



UNIVERSITY
OF WOLLONGONG
AUSTRALIA

University of Wollongong Research Online

Faculty of Law, Humanities and the Arts - Papers

Faculty of Law, Humanities and the Arts

2014

Fisheries

Quentin A. Hanich

University of Wollongong, hanich@uow.edu.au

Warwick Gullett

University of Wollongong, wgullett@uow.edu.au

Duncan Leadbitter

University of Wollongong, dleadbit@uow.edu.au

Alistair McIlgorm

University of Wollongong, amcilgor@uow.edu.au

Glenn J. Sant

University of Wollongong, gsant@uow.edu.au

Publication Details

Q. A. Hanich, W. Gullett, D. Leadbitter, A. McIlgorm and G. J. Sant, 'Fisheries' in D. B. Lindenmayer, S. Dovers and S. Morton(ed), *Ten Commitments Revisited: Securing Australia's Future Environment* (2014) 139-146.

Research Online is the open access institutional repository for the University of Wollongong. For further information contact the UOW Library:
research-pubs@uow.edu.au

Fisheries

Abstract

Fisheries management is inherently difficult, and often 'wicked'. 'Wicked' problems are difficult to define because they are intermeshed with other complicated and larger problems and include multiple factors that are hard to quantify (Jentoft and Chuenpagdee 2009). Such problems have no clear single solution and require the engagement of stakeholders in an ongoing, cyclical and consultative manner.

Keywords

fisheries

Disciplines

Arts and Humanities | Law

Publication Details

Q. A. Hanich, W. Gullett, D. Leadbitter, A. McIlgorm and G. J. Sant, 'Fisheries' in D. B. Lindenmayer, S. Dovers and S. Morton (ed), *Ten Commitments Revisited: Securing Australia's Future Environment* (2014) 139-146.

Fisheries

Quentin Hanich, Warwick Gullett, Duncan Leadbitter,
Alistair McIlgorm and Glenn Sant

1. Review and refine objectives for Australian fisheries management.
2. Review history of strategic assessments and improve alignment between environment and fisheries legislation.
3. Address impediments to rebuilding fish stocks in managed fisheries.
4. Strengthen transparency and consistency of reporting and public accountability.
5. Implement new regulations for international imports to meet Australian standards for environmental and compliance requirements.
6. Strengthen international leadership and whole-of-government coordination.
7. Clarify and strengthen Indigenous fishing rights.
8. Analyse looming demographic changes in the fishing industry and identify potential opportunities and challenges.
9. Improve communication and education on role and objectives of marine protected areas and community ownership of marine resources.
10. Review cost recovery and management service delivery options.

Introduction

Fisheries management is inherently difficult, and often ‘wicked’. ‘Wicked’ problems are difficult to define because they are intermeshed with other complicated and larger problems and include multiple factors that are hard to quantify (Jentoft and Chuenpagdee 2009). Such problems have no clear single solution and require the engagement of stakeholders in an ongoing, cyclical and consultative manner. Australian fisheries managers must take into account scientific uncertainty and declining productivity, coastal communities and seafood corporations, industrial activities and conservation values – and implement decisions across state and federal jurisdictions, which affect fish that pay no heed to jurisdictional boundaries. This is no simple task for any government – small or large. Few countries in the world, if any, have managed to successfully implement all the critical elements necessary to manage and develop complicated multi-stakeholder fisheries in a manner that is sustainable and maximises benefits to the broader community. Poor fishing practices and overfishing costs the world up to A\$50 billion in lost economic benefits every year, with 30% of the world’s fisheries now over-exploited (Arnason *et al.* 2009).

In this context, Australia is often cited as a world leader in fisheries management and, for a while, Australia played an important role in the development of global and regional fisheries institutions and conservation initiatives. Australia has developed fisheries management regimes that seek to maintain and prioritise economic and sustainability objectives through harvest strategy policies. In addition, Australian regulations require the sustainability of seafood exports to be assessed before the granting of export approval, involving over 100 different managed fisheries nationally.

