Review of Commonwealth Fisheries:

Legislation, Policy and Management

David Borthwick AO PSM

17 December 2012

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21 December 2012

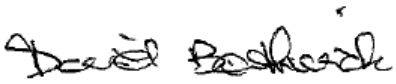
Senator the Hon. Joe Ludwig
Minister for Agriculture, Fisheries and Forestry
PO Box 6022
Parliament House
CANBERRA ACT 2600

Dear Minister

On 13 September 2012, you asked me to undertake a review into Commonwealth fisheries: legislation, policy and management. You asked me to report by 17 December 2012.

I hereby submit a copy of my report in accordance with your Terms of Reference.

Yours sincerely,



David Borthwick AO PSM

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Executive Summary

The management of Commonwealth fisheries is in good shape, notwithstanding the attention fisheries issues attract from time to time.

Differences in view 'go with the territory': often the issues are complex; there is imperfect information; the interpretation of the scientific, or economic or other evidence is contested; and the motivation and objectives of stakeholders can tug in different directions. Fisheries management decisions often reflect 'on-balance' judgements and there needs to be a readiness to change approaches as evidence becomes clearer. The Review finds that:

- The structural separation of fisheries policy and international fisheries issues with the Department of Agriculture, Fisheries and Forestry and operational policy and fisheries management with an 'independent', expertise-based Commission of the Australian Fisheries Management Authority (AFMA) provides a sound governance framework.

- As fisheries management has evolved, especially over the last five to 10 years, more attention has been placed on ensuring a viable commercial fishing sector based on sustainably managed fish stocks and their encompassing marine environment.

- Improved fisheries and environmental outcomes are reflected in the increased profitability of Commonwealth fisheries (although with a lower gross value of production) and the improved status of a number of fisheries, which are no longer regarded as 'overfished' – although some previously overfished stocks have not yet recovered. At the same time, greater focus is now placed on undertaking ecological risk assessments for each fishery and to actively applying ecosystem-based fisheries management principles, cognisant of the effects that fishing and fishing methods can have on the broader marine environment.

The management approach to Commonwealth fisheries has been progressively adapted and refined to address an historical legacy of weak regulation, resulting in chronic overfishing, which threatened the viability of many fishers and regional communities and was indifferent to environmental consequences.

AFMA has applied an adaptive management approach to each fishery. For some, 'progress' has been too rapid; for others it has been too slow. But there has been progress and this has been against a well thought-out fisheries management framework with a careful assessment of risks, both commercial and to the marine ecosystem.

OVERARCHING FRAMEWORK

From one perspective, the task of the Review could be viewed as suggesting legislative improvements, and there is scope for that. However, that alone would be insufficient.

The Review looked at various models of fisheries legislation, in the States and overseas. However, it found that there is not a clear relationship between good legislative form – especially in terms of espoused fishery management and ecological objectives – and good fishery and ecological outcomes.

Reflecting this, in Australia Commonwealth fisheries legislation has remained more or less intact since 1991, yet the decisive change in fisheries management came from a ministerial direction in 2005 that set in place a harvest strategy policy which is now implemented by AFMA. It was not legislative form that improved Commonwealth fisheries outcomes but far-sighted guidance from government on how the legislation should be applied.

Thus, having contemporary, well targeted legislation is important but it is even more important that it is then translated into sound policy and management practices.

Clearer policy settings

The Review proposes that the Commonwealth should develop an overarching fisheries framework. There should be three key inter-related parts to that framework

1. Commonwealth Harvest Strategy Policy (HSP) – dealing with the target fish species;

2. by-catch and discards –minimising effects on non-target species; and

3. safe-guarding the broader marine ecosystem – for example, minimising effects on sensitive benthic areas and taking into account interactions across fish species.

There is currently a good deal of good work being done in the above areas – some in government policy and some within AFMA – but it is fragmented and some aspects are dated and in need of revision. The current reviews of the HSP and by-catch and discard policy are welcome but need to be supplemented by bringing together analysis and insights on broader ecosystem interactions.

In the area of by-catch and discarding, the Review heard of many instances where commercial but out-of-quota species were being returned dead to the sea, or where there was 'high-grading' within quota to discard lower value for higher value fish. If the current policies are allowing such regrettable outcomes it is questionable as to whether the incentive/disincentive structure to limit by-catch and discarding is currently right.

In updating policy in the three areas, the Review encourages research and searching analysis of international literature to investigate options that might be applied in the Australian context.

In bringing together these three policies, the Review would suggest consideration be given to encapsulating them in ministerial directions, as was the instigation of the HSP in 2005. It would give clear direction to the AFMA Commission and it would also be in keeping with the Review's view that once fisheries policy and management arrangements are put on a sound footing they should be accredited under the *Environment Protection and Biodiversity Conservation Act 1999* (see section below). To this end also, the Review proposes that such ministerial directions be 'signed off' by both the fisheries and environment ministers.

The current HSP direction was issued under s 91 of the *Fisheries Administration Act 1991* (FAA). If it is judged that this provision is an unsuitable way of giving such directions (for example, for not meeting the 'exceptional circumstances' test), then there should be a more general provision added to the Act to allow for directions of the kind

envisaged in this Review. Any such ministerial directions, however, would need to be consistent with the *Fisheries Management Act 1999* (FMA) and the FAA.

Recasting AFMA's objectives

In parallel with the above ministerial directions, the objectives of the FMA and FAA should change to pick up the three elements.

The objectives in the FMA and FAA are currently pitched toward economic and commercial outcomes (particularly to "efficient and cost-effective fisheries management", "exploitation of fisheries resources" and to "maximising the net economic return to the Australian community") and these factors have historically – at least in terms of the degree of assessed overfishing – been accorded precedence over maintaining ecological functions and relationships and long-run sustainability of fisheries.

The objectives of the FMA and FAA should be recast so that AFMA is required to have regard to: the principles embodied in the HSP; minimising by-catch and discards; and the impacts of fishing on marine ecosystems. In particular, the Review proposes that

- The Acts explicitly require AFMA to give more equal weighting in its consideration of the above objectives in fisheries assessments; that does not necessarily mean equal outcomes. Where there may be trade-offs in the pursuit of objectives this should be brought out explicitly in fisheries assessments, with explanation of the reasons for the intended approach.

- In proposing that the objectives of the Act explicitly incorporate three new elements, the Review is not suggesting that other objectives should not be retained in some form. However, as noted there should be no explicit or implicit hierarchy of objectives.

- The Review proposes that, in the redrafted objectives, AFMA be required to have regard to the interests of recreational and Indigenous fishers (and other users of the marine environment).

Fisheries management plans

Fisheries management plans are supposed to be the principle mechanism for applying the FMA and FAA objectives to individual fisheries. As such, legislative provision is currently made to consult the public on a draft plan and for them to be submitted to the minister who can accept the plan or refer it back to AFMA for reconsideration.

These are sensible requirements. However, the formal fisheries management plans as currently constituted are essentially a legal / regulatory document which is, in effect, a 'toolkit' which AFMA draws on in managing a fishery. They do not contain even basic information such as: an overview of the fishery, stock assessments, how management objectives will be pursued, what effects fishing may have on marine ecosystems, what the approach to compliance will be, and so on.

Currently fisheries management plans are content free; they are completely inadequate for giving effect to the public consultation and ministerial approval requirements in the current legislation. In that regard, AFMA's primary basis for consultation and advice on

fisheries management comes from management advisory committees and resource assessment groups. These advisory bodies serve a useful function. However, input from groups such as these does not suffice for seeking public, scientific and other input from other sources. The Review considers that AFMA consultation processes are too 'in-house' or restrictive in seeking views on fisheries management issues. They need to be opened up: more attention should be paid to preparing issues papers and canvassing options in order to seek a broader range of inputs.

The Review proposes, in addition to the current toolkit approach, that fisheries management plans separately contain a strategic assessment addressing factors such as: the circumstances of the fishery; management objectives; issues; options; and tradeoffs. Information of this kind would serve as a much better basis for consideration and ministerial approval. The Review notes that

- the strategic assessment would 'cover' or 'supplement' the current toolkit approach, with both parts being subject to public consultation and ministerial approval;
- fisheries management plans need to adapt over time as issues emerge and as new information comes to hand – and it would be unwise to lock AFMA into an inflexible framework (and this is not what is proposed);
- developing a strategic assessment should not involve AFMA in extra work, since most of this work has already been undertaken for each fishery (for example, stock assessments, ecological risk assessments, addressing of by-catch issues) but it has been generally done after (rather than before) the fisheries management plan is put in place and with little opportunity for broader public or scientific input; and
- where, over the life of a fisheries management plan, significant developments arise that require action, AFMA should consider addressing such issues through a public consultation process, rather than solely relying on internal processes through resource assessment group and management advisory committee consideration.

The Minister's powers to vary fisheries management plans

Although the AFMA Commission is independent, the FMA and FAA confer considerable powers on the minister: to give directions; to accept a fisheries management plan; to approve corporate and operational plans and more.

Consistent with the view that fisheries management plans should be made more substantive and should give effect to overarching ministerial policy directions and to changes in the objectives of the fishery Acts, the Review considers that the minister's capacity to vary fisheries plans be clarified and circumscribed. The Review proposes that the minister's power with respect to the approval of a fisheries management plan be as follows

- The minister should have enhanced powers to accept or reject a plan. If the minister has twice referred a plan back to AFMA for reconsideration, the minister should be able to take a final decision on the plan following the receipt of advice from an appropriately appointed, independent advisory body, reporting within 28 days. The minister's decision would need to be consistent with the fisheries Acts.

- In that event, the reasons for the minister varying the plan formulated by AFMA should be tabled in Parliament.

- Consideration should also be given to the need to make legislative provision for taking immediate fisheries decisions – in the event of an urgent or emergency situation arising – without the two step process and independent advice. In other words, in certain situations, if an urgent decision is truly required, a decision should be taken, with that decision and other relevant issues being subjected to ex poste review.

- The minster's powers should be extended to enable equivalent action in the event of significant development over the life of a fisheries management plan (that is, twice referred back to AFMA, independent advice and reasons for a variation from what AFMA has proposed being tabled in Parliament – again with an emergency exception provision).

Integrating fisheries and environmental assessments

The Review was asked, in its terms of reference, to address how the FMA could become the "lead document in fisheries management, and that all aspects of environment, economic and social consideration, and relevant planning processes required be incorporated into the Acts, in a coordinated way".

The Review is of the view that little would be gained from amalgamating the FMA and FAA. This could be done – and the Review is not opposed to it – but it is not unusual to have the administrative and operational aspects in separate legislation.

In terms of efficiency, a far more important aspect to address is the interaction of the fisheries Acts with the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). In that regard, the application of the EPBC Act has encouraged AFMA to address ecological matters beyond the objectives specified in the fisheries Acts and has enabled assessment of key issues by the environment minister. However, that has come at a cost: as the fishing industry would say, there is 'double jeopardy' – with separate fisheries and environmental assessments going over much of the same ground – with, in some respects, the environment department taking on at least part of the role that should be the responsibility of fishery managers.

The Review is of the view that environmental objectives can be safeguarded and met by having AFMA's processes properly accredited and subjected to performance review by both the fisheries and environment ministers. In this regard, the points addressed above – which fundamentally change the overall fisheries governance framework – are consistent with and would go a long way toward giving effect to a robust accreditation framework. That is:

- both ministers giving a direction to AFMA on the proposed overarching policy framework covering the three elements mentioned;

- the corresponding changes to the objectives in AFMA's legislation;

- giving real substance to fisheries management plans, including greater transparency, accountability and meaningful public consultation processes;

- enabling the fisheries minister to take a final decision (subject to constraints identified) on a fisheries management plan and in the event of significant changes over the life of a plan.

The Review also proposes AFMA's performance for individual fisheries management plans be subject to public reporting, including on key performance indicators (developed as part of the plans). It is further proposed that the minister(s) should be enabled to seek independent advice or audit to ensure that fisheries management plans are being adequately implemented.

The application of the precautionary principle, a key environmental requirement, and how it should be applied should be included as part of the ministerial policy directions referred to above. Such a direction should set out a broad framework or an approach that AFMA should adopt. Many of the key elements of a precautionary approach are already embodied in practice (for example, it is a key part of HSP processes and there are ecological risk assessments and ecological risk management frameworks) but these aspects should be better brought together in the development of the proposed overarching policy. Moreover, how these tools are applied in practice needs to be systematically addressed in the context of each fisheries management plan.

Research, fisheries management and industry levies

The nub of the problem is that, particularly in small and emerging fisheries, the industry struggles to afford the levies to fund the research judged necessary to validate fishing effort. There is no easy answer here. Increased public funding in such instances – for private gain – is hard to justify. In part, the answer may be to allow fishing but to adopt a more precautionary approach (for example, in setting a total allowable catch or through gear restrictions, following rigorous assessment processes) to managing the fishery so impacts are less and can be evaluated over time.

The Review proposes a range of options for government consideration. The option that the Review supports would be a combination access fee (reflecting the community ownership of the resource) and a levy (reflecting cost recovery objectives). Opportunities to reduce administrative and hence levy costs should also be explored as a component of a risk-based co-management strategy (see below).

Offshore Constitutional Settlements (OCS)

The Review received strong feedback from both Commonwealth and State/Territory jurisdictions, fishers and other groups on the current arrangements for managing overlapping fisheries. The reality is that many fish stocks straddle boundaries: it is nonsensical to have separate and often incompatible management arrangements applying to the same fish stock across jurisdictions. The upshot of current OCS arrangements is that extra costs and uncertainties are imposed on fishers and environmental outcomes are jeopardised (as issues have not been addressed on a consistent or complementary basis).

It is not the place of the Review to solve OSC issues – although it points to a number of ways through the issues – rather, there needs to be more impetus from fisheries ministers and resolution in a Council of Australian Governments (COAG) context. As it is, current Commonwealth/State fishery arrangements would have to be the most 'flaky'

the Reviewer has come across in dealing with cross-jurisdictional issues. To assist COAG it would be worthwhile commissioning a research study by the Productivity Commission to examine the issues and suggest a way forward.

Recreational Fishing

As noted previously, the Review considers that the fisheries Acts should give explicit acknowledgement to the need for AFMA to give consideration to the interests of recreational anglers. They contribute a lot to the economic and social life of our country, all the more so in regional areas.

AFMA already responds in limited ways to restrict commercial fishing of some species that are the focus of some forms of recreational fishing. Reflecting the FMA, AFMA applies management controls on commercial fishing in the Eastern Tuna and Billfish Fishery to protect blue and black marlin.[1] However, the interactions between recreational and commercial fisheries interests – and the divergence between such interests – are likely to be an ever more pressing issue in the future.

Where applicable, resource sharing issues between recreational and commercial fisheries need to be explicitly addressed in fisheries management plans. The issues need to be drawn out by AFMA through scientific, economic or other analysis and tested with expert evidence and public consultation. The final resolution should be informed by the above process; however, for example, the sharing of a total allowable catch may well end up being a matter for government to resolve between commercial and/or recreational interests.

Aquaculture

Aquaculture occurs almost exclusively in State/Territory waters and is administered by the States (subject to EPBC Act approval processes where applicable). In the future, aquaculture may take place in Commonwealth waters. The fisheries Acts are not an appropriate vehicle to facilitate that (for example, the requirements for licences and management plans are geared to wild-catch). Moreover, AFMA has no experience in managing aquaculture.

The Commonwealth should enter into an agreement that the States manage future aquaculture in Commonwealth waters (subject to EPBC Act oversight). This would be more efficient than setting up a parallel Commonwealth process which would inevitably

[1] The Explanatory Memorandum for the *Fisheries Legislation Bill (No. 1) 1998* notes the insertion of s 15A to the FMA responded to disputes between recreational/charter operators who fish for black marlin and blue marlin and commercial tuna longline operators who take those species as bycatch. "Although black marlin and blue marlin have little commercial value for commercial operators, those species are the basis for the viability of charter operators. Recreational/charter operators maintain that the incidental take of black marlin and blue marlin by commercial operators negatively impacts on their activities in that it reduces their catches of marlin and strike rates. Charter operators maintain that this has a significant adverse impact on their profitability because it reduces the number of their clients. The commercial and recreational/charter industries recognise that conflict is harmful to them. The commercial tuna longline industry instituted a voluntary code that required black marlin and blue marlin to be returned to the sea if taken. However, a small number of commercial operators ignored the voluntary ban."

lead to the ineffectiveness of split responsibilities that characterise OCS arrangements. To give effect to this, amendments to Commonwealth legislation may be required.

Compliance and enforcement

The fishing industry was strongly of the view that behaviour contravening regulatory or legislative requirements should be stamped out; rogue and illegal behaviours rebound on perceptions of the industry as a whole. To this end, the Review proposes that penalty regimes be strengthened, with resort to both civil and criminal penalties as appropriate. It also proposes that licence cancellation provisions be kept but applied only in defined circumstances, namely for egregious breaches of the FMA and regulations, or with mutual agreement.

Co-management

Much has been written about the benefits of co-management in a fisheries context (in Australia and overseas) but it has not got a lot of traction in reality.

Co-management is a sound approach: conceptually, it can lead to lower costs and higher fishery and environmental standards. Voluntary codes of conduct could be registered; these could contain clear and measurable key performance indicators and standards, which could be audited. The circumstances of each fishery, though, are different, as are the capacities and interests within each fishery.

Accordingly, where there is a clear desire by commercial fishers to develop a substantive co-management practice, it would need to be in the context of clear direction from government and with advice, implementation and oversight from AFMA. Although some elements of what might be called co-management already exist (and there have been some limited trials), giving substantive effect to the idea needs considerable thought and application.

If co-management is to be given substance, it needs to be given greater priority. That would require a willingness by both AFMA and the industry to take a differential risk-based approach according to the capacity of different fisheries and fishers to perform and report to a high standard.

In this context too, the Review notes Commonwealth fisheries are only worth about $320 million in terms of the gross value of production.[2] The administration costs amount to $52 million[3] and it would be worthwhile exploring more earnestly ways to lower imposts on the industry while maintaining or improving management outcomes.

SUMMING UP

The Review has not sought to examine closely all the intricacies of the FMA and the FAA. Rather, it judged that the better approach is to focus on the overall principles and the governance framework that should be applied. In this context, the key points are:

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[2] ABARES (Australian Bureau of Agricultural and Resource Economics and Sciences) (2012), *Australian fisheries statistics 2011– Status of Fish Stocks and Fisheries Managed by the Australian Government*, p 20

[3] Total net resourcing for AFMA (total estimate 2012-13) as set out in the *Agriculture, Fisheries and Forestry Portfolio Budget Statements 2012–13,* p 215. The Review acknowledges that some of these costs reflect broader responsibilities of AFMA (for example managing high seas fishing by Australian operators) rather than the direct management of Commonwealth fisheries.

- Giving clearer ministerial direction to AFMA by setting out an overarching fisheries management policy framework;
- Changing the objectives in the fisheries Acts to reflect more equally the range of commercial and environmental (and other) issues to be addressed;
- Reaffirming the primacy of revamped fisheries management plans as the main vehicle for public consultation, with greater analysis of options and consequences being brought out;
- Leveraging off the above measures to accredit the framework to develop fisheries management plans under the EPBC Act but with the capacity for the fisheries minister (in consultation with the environment minister) to seek independent advice, commission audits and ultimately to vary a plan (subject to specified provisions).

The Reviewer would like to thank participants to the Review, especially for their willingness to step back from their interests to suggest workable and balanced solutions for the industry and community as a whole.

Findings and recommendations

Recommendation 1

AFMA should remain an independent authority headed by a Commission because the current governance arrangements are sound and the established process for the Commission to remain distinct from government allows decisions to be made against objective criteria based on science, economic and other relevant analysis.

Recommendation 2

The Government should set an overarching fisheries framework – capitalising on the current reviews of the Harvest Strategy Policy and bycatch and discards policy, but also containing a third pillar, addressing ecosystem impacts in a fisheries context. This framework should:

- Examine and explain the interrelationships between the three pillars; aim to clarify the application of the precautionary principle, drawing out, for example, how it is applied through HSP and ecological risk assessments; require AFMA to give equal attention to each pillar, and to transparently address trade-offs where applicable;
- Be authorised by both the fisheries and environment ministers;
- Be consistent with the objectives of the fisheries Acts (which would be revised; see below); and
- Take the form of a ministerial direction with, if required, legislative amendment to better allow for that (rather than the FAA s.91 provision).

Recommendation 3

The Review notes that there is little to be gained from amalgamating the FMA and FAA into one Act. However, it considers that the objectives of the Acts require amending to explicitly require AFMA to address: eco-system effects, HSP and bycatch and discard issues in formulating fisheries management plans (and more generally in their administration of fisheries).

These objectives need to get equal attention in AFMA's assessments. However, it should be made explicit that equal attention does not always mean equal outcomes. Therefore, where there is conflict between these objectives, these issues need to be explicitly addressed, including where trade-offs are to apply, with the reasons for AFMA's decision being publicly explained.

Other objectives, as appropriate, should be incorporated into the Acts, including for AFMA to appropriately address and consider issues pertinent to indigenous and recreational fisheries (and other users of the marine environment).

Recommendation 4

Fisheries management plans should be revamped so that information about the processes and components of the plans, as is envisaged by the FMA, are accessible to the public and made available in a form amenable to receiving additional analytical input. This should involve:

- The fisheries management plan being accompanied by a strategic fisheries assessment, in addition to the information currently included in a plan;
- Where matters of significance arise during the life of a plan, AFMA should be required to consult more widely, seeking input through, for example, issues papers, which should be made easily publicly accessible (through websites as appropriate);
- In the event of the need to take urgent or immediate action (say in an emergency situation) AFMA should have the ability to do so, but should be required to publicly review its decision ex poste as soon as practicable;
- Fisheries management plans should be subject to public reporting including on key performance indicators developed as part of the plan.

Recommendation 5

The Minister's powers to give directions under s. 91 of the FAA should be retained in their current form. However, consideration should be given to a separate legislative provision enabling the Minister to make a decision concerning a fisheries management plan in the following terms:

- Such a decision be applicable for both a new plan approval or if there is a significant development over the course of a plan;
- A ministerial decision would need to be consistent with the objectives of the FMA and FAA;
- The decision only be made if the plan has been twice referred back to AFMA and the Minister is still not satisfied with the revised plan;
- The Minister be normally required to get independent advice from a panel set up to advise on the issues, with the nature and composition of the panel being determined according to the issue(s) that need to be addressed, with the panel being required to report within 28 days;
- If the Minister takes a decision at variance to what AFMA has proposed, there should be a requirement for the reasons for that variation to be tabled in Parliament; and
- As for Recommendation 4 relating to AFMA's development of fisheries management plans, in the event of a need to act quickly (say in an emergency situation) the Minister should have the ability to take an interim or holding decision, to be subject to an ex poste public review.

Recommendation 6

The government should give effect to its in-principle agreement to accredit AFMA's processes for managing fisheries under the EPBC Act, rather than for there to be separate assessments. This would be in the context of:

- Joint directions from fisheries and environment ministers covering the overarching fisheries policy framework (that is, covering ecosystem impacts, HSP and bycatch and discards (as outlined in Recommendation 2);
- Changing the objectives of the FMA (as outlined in Recommendation 3);
- Fisheries management plans, and accompanying information, becoming a more transparent and accountable basis for public consultation;
- Fisheries management plans being subject to revamped ministerial approval arrangements (as outlined in Recommendation 4);

- Fisheries management plans incorporating key performance indicators (developed as part of the plans) to be publicly reported on; and
- With the Minister(s) having the capacity to audit or otherwise review performance to ensure that fisheries and environmental matters are being appropriately addressed.

Recommendation 7

AFMA needs to introduce more transparency and accessibility into its consultation and decision making processes.

- Ahead of Commission decisions, in addition to Management Advisory Committee (MAC) and Resource Assessment Group (RAG) processes, AFMA should seek opportunities to prepare issues/options papers on key issues, thereby tapping into broader ranges of input from commercial and recreational fishers, scientists, NGOs and the general public.
- The decisions of the Commission, including the reasons for decisions, should be more readily available to the public.
- There is no good reason for a statutory requirement for the Commission to meet with the peak industry body following the tabling of a report on AFMA's operations in Parliament and this requirement should be removed from the FAA.

Recommendation 8

The Review sees no good reason for the legislation to expressly provide for MACs.

- MACs and RAGs serve a useful function, although only the former is expressly provided for in the FAA. How AFMA consults or seeks input is best left to it to determine according to the circumstances, or subject to ministerial direction. In particular, the current legislation provides for MACs to "exercise powers" in relation to a fishery. MACs should not have such a management role, and the Review notes that they, sensibly, have never been bestowed this role.

Recommendation 9

The provisions of the FAA providing for a Fishing Industry Policy Council should be removed.

- Such a council has never been constituted and, although a body such as this might be useful, the nature of such a body and what purpose it might serve would best be determined by the Minister rather than be prescribed in legislation.

Recommendation 10

The continued need for a Statutory Fishing Rights Allocation Review Panel should be addressed, on the basis that it is not frequently used, but when necessary, this function could be adequately performed by the Administrative Appeals Tribunal.

Recommendation 11

With respect to fisheries management and levy issues the Review considers that the current cost recovery approach is sound. However, consideration should be given to a two part levy reflecting: an access component (to the community resource) and a

research/administrative component (recovery key costs). It should be for government and AFMA to determine research priorities, from the access fee component (or indeed whether such a levy is hypothecated at all, although the Review thinks that it should be).

Recommendation 12

The government and AFMA should more earnestly pursue opportunities for co-management in the context of:

- Emphasising the notion of 'shared responsibility' for fisheries management outcomes and for maintaining (or raising) fisheries management and environmental standards;
- Differentiating, if needed, between fisheries and/or fishers on the basis of assessments of risk; and
- AFMA striving to lower its administrative (fisheries management) costs as the industry takes on more of the self-regulatory and performance reporting burden.

Recommendation 13

The Commonwealth should determine that future aquaculture in Commonwealth waters be administered by the States (subject to EPBC Act oversight) and, as necessary, that the fisheries acts be amended to accommodate this.

Recommendation 14

The compliance and enforcement provisions in the fisheries Acts should be strengthened and broadened to include scope for civil as well as criminal penalties and the licence cancellation provisions should only apply in egregious circumstances.

Recommendation 15

The Productivity Commission should be asked to review the Offshore Constitutional Settlement provisions with a view to streamlining the arrangements between Commonwealth and States as so to improving fisheries management and environmental outcomes.

1 Background

1.1 Context

On 11 September 2012, the Minister for Agriculture, Fisheries and Forestry, Senator the Hon. Joe Ludwig, announced a 'root and branch' review of the legislation governing Australia's Commonwealth fisheries management arrangements and appointed David Borthwick AO PSM to conduct the Review. Mr Borthwick was asked to complete the Review by 17 December 2012.

The announcement immediately followed the announcement by Minister Ludwig and the Minister for Sustainability, Environment, Water, Population and Communities, the Hon. Tony Burke MP, of legislation to be introduced into the Parliament to prohibit the FV *Abel Tasman* (formally the FV *Margiris*), a large mid-water trawl vessel, from operating in Australian waters pending an assessment of the impacts of the vessel if it were to operate in the Small Pelagic Fishery. In the context of the decision around the operation of the FV *Abel Tasman* in Australian waters, when announcing the details of the Review Minister Ludwig noted that there had "been a broad range of views expressed by stakeholders, community and government about the fisheries management system and the adequacy of the regulator under current legislation."[1]

Commonwealth fisheries management is based around legislation enacted over 20 years ago. Whilst there have been ongoing improvements and updates and policy has continuously evolved, a major review taking into account community views and wider resource management issues has not occurred during that time. Additionally, it has become apparent that community views about fisheries management; the use of fisheries and marine resources as both a food source but also for other extractive and non-extractive community uses; and the balance of trade in seafood and high dependence on imported seafood; are changing and are likely to continue to change.

1.2 Scope

This Review considers the broad fisheries management policy and legislative framework to test whether it is in line with government, industry and community expectations. It identifies areas requiring adjustment to better define and meet Commonwealth fisheries management objectives and it examines the underlying policy, research, legislative and regulatory framework that supports fisheries management. The crux of the terms of reference is:

The review of the *Fisheries Management Act 1991* (FMA) and *Fisheries Administration Act 1991* (FAA) will

- Recommend changes to the Acts that clearly establish the Fisheries Management Act 1991 as the lead document in fisheries management, and that all aspects of environmental, economic, and social consideration, and the relevant planning processes required be incorporated into the Acts, in a co-ordinated way.

[1] Senator the Hon. Joe Ludwig issued a media release, *Fisheries review details announced* (DAFF12/379L), on 13 September 2012 (www.daff.gov.au/ludwig/media_office/media_releases/media_releases/2012/september/fisheries-review-details-announced, viewed 12 December 2012)

- Recommend any necessary changes to the Acts that affirm the powers of a Minister to take advice, and make decisions, with the full scope of the precautionary principle available within the Fisheries Management Act 1991, and that same definition of the precautionary principle apply in both the Fisheries Management Act 1991 and the Environment Protection and Biodiversity Conservation Amendment 1999.
- Consider the need for modernising Commonwealth fisheries resource management legislation and approaches including penalty provisions, licence cancellations, the use of modern technology and co-management. Consideration of cost recovery arrangements will include consideration of the degree to which cost recovery might impact on the management of fisheries including investment in research and stock assessment.

The Review's full terms of reference are at Appendix 1.

1.3 Objectives

The fisheries management environment is a complex, controversial, high risk, uncertain world in which to operate. This Review cannot completely overcome these factors but does aim to provide recommendations that can mitigate the negative effects these factors can have on fishing and the sustainable use of marine resources. Recommendations from the Review, therefore, are intended to provide government and industry with the tools to develop realistic, robust, practical and modern fishing management arrangements.

This report is one step in a continually evolving process to modernise Commonwealth fisheries management over the last 25 years or so. Its aim is to discuss drawbacks in current arrangements, highlight imperatives for future reform and to recommend options for government to consider. It does not determine policy, and, most importantly, it does not pretend to replace the knowledge and expertise of those already involved in fisheries management at every level. It is an overarching, strategic document that offers choices to be considered in the short, medium and long term. The Review sets out for government the benefit of three months of discussions and deliberations that, hopefully, will clarify certain issues and provide the impetus for action.

Fisheries management in Australia is definitely not broken but it is the Review's conclusion that, unless action is taken soon to modernise and better reflect current realities, the many gains of the last decade will begin to dissipate.

1.4 The Review

Mr Borthwick was appointed to undertake the Review from 17 September 2012. Supporting him was a small secretariat within the Department of Agriculture, Fisheries and Forestry (DAFF). The Review and Secretariat operated separately and independently of DAFF's normal fisheries policy responsibilities.

The Review has interpreted the terms of reference broadly and comments on a range of other matters relevant to the effectiveness of Commonwealth fisheries management (for example, the efficiency and effectiveness of Offshore Constitutional Settlements).

Figure 1. Ministerial media release announcing the Review, 13 September 2012

Senator the Hon. Joe Ludwig
Minister for Agriculture, Fisheries and Forestry
Senator for Queensland

Fisheries review details announced

Fisheries Minister Senator Joe Ludwig has today released the Terms of Reference for the first major review of Australia's fisheries management system in two decades.

The scope of the review has now been broadened to include the *Fisheries Management Act 1991* and *Fisheries Administration Act 1991*.

"There has been a broad range of views expressed by stakeholders, community and Government about the fisheries management system and the adequacy of the regulator under current legislation," Minister Ludwig said.

"This root and branch review will examine current fisheries legislation, including penalty provisions, licence cancellations, modern technology and co-management arrangements.

"The review will recommend changes to Australia's fisheries legislation in order to reflect environmental, economic and social considerations as part of a modern fisheries management system.

"The review will also examine any required changes to the fisheries management legislation to reflect the objective of a precautionary principle."

David Borthwick AO PSM, a former Secretary of the Department of Sustainability, Environment, Water, Population and Communities; Deputy Secretary of Prime Minister and Cabinet, Health and Treasury, and former Australian Ambassador to the OECD, will conduct the review.

"I have said from the beginning that I want industry to have a say in the future of our fisheries management system. Broad stakeholder consultation will play an important role in the review process," Minister Ludwig said.

"It's my role as Fisheries Minister to ensure we have the best possible fisheries management system in operation."

The review will be conducted within three months.

The review will only apply to fishing operations within commercial Commonwealth fisheries.

In conducting the Review, Mr Borthwick held a series of stakeholder consultations, including with industry, representatives from the recreational fishing sector, scientists, environmental non-government organisations and Australian, State and Northern Territory government agencies. The Review also called for public submissions. In all, the Review received 57 substantive submissions and a large number of short emails from individuals containing the same or substantially similar content as was contained on a private website that the Review understands was established to facilitate contributions. A website was established to provide details about the Review and making submissions. A list of substantive submissions is at Appendix 8. A list of those stakeholders who met, or had a phone link-up, with Mr Borthwick is at Appendix 9.

Mr Borthwick took into account other key fisheries related policy and operational documents, including the 2005 ministerial direction that was translated into the *Commonwealth Harvest Strategy Policy and Guidelines* (HSP) in 2007; the *Commonwealth Policy on Fisheries Bycatch* (Bycatch Policy)*;* and the interaction of Parts 10, 13 and 13A of the *Environment Protection Biodiversity and Conservation Act 1999* (EPBC Act). The Review notes there are reviews of both the HSP and the Bycatch Policy currently underway. Also relevant is the Hawke Review of the EPBC Act[2] – and the government's response to it – which has relevant recommendations relating to fisheries management. The Review was conducted in the context of and informed by these three relevant reviews.

Mr Borthwick provided an interim report, which is incorporated at Appendix 7, to Minister Ludwig on 17 November 2012.

The content and the quality of the submissions received and discussions held gave invaluable information and foresight to the Review. All those with an interest in fisheries management in Australia who provided input to the Review were generous with their time and made a significant contribution to the findings and recommendations. Fisheries management in Australia is well served by those involved in regulation and policy development; research and data collection; fishing, both commercial and recreational; and conservation and marine protection. There is a considerable depth of understanding and genuine concern for the future of fishing and the marine environment in Australia and this, in and of itself, bodes well for a sustainable future for the industry and the fisheries on which it relies.

[2] Hawke (2009), *The Australian Environment Act – Report of the Independent Review of the Environment Protection and Biodiversity Conservation Act 1999, Commonwealth of Australia*

2 The Australian fishing industry

2.1 Industry at a glance

Australia's Exclusive Economic Zone generally extends 200 nautical miles seaward from coastal baselines, ranging from tropical to Antarctic waters and enclosing a diverse range of marine environments, communities and fisheries.[3] This area is the world's third largest fishing zone – totalling 8,148,250 square kilometres[4] – but, because of a lack of nutrient-rich currents (and so relatively low productivity), Australia ranks only 52nd in the world in terms of volume of fish landed.[5]

Australian fish stocks are in good shape: the recently released inaugural edition of the status of key Australian fish stocks series reports that Australia's key wild fish stocks are largely sustainable.[6] A total 49 species were assessed across 150 stocks. Of these, 98 are held to be 'sustainable' stocks and only two stocks are considered 'overfished' (a further eight and three stocks are classified as 'transitional-recovering' and 'transitional-depleting' respectively).[7]

Across the board, the gross value of Australian fisheries production (GVP) in 2010–11 was about $2.23 billion – equating to about 234,164 tonnes.[8] Of this total, Commonwealth-managed fisheries accounted for about $320.4 million, or 14 per cent,[9] with three quarters of this attributable to just four fisheries: (in descending order of value) the Northern Prawn; South Eastern Scalefish and Shark; Eastern Tuna and Billfish fisheries; and Southern Bluefin Tuna. The remaining 18 of the 22 Commonwealth fisheries contributed the residual.[10]

Since the beginning of the century, the total annual volume of Australian fisheries production has increased by four per cent (some 2,582 tonnes).[11] With a few exceptions, however, the industry's value has been in decline over the same period: since 2000–01, the annual real GVP has fallen by 47 per cent or, in dollar terms, some $1.04 billion. In Commonwealth fisheries the trend has been even more dramatic over the same period, with a decline in value of 49 per cent.[12]

These declines reflect a range of factors: an appreciating Australian dollar; the high price of diesel; labour shortages and increasing costs; tighter environmental and fisheries management requirements; and the reality that, in a number of fisheries, fish are harder to catch – despite improving technologies – as fish stocks have declined.

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[3] Kailola, Williams, Stewart, Reichelt, McNee & Grieve (1993), *Australian Fisheries Resources*, Bureau of Rural Sciences and Fisheries Research and Development Corporation, p 1

[4] Geoscience Australia, www.ga.gov.au/education/geoscience-basics/dimensions/oceans-and-seas.html

[5] Department of Agriculture, Fisheries, Forestry, www.daff.gov.au/fisheries (viewed 5 December 2012)

[6] The Review is aware the report has been also been subject to some criticism.

[7] Flood, Stobutzki, Andrews, Begg, Fletcher, Gardner, Kemp, Moore, O'Brien, Quinn, Roach, Rowling, Sainsbury, Saunders, Ward, & Winning, (eds) (2012), *Status of key Australian fish stocks reports 2012*, Fisheries Research and Development Corporation, p 10

[8] ABARES 2012, *Australian fisheries statistics 2011*, p 1

[9] *Ibid,* p 17

[10] Woodhams, Vieira & Stobutzki (eds) (2012), *Fishery status reports 2011: status of fish stocks and fisheries managed by the Australian Government*, Australian Bureau of Agricultural and Resource Economics and Sciences, p iii

[11] ABARES 2012, *Australian fisheries statistics 2011*, p 1

[12] *Ibid*, p 17

Nevertheless, the picture is not as gloomy as it might at first appear.

The majority of the aforementioned decline in value occurred between 2000–01 and 2004–05. In recent years the rate of decline in GVP has slowed, with the real GVP decreasing by only 10 per cent since 2004-05.[13] This steadying reflects, in part, the exit from the industry of less-competitive fishers as a result of structural adjustment. More stringent management arrangements have helped to ensure both better biological sustainability of target stocks and improved individual and fisheries economic performance.

The result is, in brief, fewer fishers and an overall decline in the GVP but an improvement in the longer term sustainability and profitability of fisheries.

2.2 Size and types of fisheries

Each State government (and the Northern Territory) is responsible for fisheries that lie within its internal waters (which include river, lake and estuarine fisheries) as well as fisheries adjacent to its coastline within three nautical miles. The Commonwealth has jurisdiction for fisheries that lie between three and 200 nautical miles of the coastline – although in practice most are in fact controlled by the States.

Where a fishery spans two or more jurisdictions, administrative boundaries are usually developed under an offshore constitutional settlement, an arrangement by which management responsibility for the fishery is handed to one jurisdiction (see Chapter 4).

Of the 22 key fisheries assessed by the Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) that exist wholly or partially within Commonwealth waters, nine are managed solely by the Australian Fisheries Management Authority (AFMA). The other 13 are managed with other Australian jurisdictions under joint arrangements or with other countries through international arrangements.[14]

Across the jurisdictions, Australia's fishing industry is made up of three key sectors: commercial, recreational, and Indigenous customary[15] and is characterised by a great diversity of stakeholders and activities, broad geographic distribution and a large number of species utilised. As a whole, the fishing industry makes a "large, unique contribution to the wellbeing and economy of Australians"[16] not the least of which is that it is Australia's sixth most valuable food-based primary industry,[17] and accounts for exported product (both edible and non-edible) worth a total of $1.2 billion in 2010–11.[18] However, given the industry's inherent complexity, diversity and spread, this is perhaps not readily recognised by many within the Australian community.

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[13] *Ibid,* p 1
[14] ABARES (2012), *Fishery status reports 2011: status of fish stocks and fisheries managed by the Australian Government*, ABARES, p 3
[15] Aboriginal and Torres Strait Islander people also participate in the commercial and recreational fishing sectors but are not distinguished from others in these sectors for the purpose of this Review.
[16] Fisheries Research and Development Corporation (2010), *Working Together: the National Fishing and Aquaculture RD&E Strategy 2010*, Commonwealth of Australia, p12
[17] *Agriculture, Fisheries and Forestry Portfolio Budget Statements 2012–13*, p 106
[18] ABARES (2012), *Australian fisheries statistics 2011*, p 20

2.2.1 Commercial fisheries

Australia's commercial fishing sector undertakes activities for the primary purpose of financial return from the sale of seafood or non-edible products. 'Commercial fishing' would normally include commercial wild-catch, as well as aquaculture and post-harvest activities (processing, handling and retailing product). This Review, however, has focussed necessarily on wild-catch and aquaculture (aquaculture in Commonwealth waters is discussed at Chapter 7): post harvest activities are only considered in so far as they are referenced in the Acts.

In 2010–11, the total volume of Australian fisheries production was 234,164 tonnes, with a gross value of $2.23 billion.[19]

Between 2000–01 and 2010–11, the total annual volume of fisheries production has increased by 1 per cent, while the annual real gross value of production has fallen by 47 per cent.[20] The majority of the decline in value occurred over the period 2000–01 to 2004–05. Since 2004–05, the real gross value of production decreased by 10 per cent, representing a slowing in the rate of decline.[21]

Since 2000–01, the gross value of wild-catch production has decreased by 46 per cent ($1.1 billion) in real terms[22] and in 2010–11 was valued at $1.31 billion.[23] In 2010–11, the sector's total production volume declined by 6 per cent to 162,762 tonnes.[24]

The gross value of aquaculture production also declined between 2001–01 and 2010–11, but only by one per cent ($9.3 million).[25] In 2010–11, the sector's total production volume was 75,188 tonnes.[26]

Focussing on Commonwealth fisheries, the value of production also declined; $312.9 million (49 per cent) from $633.3 million in 2000–01 to $320.4 million in 2010–11.[27] The table below shows the top five Commonwealth fisheries by value in 2010–11.

[19] *Ibid*, p 1
[20] *Ibid,* p 1
[21] *Ibid,* p 1
[22] *Ibid,* p 20
[23] *Ibid,* p 19
[24] *Ibid,* p 19
[25] *Ibid,* p 21
[26] *Ibid,* p 1
[27] *Ibid,* p 19

Northern Prawn Fishery	$94.9 million
Southern and Eastern Scalefish and Shark Fishery Commonwealth Trawl Sector	$48.6 million
Eastern Tuna and Billfish Fishery	$30.9 million
Southern Bluefin Tuna Fishery	$30.6 million
Southern and Eastern Scalefish and Shark Fishery Gillnet, Hook and Trap Sectors	$23.8 million

Table 1. Top five Commonwealth fisheries and sectors by value, 2010–11[28]

The latest Australian Bureau of Statistics' (ABS) Labour Force Survey recorded that in 2010-11 the commercial fishing, hunting and trapping industry employed 11,699 people (over a third of whom are involved specifically in aquaculture enterprises).[29] This is an increase of 2,268 people compared to 2009–10.[30]

2.2.2 Recreational fishing

Australia's recreational fishing sector generates personal enjoyment and recreation from fishing or non-extractive use of aquatic resources (for example fish stocking in freshwater environments).[31] It is not legal in any jurisdiction to sell fish taken recreationally.

In 2003, ABS estimated that more than five million Australians participate in some form of recreational fishing in Australia.[32] A more recent estimate[33] suggests about 3.4 million Australians engage in recreational fishing each year.[34] Although recreational fishers do not generate direct catch revenue, they do contribute significant indirect expenditure – one submission to the Review suggests expenditure is in the order of $10 billion annually[35] – to national and regional economies. In some fisheries, recreational rather than commercial fishers are the dominant contributor to economic value,[36] and recreational catch may exceed or be significant compared to commercial catch for many finfish species.[37]

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[28] *Ibid,* p 18
[29] The FRDC has noted that this is a highly conservative estimate and is inconsistent with data collected in connection with fishing vessels, fishing licences and other forms of fishing regulation.
[30] ABARES (2012), *Australian fisheries statistics 2011*, p 35
[31] Consideration of freshwater recreational fishing is beyond the scope of the Review, but it notes that statistics quoted in this report do not differentiate between marine and freshwater recreational fishing.
[32] Australian Bureau of Statistics (2003), *Year Book Australia*, 2003 (www.abs.gov.au/AUSSTATS/abs@.nsf/Previousproducts/BAFB91C589D0706FCA256CAE0015CAA9)
[33] Dominion Consulting (2005), *An Economic Profile of the Australian Fishing Tackle Industry*, Australian Fishing Tackle Association, cited in Ridge Partners (2010), *Overview of the Australian Fishing and Aquaculture Industry: Present and Future*, FRDC, p 85
[34] Several submissions to the Review, including those from the Australian Recreational Fishing Foundation, Recreational Fishing Alliance of NSW and the Australian Fishing Trade Association, note that around five million recreational anglers in Australia each year 'dangle a line'.
[35] Submission from Australian Recreational Fishing Foundation
[36] FRDC (unpublished a), *Evaluating the Performance of Australian Marine Capture Fisheries: A Report to the Fisheries R&D Corporation - Resource Working Group* July 2009, p 35
[37] CSIRO (2009), *Developing innovative and cost-effective tools for monitoring recreational fishing in Commonwealth fisheries*, CSIRO, cited in Ridge Partners (2010), *Overview of the Australian Fishing and Aquaculture Industry: Present and Future*, FRDC, p 85

Recreational fishers fall into three broad groups[38]

- 'Game and sports' fishers tend to use sophisticated vessels and gear and target large pelagic fish – to which strict catch and release practices are often applied. It is estimated there are about 20,000 game/sports fishers nationally and about half are members of clubs.

