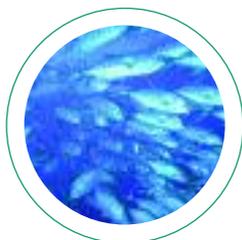


NATIONAL POLICY

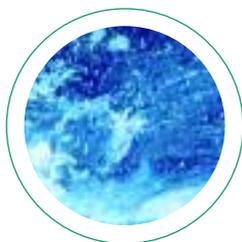
ON FISHERIES BYCATCH



August



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Ministerial Council on Forestry
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The National Policy on Fisheries Bycatch was endorsed by the Ministerial Council on Forestry, Fisheries and Aquaculture in April 1999.



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PREFACE

Concern over the take of non-target species in fishing—a problem known as bycatch—has grown in importance over the past few years. Governments around Australia have taken steps to address bycatch, including preparation of the threat abatement plan to mitigate the take of seabirds in longlining, and the creation of closed areas in the Great Barrier Reef and Northern Territory to protect dugong. Other initiatives are underway to further minimise bycatch, such as agreements by industry for the mandatory adoption of turtle excluder and bycatch reduction devices in several fisheries. Underpinning these management practices, a number of research programs around the country are testing and promoting technological improvements to fishing gear and methods.

In light of this activity, all Australian Governments agreed to develop a bycatch policy to provide a national framework for coordinating efforts to reduce bycatch. The National Policy on Fisheries Bycatch is the product of these efforts. The Policy provides options by which each jurisdiction can manage bycatch according to its situation in a nationally coherent and consistent manner.

The National Bycatch Policy is an expression of concern by all fisheries ministers and the fishing industry about bycatch. The challenge now is for fisheries agencies, working in partnership with industry and scientists, to implement practical measures and demonstrate to the community that fishing can operate in a manner that reduces waste and helps to conserve all components of the marine environment. Over time, the National Policy on Fisheries Bycatch will provide a benchmark against which efforts to reduce bycatch can be measured. I commend the Policy to all interested readers, and encourage you to assist with implementing its actions.



Warren Truss
Chair of Ministerial Council on Forestry, Fisheries and Aquaculture

INTRODUCTION

Bycatch from fishing activities has long been recognised as an issue requiring attention. Increasingly, international treaties and conventions are placing obligations on signatories to address bycatch. For example, the United Nations Food and Agricultural Organisation has developed a "Code of Conduct for Responsible Fisheries" (1995) which addresses the issue of bycatch and provides a useful blueprint for responsible fisheries management.

The United Nations Agreement for the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (1995) contains a number of obligations regarding the conservation and management of these stocks. Among these obligations are provisions related to the impact of fishing on non-target species, and the application of the precautionary approach to the management of fisheries.

The entry into force of the United Nations Convention on the Law of the Sea, to which Australia is a party, means that the Commonwealth Government now has responsibility under international law for "species associated with or dependent upon" fished species within its exclusive economic zone. This responsibility flows through to the States and Northern Territory for the fisheries under their jurisdiction.

There is a need to develop a broad, more strategic approach in addressing bycatch if all fishing activity in Australian waters is to be ecologically sustainable. However, it is also important to recognise that there will be some environmental cost in meeting the needs of consumers and in supplying the demands of the commercial, recreational, charter and indigenous sectors. Closing down or restricting Australian fishing activity may not in itself lead to a reduction in bycatch. For example, if domestic commercial fisheries are unnecessarily restricted, consumer demand may lead to the importation of seafood from poorly managed fisheries and an increase in the level of bycatch in those countries. There are also other consequences from restricting recreational, charter or indigenous fishing activity.



Discarding catch can be a wasteful practice that may pose a threat to aquatic systems over time. The taking of bycatch such as turtles and dugong, seabirds and other species that may be unable to sustain any additional mortality also

poses a direct threat to the survival of some species or populations of aquatic animals.

WHY HAVE A NATIONAL BYCATCH POLICY?