However, recent controversies regarding the licensing of a foreign super trawler, questionable reporting standards and conflicting views among stakeholders on the establishment of marine protected areas, have demonstrated that significant concerns still exist about how Australia manages its maritime estate, balances sometimes conflicting objectives and addresses international challenges. Although the latest stock status assessments by the Australian Government are reportedly improving (Flood *et al.* 2012), fisheries agencies still face a considerable challenge in promoting stock recovery and rebuilding affected stocks and marine environments. In this context, federal and state governments must strengthen domestic and international leadership, increase transparency and develop sound frameworks to meet community expectations.

Key issues

1. Review and refine objectives for Australian fisheries management

Australia needs to review and refine its objectives for fisheries management, particularly in regard to how these objectives interact. The guidance from Rio 2012 on the Sustainable Development Goals reinforces the need to consider the three main objectives or needs (economic, social and environment) for achieving sustainable development, and key to that success is the overall conservation and sustainable use of resources (such as fisheries) for present and future generations. The Commonwealth (federal) *Fisheries Management Act 1991* reflects this through the objectives of the Act that must be ‘pursued’ by the Australian Fisheries Management Authority (AFMA). They can be summarised as efficient and cost-effective management, application of the principles of ecologically sustainable development (ESD), including exercising the precautionary principle, maximising net economic returns to the Australian community (the economic objective), accountability to the fishing industry and Australian community and, finally, cost recovery.

What is not considered is the level of primacy of one objective over another in decision making, if the conservation and sustainable use of fisheries for the future is the overall objective. In 2003, the Australian Government noted the objectives ‘may be given an additional emphasis, if such a focus will ensure the long-term ecological sustainability of Commonwealth fisheries resources.’ This clearly refers to the need to have emphasis on the ESD objective. It follows that it would be inappropriate to pursue other objectives if advancement of ESD has not been achieved. However, it is not clear whether this would be the way in which a court would interpret AFMA’s legislative objectives.

2. Review history of strategic assessments and improve alignment between environment and fisheries legislation

In 1998, through the release of Australia’s Oceans Policy (Environment Australia 1998), the Australian Government committed to providing enhanced environmental scrutiny of fisheries management arrangements. This resulted in the federal Department of Environment’s role expanding into the fisheries arena so that it could provide independent ‘strategic

assessment’ and accreditation of the management arrangements adopted by AFMA for all Commonwealth fisheries and by the state and territory fisheries departments for their export fisheries. The ‘bite’ in the process is the potential for the denial of export approval for products from a fishery that is not being managed in an ‘ecologically sustainable way’. Export of product is a vital part of many fisheries and thus denial of export approval could easily result in the closure of a fishery, and loss of jobs. Although fisheries management arrangements are assessed under environmental legislation (under purely environmental objectives), they are developed under fisheries legislation (which are geared to ensuring sustainable fishing, including maintaining a viable Australian commercial fishing industry). Inconsistencies could arise between the different institutions that implement these different pieces of legislation. Although the Australian Government has not denied export approval for any assessed fishery – including the southern bluefin tuna fishery, which targets one of Australia’s most vulnerable commercial fish species – the assessment process can result in the imposition of rigorous conditions to maintain export approval. With the completion of assessments for over 100 fisheries, and reaccreditation processes underway, it is now timely for a comprehensive review of the strategic assessment process, with a view to ensuring consistency between the environmental and fisheries institutions, and their legislation.

Fisheries legislation also needs to be updated to provide a modern and more user-friendly version of the precautionary principle. This important environmental principle features prominently, but awkwardly, in federal fisheries legislation, but it is all but absent from state fisheries legislation. The 2012 political decision to prevent the ‘super trawler’ FV *Abel Tasman* – the world’s second-largest fishing vessel – from operating in the Small Pelagic Fishery, under the authority of hastily amended environmental legislation, revealed shortcomings in both the environmental and fisheries legislation and the need for clearer articulation of the principle in both Acts. The recent federal review of fisheries legislation, which was aimed at enhancing the ability to use ‘the full objectives of the precautionary principle’, has missed the opportunity to do so by not recommending any revision to the manner in which the principle is expressed in legislation.

3. Address impediments to rebuilding fish stocks in managed fisheries

Australia has made significant steps in developing fisheries harvest strategy policies across Commonwealth fisheries, enhancing consistency and clarification of fishery objectives. Australian Commonwealth fisheries are unique in setting the maximum economic yield level of stock as their economic objective, while restricting catch levels through the use of output controls and statutory fishing rights, such as individual transferable quotas (ITQs).

