



**Australian Government**  
**Productivity Commission**

# Marine Fisheries and Aquaculture

## Productivity Commission Draft Report *Overview & Draft Recommendations*

August 2016

This is a draft report prepared for further public consultation and input. The Commission will finalise its report after these processes have taken place.

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### **The Productivity Commission**

The Productivity Commission is the Australian Government's independent research and advisory body on a range of economic, social and environmental issues affecting the welfare of Australians. Its role, expressed most simply, is to help governments make better policies, in the long term interest of the Australian community.

The Commission's independence is underpinned by an Act of Parliament. Its processes and outputs are open to public scrutiny and are driven by concern for the wellbeing of the community as a whole.

Further information on the Productivity Commission can be obtained from the Commission's website ([www.pc.gov.au](http://www.pc.gov.au)).

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# Opportunity for further comment

You are invited to examine this draft and comment on it by written submission to the Productivity Commission, preferably in electronic format, by **Friday 14 October 2016**, by attending a public hearing or submitting a short comment on the inquiry website (<http://www.pc.gov.au/inquiries/current/fisheries-aquaculture#draft>). Further information on how to provide a submission is included on the inquiry website: <http://www.pc.gov.au/inquiries/current/fisheries-aquaculture/make-submission#lodge>.

The Commission will be holding public hearings in October 2016. Details regarding public hearings will be made available on the Commission's website in due course.

The final report will be prepared after further submissions have been received and public hearings have been held, and will be forwarded to the Australian Government in December 2016.

## Commissioner

For the purposes of this inquiry and draft report, in accordance with section 40 of the *Productivity Commission Act 1998* the powers of the Productivity Commission have been exercised by:

Melinda Cilento

Commissioner

## Disclosure of interests

The *Productivity Commission Act 1998* specifies that where Commissioners have or acquire interests, pecuniary or otherwise, that could conflict with the proper performance of their functions during an inquiry they must disclose the interests.

Ms Melinda Cilento has advised she is the director of a number of public and private companies, none of which participated in any way in this inquiry.

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# Terms of reference

I, Scott Morrison, Treasurer, pursuant to Parts 2 and 3 of the Productivity Commission Act 1998, hereby request that the Productivity Commission undertake an inquiry into the regulatory burden imposed on the Australian marine fisheries and aquaculture sectors.

## **Background**

Commonwealth, State and Territory governments are responsible for the management of Australian fisheries within their respective jurisdictions. Regulations are used to implement controls, such as limits on catch or effort levels, and regulate fishing methods in order to manage Australia's fisheries in a way that meets social and economic considerations and ecological sustainability objectives.

Except where agreement is reached to the contrary, state/territory laws apply to coastal waters (up to three nautical miles) and Commonwealth laws apply from those waters out to the limit of the Australian fishing zone (200 nautical miles). As most recreational and traditional indigenous fishing activity occurs in waters within state/territory jurisdiction, state/territory administrations generally manage these forms of fishing activity.

As a result, Australia's commercial fisheries are governed by a total of eight jurisdictions (the Commonwealth, states and the Northern Territory), with each jurisdiction developing specific regimes for fisheries management, fisheries research, reporting and environmental protection. In addition, there are 59 separate arrangements under the Offshore Constitutional Settlement that determine how cross-jurisdictional stocks are to be managed. There are also four joint fisheries authorities. This regulatory environment oversees an industry that has a gross value of production of \$1.3 billion per annum. It is also an industry that has been the subject of a large number of recent inquiries and reviews at many levels.

While Australia's fisheries are regarded as sustainable, reliable and safe, there is scope to improve the management of fisheries through effective and coordinated regulatory and management arrangements. This includes the streamlining of regulations, rationalising jurisdictional and offshore constitutional settlement arrangements through improved cross jurisdiction and multi-jurisdictional regulatory regimes, information and service sharing, and harmonisation of environmental, management and compliance arrangements.

While aquaculture is within scope, it was the subject of a Productivity Commission research paper in 2004 which examined existing planning and environmental regulatory arrangements. The Commission should use the findings of this research as a basis to

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inform its current inquiry rather than commencing a new investigation into issues impacting the aquaculture sector.

### **Scope of the inquiry**

The inquiry will identify opportunities to increase productivity and cut unnecessary and costly regulation, including where regulations are poorly coordinated between jurisdictions. The inquiry will therefore consider whether there are opportunities to improve fisheries regulations without compromising fishery policy and environmental objectives. Consideration would be given to regulatory simplification, streamlining and consistency of arrangements across multiple jurisdictions, alternative more efficient regulatory models, the practices of the various regulators and removing unnecessary restrictions on competition.

In doing so, the inquiry will consider the value of strengthened relationships and effective and coordinated management of our fish stocks with a view to reducing the regulatory burden incurred by business, and consumers.

In undertaking the inquiry, the Commission is to have particular regard to impediments to increasing productivity and market competitiveness of the Australian fishing and aquaculture industries, including:

1. The extent to which enhanced and improved use of cross jurisdiction and multi-jurisdictional regulatory regimes, information and service sharing can improve the economic efficiency and the ecologically sustainable use and management of fisheries resources.
2. The extent to which harmonisation or integration of environmental, management and compliance arrangements could improve the effective and efficient operation of the fishing industry and delivery of fisheries policy and environmental outcomes.
3. The extent to which accreditation schemes or recognition of equivalency could reduce the regulatory burden and increase productivity.
4. The extent to which greater use of cost recovery arrangements is applicable and informs the cost of delivering fishery production, conservation and other community service obligations.
5. The extent to which fisheries management regimes align with and protect the interests of the wider community (in particular, the balance between commercial, recreational, indigenous fishing and conservation interests, and consumers' interests).
6. The extent to which fisheries management regimes support greater participation of Indigenous Australians, provide incentives to Indigenous communities to manage their fisheries, and incorporate their traditional management practices in the fishing industry.

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7. The degree to which cross jurisdictional regulatory arrangements are transparent, accountable, proportionate, consistent, effective and targeted.
  8. The degree to which cost effective and practical non-regulatory mechanisms could be expanded to achieve fisheries management outcomes.

The primary focus of this review will be on Commonwealth, state and territory regulation of wild capture marine fisheries. This will include the interaction of fisheries specific regulation within Commonwealth and State/Northern Territory jurisdictions. It will also need to have regard to the role of the Environment Protection and Biodiversity Conservation Act (1999) and other fisheries- related environmental legislation that are directly relevant to Australian marine fishing.

### **Process**

The Commission is to undertake an appropriate consultation process including holding hearings, inviting public submissions and releasing a draft report to the public.

The Commission will consider the submissions and reports of all recent relevant inquiries and government responses. The Commission is to take into account the initiatives at the jurisdictional level relevant to the scope of the inquiry.

The final report should be provided within twelve months of the receipt of these Terms of Reference.

Scott Morrison  
Treasurer

[Received 23 December 2015]

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# Acknowledgments

The Commission has used a range of information sources in preparing this draft report. The Commission is grateful for the contributions made by stakeholders through their submissions and comments, and their participation in consultations and public forums.

The Commission has also used research and data from a range of sources to inform recommendations, including the Australian Bureau of Statistics, Australian Bureau of Agricultural and Resource Economics and Sciences and the Fisheries Research Development Corporation.

The Commission thanks relevant agencies for the provision of fisheries and related data including Australian Fisheries Management Authority (AFMA), the Department of Agriculture and Fisheries (Queensland), the Department of Primary Industries (NSW), the Department of Primary Industries, Parks Water and Environment (Tasmania), the Department of Primary Industries and Regions (South Australia), the Department of Fisheries (Western Australia), the Department of Primary Industries and Fisheries (Northern Territory) and the Department of Economic Development, Jobs, Transport and Resources (Victoria).



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# OVERVIEW

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## Key points

- Following past over-fishing, Australian governments have sought to apply policies to reduce catch volumes, and thereby restore and maintain fish stocks. Generally, these have been successful in improving sustainability.
- A developing issue is weak knowledge of the impact of increasingly successful but unmanaged recreational fishing on some high-value fish stocks.
- Current policy settings are sometimes overly prescriptive and outdated. In particular:
  - most commercial fisheries are managed primarily through controls over fishing methods, despite long recognition that this is a relatively inefficient way of meeting catch constraints, and inhibits fishers from introducing more cost effective practices
  - recreational and Indigenous customary fishing activity is at best sporadically monitored and impacts on stock sustainability largely uncounted in fishery management regimes. This is despite the fact that recreational fishing is a popular pastime for millions of Australians, and that recreational catch rivals commercial catch for some species, placing pressure on some key stocks
  - governments differ in the extent to which they have adopted best practice fishery management techniques, which is leading to significant costs for fishers operating in some cross-jurisdictional fisheries, and risks to sustainability of stocks.
- Commercial fisheries should move as a default position to apply transferrable quota systems. This would result in fewer constraints on fishing practice and provide a more efficient and effective means of adhering to harvest limits.
- Recreational fishing needs greater recognition in fisheries management, and decisions on restrictions and facilities for fishers require development of a sound evidence base.
- The introduction of licensing for recreational fishers where not presently used, and the better use of licensing systems to manage fishing where they are used, will provide a means for better meeting the needs of both future generations of fishers and environmental outcomes.
- The value of access to fisheries is multifaceted, incorporating economic, social and cultural benefits. Allocation of access where there is competition for fisheries resources should seek to maximise this value.
- Indigenous customary fishing is given special recognition consistent with native title rights more generally. However, there is limited clarity about what these rights entail for catch limits, which is an outcome of customary fishing being generally exempted from fishery management regimes. There is relatively poor input from Indigenous people into fishery management. Effective incorporation of customary fishing into management systems would help resolve these issues.
- Benefits from dissolving boundaries via active cooperation in the management of critical cross-jurisdictional fish stocks are often recognised but only rarely delivered.
- Other improvements include making regulatory standards for protected species clearer, greater delegation of operational decision making to fishery managers and strengthening cost recovery arrangements.
- Little change in the regulation of aquaculture over the past 10 years has not impeded the sector's growth. The major producing states already had several best practice regulatory features and other states have faced challenges that are predominantly non-regulatory in nature.