- 'Charter vessel operators' provide fishing experience and expertise on a commercial fee for service basis. Charters cater for small-medium groups of line and spear fishers with trips being from hours in duration to up to ten days at a time. It is estimated there are fewer than 500 charter operators nationally.

- 'Independent' recreational fishers are estimated by industry sources[39] to account for about 80 per cent of all national recreational fishing effort. Fishers often operate from small, inshore craft or from shore and only a small percentage of them are affiliated with a club. Most members of this group catch fish for private consumption.

All up, the sector supports about 90,000 Australian jobs, largely in the fishing tackle and bait industry (which has an annual turnover in excess of $170 million) and the recreational boating industry (which has an annual fishing-related turnover of around $300 million).[40] In fact, the sector's contribution – both social and economic – is likely to be even more significant than these figures suggest. Undervaluing arises from the fact that the sector is "fragmented, often poorly described, and lacks the data and organisational capacity to demonstrate its substantial outputs and outcomes to the economy and the community."[41]

While recreational fishing activities are managed by State and Northern Territory governments, the sector is a "growing partner in many Australian wild catch fisheries"[42] and its significance, including in Commonwealth waters, is noteworthy in many areas. Recreational fishing and resource sharing in Commonwealth waters is discussed in Chapter 7.

[38] FRDC (unpublished b), *Assessing the Performance of Australian Marine Capture Fisheries: an issues paper developed for the Fisheries R&C Corporation – Resource Working Group* (October 2008), p12
[39] Game Fishing Association of Australia, Australian National Sportfishing Association and RecFish Australia estimates as noted in FRDC (unpublished b) p 12
[40] Australian Bureau of Statistics (2003), *Year Book Australia*, 2003 (www.abs.gov.au/AUSSTATS/abs@.nsf/Previousproducts/BAFB91C589D0706FCA256CAE0015CAA9, viewed on 12 December 2012)
[41] FRDC (2010), *Working Together: the National Fishing and Aquaculture RD&E Strategy 2010*, Commonwealth of Australia, p 21
[42] FRDC (unpublished a), *Evaluating the Performance of Australian Marine Capture Fisheries: A Report to the Fisheries R&C Corporation – Resource Working Group* (July 2009) p 35

2.2.3 Customary fishing

Many Aboriginal and Torres Strait Islander communities have built up close, interdependent relationships with marine waters and living resources over tens of thousands of years of customary fishing practice. Today, many Indigenous Australians partake in customary fishing activities

> "for the purpose of satisfying personal, domestic, ceremonial, educational or non-commercial communal needs...Customary fishing encompasses the elements of barter or exchange of fish as long as it occurs within or between Aboriginal communities, is for other food or for non-edible items other than money, and if the exchange is of a limited and non-commercial nature."[43]

The Fisheries Research and Development Corporation (FRDC) notes that customary fishing practises can contribute significantly to Indigenous health and social cohesion and, in some instances, can lead to opportunities for training and community economic development.[44]

Within the survey region of northern Australia, the National Recreational and Indigenous Fishing Survey (NRIFS)[45] recorded that 65 per cent of Indigenous customary fishing effort occurs in the Northern Territory: 37,300 Indigenous people (amounting to nearly 92 per cent of the population surveyed), aged five years or older, had fished at least once during the survey year. During the survey period, Indigenous fishers made an estimated 671,000 fishing trips, with most fishing effort (70 per cent) focused within inshore or coastal areas. More than the half Indigenous fishers' customary catch was taken in inshore waters and line effort accounted for more than half of total fishing effort. Hand collection was next in importance, though spears and nets were also used significantly. [46]

Three submissions[47] to the Review noted that many Indigenous Australians believe their traditional fishing rights are largely ignored or are not sufficiently explicitly recognised by all levels of government, "in part due to the fact that Indigenous fisheries in Australia have remained under the radar of the broader public…"[48] The Review notes that several State and the Northern Territory governments and authorities do in fact explicitly recognise – including through legislative provision – Indigenous fishing rights and opportunities. The Commonwealth fisheries Acts, however, do not reference customary fishing beyond mention at Article 24, Schedule 2 (the Fish Stocks Agreement) of the *Fisheries Management Act 1991* (FMA).

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[43] Aboriginal Fishing Strategy Working Group (May 2003), *Aboriginal Fishing Strategy*, Fisheries Management Paper No. 168, as cited in Ridge Partners (2010), *Overview of the Australian Fishing and Aquaculture Industry: Present and Future*, FRDC, p 92

[44] FRDC (2010), *Working Together: the National Fishing and Aquaculture RD&E Strategy 2010*, Commonwealth of Australia, p 12

[45] The Review acknowledges that the NRIFS data is now more than 10 years old but notes it remains a key source of information on Indigenous customary fishing.

[46] Henry & Lyle (eds) (2003), *National Recreational and Indigenous Fishing Survey*, FRDC Project 99/158, pp 110- 115

[47] Submissions from Stephan Schnierer and Stan Lui (on behalf of Indigenous attendees at a Cairns Indigenous fisheries research priorities workshop); Stephan Schnierer; and NTSCORP.

[48] Submission from Stephan Schnierer and Stan Lui on behalf of Indigenous attendees at a Cairns Indigenous fisheries research priorities workshop.

2.3 A recent history of changes to industry operating environment

Current arrangements for Commonwealth fisheries management in the broad are set out in Chapter 4. Given the diversity and complexity of Commonwealth fisheries and the different sectors represented within each, it is not possible to include in this report a full description of the operating environment of individual fisheries. The Review has provided case studies in Appendix 2 to illustrate some of the issues, challenges and opportunities faced variously across Commonwealth fisheries by fishers and by AFMA.

The case studies indicate the challenges of ensuring that fisheries remain profitable, sustainable and meet ecological requirements and **illustrate a common pattern in far too many Commonwealth (and State) fisheries: initial over-exploitation, followed by repeated attempts to rein in fishing effort. Historically, all too often both fishers and regulators have been initially too optimistic about the sustainability of fishing effort. The result has been degraded fisheries and costly adjustments borne by the industry and by tax payers.**

It is worth noting here, more generally, several significant milestones in the evolution of Commonwealth fisheries management.

1991 The FMA was passed, replacing the *Fisheries Act 1952* and the *Continental Shelf (Living Natural Resources) Act 1968*.

The Act instigated fundamental change to the previous approach to fisheries management, including introducing ongoing and fishery-specific statutory fishing rights and fishing permits (as well as processes for their creation and allocation) and the registration of third party interests. The previous regime had been based on one year fishing boat licences which essentially allowed access to the whole of the Australian Fishing Zone.

The original explanatory memorandum (EM) for the *Fisheries Management Bill 1991* noted the purpose of the Bill was that "in providing more effective control of fisheries, it should in time result in more effective administration and a more productive fishing industry." The amended EM further notes the expansion of the Bill's stated objectives to include "requiring adherence to the principles of ecologically sustainable development".

The *Fisheries Administration Act 1991* (FAA) was also passed, establishing new arrangements for the administration of Commonwealth fisheries; key was the establishment of AFMA as a statutory authority separate from the fisheries department of state.

1992 AFMA commenced operation under a board of directors.

2005 Then Minister for Fisheries, Forestry and Conservation, Senator the Hon. Ian Macdonald, issued a formal direction (under s 91 FAA) to AFMA to address overfishing and to prevent overfishing in the future. This included specific instruction, for example;

- to adopt harvest strategies for key commercial species;
- to adopt output controls in the form of individual transferable quotas;

- to establish a system of independent surveys of catch and effort; and
- to better monitor fishing activity.

The direction's improved management measures complemented *Securing Our Fishing Future*, a major $220 million package of one-off structural adjustment which, most significantly, included a capped fishing concession buyout in over-fished Commonwealth fisheries.

2006 Over 550 concessions were purchased at a cost of more than $148 million paid out to Commonwealth fishing operators.[49]

2008 Following the Uhrig review of statutory authorities,[50] AFMA transitioned to its current governance arrangements as an independent commission with expert/skills-based members.

These matters are largely discussed more comprehensively elsewhere in the report but are noted here because all have significantly shaped the operation and performance of Australia's Commonwealth fishing industry.

[49] Department of Agriculture, Fisheries and Forestry (2007), *Annual report* 2006-07, p 72
[50] Uhrig (2003), *Review of the corporate governance of statutory authorities and office holders*, Commonwealth of Australia

3 Submission and consultation process

A call for public submissions to the Review was made in the week of 24 September 2012. Advertisements were placed in the major metropolitan and rural newspapers. Information about the Review and the submission process was also placed on the Department of Agriculture, Fisheries and Forestry (DAFF) website (www.daff.gov.au/fisheriesreview). The period for written public submissions ran for four weeks from 28 September to 26 October 2012.

Mr Borthwick consulted stakeholders in the period mid September to early November 2012 by face-to-face meetings, mostly in capital cities, and by teleconference. Mr Borthwick also emailed a wide range of individuals and organisations advising them about the Review and inviting them to make a submission.

In total, the Review received 57 submissions containing substantially original content. The Review also received 2029 short emails from individuals containing the same or substantially similar content as was contained on a private website that the Review understands was established to facilitate contributions. These emails have not been included in the list of submissions but they have been logged as part of the Review process. All substantive submissions (including names and/or organisations) were placed on the DAFF website.

The list of submissions is provided at Appendix 8 and the list of stakeholders consulted is at Appendix 9.

3.1 Range of responses

Responses to the Review came from a broad range of sectoral interests. These have been categorised in general terms below, while noting that some responses overlap into one or more categories.

Indicative number of responses received by broad category:

- General public 18
- Government agencies 5
- Commercial fishing 14
- Environment and conservation 4
- Recreational fishing (amateur and game) 8
- Indigenous fishing 3
- Research and academic institutions 5
- Proforma-style short emails (mainly about the FV *Abel Tasman*) 2029

While registering opposition to the FV *Abel Tasman*, few of these form emails addressed substantive issues relevant to the terms of reference.

3.2 Commonly identified issues

Submissions to the Review covered a range of issues with a number of these addressed consistently. While acknowledging there was considerable overlap on the issues raised by respondents, some of those most commonly raised are summarised as follows.

- Many groups and organisations agreed that the Fisheries Management Act 1991 (FMA) should retain primacy in fisheries management. Many submissions called for amendments to the Act in order to assist with the updating, or modernising, of fisheries management operations and policy.
- Similarly, many submissions supported the continuation of Australian Fisheries Management Authority (AFMA) as a commission at arm's length from government, but called for greater transparency in AFMA's processes for decision making and operations of advisory groups.
- There was strong interest in seeing the Minister's legislative powers retained, and in many submissions, there was support for these to be strengthened, while strongly advising the Minister should not become engaged in operational matters.
- A number of submissions called for the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) and the fisheries Acts to be amended to harmonise operation, avoid duplication, and provide for consistent definitions and processes. Those holding this view supported accrediting fisheries management plans for EPBC Act purposes. However, a number of submissions also thought that the EPBC Act was a vital 'backstop' to fisheries legislation and should continue to act as a separate filter on fisheries decisions.
- Also in relation to legislation, some submissions sought clarification of the priorities of the objectives set out in the FMA and sought a shift towards a whole of marine ecosystem approach to management.
- A number of submissions also wanted improvements to governance arrangements to reinforce the importance of decisions based on objective scientific and economic analysis. The need to enhance transparency in analysis, through processes such as peer review, was also raised.
- Other common themes in submissions included those related to co-management, cost recovery and compliance.
- Many submissions discussed offshore constitutional settlements and amongst these, there was a universality of view that the offshore constitutional settlements required significant review.
- Commentary on the application of the precautionary principle was wide and varied. Some claimed AFMA's decisions were not precautionary enough, while others claimed they were too precautionary.
- Many submissions stated that the precautionary principle was not clearly enough defined and the application of the principle by AFMA was inconsistent. Some suggested the thresholds and trigger points were too high.
- There was much discussion about trade-offs and risks in AFMA's decision making processes.

In addition to the issues raised above, a number of submissions from those representing sectoral interests placed particular emphasis on the following:

- Those representing the commercial fisheries sector raised issues such as the security and value of fishing rights and whether fisheries management practices undermined these. Cost recovery from the commercial sector was generally supported. However, it was noted that for a number of smaller fisheries costs attributable and levies were too high as a proportion of gross value production, making it difficult to fund research. In this context, the perceived burden of cost for fisheries management and compliance was also raised.

- Conservation groups' submissions placed particular emphasis on the need to take a more precautionary approach, particularly to ensure recovery of overfished stocks in addressing bycatch, local area depletion and discards, as well as the need to consider broader ecosystem consequences of fisheries management decisions.
- Submissions from the recreational fishing sector emphasised the sector's economic and social importance, the need to explicitly recognise recreational fishers' interests in resource sharing decisions, alignment of jurisdictional arrangements (or lack thereof) and the need to appropriately weigh the social element in fisheries management.
- Those representing Indigenous interests discussed ways of explicitly acknowledging and reflecting their interests in fisheries legislation.
- A number of researchers and academic institutions raised the issue of the adequacy of data to inform fisheries management decisions, the importance of science and its application of appropriate risk management approaches, the need for peer review, greater scientific capacity and the need to find funding sources for research and development.

3.3 The Review process

The Review was welcomed by stakeholders. While some were critical of the short timeframe, raising concerns about the four-week submission period and the three-month timeframe for the Review, all supported the Review as an opportunity to contribute to future fisheries management and to provide input on recommendations to improve current arrangements.

4 Current arrangements for Commonwealth fisheries management

4.1 Constitutional foundation

The Commonwealth and the States have shared responsibility for the management of Australia's fisheries resources since Federation in 1901. Under section 51(x) of the Commonwealth Constitution, the Commonwealth has a head of power over 'fisheries in Australian waters beyond territorial limits'[51], which on current High Court authority is the marine area beyond three nautical miles of the coastal low-water mark. Further, under s 51(xxix) of the Commonwealth Constitution, the Commonwealth has a head of power over 'external affairs', which supports laws with respect to any matter or thing (such as fisheries) situated beyond the low-water mark of Australia.

On 1 November 1979, Australia 'established its 200 nautical mile fishing zone, in which all fisheries activities must be licensed under Australian law.'[52] At the Premiers' Conference on 29 June 1979, the Commonwealth and the States completed an agreement for the settlement of contentious and complex offshore constitutional issues, including overarching jurisdictional arrangements for fisheries. The *Offshore Constitutional Settlement* (OCS) is the political agreement as a result of which the Commonwealth and the States enacted complementary legislation to assign single jurisdiction for managing each Australian fishery.

Prior to the OCS, the States were generally responsible for managing coastal fisheries out to 3 nm from the low-water mark. The Commonwealth was responsible for managing fisheries in Australian waters beyond 3 nm (i.e. from 3 nm to 200 nm). The OCS provided for the Commonwealth, the States and the Northern Territory to agree to adjust these arrangements by passing management responsibility for particular fisheries exclusively to the Commonwealth or to the adjacent States/Northern Territory; or alternatively, for the Commonwealth and the States/Northern Territory to jointly manage a fishery through a *Joint Authority*. There are presently three joint authorities, involving the Commonwealth and the Northern Territory, Queensland and Western Australia. All were established in 1995.

The OCS and Joint Authority arrangements and how they operate are outlined in Appendix 3.

4.2 Legislative framework

The primary legislation governing Australia's Commonwealth fisheries was established in 1991 following a 1989 policy statement by the Hon. John Kerin MP, the then Minister for Primary Industries and Energy, "*New Directions for Commonwealth Fisheries Management in the 1990s*" [53]. The policy statement foreshadowed the establishment of the Australian Fisheries Management Authority (AFMA) and set out objectives and policy principles, and how they would be implemented through administrative

[51] *Commonwealth of Australia Constitution Act 1900*
[52] Off shore constitutional settlement – A milestone in co-operative federalism, Attorney-General's Department, 1980
[53] Commonwealth of Australia (1989), *New Directions for Commonwealth Fisheries Management in the 1990s: A Government Policy Statement,* Australian Government Publishing Service

arrangements, management controls, cost recovery, environmental protection, and policy principles for recreational fishing. The policy statement is discussed further in Chapter 6.

The policy statement and subsequent legislation – the *Fisheries Management Act 1991* (FMA), and *Fisheries Administration Act 1991* (FAA) – have since framed most Commonwealth fisheries management. The other Commonwealth Act for fisheries is the earlier established *Torres Strait Fisheries Act 1984*, which governs fisheries between Australia and Papua New Guinea. Over the years, several legislative amendments have been made, including in 2008 when AFMA became an agency subject to the *Financial Management and Accountability Act 1997* (it had previously come under the *Commonwealth Authorities and Companies Act 1997)*.

A key issue for the Review is the workability of the fisheries Acts and their interoperation with other Acts and legislative instruments. The Review's findings and conclusions in this regard are contained in Chapter 5.

4.2.1 *Fisheries Administration Act 1991*

The FAA, which has the long title '*An Act to establish an Australian Fisheries Management Authority and a Fishing Industry Policy Council, and for related purposes*', makes provision to establish AFMA; to appoint commissioners; engage staff and consultants; form management advisory committees (MACs); and for AFMA to develop and have approved corporate and annual operational plans. Under the Act, AFMA may establish MACs to assist it in the performance of its functions and is to establish a MAC if such a committee is a requirement for the purposes of a fishery plan of management.

The Act also makes provision for a Fishing Industry Policy Council; however, such a council has not been established.

Supplementing the legislation, in December 2005, the then Minister for Fisheries, Forestry and Conservation, Senator the Hon. Ian Macdonald, made a direction under section 91 of the FAA, requiring AFMA to

> "take a more strategic approach to the setting of total allowable catch and/or effort levels in Commonwealth fisheries, consistent with a world's best practice Commonwealth Harvest Strategy Policy (HSP) that has the objectives of managing fish stocks sustainably and profitably, putting an end to overfishing, and ensuring that currently overfished stocks are rebuilt within reasonable timeframes".[54]

Following the direction an expert panel was convened and developed the HSP, which was published by the Australian Government in September 2007. Consistent with the policy, AFMA has since implemented a total of 13 harvest strategies.

4.2.2 *Fisheries Management Act 1991*

The FMA sets out the legislative parts of the fisheries management framework, including the regulation of fisheries, preparation of fisheries management plans, allocation and management of statutory fishing rights and other concessions,

[54] Commonwealth of Australia (2005), referred to in: Commonwealth Fisheries Harvest Strategy Policy at http://www.daff.gov.au/__data/assets/pdf_file/0004/397264/hsp-and-guidelines.pdf Ministerial Direction

determination of allowable catch, fish receival, compliance and foreign fishing controls, cooperation with the States and the Northern Territory, and satisfying international obligations.

The Act enables AFMA to prepare and determine a *Plan of Management* for each Commonwealth fishery. Under the Act, a plan may set out, among several things, the objectives for the fishery; performance measures; the allocation of statutory fishing rights and other concessions; the type and quantity of fishing equipment; and obligations on the holders of concessions.

The Act also enables AFMA to allocate statutory fishing rights for access to the resources of each fishery, in which many fishers have individually tradable quotas (ITQs) or shares of the resource assigned as a proportion of the total allowable catch determined by AFMA each year. Where ITQs are not used, AFMA uses a direct permit system to specify the amount of catch each concession holder can take in a fishing season.

Other provisions of the Act deal with fish receiver permits (receivers are typically those who accept fish from a boat at landing); scientific fishing permits; foreign fishing; illegal foreign fishing; fishing on the high seas; treaty licences; surveillance and enforcement; and the procedures AFMA must follow in implementing all such things.

The Act also makes provision for how the Commonwealth will work with the States and the Northern Territory on fisheries; made necessary because some fish stocks move between different jurisdictions or are naturally distributed across boundaries. These arrangements are instituted as either:

1. *Joint Authorities* (see Appendix 3), whereby it is specified which jurisdiction's or jurisdictions' laws will apply to the fisheries managed by the joint authority; or

2. *Offshore Constitutional Settlements* (see s 72 of the Act and Appendix 3), whereby it is specified which jurisdiction will be responsible for the management of a fishery (the Commonwealth, a State or the Northern Territory).

Both these types of arrangements are intergovernmental arrangements and are not legislative instruments.

4.2.3 Interaction with other Acts

Commonwealth fisheries management interacts with several other Commonwealth Acts and the legislation of the States and the Northern Territory. Key interactions are with the *Environment Protection and Biodiversity Conservation* (EPBC) *Act 1999*, especially concerning: part 10 – *Strategic Assessments* – involving accreditation of a plan of management and risk assessment for a fishery under the EPBC Act; part 13 – which seeks to protect listed threatened species and ecological communities; and part 13A – which regulates the international movement of wildlife specimens [see Section 3.3 and Chapter 5 for more detail].

Other regular interactions are with the *Navigation Act 2012* (regulating ship and seafarer safety), *Customs Act 1901* (e.g. border controls), *Quarantine Act 1901* (e.g. biosecurity threat from foreign fishing vessels), *Migration Act 1958* (e.g. detention of illegal foreign fishers).

4.2.4 International legal context

Australia has agreed to abide by a range of legally binding and non-legally binding instruments concerning fisheries. Most stem from the *United Nations Convention on the Law of the Sea, 1982* (UNCLOS) – which sets out detailed rules in relation to Australia's and other State's sovereign rights in the Exclusive Economic Zone (EEZ) , including in relation to fisheries. UNCLOS also sets out principles relating to fishing on the high seas. Key Articles of UNCLOS in this regard are 61 – *Conservation of the living resources*, 62 – U*tilization of the living resources* (in relation to the EEZ), and 118 - *Cooperation of States in the conservation and management of living resources* and 119 – *Conservation of the living resources on the high seas* (in relation to the high seas).[55]

Key supporting instruments are the non-legally binding Food and Agriculture Organisation (FAO) Code of Conduct for Responsible Fisheries, and International Plans of Action (IPOA) to

- prevent, deter and eliminate illegal, unreported and unregulated fishing
- reduce fishing (over) capacity
- reduce the incidental catch of seabirds
- conserve and manage sharks.

Other legally binding instruments include: the *FAO Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas* (1993), the United Nations *Agreement on the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks* (1995) (the Fish Stocks Agreement). Australia has also signed but not yet ratified the FAO *Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing* (2009). This treaty is not yet in force.

Under Article 118 of UNCLOS

> "States shall cooperate with each other in the conservation and management of living resources in the areas of the high seas. States … shall enter into negotiations with a view to taking the measures necessary for the conservation of the living resources concerned. They shall … cooperate to establish … regional fisheries organizations."[56]

Part III of the Fish Stocks Agreement also sets out general principles for the establishment and operation of subregional or regional fisheries management organizations or arrangements (RFMOs) to manage straddling and highly migratory fish stocks.

Consistent with these requirements, Australia has contributed to establishing six RFMOs. The RFMOs to which Australia is a party (the first three of which deal with highly migratory species) are:

[55] United Nations (2001), *United Nations Convention on the Law of the Sea, 1982*
[56] *Ibid*.

- the Western and Central Pacific Fisheries Commission set up under the *Convention on the Conservation of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean* (WCPF Convention);
- the Commission for the Conservation of Southern Bluefin Tuna set up under the *Convention for the Conservation of Southern Bluefin Tuna;*
- the Indian Ocean Tuna Commission set up under the *Agreement for the Establishment of the Indian Ocean Tuna Commission;*
- the Commission for the Conservation of Antarctic Marine Living Resources set up under the *Convention on the Conservation of Antarctic Marine Living Resource;*
- the South Pacific Regional Fisheries Management Organisation set up under the *Convention on the Conservation and Management of High Seas Fishery resource in the South Pacific Ocean; and*
- the *Southern Indian Ocean Fisheries Agreement*.

Parties to RFMOs meet annually to agree on conservation and management measures for shared fisheries resources and these measures become requirements for Australian fisheries law.

Australia therefore recognises a large number of international 'hard' and 'soft' law instruments concerning fisheries management (Appendix 4).

4.3 Fisheries management framework

The Commonwealth Minister for Agriculture, Fisheries and Forestry has executive responsibility for fisheries, with support provided by the Department of Agriculture, Fisheries and Forestry (DAFF). The AFMA Commission reports to the Minister and is responsible for performing and exercising the domestic fisheries management functions and powers of the Authority.

Under the FAA, AFMA was originally established in 1991 as a statutory authority (with an industry representative board of management) replacing the Australian Fisheries Service of the then Department of Primary Industries and Energy. Further developments followed the government's response to the 2003 Uhrig Review[57] when in 2008 the AFMA board of management was replaced with an expert-based commission.

4.3.1 Fisheries management policy statements

Modern fisheries management policy for Commonwealth fisheries derives substantially from the 1989 government policy statement *New Directions for Commonwealth Fisheries Management in the 1990s*. There are also several sector and issue-specific policy documents and action plans concerning Australian Government policies and intentions for Commonwealth fisheries.

Key sector-specific policy statements are the *Commonwealth Policy on Fisheries Bycatch* (2000), *Looking to the Future A review of Commonwealth Fisheries Policy* (2003), and the

[57] Commonwealth of Australia (2003), *Review of Corporate Governance of Statutory Authorities and Office Holders*, Canberra

Commonwealth Fisheries Harvest Strategy Policy (2007) – made as a ministerial direction under section 91 of the FAA.

The Australian Government has also outlined policy positions in various National Plans of Action (NPOAs), reflecting Australia's commitment to similar issues in International Plans of Action (IPOAs). These are the *NPOA for the Conservation and Management of Sharks* (2004 and revised in 2012), and the *NPOA to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing* (2005). Australia has also declared its position internationally regarding the bycatch of seabirds.

Not related to IPOAs, another plan of action is the *National Climate Change and Fisheries Action Plan* (2011).

For recreational fishing, the *Recreational fishing in Australia – 2011 and beyond: a national industry development strategy* (2011) has been developed recently drawing on the earlier *National Recreational Fishing Policy* (1994).

4.3.2 Australian Fisheries Management Authority

AFMA is an Australian Government entity. The following objectives which AFMA must pursue are set out in both the FAA and the FMA, which require it in the performance of its functions to

- Implement efficient and cost-effective fisheries management on behalf of the Commonwealth;
- Ensure that the exploitation of fisheries resources is conducted in a manner consistent with the principles of ecologically sustainable development (which includes the exercise of the precautionary principle), in particular the need to have regard to the impact of fishing activities on non-target species and the long term sustainability of the marine environment;
- Maximise the net economic returns to the Australian community from the management of fisheries;
- Ensure the accountability to the fishing industry and to the Australian community in AFMA's management of fisheries resources; and
- Achieve government targets in relation to the recovery of the costs of AFMA.[58]

A key issue for the Review is whether these objectives provide sufficient clarity and give adequate direction as to how AFMA should fulfil its functions. The Review's findings and conclusions in this regard are contained in the recommendations and findings section of this report.

AFMA has translated its objectives into a single outcome: ecologically sustainable and economically efficient Commonwealth fisheries, through understanding and monitoring

[58] *Fisheries Management Act 1991* s 3, p 1, *Fisheries Administration Act 1991* s 6, p 5. Both sections also include objectives related to the fulfilment of Australia's international law obligations and the FMA includes two additional environmental objectives (s 3(2)(a) and (b).

Australia's marine living resources and regulating and monitoring commercial fishing, including domestic licensing and deterrence of illegal foreign fishing.[59]

AFMA's head office is in Canberra (138 staff) and it has regional offices in Darwin (36 staff) and Thursday Island (5 staff)[60]. The Darwin office coordinates the majority of fisheries compliance operations, in both Australia's northern waters and in the Southern Ocean, while also managing Commonwealth fisheries in northern waters. The Thursday Island office also undertakes compliance and fisheries management operations with a primary focus on Torres Strait and bilateral fishery arrangements with Papua New Guinea.

Section 7 of the FAA sets out AFMA's functions. AFMA translates these functions into management practices[61] including

- processing licensing and entitlement transactions (excluding Torres Strait) to give effect to fisheries management arrangements;
- collecting licence fees and management levies from foreign and domestic fishers to allow for cost recovery of licensing and management services;
- ensuring each fishery is assessed on a continuing basis, and filling significant gaps in knowledge through research projects;
- managing catch, effort and other data collected through its Logbook Program;
- providing professional observer services to domestic and foreign fishing vessels;
- detecting and investigating illegal fishing activity by both domestic and foreign fishing boats; and
- advising Australian delegations in international fisheries forums such as the Commission for the Conservation of Southern Bluefin Tuna.[62]

Fisheries management plans (FMPs)

Under the FMA, 'plans of management', or fisheries management plans (FMPs) as they are known, are the way arrangements are set for each fishery. The Act establishes the FMPs as the main mechanism for managing fisheries and hence they are the main mechanism for giving effect to the objectives of the FMA. The FMA requires consultation with the public on draft FMPs and provides for ministerial oversight.

Under the Act AFMA must set out in writing a FMP for each fishery or, likewise in writing, explain why one is not needed and provide draft plans for public display so interested persons can make representations. In other respects the Act sets out various things that a plan must, or may, contain, and similarly, what AFMA must, or may, do in relation to performing its functions under a FMP.

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[59] AFMA Annual Report 2010-2011
[60] *Ibid*.
[61] http://www.afma.gov.au/about-us/
[62] *Fisheries Administration Act 1991*, s 7, p 6

FMPs are clearly the key mechanism through which many aspects of fishing are managed. The Review's findings and conclusions in this regard and in regard to associated assessment and decision-making functions are contained in the findings and recommendations section of this report. **The Review considers that there is considerable scope to improve the substance of FMPs, thereby improving the effectiveness and transparency of public consultation, and to give better effect to the ministerial oversight that the FMA envisages.**

Management advisory committees (MACs)

The FMA envisages that the development of an FMP will be informed by a MAC whose functions (as specified in the FAA) may include it acting as a liaison body, providing advice, and monitoring and reporting information relating to a fishery (under the Act, MACs can also be empowered to have a fisheries management role, although the Review understands this provision has never been utilised).

MACs are the main advisory body to the AFMA Commission and they are also the formal link with those with an interest in the fishery. Under the FAA, AFMA

> "must try, as far as practicable, to ensure that the membership of a management advisory committee includes an appropriate number of members [not exceeding seven] engaged in, or with experience in, the industry in the fishery in which the management advisory committee is established." [63]

AFMA currently works with eight MACs and seven *Resource Assessment Groups* (RAGs). The MACs provide advice to AFMA including on fisheries management arrangements, research, compliance and management costs.

The AFMA Commission determines the membership of each MAC following a nomination and selection process. The membership of MACs typically includes the commercial industry, fisheries management (a relevant AFMA fishery manager), scientific community, environment/conservation sector and, in some, state government officers. The FAA makes provision for a MAC to establish a sub-committee to advise it in the performance of its functions and the exercise of its powers.

The Review considers that MACs provide a very valuable source of advice but it does not consider it necessary or desirable for MACs to be specifically legislatively prescribed (see Chapter 5).

Resource assessment groups (RAGs)

Unlike MACs, RAGs are not specifically provided for in the FAA. Instead they are set up under AFMA's general power to establish committees to assist it in the performance of its functions and the exercise of its powers (s 54). RAGs provide advice on the status of fish stocks and the impact of fishing on the marine environment, including recommendations directly to the AFMA Commission on issues such as the setting of total allowable catches (TACs), stock rebuilding targets, biological reference points and risk assessments. This includes advice about the information needed for stock assessments and the likely impacts of harvest options. The RAG advice is also provided to the MACs for their consideration in formulating MAC advice to the Commission.

[63] *Fisheries Administration Act 1991*, s 62, p 28

Access to fisheries resources

Access by individuals or groups to Commonwealth fisheries is provided by allocating fishing concessions as a form of legal 'right'. Under section 7 of the FAA, AFMA has the function of establishing and allocating fishing concessions in the form of statutory fishing rights (SFRs), fishing permits, or foreign fishing licences.[64] The AFMA Commission is responsible for determining the nature and amount of access to a fishery.

The FMA sets the framework and rules for establishing and managing fishing concessions, including provisions for their allocation, suspension or cancellation.

Fishing concessions allocate 'shares' to fisheries resources, access to which is controlled by 'input' or 'output' controls or a combination; typical input controls being the number or type of fishing vessels, the amount or type of fishing gear, or the areas or times when fishing can be done; and output controls, the amount of fish that can be caught. Most Commonwealth fisheries are managed by a combination of controls, though most are managed in the main by SFRs and output controls.

Setting catch limits to control output is a key aspect of the *Commonwealth Harvest Strategy Policy* (HSP). Under the Strategy the TAC of each fish species or stock is regularly assessed through RAG and MAC processes. The TAC is apportioned by AFMA to each concession holder based on the number of individually transferable quota (ITQ) catch units held by each concession holder.

The Act makes provision for reviewing and appealing allocation decisions. The Statutory Fishing Rights Review Panel, which is a separately constituted entity under the FMA, exists to review allocations of SFRs, if required. **The Review questions whether this framework is still needed** (see Chapter 7).

Enforcement and Compliance

A major function of AFMA is ensuring compliance with Australian fisheries laws. This includes domestic and foreign fishing vessels, and licensed and illegal fishing activities, both within the Australian Fishing Zone (AFZ) and the high seas, under international treaties and agreements.

Specific measures include monitoring activities and a comprehensive catch and landing reporting system for quota.

AFMA works with other Commonwealth agencies, including with State and Northern Territory fisheries authorities, and in cooperation with other Commonwealth agencies with responsibilities involving maritime law enforcement and border security, such as the Australian Federal Police, Border Protection Command, DAFF Biosecurity and the Australian Tax Office.

With regard to illegal foreign fishing, AFMA's work extends, with interagency collaboration, to controlling Australia's remote Southern Ocean territories (including in a joint treaty with France), and maintaining surveillance and enforcement in northern Australian waters bounding Indonesia, East Timor and Papua New Guinea.

[64] *Fisheries Administration Act*, s 7(m), pp 8-9. See also *Fisheries Management Act,* Part 3

In collaboration with DAFF, AFMA also contributes to regional outreach programs aimed at stopping illegal foreign fishing in Australian waters by dealing with the problem at source. The outreach programs include public information campaigns and multilateral work with ten South East Asian countries through a Regional Plan of Action to combat illegal, unreported and unregulated fishing.

The Review has considered the enforcement and compliance functions of AFMA and the findings and conclusions concerning these functions are contained in Chapter 7.

4.4 *Environment Protection Biodiversity Conservation Act 1999* (EPBC Act)

The EPBC Act has a significant bearing on Commonwealth, State and the Northern Territory fisheries management. The main areas of the Act applied to fisheries are Parts 10, 13 and 13A, which deal respectively with strategic assessments, accreditation of FMPs, and the requirements that must be met before exporting the catch from a commercial fishery operation.

Under **Part 10**, dealing with 'Strategic assessments', and specifically Division 2 'Assessment of Commonwealth-managed fisheries', the impacts of actions under a proposed FMP are assessed in consideration of matters of national environmental significance. If an FMP is accredited under Part 10 and a Ministerial declaration made under s 33, it avoids any need to seek Ministerial approval of each fishing operation as a 'Controlled action' under Part 9 of the EPBC Act.

Part 13 concerns the Commonwealth Environment Minister accrediting a FMP once satisfied that all reasonable steps have been taken to avoid impacting on listed threatened species, listed migratory species, cetaceans and members of listed marine species.

Part 13A concerns the international movement of wildlife specimens; as it relates to fisheries, the commercial export of Australian native species or species listed under the *Convention on the International Trade in Endangered Species* (CITES). For the catch from a commercial fishery to be lawfully exported, the species concerned must either be included by the Commonwealth Environment Minister on the list of exempt native specimens (LENS) or the Environment Minister must declare the commercial fishery operation to be a 'approved wildlife trade operation' (WTO) and export permits must be obtained. Prior to declaring a 'approved wildlife trade operation', the Environment Minister must be satisfied that the operation will meet criteria including: obligations under CITES and the *Biodiversity Convention*; that commercial utilisation of Australian native wildlife for export is managed in an ecologically sustainable way, that it will not be detrimental to the survival or conservation status of a taxon to which the operation relates, and the operation will not be likely to threaten any relevant ecosystem including (but not limited to) any habitat or biodiversity.

The interaction between the fisheries Acts and the EPBC Act and the workability of existing arrangements are key considerations for the Review. The Review's recommendations on this matter are contained in the findings and recommendations section of this report.

5 Governance

5.1 Roles and responsibilities

The *Fisheries Management Act 1991* (FMA) and *Fisheries Administration Act 1991* (FAA) set out the Australian Fisheries Management Authority's (AFMA) and the Minister for Fisheries' roles and responsibilities with respect to fisheries management. AFMA has broad decision-making powers, whereas the legislated role of the Minister under normal circumstances is – as one would expect – more limited. This is not to say that the Minister's powers are not considerable as they stand.

In line with the Hon. John Kerin MP's wry observation in 1989 that a Fisheries Minister should "concentrate on broad strategies rather than the detailed day-to-day administration,"[65] (presumably a diplomatic allusion to the constant lobbying to which he had been subject prior to the establishment of AFMA as a statutory authority) the FAA clearly intends that

- the relationship between AFMA and the Minister be at a strategic level;
- the Minister should "have the power of direction over the affairs of the Authority"; and
- AFMA should, in turn, oversee the development and implementation of management arrangements.[66]

There was almost universal support – in submissions and consultations – for the broad shape of current governance arrangements to continue. **A clear message was that AFMA should remain a commission distinct from government as this would better ensure that decisions are made against objective criteria based on science, economic and other analysis.** At the same time, there was recognition that government needed to give guidance on the overarching policy framework that AFMA should apply, with many mentioning the application of a precautionary approach as a good example.

Many stakeholders sought greater transparency in, and access to, the Commission's decision making processes and AFMA's supporting committee structure. The Review also learned there is concern amongst a small number of stakeholders about the makeup and tenure of not only the Commission but the Management Advisory Committees (MACs) and Resource Advisory Groups (RAGs) on which it relies.

With this in mind, the Review has also considered whether the Acts appropriately define respective roles and responsibilities – including interactions – and how the current overarching governance framework for fisheries might be improved with particular reference to accountability, transparency, communication and engagement. It also considered whether adequate power is reserved for the Minister where decision-making is more sensibly a reflection of community values rather than founded in scientific or risk-based approaches.

[65] The Hon. John Kerin MP, 1989, *New Directions for Commonwealth Fisheries Management in the 1990s – A Government Policy Statement December 1989*, Foreword, Commonwealth of Australia, p iv
[66] Explanatory Memorandum *Fisheries Administration Bill 1990*, p 1

5.1.1 Department of Agriculture Fisheries and Forestry

The Australian Department of Agriculture, Fisheries and Forestry's (DAFF) broad role is to develop and implement policies and programs that ensure Australia's agricultural, fisheries, food and forestry industries remain competitive, profitable and sustainable.

DAFF supports Australia's domestic fisheries and aquaculture, through

- research;
- quarantine and biosecurity;
- fish health and food safety programs;
- market access and trade negotiations;
- business development and management assistance;
- policy development; and
- representing Australia in international fisheries fora.

DAFF's Fisheries Branch works closely with AFMA and assists the Minister responsible for fisheries to set the policy direction for

- Commonwealth fisheries management;
- progressing operations of joint authorities;
- legislative reform and reviews; and
- negotiating jurisdictional boundaries and resource sharing arrangements.

DAFF (through the Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES)) also reports on elements of AFMA's performance against its objectives through the annual publication of fisheries status reports. The reports provide an independent evaluation of the biological status of fish stocks and the economic status of fisheries managed, or jointly managed, by the Commonwealth through AFMA. Status reports assess the biological status of target and key by-product species in each fishery, with respect to their biomass and the level of fishing mortality. ABARES also examines the economic performance of each fishery in terms of AFMA's objective of maximising net economic returns from Commonwealth fisheries to the Australian community. The status reports also comment on broader environmental aspects but the framework for monitoring performance in this area is less developed.

Notwithstanding their support of ABARES fisheries status reports as "a valuable source of information" with respect to the performance of individual fisheries, WWF-Australia; TRAFFIC; Marine Conservation Society; and Humane Society International note a broader lack of assessment by DAFF of

> "AFMA's overall performance against its ESD [ecologically sustainable development] or economic objectives and...the extent to which management is efficient and cost-effective,

whether cost recovery is in line with government policy, or whether AFMA is accountable to the Australian public."[67]

The joint submission maintains DAFF's failure in monitoring AFMA's performance is "the major flaw in the current arrangements" and cites the second reading speech of the FAA as evidence of a clearly envisaged broad oversight role for the Department post AFMA's establishment

> "…. the fisheries policy branch will also be required to monitor the overall performance of the Australian Fisheries Management Authority in regard to its implementation of the Government's fisheries management objectives and the general performance and profitability of the fishing industry."[68]

WWF-Australia et al. go on to offer a way of improving performance assessment within existing resources: ratchet annual fisheries status reporting back to a rolling program of, for example, three-yearly reports, with savings redirected to "more explicit performance assessment against AFMA's objectives."

The Review believes there is some merit in considering whether fisheries stock assessments and reporting could in fact be undertaken over a longer time frame – through a regular program covering all fisheries – without loss of data critical to informing sound management decisions. However, it also notes the importance of ABARES' reports as an independent evaluation of the biological condition of fish stocks and economic status of fisheries – any move to a longer reporting period must not be at the cost of greater uncertainty in fisheries.

Although AFMA is in fact required to account for its performance to the Minister, Parliament and the Australian public through legislative reporting requirements (see section 5.2.1), the Review has some sympathy for WWF-Australia et al.'s concerns that some objectives seem to be more keenly monitored and bettered reported upon than others. Rather than look to additional assessment and reporting, however, the Review proposes mechanisms to address what it considers to be a broader requirement – noted in several other submissions – for greater transparency of, and opportunity for engagement in, AFMA's processes (see section 5.2.2). It also proposes recasting the fisheries Acts' objectives to better balance economic and commercial objectives against those concerned with ecological and longer-term commercial sustainability.

The Review heard that there is a certain 'blurring' between DAFF and AFMA.[69] In part this is inevitable, as there are rarely clear boundaries between fisheries policy issues (the responsibility of DAFF) and operational policy, implementation and management (the role of AFMA). Policy needs to be informed by operational experience and vice versa. A compounding issue is that both DAFF and AFMA interact with State and the Northern Territory agencies, which do not have the structural separation of roles of the Commonwealth. Nevertheless, the Review heard that the separation of roles at the Commonwealth level was much preferred but that the two bodies needed to work more strategically and closely with one another.

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[67] Joint submission from WWF-Australia; TRAFFIC; Marine Conservation Society; & Humane Society International

[68] Senator the Hon. Michael Tate, Second reading speech, Fisheries Administration Bill 1991, Senate Hansard, 6 June 1991, p 4567

[69] For example, see joint submission from Austral & WWF-Australia

While DAFF and AFMA each needs to be cognisant of and remain within the bounds of their separate roles and responsibilities, both entities work to common aims, are accountable to the same Minister and often deal with the same issues; it is therefore essential that each is well informed about what the other is doing and that regular information exchange occurs freely at a strategic as well as officer-to-officer level. More attention needs to be given to forging a closer working relationship.

5.1.2 Australian Fisheries Management Authority

AFMA was established by the FAA to manage Commonwealth fisheries resources on behalf of the Australian community. It is a prescribed agency under the *Financial Management and Accountability Act 1997*, comprising a commission and a chief executive officer (CEO). AFMA'S CEO and staff constitute a statutory agency for the purposes of the *Public Service Act 1999*.

The Review heard almost universal support for maintaining the current fisheries management governance model. Several submissions went on to note that AFMA, since its establishment, has evolved considerably but that improvement in the AFMA's operations, broader fisheries governance structures and, or credibility must continue.[70]

Only one alternative fisheries management governance model was offered to the Review: Dr Jonathan Nevill proposes that "radical change" is required in Commonwealth fisheries management – namely AFMA's disbanding and replacement with an agency with the considerably broader remit of "the management of Australia's marine biological assets." Dr Nevill draws parallels with the Hobart-based *Commission for the Conservation of Antarctic Living Marine Resources* (CCAMLR), suggesting "such an agency would take over responsibilities for both harvesting (fishing) and the Commonwealth network of maritime protected areas."[71]

The Review is inherently attracted to the integrative and holistic management principle underpinning a CCAMLR-style agency and notes several submissions suggested AFMA could take on a 'marine stewardship' role[72] rather than that purely of fisheries management – the Review's view on the need for fisheries management in an ecosystem context is discussed at Chapter 6. Coupling responsibly for Commonwealth marine conservation and fisheries within a single entity, however, would necessitate far-reaching change in the administration, legislation and management of AFMA. Such a move would also go against strong and wide-ranging stakeholder support for the continuation of AFMA.

