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The Parliament of the Commonwealth of Australia

# Netting the benefits

## **Inquiry into the Role of Science for the Future of Fisheries and Aquaculture**

House of Representatives  
Standing Committee on Agriculture, Resources, Fisheries and Forestry

November 2012  
Canberra

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## Foreword

### *'When The Boat Comes In' (or 'Dance Ti Thy Daddy')*

*Dance to your Daddy, my little laddy*

*Dance to your Daddy, my little man*

*Thou shalt have a fish and thou shalt have a fin*

*Thou shalt have a codlin when the boat comes in*

*Thou shalt have haddock baked in a pan*

*A traditional English folk song, originating in Northumberland, where mothers sang to their little ones as they waited for their fishermen to come back from the treacherous North Sea.*

Fishing is the activity of catching fish. It is an ancient practice dating back at least 40,000 years. Many species have come and gone depending on climate and fishing habits, but fish have remained part of our diet through the ages.

Since the 16th century, fishing vessels have been able to cross oceans in pursuit of fish and since the 19th century it has been possible to use larger vessels and, in some cases, process the fish on board. Fish are normally caught in the wild. Techniques for catching fish include hand gathering, spearing, netting, angling and trapping.

The term fishing may be applied to catching other aquatic animals such as shellfish, cephalopods, crustaceans, and echinoderms. The term is not usually applied to catching aquatic mammals, such as whales, where the term whaling is more appropriate, or to farmed fish. In addition to providing food, modern fishing is also a recreational sport.

FAO statistics tell us that the total number of fishermen and fish farmers across the world is estimated to be 38 million. Fisheries and aquaculture provide direct and

indirect employment to over 500 million people. In 2005, the worldwide per capita consumption of fish captured from wild fisheries was 14.4 kilograms, with an additional 7.4 kilograms harvested from fish farms.

Australia is a small player globally, but fishing is still a vital part of our economy. However, there are many opinions about how to run the industry and how much involvement should come from Government.

This inquiry was due to the fact that little attention had been paid the fishing industry in recent times and yet there have been many changes in both the wild fisheries and aquaculture that has attracted some fairly contradictory legislation. AFMA had played a good solid role in developing a hands-off approach to managing our commercial fisheries. But it was time to take a look at this industry and review its capabilities.

As it happened, towards the end of our inquiry a controversy arrived in the shape of a super trawler that quickly became a 'bogey man'. Although there was sufficient legislation to control its activities, the community was mobilised to oppose it through fear, despite the fact that scientists working in the field explained that it would have no greater impact than others using similar methods of fishing.

Thus it exposed weaknesses in our legislative processes and caused rifts not only in the fishing community, but also among elected members of Parliament. Emergency measures were taken, not necessarily in the interests of the industry.

The Committee took a large amount of evidence across the country which gave us a good insight into the industry but also pointed to many inconsistencies in dealing with the various fishing levels and aquaculture changes.

This led me to believe that there should be some way of developing a national regional fishing policy statement for fisheries, aquaculture and recreational fishing that would allow the industry to start setting its goals through regional fishing agreements that run for up to twenty years, but with reviews every five years. This way all processes can be reviewed regularly, while allowing some certainty in the industry to encourage investment.

Lastly, I wish to thank members of the Committee, the Secretariat and all the individuals and organisations who contributed to the inquiry.

Hon Dick Adams MP  
Chair



## Membership of the Committee

**Chair**            Hon Dick Adams MP

**Deputy Chair**   Mr Alby Schultz MP

**Members**        Mr Darren Cheeseman MP

Mr Geoff Lyons MP

Mr George Christensen MP

Mr Rob Mitchell MP

Mr Tony Crook MP (Supplementary)

Mr Dan Tehan MP

## Committee Secretariat

Secretary	Mr David Brunoro
Inquiry Secretary	Mr Thomas Gregory
Research Officer	Mr Nathan Fewkes
Administrative Officers	Ms Dorota Cooley
	Ms Louise Goss



## Terms of reference

The Committee will inquire into and report upon the role of science for the future of fisheries and aquaculture, and in particular:

