## INQUIRY INTO RECREATIONAL FISHING

Organisation:

Australian Conservation Foundation

Name:

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Position:

Manager, Healthy Ecosystems Program

Date received:

18/03/2010



18 March 2010

The Director
Select Committee on Recreational Fishing
NSW Legislative Council, Parliament House
Macquarie Street, Sydney NSW 2000

Dear Director

Re: Inquiry into Recreational Fishing

The Australian Conservation Foundation (ACF) is very grateful for the opportunity to submit to the inquiry conducted by the NSW Legislative Council's Select Committee on Recreational Fishing.

ACF would appreciate the opportunity to present at the public hearings of the Select Committee on Recreational Fishing.

We would also like to endorse the submissions made by the Nature Conservation Council of NSW, the National Parks Association of NSW and the Australian Marine Conservation Society.

Should your require any further information about this submission, please contact Ms Chee Chee Leung

Yours sincerely,

Paul Sinclair

Manager,

Healthy Ecosystems Program

The Australian Conservation Foundation is committed to achieve a healthy environment for all Australians. We work with the con and government to protect, restore and sustain our environment. www.acfonline.org.au

Authorised by Don Henry, Executive Director, Australian Conservation Foundation, Floor 1, 60 Leicester Street, Ca.



# ACF SUBMISSION TO THE NSW LEGISLATIVE COUNCIL'S SELECT COMMITTEE ON RECREATIONAL FISHING

#### Summary of recommendations

*Recommendation 1:* Improve communication to recreational fishers and the wider community about the benefits of marine protected areas in NSW.

Recommendation 2: Strengthen coordination and integration between the Commonwealth and the state on marine planning, including the implementation and management of marine protected areas.

Recommendation 3: Secure greater representation of key stakeholders in recreational fishing and marine protection advisory groups.

*Recommendation 4*: Conduct research into the value of marine ecosystem services and the social and economic benefits of marine protection.

Recommendation 5: Adopt and implement the Code of Practice for Recreational Fisheries.

Recommendation 6: Consider the combined impact of recreational and commercial fishing in the development of estuaries management and protection plans rather than simply excluding one form of fishing to benefit the other.

Recommendation 7: Develop a network of marine sanctuaries that includes a comprehensive, adequate and representative sample of marine life and habitats.

Recommendation 8: Expand marine research, including the comprehensive mapping of marine habitats in state waters.

Recommendation 9: Undertake an Environmental Impact Statement for the impact of recreational fishing on the NSW marine environment.

#### Overview

Recreational fishing plays a very important part in the social, cultural and economic fabric of New South Wales. However, it has a direct impact on the natural marine environment. Effective management, informed by improved research and delivered alongside strong community education and communication programs, can ensure recreational fishing is balanced with conservation.

There is widespread support for protection of marine biodiversity and ecosystems. A Department of Environment, Climate Change and Water survey of 2000 people in NSW found the vast majority (85 per cent) agreed that some areas of the marine environment should be protected, even if it meant recreational and commercial fishing were excluded. The survey also showed the public ranked the environment in the top five most important issues the NSW Government should address (DECCW 2010).

Marine protected areas bring benefits to marine life and habitats. They can help threatened fish populations recover their numbers, and build the resilience of marine species. This increased biodiversity can generate value to coastal communities through improved opportunities for recreation and new jobs in management, tourism and research. Protected areas can enhance the recreational fishing experience and place the sector on a clear path towards sustainability that will help secure its viability for the long term.

#### Comments on the Terms of Reference

Terms of Reference 1 (a): The current suite of existing regulatory, policy and decision-making processes in relation to the management of recreational fisheries in New South Wales, including the process for the creation of Marine Protected Areas and Marine Parks and the efficacy of existing Marine Protected Areas and Marine Parks

#### Better education and communication about marine protection

Recreational fishing management programs should include more education and communication about marine protected areas, including the different types of protection and the activities permitted in each area. Currently, there is uncertainty among the public over the different rules covering the use of multiple use marine parks, aquatic reserves and marine extensions. Improved communication would help to achieve greater understanding of and support for marine protection within the community, especially the recreational fishing community.

More effort should also be made to educate the public about the benefits of marine parks, especially the science supporting their establishment. This is particularly important during the process of creating marine protected areas to ensure there is informed debate and that community views are based on accurate, science-based information.

*Recommendation 1:* Improve communication to recreational fishers and the wider community about the benefits of marine protected areas in NSW.

#### Integrate Commonwealth and state marine planning and protection processes

The planning, implementation and management of marine protection requires improved integration and coordination between the Commonwealth and the state. The environment of a NSW marine park cannot be considered in isolation. Species may move across park boundaries and between state and Commonwealth waters, while activities outside protected areas may affect marine life within. Links should be established between existing and proposed state and Commonwealth marine protected areas, and this should be made a priority as the Federal Government undertakes its marine bioregional planning program for Commonwealth waters.