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# Overview

## Inquiry context

Fish are a renewable, but not inexhaustible, resource. They are subject to the well-recognised potential for a ‘tragedy of the commons’, where the uncoordinated efforts of individual fishers depletes the resource. Governments must therefore limit catches to sustainably manage resources and, where there is competition between fishers, determine the rules for shared access. Governments also regulate fisheries to maximise their returns to the community, as ‘open access’ policies have historically led to over-expenditure on fishing activities relative to yield.

There are around 165 commercial wild catch fisheries spanning Australia’s Exclusive Economic Zone, which is larger than the land area of Australia, generating around \$1.5 billion in revenue. Millions of Australians fish recreationally. Coastal Indigenous communities have long been users and custodians of Australia’s marine environment, and continue to have strong cultural associations and concerns for the sea and its resources. Australia’s fish resources also provide non-extractive value, such as for the tourism sector, for which viewing native fish and the marine environment are significant drawcards.

The central aim of Australian fishing laws is to strike a balance between exploiting and maintaining the value of fish resources for the benefit of current and future users. The complex and dynamic nature of fish and marine ecosystems, and the multiple and changing uses of marine resources, make the achievement of this goal challenging. Further, each fishery is different (with different species, marine environments and nature of demand) and requires localised management arrangements. Fisheries management is complicated by the fact that, despite its large size, Australia’s fishing area has relatively low biological productivity. Australia accounts for 0.2 per cent (by tonnage) of global commercial production. (However, its production is concentrated in relatively high value species such as rocklobster and abalone and, as a result, accounts for approximately 2 per cent of global product by value.)

There will always be scientific uncertainty about the magnitude of environmental risks, and differing views on the degree to which governments should act to, and effectively can, mitigate these risks. Governments recognise that information that reduces uncertainty and guides improvements in management methods has potentially high payoffs, but such information can be difficult and costly to obtain. Given the large costs of irreversible environmental degradation from overfishing, governments now err on the side of sustainability when making regulatory decisions.

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The regulation of fisheries involves three core tasks: research and/or collection of data to inform management; the development and implementation of controls over activity; and enforcement of those controls. Australian fisheries laws control two main matters: 1) the taking of fish, such as where people can fish, the types of species that can be caught, how much and how; and, 2) who can fish where there is competition for access.

## **Management arrangements – wild catch fisheries**

The Commonwealth, states and the Northern Territory each regulate marine fisheries, with the states and Northern Territory generally responsible for fisheries that lie within three nautical miles from Australia's coastline and the Commonwealth those that lie between three and 200 nautical miles from the coastline.

As recreational and Indigenous customary fishing have traditionally been undertaken close to shore, only the states and Northern Territory presently regulate these forms of fishing. All jurisdictions regulate commercial fishing. In addition, a number of fish stocks spanning jurisdictional borders are subject to intergovernmental management arrangements.

Although there are many similarities in the fisheries laws of each jurisdiction, there are also significant differences, particularly in relation to the management of fishing sectors (commercial, recreational and Indigenous customary). Australia's waters are thus governed by multiple fisheries laws, and fisheries regulations comprise a complex array of interrelated regimes governing commercial, recreational and customary fishing.

Governments are converging towards best practice methods for determining overall catch limits in fisheries. These include the use of quantitative assessments of fish populations, and harvest strategies to define the desirable level of resource use and/or points at which changes in management are required so as to meet policy objectives. Limits may be set with reference to the quantity or weight of fish caught (output controls) and/or fishing methods, for example, fishing gear, boat sizes and days fished (input controls). In Australia, total catch limits are set predominantly for commercial fisheries, reflecting the historical focus of regulators on this sector.

Controls must suit the type of species targeted and be cost-effective given the fishing sectors involved. However, best practise strongly favours the use of output controls as the primary method of regulating aggregate catch, as they directly target the amount of fish caught and impose fewer constraints on methods of catching fish (and so allow for improvements in the efficiency of fishing practices over time).

Where output controls are used, quotas for individual fishers are most commonly determined as a share of allowable catch from the fishery. The setting of quotas as shares allows their automatic adjustment when any changes occur to catch limits. Quotas also have the advantage of minimising incentives to 'race to fish', spreading the catch over the fishing season and raising average utilisation rates of equipment. Tradeable quotas

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facilitate structural adjustment by making it easier for fishers to enter and exit the industry, and increases the value of the industry as more efficient fishers can purchase quotas.

Aggregate output controls are usually complemented by other controls, such as gear restrictions or bycatch exclusion devices, to minimise the impact of fishing on non-target species and the environment.

## **Sector management — a slow drift to reform**

The shift to controlling harvest as the dominant commercial fishery management technique in Australia has occurred gradually over the past 15 or so years. Individual transferable quota systems are presently used in fewer than half of all fisheries; the remainder are still managed through input controls, although reform efforts are continuing. Past input based management techniques, which encouraged over-investment, have proven difficult and costly to unwind.

Recreational fishers are primarily regulated using controls such as allowed gear, and bag and size limits, given their diversity in activity and the large area over which they fish. As recreational fishing has historically been viewed as less consequential than commercial fishing, it is subject to significantly less monitoring.

Indigenous customary fishing is generally either regulated through possession limits and gear restrictions or exempt from fishing laws.

## **How controls are set**

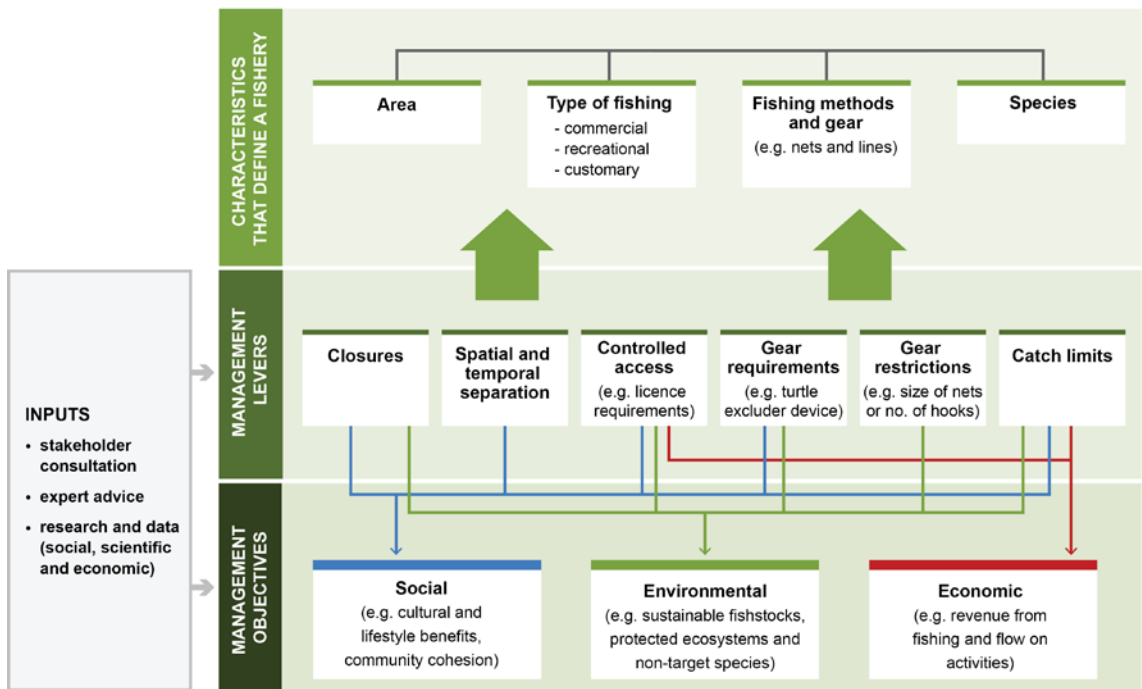
The controls on catch limits and fishing practices needed to meet environmental objectives are largely technical matters determined by scientific and statistical research. Harvest control rules and other requirements to meet fishery policy goals are implemented through management plans for each fishery, which are developed and enforced by fisheries authorities. Typically, harvest controls focus on the sustainability of the target stock, although in Commonwealth fisheries they are also designed to maximise economic returns.