The primary reason for a National Bycatch Policy is to ensure that direct and indirect impacts on aquatic systems are taken into account in the development and implementation of fisheries management regimes. Under the Commonwealth Fisheries Management Act 1991 there is a requirement to "ensure that the exploitation of fisheries resources and the carrying on of any related activities are conducted in a manner consistent with the principles of ecologically sustainable development and the exercise of the precautionary principle, in particular the need to have regard to the impact of fishing activities on non-target species and the long term sustainability of the marine environment". Similar principles are embodied in State and Northern Territory fisheries legislation for both marine and freshwater environments.

By reducing discards, particularly non-target catch and juveniles of commercially or recreationally valuable species, we can enhance the productivity of our fisheries and maintain the integrity of our aquatic ecosystems.

The National Strategy for Ecologically Sustainable Development and the National Strategy for the Conservation of Australia's Biodiversity place responsibility on fishery agencies and fishers to address bycatch. Some species of aquatic animals (including some fish) are not managed under fisheries legislation, but under nature conservation legislation. As some of these species are taken as bycatch, a cooperative approach is needed to satisfy the requirements of both forms of legislation and to develop complementary management arrangements involving both the Commonwealth, and the States and Northern Territory.

By taking action to address bycatch, all groups will benefit through sustainable catch levels and reduced damage to target catch. The commercial sector, for example, may experience shorter sorting times, less gear damage and lower fuel consumption. A National Bycatch Policy is needed because bycatch is an environmental, social,



educational, engineering and economic issue and needs to be addressed strategically and in a focused, coordinated manner.

It is also important that stakeholders have a common understanding and agreement on the need for action. By achieving a common understanding, support for addressing bycatch at the level of the individual fishery can follow. Stakeholders will have a role in ensuring that action taken to reduce bycatch will have achievable objectives, and can be implemented in reasonable timeframes.

The Policy recognises that there will be different ways of addressing the bycatch issue for different fishing activities. In some fisheries, fishery-specific bycatch action plans will be developed. In others, different mechanisms may be used e.g. by incorporating specific measures into management plans. Actions will be prepared in consultation with stakeholders, through for example Fisheries Management Advisory Committees and Consultative Committees. The Policy provides a framework for the development of such actions.

WHAT DOES BYCATCH MEAN?

Generally, fishers use their skills and experience to take the highest value catch they can (TARGET CATCH). This value may be determined in terms of dollars, size, eating or sportfishing quality, or social significance, depending on which sector the fisher comes from. In most forms of fishing, however, some species which are not targeted will also be taken. While some of this non-targeted catch is commercially valuable and is retained by fishers (BY-PRODUCT or incidental catch), some is returned to the water (DISCARDS) either because it has no value or because regulations preclude it being retained.

It is recognised that target and by-product species must be managed effectively as part of specific fisheries management arrangements.

Over time a species may change from being discarded to being by-product or targeted, and vice versa depending upon, among other things, consumer demand, market channels and technology.



The definition of fisheries bycatch, at its broadest, includes all material, living or non-living, other than target species which is caught while fishing. Regardless of whether a species is kept or discarded, objectives of fisheries legislation provide for the sustainable management of all resources. A range of mechanisms exist to manage some types of catch, and particular arrangements are in place to manage the take of commercial species, whether targeted or by-product.

BYCATCH, as the term is used in this document, includes discards and also that part of the "catch" that is not landed but is killed as a result of interaction with fishing gear.

While the term bycatch may refer to all non-targeted catch, including by-product, discards and gear interactions, this Policy will deal specifically with those aspects of bycatch that are not currently subject to management provisions.

Target and by-product species are managed through formal arrangements such as fishery-specific management plans. By-product species in one fishery are commonly targeted in another fishery and as such may be managed under a fishery-specific management plan with complementary arrangements to limit their take in other fisheries. Such arrangements are based upon historical interactions between these fisheries. The Offshore Constitutional Settlement agreements between the Commonwealth and the States and Northern Territory facilitate these arrangements.