Recommendation 2: Strengthen coordination and integration between the Commonwealth and the state over marine planning, including the implementation and management of marine protected areas.

#### The efficacy of existing marine protected areas and marine parks

There is extensive published scientific research to show that marine protected areas and marine parks are highly effective tools for helping overfished and threatened species recover their numbers and build resilience to climate change.

Among the international papers, a University of California review of 89 studies of marine protected areas found that fish populations, size and biomass all dramatically increased inside reserves, and marine life spilled over to nearby fished areas. The diversity of communities and the mean size of organisms within a reserve were between 20 and 30 per cent higher than unprotected areas. The density of organisms in reserves was roughly double that outside, and the biomass of organisms was nearly triple (Halpern, 2003).

In Australian waters, monitoring of the protected marine reserves network in the Great Barrier Reef has revealed rapid increases of targeted fish and sharks inside no-take reserves, in both reef and non-reef habitats. Scientists have found the numbers and size of fish almost doubled on many no-take reefs. They reported that reserves benefitted overall ecosystem health and resilience, with preliminary economic analysis suggesting considerable net benefits in protecting environmental and tourism values (McCook et al, 2010).

More locally, research at NSW marine parks is also providing indications of positive biodiversity outcomes. Preliminary survey results from subtidal rocky reefs at the Jervis Bay Marine Park revealed that two exploited fish species, the red morwong and bream, and one threatened species, the grey nurse shark, showed trends for population increase in marine park sanctuary zones (Barrett et al, 2006). At the Solitary Islands Marine Park, there was evidence that the abundance and mean size of mud crabs were consistently greater within sanctuary zones compared to fished areas in the same estuary (Butcher et al, 2002).

A Marine Parks Authority NSW review of the benefits of marine protected areas said there was "considerable scientific information" to show that marine park protection zones are an important tool in the long-term conservation and management of marine biodiversity and ecological processes. The review also acknowledged that many of the world's leading marine scientists believe a network of protected areas is a necessary part of overall efforts to provide ecologically sustainable use of marine resources (Marine Parks Authority NSW, 2008).

Besides protecting biodiversity and habitats, marine protected areas help to build more sustainable fisheries and create jobs in their management and through increased tourism and recreation. They can also serve as natural reference sites for scientific research that will enable us to better understand the marine environment, to measure the impact of fishing and other pressures, and to improve fisheries management to ensure the industry's long-term viability.

Terms of Reference 1 (b): The effectiveness and efficiency of the current representational system of trusts and advisory committees that advise government departments and statutory authorities

Advisory bodies should include sufficient representation from a range of key stakeholders including the Marine Parks Authority, the diving community and the conservation sector. All stakeholders that advise government departments and statutory authorities have a duty to present advice that is fair and based on facts.

*Recommendation 3*: Secure greater representation of key stakeholders in recreational fishing and marine protection advisory groups.

Terms of Reference 1 (c): The value of recreational fisheries to the economy in New South Wales

Recreational fishing plays an important part in the NSW economy. The Survey of Recreational Fishing in NSW in 2000-01 reported the average recreational fisher spent about \$550 a year, with about 1 million recreational fishers across the state. The money these fishers spend is substantial and important to regional economies. However, a well planned network of marine protected areas can support ongoing recreational fishing and may help improve the quality and quantity of catch. Habitat protection and

reduced commercial fishing achieved through marine protection will also enhance the recreational fishing experience.

Besides fishing, other recreational marine based activities such as swimming, boating and kayaking are also very valuable to coastal economies. For instance, a survey of 51 businesses near the Solitary Islands Marine Park found staff numbers increased and estimated annual turnover grew by 20 per cent between 2001 and 2005, with the largest source of increased business coming from general beach users who travelled from out of the region (Ryan, 2006). Marine protected areas can create a more sustainable future for a range of marine based industries in NSW.

The NSW Government should undertake a thorough investigation into the value of ecosystem services provided by the marine environment, as well as the social and economic benefits of marine protection. The research findings would also assist marine and coastal planning through informing decisions on development proposals.

Recommendation 4: Conduct research into the value of marine ecosystem services and the social and economic benefits of marine protection.

Terms of Reference 1 (d): The gaps in existing recreational fishery programs, including the number and location of Recreational Fishing Havens

The NSW recreational fishery should implement the principles and practices of the 2008 Code of Practice for Recreational Fisheries, which promotes best practice for responsible management and fishing practices (EIFAC, 2008). The code stipulates the importance of environmental stewardship in recreational fishing practice and management, and the need for ecosystem and precautionary approaches for sustainable recreational fisheries management.

Recreational fishing havens may benefit anglers but do not necessarily improve the health of marine life as total recreational catches can be large, sometimes larger than commercial catches (see Appendix 1). This exclusion of commercial fishing risks reducing the availability of quality local seafood to NSW fish markets and seafood consumers. Any effective fisheries management of estuaries should consider the impact of the total combined catch of recreational and commercial fishing in the development of management and protection plans rather than simply excluding one form of fishing for the benefit of the other.