- a) the relationship between scientific knowledge of fish species, ecosystems, biodiversity and fish stock sustainability;
- b) fishery management and biosecurity, including but not limited to:
  - the calculation and monitoring of stock size, sustainable yield and bycatch, as well as related data collection
  - the effects of climate change, especially relating to species dispersion, stock levels and impacts on fishing communities
  - pest and disease management and mitigation
  - minimising risks to the natural environment and human health
  - cooperation among Australian governments on the above
- c) research, development and applied science of aquaculture, including:
  - transitioning from wild fisheries to aquaculture in individual species
  - improving sustainability and lifecycle management practices and outcomes
  - pest and disease management and mitigation
- d) governance arrangements relating to fisheries and aquaculture, including the implications for sustainability and industry development;
- e) current initiatives and responses to the above matters by state, territory and Australian governments;
- f) any other related matter.





## List of abbreviations

ABARES	Australian Bureau of Agricultural Research and Economics
AFMA	Australian Fisheries Management Authority
AFZ	Australian fishing zone
AIMS	Australian Institute for Marine Science
AMA	Australian Marine Alliance
AMCS	Australian Marine Conservation Society
AMSA	Australian Marine Sciences Association
APFA	Australian Prawn Farmers Association
CFA	Commonwealth Fisheries Association
CRCs	Cooperative Research Centres
CSIRO	Commonwealth Scientific and Industrial Research Organisation
DAFF	Department of Agriculture, Fisheries and Forestry
DCCEE	Department of Climate Change and Energy Efficiency
DPI	Department of Primary Industries (NSW)
DPIPWE	Department of Primary Industries, Parks, Water and Environment (Tas)
EBFM	Ecosystems-based fisheries management

EEZ	Exclusive Economic Zone
<i>EPBC Act</i>	<i>Environment Protection and Biodiversity Act 1999</i>
ERM	Ecological risk management
ESD	Ecologically sustainable development
<i>FA Act</i>	<i>Fisheries Administration Act 1991</i>
FAO	Food and Agriculture Organisation
<i>FM Act</i>	<i>Fisheries Management Act 1991</i>
FRDC	Fisheries Research and Development Corporation
FSANZ	Food Standards Australia and New Zealand
HSP	Harvest Strategy Policy
IMAS	Institute for Marine and Antarctic Studies
ISA	Infectious salmon anaemia
JCU	James Cook University
MEY	Maximum economic yield
MSC	Marine Stewardship Council
MSY	Maximum sustainable yield
MPA	Marine protected area
NAC	National Aquaculture Council
OCS	Offshore Constitutional Settlement
RD&E	Research, development and extension
SBT	Southern bluefin tuna
SEWPaC	Department of Sustainability, Environment, Water, Population and Communities
TSGA	Tasmanian Salmonid Growers Association

TSIC	Tasmanian Seafood Industry Council
UWA	University of Western Australia
WAFIC	Western Australian Fishing Industry Council
WWF	World Wildlife Fund





# List of recommendations

## 2 Background

### Recommendation 1

The Committee recommends that the Fisheries Research and Development Corporation conduct and publish an annual audit of total national investment in fisheries and aquaculture research, development and extension.

## 3 Fisheries

### Recommendation 2

The Committee recommends that the Australian Government continue to publish a consolidated stock report for all Australian fisheries on a regular basis, after the initial publication of such a report in 2012, in consultation with State and Territory governments.

### Recommendation 3

The Committee believes that precaution is about managing risk; and therefore recommends that a new guideline on precaution be developed with agreement and support of stakeholders, for inclusion in a new national regional policy statement for fisheries, aquaculture and recreational fishing.

### Recommendation 4

The Committee recommends that the Australian Government expedite the creation and implementation of the monitoring and evaluation strategy for the national Commonwealth marine reserves network – to ensure that they are well managed and thoroughly evaluated, before

consideration of any new MPAs domestically and globally. A timeline should be announced to show:

- when a complete monitoring strategy will be in place;
- when a full evaluation will be completed; and
- when the findings of the evaluation will be implemented.