AFMA's responsibilities are shared between the Commission itself and the CEO. The Commission is skills-based and is responsible for AFMA's domestic fisheries management functions and powers. The CEO (who is also a Commissioner) is responsible for assisting the Commission, including giving effect to its decisions. The CEO is also separately responsible for exercising AFMA's foreign compliance functions and powers, and responsibilities under the *Financial Management and Accountability Act 1997* and *Public Service Act 1999*.

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[70] For example, submissions from Austral Fisheries & WWF-Australia; Commonwealth Fisheries Association; Conservation Council SA; and Associate Professor Marcus Haward

[71] Submission from Dr Jonathan Nevill

[72] For example, submissions from WWF-Australia et al; Dr Jonathan Nevill; and Stop the Trawler Alliance

The Commission may delegate to the CEO any of the domestic fisheries management functions or powers of the Authority – the CEO, in performing any such function or exercising any such delegated power, is subject to the Commission's directions. The CEO may, in turn, delegate to certain people or entities – for example, an AFMA staff member or a committee.

The Minister for Fisheries appoints AFMA's Chairperson, other part-time Commissioners and the CEO. The Minister may or must terminate an appointment in certain circumstances.

Under the FAA, to be eligible for appointment individuals must have "high level of expertise in one or more" of the fields of fisheries management; fishing industry operations; science; natural resource management; economics; business or financial management; law; and public sector administration or governance.

Figure 2. ***Recent Commonwealth fisheries management institutional arrangements***

Recent Commonwealth fisheries management institutional arrangements
A brief history of AFMA

Prior to 1991, fisheries under Commonwealth control were administered by the Australian Fisheries Service (AFS), a division of the then Department of Primary Industries and Energy. Management decisions were made by the minister directly or by his delegate – a senior officer within the department. The AFS was supported by advice from the Bureau of Rural Resources and the Australian Bureau of Agricultural and Resource Economics (ABARE).

In 1989, the Commonwealth Government released a policy statement, *New Directions for Commonwealth Fisheries Management in the 1990s* (DPIE 1989), which canvassed – amongst other matters – options for the future administrative and institutional arrangements.

In line with *New Directions* conclusions, the Australian Fisheries Management Authority (AFMA) was established under the *Fisheries Administration Act 1991* as a statutory authority, and commenced operation in February 1992. The new authority was governed by a chair and a (largely representational) board of seven directors (of whom one was a senior government official), appointed by the minister, with expertise in one or more of the fields of commercial fishing or other fishing industry operations; fisheries science; natural resource management; marine ecology; economics; or business management.

This model – which aimed to ensure that professional fisheries managers based decisions on scientific and economic analyses – represented a significant governance shift: day-to-day decisions were taken at arm's length from the minister and so were ostensibly removed from the political arena. The legislative fisheries management objectives to be pursued by this new body were clearly set out under its *Fisheries Management Act 1991* including cost-effective management, and ensuring ecologically sustainable development and delivery of economically efficient fisheries.

The FAA sets out clear requirements for Commissioners to disclose to the Minister any interests – pecuniary or otherwise – that could relate to their AFMA functions, both prior to appointment and whenever such interests arise during their terms of office. Where a Commissioner has an interest in a matter to be considered by the Commission, he or she must make known the nature of the interest to the meeting of the Commission.

The Commission maintains a register of all interests and an individual Commissioner must not take part in any deliberation or decision in which he/she has such an interest.

Commissioners cannot hold an executive position in a fishing industry association or in a body corporate that holds a fishing concession, licence or permit. Nor can they themselves hold a fishing concession, licence or permit granted under the FMA or *Torres Strait Fisheries Act 1984* or the majority of voting shares in a company that holds a fishing concession, licence or permit granted under these Acts.

Notwithstanding general support for AFMA's continued operation, and AFMA'S own assertion that one of the model's key strengths is the "independent and expert role of the AFMA Commission and the ability of its members,"[73] the Review heard calls for changes to the Commission's makeup and Commissioners' tenure. The WWF-Australia et al. submission notes under the current set up more than half the Commissioners have had "a longstanding involvement with AFMA as, variously, managing director and/or members of the Commission's predecessor, the AFMA Board." In the interest of best practice governance it suggests that the current five year terms of appointment be reduced to three years and that individuals serve no more than two consecutive terms. It also calls for temporally-staggered appointments to ensure "both continuity and renewal" in the Commission.

The Review also considered whether the Commission's collective skills and experience are appropriately broad and reflective of AFMA's legislative objectives. It has heard variously that the Commission could, in addition to its current span of experts, include conservation,[74] Indigenous[75] and recreational fishing expertise[76] as well as a "member of the community who can advocate the social imperatives of fisheries management"[77] to ensure the range of skills reflects broader community interests. In their joint submission, Austral Fisheries and WWF-Australia also noted a need for the Commission to include adequate fishing industry operational expertise.

Beyond this, the Review heard occasional reference to AFMA being 'captured' by industry,[78] or as one submission describes "act[ing] in a way that is subservient to the commercial fishing industry"[79] – usually, but not always, referencing past arrangements under the Board of Directors. Seafood Services Australia, for example, notes that "the early make-up of the AFMA was strongly biased towards industry based directors" and that this made it difficult to ensure industry was not effectively setting its own fishing limits. The Review considers some suggestions of 'capture' may extend, in part, from a general lack of understanding by the community of the operation of current decision-making and advice provision arrangements. It seems AFMA recognises this as an issue, noting in its submission to the Review that it must not only remain *independent* but also be *seen* and *heard* to be so

[73] Submission from AFMA
[74] Submissions from WWF-Australia et al and Stop the Trawler Alliance
[75] Submission from Stephan Schnierer & Stan Lui
[76] Submissions from the Recreational Fishing Alliance of NSW; Australian Recreational Fishing Foundation; Mr Graham Pike; and Stop the Trawler Alliance
[77] Submission from Mr Graham Pike
[78] Submissions from Mr Graham Pike and Dr Jonathan Nevill
[79] Submission from Dr Jonathan Nevill

> "in order to perform its functions, it is vital that AFMA and the AFMA Commission continues to have an independent public voice when fisheries matters are under discussion in the media or other public processes."[80]

Exercising this voice, the AFMA Chair recently described publicly the "completely non-partisan, independent" role the Commission takes in fisheries management decision making (specifically with reference to setting catch limits)

> "... the Commission considers the advice of AFMA staff, together with scientific advice from our relevant resource assessment group and the advice of the relevant management advisory committee...The views of members of these groups are not always unanimous, and the Commission takes into consideration all views expressed by their members in the full knowledge that they will have different perspectives, different interests and different agendas...I emphasise, however, that none of these groups [make management decisions] – not the resource assessment groups, not the management advisory committees, not the CEO of AFMA or AFMA's staff – but rather the independent AFMA Commission."[81]

The roles, responsibilities and operations of AFMA's MACs and other structures are considered at section 5.1.3.

On the other hand, the Review has heard that the Commission as currently constituted is independent to the point of being "removed from the reality on the water".[82] Several industry stakeholders made this point during meetings with the Review and suggested that Commissioners' distance from the "fishing coalface" sometimes leads to decisions that are impractical or undesirable from industry's perspective. The Commonwealth Fisheries Association offers substantiation of the "remoteness of the Commissioners" in that, during the "last 12 months, the Commissioners have overturned unanimous MAC decisions[83] seven times." In the same vein, but from a different perspective, AFMA notes that the Commission

> "applies a high-level of critical review to the advice it receives... As evidence of this, over the last two years, one quarter of all decisions of the AFMA Commission were not in-line with the MAC recommendation and it is not unusual for the AFMA Commission decisions to deviate from the recommendations it [has] received from AFMA staff."[84]

The Review finds that AFMA as it is currently constituted does not appear to be 'captured' by industry or, for that matter, any other interest group. However, this is not necessarily obvious to the Australian community. Although much of AFMA's committees' advice is publicly accessible, neither the form in which it and other advice is considered by the Commissioners, nor the Commissioners' deliberations and decisions, are made public. The Commission should pay particular attention to publicly explaining what is on its work program and the reasons for its decisions.

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[80] Submission from AFMA
[81] Michael Egan, *AFMA Chair hits out at unlawful quota claims* media release, 16 September 2012, (www.afma.gov.au/2012/09/afma-chair-hits-out-at-unlawful-quota-claims, viewed 12 December 2012)
[82] Submission from Commonwealth Fisheries Association
[83] The Review notes that MACs do not make decisions on fisheries management but rather recommendations to the Commission – see section 6.1.4.
[84] Submission from AFMA

Several submissions concur with the above finding, calling for greater transparency in the Commission's decision making processes – including with reference to AFMA's justification of decisions against its legislative objectives. [85]

5.1.3 Committees

Prescribed committees

To assist its operations, AFMA may, under the FAA, establish committees – it also has the power to abolish any such committees. A committee (other than a MAC) may be constituted wholly by Commissioners, or by Commissioners and others and must perform its functions in the manner and to the procedures set by AFMA. Where a committee member has an interest in a matter under consideration such that a conflict may arise, he or she must make a disclosure, which is to be recorded.

The FAA makes provision specifically for MACs and their functions, differentiating MACs from any other committees in that they are to assist AFMA "...in the performance of its functions and the exercise of its powers *in relation to a fishery*".

The Review notes that the legislation provides that AFMA *may* establish MACs for the purpose of providing advice to AFMA on the preparation and operation of a fisheries management plan. Yet – rather curiously – the legislation also provides that where a fisheries management plan makes provision for "the performance of functions or the exercise of powers" by a MAC, AFMA *must* establish such a committee.

Under the FAA, a MAC has such functions as AFMA from time to time determines. These may include but are not limited to

- being a liaison body between AFMA and people engaged in a fishery;
- advising AFMA on the preparation and operation of a fisheries plan of management; and
- monitoring and reporting to AFMA about scientific, economic and other information relating to a fishery.

In practice, MACs – of which there are currently eight in operation – are both "the main advisory body and link between AFMA and those with an interest in the fishery."[86] A MAC serves as a forum where "strategic management issues are discussed, problems identified and possible solutions developed"[87] and its advice to AFMA might range across matters including fisheries management arrangements, research, compliance and management costs.

The Review notes broad and strong stakeholder support for the continuation of MACs (and RAGs – see section 5.1.3) – held, as they are, as valuable advisory and "participatory fisheries management" mechanisms providing "structured pathways to

[85] Submissions from Commonwealth Fisheries Association; Austral & WWF-Australia; Stop the Trawler Alliance; and WWF-Australia et al

[86] AFMA website (www.afma.gov.au/managing-our-fisheries/consultation/management-advisory-committees/ viewed 10 December 2012)

[87] AFMA *Fisheries Management Paper No. 1 – Management Advisory Committees*, June 2009, p 3 (www.afma.gov.au/wp-content/uploads/2010/06/fmp01_2009.pdf)

deliver research support into management and policy fora."[88] As far as it goes, this is perfectly adequate: that MACs are held in high esteem both by AFMA and by stakeholders with a seat at the MAC table; replicated by several State fishing management agencies; and follow an internationally well regarded approach speaks volumes about their value.

However, AFMA itself points out that MACs are its "main point of contact with key stakeholder groups,"[89] and it certainly appears to the Review that the committees are used by AFMA as its primary consultative channel. This, particularly in light of the significant number of submissions critical of the lack of opportunity for public engagement in fisheries management, is of concern to the Review; MACs are not constituted or resourced to – and nor do they in practice – funnel in broad public input to the Commission's decisions. Nor, as some submissions have suggested, does the Review believe they should be expected to undertake such a role since this would almost certainly dilute the very characteristics that make MACs so useful and valued under current arrangements.

An effective, consultative mechanism that both informs and engages the Australian community should be a cornerstone of AFMA's management; it should not be left to MACs to, amongst their other roles, attempt to represent the Australian community. The Review considers this matter in greater detail at section 5.2.

Returning to MACs' roles and powers, the Review notes that, subject to it acting in accordance with AFMA policies and directions, a MAC is empowered to do, on behalf of AFMA, anything "necessary or convenient" in performing its functions. It follows from this that all acts and things properly done in the name or on behalf of AFMA by a MAC are taken to have been done by the Authority. Parallel with this very considerable delegated power, the Act imposes strict requirements for MAC members to declare conflicts of interest. AFMA's submission to the Review points out that "neither the AFMA Commission nor its predecessor, the AFMA Board, has ever delegated a decision making power to a MAC"[90] and so proposes that, where a MAC operates in an advisory rather than decision-making capacity, such a standard is unnecessary. In practice such a lofty standard poses a considerable problem for AFMA; MAC membership is drawn necessarily and deliberately from stakeholders who, by their nature, have an interest in the relevant fishery.

By way of follow on, several submissions note there would be value in more clearly articulating MAC procedures for the declaration of interests and potential conflicts – and greater administrative transparency – with a specific focus on those of a non-pecuniary (for example, philosophical, personal or academic) nature.[91]

In establishing a MAC, AFMA appoints an independent chair; an AFMA staff member who is responsible for the management of the fishery for which the Committee has been established; and up to seven other members. Typically the 'others' comprise a research

[88] Submission from CSIRO
[89] AFMA *Fisheries Management Paper No. 1 – Management Advisory Committees*, June 2009 p 3
[90] Submission from AFMA
[91] Submissions from Austral Fisheries & WWF-Australia and Commonwealth Fisheries Association

member, an environment or conservation member and up to four industry members.[92] This industry dominance appears to stem from the FAA instruction that AFMA "must try, as far as practicable, to ensure that the membership...includes an appropriate number of members engaged in, or with experience in, the industry in the [relevant] fishery". On the inclusion or otherwise of interests beyond commercial fishing, the FAA is silent and it is the "Commission [that] decides on a fishery-by-fishery basis whether membership of a MAC should also reflect…wider community interests".[93]

Although diversity of MAC memberships have expanded since their inception, many submissions to the Review note committees' composition and administration remains too strongly weighted in favour of commercial industry at the cost of other interests.[94] Along similar lines, CSIRO notes there would be value in considering whether a "broader shared understanding" might be enabled though bringing together in MACs conservation and fisheries management elements.

One way AFMA appears to have looked to broaden participation in MACs, noting the legislative limit of seven 'other' members, is to invite added involvement on the basis of a "need for additional expert advice."[95] 'Invited participants' to MACs are bound by the same obligations and responsibilities as members but are not eligible for sitting fees[96], which the Review notes could restrict representational capacity in some instances. This is a potential problem where an 'invited participant' is included as the sole representative of a particular interest, is held to be the representative expert, and yet may not be able to consult effectively within the relevant sector.

The Review also notes that inclusion of non-commercial representatives, whether as members or invited participants, does not automatically mean interests are appropriately balanced. One invited participant commented on a recent experience where the MAC of which he is a part acknowledged recreational and conservation participants' concerns but "overruled or outvoted" them, "leaving [us] no alternative but to seek other pathways to be heard."[97] That said, it is clear that the mix as it does exist is valued by AFMA; the "diversity of membership and individual accountability of members are key strengths of the MAC process." [98]

MAC members may hold office for up to three years and the Act does not preclude reappointment. As a general rule, AFMA considers revised membership arrangements upon expiry of terms of appointment of existing members. The Act makes clear provision for termination of appointment in certain circumstances.

The Act also provides that a MAC may establish (and abolish) sub-committees, with or without inclusion of MAC members, to advise it on particular issues.

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[92] AFMA website (www.afma.gov.au/managing-our-fisheries/consultation/management-advisory-committees viewed 10 December 2012)
[93] AFMA website(www.afma.gov.au/managing-our-fisheries/consultation/management-advisory-committees viewed 10 December 2012)
[94] Submissions from Mr Graham Pike; Recreational Fishing Alliance NSW; and Mr Keith Antonysen
[95] AFMA *Fisheries Management Paper No. 1 – Management Advisory Committees*, June 2009, p 5
[96] AFMA *Fisheries Management Paper No. 1 – Management Advisory Committees*, June 2009, p 5
[97] Submission from Recreational Fishing Alliance NSW
[98] Submission from AFMA

Other committees

Whereas MACs are prescribed in legislation, RAGs are not. Rather, they are established pursuant to AFMA's general power to establish committees in s 54 of the FAA. This should not, however, be seen as a reflection on the relative importance of the role they play in assisting AFMA in the performance of its duties. **Indeed, it seems to the Review that RAGs are held in equally high regard as MACs by most stakeholders and as an integral part of the current system.**

There are currently seven RAGs in operation, focused either on a major fishery group or individual species, made up of high-level expert scientific, economic and industry membership including individuals from CSIRO, ABARES, universities, state government and private research institutions. The Commonwealth Fisheries Association notes that RAGs enable the Commonwealth "very cost effective use of this expertise."

RAGs operate independently from MACs. That said, RAGs work closely with MACs to provide the committees with advice on the status of fish stocks, sub-stocks, species (target and non-target), and on the impact of fishing on the marine environment. This includes providing advice to MACs' research sub-committees on the type of information required for stock assessments.

RAGs evaluate alternative harvest options proposed by MACs, including the impact over time of different harvest strategies; stock depletion or recovery rates; confidence levels for fishery assessments; and risks to the attainment of approved fishery objectives. The groups also evaluate and report on economic and compliance factors affecting the fishery as well as coordinating, evaluating and regularly undertaking fishery assessment activity in each fishery.

RAGs provide their advice directly to the AFMA Commission. RAG advice is also provided to the relevant MACs (MACs consider RAGs' advice and make recommendations to AFMA) and to AFMA on issues including total allowable catch setting, stock rebuilding targets and biological reference points. In effect, the RAGs provide advice taking account of uncertainty and seek to identify the risks associated with the alternatives.

The key criticisms of MACs have been similarly levelled at RAGs.

Beyond these, one submission highlighted that each RAG should include "at least one truly independent scientist (i.e. one with relevant expertise who does not benefit from AFMA generated research projects)."[99] This issue was also raised with the Review during consultations, though rather from the angle of noting how 'small is the pool' of fisheries scientists from which to draw relevant expertise. On this note, the Review acknowledges that independence must be balanced against interest but notes also, with reference to the provision of scientific advice particularly, expertise (specifically that which is highly specialised) is often intrinsically linked with interest of some form. As for the management of interests in MACs and RAGs, the Review considers clear documentation and rigorous application of guidance would go a long way to addressing this matter. The Review does not concur with the suggestion made by several submissions to enshrine specific declaration of interest requirements for RAGs in

[99] Submission from Stop the Trawler Alliance

legislation (beyond those set out in s 55(3) and (4) of the FAA for committees other than MACs) and further discusses the need or otherwise for legislated advisory structures at section 5.2.2.

On a related matter, CSIRO's submission to the Review notes that a shortcoming of the current set up is the **absence of peer review** of the science on which many of the Commission's decision are based.

> "Currently, within RAGs, there is rigorous internal review of scientific results and assessments but there is no formal process for independent scientific peer review beyond the publication of methods in scientific journals which may lag the actual decisions by several years. This is an important part of the scientific process and provides greater confidence to all involved that the science supporting management decisions is of the highest quality and robustness."

The submission goes on to note that a formal mechanism for independent peer review, such as those presently employed in the United States and South Africa, could be developed and adopted by the RAGs, with only "a modest increase in costs…greatly outweighed by the benefits."[100]

There was one further RAG-specific issue put to the Review: some RAG members raised concerns about their capacity to provide meaningful input to discussion because of constraints inadvertently imposed on the groups. **Constraints took two forms, the first being that papers are often provided to participants without adequate lead up to deadlines, particularly in light of the heavily technical nature of some items. The second is that papers are sometimes provided to RAG members 'in confidence', restricting their broader circulation.** Conservation members raised this as a particular issue since it limits their consulting across or between other like-minded organisations with relevant expertise.[101]

5.1.4 Minister for Agriculture, Fisheries and Forestry

While AFMA is an independent body, nominally neither the Commission nor CEO operate in isolation from government, specifically the Minister responsible for fisheries.

Under the *Public Service Act 1999*, AFMA's CEO and staff are required to be responsive to the Australian Government in implementing government policies and programs. Further to this, the fisheries Acts make provision for the Minister to give some guidance to or have some authority over AFMA through routine processes and appointments, as follows.

- As noted previously, the Minister appoints the Chairperson of the Commission, other part-time Commissioners and the CEO. The Minister may or must terminate an appointment in certain circumstances.
- The Minister may approve the AFMA corporate plan (which may be for 3, 4 or 5 years as AFMA chooses) or, if he or she thinks the interests of fisheries management or any matter relating to fisheries management so require, the Minister may request

[100] Submission from CSIRO
[101] Submission from WWF-Australia et al.

that AFMA revise the plan. AFMA is bound to consider the request, "make such revision...as it considers appropriate" and resubmit the plan for approval.

- In a similar way, the Minister may approve or request a variation in AFMA's annual operational plan where the Minister thinks that the plan is inconsistent with the relevant corporate plan.

- AFMA is required to submit fisheries management plans to the Minister. The Minister is bound to accept the plan where it is clear AFMA's consultation and consideration of representations has been adequate and the plan is consistent with corporate and operational plans. If the Minister does not accept the plan, he or she must refer it to AFMA with an explanation of why it was not accepted.

The Minister can also ask AFMA to vary either a corporate or operational plan at any time but in doing so must explain the reasons for the request. The FAA does not require the Minister to provide an explanation should he or she reject AFMA's drafting of the requested variation. On the other hand, with the exception of variations of a minor nature, AFMA cannot vary a corporate or operational plan except with the Minister's agreement. Where minor variations are made, AFMA must afterwards alert the Minister as soon as practicable.

The Acts also set out directive powers, specifically focused and otherwise, available to the Minister in certain instances

- The Minister can direct the CEO with regard to AFMA's performance and exercise of the foreign compliance functions and powers – and the CEO must comply with the Minister's directions.

- The Minister can direct AFMA to conduct a consultative public meeting. This is in addition to a requirement under the Act for AFMA to hold a public meeting to consult with "industry and the public generally" at least once every 12 months. AFMA must comply with such a direction.

- The Minister may give directions, under s 91 FAA, to AFMA necessary to ensure that the AFMA's performance of its functions and exercise of its powers does not "conflict with major government polices" only where "exceptional circumstances" exist. Where such a direction is given, AFMA must comply.

The Review also notes as a matter of interest a point of difference between the two Acts with reference to their administration by the Minister. The FMA requires both the Minister and AFMA to pursue the Act's stated objectives in their administration and performance of functions respectively. Under the FAA, however, an equivalent obligation is only imposed on AFMA; the Act is silent on the matter of ministerial obligations and the Review understands this potentially gives **the Minister the ability to consider a wider range of objectives when administering this Act.** This might include, for example, Australia's national interest (including when giving directions to AFMA under s 91 of the FAA).[102]

[102] Management in "the national interest" forms one of the explicit objects of another act concerned with managing a community resource, the *Water Act 2007*

The specific direction and routine guidance provisions listed indicate the Minister's powers are considerable and multi-layered in terms of capacity to provide strategic direction and guidance to AFMA on fisheries management issues. The Review understands, however, that respective Ministers have not looked to use this suite of powers to intervene in the management of fisheries, except Senator the Hon. Ian Macdonald, then Minister for Fisheries, Forestry and Conservation in 2005 (see Figure 4, Chapter 6).

Few submissions to the Review specifically canvass alternative ministerial powers. The Commonwealth Fisheries Association flags conditional support for more flexible and clearer ministerial powers, noting the Minister "should have these greater powers provided that they come with the type of safeguards and accountability included in more modern natural resource legislation".[103] Associate Professor Marcus Haward (Ocean and Antarctic Governance Program, Institute for Marine and Antarctic Studies, University of Tasmania) calls, in the same vein, for the Minister's power to "be able to request from, and to act on advice from AFMA Commission"[104] to be reinforced.

The Review finds the balance of the Minister's powers and AFMA's independence is largely adequate. It considers, however, there are two aspects where additional or amended ministerial powers would be of considerable benefit, namely

- **the ability to direct AFMA to frame its operations within a triumvirate of a harvest strategy policy; by-catch policy and ecosystem approach; and**
- **(in line with the Commonwealth Fisheries Association's suggestion) greater involvement – subject to sensible checks and balances – in the development and use of a fisheries management plan.**

The Review notes that any changes must be carefully articulated so as not to place the Minister in a position either of unfettered decision-making or undue influence where decisions are clearly to be based on scientific or economic data.[105]

In looking to the first issue, the Review notes the Minister, in seeking to make a direction under FAA s 91, must possess reasonable probative evidence of specific

- exceptional circumstances;
- need for giving the direction; and
- major government policies with which the performance and exercise of AFMA functions and powers are not to conflict.

Advice to the Review is, although reasonable discretion should be exercised in making a direction, this power of the Minister is considerable. It enables "...the Minister to intervene in a range of situations not limited by the objectives of the FMA, including, for example, where it would be in the national interest to do so". There is a restriction, however, in that in order to be a 'major government policy', the policy involved would likely need to be agreed at Cabinet level.

[103] Submission from the Commonwealth Fisheries Association
[104] Submission from Marcus Haward
[105] Submission from the Commonwealth Fisheries Association

Notwithstanding, the Review notes FAA s 91 is not a general direction making power allowing the Minister to give direct policy guidance in normal circumstances, or in relation to polices that have not been agreed, in most cases, at Cabinet level.

Figure 4 in Chapter 6 describes the only circumstances in which a ministerial direction to AFMA has been given to date, this being to take decisive action to halt overfishing and enable overfished stocks to recover. A mainstay of the direction was the development and promulgation of the *Commonwealth Harvest Strategy Policy* and *Guidelines* (HSP). The Review regards a harvest strategy policy and a complementary bycatch policy[106] as pivotal to good fisheries management and further considers there would be value in adding a third leg: an ecosystem approach to fisheries management. More detail for this proposal and how it might be implemented is discussed at Chapter 6.

If it is not appropriate for the Minister to use the FAA s 91 provision to give ministerial direction or policy guidance on HSP, by-catch (and discard) policy and an ecosystem approach, the Review considers that the Minister should have a general power to give this and similar guidance to AFMA. Such a power would extend beyond those already available via the corporate planning process and its exercise would have to be consistent with the objectives of the fisheries Act(s).

In turning to the second issue, **the Review considers greater potential for ministerial involvement with respect to fisheries management plans should be enabled to achieve better transparency of process, broader consultative opportunity and a more informative product.** The Review believes such a change would go a good deal of the way to addressing valid community concern about the current lack of public engagement opportunities and the transparency of decision-making in fisheries management (see section 5.2.2).

The fisheries Acts, as currently structured, depict the plans as the centrepiece of the management framework for each individual fishery. This is reflected both in the requirement for AFMA to seek public input on a draft of a plan and in the Minister's power to accept or otherwise, a plan submitted by AFMA.

The plans are statutory instruments "determined by AFMA, accepted by the Minister and enacted by gazettal."[107] They are, essentially, a legislative 'toolbox' and provide AFMA with a suite of powers to manage the fishery over the course of the plan. This is perfectly appropriate, so far as it goes.

Examination of individual plans, however, reveals they are constituted in a way that is inadequate for meaningful consultation or for ministerial consideration and acceptance. Nor do they take the form it appears the Act had originally intended: FMA s 17 sets out all manner of things a plan might contain. This is not to say that this detail for each fishery, and in many cases a good deal more, does not exist; merely that it does not sit in the statutory plan as originally envisaged, or even in one document outside the plan.

[106] The HSP and by-catch policy are being reviewed, with reports due to the Minister early-mid 2013 (www.daff.gov.au/fisheries, viewed on 6 December 2012).
[107] Submission from AFMA

The Review cannot set aside that a fisheries management plan at the point of determination is underdone for the purpose of consultation; this is the first of two key reasons it considers AFMA's public engagement is inadequate. Without substantive content (that is consistent in form across all plans) on which to engage the community, there is little to be achieved by engaging. The second reason – already touched upon previously and discussed more fully at section 5.2.2 – is the lack of any clear mechanism for seeking or enabling input beyond identified representational interests sitting on MACs and RAGs.

Returning to ministerial powers, suffice it to say the Review notes the Minister could use current powers to indicate to AFMA issues to be addressed in the plans and, from there, consultations with the public.

The Review considers the FMA's provisions where the Minister and AFMA could potentially engage in a stand-off over a fisheries management plan – that is, where the Minister does not accept the plan and AFMA does not subsequently vary it to the Minister's satisfaction[108] – should be subject to a resolution. To this end, the Review considers **that the Minister should be able to make substantive comments on a draft plan** (not limited to consistency with AFMA's corporate plan and annual operational plan and to the adequacy of consultations as is currently the case) **and a 'two-strike' rule should apply, such that if the Minister has twice not accepted a fisheries management plan, the Minister may make an executive decision**, but should be required to table in Parliament the reasons for doing so, subject to the exception where tabling would prejudice Australia's national interest. Particulars of the instruction could also be set out in AFMA's annual report unless, again, their inclusion would prejudice national interest.

Before the Minister could make a final decision, however, the Review proposes that the Minister **obtain relevant independent advice** covering, but not limited to, scientific, environmental matters or economic issues as relevant. In line with the Commonwealth Fisheries Association's proposal, an independent expert panel could be established on an *ad hoc* basis for this purpose, with composite expertise reflecting the nature of the issue. It would be reasonable for the **panel's advice to be time limited** (reporting to the Minister, for example, in 28 days) to avoid dragging out the situation and consequent uncertainty.

Furthermore, the Review also considers the Minister should have the power over the life of a fisheries management plan to ask AFMA to consider **whether an amendment to a plan is appropriate** in the light of particular circumstances or developments. A similar process for the approval of such amendments as described above (that is, 'two strikes' and an independent assessment) could be adopted.

The Review notes **there may need to be a provision also to move more quickly to address an emergency or urgent situation** requiring speedy resolution. If such circumstances arise, the Review envisages that an 'interim' time-limited decision might be taken. During this time attention could be paid to developing a longer term solution. This might, for example, require commissioning research, risk assessments or other analyses and, as appropriate, undertaking consultations before bedding down fisheries management arrangements.

[108] FMA s 18(2)-(5)

5.2 Industry and community consultation and accountability

In considering the fisheries Acts as a whole, the Review notes an omnipresent industry-focus with respect to legislative requirements for communication, consultation and accountability – a reflection, perhaps, of the context in which they were drafted some 20 years ago. Notwithstanding this focus, AFMA does deal regularly with a range of interests beyond the commercial sector.

The Acts themselves contain several provisions specific to the Authority's consultative and accountability faculties and mechanisms. Some of these have been touched upon in brief in the context of ministerial powers and AFMA's governance arrangements. The Review acknowledges AFMA's communicative potential particularly is, in practice, really quite comprehensive with reference to identified representational interests.

There are in the Review's view, opportunities to improve AFMA's engagement beyond individuals and entities with a known interest, be it pecuniary or philosophical, in fisheries management. This would have the positive effect of increasing AFMA's transparency of operation and accountability to the Australian community, so better ensuring public understanding and support for the Authority's decisions, as well as ensuring decisions are made, and seen to be made, with proper reference to the objectives of the Acts.

5.2.1 Accountability and transparency

AFMA is properly accountable to the Parliament and the public through the Minister, by way of legislated planning and reporting requirements. The former has already been discussed with reference to the Minister's powers to agree or vary AFMA's corporate and annual operational plans (see section 5.1.4) and is not revisited here.

In turning first to reporting, the FAA requires that AFMA submit annual reports on its operations to the Minister for presentation to the Parliament. The FAA sets out specific reporting requirements[109] on the extent to which AFMA's operations during the year have contributed to achieving

- the Authority's legislative objectives (with particular reference to ensuring "the exploitation of fisheries resources and the carrying on of any related activities are conducted in a manner consistent with the principles of ecologically sustainable development (which include the exercise of the precautionary principle), in particular the need to have regard to the impact of fishing activities on non-target species and the long term sustainability of the marine environment)"[110] and;
- the goals and the objectives set out respectively in the corporate and operational plans.

The report must also contain particulars of

- any variations of the corporate and operational plans;

[109] FAA s 87
[110] FAA s 6(b)

- significant changes to plans of management and the introduction of new plans, as well as an assessment of their effectiveness or otherwise; and
- any ministerial directions made under s 91 of the FAA.

Finally, the report must also include an evaluation of AFMA's "overall performance against the performance indicators set out in the corporate plan and annual operational plan".[111] The Review considers this requirement to be perfectly reasonable and notes this last aspect is particularly important in light of the criticism[112] levelled at a perceived lack of transparency around and scrutiny of AFMA's pursuit of its legislative objectives.

The FAA's reporting requirements go further on the matter of reports on AFMA's operations during a year; where a report is tabled in Parliament, a copy of the report is also to be provided to "the peak industry body". Furthermore, AFMA must request a meeting with the governing body of the peak industry body, the purpose of which is

> "to address the members of the governing body on the Authority's activities during the period covered by the report and on any other matters relating to fisheries management that the Chairperson and the CEO regard as relevant; and
>
> to give any additional information to those members in relation to the Authority's activities as the Chairperson and the CEO believe to be appropriate."[113]

This requirement is one of **several provisions in the Acts that appear to confer some form of pre-eminence to commercial fishing interests over any others.** The Review notes this is likely a reflection of the context in which the legislation was drafted, where the prevailing interest in fisheries at the time was from the commercial fishing sector, and that the Review's contemporary contemplation is through a very different filter. Other examples of this apparent primacy include

- provision in the FAA for a Fishing Industry Policy Council;
- provision for the wholesale delegation of AFMA's powers to MACs, weighted, as they remain, with commercial fishing interests; and
- the representational nature of the AFMA Board as originally constituted.[114]

These examples are further considered specifically in the following section. Nonetheless, in the broad, the Review notes a wide range of interests now exist in Commonwealth fisheries beyond those with a pecuniary stake. While commercial fishers remain a critical element of almost all operational fisheries they are by no means the only element, recalling Commonwealth fisheries are a public resource. **Therefore commercial fishers in the Review's view should not be accorded legislative primacy over other interests.**

Another key element of transparency under current arrangements is the trading of fishing concessions: a core part of AFMA's business under the Act is the granting of

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[111] FAA s 87(c)
[112] Submission from WWF-Australia et al
[113] FAA s 89
[114] The AFMA Board was replaced with a Commission in 2008.

concessions and the facilitation of transactions between concession holders.[115] AFMA is required to keep and make available for inspection by anyone interested a register of statutory fishing rights and their transfer.[116]

In practice, routine licensing business is now largely conducted online through an electronic system, 'GOFISH'. As well as reducing administrative costs, the introduction of the system in 2009 has arguably gone some way to enabling the market for fishing concessions to operate more efficiently, enabling concession holders to engage in 'real time' transactions. Another AFMA-managed site, 'QUOTABOARD', provides an online quota trading classifieds board enabling browsing or advertisement of Commonwealth quota, SFRS or permits. The site's purpose is to "facilitate the trade of Commonwealth quota, SFRs and permits and ensure the quota management system functions effectively."[117] The Review understands AFMA is presently discussing with the Commonwealth Fisheries Association the possibility of the latter taking on the administration of QUOTABOARD.

The Review notes that enabling fishing concessions to move easily to those who value them most highly is an important element of delivery against the FMA's objectives of efficient and cost-effective fisheries management and maximising net economic returns to the community: those who can use concessions most efficiently will be willing to pay more for them than they those who use them less efficiently.[118]

Low transactions costs and low cost access to good information[119] are essential conditions for markets to work efficiently. If bargaining is costly or participants have differential or poor access to information, the outcome is not likely to be efficient. In this respect, fishing concession market efficiency may depend on effective market infrastructure.[120] In the case of the Commonwealth fishing concession market, there is currently no central market infrastructure or requirement for the provision of certain information.

The Review considers improving the availability of information about access right values could increase the efficiency of concession trading significantly. More broadly, the Review concurs with AFMA's suggestion that "increased collection and analysis of economic data including...business incomes and costs would improve AFMA ability to deliver against the [Acts'] objectives," as well as directly increasing transparency around the value of commercial fishing.

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[115] *Fisheries Legislation Amendment Bill 2009*, Explanatory Memorandum (www.comlaw.gov.au/Details/C2009B00240/Explanatory%20Memorandum/Text viewed 10 December 2012)

[116] Part 4 of the FMA deals with the Register of Statutory Fishing Rights

[117] QUOTABOARD (www.quotaboard.afma.gov.au viewed 7 December 2012)

[118] Rose (2002), *Efficiency of individual transferable quotas in fisheries management*, ABARE Report to the Fisheries Resources Research Fund, p 7

[119] Related to this, AFMA's submission notes that in some fisheries, where fishers can choose not to make economic data available, a lack of data "severely limits the extent to which AFMA can obtain a picture of economic performance in fisheries. By way of example, the Southern Bluefin Tuna fishery does not provide economic data to ABARES."

[120] Rose (2002), *Efficiency of individual transferable quotas in fisheries management*, ABARE Report to the Fisheries Resources Research Fund, p 8

5.2.2 Communication channels and processes

The fisheries Acts contain a number of provisions relating to consultation and, in parts, these are unusually prescriptive. The Review notes that not all consultative provisions have been established as enacted but also that other mechanisms operate apparently successfully without being prescribed.

In introducing its stakeholder consultation arrangements AFMA's submission to the Review notes these are

> "closely aligned with the consultation expectations set out in the relevant sections of the 1976 report of the Coombs Royal Commission into Australian Government Administration and more recently Ahead of the Game: Blueprint for the Reform of Australian Government Administration released by the Prime Minister in 2010".[121]

Section 9 of the FAA provides broadly, that "… for the purpose of considering any matter, or obtaining information or advice, relating to the performance of its functions, (AFMA) may consult with persons, bodies or governments". The Act sets out a non-exhaustive list of those whom AFMA might consult for such purposes, including industry and recreational fishing representatives; governments or government authorities with fisheries-related functions; and "persons (including members of the scientific community) having a particular interest in matters associated with the industry".

The Acts also set out several specific communicative requirements for the Authority. AFMA must

- Convene public meetings at least once every 12 months, for "the purpose of consulting with the industry and the public generally."[122] AFMA must take reasonable steps to bring such meetings to industry and public notice.
- Maintain and use a register of interested people and entities who wish to be notified about the making or changes to fisheries management plans.[123] Where a plan is amended or revoked, AFMA must given written notice to all holders of fishing rights granted in accordance with the plan.[124]
- Before determining a fisheries management plan, undertake specific consultation as required by s 17 (2)-(4) of the FAA, namely the publication of an invitation (in the Gazette, newspapers and other appropriate publications) for interested people to "make representations in connection with the draft plan."

Beyond these legislative requirements, AFMA engages with stakeholder groups through management advisory committees, liaison officers, port visits, newsletters and direct mail to concession holders.[125] On the water, AFMA can communicate with fishing vessels via text message or email using a satellite system.[126]

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[121] Submission from AFMA
[122] FAA s 90
[123] FM s 17A
[124] FMA s 20
[125] AFMA *Corporate Plan 2012-2017*(www.afma.gov.au/wp-content/uploads/2012/06/Final-2012-2017-Corporate-Plan-130412.pdf), p 4
[126] AFMA *Annual Report 2010-2011* (www.afma.gov.au/static/annual-report-2010-11), p 65

AFMA's submission notes that the Authority has recently expanded its engagement with key stakeholders through the re-development of the website, increased media engagement and the establishment of new consultative committees with environmental non-government organisations. However, the submission goes on to note that

> "general awareness of AFMA's role and actions is limited and negative perspectives regarding the performance of global fisheries management readily dominate public perceptions of Australian fisheries including AFMA-managed fisheries...Recent communication initiatives by AFMA are unlikely to deliver any measurable public change beyond AFMA's key stakeholders and there is clearly a need to rebuild trust and confidence in AFMA after recent media and political events. Increasing the level of publicly available information on fisheries management and science would assist in increasing public understanding of AFMA's activities. AFMA, in collaboration with other areas of government and credible third party sources (e.g. Marine Stewardship Council) needs to increase public awareness of the strength of its fisheries management."[127]

The Review concurs with AFMA's assessment that there is a need for more clear and targeted advocacy/public education on the management approach in Australia's fisheries and that there may be value in coupling this with input from trusted third parties where the opportunity arises. This is further discussed at Chapter 8 but, in this context, the Review notes the Productivity Commission's recommendation that the FRDC be enabled to undertake marketing activities – and that the possibility of piggybacking on high regard in which the FRDC is held could be given further consideration.

In turning to the broader issue of public engagement in fisheries, the Review considers there are several extant mechanisms or channels that offer the potential to address the Review's concerns about AFMA's lack of public engagement as well as AFMA's concerns about the community's deficit of fisheries management knowledge.

Fisheries management plans

First and perhaps key of these possibilities (highlighted earlier in this chapter with reference to ministerial powers), and clearly envisaged in the original set up of the fisheries Act, is that the public be meaningfully consulted on each fisheries management plan. The Review reiterates that the plans as they currently exist are not inadequate in themselves: as a regulatory articulation of AFMA's "fisheries management toolbox" they are perfectly reasonable and suitably high level in their expression so as to enable AFMA flexibility to address emerging issues as they arise within an individual fishery without an onerous and lengthy legislative amendment process. **However, there should also be, in the Review's opinion, a fully articulated fisheries management strategy which should precede the legally-referenced 'nuts and bolts' of the management methods to be drawn upon – and it is this that could provide a platform for substantive stakeholder and public input.**

Such a model is employed in Canadian fisheries management, whereby an 'Integrated Fisheries Management Plan' (IFMP), described as "both a process and a document," frames "the conservation and sustainable use of fisheries resources and the process by

[127] Submission from AFMA

which a given fishery will be managed for a period of time".[128] Unlike the Australian fisheries management plan, a Canadian IFMP is not legally binding and can be modified as required.

As a *document* an IFMP serves two key functions

- "the identification of the issues, objectives and management measures designed to ensure an orderly, economically viable, socially / culturally beneficial and sustainable fishery; and
- communication of basic information on a fishery and its management within [Department of Fisheries and Oceans] DFO and outside parties."[129]

As a *process* the IFMP "ensures that both DFO sectors and stakeholders are integrated in a consistent manner" and, once finalised, constitutes an explanation and record of how the fishery is managed for anyone who cares to access it – a standalone "window [into an individual fishery's management] to the world".[130]

Without being completely prescriptive of what should be in an Australian equivalent of an IFMP, it would seem to the Review it would seem necessary to include matters such as

- **fisheries stock issues and analysis;**
- **key economic and social dimensions of the fisheries management plan;**
- **how the fishery fits in with HSP, including the proposed mechanisms for setting the total allowable catch and other management mechanisms to be drawn upon from the start of the plan (acknowledging these aspects might be varied over the life of the plan to adjust to evolving circumstances);**
- **the by-catch, discard and incidental catch issues and any mitigation measures;**
- **ecological risk assessment and the ecosystem consequences from managing the fishery;**
- **threat abatement approaches proposed for high risk species, such as sea lions, seals or sea birds;**
- **where there are trade-offs between, for example, the efficient and cost effective harvest of target species, by-catch and discard and eco-system consequences these be explicitly drawn out and explained (both in terms of environmental and commercial implications); and**
- **resource-sharing issues be drawn out if applicable, for example, between commercial and recreational and Indigenous customary fishers.**

In drawing out the full consequences of the proposed arrangements, the plan should, to the furthest extent possible, draw out the economic and commercial consequences for

[128] Department of Fisheries and Oceans (2010), *Canada Preparing an Integrated Fisheries Management Plan – Guidance Document* (15 February 2010) (www.dfo-mpo.gc.ca/fm-gp/peches-fisheries/ifmp-gmp/guidance-guide/preparing-ifmp-pgip-elaboration-eng.htm viewed 7 December 2012)
[129] *Ibid*
[130] *Ibid*, Section 2

commercial fisheries of the proposed framework and any alternative approaches. Finally, like the Canadian model, **it would seem sensible for the plans to have key performance indicators against which the veracity of arrangements can be assessed and reported.** Assessments could be undertaken on pre-agreed regular basis, by an independent assessment committee established by AFMA, but which could report to both the Fisheries and Environment Ministers through DAFF and Department of Sustainability, Environment, Water, Population and Communities.

The Review acknowledges that many of these issues are already addressed directly by AFMA (with substantial input through the MACs and RAGs) with respect to individual fisheries. However, this appears to be done after rather than before a fisheries management plan is developed and without an overt opportunity or mechanism for *public input.*

There needs to be clearer provision in the fisheries Act(s) than is included in the FMA s 17, which indicates, in broad terms, matters that must be considered in a fisheries management plan and in a strategic plan to sit behind it. Currently, s 17 includes an extensive list of matters that may be dealt with in a fisheries management plan but does not impose many mandatory requirements. The Minister could also use current powers under the Act to indicate to AFMA the issues to be addressed in the plans and consultations with the public.