These fishing rights were intended to usher in a sense of ownership among fishers and lead to joint action between quota holders in developing strategies for long-term stock recovery. However, this has only partially eventuated because quotas are often seen as regulatory and their implementation has not been coupled with other necessary changes in fishery governance that would enable quota holders to act collectively, such as in investing in the recovery of fish stocks (which could have significant economic, biological and ecological benefits). The existing quota regime suffers from poor quota management system design and a reluctance to set quotas low enough to stimulate quota trading. Poor design of quota trading arrangements are an impediment to industry rationalisation and the development of quota owning groups that are interested in rebuilding stock through alternative incentive-based strategies. Removing these impediments could have significant benefits for rebuilding fish stocks in managed fisheries.

4. Strengthen transparency and consistency of reporting and public accountability

Fish are publicly owned resources and managed by governments in trust for the people, even if rights to harvest have been allocated. In the past 10 to 20 years, there has been greater public interest in the state of fish resources and the state of the marine (and freshwater) environment more widely. Fisheries agencies moved to provide more detailed information on stock status (where known), the interactions of fisheries with the environment and progress on management via special reports and the wider availability of management committee meeting records. However, progress has been patchy, with some agencies providing detailed and regular information on both stocks and fishery interactions (e.g. Western Australian and Australian Governments) while others produced information on an irregular basis and in a limited way (e.g. New South Wales). A similar contrast can be seen with reporting on management progress with the Australian Government having up-to-date management advisory committee (MAC) minutes and catch reporting online, but New South Wales MAC minutes are generally 3–4 years out of date and the most recent landings data are for the period 2006–07. The most recent publicly available report on progress on the Fishery Management Strategies in New South Wales is dated 2004.

Nevertheless, there has been some effort to encourage a coordinated approach to reporting among the fisheries management agencies with the release of a report on the state of key Australian fish stocks (Flood *et al.* 2012). This was a welcome initiative that started addressing issues such as material being out of date and, in some cases, the challenges of ‘straddling stocks’ (i.e. across state boundaries). The report was widely covered in the media because it found that only two species in Australia were overfished. However, the report had a few idiosyncrasies, which created some misleading outcomes. The first related to the reliance on volume and value criteria to define which key species and stocks should be included in the report. Although there is a need to make a judgement call as to what species are covered, it does pave the way for a perverse outcome in that species that become overfished and/or experience declining catches (or closures) may be removed from the public spotlight. The sensitivity of governments to overfishing is further emphasised by the redefinition applied to ‘overfishing’ and ‘overfished’. Species or stocks that are overfished, but in recovery, are labelled as being ‘in transition’, as are those that are being overfished. Finally, species have been labelled ‘sustainable’ on the basis of stock status criteria only, without considering other factors such as fishing impacts. This appears to be inconsistent with various commitments on ecologically sustainable development, the Oceans Policy, and federal and state legislation governing fisheries management.

Lack of transparency and opaque reporting systems do not generate the level of community support required to manage public resources. Instead, they call into question the utility of government/industry ‘sustainability’ standards and, arguably, undermine international claims about best practice and implementing co-management. What is needed is greater unanimity on reporting on the status of public resources, and an open government approach (as is policy in New South Wales at a whole of government level) to shine a light on progress.

5. Implement new regulations for international imports to meet Australian standards for environmental and compliance requirements

Australia is a member of the United Nations Food and Agriculture Organisations (FAO) Committee on Fisheries, and agreed to the most recent version of the FAO Responsible Fish Trade Guidelines in 2009 (FAO 2009). Although not binding, it is implicit in accepting the text for publication that the members agree with its content and will incorporate it in their