#### Recommendation 5

The Committee recommends that the Minister for Agriculture, Fisheries and Forestry work with State and Territory counterparts to commission a regular estimate of recreational fishing activity and impacts in Australia, with data and results published in a yearly consolidated report, using a nationally agreed data collection model.

#### Recommendation 6

The Committee recommends that COAG seek to harmonise, where there is agreement, recreational fishing licensing, rules and data collection.

#### Recommendation 7

The Committee recommends that the current review of Commonwealth fisheries management consider whether revisions to the *Fisheries Management Act 1991* are necessary to allow the Australian Government to more readily manage recreational fishing activity in Commonwealth waters.

#### Recommendation 8

The Committee recommends that the 2008 preliminary assessment of the 'Implications of Climate Change for Australian Fisheries and Aquaculture' be developed by the Department of Climate Change and Energy Efficiency into a more comprehensive study, to include broad strategic issues and localised impacts.

#### Recommendation 9

The Committee recommends that the Australian Government ensure there is a continued strong effort to monitor and analyse the effects of climate change on Australia's oceans and communities.

#### Recommendation 10

The Committee recommends that the Australian Primary Industries Ministerial Council commission a review of the 'National Fishing and Aquaculture RD&E Strategy 2010', to assess progress in achieving the Strategy's aims, in particular in regard to the co-ordination of Australia's scientific effort. The review should consider whether additional

mechanisms are necessary to complement the strategy, such as a regular national fisheries research, development and extension forum or registry of research projects.

## 4 Aquaculture

### Recommendation 11

The Committee recommends that the Australian Government work with state and territory governments to develop further conservation agreements to streamline assessments under the *EPBC Act*, to facilitate the growth of aquaculture.

### Recommendation 12

The Committee recommends the Australian Government, through the Council of Australian Governments, lead the development and agreement of a detailed and comprehensive national aquaculture policy, including the roles and responsibilities of all governments, to address (amongst others) the issues contained in paragraph 4.89, at least in the areas of:

- National ambition;
- Governance;
- Regional planning;
- Community agreement;
- Technology; and
- International competitiveness

## 5 Biosecurity, certification and international aid and cooperation

### Recommendation 13

The Committee recommends that the Australian Government update AquaPlan as soon as possible.

### Recommendation 14

The Committee recommends that the Department of Agriculture, Fisheries and Forestry develop a model for funding and enhancing aquatic disease control and aquatic veterinary training, possibly including an industry levy, as a matter of urgency.

**Recommendation 15**

The Committee recommends the Legislative and Governance Forum on Food Regulation formulate an independent mechanism for conducting a performance audit or review of the entire food standards system.

**Recommendation 16**

The Committee recommends that, while protecting Australian intellectual property, the Australian Government make available technology and expertise through aid programs dedicated to fisheries management and aquaculture production.

**Recommendation 17**

From within the existing aid budget, the Committee recommends that the Australian Government increase aid to Pacific Island countries for projects and programs relating to fisheries management and aquaculture production.

**6 Governance, environmental policy and the way forward****Recommendation 18**

The Committee recommends that the Treasurer refer to the Productivity Commission an inquiry into the efficiency of the fisheries industry across Australia and the efficiency and effectiveness of the inter-jurisdictional governance arrangements for Australian fisheries.

**Recommendation 19**

The Committee recommends that the fisheries management and environment protection responsibilities of the Australian Government continue to be administered by separate agencies, but that these agencies work towards a single application process (and potentially a single point of contact) for fisheries approvals, with the aim of providing a 'one-stop-shop' from the applicant's perspective.

**Recommendation 20**

The Committee recommends that commercial fishing organisations in Australia form a national peak body. This process could be initially assisted by the Department of Agriculture, Fisheries and Forestry through facilitating contact and coordination.

**Recommendation 21**

The Committee recommends that fisheries management should not be subject to political direction, except as explicitly provided for in legislation.

## Recommendation 22

The Committee recommends that the Australian Government, through the Council of Australian Governments, lead the development of a comprehensive national regional policy statement for fisheries, aquaculture and recreational fishing, which includes:

- an overall statement of strategic intent to drive future direction;
- a new guideline on precaution; and
- a research, development and extension work program.