Decisions on who may access fisheries reflect governments' objectives for the use of fishery resources. Objectives vary across the jurisdictions, and may include economic and social, as well as environmental, aims. Where there is competition for the same fishing stock, allocation decisions (where made) reflect government judgements on the value of access to the different fishing sectors and the community. Governments use a broad repertoire of allocation methods, including spatial separation of access, temporary area closures and allocations of catch shares to sectors out of a total allowable catch limit.

In short, there is a range of tools in regulators' and fisheries managers' 'tackle boxes' that can be used to achieve fishery policy goals (figure 1). Governments' principal goals should be to make efficient and effective regulatory decisions on resource use, drawing on

contemporary information about impacts, and recognising that regulatory effort and research should be proportional to the value of fisheries to the community.

Figure 1 Fisheries controls



## Aquaculture

Aquaculture has grown in overall importance as wild-caught production in Australia has declined. Aquaculture is regulated to mitigate the industry’s impact on the environment, provide access to publicly owned land and water, and manage potential conflicts with other users of these resources. Given their jurisdiction over most planning and local environmental matters, states and territories are primarily responsible for the management and regulation of aquaculture.

The primary modes of control (and facilitation) are the grant of leases on public land and waters so as to provide secure tenure to a site and the issuing and administration of various development and operating approvals. These approvals may stipulate conditions such as restrictions on the type of infrastructure that can be employed and requirements to maintain the quality of water to a specified level. Regulations also usually seek to control interactions with other wildlife, such as seals and seabirds.

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## How well are fisheries regulations working?

Reforms aimed at rectifying over-fishing in wild catch fisheries have produced better environmental outcomes and underwritten an economically sustainable industry over the longer run. As one indicator, some 11 per cent of fishing stocks in Australia (for which a status has been determined) have been fished to unsustainably low levels, compared to 29 per cent of the world's fish stocks. In recent years, Australian authorities have sought to standardise and increase the coverage of stock surveys to obtain a more accurate picture of risk and to target regulatory effort.

However, wild catch fisheries in most jurisdictions need to be better managed so as to reduce unnecessary costs and ensure that the community gets maximum value from its resources. Particular concerns include:

- the cost of fisheries regulation and management relative to the value that can be gained from fishing given the likelihood of ongoing catch constraints
- the outlook for the commercial fishing industry, where there are concerns about the slow pace of reform in some jurisdictions and the impact of fisheries regulation on competitiveness, investment and innovation
- relatedly, that the management of some (mostly commercial) fisheries spanning jurisdictional borders is ineffective and inefficient due to multiple and sometimes inconsistent regulatory regimes
- the adequacy of current fisheries management regimes in dealing with community expectations and preferences for the use of fishery resources
  - including concerns about the impact of the recreational sector on fishing stocks, with catch now estimated to rival or exceed commercial catch for a range of key species; in all probability, this will increase in future with population growth and utilisation of new fishing technologies
  - there is longstanding concern that Indigenous customary fishing is insufficiently recognised in states' fishery management regimes, an issue that should be taken out of the too-hard basket
- that decisions on where fishing can occur and by whom are being made in an arbitrary way in several jurisdictions, with significant impacts on current users.

## The Commission's approach

This review identifies reform areas that are of high priority and common interest to jurisdictions, given the need to match regulatory effort to the value that can be gained from Australia's fisheries.

In doing so, it focuses on the frameworks for determining access to fishery resources and managing each fishing sector, given that it is these higher-level policies that will influence day-to-day management and have the most significant bearing on outcomes. It also

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considers the management of cross-jurisdictional fisheries and the efficiency of core fishery management tasks.

## **Access arrangements**

### **Access to fishing grounds**

Governments must make decisions on access to and use of marine resources, balancing the interests of different users.

From a national perspective, fishing laws generally do not seem to unreasonably limit the establishment of new commercial fisheries or recreational fishing grounds. But broader decisions on the use of marine environments can frustrate the establishment of fisheries and/or limit activities in existing fisheries. There are widely-held concerns about the adverse impacts on fishing of coastal developments, marine infrastructure and the declaration of marine park areas.

### **Land and marine developments**

Effluent outflows and runoff associated with coastal developments, and marine infrastructure, such as artificial reefs, can adversely affect fisheries, particularly for commercial fishers. Even small changes in the location of developments can significantly affect the viability of fishing areas or commercial fishers' operating costs.

Notwithstanding this, most states do not require coastal and marine development proposals to consider their impacts on commercial fishing, a defect that should be corrected.

### **Marine park areas**

Marine park areas are established for biodiversity conservation reasons and by intention may affect access to fishing grounds and the types of fishing that can take place, if fishing is permitted at all.

Better practice in some jurisdictions, for example, the Commonwealth and South Australia, incorporates consultation on proposed marine parks and zoning arrangements to better understand and, to the extent practicable, mitigate impacts on fishers, communicates the reasons for decisions, and evaluates outcomes against objectives. Emulating such best practice processes would promote better outcomes. Otherwise, marine parks are outside the scope of this inquiry.



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## Determining limits in fisheries

Harvest strategies set out stock management responses given acceptable levels of risk, and so are central to the adaptive management process that constitutes sound fisheries management. In addition to providing predictability on how fishery stocks will be managed, they guard against ad-hoc decisions on fishery controls. Most commercial fisheries have fishery-specific harvest strategies. All jurisdictions should continue to adopt harvest strategies as the primary tool for managing fishing stocks.

### Harvest strategy policies

There is an important distinction between harvest strategies (particular approaches) and the overarching policy for such strategies, which can help provide coherence to those strategies.

A harvest strategy policy describes how government fishing policy should be incorporated into the harvest strategies for each fishery, including setting out governments' policy priorities, acceptable levels of risk and preferred methodologies for guiding utilisation of fish stocks and changes in management responses. Such policy ensures that harvest strategies across all of a government's fisheries are consistent with desired standards, and reduces the time and the degree of contention involved in setting specific strategies. Thus the existence of a harvest strategy policy makes it more likely that a government's fishing policy goals will be met, and met efficiently, and places greater accountability on fishery managers to follow the policy or justify deviations from it. They also better facilitate review of the overarching goals and outcomes of fishery management.

However, only the Commonwealth, Northern Territory, South Australia and Western Australia have harvest strategy policies. Other jurisdictions should implement them.

The policies of the Commonwealth and Western Australia are more specific than those in South Australia and the Northern Territory in prescribing methods for determining the target level of fish extraction. *The Commission would value feedback on approaches for setting catch limits.*

## Determining allocations between fishers

Fish cannot be fenced, and so different sectors sometimes compete for access to common stocks. Unsurprisingly, the arrangements for allocating access are highly contentious as they can affect livelihoods and social amenity.

The basis for allocation is sometimes opaque, uncertain or of questionable efficiency, which provides fertile grounds for disputes. The stated policy objectives of governments include multiple and sometimes competing goals that often provide limited guidance on how judgements should be made. Where governments have stated their policy aims, it is

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not clear that they have been determined to maximise the value of fishery resources to the community as a whole.

Although South Australia, Western Australia, New South Wales and the Northern Territory have allocation policies, decision-making is not supported by the regular collection of representative information on the demand, catch and value of recreational and Indigenous customary fishing.

There needs to be a clearer and less contested means of allocating access to different fishing sectors. The key guiding principle is to allocate fishing resources to the highest value uses across multiple competing parties.

The ‘value’ obtained from fisheries resources can have different facets and forms. For example, value could be economic (revenue from fishing and flow on activities), social (recreational enjoyment, community cohesion) or cultural. Many of these sources of value are hard to measure.

As most allocation decisions in Australia do not involve a previously unallocated fishery, policy makers have to determine whether a reallocation in favour of one group at the expense of another will increase the overall value gained from the fishery. That requires estimating the marginal or incremental value derived from additional access or lost due to reduced access.

Governments should provide clear guidelines on what they will take into account in allocation decisions, including how they will prioritise policy objectives. Ultimately, there should be a clear gain to the community from any re-allocations of access — for example, the benefits to recreational fishers and local economic activity from transferring some of the allocation from commercial to recreational fishers should exceed the losses to commercial fishers and related activity.

Basing allocation decisions purely on the level of expenditure by fishing groups (as proposed by some) would be poor policy. The low-cost extraction of fish for high value uses would perversely be trumped by higher-cost methods, an aberration in its own right, but one that would also create incentives for cost-padding, and spurious analysis.

## Valuing access to the fishing sectors

The value of marginal access by commercial fishers can be estimated through the costs of producing and purchasing fish, and the price of fish sold in markets. However, there are no equivalent markets for valuing access by recreational and Indigenous customary fishers, which complicates allocation to these groups.