policy and regulations for trade in fisheries products into and out of Australia. In commitment 2, we noted how exports from Australia are assessed and need to meet certain requirements before permits for export are granted. This is consistent with the FAO guidelines for the export of Australian harvest fisheries products. However, there is an imbalance in Australia’s trade policy implementation because there is no measure of ‘responsibility’ by Australia for imported products. Australia needs to review imported products against the categories within the guidelines to ensure the products are from sustainable sources and are not derived from illegal, unreported, or unregulated (IUU) fisheries. This currently does not occur and strikes at the heart of national level principles around sustainable development, where one country protects its national resources and fills its demand through importing products from other countries with less protection, therefore undermining the sustainability of resources for the future generations of other countries. The implementation of responsible fish trade is essential for both exported and imported products if all countries are to achieve sustainable fisheries. There have been recent moves by some economic areas to introduce regulations to block the imports of IUU-derived products, such as introduced by the European Union and USA, but they still also have not fully incorporated all the elements of the FAO guidelines. Australia needs to catch up with these global trends and implement import controls that are consistent with its own export controls.

6. Strengthen international leadership and whole-of-government coordination

The Australian Government played an important ‘middle-power’ role in international fisheries throughout much of the 1990s and early 2000s. Australia contributed significantly to the development of regional and global fisheries initiatives that supported cooperative approaches to fisheries management and played a leading global role in combating illegal, unreported and unregulated fishing. The Australian Government hosted important meetings (such as workshops to develop the International Plan of Action to Combat Illegal, Unreported and Unregulated Fishing) and funded important collaborative initiatives (such as the High Seas Taskforce), while Australian officials chaired important international and regional meetings (including the FAO Committee on Fisheries). Given the transboundary nature of many important fish stocks, and the increasingly globalised operations of industrial fishing fleets, these international initiatives were important to the effective conservation and management of Australian fisheries, from the tropics to the Antarctic. However, in recent years, the Australian Government has significantly reduced its international engagement and now provides little strategic input into international fisheries governance. In part, this is due to staffing cuts and reductions in public service funding that have been implemented since the global financial crisis and reduced capacity in this area. This reduced engagement has weakened the development of important regional initiatives and undermined Australian interests in reducing the over-capacity of the global fishing fleet and strengthening conservation and management initiatives. The Australian Government should rebuild its international engagement, and strategically lead and support the development of international and regional initiatives that will reduce over-capacity, strengthen conservation and management, and further develop market and port mechanisms to support sustainable fisheries.

7. Clarify and strengthen Indigenous fishing rights

Indigenous Australians in all coastal jurisdictions maintain their traditional links with the sea, which includes fishing. The Commonwealth *Native Title Act 1993* clarified that the

common law concept of 'native title' includes fishing rights and interests, yet the protection actually afforded by the Act is little more than exemptions from recreational fishing licence requirements for Aboriginal persons who satisfy the difficult test for establishing that they hold native title rights (only New South Wales and Victoria have a general requirement for saltwater recreational fishers to be licenced). In 2010, New South Wales became the latest jurisdiction to amend its fisheries legislation to more explicitly recognise 'Aboriginal cultural fishing'. However, differences remain in the manner in which traditional Aboriginal fishing is recognised and protected in the various jurisdictions. It is recommended that Indigenous fishing rights in state and territory fisheries legislation are reviewed, clarified and strengthened, with a view to limiting evidentiary requirements and supporting culturally important yet environmentally sustainable traditional Aboriginal fishing. Attention should also be devoted to the challenge of delimiting the sea country areas of different Aboriginal groups to better support traditional fishing and reduce conflict.

8. Analyse looming demographic changes in fishing industry and identify potential opportunities and challenges

Historically, Australian jurisdictions have wrestled with the legacy caused by previous governments issuing too many licences, and the consequent challenges to limiting fishing capacity. More attention has been paid to addressing vessel capacity than addressing the level of human capacity to keep it within sustainable levels. However, many of Australia's commercial fishing licence holders are over 55 years of age and are small boat operators in estuarine and coastal fisheries. Fishers comprise an ageing population and many of the 'baby boom' generation are planning to retire in the 2015–2025 period (Dominion Consulting Pty Ltd 2004).

The fisheries capacity implications of this generational change could be significant if the licences of older fishers are taken up by younger, more active fishers. Many of the baby boomer fishers are expecting the sale of their licence to provide capital as their only form of superannuation. Their desire to finally exit fishing is an opportunity to develop some long-term fishery adjustment strategies. The Australian Government should prepare for this looming human demographic change in the fishing industry, and manage this change in a manner that ensures a more sustainable fisheries outcome for future generations, without negatively impacting on existing fisher's superannuation plans.