Recommendation 5: Adopt and implement the Code of Practice for Recreational Fisheries.

Recommendation 6: Consider the combined impact of recreational and commercial fishing in the development of estuaries management and protection plans rather than simply excluding one form of fishing to benefit the other.

Terms of Reference 1 (e): Ecologically sustainable development issues related to improving recreational fisheries

The development of marine sanctuaries that include a comprehensive, adequate and representative sample of marine life and habitats, are critical to the goal of ecologically sustainable fisheries. These sanctuaries provide examples of natural marine ecosystems that are undisturbed by fishing, which inform the determination of sustainable catch levels for different species to ensure the long-term future of recreational fishing.

Significant improvements in research, including comprehensive mapping of marine habitats in state waters and an Environmental Impact Statement (EIS) for NSW recreational fishing, must be undertaken. This work is required to assess the impacts of recreational fishing on the marine environment, and inform the development of more sustainable and effective management of marine waters. Without this information, achieving the goal of ecologically sustainable development is very difficult.

While the general perception is that commercial fisheries have a larger impact on the environment, the total recreational catch is sometimes equal to or greater than the total commercial catch. Total NSW annual catch figures for some fully fished species such as bluespotted flathead, sand whiting and spotted mackerel show the total recreational catch was more than three times greater than the total commercial catch (see Appendix 1).

An EIS should collate catch and effort data for NSW recreational species and examine size and bag limits. It could investigate any effects of selectively removing larger fish, the survival rates of fish that escape before capture or are released, and instances where maximum – as well as minimum – size limits may be appropriate. Further studies of recreational fishing waste, including impacts as well as the effectiveness of mitigation efforts, are also needed.

Recommendation 7: Develop marine sanctuaries that include a comprehensive, adequate and representative sample of marine life and habitats.

Recommendation 8: Expand marine research, including the comprehensive mapping of marine habitats in state waters.

Recommendation 9: Undertake an Environmental Impact Statement for the impact of recreational fishing on the NSW marine environment.

### APPENDIX 1: Comparison of total annual catch by NSW commercial and recreational fisheries.

Source: Status of Fisheries Resources in NSW 2006/07.

Species	Exploitation status	Commercial catch	Recreational catch
		(tonnes)	(tonnes)
Bluespotted Flathead	Fully Fished	125	320-450
Dart	Undefined	<5	15-50
Dusky Flathead	Fully Fished	120	570-830
Flounders	Undefined	<20	10-20
Grey Morwong	Overfished	40	130-210
Hammerhead Shark	Undefined (IUCN	<5	10-50
	Vulnerable/Endangered)		·
Luderick	Fully Fished	350	270-550
Mackerel Tuna	Undefined	15	<50
Mahi Mahi	Undefined	<5	100
Mako Shark	Undefined (IUCN Vulnerab	6	30-140
Mulloway	Overfished	40	100-500
Pearl Perch	Uncertain	13 .	<30
Sand Whiting	Fully Fished	14	230-460
Snapper	Growth Overfished	200	180-250
Spanish Mackerel	Fully Fished	5	10-100
Spotted Mackerel	Fully Fished	25	10-100
Sweep	Fully Fished	40	30-60

Tarwhine	Fully Fished	<i>7</i> 5	130-210
Teraglin	Fully Fished	10	70-110
Tiger Shark	Undefined (IUCN Near Threatened)	5	10
Yellowfin Bream	Fully Fished	360	820-1070
Yellowtail Kingfish	Growth Overfished	125	120-340

#### **APPENDIX 2: References**

Barrett, N et al. (2006). "Ecosystem Monitoring of Subtidal Reefs in the Jervis Bay Marine Park (1996-2005)". Tasmanian Aquaculture and Fisheries Institute Internal Report.

Butcher PA, Boulton AJ and Smith SDA (2002). "Mud crab (*Scylla serrata*: Portunidae) populations as indicators of the effectiveness of estuarine marine protected areas." World Congress on Aquatic Protected Areas Proceedings: 421-427.

Department of Environment, Climate Change and Water (DECCW) NSW (2010). "Who Cares About the Environment in 2009? A survey of NSW People's environmental knowledge, attitudes and behaviours."

European Inland Fisheries Advisory Commission (2008). "EIFAC Code of Practice for Recreational Fisheries." EIFAC Occasional Paper No. 42.

Halpern, B (2003). "The impact of marine reserves: do reserves work and does reserve size matter?", Ecological Applications 13 (1): 117-137.

Marine Parks Authority NSW (2008). "A review of benefits of marine protected areas and related zoning considerations."

McCook, Laurence J et al. (2010). "Adaptive management of the Great Barrier Reef: a globally significant demonstration of the benefits of a network of marine reserves", *Proceedings of the National Academy of Sciences*, February 22, 2010.