While imperfect, it is nevertheless possible to construct proxies for the value of additional recreational fishing opportunities based on indirect estimates of recreational fishers’

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willingness to pay (for example, as revealed by people's willingness to incur travel costs to go fishing, or as elicited through surveys).

Customary fishing by Indigenous Australians has cultural dimensions that make its value very difficult to quantify. It is much harder to see customary fishing through the prism of the separate preferences of individual fishers. Fishing by one person has communal and cultural values that would not necessarily be well captured by a 'willingness to pay' measure for each individual.

In accordance with the principles agreed by all states and the Northern Territory governments in 2004 for the management of Indigenous fishing, governments should set aside shares in overall allocations sufficient for local Indigenous communities to maintain their traditional customs. This would, in practice, accord priority to customary fishing take. This proposal would apply to a lesser extent in the Northern Territory, where Indigenous Australians have been granted extensive freehold title over intertidal waters.

The level of the allocation should be informed by advice from Indigenous communities and data collected on customary practices and use.

Providing a share of allowable catch sufficient to cover cultural use by the local Indigenous community — reflecting demand and their particular laws and traditions — is unlikely to significantly affect activity by other fishers as customary fishing comprises a small share of the total catch in most fisheries. To the contrary, providing explicit shares of access in managed fisheries will enable better accounting and enforcement of each sector's shares.

Customary fishing, as for other sectors, should be subject to overarching fishery management goals, including the sustainable utilisation of fish stocks. As such, allocations to the customary sector should be binding and not exceed the limits required to meet policy aims. The Commission envisages that distribution of the customary allocation would be a matter for the local Indigenous communities to determine.

Further, controls (such as gear restrictions and minimum fish sizes) may be applied, as for other fishers, as a condition of access to manage the impact of fishing activities on by catch and the broader marine environment.

To ensure that the customary allocation and any controls over customary fishing activities are culturally sensitive and do not infringe on native title rights, it is important they be developed in consultation with Indigenous communities. Further discussion on the participation of Indigenous Australians in fishery management is below.

## Allocation policies

Calculation of the marginal values of access for the commercial and recreational sectors can be complex, but provides a basis and benchmark for objective and soundly-based decision making. Governments should be transparent and consistent in how they approach

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allocation decisions. Ultimately, allocation policies should seek to promote the best use of fishery resources and ensure decisions are evidence-based. Governments should give high priority to collecting better information, particularly for highly-contested fisheries.

Victoria, Tasmania and Queensland should institute resource allocation policies. The Australian Government should also develop a policy, reflecting the increasing reach of recreational fishers into its more distant waters.

### Scope to move to inter-sectoral trading

Pragmatism requires that, for the moment, governments continue to determine allocations between sectors. However, there may be scope to extend existing arrangements for the trading of fishing access rights in the commercial sector to include the recreational sector.

Transferable quota systems set limits on the total amount of allowed catch or effort for a particular fishery within a period, and apportion tradeable entitlements to fish within these limits. Such price-based mechanisms for allocating access across sectors have the advantages of avoiding subjective decisions and allowing access to those who value it most.

The practical inclusion of the recreational sector is a longer-term, but still desirable, goal. In practice, this would require its representative organisations to hold and deal with collective rights. There is already an imperative to improve data collection and valuation techniques, which would help. And the recreational sectors in some states also recognise that they need to better organise given the inadequacy of current arrangements for contested fisheries. Transferable quota systems that include recreational fishers are therefore worth considering in the longer-term, but, given the transaction costs involved, are only suitable for high-value fisheries.

## Improving commercial sector prospects

Output, value and employment in the commercial sector have been trending down for well over a decade. In part, this trend reflects constraints on activity due to past overfishing. The industry is also suffering, however, from outmoded fishery management policies, including the use of input controls (controls over how fishing occurs) as the predominant management technique in the majority of fisheries. The use of input controls has suppressed productivity improvement, encouraged over-investment and discouraged structural adjustment. (Notably, most of the sector comprises small fishing businesses, most commonly operating in low-value fisheries.)

Use of individual transferrable quota (ITQ) systems for the management of commercial fisheries as the default option (or, where this is not technically feasible, market-based input controls — individual transferrable effort (ITE) systems) will help improve productivity in and prospects for the sector, as will the regular review of regulations to ensure that they are

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the minimum required to achieve governments' objectives. Recommendations discussed elsewhere, including the provision of clearer and more certain basis for decisions on access to fisheries, rationalising or streamlining cross jurisdictional fishery management and clarifying environmental standards, will also help reduce regulatory burdens and risks.

## **Market-based controls**

The jurisdictions that are at the forefront of using ITQ systems are generally those that most suffered from over-fishing and/or have a significant number of higher-value fisheries — the Commonwealth, South Australia and Tasmania. Other jurisdictions continue to manage most of their fisheries through input controls, although some are undergoing or have flagged future reform (New South Wales and Queensland). However, all jurisdictions have retained some input-controlled fisheries because of the perceived value (on the part of fishers) attaching to existing entitlements. ITE systems are used at low levels.

Impediments to the greater use of ITQ systems have included concerns about their relatively higher administrative costs. When they are in place, they require more sophisticated monitoring systems. Moreover, they involve transitional costs, including the revision of business models for fishers, because ITQ systems require the imposition of explicit, usually lower, limits on catch and dissolve existing rights to fish in favour of new, tradeable, rights. This may have flow-on impacts on supplier businesses, local employment and communities. However, such impacts are, to an extent, both necessary and unavoidable, with the alternative being continuing decline in sector competitiveness and value. The task of instituting reforms and transitioning to the new system could nevertheless be made easier by improving processes for allocating rights under ITQ systems, as outlined below.

The higher cost of ITQ systems suggests that they are more suited to high value fisheries. But notably the Commonwealth and South Australia are also now using these in fisheries targeting lower-value fish, which suggests cost-effectiveness should be determined on a case by case basis.

ITQ systems can be challenging to implement in fisheries where multiple fish species are targeted and for fish that have highly variable annual recruitment (where the amount of growth in fish biomass bears little relationship to the previous year's fish stocks). But jurisdictions are developing innovative approaches to multi-species fisheries (for example, setting different total allowable catch limits for lower-value fish in a fishery to high-value fish) that improve prospects for application of ITQ-based management.

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## Dealing with latent effort

Reforms have been partially frustrated by the existence of un- or under-utilised entitlements to fish ('latent effort'). These inflate the 'demand' for the fishery and complicate the allocation of new entitlements. Jurisdictions have periodically sought to buy out entitlements to reduce the number of fishers. The prospect of future buyouts is encouraging some people, however, to remain in commercial fishing (or to maintain their rights to commercially fish).

The Commission has been advised that, at a practical level, any restructure of rights without compensation will be unworkable. However, the sector needs to also be realistic about future prospects and the need for reform to enable improved sustainability, productivity and profitability.

In implementing ITQs, governments have most commonly allowed a short period of trading in historical entitlements to enable businesses to exit the industry or adjust their business models. Such market mechanisms tend to be very complex, and require that fishers have high levels of sophistication to participate.

Removing latent effort would simplify the process of allocating new entitlements and increase the likelihood that fishers would receive sufficient entitlements for them to operate viably.

The experience of Australia and overseas suggests that a better future approach would be to separate the process into two steps: 1) the first would be to either rescind all fishing rights or reduce latent effort through a bidding system; and 2) only once the level of entitlements has been reduced (or removed) would fishing businesses be permitted to participate in a market process to trade rights.

## Scope for conditional bidding

Governments implementing reforms that fundamentally alter the nature and mix of entitlements for commercial fishers should consider trading systems that allow some conditional bidding. This would allow fishers to make their offers conditional on a desired outcome — such as the ability to sell all of their entitlements or to purchase a minimum package of rights. Without the ability to make conditional offers, commercial fishers may be unable to purchase enough entitlements to support the viability of their business, or to exit the industry. Either situation risks an increase, or continuation, in latent effort and inefficiency (at least in the short run).

## There should be a presumption in favour of ITQs

Governments should move each of their fisheries to ITQ management unless it is demonstrated that this is technically impractical or not cost effective for the individual fishery. If individual transferable quotas are not feasible, fisheries should be managed

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using ITE systems, which would at least provide a mechanism for ensuring that entitlements are better utilised, and utilised by the most efficient fishers.

## **Reducing regulatory costs and imposts**

Governments have closely regulated commercial fishing for over thirty years. Over that time, regulatory challenges and objectives have changed, but the regulatory response has typically been to overlay additional requirements onto existing fisheries management practices.

In addition to statutory reviews of fisheries laws, fisheries regulators should regularly review, in conjunction with harvest strategies, whether the specific controls and management arrangements applying to fisheries are still appropriate for each fishery. There seems scope for some streamlining and simplification:

- market mechanisms (as described above) require less prescriptive arrangements
- new technologies (including electronic data collection systems) allow more efficient monitoring of fisheries.