9. Improve communication and education on role and objectives of marine protected areas and community ownership of marine resources

Australian Governments have a long history of supporting the development of marine protected areas and protecting important marine habitats, with important benefits for fisheries productivity and resilience. The Howard Government implemented important expansions to Australian marine protected areas and set global precedents in marine conservation, with the creation of large-scale marine protected areas. These achievements have since been further developed by subsequent governments through the establishment of the National Representative System of Marine Protected Areas. Australian state governments have also attempted to further expand their marine conservation through the development of marine protected areas in nearshore areas. Unfortunately, despite the scientific support for these initiatives, there has been significant backlash from some vested interests against these developments, with significant controversy further stirred up in the context of political campaigns. This has resulted in significant misrepresentations regarding the scale of the

protected areas and their scientific justifications. The Australian Government should develop communication strategies and community programs to better articulate and promote the benefits of marine conservation for all stakeholders, particularly fishing interests. This is necessary to counter misrepresentations that marine protected areas are locking up community resources, when in fact they are promoting community interests through ensuring high conservation values are protected for the benefit of all in the community.

10. Review cost recovery and management service delivery options

Markets should reflect the true costs of all fishery inputs, consistent with the principles of ESD. During the past decade, Australian Governments have increasingly recovered the costs of fisheries management services from the fishing industry. In that time, however, there has been little development in service efficiency by government, or development of alternative service delivery by parties other than government. The costs of management have restricted the capacity of the fishing industry to adjust and to reach more sustainable fisheries management arrangements, particularly in low value fisheries. In 2005, a Ministerial Directive Direction recommended ITQs as the preferred management regime for Australian fisheries. But, the high fixed cost of separate ITQ administration has created impediments to the achievement of ITQ objectives.

The national efficiency of fisheries management service delivery can be increased, bringing more fisheries under ITQ management, with benefits for sustainable fisheries management. The Australian Government and industry should develop and trial a suite of arrangements for competitive alternative service delivery. For example: could an external entity specialising in ITQ registry services provide core ITQ registry services to different fisheries, even in different Australian jurisdictions; should Australia establish a national quota registry arrangement for ITQs, as in New Zealand; should federal–state jurisdictional issues have to limit fishery management service provision in the 20-year view?

Conclusion

Girt by sea, the Australian marine environment and our diverse commercial, recreational and Indigenous fisheries are a fundamental part of our national identity. Managing these resources successfully and protecting the marine environment depends upon the effective implementation of a complicated web of policy and regulatory tools over one of the world's largest maritime estates. The wicked nature of fisheries management challenges managers to continuously respond, adapt and evolve these policy and regulatory tools. This year (2014) will likely be a critical year for Australian fisheries as federal and state governments respond to legislative and policy reviews and consider how to best meet environmental and socio-economic objectives. In this context, federal and state governments must strengthen domestic and international leadership, increase transparency and continue to develop sound frameworks to meet community expectations.

References

- Arnason R, Kelleher K, Willmann R (2009) *The Sunken Billions: The Economic Justification for Fisheries Reform*. World Bank, Washington DC.
- Dominion Consulting Pty Ltd (2004) An assessment of economic and social issues in the New South Wales Ocean Trawl Fishery Management Strategy. In: *Ocean Trawl Fishery*,

- Environmental Impact Statement, Public Consultation Document: Volume 4, Consultant's Reports.* NSW Department of Primary Industries, Cronulla, NSW.
- Environment Australia (1998) *Australia's Oceans Policy.* Environment Australia, Canberra.
- FAO (2009) Responsible fish trade. *FAO Technical Guidelines for Responsible Fisheries.* No. 11. Food and Agriculture Organization of the United Nations. Rome.
- Flood M, Stobutzki I, Andrews J, Ashby C, Begg G, Fletcher R, *et al.* (2012) *Status of Key Australian Fish Stocks Reports 2012.* Fisheries Research and Development Corporation, Canberra.
- Jentoft S, Chuenpagdee R (2009) Fisheries and coastal governance as a wicked problem. *Marine Policy* 33, 553–560.