Fisheries Industry Policy Council

Several submissions note that the Act dedicates significant attention to the establishment, functions and powers of a Fishing Industry Policy Council (FIPC).[131] The Council was intended to

> "(a) to inquire into, and to report to the Minister on, matters affecting the well-being of the industry; and
>
> (b) to inquire into, and to report to the Minister on, matters referred to it by the Minister in relation to the industry; and
>
> (c) to develop, and to submit to the Minister, recommendations, guidelines and plans for measures consistent with the principles of ecologically sustainable development designed to safeguard or further the interests of the industry; and
>
> (d) to consult, and co-operate, with other persons and organisations in matters affecting the industry; and
>
> (e) such other functions (if any) as are conferred upon the Council by the regulations."[132]

Included in the Act presumably to allay industry concerns about a potential loss of access to the Minister when operational decision-making was removed to the AFMA Board, the Council has never actually been established. While the reasons for this are not wholly clear, the Review considers the early establishment of the MACs and RAGs

[131] Submissions from WWF-Australia et al; Australian Recreation Fishing Foundation; and The Recreational Fishing Alliance of NSW
[132] FMA s 98 (1)

structure may go some way to explaining a subsequent lack of industry pressure for the FIPC's establishment.

Several submissions support the establishment of a FIPC-like body, albeit with a much broader and more inclusive constitution than was originally envisaged in the heavily-industry focused FIPC, to assist the channelling of stakeholder information to, and providing a sounding board for, the Minister. **The Review considers the establishment of a consultative body comprising broad interests and reporting directly to the Minister is sensible, but questions the need for it to have a legislative basis.** Rather, the Minister could choose to establish a standalone advisory council similar in form to the recently established Recreational Fishing Roundtable, and (without limiting 'own motion' advice) charge with provision of advice as the need arises.

Management advisory committees

AFMA notes that it also consults "extensively with stakeholders....through management advisory committees (MACs) for each of the major fisheries."[133] Several submissions to the Review have noted there would be value in returning to a dedicated MAC for each fishery rather than continuing with the current 'superMACs'. The Review acknowledges that MACs (along with RAGs) play a critical role in tapping into fishers' and other perspectives, and does not propose their role in this sphere be diminished (see section 5.1.3).

The Review does, however, question the need for the continued inclusion of MACs, specific from other committees, in statute. It seems likely the provision for MACs to take up decision-making roles under the original AFMA Board was included to garner industry support for the new arrangements. While the Review acknowledges that MACs (along with RAGs) play a critical role in tapping into fishers' and other perspectives – and would not see their role in this sphere diminished – MACs are not, never have been, and, in the Review's view, should never be a decision-making mechanism. Accordingly, there is no need for prescription and reference to MACs should be removed from the FMA.

[133]AFMA (2011), *Annual Report 2010-2011* (www.afma.gov.au/static/annual-report-2010-11), p 65

6 Overarching principle: maximising community benefit from fisheries management

6.1 Expectations

All stakeholders have views about how the Australian Fisheries Management Authority (AFMA) can best achieve its legislative objectives of implementing efficient and cost effective management of fisheries; ensuring that the exploitation of fisheries resources is conducted consistently with the principles of ecologically sustainable development (including the precautionary principle); and maximising the net economic returns to the Australian community. These views represent a varied interpretation of what good fisheries management means.

It was also clear that stakeholders have differing views about which of these objectives should have primacy. But the FMA does not in itself accord a hierarchy to the objectives.

Taking submissions to the Review into account, it is apparent that AFMA and its stakeholders understand very well[134] that AFMA is required to manage fisheries efficiently and cost effectively to ensure a sustainable, profitable fishing industry. **Contributors to the Review universally agree that fisheries management involves trade-offs, compromise and decision making in a world where there is imperfect information.** However, broad agreement on this point by most stakeholders does not mean that decisions on fisheries management are not strongly contested, and in some cases, highly complex.

The contestability arises for a host of reasons related to the specific issues in each fishery. For example, it may arise in part because of imperfect information on, say, the status of fish stocks, or because of differing judgements about whether and to what extent commercial fishing objectives should be compromised to mitigate broader ecological concerns. In some areas there are no clear cut answers. Effectively, AFMA has to feel its way, although it endeavours to do so following a clearly articulated framework set out in the *Commonwealth Harvest Strategy Policy* (HSP) and having regard to ecological risk assessments and the implementation of fisheries management plans. But finely balanced judgements have to be made. It is unrealistic to think that there will not be differing viewpoints on the course that AFMA sometimes follows. How can AFMA best negotiate this minefield and what tools in the AFMA armoury can be sharpened to allow it to consult transparently, explain fully and manage the gamut of expectations without jeopardising the primacy of science and objective assessment?

6.2 Maximising community benefit from fisheries management

> "From ancient times, fishing has been a major source of food for humanity and a provider of employment and economic benefits to those engaged in this activity. However, with increased knowledge and the dynamic development of fisheries it was realised that aquatic resources, although renewable, are not infinite and need to be properly managed,

[134] For example, WWF-Australia et al. and Austral & WWF-Australia.

if their contribution to the nutritional, economic and social well-being of the growing world's population was to be sustained."[135]

The government's 1989 Policy Statement, *New Directions for Commonwealth Fisheries Management in the 1990s*[136], was a critical development in modernising Australia's approach to fisheries management and paved the way for significant, in many cases, world-leading developments in the way fisheries can be sustainably and profitably managed. The three overarching objectives to management controls outlined in the Policy Statement were

- To ensure the conservation of fisheries resources and the environment which sustains those resources;
- To maximise economic efficiency in the exploitation of those resources; and
- To collect an appropriate charge from individual fishermen exploiting a community resource for private gain.

In 2012, these essential elements should still be at the forefront of fisheries management: together with the knowledge that fisheries are inherently complicated; require significant government (or public policy) intervention to ensure sustainability and profitability; and all marine resources are publicly owned.

The Policy Statement explained the complexity of fisheries management thus

> "Fisheries resources are publicly owned, being at once everybody's and nobody's. The lessons of economics are clear: when resources belong to nobody, nobody will look after them; when resources belong to everybody, everybody **must** look after them. It is up to government to ensure that fisheries are exploited so as to provide the best return to the people in the industry and to Australia as a whole."[137]

But in 2012, there are also some inherent differences in Australian fisheries that demand attention. These include increased understanding of the science behind fisheries management, along with a greater appreciation for what we do not know; modernised techniques and equipment; greater challenges for the industry's productive capacity (despite a general increase in profitability); and an ever evolving, sophisticated community, whose expectation of fisheries management has increased along with heightened concerns about conservation, as well as sustainability. Key features of the Australian fisheries management regime have been summarised by the CSIRO in its submission to this review which is replicated at the end of this Chapter.

The HSP, *Commonwealth Policy on Fisheries Bycatch* and the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) all had a marked positive and modernising impact on fisheries management since 1991, which allowed for an ecosystem approach to fisheries management and which was embraced by Australia's fisheries managers to the greatest extent possible.

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[135] Food and Agriculture Organisation of the United Nations (1996), *Precautionary Approach to Capture Fisheries and Species Introductions*, p 1

[136] Department of Primary Industries and Energy (1989), *New Directions for Commonwealth Fisheries Management in the 1990s, A Government Policy Statement*, p 2

[137] Ibid.

Submissions to the Review generally supported the recent shift towards an ecosystem approach[138]. This approach has been influenced by key fisheries related elements of the EPBC Act and the provisions in Parts 10, 13 and 13A of that Act. Additionally, the development of the bycatch policy has allowed AFMA to undertake fishery-specific ecological risk assessments and the development of ecological risk management plans.

The HSP is generally regarded as a watershed by every stakeholder that spoke with the Review.

The time has now come to develop this approach further and to instigate a fisheries specific push to better apply these approaches formally (through policy direction and legislation), and in a coordinated and transparent way (through changes to the pursuit of scientific verification and the development of plans of management)[139]. Evidence to the Review suggests that the ecosystem approach should be provided for in fisheries management along with an HSP that is subject to regular review and updating; and a bycatch policy that encompasses meaningful directions on, not only why, but how managers deal with the issues of bycatch, discards and high-grading.

6.2.1 The precautionary principle

Principle 15 of the *Rio Declaration of the United Nations Conference on Environment and Development*[140] in 1992 states that

> "In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall be not used as a reason for postponing cost-effective measures to prevent environmental degradation".

Versions of this precautionary principle have been replicated in policy and legislation in Australia, relating generally to issues of environmental management and in decision making in areas that have the potential to impact on the environment, including the marine environment. The definition of the precautionary principle or at least a consistent approach to the concept demands discussion in the context of an overarching fisheries management principle. This is particularly so, given the broad range of views put to the Review about whether AFMA's management decisions are not precautionary enough, or alternatively, are too precautionary. Worth noting here as well, are a number of comments from stakeholders who believe there is a lack of consistency of application of the principle and a lack of transparency about how conclusions are made in evaluations of the level of precaution required in fisheries.

The precautionary principle is applied because uncertainty exists. Fisheries management is almost universally undertaken in this environment of uncertainty. The less information – or the more uncertainty – the more precautionary decision makers generally need to be.

The Review notes there has been a marked improvement in AFMA's operation with respect to its precautionary objective, especially since 2005. The application

[138] For example, CSIRO and WWF-Australia et al.
[139] Funding these activities and other charges for cost recovery are an important element in proposed approaches and are discussed in detail in Chapter 7.
[140] United Nations(1992), *The Rio Declaration on Environment and Development*, p 3

of harvest control rules, for example, based on a sophisticated tiered system designed to account for different degrees of stock uncertainty, and the implementation of an ecological risk assessment (ERA) framework and rolling progression of fisheries assessments are testament to the AFMA's considerably changed approach following the ministerial direction. ERAs have been undertaken for all AFMA fisheries. These focus on the impacts of each fishery on bycatch, protected and endangered species, habitats and marine communities. This has allowed for an improved capacity to meet the requirements of the precautionary principle.

Notwithstanding its commendable work, the Review believes there is a tendency for AFMA to lean in favour of fisheries catch objectives. In part, in more recent times this may have arisen inadvertently through the HSP, which has had the effect of focussing primarily on the target species, even though policy requires broader environmental consideration. For example, the Review heard in consultations that the scientific input in a resource assessment group (RAG) context focused overwhelmingly on stock assessment issues with much less attention paid to issues relating to bycatch and discard or ecosystem effects. The Review also heard from environmental non-government organisations that their participation in RAGs is effectively constrained because typically they receive large volumes of technically complex information only a day or so before a RAG meeting, which prevents them from properly assessing it, let alone consulting other environmental experts.

Nevertheless, the Review notes the comments in the AFMA submission

> "A prohibitory approach in the application of the precautionary principle essentially requires that no activity be undertaken unless there is no appreciable risk of harm to the environment and a very high level of scientific certainty around the corresponding risk assessment. It is well understood within marine management and science that such an approach is impractical for most fisheries management decisions. Recognised best practice for fishery management provides for a structured approach that appropriately restricts fishing activities so as to maintain a high probability of environmental safety for the level of understanding available and to incentivise improved understanding."[141]

In relation to managing fisheries in an environment of uncertainty, the Department of Sustainability, Environment, Water, Population and Communities (SEWPaC) noted in its submission to the Review that management approaches to deal with this uncertainty include a combination of adaptive management – planning management approaches, implementing management plans and review of the effectiveness of the action; ecosystem based fisheries management; and the use of the precautionary principle in decision making.[142]

AFMA's task would be made somewhat easier if uncertainty equated to risk, given the raft of research undertaken, assessments made and information about managing risk available to public policy makers and regulators. Like uncertainty, managing risk involved assessments and trade-offs, including cost-benefit analysis. But risk is easier to define, easier to evaluate and therefore, easier to manage. The Productivity Commission's excellent 2007 staff working paper, *Precaution and the Precautionary Principle: Two Australian Case Studies* noted that

[141] Submission from AFMA
[142] Submission from SEWPaC

> "Precaution is a response to the inherent difficulties faced by decision makers confronted with uncertainty – as distinct from risk – about potential outcomes. The differences between risk and uncertainty are important for decision making. Risk is amenable to conventional cost-benefit analysis and risk assessment and management. In contrast, cost-benefit comparisons, and formulation of risk management strategies, are problematic in the presence of uncertainty because much of the information required for such analyses is not available or is inconclusive."[143]

Nevertheless, as the Productivity Commission report goes on to state, decision makers in an uncertain environment are required to do two things

1. make decisions despite the uncertainty; and
2. do so using some form or forms of risk management tools.

The precautionary principle is the essential element in fisheries management because it provides the very means to make good decisions using poor or insufficient information.

The FAO concluded that "most problems affecting the [fisheries] sector result from insufficiency of precaution in management regimes when faced with high levels of uncertainty."[144]

The FAO's conclusion is correct – globally, fisheries are in a parlous state and this has certainly been allowed to occur through, among other factors, a lack of attention to the precautionary principle. Even today, many fisheries around the world are subject to extraordinary overfishing and mismanagement.

Returning to the Australian context, in which fisheries are far better managed, we have also seen evidence of much more uncertainty and overfishing in the past. For example, in 2004, of the 74 assessed stocks, 72 per cent had uncertain fishing mortality status, 12 per cent were subject to overfishing, and 16 per cent were not subject to overfishing; whereas in 2011, of the 95 assessed stocks, only 13 per cent were uncertain, 6 per cent were subject to overfishing, and 81 per cent were not overfished. While the status of stocks over all has improved in recent years, with far less uncertainty in particular, still 19 per cent of stocks are either uncertain or subject to overfishing. Of these, some 11 per cent are managed solely by AFMA (the others are managed jointly with other Australian jurisdictions or involve international arrangements).[145]

That 11 per cent of stocks fail to meet the expectation laid out by the HSP is a concern and inevitably points to insufficient precaution so far as these stocks, at least, are concerned.

The Review found that the deficiency in precaution does not mean the precautionary principle itself is ill-defined in legislation and it does not mean that focussing on a precautionary approach rather than imposing the precautionary principle has caused an apparent bias in favour of the commercial fishing industry. As the Productivity Commission's report stated and SEWPaC repeated in its submission, the precautionary principle is not an end in itself. It is a tool to achieving sound fisheries management.

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[143] Weier, and Loke (2007), *Precaution and the Precautionary Principle: two Australian case studies*, Productivity Commission, Staff Working Paper, September 2007, p 2

[144] FAO (1996), *Precautionary Approach to Capture Fisheries and Species Introductions*, p 3

[145] Op cit ABARES, *Fisheries Status Reports 2011*

The Productivity Commission report states that

> "efficient and effective implementation of precaution requires decision makers to take account of the full range of relevant factors, including the magnitude, nature and severity of potential harm, as well as the economic, social, environmental, and health costs and benefits."

Taking appropriate account of these relevant factors in applying a principle of whatever definition is what counts most.

In its submission to the Review CSIRO portrayed the deficiencies in the current fisheries management thus

> "The precautionary principle is designed to allow for management actions even in the absence of information, and there are many ways in which the precautionary principle is already applied in Commonwealth fisheries management in combination with risk-based approaches. The main issue to address is consistency of application of the principle. This consistency of application should extend to all users of the marine environment.
>
> Greater clarity is needed on how to apply the precautionary principle in a consistent and reasonable fashion. A set of consistent guidelines for implementation of the precautionary principle in Commonwealth fisheries could be drafted, reviewed, published and implemented as a central part of AFMA's operational guidelines."[146]

In the context of their concerns about AFMA's capacity to make decisions that appropriately take into account the effect of activities on the marine environment, WWF-Australia et al. stated that 'We believe that AFMA clearly understands the meaning of the precautionary principle and we do not believe that the current legislation impedes either that understanding or its application. Rather, we believe that the ongoing problems related to overfishing, and in particular, failure to rebuild overfished stocks, reflect

1. a lack of certainty about the Government's and the community's expectations about the appropriate level of precaution that should be applied;
2. an unwillingness, on the part of AFMA, to respond to uncertainty relating to the impacts of fishing in the way prescribed by the precautionary principle; and
3. lack of effective oversight of AFMA's management responses against its objectives."[147]

The Review notes that in its submission AFMA discussed the lack of understanding of the way AFMA applies the precautionary principle and that this could be one explanation for the level of criticism and sometimes confusion around its decisions. AFMA's submission suggests that

> "Fisheries management and the ensuing public debate would benefit from clarification of the application of the precautionary principle under both the fisheries Acts and the EPBC Act through a national policy and/or legislative amendments."[148]

Another issue that needs to be taken into account is that fisheries should be managed in a way that does not prevent appropriate innovation and improvement to be undertaken

[146] Submission from CSIRO
[147] Submission from WWF-Australia et al.
[148] Submission from AFMA

by fishers and fisheries managers. As the Productivity Commission noted, an "excessive application of precaution"[149] could cause this and could potentially have the opposite effect of what is intended when applying precaution in decision making.

A classic conundrum.

Figure 3. Extract from *Precaution and the Precautionary Principle: two Australian case studies*

Extract from
Precaution and the Precautionary Principle: two Australian case studies
Productivity Commission, 2007

There are many options for implementing precaution. Since the nature of the uncertainties and potential hazards vary case-by-case, the appropriate response to the hazards will also vary depending on the circumstances (OECD 2002; Peel 2005; Raffensperger et al. 2000).

The range of possible precautionary measures includes:

- research to reduce uncertainties and improve information for decision making
- incorporating 'safety margins' or 'uncertainty factors' in risk assessments
- adopting measures that are robust to a range of possible circumstances, based on sensitivity analysis
- adaptive management to respond to new information
- regulating new products, processes or technologies to reduce the potential for adverse impacts
- banning (either temporarily or permanently) potentially hazardous activities.

Options may be combined — for example, temporary prohibition while conducting research. The course of action will depend on the circumstances of each case, which include:

- the extent and significance of the information gaps and uncertainties
- the prospects and potential costs and benefits of obtaining better information in the future.
- the incidence of damage, for example, whether those likely to be most seriously affected are children (where larger safety margins are often applied), whether adverse effects are concentrated on future generations, or whether environmental impacts will have large flow-on effects through ecological systems
- the possibility of catastrophic events and society's degree of risk aversion
- the capacity, and ease or difficulty, of altering policies in the future, which may depend on whether policy measures would require, or generate incentives for, long-lived investments
- the potential costs and benefits to society of each alternative course of action (Peterson 2006).

[149] Productivity Commission (2007), staff working paper, *Precaution and the Precautionary Principle: Two Australian Case Studies*, p 9

The Productivity Commission Report looked at three types of application of the precautionary principle; flexible, semi-prescriptive and prescriptive and concluded that the flexible approach to be most suitable. A flexible approach requires managers to apply the principle – that is, uncertainty should not lead to the absence of cost-effective action to reduce the threat or actual potential for harm or damage. The inclusion of the principle of cost-effectiveness provides us with the flexibility inherent in this approach and leads to adaptive management. **The Review agrees this is an appropriate approach in the Australian fisheries context.**[150]

Of course, any effective operation of the precautionary approach (the flexible approach rather than prescriptive) will be dependent upon the application of warranted ministerial oversight of decision making by fisheries managers. As the joint submission to the Review by WWF-Australia, TRAFFIC, AMCS and HSI reflected, "while it is important that all stakeholders have confidence that the legislative objectives are being pursued in an appropriate manner, via ministerial oversight, it is equally important that industry has confidence that decision will be taken on the best available advice rather than for political expediency".

In order to assist AFMA better achieve best practice for fisheries management, the Review suggests AFMA be given greater and renewed policy direction in the areas of HSP, bycatch and discard and ecosystem effects; that fisheries management plans explicitly address these issues, pointing out trade-offs where they occur and forming a better basis for consultation and ministerial direction if required; and the fisheries Act(s) are amended to reflect a more balanced priority between objectives. The Review notes that such an approach would further enhance AFMA's application of the precautionary principle.

These issues are discussed in further detail below.

6.3 Commonwealth fisheries management policy

The use of the fisheries resources world-wide requires the acceptance of some fundamental facts: that fishing extracts a resource from the environment, and it will have impacts. The impacts will be on target species, and most likely, non-target species, and sometimes also habitats. Fishing will also inevitably impact on the ecosystems of which fish are part.

As fisheries are mainly public resources it is the role of government and fisheries managers to ensure, to the greatest extent possible, that the use of fisheries maximises the benefits and minimises the negative impacts of fishing. Fishing interests with a view to the long term also share these 'resource use' objectives. It is also important that those who are primarily concerned about the conservation of the marine environment and species over and above the interests of resource use understand that there are trade-offs that will impact on conservation. **In short, fisheries management is about compromise.**

[150] The semi-prescriptive and prescriptive approaches require a more stringent application of precaution – that is, less focus on cost-benefit and economic efficiency and more focus on preventing potential harm, in some case, even when there is little or no scientific evidence to support the potential for harm. Examples the Productivity Commission provided were the 1990 Ministerial Declaration from the Third International Conference on the Protection of the North Sea and the Earth Charter 2000.

Commonwealth fisheries management therefore involves marine environment management, and it is in governments' and industries' interests to ensure that the unavoidable trade-offs are managed optimally.

The government's policies for marine environmental management deal with many such trade-offs by assigning parts of the marine estate to different uses. Commonwealth marine protected areas are established to protect and conserve marine biodiversity and habitats. It follows therefore that areas outside these are for other uses, while at the same time not losing sight of the need to protect the environment in these 'other use' areas also. Where the balance lies for Commonwealth fisheries in marine areas where fishing is allowed should therefore be different from where the balance lies in marine protected areas.

As previously mentioned, the fisheries management regime has improved markedly in the last 10 years. The implementation of the HSP (and the associated tiered system of stock assessment and precautionary setting of total allowable catch – see CSIRO submission) and the bycatch policy, with certain requirements under the EPBC Act, and an AFMA Commission that is independent and selected on merit, have all contributed to this improvement.

But, as those contributing to the Review have stated (to varying degrees), further improvements are required, including to legislation; management practices; funding for and prioritisation of research and development; and our approach to the objectives of maximising economic returns, increasing economic efficiency and better assessing the impact exploitation of fisheries has on the ecological sustainability of a fishery.

As this Review noted in its interim report to the Minister, some of the key improvements of the last decade were because of, on occasion, the complementary affects of the EPBC Act. In that time the *Fisheries Management Act 1991* (FMA) and the *Fisheries Administration Act* (FAA) have remained largely unchanged. Instead, improvements have come about by a combination of strong and clear political leadership, the development of policies such as the harvest strategy policy and the bycatch policy and a more objective approach by AFMA in its decision making.

The Review has found, therefore, that it is not legislation that is necessarily holding back fisheries management; and that there is a strong base to build on thanks to the last 10 years of progress. The Review notes, however, that there are some key areas of the fisheries Acts that could benefit from amendment to help government and fisheries managers to achieve better outcomes.

The Review considers a robust Commonwealth fisheries management framework should consist, in equal measure, of the following policies

- **A harvest strategy policy**
- **A bycatch and discards policy**
- **An ecosystem impacts policy**

Already, in determining the management of individual fisheries, AFMA takes into account the HSP and guidelines (currently under review) and the bycatch policy (also under review). Additionally, AFMA's management regime includes ecological risk

assessments. So the key elements of a robust fisheries management regime are largely in place and are being implemented more or less successfully by AFMA.

The positive impacts of implementing these policies in Commonwealth fisheries management is evidenced by the trends in fisheries status,[151] particularly over the last ten years or so. The percentage of stocks that are overfished has been decreasing (19 per cent in 2004; 10 per cent in 2011), the percentage of stocks that are not overfished has increased (27 per cent in 2004; 81 per cent in 2011), and the percentage of stocks with uncertain status is decreasing (54 per cent in 2004; 13 per cent in 2011).

The issue holding back further gains in sound fisheries management is more about getting the balance right between resource use and impacts on other species and ecosystems. In order to do so, the Review proposes the following.

- **The government gives policy directions to AFMA in three areas: revised HSP; bycatch, discard and incidental catch issues; and ecosystem impacts.** The policy direction could pick up, for instance, the *Guidelines for the Ecological Sustainable Management of Fisheries*[152] applied by the SEWPaC. Such guidance should be developed through a public consultation process. Importantly, and as briefly discussed in Chapter 5, the three-pillar framework should be agreed by both the fisheries and environment ministers. An amendment to the FMA or FAA may be required to allow the government to formally give these policy directions and require AFMA to implement them.

- **The objectives of the fisheries Act(s) be amended** so AFMA is required to formulate, vary and manage fisheries management plans having regard to the above three prongs (see below for elaboration).

- Further, the objectives to be redefined such that there is a clearer understanding of their meaning and **equal attention given to the objectives** to be pursued.

- Fisheries management plans to be subjected to **key performance indicator reporting and, as judged appropriate, external auditing at the requirement of the Fisheries and Environment Ministers.**

In essence, the Review considers robust ways can and should be found to better integrate fisheries and environmental legislation or to meet contemporary community expectations. This should result in greater certainty for industry and the commercial benefits that yields. In this way, the level of transparency associated with the process, coupled with recommendations relating to the development of management plans and the roles of the management advisory committees (MACs) and the RAGs, would be such that consideration of values and trade-offs should allow for a much broader stakeholder contribution to and final understanding of AFMA's management decisions (see discussion in Chapter 5 about the role of MACs and RAGs).

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[151] ABARES Fishery Status Reports (2002 to 2012)

[152] Australian Government Department of the Environment and Water Resources (2007), *Guidelines for the Ecologically Sustainable Management of Fisheries* (www.environment.gov.au/coasts/fisheries/publications/pubs/guidelines.pdf)

6.3.1 Harvest strategy policy – maximising economic yield

A harvest strategy sets out the management actions necessary to achieve defined biological and economic objectives in a given fishery. Harvest strategies must contain

- a process for monitoring and conducting assessments of the biological and economic conditions of the fishery; and
- rules that control the intensity of fishing activity according to the biological and economic conditions of the fishery (as defined by the assessment). These rules are referred to as control rules.[153]

The HSP has had a pivotal role in improving fisheries management decisions and general oversight since its implementation in 2007. The 2005 ministerial direction under s 91 of the FMA, and as mentioned elsewhere in this report, led to the development and implementation of the HSP and is detailed at Figure 4.

Figure 4. ***The 2005 Ministerial Direction: A changed focus for Australia's fisheries management***

The 2005 Ministerial Direction
A changed focus for Australia's fisheries management

Section 91 of the FAA, which enables the minister to direct AFMA only in exceptional circumstances and in order to avoid a conflict with major government policies, has only been used once. On 14 December 2005, the then Minister for Fisheries, Forestry and Conservation, Senator the Hon. Ian Macdonald, concerned about "too many boats chasing too few fish" issued a formal direction to AFMA to address overfishing and to prevent overfishing in the future.

The direction was issued as part of the S*ecuring our Fishing Future* initiative, announced in November 2005, which was in essence a "$220 million one-off assistance package" aimed at achieving industry adjustment largely through the buyout of fishing concessions in targeted fisheries via a competitive tender process.

The direction stated plainly that "the Australian Government considers that decisive action is needed immediately to halt overfishing and to create the conditions that will give overfished stocks a chance to recover to an acceptable level in the near future" (for the direction in full see Appendix 5). It set out a number of specific actions required to achieve this end, most significantly:

- adoption of harvest strategies for key commercial species in Commonwealth-managed fisheries to ensure a more strategic, science-based approach to setting total allowable catch levels;
- adoption of output controls in the form of individual transferable quotas in all Commonwealth fisheries unless there is strong evidence for a different approach
- establishment of a system of independent surveys to increase the transparency and integrity of catch and effort information; and
- better monitoring of fishing activity including, for example, through the use of observers and, increasingly, electronic means (such as vessel monitoring systems and on-board cameras).

These instructions represented a major shift in focus for AFMA and for the Australian fishing industry.

[153] Department of Agriculture, Fisheries and Forestry (2007), *Commonwealth Fisheries Harvest Strategy; Policy and Guidelines*, p 3

The Review has found that the benefits of the instigation of the HSP have resulted in strong support for it from stakeholders. There are a number of reasons for the HSP's positive and quite dramatic impact on Commonwealth managed fisheries, in the context of its role in future

- The HSP was a clear and unequivocal policy initiative of the then Minister for Fisheries. AFMA and fisheries management stakeholders were left in no doubt of the requirements outlined in the ministerial direction and the HSP itself.
- The HSP is not prescriptive in the imposition of management arrangements. Rather, it requires outcomes, but not the management process for achieving those outcomes.
- It has significant buy-in from key contributing stakeholders.
- It applies to all Commonwealth-managed fisheries.
- Ongoing technical evaluation of harvest strategies is required and provides a process for certainty and predictability (requiring strategies to be established for at least three years), while recognising flexibility may also be required where new information becomes available that allows for better assessment of the status of fisheries.
- The associated Guidelines are transparent and cover the broad range of elements necessary for the development of sound harvest strategies.
- The Guidelines outline the roles and responsibilities of the MACs and RAGs in the harvest strategy development process, including their relationship to AFMA. They make clear that AFMA is expected to consult widely in the process of decision making (i.e. not just with the RAGs and MACs).
- The design criteria are straightforward and cover all criteria necessary for developing a harvest strategy to minimise economic yield for commercial target species, while taking into account the imperatives for ecologically sustainable development and the precautionary principle.

As discussed further below, however, **the HSP (while perfectly adequate for stock based assessments) is not the appropriate means for consideration of bycatch and discards or the inter-relationships of stocks in an ecosystem, as needed for an ecosystem approach to fisheries management.**

While noting the HSP is currently being reviewed, the Review found wide stakeholder support for the continuation of the HSP, albeit with scope for further improvements. Notwithstanding its highly successful implementation, the HSP is not a catch all for fixing fisheries management. It has drawbacks that need to be addressed and limitations in its objectives that require critical examination.

The Commonwealth's 2007 *Harvest Strategy; Policy and Guidelines* characterise the objectives of the policy as the

> "sustainable and profitable utilisation of Australia's Commonwealth fisheries in perpetuity through the implementation of harvest strategies that maintain key commercial stocks at ecologically sustainable levels and within this context, maximise the economic returns to the Australian community."[154]

In essence, this reflects the objectives of the FMA, and also, inherently maintains an emphasis on the economic issues associated with fishing and fisheries management. As

[154] Op cit.

previously mentioned, the Review has no criticism of this economic emphasis, as long as there are effective mechanisms to deal with other key management issues. AFMA's work in implementing management arrangements to match harvest settings has been commendable (and in many respects world-leading), but there is a tendency for AFMA to lean in favour of fisheries catch objectives, presumably, not only because of the objectives of the Act and the HSP, but also because the HSP focuses on the target species, even though policy requires broader environmental considerations.

- For example, the Review heard that the scientific input in a RAG context focused overwhelmingly on stock assessment issues with much less attention paid to issues relating to bycatch and discard or ecosystem effects.

As the WWF-Australia et al. submission noted

> "...the HSP relates only to some parts of the catch taken on Commonwealth fisheries. There remains no guidance from the Government on the level of precaution that is required in the management of by-product species and other discarded species. There remains, therefore, a significant gap in the Government's articulation of the level of precaution that AFMA should apply."[155]

The HSP, at its heart, is designed to provide the Australian community with a high degree of confidence that commercial fish species are being managed for long-term biological sustainability and economic profitability and to provide the fishing industry with a more certain operating environment.

However, in the absence of equal attention being given to other elements that are also fundamental to the sustainability of a fishery and the associated marine environment, the concern is that AFMA's decision making is skewed towards the economics, and therefore, the commercial fishing sector's priorities and interests. These other elements include by-product/bycatch/discards resulting from commercial fishing activities and an ecosystem approach to fisheries management, which are discussed further below. The integration of these elements with the HSP should be fundamental to fisheries management planning and decisions.

The Review therefore suggests the HSP could further enhance fisheries management if it was one of the three key supporting principles of a modernised management system, subject to ministerial approval in the context of fisheries management plans as proposed in Chapter 5.

6.3.2 Bycatch policy – minimising the impact on non-target species

The Commonwealth has had a bycatch policy in place since 2000. This seeks to assess and minimise the impact of fishing on non-target species as an integral part of fisheries management, with the ultimate objective of ensuring that impacts on bycatch species are minimal. In March 2012, Minister Ludwig announced a review of the bycatch policy, which would run concurrently with DAFF's review of the HSP.

[155] Submission from WWF-Australia et al.

- An issues paper was released in November 2012 that set out to identify key issues for the review.[156]

Fisheries bycatch generally refers to the incidental capture of, or interaction with, non-target species, most or all of which are discarded. Bycatch is different to by-product, which is also non-target species but has commercial value.

More specifically, the Commonwealth's bycatch policy applies to that part of the fisher's catch that is returned to the sea either because it has no commercial value or because regulations preclude it being retained,[157] and that part of the catch that does not reach the deck of the fishing vessel but is affected by interaction with fishing gear.

As the bycatch policy states

> "(d)iscarding unwanted catch is a wasteful practice that may pose a threat to marine systems over time. Bycatch also poses a direct threat to the survival of some species or populations of marine animal, such as turtles and dugongs, seabirds and others that may be unable to sustain additional mortality from fishing. The primary reason for a *Commonwealth Policy on Fisheries Bycatch* is to ensure that direct and indirect impacts on marine systems are taken into account and managed accordingly."[158]

The issues paper released by DAFF for the review of the bycatch policy[159] notes that alternative definitions of bycatch were considered at a stakeholder workshop in June 2012 – with general support for the concept of both commercial and non-commercial bycatch species. Commercial bycatch would be managed under the HSP because it is bycatch that is retained for its commercial value. Non-commercial species would be managed by a bycatch policy because they are not kept by commercial fishers. Non-commercial species would include marine wildlife, protected species and other fish species not retained.

The Review would urge the bycatch policy review to examine closely the practice of discarding. Discarding most often occurs when species that fishers are not permitted to retain are thrown back, even if they have commercial value. Discarding includes the practice of high grading whereby damaged or lower value catch is discarded in preference of higher value catch. The Review heard of many examples of significant amounts of discarding as well as high-grading in Commonwealth fisheries. In such instances, this is not 'catch and release' fishing; the catch is returned to the water dead. One alarming case included an amount of five tonnes of commercially valuable bycatch discarded on a single trip because the fisher was not licensed to fish the species that was caught.

Bycatch and interactions with other non-target species are an inevitable outcome of commercial fishing, but policies, such as the bycatch policy, should work to minimise the occurrence of wasteful and damaging discarding as much as possible. Discarding

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[156] The issues paper, terms of reference for the review and other related documents can be found at www.daff.gov.au/fisheries/environment/bycatch/review

[157] Issues surrounding the discarding of bycatch to avoid contravention of regulations are considered by the Review to be significant issues for fisheries management procedures and are discussed further in Chapter 7, under Penalties and Enforcement.

[158] Australian Government, *Commonwealth Policy on Fisheries Bycatch*, p 3

[159] DAFF (2012), *Review of the Commonwealth Policy on Fisheries Bycatch*, (www.daff.gov.au/__data/assets/pdf_file/0007/2219839/commonwealth-bycatch-issues-paper.pdf) p 15

impacts commercial fishers' profitability. Additionally, both discarding and high-grading prevent fisheries managers from effectively monitoring and recording the impact that commercial fishing has on target and non-target species, including through accurate stock assessments. The review of Commonwealth bycatch policy is therefore a much needed development as current approaches have substantial shortcomings.

The Review proposes that a Commonwealth bycatch policy, which could be incorporated as one of the three integral elements to modernised fisheries management in Commonwealth waters (along with the HSP and a broad ecosystem management approach), encompasses stringent regulation (for example, where threatened species issues arise); contains incentives or disincentives to encourage or discourage certain behaviours respectively; and incorporates effective enforcement and compliance regimes in order to reduce discarding and high-grading. Where necessary, further regulation and compliance mechanisms should be included in the legislation. The Review notes that there are bycatch action plans for particular fisheries and recommends that these action plans articulate the relevant enforcement arrangements and penalties to be applied for non-compliance.

Enforcement and compliance provisions are discussed in more detail in Chapter 7. In particular, the Review considers that **options should be examined to minimise bycatch and discarding and to prevent high grading, including consideration of penalties to be applied to those who exceed their quota, or, alternatively, catch fish for which they are not licensed.** The Review examined New Zealand's relatively recent introduction of deeming provisions, whereby fishers are penalised to a pre-determined deemed value if they land fish outside their catch limits and suggests similar provisions be examined for Commonwealth fisheries. The Review notes this could also be achieved through 'multiple of gain' penalties as discussed in Chapter 7. It has been put to the Review that such an arrangement might give rise to unwarranted complexity. However, such a scheme need not be 'over-engineered'; providing a financial disincentive is considered a relatively simple, but effective method to encourage compliance.

The Review also suggests that, where practical and in areas of highest risk, AFMA observers on boats and video monitoring surveillance be increased. Additionally, taking a risk based approach, a more focussed increase in auditing of vessels and catches targeting certain high-risk fisheries should be considered.

A more effective bycatch policy, which forms part of the overarching management framework, could have a marked positive impact on the capacity for enhanced fisheries management.

6.3.3 Ecosystems approach – minimising the impact on ecosystems

As variously termed, 'ecosystem approaches to fisheries management' (EAFM), 'ecosystem-based fisheries management' (EBFM), or just 'ecosystem approaches to fisheries' (EAF), are widely accepted and highly regarded. However, the dilemma is exactly what they mean in fisheries management practice. The FAO has produced a guideline[160] which defines EAF as follows

[160] FAO (2003), *Technical Guidelines on the Ecosystem Approach to Fisheries*

> "An ecosystem approach to fisheries strives to balance diverse societal objectives, by taking into account the knowledge and uncertainties about biotic, abiotic and human components of ecosystems and their interactions and applying an integrated approach to fisheries within ecologically meaningful boundaries."

The FAO further elaborates the concept

> "A primary implication is the need to cater both for human as well as ecosystem well-being. This implies conservation of ecosystem structures, processes and interactions through sustainable use. Inevitably this will require considering a range of frequently conflicting objectives where the needed consensus may not be readily attained without equitable distribution of benefits. In general, the tools and techniques of EAF will remain the same as those used in traditional fisheries management, but they will need to be applied in a manner that addresses the wider interactions between fisheries and the whole ecosystem. For example, catch and effort quotas, or gear design and restrictions, will be based not just on sustainable use of the target resources, but on their impacts on and implications for the whole ecosystem."[161]

Despite there being considerable international literature as well as the FAO guideline the concepts of EAF remain difficult to apply in practice.

The WWF-Australia et al. submission identified this issue with respect to Commonwealth fisheries management

> "Across DAFF, AFMA and DSEWPaC we see actions taken in the name of "ecosystem-based management" of the marine environment. For example, AFMA has been moving, incrementally, down the path of what it calls ecosystem-based management without any real explanation of what this means or its role in pursuit of AFMA's objectives. However, there is no overarching government policy statement about what ecosystem-based management means in relation to the marine environment and how it should be pursued. The current approach to ecosystem-based management by these three agencies is piecemeal and lacks guidance. This situation creates confusion amongst all stakeholders and creates an environment in which it is easy to oppose measures seeking to achieve ecosystem-based management."[162]

The Review has grappled with just how an ecosystem approach to fisheries could be translated best into practice for Commonwealth fisheries, and it is apparent that just as the HSP provides for a science-based assessment of fisheries on a stocks basis (with reference points or policy-related 'threshold' settings), a similar policy document is needed to specify the settings to manage fisheries as part of marine ecosystems. As mentioned previously, the Review proposes this new policy document should be an equally balanced third pillar alongside the HSP and bycatch and discard policies, and should be specified in statute as an objective of the FMA.

The Review proposes that, to give it focus, it should specify a scientifically-based method and it should articulate the settings and thresholds, wherever possible, to give the maximum practical guidance to AFMA and fishers. The proposal at this stage is that this document would look at EAF from the perspective of **minimising ecosystem impacts**. A focus on impacts could at the same time help to more closely define the issues, while also complementing the approach applied by the other two 'pillars' (noting both are also being reviewed), and the bycatch policy in particular, needs considerable

[161] www.fao.org/fishery/topic/13261/en (also referenced in ANEDO submission, p 9)
[162] Submission from WWF-Australia et al.

work to specify meaningful science-based settings to inform fisheries management settings and responses.

To reiterate the point made earlier in this report, the Review is well aware that fishing necessarily has environmental impacts: it is, in essence, 'collateral damage.' With thought, often the collateral effects can be minimised. Inevitably though, there will be tradeoffs that need to be assessed, weighed and a judgement reached. It would help if there was a clearly articulated framework in which that took place – an overarching fisheries framework and a strategic assessment in the context of a fisheries management plan – with wide scope for scientific and other analytical input with consultation more extensive than current, largely 'in-house' approaches.

Figure 5. ***Australia's fisheries in context***

Australia's Fisheries in Context

[Extract from CSIRO submission]

Australia's commercial fisheries industries are relatively small by world standards yet have disproportionately large ecological, social, and political footprints. For example, Australian marine fisheries account for 0.2% of global marine fisheries landed tonnage but 2% of marine fisheries landed value (FRDC 2010). Demand for seafood is likely to increase with increasing populations both domestically and in our region, placing additional pressure on sustainable production of seafood. Global landings from capture fisheries are static or declining slightly, while production from aquaculture continues to rise (FAO 2011).

Australia's fisheries jurisdictions have adopted ecosystem-based fishery management (EBFM) as a policy goal, since the mid-2000s. This is consistent with the growing international demand for environmentally sustainable food production. Spatial management and participatory or co-management are also key features of the fishery management system. Our fisheries are considered well managed by global standards. For example, it has been estimated that only 15% of our fisheries are classified as overfished, with an improving trend, compared to 30% globally (FAO 2010, Smith and Webb 2011, Woodhams et al. 2011).

This fairly rapid shift in fisheries management over the last decade from a focus on single target species assessments to a focus on ecosystem-based management places increasing demands on research for the provision of management advice. A focus on EBFM requires that fishing impacts on target, bycatch, habitats and ecological communities are considered, with the information demands for EBFM being much higher. As a result Australia has pioneered the development of tiered risk assessments that start with lower cost methods and only increase research costs when a material risk with that approach is shown.

Australia is seen as being at the forefront in this area of research (Gallagher et al 2012; Scandol et al. 2009; Patrick et al 2009; Pikitch 2012) but the information demands are still formidable and outside the scope of traditional data-rich-based research.

Current challenges to sustainable management are likely to be compounded by long-term changes in the ocean environment which limit the value of past experience and historical patterns. Science has a role in addressing these challenges through advances in ocean observation systems, developing methods to assess data-poor species and fisheries, bio-economic research, 'whole of system' modelling frameworks, and social research into governance systems, including better understanding of human behaviour (Fulton et al. 2011).

Australian marine industries (offshore oil and gas, tourism, fishing) were worth in excess of $44 billion per annum in 2010, having increased from $38 billion in 2008 (AIMS 2010). Increasing marine uses can lead to tensions between sectors and generate competing priorities for the same areas. Recreational fishing is a major social and economic activity in Australia with up to four million people participating per annum and catches of many species exceeding commercial catches (Henry and Lyle 2001). The recreational fishing sector is managed by the States, but interact(s) with Commonwealth managed fisheries. The growth in marine industries is increasing conflict with other users, including commercial fishers. No arrangements currently exist to provide a forum for identifying integrated strategic marine management or for setting spatial management priorities across multiple sectors.

7 Principles for modernising fisheries management

7.1 Convergence of fisheries management and environmental objectives and the precautionary principle

The Review has considered the most fundamental of relationships in fisheries management, and in particular, that which appears most fraught for commercial fishers, conservationists, scientists and the recreational sector alike – the interplay between the *Fisheries Management Act 1991* (FMA), the *Fisheries Administration Act 1991* (FAA) and the *Environment Protection, Biodiversity and Conservation Act 1999* (EPBC Act). There was a gratifying unity of views, however, that the EPBC Act has helped AFMA considerably by guiding it to apply precautionary approaches to fisheries management and placing more focus on ecosystem considerations. However, there was also wide agreement that the prime vehicle giving legislative effect to good fisheries management in Australia was the FMA and the FAA.

The more substantive issue for the Review, therefore, is how the fisheries and the EPBC Acts might better relate to one another to achieve a seamless but effective integration of fisheries and environmental requirements. In this context, the Review has heard the following arguments:

Firstly, the EPBC Act is an important backstop to the fisheries Acts, leading to improvements in fisheries management because, *inter alia*, it puts a more 'precautionary' filter on various management decisions. Secondly, the Review heard that the overlay of the EPBC Act – particularly the requirement to do, at times, multiple and separate assessments under various provisions of the Act – has amounted to a "double jeopardy", increasing uncertainty and costs for the fishing industry without there being an appreciable difference in fisheries, by-catch and discard or ecosystem outcomes.