## **Other issues**

Some participants raised concerns about food security and Australia's self-sufficiency in wild caught seafood. Australia is not at risk of food insecurity as there is no lack of fish availability. In fact, global fish production (including aquaculture) is outstripping population growth and international seafood prices are declining.

Self-sufficiency is a fruitless and inefficient objective. It is fruitless because Australian wild caught seafood production could not be increased to achieve self-sufficiency without creating unacceptably high risks of over-fishing. As in trade generally, it is also often more efficient to purchase fish from foreign producers who can fish at lower costs. It is worth noting again that Australian waters are relatively unproductive in biological terms. Even if the concept of food self-sufficiency was accepted, there is little integrity to an argument that a country be self-sufficient in every food type.

There are more grounds for concern about the comparatively poor safety record of the commercial fishing industry and the uncertainty about which agencies have regulatory responsibility for reviewing workplace safety.

Commercial fishers and regulators should work closely together to ensure safety regulations are regularly reviewed so that they remain practical and effective in reducing the risks of injury and fatality in the sector. The current transfer of responsibility for maritime safety from the states and territories to the Australian Government has intensified concerns about the supervision of safety matters. Governments should ensure that there are good linkages between work health and safety and maritime regulators (including in

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relation to sharing of information on incidents) and clarify which agencies are responsible for different types of incidents.

## **Recreational fishing**

Recreational fishing is sometimes, but inaccurately, seen as an inconsequential adjunct to commercial fishing. This neglects the scale of recreational activity and its large social value to the community, with millions of Australians fishing each year. There is also a local economic flow-on effect in servicing this recreational activity, from accommodation and boat servicing to bait supply. Recreational catches also now rival or exceed commercial catches for some species, and recreational fishing practices can have adverse effects on non-target species (bycatch) and ecosystems. The rising sophistication and affordability of scanning technology and vessels has particularly increased fishers' ability to fish further from shore and more intensively.

The demand for access to certain fishing areas or species by the recreational fishing sector has contributed to significant tension in some jurisdictions. The extent of competition for resources is hard to assess as there is relatively little information on shifts in activity and catch. This limits the current scope to objectively reflect demand for recreational fishing in decisions on access to marine resources, and/or in the provision of additional services for recreational fishers.

It is probable that the recreational sector's impact on fisheries will grow with population growth and utilization of new fishing technologies. In catch-constrained management regimes, it is not practical or consistent with policy aims for the regulatory approach to be one of ad-hoc intervention or neglect.

Recreational fishing activity is licensed in some states and should be licensed in all.

## **Licensing**

A well-designed licensing system is a key step for better managing recreational fishing. While some states have a licensing system in place, these could be better used to collect more comprehensive information, and better manage and support activity.

The better measurement of recreational activity, impacts and risks is an important element in ensuring:

- a better basis for monitoring effort and allocating access to fishery resources
- a means to better target information and services (for example, ramps and educational resources) for recreational fishers



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- a sampling frame for surveys to monitor catch, gear used, expenditure, social impacts and the value derived from recreational fishing, which should factor into decisions on access, management of recreational fishing activity and services.

Licensing also provides a means for directly conveying and enforcing access conditions, especially for high risk fisheries. Systems can be tailored, through variations in fees or conditions, or caps on the number of licenses issued, to help manage demand for vulnerable species. Further, they can provide a source of revenue to improve recreational fishing management, and for research and additional facilities for recreational fishers.

Queensland, South Australia and the Northern Territory do not have licensing systems for recreational fishers. The experience of jurisdictions that do shows that they need not entail significant regulatory burden or high costs for fishers (for example, permits can be obtained online at a low fee and issued for short or longer term periods). The price of licences should be a secondary objective to their use to gather information on and manage resource use.

For maximum efficiency, licensing systems should have high coverage rates. Licences should be readily available at low cost for the majority of fishers (those not operating in high-risk fisheries, which may require more intensive monitoring and management). Governments may exempt certain groups from the payment of fees for welfare reasons, but there should be few, if any, exemptions from being ‘counted’ and contributing data.

Charter fishers should be required to keep records on catch and effort (like commercial fishers) given their greater incentives to maximise take. Records should be the subject of compliance review.

The adoption of licensing systems by all states and the Northern Territory would support consistency in cross-jurisdictional fisheries, where currently only some recreational fishers are licensed. The Commonwealth should consider licensing if it assumes greater responsibility for the management of recreational catch.

Licensing provides a practical and proportional way of better incorporating recreational fishing into harvest and other management strategies. Taking this action now will reduce the risk and likelihood of more draconian measures down the track.

## **Other management controls**

The number of recreational fishers, diversity in their activity, a large and often remote coast-line and the capacity for fishers to rapidly respond to available fish stocks makes controlling catch more difficult for the recreational sector than for the commercial sector. Current management approaches vary, but can include size, bag, boat and possession limits; restrictions on the types of gear that may be used; and temporal and spatial closures. The efficacy of controls varies depends on the fishery and species.

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While it is difficult to be definitive about the effectiveness of controls because of data inadequacies, available research suggests that size, bag and gear limits are effective in many fisheries.

It is clear that in a few fisheries (primarily where there are limits on catch and the species is targeted by both recreational and commercial fishers) existing restrictions are not effective and that, if practical, controls on the aggregate catch of recreational fishers should be implemented. Harvest tagging systems, which set a harvest limit over a period and provide for the tagging of catch as a condition of possession, should be considered for valuable, at-risk species.

Returning a live fish to the water after capture ('catch and release' fishing) is a common practice in recreational fisheries. While catch and release fishing is generally viewed as helpful in conserving stocks of inshore fish, emerging research suggests that these methods are associated with higher mortality rates for deep-water species. Further research is required in this area to consider whether alternative approaches are needed.

## **Recreational fishing surveys**

Management controls should be developed with an understanding of the status of the targeted species and their ecological systems, recreational participation, catch and fishing methods, and the value of recreational fishing to the community. The existing ad-hoc jurisdictional and regional surveys do not provide adequate information for understanding, managing and developing Australia's recreational fisheries. Regular and systematic collection of evidence on recreational fishing is required.

While jurisdictions have recently agreed to explore opportunities to harmonise and share information and to develop data collection approaches for the long term, more decisive action needs to be taken to address requirements in this sector. The Commission recommends a two-step approach:

- The Australian Government should conduct a national survey in 2017-18 using a comparable method to the 2000-01 *National Recreational and Indigenous Fishing Survey*, with states and the Northern Territory contributing to the cost of this survey.
- From 2022-23, all governments should undertake five yearly surveys of recreational fishers, whether at the national level or on a coordinated basis.

## **Enforcement**

The diversity and expanse of recreational fishing activity makes enforcement difficult and the risk of being caught low. Strong penalties for knowing and persistent breaches of laws, such as the illegal take of key species, are likely to be more cost-effective ways of achieving compliance than the dedication of significant resources to enforcement. Penalties

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and the resources employed for enforcement should be proportional to the level of risk to the sustainability of fisheries.

## **Indigenous customary fishing**

The marine environment holds cultural importance for many Indigenous Australians. Customary fishing in accordance with traditional Indigenous laws and customs can confer ceremonial, communal and spiritual benefits connected to country, and be an important component of a community's traditions. Because of these unique attributes, governments treat customary fishing differently from commercial and recreational fishing.

### **Customary fishing should be better incorporated into fishery management**

For management purposes, most jurisdictions either exempt customary fishers from licensing requirements, but subject them to some gear and possession requirements, or exempt them from management frameworks altogether. Although this provides a form of special recognition, largely exempting customary fishing from fishery management laws appears to have resulted in more harm than good. Exemption has meant that the interests and impacts of customary fishing are not always considered in fishery management regimes. Perhaps unsurprisingly, ambiguity in relation to customary fishers' rights and obligations has led to tension and conflict in some high-demand fisheries.

Although all governments have expressed a desire to better incorporate customary fishing into fisheries management regimes, there has generally been slow progress.

### **Clearer recognition of Indigenous customary fishing**

Customary fishing by Indigenous Australians should be recognised as a sector in its own right in fishery management regimes. To avoid any inconsistencies, the definition of customary fishing should be consistent with native title. This would provide for fishing by Indigenous Australians in accordance with proven traditional laws and customs. The specific rights enjoyed by a customary fisher will stem from traditional practice in that fisher's community.

Customary fishing is currently considered to exclude fishing for commercial purposes, but for some Indigenous communities, traditional practices include the trade or barter of fish within or between communities. The right to trade has been affirmed — in at least a restrictive sense — by the High Court of Australia in *Akiba v Commonwealth* (2013) HCA 33, and by statute in Western Australia.

Allowing trade in accordance with traditional customs is consistent with intentions underpinning recognition of customary fishing rights. Governments should provide

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statutory clarification of customary rights to fish for commercial purposes, but only where consistent with proven traditional laws and customs.

Customary fishing rights should not be tradeable or transferrable, recognising the unique characteristics of the associated cultural benefits and that these benefits are exclusive to the Indigenous community concerned.

Clearer recognition of the sector will allow fishery authorities to set sector-specific catch or effort limits, as discussed above. The collection of information to support customary fishing management will require good-faith engagement by fisheries managers with customary fishers and preparedness by customary fishers to share information. Consultation with Indigenous communities is essential to ensure that native title rights are not inadvertently infringed when governments seek to apply contemporary fisheries management practices to customary fishing.

### **Establishing entitlement to Indigenous customary fishing rights**

The requirements for proof to claim entitlement to undertake customary fishing differ by jurisdiction. For example, in Tasmania and New South Wales, a person must have Aboriginal ancestry, identify as an Aboriginal person and be accepted by the Aboriginal community, while in South Australia identification is established through the development of traditional fishing plans. *The Commission would value views from stakeholders on existing methods and desirable ways of establishing entitlement.*

### **Greater participation in fisheries management**

Management strategies for fisheries used by customary fishers should be developed, where possible, in consultation with relevant Indigenous communities.

Customary fishers should, like other sectors, contribute to fisheries management costs insofar as they benefit from such management. However, practical difficulties may preclude efficient cost recovery in most jurisdictions. Indigenous communities may be able to contribute effectively either in full or part through other means including, for example, self-management through Indigenous ranger programs. In addition to being a more culturally-appropriate means of enforcement, ranger programs allow application of traditional knowledge and empower Indigenous Australians to be more engaged in fisheries management.

### **Cross-jurisdictional stock management**

Marine fisheries that span Commonwealth, state and/or Northern Territory borders are a consequence of the marine jurisdictions defined by the Offshore Constitutional Settlement (OCS).

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Management of cross-jurisdictional fisheries is more costly due to the existence of multiple regulatory systems. Where the rules of those systems are inconsistent or do not sufficiently consider each other, there are also higher risks of over- and under- fishing, unequal treatment of fishers, administrative inefficiency and compliance costs. The risks mainly relate to the management of 24 stocks and here, the degree and nature of detriment varies widely.

Regulatory stasis seems to pervade the reform of cross-jurisdictional fisheries. Given the costs and complexity of instituting major reforms, there have been few attempts, and several have faltered. For example, negotiations on the Commonwealth and New South Wales trawl fisheries have been occurring for nearly 10 years and the ‘on again, off again’ attempts to reform the southeast Australian scallop fishery have been going on for 30 years.

Given limited resources, governments should:

- focus on fish stocks that are of higher value/risk and subject to inconsistent management arrangements, and hence vulnerable to significant cost escalation or diminution in value if poor management arrangements continue
- consider whether transfer of management responsibility to one government or better alignment of management arrangements would produce the greatest net benefits.

High priority candidates for reform include management of southern bluefin tuna, east coast snapper and the fishing stocks managed in the Commonwealth/New South Wales trawl fisheries. Well-recognised risks with the management of these stocks suggest:

- the Australian Government should set allowable catch limits of southern bluefin tuna for all fishing sectors (including the recreational sector). For practical reasons, the government could continue to draw on states for day-to-day management of recreational fishers, but this should be in accordance with the catch limits determined by the Australian Government. Catch limits should be in place for the southern bluefin tuna fishing season commencing on 1 December 2018
- the New South Wales, Victoria and Queensland governments should ensure the joint stock assessment process for the east coast biological snapper stock proceeds as a priority
- the New South Wales Offshore Trawl Fishery should be absorbed into the Commonwealth Trawl Sector of the Southern and Eastern Scalefish and Shark Fishery by the end of 2018.

Governments should make reform of the specified cross-jurisdictional fisheries arrangements a collective priority, and dedicate sufficient resources to implementing reforms.

The rigidly defined geographic boundaries specified in many OCS fisheries arrangements are inflexible, and are ill-suited to changing fish populations and distributions arising from climate change as well as being inimical to adaptive fishery management. The costs and

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risks of shared fishery management will be reduced if all governments adopt known best practice approaches to core tasks (such as stock assessments and harvest controls), routinely seek to implement reciprocal or consistent arrangements in relation to catch controls and data collection, and regularly review the terms of intergovernmental agreements underpinning shared management.

These tasks should be the subject of joint Ministerial direction to agencies.

## **Environmental regulations**

### **Regulations vs public expectations**

The environmental standards and assessment processes employed to mitigate risk in fisheries appear, on the whole, to be meeting their objectives. Several stakeholders raised concerns about the efficiency of assessment processes for fisheries regulated under the *Environment Protection and Biodiversity Conservation Act 1999* (around 80 per cent of fisheries) but these related to functions that, by necessity, are undertaken by separate entities, and so do not warrant amalgamation (as proposed by some). (Other fisheries are considered below).

An emerging concern is the gap between the standards or outcomes expected by some in the community and those set (or thought to be set) by governments. Greater public awareness and concern about overfishing and marine environments have heightened expectations of governments, as well as accountability for standards set and achieved.

The gap between public expectations or perceptions, and regulatory standards and outcomes, has resulted in higher costs for the commercial fishing sector. This is evidenced by the take-up of third party certification schemes and pressure on governments to increase restrictions on fishing — most prominently in relation to large vessels and ‘charismatic’ (in some way special to the public), but not necessarily at risk, species.

These responses are partly a consequence (or the cost) of poor practices and overfishing in the past, which has sometimes created a need for ‘social license’ to viably operate in addition to compliance with government standards. The policy concern is public misperceptions may remain or intensify, which would undermine the value of regulation and lead to unnecessarily higher costs for fishers and the community, whether through unnecessarily stringent regulations raising production costs or reducing catch, both of which will flow through to higher prices for consumers.

The Commission’s analysis indicates that environmental standards for fisheries are set conservatively. To the extent that there are misperceptions, the industry itself has a role in correcting these. But governments should also do more to make standards and outcomes more transparent. This includes:

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- the Australian Government publishing the annual reports that fisheries produce on their performance against accreditation requirements, which would provide useful information to the public and enable fishers to more readily point to their ‘credentials’
  - clarifying and more transparently reporting against standards for the regulation of protected species.

## Regulation of protected species

Fishing brings a risk of interactions with threatened, endangered or protected species (TEP) in some areas. Regulators do not always specify their appetite for such risks and, in some cases, set the standard for mortalities effectively at zero.

The question is one of balance. If governments know that there is a risk to TEP species in a fishery, they should specify mortality limits (for example, over a season) and require fishers to take measures to meet these limits, rather than leave the implication that mortalities are to be an implausible zero.

All jurisdictions require fishers to report interactions with TEP species, but only the Commonwealth and South Australia make information on these interactions readily accessible (online). All governments should make information on interactions with TEP species publicly available, in conjunction with limits. In turn, this will inform the adjustment of limits and strengthen accountability for meeting them.

The Australian Government should also clarify the purpose of the Marine Species List established in Part 13, Division 4 of the *Environment Protection and Biodiversity Conservation Act 1999*, and the criteria for adding or removing species from the list.

## Third party accreditation schemes

Several stakeholders sought the streamlining of, or exemption from, environmental approvals for fisheries that have achieved certification from credible third parties.

Third party certification should not replace regulatory requirements or set regulatory benchmarks. Regulatory standards set the minimum environmental standards that fisheries must meet in order to permit their continued use by the community. Third party certification schemes are concerned with one aim — environmental protection. Their standards are by definition more conservative and are not balanced against other objectives that governments pursue through the managed use of fishery resources.

Where practicable, regulators should minimise regulatory costs and burdens by drawing on information used by third party certifiers.

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## State and territory-managed fisheries

State and territory governments assess any fisheries not assessed under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*. Assessment processes are generally less extensive, which appears to reflect that the relevant fisheries are generally of lower value and/or risk, being often niche or small-scale. *The Commission would value feedback from stakeholders about the adequacy of environmental management regimes for these fisheries and, if required, options for improvement.*

## Downstream processing

Around 90 per cent of the seafood produced in Australia by volume is sold as fresh or frozen product. The majority of seafood processing therefore adds very little value to the product, with the value added resting in correct handling and timely delivery to local and overseas markets. There is no evidence to indicate that regulation has resulted in significant negative impacts on the operations of the downstream sector.

Some industry participants asked that the Commission recommend that mandatory country-of-origin labelling be extended to seafood sold for immediate consumption. This is unnecessary for public policy (food safety and consumer protection) reasons, which are adequately dealt with under existing law.

Some participants also requested that the Australian Government mandate Australian Fish Name Standards (AS 5300 -2015) — a voluntary standard introduced in 2007 that specifies the prescribed fish name for fish sold to consumers or for wholesale, export and import. Making the standard mandatory would require agreement across all jurisdictions on all names; a costly and difficult exercise. As current arrangements do not appear to be having significant negative impacts on consumers or businesses, the standard should remain voluntary.

## Seafood processor licence and accreditation fees

There is considerable variation in fee-setting for processor licences and accreditation across jurisdictions. Some jurisdictions apply a flat fee for all processors while others differentiate by the type of species being processed or by the size and scale of the premises.

Fees should reflect the efficiently-incurred costs of regulating facilities. Using a tiered scale of fees would better reflect and efficiently deal with differences between processors, including reducing the scope for smaller businesses to cross subsidise the regulation of larger businesses.