In the Review's judgement, the application of the EPBC Act has achieved important outcomes in shifting the balance of fisheries management objectives from paying greater heed to economic and commercial objectives, to a range of environmental considerations.

Nevertheless, the Review considers that at the current juncture worthwhile **steps should be taken to better integrate fisheries and environmental legislation.** The Review believes such steps can and should be taken without compromising the standards required by the EPBC Act. In this regard, the Review notes the Hawke Review proposed that the EPBC Act be amended so that "...the fishing provisions under Part 10, 13 and 13A are streamlined into a single strategic assessment framework for

Commonwealth and state and Northern Territory-managed fisheries to deliver a single assessment and approval process" (Recommendation 40)[163].

In responding to this recommendation, the government has indicated it "agrees with the intent of this recommendation, but noted that the fisheries assessment provisions and the EPBC Act serve different functions – for example, ecological communities and listed migratory species in the Commonwealth area (Part 13), strategically assessing impacts on matters of national environmental significant (Part 10), and ecologically sustainable management of commercial export fisheries (Part 13A)." The government also indicated it "supports reducing the administrative and regulatory process involved in fisheries assessments, including through less frequent assessments of well-managed fisheries".

In supporting this view, the Review notes the comments in the AFMA submission;

> "the overlap between fisheries management (both Commonwealth and state/territory) legislation and the EPBC Act creates considerable inefficiency and uncertainty for both governments and fisheries stakeholders. Inefficiency and uncertainty is exacerbated by significant duplication of activity between several EPBC Act approval requirements for each individual fishery."[164]

To these ends, the government has announced it "supports in principle a progressive shift under the Act from individual assessments of fisheries to the accreditation of fisheries management arrangements".

The Review supports the adoption of an accreditation framework. However, the Review has not yet seen how it is proposed to translate this shift into legislative amendment or changed practice.

In this regard, the Review considers it would **be important that any accreditation arrangements do not lower the environmental standards applicable to fisheries.** This may mean that the form the accreditation may eventually take will need to be sufficiently clear, precise and subject to performance reporting so the public is assured that standards do not slip. However, if the arrangements are overly prescriptive, then the environment department would still, in large measure, be taking on rather more of the instructive functions of a fisheries manager.

Another issue that was discussed broadly in stakeholder discussions and mentioned in a number of submissions was that of compliance with EPBC Act requirements in state managed fisheries. **One of the frustrations for Commonwealth fishers and AFMA itself, is the inconsistency (real or perceived) in the obligations imposed on Commonwealth and State fisheries.**

In its submission, AFMA stated that "there is an immediate need to address the current inconsistencies in the application of the EPBC Act between different fisheries

[163] http://www.environment.gov.au/epbc/review/publications/final-report.html
[164] Submission from AFMA

management jurisdictions, operating in applicable waters"[165]. AFMA usefully provides a detailed case study in its submission outlining the apparent differing management approaches taken by SEWPaC to minimise gillnet fishing impacts on Australian sea lions in different jurisdictions.

Essentially, AFMA argues that, following a process beginning in 2007, culminating in the FRDC funded project "(T)the impact and mitigation of Australian sea lion by-catch in the Commonwealth managed shark gillnet fishery off South Australia", AFMA instituted a series of measures in order to reduce female sea lion catch in the fishery to as close to zero as possible. Currently, over 70 percent of the South Australian component of the Southern and Eastern Scalefish and Shark Fishery (SESSF) is presently closed to gillnet fishing. The Minister for Sustainability, Environment, Water, Population and Communities has, correspondingly imposed stringent conditions on the Commonwealth Gillnet Fishery and entire SESSF is required to meet the conditions to avoid removal of approvals under the EPBC Act required to operate in the fishery. Nevertheless, the same stringent requirements are **not** imposed by the Minister for state-managed gillnet fisheries, which has, according to AFMA, allowed state-managed gillnet fisheries to operate gillnets immediately adjacent to Australian sea lion colonies.

This situation brings into stark relief the problems inherent in a federated system; problems that are not unique to the fisheries management regime. **However, the Review regards this situation to be inequitable; inconsistent; irrational on economic and environmental policy grounds.**

In order to alleviate, or remove wherever possible, this inconsistency in approach, the Review proposes that where applicable, the same or similar obligations be placed on state and Northern Territory-managed fisheries under the EPBC Act to ensure, where practical, common or compatible approaches where the fisheries cover common stocks.

The difficulties associated with offshore constitutional settlements (OCS) and fisheries' systems, the management of which are shared by a number of jurisdictions, are discussed later in this chapter. It seems the problems associated with inconsistency in the imposition of requirements are not unique to the requirements under the EPBC Act.

7.2 Research and development – funding priorities; public and private

The need to ensure fisheries are sustainable – commercially and from an environmental perspective – in the longer term requires that there be a relatively heavy research focus.

That research covers the need for good data for fisheries management purposes (for example, for the Australian Fisheries Management Authority (AFMA) to undertake stock assessments) to strategic research looking at a spectrum of fisheries and marine issues

[165] *Ibid*

(for example, the kind undertaken by the Fisheries Research and Development Corporation (FRDC)).

A pressing issue, in large part stemming from the need to take a precautionary approach to fisheries management, has been the need to adequately fund research, particularly into stock assessments and the sound management of fisheries more generally.

Under current cost recovery arrangements, the research AFMA requires to enable it to manage a fishery is cost recovered by a levy on fishers using the Department of Finance and Deregulation's government cost recovery policy (CRIS[166]). However, a number of submissions noted that funding for research and priority setting was inadequate, with a number calling for an increase in funding for research and stock assessments.

As the Recreational Fishing Association of NSW noted in its submission to the Review: "If Australia is to continue to follow best practice fisheries management principles it must address, at the least, known scientific knowledge gaps, particularly in developing fisheries where opportunities for commercial growth may exist. "[167]

Where funding to address these known scientific gaps comes from is a key point, keeping in mind Australia adopts the generally accepted user-pays arrangements.

A major issue raised with the Review is that not all Commonwealth fisheries can afford to undertake the requisite research. Larger and/or more profitable fisheries generally have the capacity (although they seek to lower levy costs), whereas smaller and/or less profitable fisheries have less capacity to pay. The Review notes that it is often in these smaller fisheries that most scientific gaps occur. Is there, therefore, an argument for cross-fisheries funding of research?

Given the difficulties described above, the Review has examined whether the current AFMA levy arrangements are reasonably based and whether there are alternative options. The main options identified are

1) Maintain the current cost recovery framework. The advantage of this approach is that while there will always be issues of contention, the methodology for determining private versus public interest and the attribution of costs is essentially sound. It is good policy. Viewed from this vantage point, if the industry cannot afford the levy, and hence the necessary research cannot be undertaken, in the longer term the marginal fishers in that fishery should exit the industry, selling their individual transferable quotas (ITQs), if applicable, to other fishers.

2) In circumstances where 1) above is not judged to be reasonable, or where there is a "higher" public good consideration at stake (and that claim risks being too easily made), some variation in the approach might be contemplated. This essentially would involve some new money, or diversion of money from an existing programme.

[166] The Cost Recovery Impact Statement template can be found at http://www.finance.gov.au/financial-framework/financial-management-policy-guidance/cost-recovery
[167] Submission by the Recreational Fishing Association of NSW

For example, some Commonwealth money for FRDC could arguably be directed to such research.

3) Another way would be to replace the current AFMA levy by, in effect, an access fee similar to that recently introduced in Western Australia (basically a two-tied levy for smaller and larger fisheries). An access fee would reflect the private use of community resources. If hypothecated to fisheries this would enable funding to be pooled and then directed toward the highest fisheries research management objectives. However, pursing this objective would break with the important user pays link and, therefore, involve what might be regarded as cross-subsidisation from one fishery to another.

4) A further option, which would be sound in terms of economic and resource efficiency objectives, would be to impose both an access fee and an industry specific levy. This would pick up the attribution of industry costs as well the use of the community resource, possibly providing additional funding for scientific work in those fisheries most in need, but at the same time, most unable to be funded under current arrangements. It would be a policy issue for government to ultimately determine, as to how the level of such fees were set and structured.

5) A final option, which would be compatible with all of the above approaches, would be to have an in depth examination of how AFMA conducts its business to see if there is capacity to lower costs, if that could be done without significantly detracting from the value of the data sets. For example, without being in any way prescriptive, such an examination would consider whether stock assessments for some fisheries could be undertaken less frequently. It could also look at – on a risk basis – whether electronic surveillance might suffice in more instances instead of observers. It could also examine the scope – as industry has asked[168]– for opening up more of AFMA required processes (for example, observers, data collection) to competition. The Review has not had an opportunity to examine the opportunities in this area. It would require careful assessment of individual fisheries having regard to their track records and risks.

Each option has pros and cons. Essentially, however, the Review recommends, on the basis of sound economic principles, that option 4 be pursued, with an accompanying examination of AFMA's cost recovery structure and a review of costs to see where efficiencies may be possible. Opening up AFMA to competition in the area of observers, for instance, should also be examined.

7.2.1 Fisheries Research and Development Corporation

The Fisheries Research and Development Corporation (FRDC) is a major source of fisheries research funding. It has strong research capability, which provides a positive return on the Government's investment in research, development and extension

[168] Submission from Commonwealth Fisheries Association

activities. The 2008 evaluation of 15 RDC's in Australia indicating that the FRDC was providing an average return on investment of 5.6 to 1 in 2009-10.

The FRDC ensures that national research priorities and rural research priorities are aligned with its research programs. Its program model is flexible and able to accommodate and adopt new or changing priorities, such as climate change. DAFF has analysed FRDC funding against departmental research priorities and has found that the FRDC directs the majority of its funds in line with departmental objectives, priorities and in line with the contributions that the various fishing sectors make to the fishing industry.

However, the FRDC is funded to a considerable degree from government (over 60 percent; and far more than is provided to any other statutory RDC), as opposed to research levies imposed on industry. This rightly reflects the public nature of fisheries and marine resources. It follows that DAFF, and the Minister, should inject a stronger government policy overlay to the FRDC's research strategies and planning for priorities given the FRDC deals in a world where such a significant public interest component exists (unlike other rural RDCs, which deal with mainly private resources). But the Review has found no evidence that the government does any more than direct the FRDC in the same way it does all other RDC's. The Review believes there is an argument for reviewing DAFF's basic oversight, without obstructing or impeding the smooth running of the organisation by its own board and management.

It would be reasonable for DAFF to seek advice from the FRDC on the level of funding for private interest research, which delivers a public benefit, against public interest research activities, and to provide more guidance about how public good money could be appropriately spent. If this was to be pursued, the Review notes that DAFF could helpfully more fully articulate what government/public priorities in fisheries research are.

In this context, the Review notes the CSIRO submission, which states "while the CRIS plays an important role in focussing research and monitoring priorities and delivery of cost-efficient fisheries management, it does reduce the availability of funding for broader marine research, such as ecosystem impacts of fishing and issues of interest to the wider community. There is a need to consider different/complimentary sources of funding for broader applied research on marine ecosystems to address these broader issues."[169]

Overall, however, the Review found that pressures on funding research and development activities are a universal problem faced by industries, in particular rural industries, more broadly. The fisheries research dollar in this context is significant and so, it is not so much the quantum but the efficient and effective use of the research dollar that counts most. Finally, the Review noted that there are a number of different research institutions that are funded, publicly, privately and by states and the Commonwealth. In general terms the Review found that there is broad cooperation in

[169] Submission from CSIRO

fisheries research – the relatively small size of the cohort assists with this. However, at the state/Commonwealth policy level, constant review and evaluation of the efficiency of the research dollar spend, would inform funders and researchers alike about possible gaps and duplication, or potential increased effectiveness through joint projects or more open sharing of information.

7.3 Enforcement and compliance

Enforcement and compliance are fundamental elements of AFMA's regulatory role under the FMA. The importance of that role was clearly stated in the second reading speech of the Bill for the Act, which noted, the best system of fisheries management will only work as far as it is effectively enforced. Unsurprisingly, these elements are enduring concerns; "if there is no compliance with the rules set by fisheries regulators then there is effectively no management" notes AFMA's submission to the Review.

In any regulated fishery, management rules are set with the intention of balancing the preservation of the natural resource with enabling an efficient, vibrant industry. Where management rules are broken, the result is not only damage to public 'capital' (i.e. fish stocks and/or the marine environment more broadly) but also damage to the value of fishing concessions – and therefore the industry at large.

Furthermore, where non-compliant behaviour is detected, the Australian community expects fast and appropriate action. There is also an expectation of a deterrence effect to influence the future behaviour.

Whereas compliance is considered to be generally high in Commonwealth fisheries, there remain significant challenges in some fisheries and some regions.[170]

In considering the adequacy of arrangements, the Review turned firstly to the current legislative penalty, compliance and enforcement regime and how AFMA goes about preventing, detecting and responding to illegal fishing activities.

7.3.1 Penalty regime

The FMA sets out a penalty regime based on two tiers of fines; low-level 'on the spot' fines (i.e. infringement notices) and larger amounts, which require successful criminal prosecution. Under section 106 and following a conviction of certain offences (s 13 or ss 95(5)), a court may order forfeitures – including boats, gear, catches or the proceeds of the sale of catches. AFMA or a court may, in certain circumstances, also cancel fishing concessions; however, forfeiture or cancellation has been used very rarely for domestic offences in Commonwealth fisheries. Suspension powers are also an option but they can only be used in a supervisory manner, not as a penalty of itself.

From this, and from submissions to the Review, it is clear that the current penalty regime for Commonwealth fisheries lacks an appropriate spectrum of sanctions.

[170] Submission from AFMA

In addition to strengthening existing penalty provisions, AFMA posits that alternative compliance approaches to broaden the suite of measures available would also lead to the more efficient and cost effective delivery of timely enforcement.

Alternative compliance approaches could include civil and administrative penalty provisions (including suspensions for penalty purposes), enforceable undertakings, automatic forfeiture and injunction.

AFMA also recommends that the maximum level of fines be increased and terms of imprisonment be introduced for a wider range of offences to ensure that the penalties for more serious offences or repeat offenders act as a sufficient deterrent to illegal behaviour.

7.3.2 Compliance and enforcement policy

AFMA articulates its approach to compliance and enforcement in a published policy document, which is founded on a risk-based regime that aims at targeting compliance and enforcement in the areas where it is most needed, "thereby using AFMA's resources most effectively". It involves a series of steps to identify and assess non-compliance risks and then applies tailored compliance measures to control these risks. AFMA also retains a general presence and deterrence role by maintaining a visible presence at ports and at sea.

AFMA maintains an annual compliance and enforcement program outlining the identified priority risks areas, the methods proposed to address and monitor those risks and a program of general deterrence. The program is based on annual compliance risk assessments conducted in the major Commonwealth fisheries.

7.3.3 Cancellation of fishing concessions

Under s 39 of the FMA AFMA may, in general terms, cancel a fishing concession under certain circumstances. The ability of AFMA to cancel concessions was a concern raised by a number of commercial fishing industry representatives. There appeared to be two main issues: that the Act gives AFMA too much power by being able to cancel a concession; and the ability to cancel a concession undermines its value as financial security.

At the heart of the cancellation issue is whether an exclusive access right to a public resource can or should be given to individuals in the form of 'property' and/or 'ownership of property'.

Another matter emerging during stakeholder consultations was concern that the value of fishing rights was being undermined because of ineffective partitioning of fisheries resources under the various Offshore Constitutional Settlements. Some industry stakeholders considered that this issue was more important, and a more immediate concern, than cancellation. OCS issues are dealt with in Section 7.4.

There are three options for dealing with the cancellation provisions

- Leave the Act as it is and retain the cancellation provisions without change; however, this option does not respond to industry's concerns about the extent of AFMA's powers and the assertion that cancellation undermines the value of concessions for securing finances.

- Remove the cancellation provisions from the Act; but this could be seen, both domestically and internationally, as a significant weakening of the sanctions regime for managing Australian fisheries, particularly if the circumstances did not allow criminal prosecution.

- Retain the cancellation provisions and amend the Act to make the circumstances of their application clearer. The ability to cancel a concession would be kept but the circumstances for cancellation would be tightly specified.

On balance the Review considers the best option would be amending the FMA to make it clear when a concession could be cancelled, for example, in the case of egregious or repeated breaches of fisheries management requirements. This should ideally be done in concert with reviewing the penalty provisions of the Act.

7.3.4 Penalty provisions

A view expressed in several submissions and that also came through in stakeholder meetings is that AFMA has too few options in respect of its enforcement powers and that the currently available penalties are 'polarised' by being limited to fairly meaningless fines, or at the other end of the scale, criminal prosecutions or cancellation of a fishing concession. Examples are the submissions by AFMA, Austral et al., and WWF et al.

> "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." – AFMA submission

> "... we support strong measures being taken by AFMA to ensure adherence to regulations and requirements, proportionate to the actions being breached. For example, bycatch reporting breaches, where some sectors of industry may misreport accidental captures of threatened, endangered or protected (TEP) species, require significant and effective compliance responses from AFMA. Aside from the possible negative impacts on those TEP species directly, the community perception of these (generally isolated) incidents when they become apparent is significantly negative towards fishing industry members more broadly." – Austral et al. submission

> "We would support changes to the penalty provisions of the FMA that balance the need for adequate deterrence with the maintenance of secure property rights in the form of SFRs." – WWF et al. submission

Under the current framework, AFMA cannot access a range of civil remedies such as civil penalties, injunctions and enforceable undertakings. This is a deficiency

in the fisheries legislation that could be remedied in legislative amendments giving AFMA greater enforcement options.

During stakeholder consultations many commercial fishers said they would welcome substantial fines for breaches as they have no tolerance for behaviour that does not uphold the regulatory framework, because it brings the probity of the industry as a whole into question.

Options for a more comprehensive range of penalty provisions that would allow an appropriate penalty to be selected that 'fits' the particular unlawful action could include

- the inclusion of tiered penalties depending on the severity of the unlawful action ;
- including a range of civil and criminal penalties, including strict liability and fault based provisions;
- including mechanisms such as injunctions and enforceable undertakings; and
- provisions allowing the recovery of the proceeds of unlawful action (e.g. additional penalties referable to the value of the fish taken illegally).

It is appropriate that amendments to the existing provisions and the inclusion of new enforcement tools should be consistent with Commonwealth enforcement policy[171].

The Review understands there are no legal barriers to implementing a more comprehensive range of penalty provisions, such as expanding the range of offence provisions and including other enforcement tools such as civil penalties, enforceable undertakings and injunctions in the FMA. In particular, the Review notes that issues surrounding the discarding of bycatch are significant and providing AFMA with greater scope to deal with this through a penalty and enforcement regime is one benefit to expanding the range of offence provisions. This should be considered in the context of the discussion on the potential for a ''deeming" system discussed at Chapter 6.

The Review proposes that the FMA be amended to give AFMA a broader range of options to enforce the key regulatory requirements including civil penalties, enforceable undertakings and injunctions. Including these enforcement options would bring the FMA in line with other more modern Commonwealth legislation such as the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), the Biosecurity Bill 2012 and the *Great Barrier Reef Marine Park Act 1975*, which was amended in 2008 to include more flexible enforcement options.

A more detailed discussion of the range of enforcement options can be found at Appendix 4.

[171] Commonwealth of Australia (2012), *Guide to Framing Commonwealth Offences, Infringement Notices and Enforcement Powers* and the Regulatory Powers (Standard Provisions) Bill 2012.

7.3.5 Other enforcement options

There are a number of other compliance and enforcement options available in other Commonwealth legislation. Two options that the Review considers are worthy of further consideration are external audits and enforceable/remedial directions. Both these options are outlined in detail in Appendix 4.

Strengthen existing provisions

In addition to including new civil remedies in the FMA, it would be appropriate to enhance the existing enforcement mechanisms by

- introducing a tiered approach to criminal offence provisions;
- increasing the penalties for infringement notices; and
- possibly increasing the penalties for some offences and including 'multiple of gain' penalties.

The Review considers that penalties in line with other environmental legislation should be considered for the FMA, noting that an offence with a penalty of at least 12 months imprisonment is an indictable offence and therefore triggers certain forfeiture provisions in the *Proceeds of Crime Act 2002* (ss 48 and 49).

7.3.6 Other enforcement issues

Forfeiture provisions

In its submission, AFMA argues that forfeiture of fish taken illegally by domestic fishing, or proceeds equal to their value, should be automatic under the FMA. AFMA also asked for a power to seize the proceeds of the sale of illegally caught fish.

The Review notes that Commonwealth policy in the Guide to Framing Commonwealth Offences, Infringement Notices and Enforcement Powers is that the forfeiture measures in the Proceeds of Crimes Act are generally sufficient but, if it is necessary to develop additional forfeiture provisions, then the powers and safe guards should be consistent with those in the Proceeds of Crime Act. These include

- a decision to forfeit property should be made by a court; and
- forfeitable property should be seized under warrant.

The Review is not persuaded that there is a sufficient policy case for departing from the general Commonwealth policy position on forfeiture provisions. However, the Review notes that some of its other recommendations, such as a broader range of enforcement options and reconsidering penalties for offences, should assist AFMA in ensuring that there is sufficient deterrence against domestic illegal fishing. Additional indictable offences in the FMA, where appropriate, would also give AFMA the

option of seeking forfeiture orders under s 49 of the Proceeds of Crime Act (no conviction is required to obtain such order).

Prosecution options

Currently, all prosecutions under the FMA are run by the Commonwealth Director of Public Prosecutions (CDPP). AFMA raised concerns in its submissions about the capacity of the CDPP to deal with all the prosecutions under the FMA due to resource constraints and because of the specific expertise which they say is required to run prosecutions under the FMA Act, particularly in relation to domestic fishers. AFMA's proposed solution is for it to engage its own prosecutor for fisheries matters.

Whether it is feasible and consistent with Commonwealth policy, for AFMA to employ its own prosecutors is beyond the scope of this Review. However, the Review notes that there are potentially options available to AFMA to prosecute summary offences without requiring the assistance of the CDPP. Further, if the Review's recommendations for a broader range of enforcement options are adopted, AFMA will have civil enforcement options available which may not require court proceedings or, if they do, the proceedings are civil and so do not involve the CDPP.

7.4 Co-management

Co-management of fisheries appeals to many in the industry as a positive development leading away from centralised (government) management. The advantages of co-management are viewed as including

- lower costs due to reduced red-tape and government recovery of management costs; and
- greater sense of empowerment, leadership and ability to set future directions.

Co-management is defined as "An arrangement in which responsibilities and obligations for sustainable fisheries management are negotiated, shared and delegated between government, fishers, and other interest groups and stakeholders."[172]

The FRDC has undertaken a review of co-management in Australian fisheries[173] that identified essential pre-conditions for co-management to include:

- a willingness by governments to consider alternative management models involving greater shared responsibility;
- fishers' groups that have a significant proportion of members wanting to move to co-management;

[172] FRDC (2008), *Co-management: Managing Australia's fisheries through partnership and delegation*
[173] FRDC (2011), 2011/216 Review of Co-management in Australia's Fisheries – Report of the FRDC Working Group

- an effective fisher organisational structure with good governance and an ability to communicate with all fishers and other stakeholders;
- the existence of a legislative basis to delegate powers; and
- an ability for the fisher's organisation to legally enforce agreements through civil, contractual or company law.
- Co-management as a concept should not be viewed as a change applying between government and commercial fishers; it is also a concept that can apply to the interests of recreational fishers, conservationists, Indigenous fishers and others in the community of fishing interests.

The Review's reading of the literature, and in discussions over the course of the Review, has yielded that there are considerable benefits from co-management. The rather uncertain question is: what does this concept really mean and how can it be put into practice?

The Review envisages co-management could have some or all of the following features:

- solid statutory fishing rights which are tradable, creating an incentive for holders of those rights to fish responsibly to ensure the sustainability of the fishery;
- fisheries policy and management decisions being developed through a transparent consultative process where fisheries decisions draw on the industry's expertise (and that of other participants);
- where the industry itself develops and enforces codes of conduct to give effect to all regulated management requirements, if not to an even higher standard, on a voluntary basis;
- where fisheries' regulatory requirements are risk-based, recognise good performance, and impose lower imposts on fisheries that have a demonstrated track record of good behaviour and reporting against agreed key performance indicators;
- where fisheries are accredited, say, by the Marine Stewardship Council (and that is judged to be sufficiently robust), that should be one factor taken into account in fisheries management decisions.

Now clearly many of these features are apparent in current arrangements. It is questionable to what extent they translate in a substantive way into the management of individual fisheries. To what extent should AFMA loosen the reins where there is good performance, yet hold other fisheries to a tighter rein? This is an area for judgement, and needs clear defensible frameworks – otherwise it would be an area ripe for dispute. Each fishery would need to be examined on its own merits. However, this should be against a clearly articulated and publicly tabled framework.

It would make considerable sense to encourage sensible co-management. In doing so, it would not be the objective of co-management to lower fisheries and environmental standards but to improve them, hopefully at a lower cost to industry.

The Review is attracted to co-management but, if it is to be pursued to its fullest extent, it needs to be done against a clear framework which is: risk-based, differentiating between fisheries and fishers according to their capacities and performance, and subject to performance reporting and audit.

7.5 The Offshore constitutional settlements and resource sharing

7.5.1 The Offshore constitutional settlements

This is an area in which all parties who contributed to the Review agreed left a lot to be desired. However, perspectives and suggested solutions – especially between the Commonwealth and the states – differed appreciably.

Essentially, there is agreement that having Commonwealth and state fisheries, fishing the same stocks, with differing management and leasing requirements is absurd. For a combined wild fish fishery worth $2.2 billion it is duplicative; imposes extra and unwarranted red-tape and costs on industry; can be "gamed" by dual licensed fishers; can contribute to compliance and enforcement issues where boundaries are blurred; and pays insufficient priority to the need to manage fisheries and the environment on an integrated basis.

As indicated, the Review has heard many examples where the states' decisions push against Commonwealth fishery management decisions and vice versa. There are no winners in this area, only losers.

To give an example, total allowable catches (TACs) and ITQs are an essential part of a statutory fishing rights in most Commonwealth fisheries. AFMA sets the TAC having regard to estimates of the take by state commercial fishers and recreational anglers. The TAC they set is often essentially a residual. If the state commercial or recreational take increases then, other things being equal, the Commonwealth TAC should decrease. In this sense, therefore, the value of the Commonwealth statutory fishing right is far from secure.

Over the years, there has been considerable discussion of how these issues might be better resolved but they have not come to much.

In principle, the joint fisheries arrangements whereby the dominant jurisdiction is essentially left to manage the fishery (subject to oversight) is sound but there are many fisheries where it has not been possible to agree on joint arrangements.

One step, way short of joint management, would be to pool scarce fishery research resources in some way and at least agree to undertake shared stock assessments. In this regard the Review notes a recent pleasing move in this direction with the release of the

first national assessment of key wild-caught fish stocks[174]. It shows what can be achieved when Australian governments agree on a national framework, in this case for stock assessment of 49 wild-caught species that contribute around 70 per cent of the annual catch and 80 per cent of the value of Australian wild-capture fisheries.

> "The Status of key Australian fish stocks reports...aim to be... a scientifically robust, simple tool to inform fishers, seafood consumers, managers, policy makers and the broader community, and allow ready comparisons between the status of the key wild-caught fish stocks around Australia."[175]

Another step would be to ensure, to the extent practicable, that data reporting (for example on catch, by-catch, and protected species interactions) is collected on the same basis and shared. Such streamlining could be the start of a more general move to national consistency in fisheries management, ultimately leading to uniform licensing and fisheries management plans spanning jurisdiction boundaries.

It is not the place of this Review to solve the offshore constitutional settlement issues. That is best addressed substantively by fisheries ministers and pursued in a COAG context. The Review notes, however, that in facilitating such an examination it would be worthwhile commissioning a Productivity Commission review or research study to examine the issues and suggest a way forward. That route was used to very good effect in reviewing the Commonwealth/State intersections in the regulation of the offshore gas and petroleum sector.

7.5.2 Resource sharing

Resource sharing was frequently raised with the Review as a significant concern. As was remarked in the previous section, arrangements between the Commonwealth and the States/NT to give effect to the Offshore Constitutional Settlements were established (and many are failing) to resolve 'shares' of responsibility in fisheries management. Similarly, with regard to international boundaries, a range of bilateral and multilateral agreements have been struck (e.g. the Regional Fisheries Management Organisations) to which Australia is a party, with the purpose of clarifying responsibilities and resource access rights.

Closer to home, recreational fishers and Indigenous interests considered that the fisheries management framework should have explicit regard to and recognition of their interests.

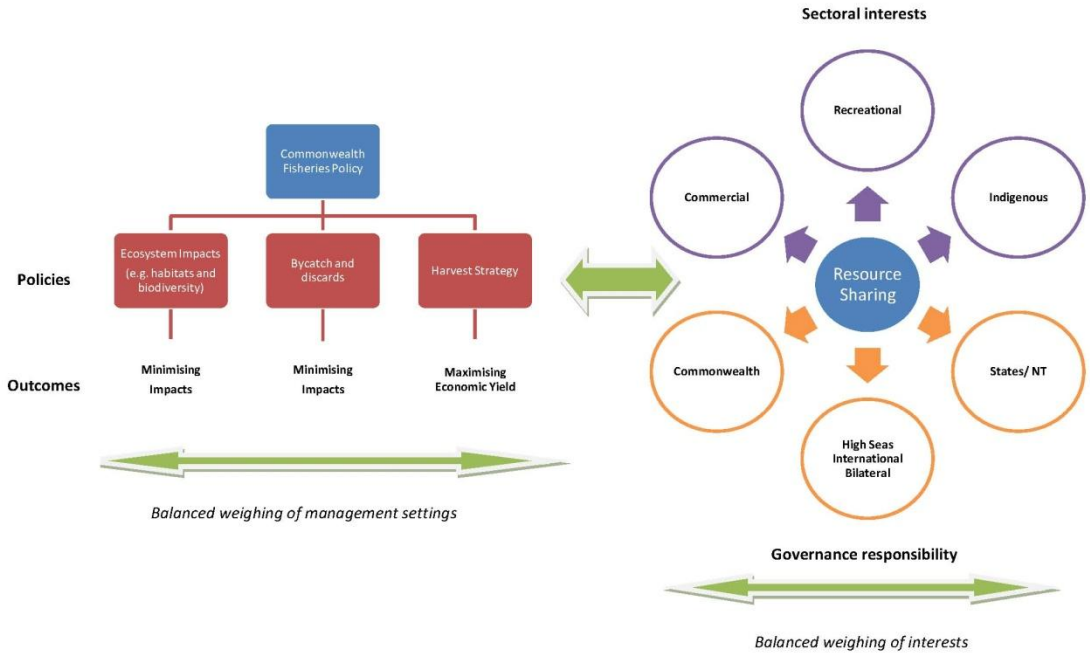
Recreational fishers mentioned the need for clear recognition of recreational fishing in resource sharing, having regard to the sector's economic and social importance; alignment of Commonwealth and state fisheries management approaches; the application of ecosystem frameworks to fisheries management, including by-catch and local area depletion.

[174] FRDC (2012), *Status of Key Australian Fish Stocks Reports* 2012
[175] Ibid.

Indigenous interests similarly sought recognition in the Commonwealth fisheries Acts, as well as appropriate opportunities for consultation, culturally sensitive fisheries management and arrangements to mitigate the impacts of other sectors' fishing on Indigenous lands and seascapes.

Figure 4 shows these relationships graphically in relation to the Framework the Review is proposing for a Commonwealth Fisheries Policy. Although the figure sets out the relationships, striking a balance of Commonwealth fisheries management settings with sector interests will undoubtedly be an enduring dilemma where difficult compromises and trade-offs will inevitably need to be struck.

Figure 4. Concept for integrating sectoral interests into a Commonwealth fisheries policy framework



7.5.3 Recreational fishing[176]

Unlike the States and the Northern Territory, the Commonwealth's interactions with recreational fishing have been relatively low key. The States oversight and regulate recreational fishing. They too determine, as appropriate, the relative take of key fisheries between the commercial and recreational sector. Increasingly, State fisheries management decisions appear to lean in favour of recreational fishers in terms of allocating access.

There are many issues that need to be weighed. On one hand, the desire of the public to have continued access to sustainably harvested Australian seafood from the commercial sector. On the other hand, recreational fishing is an embedded part of "Australian culture": its economic spin-offs are large and increasing (particularly as baby boomers retire and the affordability of more sophisticated boats and equipment has come onto the market). Indeed, the capacity of recreational fishers, like the commercial fishers, to target fish has improved remarkably over the years.

Increasingly, issues of resource trade-offs between commercial and recreational fishers will arise in Commonwealth fisheries. Where such issues arise they will need to be addressed sensitively and in a transparent way.

The FMA overwhelmingly focuses on managing commercial fisheries. However, s 17(6)(h) of that Act indicates AFMA may, in developing a plan of management for a fishery "prohibit or regulate recreational fishing in the fishery". Conceivably, this brief mention would give AFMA considerable powers, should it choose to exercise them.

Recreational fishing would seem to require more attention than the brief reference in s 17(6)(h) of the FMA. There needs to be policy development and legislative clarity. How should resource sharing issues to be explicitly addressed; if bait fish are targeted by commercial fishers will that impact on the game fishing recreational potential; how is the Commonwealth going to step up to the resource sharing mark, particularly when fish stocks are subject to international agreements and when Commonwealth fisheries interact with state fisheries that favour recreational take, how are the intersecting issues best resolved?

Some recreational issues might also be best left to broad policy direction rather than prescribed in legislation. For example, it is appropriate to require AFMA to examine, where applicable, resource sharing arrangements (or other impacts) and to tease out the issues, drawing on public consultations, science, economic and other analysis and to come to a landing. However, it is equally valid should a minister decide that he/she

[176] In regard to recreational fishing, the Reviewer wishes to make it known that he is a keen recreational fisher and has been for more than 50 years. His main interests are fly fishing for trout and occasional estuary fishing. He has NSW, Victorian and New Zealand recreational fishing licences and subscribes to several fishing magazines, but is not a member of any recreational fishing organisations or clubs.

would like to land in favour of recreational interests (or vice versa). Such matters can be informed by analysis and consultative processes. However, the end decision may be more value-laden than a matter on which a fisheries management agency necessarily should have the final say.

The Review sees a need to explicitly refer to recreational fishing interests in the objectives of the FAA and FMA. These interests should be taken into account in AFMA's deliberations, particularly in the context of developing fisheries management plans and in variations to those plans.

7.5.4 Indigenous involvement in fisheries

Submissions to the Review and stakeholder consultations identified concerns about Indigenous engagement in fisheries including: recognition in the Commonwealth fisheries Acts, rights to traditional 'sea country', consultation on fisheries management plans and marine protected areas, and the impacts of commercial and recreational fishing on Indigenous cultural fishing practices. Another matter was continued and expanded research and development of Indigenous fisheries.

The Review sees a need to include reference to Indigenous interests in the objectives of the FAA and FMA. AFMA should, as appropriate, facilitate engagement and consultation where there are overlapping interests, such as access to resources, fishing impacts and conservation, when developing fisheries management plans and when considering variations to those plans.

7.6 International relations and management of stocks

Having ratified UNCLOS and several other fisheries and marine environment-related treaties, Australia cooperates internationally, including by regularly reporting Australia's progress in implementing the FAO Code of Conduct for Responsible Fisheries. At the global level Australia contributes to the United Nations General Assembly biennial formulation and agreement of the *Oceans and Law of the Seas Resolution*, and *Sustainable Fisheries Resolution*, and to the FAO Committee on Fisheries (COFI).

At the large regional level, Australia works with many other countries through RFMOs and the Pacific Islands Forum Fisheries Agency (FFA). Australia also participates in the APEC Oceans and Fisheries Working Group, the OECD Committee for Fisheries, and the Network of Aquaculture Centres in Asia.

Other multilateral cooperation is through the Regional Plan of Action to Promote Responsible Fishing Practices and Combat Illegal, Unreported and Unregulated Fishing in the South East Asian Region; and the Indian Ocean Rim Association for Regional Cooperation.

Australia cooperates bilaterally with each of our maritime neighbours, particularly on border controls and illegal fishing, with Indonesia, East Timor, Papua New Guinea and

France (New Caledonia and Kerguelen Island), and more broadly with New Zealand on a range of fisheries management issues, including jointly managed fisheries.

Australia engages in these forums, not only because of our treaty obligations and international reputation, but to ensure Australia's fisheries interests are progressed and/or protected.

Decisions taken in these forums can impact directly on Australia's domestic fisheries management. Well-established, high quality and successful management arrangements in Australia (such as the *Commonwealth Harvest Strategy Policy* and *Guidelines*) could otherwise be undermined, weakened or negated by decisions taken in these forums, and if adopted with or without our representation, Australia generally becomes bound to implement them.

Concern that the government needs to exert more influence internationally was expressed by WWF et al. in its submission:

> "Government policy has effectively abrogated responsibilities for management of Australia's tuna fisheries to largely ineffective RFMOs, by exempting them for the requirements of the HSP" and "We believe that the application of different standards for 'domestic' and 'international' fisheries is unacceptable."

Negotiating acceptable outcomes in international and regional fisheries forums can be difficult and it is expensive in terms of personnel commitment and travel costs. **Nonetheless, the Review is of the opinion that Australia has no choice: it should actively participate in international forums.**

7.6.1 Foreign fishing in the Australian Fishing Zone

At present access for foreign fishing is provided through three arrangements:

- The "US Treaty" – formally the *Multilateral Treaty on Fisheries Between Certain Governments of the Pacific Island States and the Government of the United States of America*
- "MoU Box Agreement" – formally the *Australian-Indonesian Memorandum of Understanding regarding the Operation of Indonesian Traditional Fishermen in Areas of the Australian Fishing Zone and Continental Shelf* (1974), an agreement allowing Indonesian traditional fishing in an area off the north-western coast of Western Australia
- Torres Strait Fisheries Act 1984 – providing access to Australian waters by Papua New Guinea nationals to conduct traditional fishing.

Up until late 1997 the Australian Government licensed Japanese longliners to fish for southern bluefin tuna in the AFZ but the arrangement ended because neither side could agree on a global Total Allowable Catch for southern bluefin tuna.

The current policy is that foreign fishing licences are not be issued and the Review does not see any reason to change that policy.

7.6.2 Illegal foreign fishing

Illegal foreign fishing came to prominence in the early to mid-2000s when large foreign vessels were fishing in Australia's Southern Ocean territories – Heard and McDonald Islands, and Macquarie Island. Also at that time many hundreds of smaller foreign vessels were fishing in Australia's northern waters.

Australia's operational response was two-fold: direct representations to the Flag States of the vessels involved; and enforcement involving vessel apprehensions and prosecutions. At the same time Australia was advocating at the FAO Committee on Fisheries for international action against what is now known world-wide as "IUU fishing" – illegal, unreported and unregulated fishing.

Australia's actions against illegal foreign fishing have been very effective so far as they concern incursions into Australian waters. However, fish and fisheries straddle international boundaries, so IUU fishing in adjacent waters also affects Australian managed fisheries. This impact is borne out in the latest (2011) Fisheries Status Reports[177] that indicates one of the few fisheries that is still overfished and subject to overfishing is Antarctic Waters Toothfish (a jointly managed international fishery). This stock has not been fished by Australian vessels since 2008 when a research survey was conducted but its status still reflects the historic and continuing levels of foreign IUU fishing.

Action against IUU fishing, and illegal foreign fishing is in the form of:

1. Operational deterrence and enforcement by air and sea surveillance and on-the-water apprehensions, coordinated by the Australian Customs and Border Protection Service (ACBPS). The operational response involves Customs, Navy and AFMA. Australia also takes part in coordinated surveillance and enforcement operations with Indonesia, Papua New Guinea and East Timor. AFMA participates in surveillance; foreign fishing vessel destruction (with DAFF Biosecurity); processing of suspected illegal foreign fishers (led by the Department of Immigration and Citizenship), and prosecutions (with the Commonwealth Director of Public Prosecutions).
2. Regional outreach – DAFF and AFMA work with Indonesia, Papua New Guinea, East Timor in particular, and with other South East Asian countries, to raise awareness in the region about illegal fishing and its impacts (both inter-governmentally and with foreign fishers directly). DAFF and AFMA also work through bilateral and multilateral policy forums and programs to build fisheries management and governance capacity in the region.

The Review considers that the current arrangements are working well.

[177] ABARES (2012), *Fisheries Status Reports 2011*

Operational deterrence of illegal foreign fishing is undoubtedly expensive (costing several $millions per year), but it is done in conjunction with and is complementary to other maritime work on border protection. Making changes to operational fisheries enforcement could achieve some savings but could risk resurgent illegal foreign fishing in Australian waters.

The Review understands that Indonesia, East Timor and PNG and other SE Asian countries have high regard and greatly appreciate the regional outreach work of DAFF and AFMA. If DAFF's policy and program leadership, or AFMA's practical training in fisheries management, were to vacate the space it could negatively impact our relationships in the region, and especially with Indonesia, in a sector (fisheries) which is economically significant and strategically important, especially to our neighbours.

The Review considers it is important that DAFF and AFMA continue regional outreach work on fisheries.

7.7 Aquaculture

Legal and administrative arrangements for aquaculture in Commonwealth waters are matters that have not been resolved despite years of consideration in ministerial council and related forums. The main options canvassed over the years have been to

- amend the FMA;
- establish a new Commonwealth Act; or
- transfer responsibility to the States and the Northern Territory.

There is not much expectation of near-term aquaculture development in Commonwealth waters but the Review heard from some stakeholders, especially those with aquaculture interests in State waters, that in the mid to longer term, especially as the impacts of climate change take effect, aquaculture could extend into Commonwealth waters. The Review was told that as it stands if a lease were to be taken up it would have to be approved under Commonwealth fisheries legislation to fit, in effect, a "wild catch" model.

The Review also discussed the issue with a number of State government agencies and the view shared was that **it would be sensible if responsibility for managing aquaculture in Commonwealth waters were to be transferred to the States and the Northern Territory, and administered under their existing respective legislation for aquaculture.** The cost of managing aquaculture in Commonwealth waters was not expected to be a problem because costs would be recovered from commercial developments.

The States and the Northern Territory already manage aquaculture in their respective jurisdictions under existing legislation. To the extent that the Commonwealth is involved it is through the EPBC Act. There is no clear reason why responsibility for its management should not be transferred although still subject to the EPBC Act

requirements, as appropriate. Indeed, if the Commonwealth were to enter this field it would give rise to the risks inherent in current OCS issues for wild-catch fisheries: the emergence over time of incompatible regulatory regimes that are likely to prove to be more costly to the industry and environment.

The Review considers Commonwealth fisheries legislation should be amended, as necessary, to facilitate State and Territory regulation of aquaculture in Commonwealth waters. Although it is not a pressing issue it could become so in the future and legislative and regulatory clarity is needed now to enable future investment decisions. The states have the experience and the expertise; it would be a mistake to carve out a regulatory niche for the Commonwealth in this area as that would work to compound the split jurisdiction problems that arise in other commercial fisheries. Amendments to the Commonwealth fisheries legislation should be of a level to enable state management (with appropriate reporting if judged necessary by the Commonwealth).

7.8 Statutory Fishing Rights Allocation Review Panel

The Statutory Fishing Rights Allocation Review Panel (SFRARP) is established under section 124 of the FMA. SFRARP reviews decisions about provisional allocations of Statutory Fishing Rights (SFRs) made by AFMA or a Joint Authority for a managed fishery. The Minister appoints members of the Panel.

The current merits review process for SFR allocation for Commonwealth fisheries includes consultative arrangements, consideration of submissions, determination by AFMA and acceptance by the Minister. A fisheries management plan, which provides for and outlines the allocation process, is a disallowable instrument that must pass both houses of parliament.

From its beginnings 20 years ago SFRARP has handled 12 applications affecting five Commonwealth fisheries. In that time it has delivered five decisions, two of which went on appeal to the Federal Court. No cases came before the Panel in 2010-11 or in 2011-12. The cost to maintain the Panel in existence is some $125 000 per year. The government meets the full cost of any appeals.

A 2008 internal review of Commonwealth fisheries merits review processes identified inefficiencies with SFRARP, including a low case load, high administrative burden and significant ongoing costs. **The Review proposes abolishing SFRARP and suggested options such as a rights review procedure by AFMA or by the Administrative Appeals Tribunal (AAT) or both.** Under section 165 of the FMA the AAT already reviews certain decisions, if necessary, following an internal review by AFMA.

Other than the Northern Prawn Fishery Management Plan, which is due to be released in 2012–13, AFMA does not expect to allocate any new statutory fishing rights in the next two years. The Review understands that allocations in the Northern Prawn Fishery will be on a one-to-one basis so AFMA will not be exercising any discretion, so there is little or no prospect of an allocation review.