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## Aquaculture

### Regulation has played a minor role in recent shaping of the industry

There is little evidence suggesting that regulations have systematically impeded the viability or growth of aquaculture businesses (for example, by preventing investment, experimentation and hence advancement in the key drivers of nutrition, fish and marine health, and genetics). Notably, Australia's aquaculture output growth rate over the past decade — underpinned by growth in salmon — was similar to those of the dominant producer countries in Asia. Its growth rate in value terms was second only to Norway among OECD countries.

The development of the industry has been shaped more by technological, geographic and other non-regulatory influences.

- For existing farmed species, there has been limited growth other than in salmon and barramundi production due to changes in consumer tastes, competition from imported products, and other activities or requirements affecting the suitability of new sites.
- Newer species have faced technical and biological challenges in ensuring fish health and growth in a controlled production environment. Few have achieved sustained commercial viability. For example, most ventures in marine areas have failed due to weather events, disease, unexpected predators, as well as poor business planning. Anecdotally, these failures have made it harder for new projects to access financing.

### Adapting aquaculture regulation for the future

Nevertheless, the regulatory environment can be improved.

#### Greater use of spatial planning — where needed

The future growth of the aquaculture industry faces several challenges. These include coastal development and increasing competition for access to coastal land and waters, environmental concerns and access to infrastructure.

There are few, though prominent, examples of regulatory arrangements that have stymied proposed aquaculture developments. These include land-based developments adjacent to the Great Barrier Reef, where environmental requirements have effectively prevented any aquaculture development.

Where there are viable prospects, the use of spatial planning to designate zones for aquaculture development will continue to be very important. These help to establish the legitimacy of businesses (that is, address the actual and perceived risks associated with fish farming) and reduce the red tape associated with environmental impact assessments and

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public consultations for new developments. South Australia and Tasmania, which have well-established industries, have long used spatial planning.

The Queensland government has announced that it will identify aquaculture development areas, including around the Great Barrier Reef. It will also specify conditions on aquaculture developments to avoid and mitigate any environmental impacts and any required environmental offsets. Western Australia recently introduced aquaculture zoning to foster development of the sector in the Kimberley and mid-west regions.

Whether other jurisdictions should institute spatial planning regimes and related policies depends on prospects for aquaculture development. This should be determined in consultation with industry and so avoid the ‘catch 22’ situation of a lack of a regulatory framework deterring potential investors and a lack of projects meaning that the regulatory framework is not developed.

### **Addressing community concerns**

Community concern about the environmental impacts of aquaculture is growing in Tasmania, in common with other developed countries that have established industries, such as New Zealand, Norway, Canada and Scotland. As has been the experience of the wild caught sector, the sector is requiring ‘social license’ to operate in addition to regulatory assurance.

Community concerns in Tasmania centre on the perception of regulatory capture. They have been fuelled by the fact that the functions of regulating and promoting the industry rest in a single minister and agency, and views that the government is unwilling to regulate in a way that might limit the growth of an industry that has become a major driver of economic activity and employment in the state. As noted in the Commission’s 2004 study into aquaculture, there should ideally be separate agencies for industry development and regulation to remove potential conflicts of interest and improve public confidence in environmental protection, resource planning, operating conditions and enforcement.

## **Other areas for improvement**

In addition to improving fisheries management frameworks, there is scope to improve the undertaking of certain core tasks and activities that support fisheries management.

### **Decision-making by executive government vs fishery managers**

Decisions on fisheries controls can broadly be categorised as either strategic or operational. Strategic decisions influence the objectives of fisheries, while operational decisions are those required to put policy intentions into effect.

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Under harvest strategy frameworks, many operational decisions in fisheries are technical matters and can be made more efficiently at the agency/fishery manager level. Recent reviews in Australia suggest there is a high level of political involvement in operational decisions in some states and this results in adverse outcomes. Governments should delegate operational decisions to the relevant fishery management authorities to the extent possible.

## **Consultation and collaboration with stakeholders**

Consultation is central to the design and effective implementation of fisheries management controls, including allocation decisions. In some cases, fisheries management tasks can be undertaken more efficiently and effectively through co-management.

There are particular concerns about the use of advisory groups in fisheries, including lack of clarity in their roles, sufficiency of expertise, the adequacy of representation of views and transparency in processes. These can be addressed through clear terms of reference, a conflict of interest policy, clear descriptions of members' roles and required expertise (and transparent appointment processes), fixed membership terms, and performance assessment regimes.

The scope for co-management arrangements varies by fishery, but past experience has demonstrated that the expertise of stakeholder groups and willingness of both stakeholders and governments to work together are essential pre-requisites.

Policies on co-management need to provide practical guidance to stakeholders on the types of activities governments will consider collaborating on or delegating, and required capability standards of stakeholder groups. Such guidance would aid identification and advancement of suitable co-management opportunities in fisheries.

## **Enforcement**

All governments follow risk-based approaches to enforcement. There appears to be generally high compliance with regulations. Concerns remain in some quarters about illegal fishing, however, although the extent to which this occurs for most species is uncertain. Governments should provide easily accessible channels through which the public can advise of illegal fishing activity. To make the best use of this information, governments should ensure their fisheries agencies are sufficiently resourced to quickly follow up complaints.

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## **Cost recovery and contestability**

The efficiency and equity benefits of cost recovery systems are well-known. But there are also pressing imperatives for good cost recovery arrangements in fisheries management for other reasons, including to:

- support the provision of essential regulation and provision of services to fishers
- increase the accountability of fisheries managers to fishers about what and how services are delivered — which will help to ensure that regulatory effort is proportionate to the value of the fishery
- encourage reform. This is especially so for cross-jurisdictional fisheries, where the unequal treatment of fishers in relation to regulatory fees has impeded progress.

There is scope to adopt or improve cost recovery arrangements in all states and the Northern Territory. Full cost recovery arrangements may not be viable in some jurisdictions (or fisheries) until intended major policy reforms have been implemented (such as in New South Wales). And as noted earlier in regard to licensing, the objective of the regulatory action should determine the scope and nature of any charging.

Efficiency can also be enhanced by making processes such as research, consultation and data management contestable.

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# Draft recommendations, findings and information requests

## Chapter 2: Access to Fisheries Resources

### DRAFT RECOMMENDATION 2.1

The New South Wales, Victorian, Tasmanian and Queensland Governments should develop and implement a harvest strategy policy. Harvest strategy policies should be developed with regard to the *National Guidelines to Develop Fishery Harvest Strategies*.

### DRAFT RECOMMENDATION 2.2

The Australian, Victorian, Tasmanian and Queensland Governments should develop a policy to guide the allocation of access to fisheries stocks between different sectors.

The allocation policies of all governments should seek to promote the best use of fishery resources and provide certainty in relation to the processes involved in determining resource shares. At a minimum these policies should outline:

- triggers for review of existing allocations between sectors
- the review process, including how consultation will occur
- key considerations that will guide decisions.

These policies should be publicly available.

### DRAFT FINDING 2.1

Decisions by governments on the allocation of fishery resources are severely constrained by a lack of comprehensive and current data on the participation and take of the recreational and customary fishing sectors.

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#### DRAFT FINDING 2.2

A move to inter-sectoral trading of access rights is worth considering in the longer term for suitable, high value fisheries.

## Chapter 3: Commercial fishing

#### DRAFT FINDING 3.1

Output controls, in particular, individual transferable quota systems, provide a more effective and efficient way of managing commercial fisheries than controls over methods of fishing (input controls).

There is scope to improve the implementation of individual transferable quota systems and increase their take-up.

Fisheries that are not amenable to aggregate catch limits due to highly variable fish stocks would be more efficiently managed through individual transferrable effort systems than current input controls.

#### DRAFT RECOMMENDATION 3.1

The Northern Territory and all state Governments should move each of their fisheries to an individual transferable quota management system unless it is demonstrated that this is technically impractical or not cost effective. If individual transferable quotas are not used, fisheries should be managed using individual transferable effort systems.

The Australian Government should complete the move of its fisheries to either individual transferable quota or individual transferable effort systems.

Governments should publicly release reasons for the approach taken to each fishery.

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DRAFT RECOMMENDATION 3.2

The Australian, state and Northern Territory Governments should ensure that commercial fishing regulations are reviewed regularly to ensure they remain 'fit for purpose' against clearly articulated policy objectives. At minimum, reviews should occur when harvest strategies are revised.

DRAFT RECOMMENDATION 3.3

State and territory governments should take into account any impacts of proposed planning and land/marine use developments on the commercial fishing sector.

## Chapter 4: Recreational fishing

DRAFT RECOMMENDATION 4.1

Within the next three years:

- the Queensland, South Australian and Northern Territory Governments should introduce licensing for independent recreational marine fishing, and the Victorian and Tasmanian Governments licensing for marine fishing charter boat operators
- governments should minimise license exemptions.