A more cost-effective arrangement could be to abolish SFRARP and have all allocation issues referred to AFMA in the first instance, and then to the AAT if necessary. The AAT would be able to undertake the work of SFRARP under its existing functions. If SFRARP were to be abolished, final allocations would continue to be appealable to the AAT and the Federal Court.

"We note that the SFRARP has now served its purpose with the rights in almost all Commonwealth fisheries allocated. It is expensive and should be abolished."[178]

[178] Submission from Commonwealth Fisheries Association

Appendix 1

Review of *Fisheries Management Act 1991* and *Fisheries Administration Act 1991*- Terms of Reference

The relevant legislation for fisheries management in Australia today is the Commonwealth *Fisheries Management Act 1991* and *Fisheries Administration Act 1991*. The precautionary principle is an objective of the *Fisheries Management Act 1991*.

However, the ability of the Minister for Fisheries to enact the precautionary principle is limited due to gaps in scientific knowledge, limits on the scope of the precautionary principle considerations, limits on how quotas are determined, limits on the considerations that apply in quota management, cross-agency considerations such as the relationship with the Department of Sustainability, Environment, Water, Population and Communities, and interactions with other legislation such as the *Environment Protection and Biodiversity Conservation Amendment Act 1999*.

It is therefore considered that the advice from the lead agency, the Australian Fisheries Management Authority to the Minister for Fisheries is limited in delivering on the expectations sought from the precautionary principle objective of the *Fisheries Management Act 1991*. As a consequence, the powers of the Minister to make decisions based on the precautionary principle are therefore equally limited in their scope, and the community is exposed to a less than sustainable model of fisheries management.

In light of new challenges within Australian fisheries management, the full objectives of the precautionary principle are now sought.

The review of the *Fisheries Management Act 1991* and *Fisheries Administration Act 1991* will;

- Recommend changes to the Acts that clearly establish the *Fisheries Management Act 1991* as the lead document in fisheries management, and that all aspects of environmental, economic, and social consideration, and the relevant planning processes required be incorporated into the Acts, in a co-ordinated way.
- Recommend any necessary changes to the Acts that affirm the powers of a Minister to take advice, and make decisions, with the full scope of the precautionary principle available within the *Fisheries Management Act 1991*, and that same definition of the precautionary principle apply in both the *Fisheries Management Act 1991* and the *Environment Protection and Biodiversity Conservation Amendment 1999*.
- Consider the need for modernising Commonwealth fisheries resource management legislation and approaches including penalty provisions, licence cancellations, the use of modern technology and co-management. Consideration of cost recovery arrangements will include consideration of the degree to which cost recovery might impact on the management of fisheries including investment in research and stock assessment.

This review starts immediately and will be completed within the next three months. Once completed, and once passage of the *Fisheries Management (Amendment) Act 2012* occurs, changes to the Environment Protection and Biodiversity Conservation Amendment that provide environmental discretionary powers to the Minister will be revoked, with any new *Environment Protection and Biodiversity Conservation Amendment 1999* to only be made to make clear the relationship between the *Fisheries Management Act 1991* and *the Environment Protection and Conservation Amendment Act 1999* itself.

Appendix 2

Case Study – Northern Prawn Fishery

Geography

The Northern Prawn Fishery (NPF) is one of Australia's largest fisheries, covering an area of more than eight hundred thousand square kilometres between Cape York in Queensland and Cape Londonderry in Western Australia.

Under an offshore constitutional settlement agreement between the Commonwealth, Western Australia, Northern Territory and Queensland governments, originally signed in 1988, prawn trawling in the NPF to the low water mark is the responsibility of the Commonwealth.

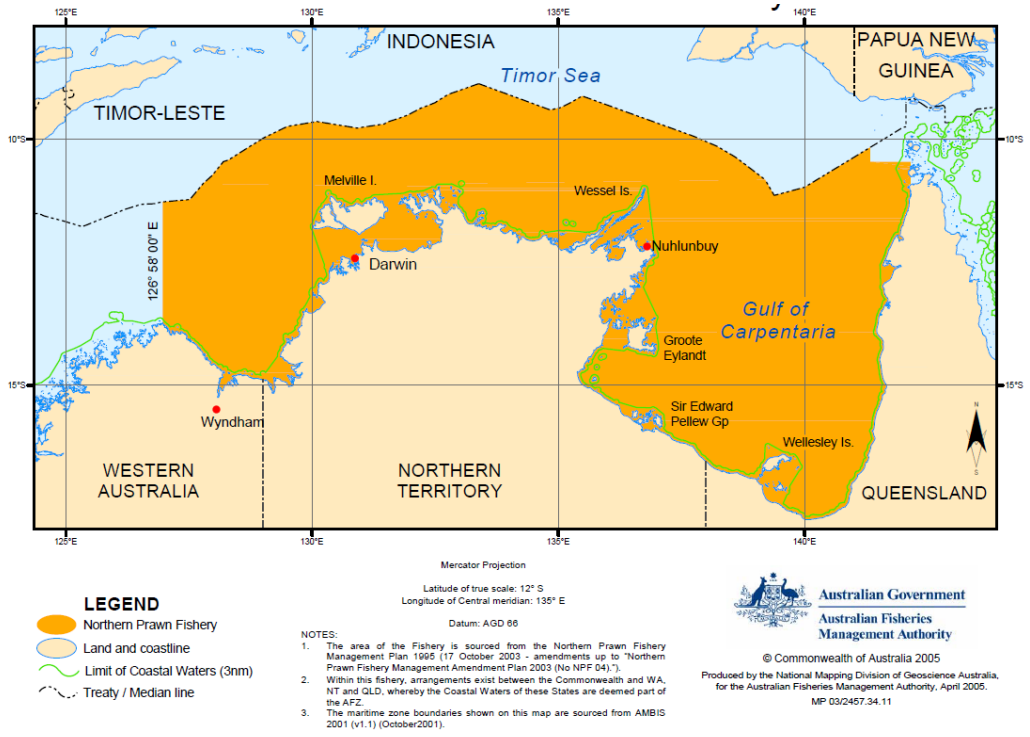


Figure 1: Map of Northern Prawn Fishery (AFMA website)

Biology[179]

Nine species of prawns are targeted within the fishery using otter trawls (cone-shaped nets, the mouth of which are held open by 'otter boards'[180])

- white banana (*Fenneropenaeus merguiensis*) and red-legged banana (*F. indicus*);

[179] Woodhams, Stobutzki, Vieira, Curtotti, & Begg (eds) (2011), *Fishery status reports 2010: status of fish stocks and fisheries managed by the Australian Government*, Australian Bureau of Agricultural and Resource Economics and Sciences, pp 69-89

[180] FAO website> Fisheries technology (www.fao.org/fishery/fishtech/1021/en)

- brown tiger (*Penaeus esculentus*), black tiger (*P. monodon*) and grooved tiger (*P. semisulcatus*);
- blue endeavour (*Metapenaeus endeavouri*) and red endeavour (*M. ensis*); and
- western king (*Melicertus latisulcatus*) and red spot king (*M. longistylus*).

Of these, banana and tiger prawn groups are the two key species groups targeted. Scampi, squid, scallops and bugs are also taken.

Banana prawns group in aggregations and, as a result, large catches can be taken in a relatively short time. Their annual stock recruitment and abundance is highly dependent on rainfall, with high rainfall periods being associated with improved recruitment and abundance. Hence both recruitment and abundance can be highly variable from year to year, affecting catch rates.

Catch rates of tiger prawns are relatively less affected by environmental factors, aggregating behaviour is less common and stock recruitment and abundance are less dependent on rainfall than is the case for banana prawns. Relatively longer trawl times are typically required for tiger prawn catches.

Generally, prawn species reach a saleable size at six months of age, and can live for up to two years. Growth rates vary considerably between species and sexes, with females generally growing faster and to a larger size than males. Most species are sexually mature at six months, but fecundity increases with age: a twelve-month-old female can produce hundreds of thousands of eggs at a single spawning and may spawn more than once in a season. Less than 1 per cent of offspring survive a 2-4 week larval phase to reach suitable coastal nursery habitats. After one to three months in nursery habitats, the young prawns move offshore onto the fishing grounds.

Economics

The NPF is not only the most valuable Commonwealth-managed fishery; it is also one of the most valuable fisheries in Australia, with GVP peaking at $218.7 million in 2000-01.[181] Annual GVP has generally varied between $65 million and $168 million depending on fluctuating annual catch, season length, market conditions and foreign exchange rates.

At an individual level, in 2009-10 average per boat cash receipts for the fishery were steady at about $1.5 million, while cash costs fell by 5.5 per cent from the previous year to $1.2 million. This resulted in a 41.6 per cent increase in average boat cash income to $292 000.[182]

[181] ABARES, 2011 *Fisheries survey report 2011: Results for selected fisheries 2008-09 to 2010-11*
[182] ABARES, 2011 *Fisheries survey report 2011: Results for selected fisheries 2008-09 to 2010-11*

The most recent prawn catch figure available for the fishery is 7,711 tonnes (2010), which compares favourably with the 7 483 tonnes taken the previous year. The adjacent table provides a breakdown of this total by groups.

Prawns	2009 take (t)	2010 take (t)
Banana	5 881	5 642
Tiger	1 250	1 628
Endeavour	346	429
King	7	12

In terms of product unit value, tiger prawns usually command substantially higher prices than banana prawns (and, as a general rule, larger sized prawns command higher prices within species). In 2009-10, for example, the average price fishers received for tiger prawns was $20.40 per kilogram compared to $10.27 per kilogram for banana prawns. This is offset by greater price fluctuations for tiger prawns, most of which are exported, predominantly to Japan (whereas up to 90 per cent of white banana prawns caught are sold on the domestic market). Accordingly, prices are influenced by external factors including foreign market demand, competition from other countries and exchange rates.[183] Catches sold on the domestic market compete with imports of lower value prawns.

History

In over 40 years of commercial fishing, the NPF has seen significant variation in fishing effort, profitability and investment of public and industry money in removing the former to improve the latter. A scan of the fishery's history gives some sense of the considerable changes in management approach made in response to improving technologies, increasing concern for stock sustainability and the drive for improved profitability.

The CSIRO identified commercial stocks of prawns through exploratory surveys in the Gulf of Carpentaria in the 1960s. A lack of suitable ports, refuelling and repair facilities, as well as geographic remoteness, limited the development of a commercial fishery until the 1970s. Once infrastructure problems were overcome the fishery grew rapidly and by 1977, when the first fisheries management plan (FMP) was introduced, entry was limited to 302 vessels.

The plan set out interim three year management arrangements, including a moratorium on the granting of further fishing entitlements. Liberal entry criteria and a government ship building subsidy scheme, however, resulted in 292 vessels with entitlements to fish in the NPF by the end of the 1970s. This investment in new, more efficient purpose-built freezer trawlers caused two problems: overcapitalisation and large increases in effective effort. Fishing effort peaked in 1981-82 at a level that arguably exceeded the long term sustainable yield of the resource. The following year, the tiger prawn catch peaked at 5 751 tonnes.

[183] ABARES, 2011 *Fisheries survey report 2011: Results for selected fisheries 2008-09 to 2010-11*

In 1984, in response to concerns about fishing effort and overcapitalisation, a new management scheme was introduced and vessels were 'unitised'. Each trawler with a fishing entitlement was issued with

- one B-unit, which served as a right to fish; and
- A-units calculated on actual hull volume and engine power,

with a total of 302 B-units and 133,269 A-units granted.[184] Units were transferable and became a currency proxy, allowing fishers to use any size boat, provided the requisite number of A-units could be obtained from within the existing pool.

In the same year, the Northern Prawn Fishery Management Advisory Committee[185] (NORMAC) was established.

As fishing effort increased, total yearly landings of tiger prawns declined, and in 1985 concerns were expressed about the resource viability. In 1986, a voluntary buy-back scheme was initiated with the aim of reducing, by 1990, the number of A-units to 70 000. The buy-back was industry-funded by a voluntary adjustment scheme loan, supported by a government guarantee and was subsequently extended to include B-units.

In an attempt to reduce effort on tiger prawns before spawning, in a response to a decline in recruitment, mid-season closures were introduced in 1987. Daylight trawling during the tiger season was banned and vessels were restricted to towing two nets.

By the end of 1989, with only 20 810 A-units removed from the fishery, the reduction target was clearly not going to be reached. Prawn stocks continued to decline and economic conditions for fishers remained poor.

In 1990, with 216 vessels still active in the fishery, the buy-back scheme was refinanced and amended to further reduce A-units to a target of 53 844 by early 1993. The government provided a $5 million grant over three years and guaranteed up to $40.9 million to pay for units removed under the scheme. The borrowings were to be repaid over a period of ten years by levies on operators remaining in the fishery. At the end of 1992, the target had fallen short and the FMP was amended to provide for compulsory surrender of A-units. Just under a third of the remaining A-units were removed, resulting in a reduction in the number of active fishing vessels from 171 in 1992 to 124 the following year.

In 1995 a new management plan for the fishery was determined,[186] along with statutory fishing rights (SFRs). Class A and B SFRs were introduced, based on existing effort, to replace existing A- and B-units. A number of input restrictions (for example, restrictions on net sizes), introduced as interim measures in 1987 to reduce fishing effort, were lifted – some five years after they were intended to conclude.

Despite the smaller fleet size, because of industry's adoption of improved technologies, concern remained that the effective effort in the fishery was still too high. In 1998, the

[184] Small trawlers (those which had not qualified for the government ship building subsidy) were issued a minimum of 375 Class A units.
[185] See Chapter 5 for further discussion of management advisory committees.
[186] *Northern Prawn Fisheries Management Plan 1995*

Northern Prawn Fishery Resource Assessment Group (NPRAG) advised that the effective effort directed at tiger prawns was well above maximum sustainable yield (MSY) and should be reduced by 25-30 per cent. In the same year, a bycatch action plan was developed.

In 2000, tiger prawn recruitment was the lowest on record and an international expert review confirmed the species as over-fished and that effort was too high to promote recovery. NORMAC established a target, by 2006, of S MSY (spawner biomass to produce MSY), with 70 per cent certainty. In the same year, the fishery moved to gear-based management, with restrictions placed on the length of trawl net headrope allowed.

In 2002, AFMA met its 40 per cent effort reduction target by reducing by a quarter the gear SFR and shortening the fishing season to 134 days in total over three years.

In 2004, the overall management objective of the fishery was shifted to maximum economic yield (MEY); the previous S MSY target was changed to a 'limit' reference point. Bioeconomic modelling by the then Australian Bureau of Agricultural and Resource Economics suggested a 30 per cent reduction in effort would be needed to achieve the target effort level required for MEY. The following year the gear SFR was reduced by a quarter, along with a lengthening of the tiger prawn season and the addition of further measures to minimise tiger prawn catch in the banana prawn season. As a result of internal trading of gear SFRs, a further 11 boats exited the fishery.

In late 2005, as well as issuing a ministerial direction to AFMA (see Chapter 6), the then Minister for Fisheries, Forestry and Conservation announced the *Securing Our Fishing Future* package, the buyback component of which was implemented in 2006. The primary purpose of this element with regard to the NPF – unlike other fisheries targeted – was to remove capacity to improve the economic efficiency of remaining boats, rather than to improve biological sustainability. In the period immediately prior to the buyback, the fishery was, on average, achieving negative profits.[187] Participation of NPF fishers in the buyback was conditional on their agreement to move to output controls, specifically an individual transferable quota (ITQ) system.[188]

The government invested $68 million in the NPF to remove 43 boat SFRs and 18,365 gear SFRs (a 34 and 45 per cent reduction respectively) by the beginning of 2007. With hindsight, ABARES has noted the package represented an acceleration of existing autonomous adjustment.[189]

In 2007, AFMA implemented a harvest strategy for the fishery, specifying a target of long-term maximum economic yield (MEY) for tiger prawns and endeavour prawn by-product. No output target was specified for banana prawns.

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[187] Vieira, Perks, Mazur, Curtotti and Li, 2010, *Impact of the structural adjustment package on the profitability of Commonwealth fisheries*, ABARE research report 10.01

[188] Australian National Audit Office (ANAO) 2009, *Administration of the Buyback component of the Securing our Fishing Future Structural Adjustment Package*, ANAO Audit Report No. 38 2008-09, Canberra

[189] Vieira, *et al.* (2010)

In summary, since 1985, an estimated $220 million has been spent on adjusting the NPF from the original 302 government-issued licenses in 1984, to the 52 remaining today. Of this, approximately $71 million was provided by government ($3 million for the original buyback and $68 million for the structural adjustment package) with the residual $149 million paid by industry through a combination of levies and unit trading within industry to facilitate fleet rationalisation.

Current arrangements

NPF management arrangements are implemented under the Northern Prawn Fishery Management Plan 1995 and include a combination of input controls. Inputs controls are most often used for fisheries where there is significant seasonal variability in stock size and the possibility that fishers will 'high grade' their catch at sea by dumping smaller or lesser value fish to maximise return on their quota.

The main management tools for the NPF are restrictions on the length of trawl net headrope allowed. Gear units, which are allocated to each operator according to the number of Class A gear SFRs they hold, specify the headrope length an operator can use. Class B SFRs also determine how many vessels can operate in the fishery because a vessel must be nominated to a Class B SFR in order to operate. Operators are free to buy, sell or lease both Class A and B SFRs.

The fishery is also managed with a variety of other input controls including other gear and vessel restrictions, permanent area closures and seasonal closures. Temporal closures aim to protect pre-spawning prawns, coincide with recruitment phases and ensure prawns are at a commercial size for harvesting. Sensitive areas such as seagrass beds are permanently closed to fishing.

Current closure arrangements split operations in the fishery into two distinct fishing seasons; a banana prawn and a tiger prawn season. Each season's length can vary from year to year depending on catch rates and in accordance with AFMA's adaptive management approach. In 2006-07, the tiger prawn season remained open for 15 weeks while the banana prawn season ran for 8 weeks. In both 2007-08 and 2008-09, longer seasons – 17 and 10 weeks respectively – were permitted.

In May 2011, the NPRAG recommended a fixed yearly small prawn closure from 1 December to 1 March. A daylight trawl closure is in place during the tiger prawn season to reduce the capture of spawning tiger prawns

Reflecting the multi-species nature of the NPF, the fishery's harvest strategy – with MEY adopted as the target – is divided into specific strategies for the tiger prawn fishery, (including endeavour prawns), the banana prawn fishery, and for other target species and by-product species.

Future arrangements

As part of the 2005 ministerial direction, AFMA was directed to

> "... implement the long standing government policy of managing Commonwealth fisheries using output controls in the form of individual transferable quotas by 2010 unless there is a strong case that can be made, on a fishery by fishery basis, that this would not be cost effective or would be otherwise detrimental..."

In the context of the direction, NPF fishers participated in the Secure Our Fishing Future buyback only on condition of their agreement to move to output controls. The transition, however, has been slow and realisation of an output control arrangement in the NPF appears unlikely until mid 2013 at the earliest: it would seem that the NPRAG holds "grave reservations about the scientific validity and appropriateness of managing one or more components of the fishery under TACs [total allowable catch] and believe this move could be detrimental to the fishery".

In August 2009, following consideration of

- submissions from industry;
- an industry-funded full cost benefit analysis of four different management options; and
- recommendations from NORMAC.

AFMA agreed to implement output controls for banana (with an east-west zone) and tiger prawn catches through an ITQ system, subject to amendment of the management plan in accordance with the provisions of the Fisheries Management Act 1991.

In October 2009, AFMA consulted with NPF SFR holders on the adoption of a one-for-one ITQ allocation method. Lacking unanimous agreement from all NPF SFR holders, the commission appointed an independent allocation advisory panel to provide advice on a recommended allocation model for the fishery. The panel's initial summary indicated a preference for a one-for-one allocation.

Scientific and economic advice on the move to a quota-based fishery remains mixed. While AFMA has been working with NORMAC in seeking to design a new management regime that is both practical and cost effective, the majority of industry members continue to object to the shift in approach and "numerous RAG members, (including both the independent scientific members) simply think that TACs are the wrong management tool for the short-lived penaeid prawn fisheries of the NPF."[190] AFMA remains of the view that a system of ITQs is the best management option for the NPF, and is consistent with the objectives of the Fisheries Management Act 1991.

Procedurally, introducing ITQ management to the fishery requires changes to the FMP; a draft *Northern Prawn Fishery Management Plan 2012*, proposing the introduction of ITQs for both tiger and banana prawns, was released for public comment from 30 November 2011 to 30 January 2012. The NPRAG highlighted risks of introducing the new arrangements in the absence of a robust TAC-setting methodology for banana prawns.

At their meeting in March 2012, industry members of the NPRAG noted that, from their perspective, "the fishery is in the best place it has been for a long time and that this can be attributed to the current management arrangements, particularly the harvest strategy."[191]

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[190] Northern Prawn Fishery Resource Assessment Group, Chair's summary, NPRAG meeting 15&16 March 2012

[191] Northern Prawn Fishery Resource Assessment Group, Chair's summary, NPRAG meeting 15&16 March 2012

On 5 November 2012 AFMA issued a notice of its intention to revoke the *Northern Prawn Fishery Management Plan 1995* and determine a new plan, inviting written submissions from those with an interest in the fishery.

Environmental considerations

In effecting its legislative obligation for utilisation of fisheries resources consistent with the principles of ecologically sustainable development, AFMA has developed a number of management arrangements and guidelines.

These include

- the development and implementation of the *Northern Prawn Fishery Management Plan 1995* which provides for fishery effort, target species and bycatch species limits. The plan has been accredited under the *Environmental Protection and Biodiversity Conservation Act 1999* – acknowledgement that the Minister for the Environment is satisfied the fishery's actions will not have unacceptable or unsustainable environmental impacts.
- the *Northern Prawn Fishery Bycatch and Discarding Workplan* which provides guidelines and regulations to;
    - eliminate, to the greatest extent feasible, the catch of large animals such as turtles, sharks and stingrays, other protected species and other species where the take may not be sustainable
    - reduce the overall amount of bycatch in the fishery
    - provide protection for areas that are important habitat for vulnerable species of marine life.
- the development and implementation of turtle exclusion devices, decreasing the catch of turtles and large marine animals (rays and sharks) significantly. The NPF has been accredited by the United States as 'compliant' under its stringent turtle guidelines, enabling the import of prawns from the NPF into the US.
- the development and implementation of bycatch reduction devices (intended to reduce the bycatch of unwanted fish and crustacea species).
- Ecological Risk Management.
- *Northern Prawn Fishery Strategic Assessment Report*.
- *Industry Code of Practice.*
- the development of educational programs (delivered through pre-season skipper briefings and the Crew Member Observer Program) to inform skippers and crews of environmental and fishery issues.

As well as accreditation under the EPBC Act, the NPF has recently gained third party environmental certification as a 'sustainable and well managed fishery' from the Marine

Stewardship Council (MSC).[192] The NPF is the first fishery to supply MSC-certified banana and tiger prawns.

[192] MSC media release 7 November 2012, *Australia's largest prawn fishery, Northern Prawn Fishery, gains MSC certification* (http://www.msc.org/newsroom/news/australias-largest-prawn-fishery-northern-prawn-fishery-gains-msc-certification?fromsearch=1&isnewssearch=1)

Case Study – Eastern Tuna and Billfish Fishery

Geography

The Eastern Tuna and Billfish Fishery (ETBF) extends along the east coast of Australia (including Tasmania) from the South Australian/Victorian border to the tip of Cape York. It also encompasses Commonwealth waters around Lord Howe and Norfolk islands and includes the Coral Sea Zone and the High Seas which are a part of the Western and Central Pacific Fisheries Commission's (WCPFC) area of competence.

Within the area of the ETBF, the Commonwealth has offshore constitutional settlement arrangements with Queensland, Victoria and Tasmania and through these arrangements AFMA has jurisdiction over all waters off these states.[193]

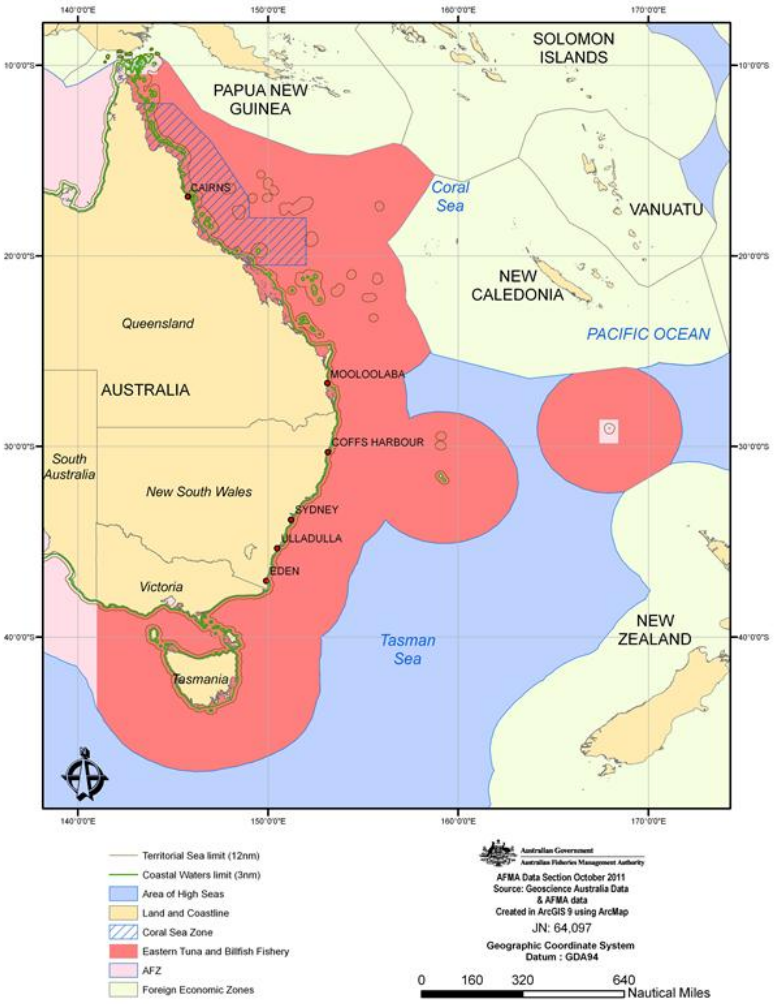

Figure 2. Map of Eastern Tuna and Billfish Fishery (AFMA website)

Biology[194]

The ETBF is a multi-species, multi-method fishery that supports both commercial and recreational fishing activities.

The five key target species in the ETBF are yellowfin, bigeye and albacore tuna; broadbill swordfish; and striped marlin. By-product species include escolar (black oilfish); mahi mahi; moonfish; ray's bream; rudderfish; shortbill spearfish; shortfin mako; skipjack tuna; and wahoo. Southern bluefin tuna (SBT) is also caught as a by-product species along the New South Wales coast during certain times of the year. All SBT not released alive and in a vigorous state must be covered by quota under the *Southern Bluefin Tuna Management Plan 1995*.

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[193] AFMA (2012) *Eastern Tuna and Billfish Fishery: Management Arrangements Booklet 2012 Fishing Season*, p 12 (http://web-test.afma.gov.au/wp-content/uploads/2010/06/ETBF-management-arrangements-booklet-20122.pdf, viewed on 13 December 2012)

[194] Woodhams, Stobutzki, Vieira, Curtotti, & Begg (eds) (2011), *Fishery status reports 2010: status of fish stocks and fisheries managed by the Australian Government*, Australian Bureau of Agricultural and Resource Economics and Sciences, pp 325-348

The majority of the commercial fishery's catch is taken by the longline sector with the residual taken by the minor line sector (rod-and-reel, handline and trolling).

Bycatch recorded from the ETBF longline sector includes sharks, rays, various other fish, seabirds, sea turtles and marine mammals.

Recreational and game fishers – many of whom practise tag and release – target tuna and billfish in the ETBF. Because of their importance to the recreational sector, blue or black marlin cannot be taken by commercial fishers,[195] and longtail tuna catch limits have been introduced.

Target species in the fishery are migratory in nature, meaning stocks are shared internationally, forming part of wider stocks jointly managed with other countries by the WCPFC. Domestic management arrangements reflect Australia's obligations to the WCPFC.

Economics

The ETBF is the third most valuable Commonwealth-managed fishery, [196] with a GVP in 2010-11 of $30.9 million, compared to $30.1 million in 2009-10. Total longline catches of the five key target species (albacore, bigeye tuna, yellowfin tuna, striped marlin and swordfish) increased from 4398 tonnes in 2010 to 4775 tonnes in 2011 (five key target species only). Total longline effort in the ETBF also decreased, from 7.87 million hooks in 2010 6.59 million hooks in 2011. [197]

Historically, yellowfin tuna has been the dominant species for the domestic market in the fishery in terms of GVP (with the exception of 2007-08 following an historically high catch of bigeye tuna), accounting for 35 per cent of total GVP ($10.6 million).[198]

Australia exports a range of tuna species, most of which is derived from the ETBF.[199] Of species caught in the fishery, bigeye tuna was the fishery's most important export commodity in 2009‑10, with exports valued at $5.8 million, closely followed by yellowfin tuna at $5.0 million, swordfish at $4.2 million and albacore tuna at $2.7 million. The principal destination for Australian tuna is Japan, which received 71 per cent of total tuna exports (excluding southern bluefin tuna) in value terms in 2009‑10. New Zealand, Thailand, the United States and Vietnam were also important export

[195] Explanatory Memorandum for the *Fisheries Legislation Bill (no. 1) 1998* notes the insertion of s. 15A to the FMA responded to disputes between recreational/charter operators who fish for black marlin and blue marlin and commercial tuna longline operators who take those species as bycatch.
[196] ABARES 2012, *Australian fisheries statistics 2011*, p 18
[197] Woodhams, Stobutzki, Vieira, Curtotti, & Begg (eds) (2011), *Fishery status reports 2010: status of fish stocks and fisheries managed by the Australian Government*, Australian Bureau of Agricultural and Resource Economics and Sciences, p 330
[198] *Ibid*, p 319
[199] Estimates of the value and volume of the fishery's exports can be drawn from Australian Bureau of Statistics data on tuna exports. However, these data are not disaggregated at a fishery level and include exports of the much smaller Commonwealth Western Tuna and Billfish Fishery.

markets in 2009–10, receiving 8.5 per cent, 7 per cent, 6 per cent and 4 per cent, respectively, of Australian exports in value terms.[200]

Commercial markets have developed in Australia and overseas for several by-product species, including mahi mahi and wahoo. The ETBF has catch limits for longtail tuna and sharks but the take of moonfish, rudderfish and escolar is not limited.[201]

Little information is available on recreational participation levels, catches and fishing effort directed at tuna and billfish in the ETBF, apart from that gathered through fishing tournaments, charter vessel logbooks and the National Recreational and Indigenous Fishing Survey.[202]

History[203]

As early as the 1930s, domestic commercial fishing for tuna and billfish (handline and trolling) began along Australia's eastern coast. Some 20 years later, Japanese pelagic longliners began commercial (unregulated) exploitation of the same area. Exploitation expanded by the mid 1950s to include domestic yellowfin longlining, with sales to canneries and local fish markets.

With the introduction of purse seining and the development of the skipjack tuna fishery (purse-seine and pole-and-line) in the 1970s, catches increased significantly. Concurrently, a black marlin gamefish industry was developing off Cairns (an important black marlin spawning ground).

From 1979 – with the declaration of the Australian Fishing Zone (AFZ) – Japanese longliners required licenses under bilateral agreements in order to fish in the area and their access became progressively more restricted as domestic commercial and recreational tuna and billfish fisheries expanded.

The early 1980s saw a marked increase in longlining effort, following successful air-freighting of fresh chilled tuna to Japan.

It was not until 1986, by which point commercial and recreational fishing effort was considerable, that requirements for logbooks were introduced – though this only applied to domestic longliners. In the same year, the forerunner of the current day Tropical Tuna Management Advisory Committee, the East Coast Tuna Management Advisory Committee, met for the first time and in 1987 nominal catch per unit effort (CPUE) for domestic longlined yellowfin tuna peaked at around 27 fish per 1000 hooks, with 2 million hooks set.

In the 1990s, commercial fishing effort expanded into northern Queensland waters, resulting in high catch rates of yellowfin tuna (from 1992-96 rates varied between 12 and 18 tuna per 1000 hooks) and bigeye tuna. Meanwhile, recreational catches of striped marlin increased. By the middle of the decade improved United States market

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[200] Woodhams, Stobutzki, Vieira, Curtotti, & Begg (eds) (2011), *Fishery status reports 2010: status of fish stocks and fisheries managed by the Australian Government*, Australian Bureau of Agricultural and Resource Economics and Sciences, p 330

[201] *Ibid*, p 331

[202] *Ibid*, p 329

[203] *Ibid*, pp 329-330

access prompted many longline fishers to relocate to southern Queensland ports to target swordfish for US export.

From 1995 onwards, AFMA enforced – by way of a monthly audit and regular field liaison – longline logbook returns as a condition of fishing permits. Two years later, Japanese longliners were excluded from the AFZ, after failure to reach agreement on a global total allowable catch for southern blue fin tuna.[204] Nominal CPUE for swordfish and bigeye tuna peaked at approximately four fish per 1000 hooks, with 6 million hooks set.

In 1998 the *Fisheries Management Act 1991* was amended to prohibit commercial fishers taking black and blue marlin, in recognition of their importance to the recreational fishery. The following year, recreational anglers reported the best striped marlin season on record – though catch has in fact since peaked (789 tonnes) in 2001.

From 2000, AFMA instigated specific operational area and quota-holding requirements on longliners to reduce the likelihood of their capturing southern bluefin tuna without quota and in 2003 it implemented an at-sea observer program in the sector. In the same year, longline fishing effort peaked at 12.4 million hooks and purse-seine fishery entitlements for skipjack tuna were separated out from the ETBF.

In June 2004 the convention establishing the WCPFC entered into force: Australia signed the convention in October 2000 and ratified it in September 2003. Around the same time, fishing pressure on swordfish increased as Spanish longliners focused effort in international waters in the south-western Pacific Ocean.

The following year, the commission agreed to adopt a range of measures directed towards the conservation and management of yellowfin and bigeye tuna, including consideration of temporary closures for the purse-seine fishery to reduce fishing mortality levels for both species.

In 2006, longliners began to use deep-setting techniques to target albacore tuna, in response to reduced swordfish availability, high operating costs and poor market demand. In the same year, the *Securing our Fishing Future* structural adjustment package – for which the ETBF was a target – resulted in the surrender of 99 of the 218 longline permits originally available; 45 per cent and 49 per cent reductions in longline and minor line permits, respectively.[205]

AFMA introduced catch disposal records for the domestic fishery, as well as setting an annual commercial TAC of 35 tonnes for longtail tuna and a 10-fish trip limit if the trigger limit is reached.

In 2007, AFMA closed the main albacore tuna fishing ground to new entrants and introduced a TAC of 3200 tonnes for the species in this area. The relative availability of bigeye tuna and the strengthening of the Australian dollar saw a lessening of targeted effort for albacore tuna.

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[204] *Ibid*, p 361

[205] Vieira, Perks, Mazur, Curtotti, and Li (2010), *Impact of the structural adjustment package on the profitability of Commonwealth fisheries*, ABARE research report 10.02, p 38

In December of the following year, the WCPFC adopted a conservation and management measure to reduce fishing mortality on bigeye tuna and limit yellowfin tuna fishing mortality.

In 2009 the ETBF management plan was introduced under transitional management arrangements – namely a total allowable effort of 12 million hooks between 1 November 2009 and 28 February 2011 and an allocation of hook-day SFRs. In the same year, the WCPFC instigated a conservation and management measure restricting swordfish catches south of 20°S. In response, AFMA set a TAC of 1400 tonnes for swordfish for the 2008‑09 season. In July 2009, the Tropical Tuna Management Advisory Committee (TT MAC) was formed from a merger of the Eastern Tuna and Billfish Fishery MAC, Western Tuna and Billfish Fishery MAC and Skipjack MAC to act as the management advisory body for the Eastern Tuna and Billfish Fishery.

In 2010 the ETFB management plan was amended to change effort management (number of hooks set) to catch quota management for major species in the fishery, reflecting the 2005 ministerial direction requirement to move all Commonwealth fisheries to output controls.[206] In the same year a process to allocate SFR quota commenced and the Tropical Tuna Resource Assessment Group was established.

Following their listing on Appendix II of the *Convention on Conservation of Migratory Species of Wild Animals*, porbeagle, shortfin mako and longfin mako sharks were listed as migratory species under the *Environment Protection and Biodiversity Conservation Act 1999*.

In March 2011 the previous year's fisheries management plan amendments were effected, shifting ETBF management from an allowable effort of 12 million hooks (for the 16 months prior) to output controls in the form of individual transferable quotas and a total allowable commercial catch.

Current arrangements

As a member of the WCPFC, Australia has an obligation to implement management measures that protect the long-term sustainability of the tuna and billfish stocks and the wider marine ecosystem in the Western and Central Pacific Ocean. Australia is also part of the Pacific Islands Forum Fisheries Agency, an advisory body comprising 17 Pacific Island nations and territories that provides expertise, technical assistance and other support to its members about their tuna resources.

The *Eastern Tuna and Billfish Fishery Management Plan 2010* – which reflects Australia's WCPFC obligations – has taken many years to develop and implement. In February 1998 the Eastern Tuna MAC released its findings on the relative strengths and weaknesses of gear-based SFRs and ITQ-based SFRs as access rights for ETBF. After

[206] While revenue in the ETBF has generally been cancelled out by operating costs, once other costs (depreciation, the opportunity cost of capital and total management costs) are taken into account, net economic returns are estimated in the negative. Beyond the buyback, there was still a need for greater efficiency on the fishery to ensure positive net returns. Independent reviews repeatedly showed individual transferable quota (ITQ) management could drive industry efficiency by focussing attention on all input costs and markets, while directly addressing stock sustainability. Management by effort controls (generally on fishing gear) inevitably focuses industry attention on unregulated inputs and perpetuates a 'race to fish'.

months of discussions about the most appropriate form of management in this multi-species, multi-method fishery, gear controls under a statutory management plan, were proposed.

Two advisory processes were undertaken to determine an equitable rights allocation system. Drafting of an ETBF management plan using input controls (hook numbers) commenced in 2000 but was not completed and accepted until late 2005. The *Eastern Tuna and Billfish Fishery Management Plan 2005* set out total allowable effort as the management system for the fishery but allocation of fishing rights under the plan was paused until the *Securing Our Fishing Future* structural adjustment package was concluded.

In 2007, AFMA provisionally allocated longline and minor line SFRs to eligible fishers holding longline and minor line permits respectively. The Statutory Fishing Rights Allocation Review Panel (SFRARP) received three applications for review, and it was not until early 2009 – when the panel delivered its decision – that AFMA made final SFR grants in the fishery.

In 2010 the *Eastern Tuna and Billfish Fishery Management Plan 2005* was revoked and the *Eastern Tuna and Billfish Fishery Management Plan 2010* determined in its place. This changed the fishery's management system from input control (number of hooks set) to output control (catch quota). Under this approach, the total allowable commercial catch (TACC) for quota species is set – based on the harvest strategy – before the fishing year starts in March.

A number of species – for example longtail tuna; northern bluefin tuna; skipjack tuna; and rays bream – are not managed under quota arrangements. However, the 35 tonne limit on longtail tuna imposed by AFMA in 2006 remains.

While the *Commonwealth Harvest Strategy Policy* does not prescribe arrangements for fisheries managed by an international management organisation – such as the WCPFC – AFMA has nevertheless developed a strategy for the ETBF.[207]

The harvest strategy model is based on recent CPUE and catch size data, since stock assessments are not available for stocks within the ETBF. The strategy is cost-effective in that it uses existing data, however, ABARES notes that "use of these data will necessitate rigorous verification and the collection of auxiliary data – for example, independent estimates of trends in fishing mortality and the level of discarding."[208]

The strategy is designed to determine recommended biological commercial catches – recommended total mortality for each species or stock, taking into account fishing, natural mortality and any ecological implications of harvesting the species. This assists AFMA in setting total allowable commercial catches for the five key target species in the fishery. The strategy incorporates information on the size profiles of catches so that changes in species population structure under different levels of exploitation can be

[207] The existence of the ETBF harvest strategy aids whole of government negotiation strategies for WCPFC meetings.

[208] Woodhams, Stobutzki, Vieira, Curtotti, & Begg (eds) (2011), *Fishery status reports 2010: status of fish stocks and fisheries managed by the Australian Government*, Australian Bureau of Agricultural and Resource Economics and Sciences, p 333

monitored. In this way the harvest strategy attempts to mimic more comprehensive stock assessments.

The objective of the ETBF harvest strategy is to achieve – over the long term – an agreed target of 1997-2001 catch rates (optimised for economic efficiency rather than sustainability).[209]

Future arrangements

Harvest strategies are designed to be used with single year total allowable catch levels – which potentially create uncertainty for fishers.

The MAC has recommended that changes to TACCs be assessed annually until the harvest strategy is well established within the new management arrangements; at that point it may be appropriate to implement a longer period between TACC changes. Further, the magnitude of annual change to the overall catch has been limited to 10 per cent up or down in the initial period of harvest strategy implementation. Again, it is intended that this be reassessed once the harvest strategy has a history of predictable results.

Setting the 2011 season TACC was contentious, particularly for bigeye tuna (which, in the WCPO, is assessed as subject to overfishing).[210]

While the Tropical Tuna RAG proposed a RBCC of 734 tonnes for bigeye tuna, the Tropical Tuna MAC subsequently proposed to the AFMA Commission that it determine a TACC of 1950 tonnes. The TTMAC considered that catch limit should be consistent with the WCPFC limit of 2000 tonnes – noting that in 2008 the Commission adopted a measure to reduce the overall mortality of bigeye tuna by 30 per cent. Importantly, this included imposing a 2000 tonne upper catch limit for all member countries with an historical catch of less than 2000 tonnes per year, including Australia.

The MAC's rationale for choosing 1950 tonnes as the TACC for bigeye tuna rather than following the RAG's advice was further confused by the fact that the average catch within the fishery of bigeye over the four years prior was just over 800 tonnes. It had never approached the proposed TACC of 2000 tonnes.

The rationale centred around two main issues:

- concern that setting a domestic catch limit below an international catch limit would set a precedent, potentially undermining Australia's negotiating power at the Convention for the Conservation of Southern Blue fin Tuna (CCSBT) whereby Australia would come under pressure from other CCSBT members to set its domestic TAC at a level lower than our national allocation; and

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[209] "Catch over this period is thought to provide a good estimate for maximum economic yield and was a combined total of about 600-650 kg of the key species per 1000 hooks set." AFMA website: www.afma.gov.au/managing-our-fisheries/harvest-strategies/eastern-tuna-and-billfish-harvest-strategy/

[210] Woodhams, Stobutzki, Vieira, Curtotti, & Begg (eds) (2011), *Fishery status reports 2010: status of fish stocks and fisheries managed by the Australian Government*, Australian Bureau of Agricultural and Resource Economics and Sciences, p 341

- an assumption that the Pacific bigeye tuna population is a single stock, and that changes to Australia's small take would make little difference to stock levels.

The *Eastern Tuna and Billfish Fishery Management Plan 2010* requires that, before determining a TACC, the AFMA Commission consider information given by

- the MAC
- other interested Australian and international bodies and other interested persons;
- the total estimated catch by the commercial, recreational, indigenous and other users of the fishery;
- information about the sustainability of marine species in the area of the fishery;
- the Commonwealth Harvest Strategy Policy and ETBF Harvest Strategy; and
- the precautionary principle.

Accordingly, the Commission sought further advice from the then and previous Chairs of the ETBF RAG which clarified the extent to which the ETBF harvest strategy should be taken into account and, in the instance of low confidence in the strategy, recommended a TACC below 1,341 tonnes would be precautionary.

The AFMA Commission subsequently made a final determination of the TACC at 1,056 tonnes calculated on the average catch of the species between 2001 and 2004, which is the baseline used by the WCPFC in its measure for the conservation and management of bigeye tuna.

Environmental considerations

In effecting its legislative obligation for utilisation of fisheries resources consistent with the principles of ecologically sustainable development, AFMA has developed and/or implemented a number of management arrangements and guidelines.

These include

- the development and implementation of the *Eastern Tuna and Billfish Fishery Management Plan 2010*. The plan has been accredited under the *Environmental Protection and Biodiversity Conservation Act 1999* – acknowledgement that the Minister for the Environment is satisfied the fishery's actions will not have unacceptable or unsustainable environmental impacts.
- the *Eastern Tuna and Billfish Longline Fishery Bycatch and Discard Workplan 2011-2013* which aims to minimise bycatch and discarding of high risk species.
- CSIRO *Ecological Risk Assessment* report for the ETBF.
- *Eastern Tuna and Billfish Fishery Strategic Assessment Report.*

Resource sharing in the ETBF

The ETBF has a long history of supporting both commercial and significant recreational fishing activities and, with no official mechanism existing for allocating access between the fishing sectors, the fishery was considered a prime candidate within which to progress resource sharing policy arrangements.

In 2003, Australian and state Governments announced a commitment to address the issue of resource sharing between users of Commonwealth fisheries resources (mostly state-managed recreational and charter fishers, and Commonwealth-managed commercial fishers). The *Memorandum of Understanding on Proposed Resource Sharing Arrangements for Commonwealth Fisheries* was signed by Commonwealth, State and Northern Territory Fisheries Ministers in 2004.

DAFF funded a consultant to work with relevant stakeholders to gather an idea of the most appropriate model for resource sharing.

An options report was delivered to the Australian Government Minister for Fisheries, prepared by an independent facilitator in June 2006 presenting two options:

1. An allocation approach based on mortality estimates for key species
2. A spatial approach based on the protection of recreational fishing 'hot spots'.

Following lengthy negotiations with stakeholders, a resource sharing model in the ETBF was finalised in September 2007 and there was agreement among the parties (commercial fishers, recreational and game fishers) that the proposed voluntary agreement be implemented from 1 January 2008.

The *ETBF Resource Sharing Agreement* was proposed for a period of three years (January 2008-December 2010) and was underpinned by a voluntary code of conduct, rather than formal compliance arrangements. The Agreement allowed for an agreed share of recreational catch within the ETBF as well as a spatial arrangement for the commercial fishers. Commercial longline fishers were not to set their lines in waters shallower than 400m and ensure that their fishing gear did not drift into waters shallower than 200m. These two zones were where the recreational sector primarily operates within the fishery (with respect to Commonwealth waters).

This agreement was to be underpinned by an assistance package of $750,000 for the commercial sector to support in altering fishing practices. The package included one-off payments to the owners of 28 vessels that would be adversely affected by the Agreement, and to support to establish an ETBF industry association.

Appendix 3

Managing fisheries between Australia's Jurisdictions – Offshore Constitutional Settlements and Joint Authorities

History of Offshore Constitutional Settlements and Joint Authorities

The Commonwealth and the States have shared responsibility for the management of Australia's fisheries resources since Federation in 1901. In 1979, Australia declared the Australian Fishing Zone (AFZ). This declaration afforded Australia sovereign rights over the living resources found generally within the exclusive economic zone (EEZ) out to 200 nautical miles.

At the Premiers' Conference in 1979, the Commonwealth, States and the Northern Territory (NT) agreed on the need for a formal framework to resolve a range of contentious and complex offshore constitutional issues. The Commonwealth began with an objective of taking total responsibility for fisheries and using the States as agents for administration and enforcement. The States countered the proposal that the Commonwealth should confine its activities to international matters and to fisheries of international importance such as tuna and whaling.

The debate culminated in the Offshore Constitutional Settlement (OCS) where provision was made for fisheries to be defined in terms of the species caught and/or the geographical area of the fisheries and/or the type of fishing and that these fisheries be managed either by the adjacent State, by the Commonwealth or by Joint Authorities. The concept of Joint Authorities was attached to the fisheries element of the OCS at the last minute by the Prime Minister to conform with the pattern established for mining.

What are Fisheries Joint Authorities and OCSs?

Prior to the OCS, the States were generally responsible for managing coastal fisheries out to 3 nm from the low-water mark. The Commonwealth was responsible for managing fisheries in Australian waters beyond 3 nm (i.e. from 3 nm to 200 nm). The OCS provided for the Commonwealth, the States and the NT to agree to adjust these arrangements by passing management responsibility for particular fisheries exclusively to the Commonwealth or to the adjacent States/NT; or alternatively, for the Commonwealth and the States/NT to jointly managed a fishery in waters relevant to the Commonwealth and one or more States/NT through a Joint Authority.

A Joint Authority consists of the Australian Government Minister responsible for fisheries (the Commonwealth Member) and the relevant State/NT Government Minister administering the state legislation relating to marine fishing (the State Member).

At present, there are three Joint Authorities (see Table 1) consisting of the Commonwealth and one other State/NT, and all the fisheries managed by these Joint Authorities are managed under State law. Management, research, compliance and financial resources to service the needs of the Joint Authorities are provided by the relevant State or NT fisheries departments. The States/NT receive no Australian Government funding for this role, aside from the printing costs of the annual reports.

OCS arrangements have the practical objective – to provide a sound legal and administrative basis for a functional approach under which a particular fishery can be regulated by one authority under one set of laws, without regard to jurisdictional lines.

There are currently 59 OCSs in place (see Table 2) but there are currently 63 OCS instruments in force (see Table 2). However, four of these have the sole effect of terminating another instrument/s, meaning there are in fact 59 OCSs with the effect of determining jurisdiction between the Commonwealth and States/NT.

Table 1: Joint Authorities

Joint Authority	Members	Established by	Fisheries Managed	Relevant Legislation for Management
Arrangement between the Commonwealth and the State of Western Australia– 24 January 1995				
Western Australian Fisheries Joint Authority	Cth - WA	*Fisheries Act 1952* (now replaced by the *Fisheries Management Act 1991)*	▪ Southern Demersal Gillnet and Demersal Longline Managed Fishery ▪ Northern Shark Fishery	*WA Fish Resources Management Act 1994*
Arrangement between the Commonwealth of Australia and the Northern Territory – 1 February 1995				
Northern Territory Fisheries Joint Authority	Cth - NT	*Fisheries Act 1952* (now replaced by the *Fisheries Management Act 1991)*	▪ Demersal Fishery ▪ Finfish Trawl Fishery ▪ Timor Reef Fishery ▪ Offshore Net and Line Fishery	*NT Fisheries Act 1988*
Arrangement between the Commonwealth and the State of Queensland – 7 February 1995				
Queensland Fisheries Joint Authority	Cth - QLD	*Fisheries Act 1952* (now replaced by the *Fisheries Management Act 1991)*	▪ Gulf of Carpentaria Inshore Finfish Fishery ▪ Gulf of Carpentaria Developmental Finfish Trawl Fishery ▪ Gulf of Carpentaria Line Fishery	*QLD Fisheries Act 1994*

Broadly speaking, management decisions have focussed on the sustainable management of fisheries resources set by a jurisdictional boundary. Legislative arrangements, notably the OCS, have engendered the overarching principles of cooperative and complementary management of shared stocks. In practice, this approach has resulted in individual jurisdictions implementing arrangements that simply recognise existing jurisdictional boundaries with little regard to the geographical boundaries of fish stocks.

Table 2: Numbers of Offshore Constitutional Settlements

State / territory	Arrangements with the effect of determining jurisdiction	Arrangements with the effect of terminating only	Total
NSW	18		
NT	5		
QLD	9		
SA	6	2	
TAS	7	1	
VIC	9	1	
WA	5		
TOTAL	**59**	**4**	**63**

Concern about workability

Concern about the workability of OCSs and Joint Authorities is not new. It is generally recognised that management arrangements for shared stocks across Australia are inconsistent and inefficient, and that this has an impact on the sustainability of fish stocks and fishing operations in the region.

The Australian Government in its 2003 *Review of Commonwealth Fisheries Policy* identified concerns with the OCS fisheries arrangements, highlighting a general lack of consistency and effective cooperation on the management of some fish stocks straddling Commonwealth, State/NT jurisdictions. The review committed the Government (Recommendation 50) to progressively review Offshore Constitutional Settlement (OCS) fisheries agreements and management arrangements with the States/NT.

Unfortunately, little has happened in this regard.

Appendix 4

International Fisheries Management Instruments

Legally-binding fisheries instruments

- United Nations Convention on the Law of the Sea (1982)
- Treaty on Fisheries between the Governments of Certain Pacific Island States and the Government of the United States of America (1987)
- Convention for the Prohibition of Fishing with Long Driftnets in the South Pacific (1989)
- Niue Treaty on Cooperation in Fisheries Surveillance and Law Enforcement in the South Pacific Region (1992)
- Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas (1993)
- Agreement on the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (1995)
- FAO Port State Measures Agreement (2009) – *Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing* (Australia is in the process of ratifying)
- Convention on the Conservation and Management of High Migratory Fish Stocks in the Western and Central Pacific Ocean (2000)
- Convention for the Conservation of Southern Bluefin Tuna (1994)
- Agreement for the Establishment of the Indian Ocean Tuna Commission (1996)
- Southern Indian Ocean Fisheries Agreement (2012)
- Convention on the Conservation of Antarctic Marine Living Resources (1982)
- Convention on the Conservation and Management of High Seas Fishery Resources in the South Pacific Ocean (2012)
- Treaty between Australia and the Independent State of Papua New Guinea concerning Sovereignty and Maritime Boundaries in the area between the two Countries, including the area known as Torres Strait, and Related Matters (1978)
- Agreement between the Government of Australia and the Government of the Republic of Indonesia relating to Cooperation in Fisheries (1992)
- Treaty between the Government of Australia and the Government of the French Republic on Cooperation in the Maritime Areas Adjacent to the French Southern and Antarctic Territories (TAAF), Heard Island and the McDonald Islands (2003)
- Agreement on Cooperative Enforcement of Fisheries Laws between the Government of Australia and the Government of the French Republic in the Maritime Areas Adjacent to the French Southern and Antarctic Territories, Heard Island and the McDonald Islands (2007)

Cooperation through global and regional organisations

- United Nations Food and Agriculture Organisation – Committee on Fisheries
- Organisation for Economic Cooperation and Development – Committee for Fisheries
- Association for Pacific Economic Cooperation – Oceans and Fisheries Working Group
- Asia Pacific Fisheries Commission
- Regional Plan of Action to Promote Responsible Fishing and Combat Illegal, Unreported and unregulated Fishing in the South East Asian Region
- Indian Ocean Rim Association for Regional Cooperation

Non-legally binding fisheries instruments

- FAO Code of Conduct for Responsible Fisheries (1995)
- International Plan of Action to Prevent, Deter, and Eliminate Illegal, Unreported and Unregulated Fishing (2001)
- International Plan of Action for the Management of Fishing Capacity (1999)

- International Plan of Action for Reducing Incidental Catch of Seabirds in Longline Fisheries (1999)
- International Plan of Action for the Conservation and Management of Sharks (1999)
- United Nations Resolutions on Driftnet Fishing (1991)
- United Nations Resolutions on Sustainable Fisheries (from 2004)
- Rome Declaration on IUU Fishing (2005)
- United Nations Food and Agriculture Organisation Model Scheme on Port State Measures to Combat IUU Fishing (2009)
- FAO Guidelines for the Ecolabelling of Fish and Fishery Products from Marine Capture Fisheries (2005)
- International Guidelines for the Management of Deep-sea Fisheries in the High Seas (2008)
- Australia-Indonesia Memorandum of Understanding regarding the Operations of Indonesian Traditional Fishermen in Areas of the Australian Fishing Zone and Continental Shelf (1974)
- Arrangement between the Government of Australia and the Government of New Zealand for the Conservation and Management of Orange Roughy on the South Tasman Rise (2000)

Marine environment-related instruments

- Ramsar Convention (1971) - *Convention on Wetlands of International Importance, especially as Waterfowl Habitat*
- Convention for the Protection of the World Cultural and Natural Heritage (1972)
- Convention on the International Trade in Endangered Species of Wild Flora and Fauna (1975)
- Convention for the Prevention of Pollution From Ships (1973)
- Convention on the Conservation of Migratory Species of Wild Animals (1979)
- Convention on Biological Diversity (1993)
- Johannesburg Plan of Implementation (2002) - World Summit on Sustainable Development which affirmed the United Nations commitment to full implementation of Agenda 21, alongside achievement of the Millennium Development Goals and other international agreements
- Chapter 17 of Agenda 21 (1992) – pertains to the protection of the oceans, all kinds of seas, including enclosed and semi-enclosed seas, and coastal areas and the protection, rational use and development of their living resources

Trade-related agreements

- General Agreement on Tariffs and Trade (1994)
- Agreement on Technical Barriers to Trade (1995)
- Agreement on Pre-shipment Inspection (1995)
- Agreement on Rules of Origin (1992)
- Agreement on Import Licensing Procedures (1994)
- Agreement on the Application of Sanitary and Phytosanitary Measures (1995)
- Agreement on Subsidies and Countervailing Measures (1995)
- Draft WTO Rules on Fisheries Subsidies (2007)

Maritime safety and labour-related agreements

- Torremolinos International Convention for the Safety of Fishing Vessels (1997)
- International Convention on Standards of Training, Certification and Watchkeeping for Fishing Vessel Personnel (1995)
- The Work in Fishing Convention (2007)

APPENDIX 5

Range of enforcement options for compliance and enforcement

This Appendix provides more detail about the Review's recommendations on compliance and enforcement issues.

Broader range of enforcement options

The Review recommends that the *Fisheries Management Act 1991* (FMA) be amended to give AFMA a broader range of options to enforce the key regulatory requirements. These options should include civil penalties, enforceable undertakings and injunctions. Including these enforcement options would bring the FMA in line with other more modern Commonwealth legislation such as the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), the Biosecurity Bill 2012 and the *Great Barrier Reef Marine Park Act 1975* (GBRMP Act), which was amended in 2008 to include more flexible enforcement options. Each of these schemes provides, at a minimum, for civil penalties, injunctions and enforceable undertakings, as well as criminal offences and infringement notices.

Each of the recommended options is briefly outlined below.

Civil penalties

A civil penalty is a penalty imposed by a court applying civil, rather than criminal, court processes. While punishing certain behaviours, the imposition of a civil penalty does not constitute a criminal conviction.

One of the main differences between a civil penalty provision and a criminal offence provision is that the standard of proof associated with civil penalties is lower than for a criminal prosecution. A criminal offence must be proved beyond reasonable doubt, whereas the stand of proof for a civil penalty is, broadly speaking, the balance of probabilities. Consequently, it can be easier to succeed in proceedings under a civil penalty provision than under a comparable offence provision. Civil penalties also have the practical advantage that AFMA can fund and bring proceedings by itself.

Civil penalties are contained in many Commonwealth legislative schemes, including the *Water Act 2007*, the EPBC Act and the Biosecurity Bill. The Regulatory Powers (Standard Provisions) Bill 2012, if enacted, would set out the legal framework for Commonwealth civil penalties, although the proscribed conduct that is the subject of a civil penalty would still need to be set out in the FMA.

The Review recommends that civil penalties be included for key prohibitions under the FMA.

Injunctions

Injunctions are court orders that may be sought to restrain a person from contravening a provision of an Act or to compel a person to comply with a provision. Examples in other Commonwealth legislation include s 475 of the EPBC Act and Part 7 of the Regulatory Powers (Standard Provisions) Bill. A power for the court to grant injunctions may well be useful in the fisheries context. For instance, if AFMA had

evidence that a person was proposing to fish in a Commonwealth fishery in contravention of the FMA, they could seek an injunction to prohibit them. Contravention of an injunction is contempt of court, punishable by a fine and/or imprisonment.

Enforceable undertakings

An enforceable undertaking is a written undertaking, given to a regulator, committing a person to particular action (or inaction) in order to prevent or respond to a breach of an Act. The undertaking is voluntarily given but is enforceable in court. The Regulatory Powers (Standard Provisions) Bill, if enacted, would set out standard provisions for the giving and enforcement of undertakings. Other examples included the Water Act (s 163) and the EPBC Act (s 484DA).

The Review considers that enforceable undertakings should also be available to AFMA.

Other enforcement options

There are a number of other compliance and enforcement options available in other Commonwealth legislation. Two options that the Review considers are worthy of further consideration are external audits and enforceable/remedial directions.

A power to direct that an external audit may be obtained potentially be useful for AFMA (e.g. to verify whether fishers are accurately reporting quota). The *National Greenhouse and Energy Reporting Act 2007* (NGER Act) provides for greenhouse and energy audits of corporations by registered external auditors. The regulator can order an audit if there is a suspected contravention or if it is determined that, for another reason, an audit of a corporation's compliance with the legislation is necessary. The NGER Act and associated instruments set out a detailed framework relating to the registration of auditors and the conduct of audits. At least some aspects of the NGER Act may be a useful model if a power to require external audits is included in the FMA.

The GBRMP Act contains a power for the Minister to make 'enforceable directions' (s 61ADA). In summary, if the Minister satisfied that a person has contravened, or is likely to contravene, the Act and that it would be in the public interest to do so, the Minister can issue an enforceable direction. A direction can include a requirement to take action, or to cease taking action, for the purposes of ensuring future compliance with the Act and/or preventing, repairing or mitigating damage to the environment resulting from the person's conduct. The direction is enforceable in the Federal Court. Outside of the environmental context, the Australian Communications and Media Authority (ACMA) has powers to give 'remedial directions' under a number of different legislative schemes. It can issue them, for example, for contraventions of a licence condition, code or standard. ACMA has issued 'Regulatory Guide - No.4, Remedial Directions', which provides some useful guidance on its use of remedial directions.211

Strengthen existing provisions

In addition to including new civil remedies in the FMA, the Review also considers it would be appropriate to enhance the existing enforcement mechanisms by:

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[211] www.acma.gov.au/webwr/_assets/main/lib100845/regulatory_guide-remedial_directions.pdf

- introducing a tiered approach to criminal offence provisions
- increasing the penalties for infringement notices
- possibly increasing the penalties for some offences and including 'multiple of gain' penalties.

Tiered approach to criminal offence provisions

The Review considers that the existing criminal offences in the FMA, and the *Fisheries Management Regulations 1992* (FM Regulations), should be amended to adopt a tiered approach depending on the severity of the unlawful action. That is, the offences should be structured, and penalties be set, in a way that reflects the seriousness of the conduct, while complying with Commonwealth enforcement policy as reflected in the *Guide to Framing Commonwealth Offences, Infringement Notices and Enforcement Powers*.

Infringement notices

The current penalty for infringement notices under the Regulations is low (2 penalty units or $220). Current Commonwealth policy is that infringement notice provisions should generally ensure that the amount payable under an infringement notice for an individual is 1/5 of the maximum penalty for the relevant offence or civil penalty, but not more than 12 penalty units. There is therefore considerable scope for increasing the penalties payable for infringement notices and the Review recommends that penalties be increased, consistent with the seriousness of the offence for which the notices is issued (see, for example, reg 189 of the Great Barrier Reef Marine Park Regulations 1983.).

Increase penalties

The Review also considers that there should be substantial penalties in the FMA, particularly for key offences such as those relating to illegal commercial fishing in the Australian Fishing Zone, currently in s 95. At present, the maximum penalties range between 250 and 500 penalty units ($27,500 to $55,000). Unlike criminal offences in other environmental legislation, offences in s 95 do not have terms of imprisonment. Penalties for relevant offences in the EPBC Act include:

- 7 years imprisonment or 420 penalty units for actions in Commonwealth marine area affecting the environment (s 24A)
- 2 years imprisonment or 120 penalty units for breaching conditions on an environmental approval (s 142A) – the equivalent strict liability offence has a penalty of 60 penalty units (s 142B).

The Review considers that penalties in line with other environmental legislation should be considered for the FMA, noting that an offence with a penalty of at least 12 months imprisonment is an indictable offence and therefore triggers certain forfeiture provisions in the *Proceeds of Crime Act 2002* (ss 48 and 49). The inclusion of terms of imprisonment for offences would need to be consistent with international law, especially Article 73(3) of the United Nations Convention on the Law of the Sea. For instance, imprisonment could not be included as a penalty for a fishing offence where that offence was committed by a foreign national on a foreign vessel beyond Australia's

territorial sea (in the absence of agreement by the State of the foreign national or foreign vessel concerned).

The Review recognises that s 95 of the FMA is not presently consistent with Commonwealth policy on criminal offences as it contains a range of strict liability offences with penalties of 250 to 500 penalty units, well above the 60 penalty units recommended by the *Guide to Framing Commonwealth Offences, Infringement Notices and Enforcement Powers*. Accordingly, as part of amending the offence provisions, it would be necessary to consider the appropriate fault elements and, in particular, whether certain offences should remain strict liability offences. Further, if an offence is punishable by imprisonment then Commonwealth policy is that it should not be a strict liability offence. However, consideration could be given to provisions where there is both a strict and a fault based liability offence for the same conduct (e.g. ss 142A and 142B of the EPBC Act).

Multiple of gain penalties

The Review also recommends that consideration be given to the use of 'multiple of gain penalties' for appropriate fisheries offences. Because of the high value of some fish species, the penalty imposed by a court may not provide a sufficient deterrent to the commission of the offence. In these circumstances, it seems be appropriate to include a penalty which reflects a multiple of the value of the illegally-obtained fish.

Some fisheries offences (e.g. exceeding quota) would seem to meet the policy criteria for multiple of gain penalties, set out in the *Guide to Framing Commonwealth Offences, Infringement Notices and Enforcement Powers*. That is, there would be a direct and measurable financial gain for the fisher, the amount of the potential financial gain varies widely (e.g. depending on the species), and the gain may sometimes be extremely high.

Other issues

Forfeiture provisions

Under the current FMA, foreign fishing boats used in the commission of offences may be *automatically* forfeited along with their nets, trap or equipment and fish (s 106A). In contrast, for domestic illegal fishing, a conviction is required before a court can order the forfeiture of the boat, net, trap or equipment, fish or proceeds from the sale of the fish concerned (s 106).

In its submission, AFMA argues that forfeiture of fish taken illegally by domestic fishing, or proceeds equal to their value, should be *automatic* under the FMA. They say that it would be preferable if such forfeitures were not left to the discretion of the courts because where there is no order for forfeiture, or only partial forfeiture, of catch, there is insufficient deterrent and this can result in the profits from illegal over-catch outweighing the penalty. AFMA also asked for a power to seize the proceeds of the sale of illegally caught fish.

The Review notes that Commonwealth policy in the *Guide to Framing Commonwealth Offences, Infringement Notices and Enforcement Powers* is that the forfeiture measures in the Proceeds of Crimes Act should be sufficient but, if it is necessary to develop additional forfeiture provisions, then the powers and safe guards should be consistent with those in the Proceeds of Crime Act. These include:

- a decision to forfeit property should be made by a court
- forfeitable property should be seized under warrant.

The Review is not persuaded that there is a sufficient policy case for departing from the general Commonwealth policy position on forfeiture provisions. However, the Review notes that some of its other recommendations, such as a broader range of enforcement options and reconsidering penalties for offences should assist AFMA in ensuring that there is sufficient deterrence against domestic illegal fishing. Additional indictable offences in the FMA, where appropriate, would also give AFMA the option of seeking forfeiture orders under s 49 of the Proceeds of Crime Act (no conviction is required to obtain such order).

Prosecution options

Currently, all prosecutions under the FMA are run by the Commonwealth Director of Public Prosecutions (CDPP). AFMA raised concerns in its submissions about the capacity of the CDPP to deal with all the prosecutions under the FMA due to resource constraints and because of the specific expertise which they say is required to run prosecutions under the FMA Act, particularly in relation to domestic fishers. AFMA's proposed solution is for it to engage its own prosecutor for fisheries matters.

The Review notes that, from a legal perspective, AFMA can already commence and bring a summary prosecution independently of the CDPP, although the CDPP has the power to take over such prosecutions (s 13 of the *Crimes Act 1914* and ss 9(5) and 10(2) of the *Director of Public Prosecutions Act 1983).* The key offences involving illegal domestic fishing under s 95 of the FMA are summary offences.

The issue of whether a Commonwealth agency can commence and conduct a prosecution (as the informant) is separate from the question of legal representation. Under the *Legal Services Directions 2005*, which apply to AFMA as an 'FMA agency', AFMA requires the approval of the Attorney-General to use its in-house lawyers to act as counsel or as the solicitors in litigation. Additionally, any proposal for DAFF lawyers to appear in criminal prosecutions would need to be the subject of close consultation with the Attorney General's Department (AGD) (which administers relevant criminal justice legislation and is responsible for Commonwealth policy in this regard).

The Australian Government Solicitor (AGS) has acted for numerous other Commonwealth agencies in prosecution work. However, obviously, this model would have cost implications for AFMA as they would have be required to pay the costs of the solicitors and counsel, whereas the CDPP fund their own matters.

Whether it is feasible, and consistent with Commonwealth policy, for AFMA to employ its own prosecutors is beyond the scope of this Review. However, the Review notes that there are potentially options available to AFMA to prosecute summary offences without requiring the assistance of the CDPP. Further, if the Review's recommendations for a broader range of enforcement options are adopted, AFMA will have civil enforcement options available which may not require court proceedings or, if they do, the proceedings are civil and so do not involve the CDPP.

Appendix 6

Details of the Australian Government's direction to AFMA[212]

The Australian Government considers that decisive action is needed immediately to halt overfishing and to create the conditions that will give overfished stocks a chance to recover to an acceptable level in the near future.

With this in mind, AFMA has been directed under section 91 of the *Fisheries Management Act 1991* as follows.

1. Noting the qualification in relation to internationally-managed fisheries in paragraph 2(a)(iv) below, AFMA must take immediate action in all Commonwealth fisheries to:

(a) cease overfishing and recover overfished stocks to levels that will ensure long term sustainability and productivity;

(b) avoid further species from becoming overfished in the short and long term; and

(c) manage the broader environmental impacts of fishing, including on threatened species or those otherwise protected under the *Environment Protection and Biodiversity Conservation Act 1999*.

2. AFMA must take a more strategic, science-based approach to setting total allowable catch and/or effort levels in Commonwealth fisheries, consistent with a world's best practice Commonwealth Harvest Strategy Policy that has the objectives of managing fish stocks sustainably and profitably, putting an end to overfishing, and ensuring that currently overfished stocks are rebuilt within reasonable timeframes, as set out below:

(a) Consistent with the United Nations Fish Stocks Agreement, and based on advice from CSIRO and other relevant scientists, the initial setting of the Commonwealth Harvest Strategy Policy, should be:

i. in all Commonwealth fisheries the exploitation rate of target stocks in any fishing year will not exceed that giving the Maximum Sustainable Yield. The catch of target stocks in all Commonwealth fisheries will not exceed the Maximum Sustainable Yield in any fishing year unless otherwise consistent with a scientifically robust harvest strategy designed to achieve a sustainable target level and that does not result in overfishing or overfished stocks;

ii. for the initial and default harvest strategy, reductions in exploitation rate and catch are to be implemented immediately when breeding stocks are assessed to have been reduced below 40% of pre-fished levels, and targeted fishing to cease when breeding stocks are

[212] Senator the Hon. Ian Macdonald, former Minister for Fisheries, Forestry and Conservation issued a media release, *Securing Our Fishing Future* (DAFF05/248M), on 14 December 2005. The release and the Minister's direction to AFMA are accessible through the National Library of Australia's Pandora archive.

assessed to have been reduced below 20% of pre-fished levels (known as a '20/40' harvest strategy). Alternative harvest strategies may be developed in specific cases where they meet the sustainability objectives and do not result in overfishing or overfished stocks;

iii. the harvest strategy must achieve the objective of avoiding overfishing and avoiding overfished stocks with at least 80% probability (where lack of knowledge about a fish stock precludes decision making with this level of certainty, decisions on catch/units should reflect the application of the precautionary principle); and

iv. noting that for internationally-managed fisheries to which Australia is a party (such as the Southern Bluefin Tuna Fishery and the Heard Island and McDonald Islands Fishery) the relevant international agreement will prevail where it includes an acceptable scientific process for setting sustainable catch levels. In such fora, Australia will advocate its domestic policy settings as an example of best practice.

(b) Participate in an expert review of the policy referred to in paragraph 2(a) above which will report to me by 30 June 2006.

- The expert-based review of the above initial settings for the Commonwealth Harvest Strategy Policy will determine if, and by how much, these settings should be amended to ensure that the objectives in relation to sustainability and profitability, overfishing and recovery of stocks are met within specified time limits.

- The expectation is that for some species, the adoption of more conservative harvest strategies with higher stock size thresholds (e.g '30/50' strategies), lower exploitation rates or a higher probability (e.g. 90-95%) of avoiding overfishing will be necessary to achieve these objectives.

- The review will be led by the Department of Agriculture, Fisheries and Forestry (DAFF), will involve relevant bodies, and will be peer reviewed by international fisheries experts.

3. Noting that AFMA has released the Total Allowable Catch (TAC) levels for 2006 in the Southern and Eastern Scalefish and Shark Fishery (SESSF) and projected TAC and Total Allowable Effort (TAE) levels for the SESSF and the Eastern Tuna and Billfish Fishery respectively for 2007, AFMA must implement by 1 January 2007, harvest strategies consistent with the reviewed policy in paragraph 2(b) above for all Commonwealth fisheries:

- the projected TACs and TAEs for 2007 referred to above will be subject to verification under the reviewed policy in paragraph 2(b), however it is not expected that these will vary significantly from those already announced by AFMA;

- the TAC level for the Bass Strait Central Zone Scallop fishery should be set at zero for a minimum of three years from January 2006, (excluding official stock surveys).

4. AFMA must also have regard to, participate in, or implement the following measures:

(a) Implement the long standing government policy of managing Commonwealth fisheries using output controls in the form of individual transferable quotas by 2010 unless there is a strong case that can be made to me, on a fishery by fishery basis, that this would not be cost effective or would be otherwise detrimental;

(b) In those fisheries where quota or effort-based Statutory Fishing Rights (SFRs) have been granted, conduct a cost-benefit analysis to determine whether boat permits and/or boat SFRs are an impediment to autonomous adjustment or are otherwise a barrier to efficient fisheries management and if this is the case, whether they could be phased out by 2010 while:

i. Avoiding overcapitalisation;

ii. Retaining the benefits of government funded structural adjustment;

iii. Managing access to all retained species.

(c) Minimise the incentives for discarding by ensuring it is factored into the setting of total allowable catch levels;

(d) Manage the broader environmental impacts of fishing, including minimising the level of interactions with threatened or otherwise protected species;

(e) Enhance the monitoring of fishing activity, for example through increased use of vessel monitoring systems with daily reporting, on-board cameras, and observers;

(f) Establish a system of independent surveys for all major Commonwealth fisheries by 1 January 2007 to increase the transparency and integrity of catch and effort information;

(g) Identify and implement any required spatial closures in fisheries;

- Ensure that where ongoing exclusion of fishing is proposed there is a coordinated approach with other relevant agencies to the identification of the Marine Protected Areas; and

(h) Strengthen the advice to the AFMA Board by engaging high-level expertise in economics and science to provide parallel advice to the AFMA Board in relation to key Board decisions.

5. AFMA must provide me with reports in May 2006, November 2006 and May 2007, outlining the following:

(a) how AFMA is implementing this direction (paragraphs 1-3 above);

(b) AFMA's progress in implementing the direction and expected timeframes for completing the direction; and

(c) any problems encountered with implementing the direction and the actions taken to resolve those problems.

6. From 2006 - 2010, AFMA will outline in its Annual Report its progress in implementing this direction.

I will be monitoring AFMA's performance in implementing the direction in a number of ways. These will include, but are not limited to:

(a) AFMA's reports to me in May 2006, November 2007 and May 2007;

(b) ongoing briefing from my Department on the progress of the expert-based reviews;

(c) the June 2006 report on the expert-based review of the Commonwealth Harvest Strategy Policy;

(d) ongoing advice from BRS on the status of overfished stocks, particularly through its annual Fishery Status Reports;

(e) ongoing advice from ABARE on the economic status of Commonwealth fisheries through the annual Fishery Survey Reports;

(f) AFMA's Annual Reports;

(g) the Department of the Environment and Heritage's strategic assessments of Commonwealth fisheries.

Appendix 7

Interim Report to the Minister for Agriculture, Fisheries and Forestry on Commonwealth Fisheries Management Legislation and Arrangements

This is an interim report on my Review of Commonwealth Fisheries Management Legislation and Arrangements. At this juncture the report has not been fully informed by all likely input. For example, at the time of writing the Department of Sustainability, Environment, Water, Population and Communities (DSEWPaC) had not provided a submission and the Review is still seeking input on a range of issues.

For these reasons, the Review's conclusions and findings have not been firmed up in this interim report. However, the material in this report should give a clear insight into the directions likely to be taken in the final report.

PROCESS FOR THE REVIEW

The Review was asked to examine the Fisheries Management Act 1991 (FMA) and the Fisheries Administration Act 1991 (FAA) (Terms of Reference are at **Attachment 1**). Particular matters to be examined include:

- The primacy of the fisheries Acts in the management of Commonwealth fisheries, especially the interactions with the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).
- The performance of the Australian Fisheries Management Authority (AFMA) model and Commonwealth fisheries governance.
- The application of the precautionary approach to Commonwealth fisheries, including the powers of the minister in that context.
- The need to modernise Commonwealth fisheries management and approaches, including penalty and licence provisions, cost recovery and co-management.

The Review has interpreted the Terms of Reference broadly and will comment on a range of other matters relevant to the effectiveness of Commonwealth fisheries management (such as the efficacy of the offshore constitutional settlement arrangements).

In conducting the review public submissions were invited. The Review has received some 50 odd substantive contributions and many more 'form' submissions (see **Attachment 2**). The Review also met with key stakeholders:

- the commercial fishing industry;
- representatives of recreational fishers;

- the scientific community;
- the Australian Government Departments of Agriculture, Fisheries and Forestry; and Sustainability, Environment, Water, Population and Communities
- state departments;
- representatives of environmental non-government organisations (NGOs)
- and the Australian Fishing Management Authority (AFMA) and Commissioners (full list of consultations at **Attachment 3**).

INDUSTRY TRENDS

The total Australian fisheries industry's gross value of production (GVP) is about $2.2 billion. Of this total, Commonwealth managed fisheries account for about $316 million, with more than half of this attributable to the Northern Prawn and the South Eastern Scalefish and Shark fisheries[216].

The industry across Australia has been in decline, with a few exceptions. For example, since 2000-01, the total GVP has declined by about 31 per cent. The decline in the value of Commonwealth fisheries has followed the same trend, declining by some 48 per cent.[217]

These declines have reflected a range of factors: an appreciating Australian dollar; the high price of diesel; labour shortages and costs; tighter environmental and fisheries management requirements; and the reality that, in a number of fisheries, fish are harder to catch (despite improving technologies) as fish stocks have declined. In some fisheries it is taking more effort and cost to catch fish.

Nevertheless, the picture is not all gloomy.

In recent years, the position of many Commonwealth fisheries has stabilised or improved, with the GVP stabilising since 2005-06. This reflects a degree of structural adjustment in some fisheries resulting in a reduction of less-competitive fishers. The imposition of more restrictive management arrangements has also helped to ensure the long-term sustainability of fish stocks. The upshot has been fewer fishers and a decline in the GVP but an improvement in the profitability of the fisheries.

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[216] Four Commonwealth fisheries contribute about three quarters of GVP, with the remaining 18 contributing the rest – see footnote 2.

[217] Woodhams, J, Stobutzki, I, Vieira, S, Curtotti, R & Begg GA (eds) 2011, *Fishery status reports 2010: status of fish stocks and fisheries managed by the Australian Government*, Australian Bureau of Agricultural and Resource Economics and Sciences, Canberra

In essence, Commonwealth fisheries are now, on the whole, more profitable and the catch is at more sustainable levels. This is a good outcome and further industry rationalisation is likely over time resulting in fewer fishers but quite possibly more profitable fisheries.

WHAT THE REVIEW WAS TOLD

Issues raised with the Review through submissions and stakeholder consultation cover many aspects of fisheries management. Key themes that emerged were:

- Overall there was support from both fishers and NGOs for AFMA to remain a Commission at arm's length from government. It was felt important that fisheries decisions be based on objective criteria based on science and economic analysis.

- Many submissions sought more transparency and accessibility to AFMA's decision making processes. Reference was also made to the makeup and tenure of not only the Commission but the management advisory committees (MACs) and resource advisory groups (RAGs).

- Commercial fishers sought a framework which would reduce uncertainty which was a constraining factor on future investment decisions. Factors raised included: the need for the clear and predictable application of science-based policy and objectives; the problems arising through the offshore constitutional settlements, particularly devaluing statutory fishing rights; the "double jeopardy" of the EPBC Act application to fisheries; the high cost of industry levies and the vagaries of licence suspension or cancellation provisions.

- Issues raised by environmental groups included: support for the existing application of the EPBC Act rather than the accreditation of the fisheries management framework; the need for greater clarity and priority of the fisheries Acts' objectives, including giving primacy to the ecologically sustainable development objective; a more precautionary approach and clarification from government on the levels of precaution AFMA should apply; greater alignment of Commonwealth and state application of fisheries management, including data collection; too much emphasis on MAC and RAG processes as constituting adequate consultation, rather than their advisory role.

- Recreational fishers consider the fisheries management framework should have explicit regard to the recognition of recreational fishers' interests, which include: clear recognition of recreational fishing in resource sharing, having regard to the sector's economic and social importance; alignment of Commonwealth and state fisheries management approaches; the application

of ecosystem frameworks to fisheries management, including by-catch and local area depletion.

All parties acknowledge that fisheries management can raise controversial and politically sensitive issues. Although there were differing degrees of emphasis it was generally felt there needed to be robust, transparent processes for elucidating issues, explaining reasons for decisions and for reporting performance.

The views put to the Review in submissions and in discussions have addressed complex issues in thoughtful ways. The above points are not so much a summary but illustrative of key themes from major groups. The Review will be placing submissions it has received on the Review's website: www.daff.gov.au/fisheriesreview.

KEY FINDINGS

There has been an appreciable shift to the better in the way Commonwealth fisheries are managed (reflected as noted in the improved profitability and the stabilisation and slow recovery of many, although not all, fish stocks).

However, improvement since 2005 came off a low base with too many fisheries up until that time under severe threat of being overfished or overfishing. The subsequent improvement since 2005 can be largely attributable to:

- The direction to AFMA under the FAA (s. 91) by the then Commonwealth fisheries minister, Senator the Hon. Ian MacDonald, in 2005 requiring AFMA to take a more strategic, science-based approach to setting total allowable catch and/or effort levels in Commonwealth fisheries.
- The translation of the above ministerial direction into a Harvest Strategy Policy (HSP) in 2007 by the then minister for fisheries, Senator the Hon. Eric Abetz.
- The implementation of the Australian Government's $220 million *Securing our Fishing Future Initiative* in 2008.
- Moving AFMA from a representational (mainly of fisheries interests) board structure to a skills-based commission structure in 2008.
- With the above moves being reinforced or complemented by the EPBC Act the effect has been, on balance, making decisions even more precautionary, especially in areas of by-catch and discard and interactions with protected species.

The culmination of the above five factors and the pursuit by AFMA of operational policy and management to give effect to the change in direction yielded solid results (that is, better management of fish stocks and improved industry profitability).

Of note, the change in direction of Commonwealth fisheries heralded by the above measures was not a consequence of the application of the FMA or FAA. The broad objectives and functions for AFMA were the same before the 2005 ministerial direction as they are now. This suggests even greater clarification or precision within the Act of principles such as "ecologically sustainable development"; the "precautionary principle"; and of "maximising the net economic returns to the Australian community from the management of Australian fisheries" is unlikely, by itself, to be particularly helpful (although the Review will propose changes in the objectives that AFMA should pursue as prescribed in legislation).

It is far better, in the Review's opinion, for these matters to be articulated via government policy announcements or by directions under the Act (as they were with the HSP) to give clearer guidance to AFMA on how they should operationalise the Acts' requirements.

This would also serve to better define the relationship between fisheries policy, which is the proper role for government, and the operational policy and management decisions by AFMA consistent with that policy. It is the Review's judgement that under current arrangements there has developed over time a lack of clarity between the appropriate policy role of government and what should only be an operational role by AFMA, especially confusion about "operational policy" versus "management / government policy".

This current Review provides the opportunity to build on the good work that has already been undertaken with the aim of:

- developing a clear overarching Australian Government policy covering HSP, by-catch and discards and broader ecosystem considerations in managing fisheries;
- clarifying the relationship between the fisheries minister (and the Department of Agriculture, Fisheries and Forestry (DAFF)) for fisheries policy and AFMA for operationalising that policy, with the framework set by the fisheries Acts, while giving a greater capacity for the minister to take decisions at variance from what AFMA may propose;
- increasing the transparency and consultative processes around the formation by AFMA of the fisheries management plans (and significant variations to the those plans).

What does this translate to in terms of changes to the fisheries Acts?

The Role of the Minister, DAFF & AFMA in Fisheries Policy & Management

Over the last 30 or so years, there have been three models applied to the management of fisheries:

- Prior to 1991 there was an Australian Fisheries Service which was part of the primary industries department, with fisheries policy and management decisions being made by the minister or delegate.
- The formulation of AFMA as an independent statutory authority in 1991, with fisheries policy matters and Torres Strait and international fisheries issues the prerogative of the minister and the primary industries department, and with fisheries operational policy and management for Commonwealth fisheries (and its jointly managed fisheries) the responsibility of AFMA through a largely representational board.
- The formulation of AFMA as a body corporate and independent commission with expert/skills-based (rather than representational) members in 2008.

An issue the Review has considered is whether the current overarching governance framework for fisheries can be improved.

In this regard, the Review took soundings of key stakeholders. It found there was close to universal support from commercial fishers, environmental NGOs and state fisheries agencies for the current structure of AFMA and its broad relationship with government.

This is not to say, however, the current governance of fisheries policy and management cannot be improved and the relationship and responsibilities of the minister, DAFF and AFMA better defined. In this regard, the minister's powers under the fisheries legislation are chiefly as follows:

- The minister appoints the chairperson of the Commission and other part-time members (FAA, s.12) and may/must terminate an appointment in certain circumstances (FAA, s.106).
- The minister may approve the AFMA corporate plan (which may be for 3, 4 or 5 years as AFMA chooses) or, if the interests of fisheries management or any matter relating to fisheries management so require, request the Authority to revise the plan (FAA s.73).
- In a similar way to the point above, the minister may approve or request a variation in AFMA's annual operational plan where the plan is thought to be inconsistent with the provisions of the corporate plan (FAA s.78).
- The minister may give directions to AFMA only if there are exceptional circumstances and where there is a conflict with major government policies (FAA s.91).

- AFMA is required to submit fisheries management plans to the minister, with information on any representations received and consultations conducted. If the minister does not accept the plan, he must refer it to AFMA and inform it why it was not accepted (FMA s.18).

The exercise of the above provisions means the minister's powers with respect to AFMA are considerable and multi-layered in terms of the capacity to give directions to AFMA on fisheries management issues. The Review was informed, however, the practice has been for the respective ministers not to use this suite of powers to intervene in the management of fisheries, other than the 2005 directive referred to previously.

Although the Review finds the balance of powers are largely adequate – subject to further elaboration below – the way AFMA develops fisheries management plans could be enhanced both from the point of view of the transparency of the process and in terms of the plans themselves being more informative.

In terms of the way the fisheries Acts are currently structured, the fisheries management plan is supposed to be the centrepiece from an individual fisheries management perspective. This is reflected both in the requirement for AFMA to seek public input on a draft of a plan (FMA s.17 (2)) and in the minister's power not to necessarily accept a plan submitted by the Authority (as indicated above).

However, the examination of individual fisheries management plans by the Review reveals that the way they are currently undertaken and presented forms an inadequate basis for either consultation, or for seeking ministerial approval.

Fisheries management plans are currently essentially legal or regulatory documents designed to give AFMA a suite of powers to manage the fishery over the course of the plan. This is perfectly appropriate, so far as it goes.

However, that a plan at the point of determination is under-done for the purpose of consultation is the first of two key reasons the Review considers AFMA's public engagement in fisheries management is inadequate. The second is the lack of a clear mechanism within the Authority or system for seeking or enabling input beyond obvious, identified representational interests.

In this context, the Review is examining the current operations of the prescribed MACs (FAA s.56) and RAGs established under the Authority's general power to establish committees (FAA s.54). The committees and groups – the maintenance of the structure of which is largely supported by stakeholders – are clearly valuable advisory mechanisms in assisting the Commission's decision-making, where technical, fishery-specific input is required.

It seems to the Review that MACs and RAGs are used as the main consultative channel. Yet these groups are not set up or resourced to funnel in broad public input to the Commission's decisions – and nor should they be expected to

undertake such a role. In essence, this means there is no public input mechanism through which the Australian public can seek to engage in the process that leads to decisions for the management of a public resource. The Review considers that an effective, consultative mechanism that both informs and engages the Australian community should be a cornerstone of AFMA's management.

In returning to the deficiency of fisheries management plans as a platform for substantive public discussion or ministerial approval, the Review reiterates that plans are not inadequate per se: as a regulatory articulation of AFMA's "fisheries management toolbox" they are reasonable. However, there should also be, in the Review's opinion, a fully articulated fisheries management strategy which should precede the legally-referenced "nuts and bolts" of the management methods to be drawn upon.