DRAFT RECOMMENDATION 4.2

Governments should consider implementing harvest tagging management systems for valuable at-risk species when conventional management controls (such as bag and size limits) are ineffective in achieving sustainability goals.

DRAFT RECOMMENDATION 4.3

The Australian, state and Northern Territory Governments should sponsor more research on the survival rates of catch and release methods in deep water fisheries.

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#### DRAFT RECOMMENDATION 4.4

State and territory governments should review and strengthen penalty regimes for recreational fishing to deter regulatory non-compliance.

Penalties should be proportional to the level of risk posed.

#### DRAFT RECOMMENDATION 4.5

The Australian Government should conduct a national survey of recreational fishing in 2017-18, using a comparable approach to the 2000-01 national survey. The cost of the survey should be shared by all governments.

From 2022-23 all governments should undertake five yearly surveys of recreational fishers, whether at the national level or on a coordinated basis.

Surveys should be consistent across jurisdictions and focus on participation, catch and effort, identification of species important to recreational fishers and information on the value of recreational fishing.

## Chapter 5: Indigenous customary fishing

#### DRAFT RECOMMENDATION 5.1

Customary fishing by Indigenous Australians should be recognised as a sector in its own right in fisheries management regimes.

The definition of Indigenous customary fishing should be consistent with native title.

#### DRAFT RECOMMENDATION 5.2

The Indigenous customary fishing sector should be afforded a priority share of resources in fisheries where catch or effort is limited. This allocation should be sufficient to cover cultural use by the local Indigenous community in accordance with proven traditional laws and customs.

Customary fishing rights should not be tradeable or transferrable, recognising the unique characteristics of the associated cultural benefits and that these benefits are exclusive to the community concerned.

Customary allocations and any controls over customary fishing activities should be developed in consultation with Indigenous communities.



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DRAFT RECOMMENDATION 5.3

The definition of customary fishing in fisheries laws should provide for fishing for commercial purposes, but only where consistent with traditional laws and customs.

## Chapter 6: Fisheries spanning jurisdictions

DRAFT RECOMMENDATION 6.1

In reforming cross-jurisdictional fisheries, Australian, state and Northern Territory Governments should:

- focus on fish stocks that are of higher value/risk and subject to inconsistent management arrangements
- consider whether transfer of management responsibility to a single government or better aligning management arrangements would produce the greatest net benefits.

DRAFT RECOMMENDATION 6.2

The Australian Government should set allowable catch limits of southern bluefin tuna for all fishing sectors (including the recreational sector). Sectoral allowances should be in place in advance of the southern bluefin tuna fishing season commencing on 1 December 2018.

In consultation with fishers, the Australian Government and state governments should negotiate the nature of, and responsibility for, the day-to-day management of recreational fishers targeting southern bluefin tuna.

DRAFT RECOMMENDATION 6.3

The New South Wales Southern Fish Trawl Fishery should be absorbed into the Commonwealth Trawl Sector of the Southern and Eastern Scalefish and Shark Fishery by the end of 2018.

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#### DRAFT RECOMMENDATION 6.4

The New South Wales, Victorian and Queensland Governments should make the joint stock assessment process for the east coast biological snapper stock a reform priority and provide the resources necessary to ensure the timely completion of the assessment.

#### DRAFT RECOMMENDATION 6.5

Australian, state and Northern Territory Governments should make the reform of cross-jurisdictional fisheries a collective priority and issue a joint reform strategy within 12 months of the release of the Commission's final report. Progress against the strategy should be reported annually over its term.

#### DRAFT RECOMMENDATION 6.6

The management arrangements for cross-jurisdictional fisheries and supporting memoranda of understanding should be reviewed regularly by governments to ensure they remain fit for purpose. At a minimum, they should be reviewed as part of any revision of the harvest strategy for the relevant species.

The task of reviewing and developing reforms to reduce the costs of cross-jurisdictional fisheries should be the subject of a joint Ministerial direction to agencies.

The *Principles Guiding Revision of the OCS Fisheries Arrangements* should be amended to include an intention to limit the extent of shared jurisdiction over expanses of water wherever possible.

## Chapter 7: Managing the environmental impact of fisheries

#### DRAFT RECOMMENDATION 7.1

The Australian Government should publish online the annual reports that fisheries produce as part of their accreditation requirements under the *Environment Protection and Biodiversity Conservation Act 1999 (Cwlth)*.

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#### DRAFT RECOMMENDATION 7.2

The Australian, state and Northern Territory Governments should expand the use of explicit mortality limits for fisheries that have a high risk of interaction with threatened, endangered and protected species.

Limits should be used in conjunction with controls on fishing methods and equipment that have proven effective in minimising the impact of fishing activity on protected species.

#### DRAFT RECOMMENDATION 7.3

Governments that do not already do so should make summaries of information on interactions with protected species publically available (online).

Summaries should be provided on a fishery by fishery basis and at a minimum include:

- the species with which there was an interaction
- the gear type used
- whether the specimen survived, was injured or died as a result of the interaction
- the total number of fishing days undertaken in the fishery across the duration of the reporting period.

#### DRAFT RECOMMENDATION 7.4

The Australian Government should clarify the purpose of the List of Marine Species established in Part 13, Division 4 of the *Environment Protection and Biodiversity Conservation Act 1999 (Cwlth)* and provide further information on the criteria against which species are added to or removed from this list.

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## Chapter 8: Aquaculture

### DRAFT FINDING 8.1

The development of aquaculture requires access to suitable sites. Spatial planning assists in the efficient identification of these locations. Spatial planning may also provide greater certainty, regulatory predictability and a more streamlined approval process for investors.

### DRAFT FINDING 8.2

The regulatory arrangements for aquaculture have not significantly changed since the Commission's 2004 study. This has not been a significant impediment to the growth of the aquaculture industry in Australia as the major aquaculture-producing states already had many best-practice regulatory features and other states have faced challenges that are predominantly non-regulatory in nature.

### DRAFT FINDING 8.3

Concerns about the environmental and amenity impacts of aquaculture developments are prominent in some states, highlighting tensions for governments in both regulating and promoting industry growth. These concerns could be minimised by having separate agencies responsible for regulatory and industry development functions.

## Chapter 9: Downstream processes

### DRAFT RECOMMENDATION 9.1

Governments should not extend mandatory country of origin labelling to seafood sold for immediate consumption.

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DRAFT RECOMMENDATION 9.2

The Australian Fish Names standard should continue to be used on a voluntary basis. Further development of the Standard by Fisheries Research and Development Corporation should continue to reflect the needs of industry and the preferences of consumers.

DRAFT RECOMMENDATION 9.3

Australian, state and Northern Territory Governments should ensure that licence and accreditation fees for seafood processors reflect the efficiently-incurred costs of regulating these facilities.

## Chapter 10: Other areas for improvement

DRAFT RECOMMENDATION 10.1

Australian, state and Northern Territory Governments should ensure that operational decisions are delegated to the relevant fishery management authorities to the extent possible.

DRAFT RECOMMENDATION 10.2

The governance arrangements of advisory groups formed under fisheries laws should include: clear terms of reference; a conflict of interest policy; clear role descriptions for members; fixed membership terms; performance assessment regimes; and reporting arrangements.

Members of advisory groups dealing with technical matters should be appointed based on their expertise.

Ministers or departments should have the power to dismiss advisory group members who breach the terms of their engagement.

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#### DRAFT RECOMMENDATION 10.3

Australian, state and Northern Territory Governments should have clear policies on co-management in fisheries. These policies should provide practical guidance to stakeholders on the types of activities where governments are willing to collaborate or delegate responsibilities. The policies should include details of the capability and governance standards that are expected of stakeholders seeking to enter into a co-management arrangement.

#### DRAFT RECOMMENDATION 10.4

Fisheries agencies should provide easily accessible channels through which the public can share information on illegal fishing. Governments should ensure their fisheries agencies are sufficiently resourced to enable timely and proportionate follow-up action on information supplied by the public.

#### DRAFT RECOMMENDATION 10.5

State and the Northern Territory Governments should implement best practice cost recovery arrangements where cost-effective. Where indirect methods of obtaining sectoral contributions towards costs are used, governments should set fees with reference to efficiently-incurred costs for essential services.

Governments should transparently disclose the services or regulatory activities for which costs are recovered, and the amount and extent of costs recovered.

## Requests for further information

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#### INFORMATION REQUEST 2.1

*What factors should guide government decisions on take limits — in particular, target reference points?*

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*INFORMATION REQUEST 5.1*

*What is the best way for individual Indigenous Australians to prove their entitlement to undertake customary fishing?*

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*INFORMATION REQUEST 5.2*

*How should cost recovery be applied to customary fishers?*

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*INFORMATION REQUEST 7.1*

*Are fisheries not assessed under the Environment Protection and Biodiversity Conservation Act 1999 (Cwlth) subject to adequate environmental management? If not, how should the environmental management of such fisheries be improved?*

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*INFORMATION REQUEST 7.2*

*Can the processes by which state governments and the Northern Territory manage the impact of pest native species on fishers be improved?*

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