Without being completely prescriptive of what should be in that strategic fisheries plan it would seem necessary to cover off factors such as:

- fisheries stock issues and analysis;
- key economic and social dimensions of the fisheries management plan;
- how the fishery fits in with HSP, including the proposed mechanisms for setting the total allowable catch (TAC) and other management mechanisms to be drawn upon from the start of the plan (and acknowledging these aspects might be varied over the life of the plan to adjust to evolving circumstances);
- the by-catch, discard and incidental catch issues and any mitigation measures;
- ecological risk assessment and the ecosystem consequences from managing the fishery
- threat abatement approaches proposed for high risk species, such as sea lions, seals or sea birds
- where there are trade-offs between, for example, HSP, by-catch and discard and eco-system consequences these be explicitly drawn out and explained (both in terms of environmental and commercial implications)
- resource-sharing issues be drawn out if applicable, for example, between commercial and recreational and traditional fishers.

In drawing out the full consequences of the proposed arrangements, the plan should – to the extent possible – draw out the economic and commercial consequences for commercial fisheries of the proposed framework and any alternative approaches. Finally, it would seem sensible for the plans to have key

performance indicators against which the veracity of the arrangements can be assessed and reported. Assessments could be undertaken on pre-agreed regular basis, by an independent assessment committee established by AFMA, but which would report to both the fisheries and environment ministers through DAFF and SEWPaC.

Many of these issues are addressed directly by AFMA (with substantial input through the MACs and RAGs) with respect to a fisheries management plan but this is usually done after rather than before a plan is developed (for example, the development of by-catch and discard plans and the development and application of the ecological risk assessment methodology applied by AFMA).

In summary, there needs to be clearer provision in the fisheries act(s) than is included in the FMA s.17, which indicates, in broad terms, matters that *must* be considered in a fisheries management plan. Currently, s.17 includes an extensive list of matters that *may* be dealt with in a fisheries management plan but does not impose many mandatory requirements. The minister could also use current powers to indicate to AFMA the issues to be addressed in the plans and consultations with the public.

Further, the Review considers the provisions in the Act, which could potentially result in the minister and AFMA being engaged in a stand-off on the fisheries management plan (i.e. whereby the minister does not approve the plan and AFMA does not vary it to the minister's satisfaction), should be subject to a resolution. The Review proposes a "two-strike" rule apply, such that if the minister has twice not approved an AFMA fisheries management plan, the minister can take a final decision, tabling the reasons for the proposed variation in parliament. Before doing so, however, the Review proposes that it would be reasonable for the minister to obtain relevant independent advice before coming to a decision. This advice could cover, for instance, scientific or environmental matters or economic issues (or other relevant matters). A panel of independent experts could be assembled on an ad hoc basis for that purpose (with the composition of experts reflecting the nature of the issue). It would be reasonable for the advice to be time limited (say, to report to the minister in 28 days) in order to avoid the issue dragging on with the resulting uncertainties involved.

The Review also considers the minister should have the power over the course of a plan to ask the Authority to consider whether an amendment to a fisheries management plan is appropriate in the light of particular circumstances or developments. A similar process for the approval of such amendments as described above (that is, two strikes and an independent assessment) could be adopted. There may also need to be a provision to move more quickly to address an emergency or urgent situation requiring speedy resolution.

On another matter, as indicated previously, the fisheries minister has powers under s.91 of the FAA to give direction to AFMA in the performance of its functions.

Under the FAA s.91 direction, the minister would need to show some reasonable probative evidence of the exceptional circumstances, the need for giving the direction, and the major government policies with which the performance and exercise of AFMA functions and powers are not to conflict.

In this regard, legal advice to the Review is to the effect that the minister would need to exercise this discretion reasonably. However, the exceptional circumstances power of the minister is considerable, enabling "...the minister to intervene in a range of situations not limited by the objectives of the FMA, including, for example, where it would be in the national interest to do so". Further, that advice states that "...in order to be a 'major government policy', the policy involved would, as a general rule, need to be agreed at Cabinet level".

Notwithstanding the above, s.91 is not a general direction making power that would allow the minister to give direct policy guidance in normal circumstances, or in relation to polices that have not been agreed, in most cases, at Cabinet level.

The Review has noted above that in 2005 the then fisheries minister gave a HSP direction to AFMA. The future of HSP is currently under review, although as noted the Review considers this was a ground-breaking approach. Likewise, there is a current review of by-catch and discard policy. The Review would also propose these two reviews be completed by a third leg: an ecosystem approach to fisheries management. In all areas regard should be given to applying the precautionary principle to fisheries management (see below).

If the s.91 provision isn't suitable (or the best use of the provision) for giving ministerial direction or guidance in these three areas, then the Review suggests there should be a general power for a minister to give policy guidance to AFMA (that is, in addition to powers already available through the corporate planning process). The exercise of such powers should be subject to them being consistent with the objectives of the fisheries act(s). In developing policy in the three areas identified, the sound approach, and the one being followed, would be to prepare a discussion paper, eliciting public input.

The Review proposes the minister's existing legislative powers be supported by:

- a general power to give policy direction on matters consistent with the objectives of the fisheries act(s), particularly covering HSP, by-catch and discard, and ecosystem objectives (although not limited to these factors);
- a requirement that fisheries management plans also include a strategic fisheries assessment, whereby any trade-offs between competing objectives

are analysed and subjected to public consultation prior to the finalisation of those plans; and

- the minister having the power to vary a plan (or give direction over the course of a plan in the event of significant matters) subject – in the normal course – to getting independent advice from an appropriately convened expert panel and subject to reasonable time limitation for consideration. Consideration would also need to be given to provisions to move more quickly in emergency situations.

Beyond the formal definition of respective power in the legislation, the Review considers the working relationship between DAFF and AFMA needs to be "joined at the hip" while being cognisant of the separate roles. This is especially important because of the intersection of policy and operational matters and international fisheries policy issues. Moreover, when dealing with the states – where fisheries management is within in departments – both operational and policy issues can arise and it is important from a Commonwealth perspective that AFMA and DAFF know what the other is doing.

The Review will propose it would be worthwhile – because of the intersecting issues – for a senior DAFF representative to attend Commission meetings in an observer capacity.

The integration of fisheries and related Acts

The main fisheries-related Acts are:

- *Fisheries Management Act 1991*
- *Fisheries Administration Act 1991*
- *Torres Strait Fisheries Act 1984*
- *Environment Protection and Biodiversity Conservation Act 1999*.

The Review has been asked if there is a way of better integrating the Commonwealth legislation in this area to ensure the primacy of the fisheries legislation.

The legal advice to the Review indicates the various fisheries Acts could be combined into one Act. However, that advice indicated there would not appear to be clear benefits (such as a reduction in complexity) in doing so. Moreover, it is not an uncommon legislative model to set out the administrative provisions setting up and regulating the governance of an independent authority in one Act and the regulatory functions of the authority in another. It is largely a matter of preference.

The more substantive issue is how the fisheries and the EPBC Acts might best relate to one another to achieve a seamless but effective integration of fisheries and environmental requirements. In this context, the Review has heard the following arguments. Firstly, the EPBC is an important backstop to the fisheries Acts, leading to improvements in fisheries management because, *inter alia*, it puts a more 'precautionary' filter on various management decisions. Secondly, the Review heard that the overlay of the EPBC Act – particularly the requirement to do, at times, multiple and separate assessments under various provisions of the Act – has amounted to a "double jeopardy", increasing uncertainty and costs for the fishing industry without there being an appreciable difference in fisheries, by-catch and discard or ecosystem outcomes.

In the Review's judgement, the application of the EPBC Act has achieved important outcomes in shifting the balance of fisheries management objectives from paying greater heed to economic and commercial objectives, to a range of environmental considerations.

Nevertheless, the Review considers that at the current juncture worthwhile steps should be taken to better integrate fisheries and environmental legislation. The Review believes such steps can and should be taken without compromising the standards required by the EPBC Act. In this regard, the Review notes the Hawke Review proposed that the EPBC Act be amended so that "...the fishing provisions under Part 10, 13 and 13A are streamlined into a

single strategic assessment framework for Commonwealth and state and Northern Territory-managed fisheries to deliver a single assessment and approval process".

In responding to this recommendation, the government has indicated it "agrees with the intent of this recommendation, but noted that the fisheries assessment provisions and the EPBC Act serve different functions – for example, ecological communities and listed migratory species in the Commonwealth area (Part 13), strategically assessing impacts on matters of national environmental significant (Part 10), and ecologically sustainable management of commercial export fisheries (Part 13A)." The government also indicated it "supports reducing the administrative and regulatory process involved in fisheries assessments, including through less frequent assessments of well-managed fisheries".

To these ends, the government has announced it "supports in principle a progressive shift under the Act from individual assessments of fisheries to the accreditation of fisheries management arrangements".

The Review supports the adoption of an accreditation framework. However, the Review has not yet seen how it is proposed to translate this shift into legislative amendment or changed practice.

In this regard, the Review considers it would be important that any accreditation arrangements do not lower the environmental standards applicable to fisheries. This may mean that the form the accreditation may eventually take will need to be sufficiently clear, precise and subject to performance reporting so the public is assured that standards do not slip. However, if the arrangements are overly prescriptive, then the environment department would still, in large measure, be taking on rather more of the instructive functions of a fisheries manager.

The Review proposes a key requirement of getting the balance right would be the following (picking up on the Review's proposals in the earlier section examining the appropriate roles of the fisheries minister):

- The government give policy directions to AFMA in three areas: revised HSP; by-catch, discard and incidental catch issues; and ecosystem issues. The policy directive could pick up, for instance, the *Guidelines for the Ecological Sustainable Management of Fisheries*[218] applied by the environment department. Such guidance should be developed through a public consultation process. Importantly, the three-pronged framework should be agreed by both the fisheries and environment ministers.

[218] *Guidelines for the Ecologically Sustainable Management of Fisheries* 2007, Australian Government Department of the Environment and Water Resources (www.environment.gov.au/coasts/fisheries/publications/pubs/guidelines.pdf)

- The objectives of the fisheries Act(s) be amended so AFMA is required to formulate, vary and manage fisheries management plans having regard to the above three prongs (see below for elaboration).
- Further, the objectives be redefined such that there is a clearer understanding of their meaning and more equal weighting of the objectives to be pursued.
- Fisheries management plans be subject to key performance indicator reporting and, as judged appropriate, external audit at the requirement of the fisheries and environment ministers.
- Wherever applicable, the same or similar obligations be placed on state and Northern Territory-managed fisheries under the EPBC Act to ensure, where practical, common or compatible approaches where the fisheries cover common stocks.

In essence, the Review considers robust ways can and should be found to better integrate fisheries and environmental legislation without compromising standards. This should result in greater certainty for industry and the commercial benefits that yields.

Application of the Precautionary Principle

The Review's terms of reference ask it to examine the application of the precautionary principle to fisheries management.

This can be a vexed area, although in the Review's opinion, while it is an area where judgements may differ, there is often more heat than light when it comes to different points of view. It is further complicated by semantics; the Acts reference the precautionary *principle* rather than a precautionary *approach*, the latter being the way precaution is commonly considered in fisheries. The Review notes the former attaches an internationally accepted definition and that the strict application of such a concrete principle may not always be sensible in the context of fisheries management where the practical application of 'precaution' must reflect community expectations.

The Review also considers the proposed changes to the fisheries minister's powers (including greater transparency in the development and performance reporting of fisheries management plans) and the requirement that there be accreditation under the EPBC Act, with the fisheries and environment ministers acting in concert in setting the overarching framework to be followed, will go a considerable way to clarifying the application of a precautionary approach.

The precautionary principle has been stated in an Australian context in a number of forms. For example, it has been included in the *Intergovernmental Agreement on the Environment* and this was reflected in the FMA and FAA. The

definition in the EPBC Act is slightly different. For practical purposes, however, the Review concurs with the view: "[t]he lack of consistency across the Acts is not [the] major concern in relation to the application of the precautionary principle in Commonwealth fisheries"[219].

The primary ground for differing views between fisheries and environmental groups on the application of the precautionary principle to fisheries can be summarised as:

- Those who believe they should be allowed to keep fishing at existing levels until there is irrefutable evidence that the decline in stocks and impacts on the marine environment have led to an unsustainable fishery. Those holding this view are prone to claim that the data is inconclusive; the fishery naturally is prone to variable catch rates and the like. While issues of this kind are being analysed, fishing often continues, exacerbating the stock decline.
- Those who believe, especially as fish stocks are a public resource, that it is incumbent on fishers (and governments that regulate them) to provide irrefutable evidence that proposed catch levels are sustainable. Sometimes the threshold evidence requirements demanded are so large that the costs of collection would be problematic, whether funded by fishers or by government. Until the uncertainties are resolved, fishing should be limited.

Such polar views are seldom helpful in practice. Nevertheless, the balance of the evidence is that those who are concerned that fishers and regulators have not been sufficiently cautious have considerable evidence on their side, reflected in, for example:

- the decline in many Commonwealth fisheries until the 2005 ministerial direction;
- the arguable failure to give adequate effect to the stock recovery objectives of species that have been overfished (e.g. school sharks; gulper sharks; eastern gemfish; and orange roughy).
- the seeming slowness of the application of measure to address issues such as interactions with birds, turtles, dolphins, sea lions in some instances;
- a propensity to lag the development of the application of by-catch and discard policy (the current general approach was announced in 2000 and is currently being reviewed).

The Review notes there has been a marked improvement in AFMA's operation with respect to its precautionary objective, especially since 2005. The

[219] Joint submission to the review from WWF-Australia, TRAFFIC, the Australian Marine Conservation Society and Human Society International

application of harvest control rules, for example, based on a sophisticated tiered system designed to account for different degrees of stock uncertainty, and the implementation of an ecological risk assessment (ERA) framework and rolling progression of fisheries assessments are testament to the Authority's considerably changed approach following the ministerial direction. ERAs have been undertaken for all AFMA fisheries. These focus on the impacts of each fishery on by-catch, protected and endangered species, habitats and marine communities.

Notwithstanding its commendable (in some respects world-leading) work, there is a tendency for AFMA to lean in favour of fisheries catch objectives. In part, this has arisen through the HSP, which has the effect of focussing on the target species, even though policy requires broader environmental consideration. For example, the Review heard that the scientific input in a RAG context focused overwhelmingly on stock assessment issues with much less attention paid to issues relating to by-catch and discard or ecosystem effects. The Review heard from environmental NGOs that their participation in RAGs is effectively constrained because typically they receive large volumes of technically complex information only a day or so before a RAG meeting, which prevents them from properly assessing it, let alone consulting other environmental experts.

The Review suggests AFMA be given greater and renewed policy direction in the areas of HSP, by-catch and discard and ecosystem effects; that fisheries management plans explicitly address these issues, pointing out trade-offs where they occur and forming a better basis for consultation and ministerial direction if required; and the fisheries act(s) change to reflect a more balanced priority between objectives.

Finally, the Review notes it would be hard pressed to suggest a better framework as to how the precautionary principle should be applied in practice to that contained in the *FAO Technical Guidelines for Responsible Fisheries: Precautionary Approach to Capture Fisheries and Species Introductions.*

Research, Fisheries Management and Industry Levies

The need to ensure fisheries are sustainable – commercially and from an environmental perspective – in the longer term requires that there be a relatively heavy research focus.

That research covers the need for good data for fisheries management purposes (for example, for AFMA to undertake stock assessments) to strategic research looking at a spectrum of fisheries and marine issues (for example, the kind undertaken by the Fisheries Research and Development Corporation (FRDC)).

A pressing issue, in large part stemming from the need to take a precautionary approach to fisheries management, has been the need to adequately fund

research, particularly into stock assessments and the sound management of fisheries more generally.

Under current cost recovery arrangements, the research AFMA requires to enable it to manage a fishery is cost recovered by a levy on fishers.

A major issue raised with the Review is that not all Commonwealth fisheries can afford to undertake the requisite research. Larger and/or more profitable fisheries generally have the capacity (although they seek to lower levy costs), whereas smaller and/or less profitable fisheries have less capacity to pay.

The Review has, therefore, examined whether the current AFMA levy arrangements are reasonably based and whether there are alternative options. The main options identified are:

1) Maintain the current cost recovery framework. The advantage of this approach is that while there will always be issues of contention, the methodology for determining private versus public interest and the attribution of costs is essentially sound. It is good policy. Viewed from this vantage point, if the industry cannot afford the levy, and hence the necessary research cannot be undertaken, in the longer term the marginal fishers in that fishery should exit the industry, selling their individual transferable quotas (ITQs), if applicable, to other fishers.

2) In circumstances where 1) above is not judged to be reasonable, or where there is a "higher" public good consideration at stake (and that claim risks being too easily made), some variation in the approach might be contemplated. This essentially would involve some new money, or diversion of money from an existing programme. For example, some Commonwealth money for FRDC could arguably be directed to such research.

3) Another way would be to replace the current AFMA levy by, in effect, an access fee similar to that recently introduced in Western Australia (basically a two-tied levy for smaller and larger fisheries). An access fee would reflect the private use of community resources. If hypothecated to fisheries this would enable funding to be pooled and then directed toward the highest fisheries research management objectives. However, pursing this objective would break with the important user pays link and, therefore, involve what might be regarded as cross-subsidisation from one fishery to another.

4) A further option, which would be sound in terms of economic and resource efficiency objectives, would be to impose both an access fee and an industry specific levy. This would pick up the attribution of industry costs and the use of the community resource. It would be a policy issue as to how the level of such fees were set and structured.

5) A final option, which would be compatible with all of the above approaches, would be to have an in depth examination of how AFMA conducts its business to see if there is capacity to lower costs, if that could be done without significantly detracting from the value of the data sets. For example, without being in any way prescriptive, such an examination would consider whether stock assessments for some fisheries could be undertaken less frequently. It could also look at – on a risk basis – whether electronic surveillance might suffice in more instances instead of observers. It could also examine the scope – as industry has asked– for opening up more of AFMA required processes (for example, observers, data collection) to competition. The Review has not had an opportunity to examine the opportunities in this area. It would require careful assessment of individual fisheries having regard to their track records and risks.

The Review does not press for one option ahead of others. Each option has pros and cons. The choice is really one for which government is best placed to decide.

Offshore Constitutional Settlements

This is an area in which all parties who contributed to the Review agreed left a lot to be desired. However, perspectives and suggested solutions – especially between the Commonwealth and the states – differed appreciably.

Essentially, there is agreement that having joint Commonwealth and state fisheries, fishing the same stocks, with differing management and leasing requirements is absurd. For a combined wild fish fishery worth $2.2 billion it is duplicative; imposes extra and unwarranted red-tape and costs on industry; can be "gamed" by dual licensed fishers; can contribute to compliance and enforcement issues where boundaries are blurred; and pays insufficient priority to the need to manage fisheries and the environment on an integrated basis.

As indicated, the Review has heard many examples where the states' decisions push against Commonwealth fishery management decisions and vice versa. There are no winners in this area, only losers.

To give an example, TACS and ITQs are an essential part of a statutory fisheries right in most Commonwealth fisheries. AFMA sets the TAC having regard to estimates of the take by state commercial fishers and recreational anglers. The TAC they set is often essentially a residual. If the state commercial or recreational take increases then, other things being equal, the Commonwealth TAC should decrease. In this sense, therefore, the value of the Commonwealth statutory fishing right is far from secure.

Over the years, there has been considerable discussion of how these issues might be better resolved but they have not come to much.

In principle, the joint fisheries arrangements whereby the dominant jurisdiction is essentially left to manage the fishery (subject to oversight) is sound but there are many fisheries where it has not been possible to agree on joint arrangements.

One step, way short of joint management, would be to pool scarce fishery research resources in some way and at least agree to undertake shared stock assessments. Another step would be to ensure, to the extent practicable, that data reporting (for example on catch, by-catch, and protected species interactions) is collected on the same basis and shared. Such streamlining could be the start of a more general move to national consistency in fisheries management, ultimately leading to uniform licensing and fisheries management plans spanning jurisdiction boundaries.

It is not the place of this Review to solve the offshore constitutional settlement issues. That is best addressed substantively by fisheries ministers and pursued in a COAG context. The Review notes, however, that in facilitating such an examination it would be worthwhile commissioning a Productivity Commission review or research study to examine the issues and suggest a way forward. That route was used to very good effect in reviewing the Commonwealth/state intersections in the regulation of the offshore gas and petroleum sector.

Recreational Fishing

Unlike the states, the Commonwealth's interactions with recreational fishing have been relatively low key. The states oversight and regulate recreational fishing. They too determine, as appropriate, the relative take of key fisheries between the commercial and recreational sector. Increasingly, state fisheries management decisions appear to lean in favour of recreational fishers in terms of allocating access.

There are numerous issues that need to be weighed. On one hand, the desire of the public to have continued access to sustainably harvested Australian seafood from the commercial sector. On the other hand, recreational fishing is an embedded part of "Australian culture": its economic spin offs are large and increasing (particularly as baby boomers retire and the affordability of more sophisticated boats and equipment has come onto the market). Indeed, the capacity of recreational anglers, like the commercial fishers, to target fish has improved remarkably over the years.

Increasingly, issues of resource trade-offs between commercial and recreational fishers will arise in Commonwealth fisheries. Where such issues arise they will need to be addressed sensitively and in a transparent way.

The FMA overwhelmingly focuses on managing commercial fisheries. However, s.17(6)(h) of that Act indicates AFMA may, in developing a plan of management

for a fishery "prohibit or regulate recreational fishing in the fishery". Conceivably, this brief mention would give AFMA considerable powers, should it choose to exercise them.

Recreational fishing would seem to require more attention than the brief reference in 17(6)(h) of the FMA. There needs to be policy development and legislative clarity. How should resource sharing issues to be explicitly addressed; if bait fish are targeted by commercial fishers will that impact on the game fishing recreational potential; how is the Commonwealth going to step up to the resource sharing mark, particularly when fish stocks are subject to international agreements and when Commonwealth fisheries interact with state fisheries that favour recreational take, how are the intersecting issues best resolved?

Some recreational issues might also be best left to broad policy direction rather than prescribed in legislation. For example, it is appropriate to require AFMA to examine, where applicable, resource sharing arrangements (or other impacts) and to tease out the issues, drawing on public consultations, science, economic and other analysis and to come to a landing. However, it is equally valid should a minister decide that he/she would like to land in favour of recreational interests (or vice versa). Such matters can be informed by analysis and consultative processes. However, the end decision may be more value-laden than a matter on which a fisheries management agency necessarily should have the final say.

Aquaculture

At the moment there is no legal means under the fisheries Acts to comprehensively recognise/manage aquaculture in Commonwealth waters. This hasn't been a problem to date as there is virtually no aquaculture in Commonwealth waters, although some fishers apparently have aspirations to develop leases, including in anticipation of climate change.

The Review has been told that for a lease to be taken up if would have to be approved under Commonwealth fisheries legislation to fit, in effect, as currently drafted a "wild catch" model. The current legislative framework does not suit the authorisation or oversight of aquaculture.

Aquaculture is regulated currently by state fisheries managers. To the extent that the Commonwealth is involved it is through the EPBC Act.

The Review considers Commonwealth fisheries legislation should be amended, as necessary, to facilitate aquaculture in Commonwealth waters. Although it is not a pressing issue it could become so in the future and legislative and regulatory clarity is needed now to enable future investment decisions.

The Review has spoken to major aquaculture industry stakeholders and state government fisheries departments. It is of the view – shared by all spoken to – that it would be sensible if aquaculture is to develop in Commonwealth waters that it be regulated by the states (subject to any EPBC Act requirements). The states have the experience and the expertise; it would be a mistake to carve out a regulatory niche for the Commonwealth in this area as that would work to compound the split jurisdiction problems that arise in other commercial fisheries. Amendments to the Commonwealth fisheries legislation should be of a level to enable state management (with appropriate reporting if judged necessary by the Commonwealth).

Compliance and Enforcement

A number of commercial fishers feel there should be greater emphasis on and capacity for AFMA to pursue civil (as well as criminal) remedies, with scope to impose substantial fines, for transgressions. This makes sense and the Review will propose a gradation of fines (including for any breaches by Australian fisheries in international waters subject to regional fisheries management organisation arrangements). Indeed, many Commonwealth fishers said they would welcome substantial fines for breaches as they have no tolerance for behaviour that doesn't uphold the regulatory framework, because it brings the probity of the industry as a whole into question.

An issue the Review has addressed is whether in the compliance and enforcement armoury there is a place for licence cancellation provisions. It is of the view that there should be; however, such provisions are currently too open-ended or not fit for purpose. For example, arguably it is not reasonable for AFMA to be able to cancel a licence (or suspend it) because a fisher has not paid fees. It would be better in such circumstances to impose a fine, at least in the first instance.

The Review, following, further consultation, will propose that licence cancellation be only available in egregious circumstances to be specified in legislation to help clarify the situation.

Co-management

The Review's reading of the literature, and in discussions over the course of the Review, has yielded that there are considerable benefits from co-management. The rather uncertain question is: what does this concept really mean and how can it be put into practice?

The Review envisages co-management could have some or all of the following features:

- Solid statutory fishing rights which are tradable, creating an incentive for holders of those rights to fish responsibly to ensure the sustainability of the fishery.
- Fisheries policy and management decisions being developed through a transparent consultative process where fisheries decisions draw on the industry's expertise (and that of other participants).
- Where the industry itself develops and enforces codes of conduct to give effect to all regulated management requirements, if not to an even higher standard, on a voluntary basis.

- Where fisheries' regulatory requirements are risk-based, recognise good performance, and impose lower imposts on fisheries that have a demonstrated track record of good behaviour and reporting against agreed key performance indicators.

- Where fisheries are accredited, say, by the Marine Stewardship Council (and that is judged to be sufficiently robust), that should be one factor taken into account in fisheries management decisions.

Now clearly many of these features are apparent in current arrangements. It is questionable to what extent they translate in a substantive way into the management of individual fisheries. To what extent should AFMA loosen the reins where there is good performance, yet hold other fisheries to a tighter rein? This is an area for judgement, and needs clear defensible frameworks – otherwise it would be an area ripe for litigation. Each fishery would need to be examined on its own merits. However, this should be against a clearly articulated and publicly tabled framework.

It would make considerable sense to encourage sensible co-management. In doing so, it would not be the objective of co-management to lower fisheries and environmental standards but to improve them, hopefully at a lower cost to industry.

SUMMING UP

The Review has so far identified several threads which, if brought together, it believes would strengthen fisheries management and reinforce environmental objectives. The key elements would be:

- The fisheries and environmental ministers giving direction to AFMA covering how it should manage fisheries cognisant of HSP, by-catch and discard and ecosystem management (having regard to a suitable specific precautionary approach).

- The fisheries Acts changing to reflect a more neutral treatment of the above factors, with a requirement that trade-offs be identified and the commercial and environmental issues drawn out.

- That fisheries management plans be expanded to include strategic assessments of the fisheries and thus are able to serve, surely as the fisheries legislation intended, as an informative basis for public input and ministerial approval.

- That the powers of the fisheries minister vis-a-vis fisheries management plan approval be widened (subject to a "two strike" rule and parliamentary reporting) following seeking independent expert advice.

- That the revised fisheries framework (as summarised above) be accredited under the EPBC Act, but with key performance and audit requirements to ensure that there is no slippage in fisheries management on environmental standards.

As is apparent, the Review will also make a range of proposals on the OCS; compliance and enforcement; recreational fishing; co-management; research and industry levies; and aquaculture.

The changed directions proposed should be viewed as a sensible evolution of an essentially sound system with continuing regard to the challenges of ensuring secure commercial and recreational fishing, while satisfying environmental objectives. This will require the application of good scientific and economic analysis, seeking public input and ensuring that fishers and regulators are held publicly accountable.

Attachment 1

Review of *Fisheries Management Act 1991* and *Fisheries Administration Act 1991*

Terms of Reference

The relevant legislation for fisheries management in Australia today is the *Commonwealth Fisheries Management Act 1991* and *Fisheries Administration Act 1991*. The precautionary principle is an objective of the *Fisheries Management Act 1991*.

However, the ability of the Minister for Fisheries to enact the precautionary principle is limited due to gaps in scientific knowledge, limits on the scope of the precautionary principle considerations, limits on how quotas are determined, limits on the considerations that apply in quota management, cross-agency considerations such as the relationship with the Department of Sustainability, Environment, Water, Population and Communities, and interactions with other legislation such as the *Environment Protection and Biodiversity Conservation Amendment Act 1999*.

It is therefore considered that the advice from the lead agency, the Australian Fisheries Management Authority to the Minister for Fisheries is limited in delivering on the expectations sought from the precautionary principle objective of the *Fisheries Management Act 1991*. As a consequence, the powers of the Minister to make decisions based on the precautionary principle are therefore equally limited in their scope, and the community is exposed to a less than sustainable model of fisheries management.

In light of new challenges within Australian fisheries management, the full objectives of the precautionary principle are now sought.

The review of the *Fisheries Management Act 1991* and *Fisheries Administration Act 1991* will;

- Recommend changes to the Acts that clearly establish the *Fisheries Management Act 1991* as the lead document in fisheries management, and that all aspects of environmental, economic, and social consideration, and the relevant planning processes required be incorporated into the Acts, in a co-ordinated way.
- Recommend any necessary changes to the Acts that affirm the powers of a Minister to take advice, and make decisions, with the full scope of the precautionary principle available within the *Fisheries Management Act 1991*, and that same definition of the precautionary principle apply in both the *Fisheries Management Act 1991* and the Environment Protection and Biodiversity Conservation Amendment 1999.
- Consider the need for modernising Commonwealth fisheries resource management legislation and approaches including penalty provisions, licence cancellations, the use of modern technology and co-management. Consideration of cost recovery arrangements will include consideration of the degree to which cost recovery might impact on the management of fisheries including investment in research and stock assessment.

This review starts immediately and will be completed within the next three months. Once completed, and once passage of the *Fisheries Management (Amendment) Act 2012* occurs, changes to the *Environment Protection and Biodiversity Conservation Amendment* that provide environmental discretionary powers to the Minister will be revoked, with any new *Environment Protection and Biodiversity Conservation Amendment* 1999 to only be made to make clear the relationship between the *Fisheries Management Act 1991* and the *Environment Protection and Conservation Amendment Act 1999* itself.

Attachment 2

SUBMISSIONS TO THE REVIEW

The Review has received substantive submissions from the following individuals and entities.

- Anonymous (name not for release)
- ANTONYSEN, Keith
- Austral Fisheries Pty. Ltd. & WWF
- Australian Fisheries Management Authority
- Australian Fishing Trade Association
- Australian Longline Pty. Ltd. & Petuna Sealord Deepwater Fishing Pty. Ltd.
- Australian National Sportfishing Association Ltd.
- Australian Network of Environmental Defender's Offices Inc.
- Australian Prawn Farmers Association
- Australian Southern Bluefin Tuna Industry Association
- Campbell, Vaughan
- Clark, Melissa
- Coles Supermarket Limited
- Commonwealth Scientific and Industrial Research Organisation
- Conservation Council SA
- Commonwealth Fisheries Association
- Cross, Sherrie
- Department Primary Industries and Regions SA
- Evans, John
- Fishermen Direct Pty. Ltd.
- Fremantle Tuna
- Gamefishing Association of Australia Inc.
- Gullet, Warwick, Dean of Law, University of Wollongong, (Australian National Centre for Ocean Resources and Security)

- Haward, Marcus, Associate Professor, Ocean and Antarctic Governance Program, Institute for Marine and Antarctic Studies, University of Tasmania
- Hill, John
- Inga and James (last names not for release)
- Jones, Alice, Sinerji Organic
- Meegan-Turner, Anne Marie
- Meeuwig, Jessica, Professor, Oceans Institute, University of Western Australia
- Merriman, Jeanne
- Miller, Haydn
- Minister for Tourism, Industry and Development, Norfolk Island
- Moodie, Susan
- Nautilus Fishing Pty. Ltd.
- Neville, Jonathan
- New South Wales Department of Primary Industries
- NTSCORP
- Olsen, Karin
- Pike, Graham, Member SPF RAG; co-founder Recfish Australia
- Recreational Fishing Alliance of NSW
- Ross, Estelle
- Schnierer, Stephan, Associate Professor, Southern Cross University
- Seafood Services Australia
- Southern Shark Alliance Inc.
- Stanfield, John
- Sustainable Shark Fishing Incorporated
- TARFish
- Tasmanian Scallop Fishermen's Association
- Tonkin, David
- Wadsley, Penny

- Wienecke, Barbara
- WWF, TRAFFIC, Australian Marine Conservation Society, Human Society International
- Young, Margaret, Associate Professor, Melbourne Law School, University of Melbourne

Attachment 3

CONSULTATIONS

The Review has consulted (met or teleconferenced) with the following individuals or entities in the course of the process to date.

- Austral Fisheries
- Australian Bureau of Agricultural and Resource Economics and Sciences
- Australian Fisheries Management Authority (CEO and Commissioners)
- Australian Government Department of Agriculture, Fisheries and Forestry
- Australian Government Department of Sustainability, Environment, Water, Population and Communities
- Australian Institute of Marine Science
- Australian Longline Pty Ltd
- Australian Marine Conservation Society
- Australian National Centre for Ocean Resources and Security
- Australian Recreational Fishing Foundation
- Colbeck, Richard, Coalition Senator and spokesperson on fisheries
- Commonwealth Fisheries Association / National Seafood Industry Alliance
- Commonwealth Scientific and Industrial Research Organisation – Sustainable Ocean Ecosystems and Living Resources
- Conservation Council SA
- Conservation Council WA
- Department of Agriculture, Fisheries and Forestry (Qld)
- Department of Fisheries (Western Australia)
- Department of Primary Industries (New South Wales)
- Department of Primary Industries (Victoria)
- Department of Primary Industries and Fisheries (NT)
- Department of Primary Industries, Parks, Water and the Environment (Tasmania)
- Department of Primary Industries and Regions SA

- Environment Tasmania
- Fisheries Research & Development Corporation
- Gorrie, Geoff, former deputy secretary of DAFF and Chairman Seafood Access Forum
- Greenpeace
- Humane Society International
- Hurry, Glenn, former CEO AFMA and Executive Director Western and Central Pacific Fisheries Commission
- Institute for Marine and Antarctic Studies (University of Tasmania)
- OnlyOnePlanet
- PEW Charitable Trusts
- Recreational Fishing Roundtable
- Richey Fishing Co
- Poiner, Ian, former CEO Australian Institute Marine Science
- Seafish Tasmania
- South Australian Research and Development Institute
- South East Trawl Fishing Association
- Sydney Fish Markets
- Tasmanian Association for Recreational Fishing (TARfish)
- Tasmanian Game Fishing Association
- Tasmanian Seafood Industry Council
- TRAFFIC
- Tuna Boat Owners Association
- Western Australian Fishing Industry Council
- Wilkie, Andrew, Independent Member for Denison
- WWF–Australia

Appendix 8

Submissions received

- Anonymous (name not for release)
- ANTONYSEN, Keith
- Austral Fisheries Pty. Ltd. & WWF
- Australian Fisheries Management Authority
- Australian Fishing Trade Association
- Australian Longline Pty. Ltd. & Petuna Sealord Deepwater Fishing Pty. Ltd.
- Australian National Sportfishing Association Ltd.
- Australian Network of Environmental Defender's Offices Inc.
- Australian Prawn Farmers Association
- Australian Southern Bluefin Tuna Industry Association
- Campbell, Vaughan
- Clark, Melissa
- Coles Supermarket Limited
- Commonwealth Scientific and Industrial Research Organisation
- Conservation Council SA
- Commonwealth Fisheries Association
- Cross, Sherrie
- Department Primary Industries and Regions SA
- Evans, John
- Fishermen Direct Pty. Ltd.
- Fremantle Tuna
- Gamefishing Association of Australia Inc.
- Gullet, Warwick, Dean of Law, University of Wollongong, (Australian National Centre for Ocean Resources and Security)
- Haward, Marcus, Associate Professor, Ocean and Antarctic Governance Program, Institute for Marine and Antarctic Studies, University of Tasmania
- Hill, John
- Inga and James (last names not for release)
- Jones, Alice, Sinerji Organic
- Meegan-Turner, Anne Marie
- Meeuwig, Jessica, Professor, Oceans Institute, University of Western Australia
- Merriman, Jeanne
- Miller, Haydn
- Minister for Tourism, Industry and Development, Norfolk Island
- Moodie, Susan
- Nautilus Fishing Pty. Ltd.
- Neville, Jonathan
- New South Wales Department of Primary Industries
- NTSCORP
- Olsen, Karin
- Pike, Graham, Member SPF RAG; co-founder Recfish Australia
- Recreational Fishing Alliance of NSW
- Ross, Estelle

- Schnierer, Stephan, Associate Professor, Southern Cross University
- Seafood Services Australia
- Southern Shark Alliance Inc.
- Stanfield, John
- Sustainable Shark Fishing Incorporated
- TARFish
- Tasmanian Scallop Fishermen's Association
- Tonkin, David
- Wadsley, Penny
- Wienecke, Barbara
- WWF, TRAFFIC, Australian Marine Conservation Society, Human Society International
- Young, Margaret, Associate Professor, Melbourne Law School, University of Melbourne

In addition to the submissions made by the entities listed above, the review received over 2000 pieces of correspondence from individuals containing the same or very similar content. This correspondence has not been included in the list of submissions below but has been logged as part of the review process.

Appendix 9

Stakeholder consultations

Adelaide

Australian Southern Bluefin Tuna Industry Association

Department of Primary Industries and Resources, South Australia

South Australian Research and Development Institute

Brisbane

Department of Agriculture, Fisheries and Forestry (Qld)

Department of Primary Industries and Fisheries (NT)

Dr Ian Poiner, former Chief Executive Officer – Australian Institute of Marine Science

Canberra

Australian Bureau of Agricultural and Resource Economics and Sciences

Australian Fisheries Management Authority (AFMA)

Australian Government Department of Agriculture, Fisheries and Forestry (DAFF)

Australian Government Department of Sustainability, Environment, Water, Population and Communities

Australian National Centre for Ocean Resources and Security

Australian Recreational Fishing Foundation

Commonwealth Fisheries Association / National Seafood Industry Alliance

Department of Primary Industries (NSW)

Fisheries Research & Development Corporation

Mr Geoff Gorrie, former Deputy Secretary – DAFF

Associate Professor Glenn Hurry, former Chief Executive Officer – AFMA and now Executive Director – Western and Central Pacific Fisheries Commission

Seafood Access Forum

OnlyOnePlanet

South East Trawl Fishing Industry Association

Southern Shark Industry Alliance

Sydney Fish Markets

Western and Central Pacific Fisheries Commission

Fremantle

Austral Fisheries

Western Australian Fishing Industry Council

Hobart

Austral Fisheries

Commonwealth Fisheries Association

Commonwealth Scientific and Industrial Research Organisation

Department of Primary Industries, Parks, Water and the Environment (Tasmania)

Institute for Marine and Antarctic Studies (University of Tasmania)

Recreational Fishing Roundtable

Dr Keith Sainsbury, former AFMA Commissioner and now Vice Chair – Marine Stewardship Council

Seafish Tasmania

Tasmanian Association for Recreational Fishing (TARfish)

Tasmanian Game Fishing Association

Tasmanian Seafood Industry Council

Tuna Club of Tasmania

Launceston

Australian Longline Pty Ltd

Richey Fishing Co

Melbourne

Australian Marine Conservation Society

Conservation Council SA

Conservation Council WA

Department of Primary Industries (Victoria)

PEW Charitable Trusts

Perth

Austral Fisheries

Department of Fisheries (Western Australia)

Sydney

Environment Tasmania

Greenpeace

Humane Society International

TRAFFIC

WWF-Australia

Mr Borthwick met briefly with Mr Colin Neave AO, the Commonwealth Ombudsman, at Mr Neave's request.

Mr Borthwick met with Andrew Wilkie MP, Independent Member for Denison, at Mr Wilkie's request. In the interest of balance, Mr Borthwick met with Senator the Hon. Richard Colbeck, Coalition spokesperson on fisheries and offered to meet with Senator Rachel Siewert, Greens spokesperson on fisheries.

Appendix 10

Glossary[220]

Aquaculture	Commercial growing of marine or freshwater animals and aquatic plants. Often called 'fish farming'.
By-product	Any part of the catch that is kept or sold by the fisher but is not the target species.
Commonwealth Harvest Strategy Policy and Guidelines (HSP)	Document outlining how the total allowable catch in a Commonwealth fishery will be adjusted from year-to-year depending on the status of the stock, the economic or social conditions of the fishery, conditions of other interdependent stocks, and uncertainty of biological knowledge.
Commonwealth Policy on Fisheries Bycatch	Document outlining the policy applying to Commonwealth managed fisheries concerning species that are: (a) incidentally taken in a fishery and returned to the sea (discarded); or (b) incidentally affected by interacting with fishing equipment in the fishery, but not taken.
***Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act)**	The Commonwealth Act that provides the legal framework for protecting the environment, including matters of national significance such as World Heritage sites, national heritage places, wetlands of international importance (Ramsar wetlands), nationally threatened species and ecological communities, migratory species, Commonwealth marine areas and nuclear actions. Parts 10, 13 and 13A relate specifically to aspects of fisheries.
Exclusive Economic Zone (EEZ)	The area that extends from the limit of the territorial sea, which is 12 nautical miles offshore from the territorial sea baseline, to a maximum of 200 nautical miles, measured from the territorial sea baseline. The EEZ may be less than 200 nautical miles if it overlaps with an area of sea within 200 nm of another country's territorial sea baseline. Australia has sovereign rights and responsibilities over the water column and the seabed, including the exploration and exploitation of natural resources.
***Fisheries Management Act 1991* (FMA)**	The Commonwealth Act that provides the legal framework for the majority of fisheries managed by the Australian Government. The Act sets out, among several things, fisheries management objectives and arrangements for regulating, permitting, and taking enforcement action with respect to, fishing operations.
***Fisheries Administration Act 1991* (FAA)**	The Commonwealth Act that establishes the Australian Fisheries Management Authority (AFMA) and its Commission.
Fishing concessions	A collective term including statutory fishing rights, fishing permits and foreign fishing licences.
Gross value of production (GVP)	A value found by multiplying the volume of catch by the landed price per unit. In the case of a multispecies fishery, the fishery's GVP is the sum of the GVP of each species. GVP is not a good

[220] The definition of many of the terms in this glossary derive from the ABARES *Fisheries Status Reports*

	indicator of economic performance because it does not consider costs.
High grading	A type of discarding motivated by an output control system. Depending on the costs of fishing and price differences between large and small fish of the same species, fishers may have an incentive to discard small, damaged or relatively low-value catch so that it does not count against their quota. They then hope to fill the quota with a higher value fish in the future.
High seas	Waters beyond national jurisdictions.
Individual transferable quota (ITQ)	Management tool by which portions of the total available catch quota are allocated to fishers (individuals or companies). The fishers have long-term rights over the quota but can trade quota with others.
Joint Authority	An arrangement whereby a fishery is managed jointly by the Australian Government and one or more states or territories under the laws of a single (Commonwealth, or state or territory) jurisdiction.
Management Advisory Committee (MAC)	A committee established by AFMA under s 56 *Fisheries Administration Act 1991* to assist it in the performance of its functions and the exercise of its powers in relation to a fishery.
Offshore Constitutional Settlements (OCS)	A political agreement between the Commonwealth and the States for the settlement of contentious and complex offshore constitutional issues. In relation to fisheries, in the fisheries context, the OCS was based on the premise that States exercise fisheries jurisdiction out to the 3 nm limit and the Commonwealth exercises fisheries jurisdiction in waters from 3 nm to the outer edge of the EEZ. However, the OCS provided for arrangements to be entered into to allow fisheries which did not respect these jurisdictional boundaries to be managed under the laws of one jurisdiction, either by the Commonwealth, by the States or by a Joint Authority.
Plans of management/ fisheries management plans	Plans, as described in s 17 *Fisheries Management Act 1991,* determined by AFMA and accepted by the Commonwealth fisheries Minister.
Resource Assessment Group (RAG)	A group formed by AFMA to provide advice to MACs and/or the AFMA Commission, as required, on the status and issues relating to a Commonwealth managed fishery.
Statutory fishing rights (SFRs),	Rights to participate in a limited-entry fishery. An SFR can take many forms, including the right to access a particular fishery or area of a fishery, the right to take a particular quantity of a particular type of fish, or the right to use a particular type or quantity of fishing equipment.

Strategic Assessments[221]	Strategic assessments are required for all Commonwealth and Torres Strait Fisheries under the EPBC Act. The strategic assessment process must be undertaken before AFMA can determine a plan of management for a fishery. All assessments are conducted against the Guidelines for the Ecologically Sustainable Management of Fisheries.
Territorial limits	The extent of Australia's maritime jurisdiction.
Total allowable catch (TAC)	For a fishery, a catch limit set as an output control on fishing. Where resource sharing arrangements are in place between commercial and recreational fishers, the term total allowable commercial catch (TACC) will apply. The term 'global' is applied to TACs that cover fishing mortality from all fleets, including Commonwealth, states and territories.

[221] AFMA, http://www.afma.gov.au/managing-our-fisheries/environment-and-sustainability/strategic-assessment/