The combination of existing management arrangements and this Policy will assist resource users and other interested parties work towards the sustainability of all marine life that comes into contact with fishing, including species that interact with fishing gear but are not landed.

WHO ARE THE STAKEHOLDERS?

All Australians, including future generations, are stakeholders. Specific interest groups include:

- Commercial fishing sectors
- Recreational fishing sectors
- Charter fishing sectors
- Indigenous peoples
- Passive users (divers)
- Environment and conservation groups (non-government organisations)
- Consumers
- Community groups
- Tourism sector

- Seafood processors, marketers and retailers
- Fishery management and conservation agencies
- Research agencies

GUIDING PRINCIPLES OF THE POLICY

The following guiding principles provide the philosophy which underpins the Policy and capture the spirit in which actions to address bycatch will be developed and implemented.

All decisions and actions to address bycatch will:

- Foster stewardship of Australia's aquatic resource, ie maintain and improve the quality, diversity and availability of fisheries resources, including fish habitats, and the integrity of the aquatic ecosystem into the future;
- Promote cooperative and transparent approaches involving all stakeholders for effective stewardship of our aquatic resources;
- Integrate short-term considerations with long-term goals in managing aquatic resources;
- Use robust and practical methods to assess bycatch so as to make decisions on management;



- Recognise the unique biological, economic, cultural and social nature of individual fisheries;
- Encourage cooperation in the development of complementary and effective arrangements between relevant authorities where stocks overlap, are split between jurisdictions, or are migratory;
- Ensure the widest adoption of bycatch mitigation measures through collaboration between the commercial, recreational, charter and indigenous fishing sectors, research and research funding organisations, environment and nature conservation agencies and fisheries management agencies;

- Apply the precautionary approach to the management of fish and aquatic resources.

CORE OBJECTIVES OF THE POLICY

An over-arching objective of the Policy is to ensure that bycatch species and populations are maintained at sustainable levels. Within this are the following sub-objectives:

1. To reduce bycatch;
2. To improve protection for vulnerable/threatened species;
3. To minimise adverse impacts of fishing on the aquatic environment.



STRATEGIES FOR DEALING WITH BYCATCH

There is a range of strategies that could be adopted in managing bycatch. Some are suggested below. For any given fishery a particular combination of strategies may be necessary, but not all strategies will be applicable to all fisheries. Further strategies will emerge through the consultative process.

The standards and criteria by which these are developed should always refer to the principles on which this Policy is based and to which each fishery management agency must adhere through legislation or policy.

Examples include:

- prioritization of critical bycatch issues and resourcing requirements;
- development of codes of practice to minimise bycatch;
- as required, institute fisheries adjustment mechanisms including provision of suitable compensation if required;
- development of management plans, legislative arrangements and bycatch action plans which address bycatch in both existing and developing commercial fisheries and the recreational, charter and indigenous sectors;
- development of education and training programs aimed at reducing bycatch;



- application of economic incentives or adjustment arrangements to reduce bycatch;
 - development of cooperative bycatch management arrangements for species or fisheries within more than one jurisdiction;
 - encouragement of research funding organisations and the commercial sector to fund and/or facilitate further work into identifying the impacts of fishing on bycatch, by-product and other species, mitigation techniques and use of bycatch species where appropriate;
 - regulate for appropriate gear design or fishing practice;
- enhancement of the quality and quantity of fisheries data, including bycatch data, and the thorough and efficient use of all existing data sets to assist in achieving ecologically sustainable development.

CHECKLIST FOR DEVELOPING A FISHERIES SPECIFIC ACTION PLAN

The following checklist may assist those involved in the preparation of bycatch action plans to define the specific bycatch issues and identify appropriate actions.

- What is the issue? (For example: threat to an endangered species, unsustainable bycatch or catch of by-product species, public perception of waste, lack of good quality data, benthic habitat impact, contamination, market forces, type of fishing operation, lack of community and fisher awareness). What is the order of priority for dealing with the issues?
- Is the issue species specific, fishery specific, fishing method-based, or regional in nature? Does it relate to a change in the management status of the region in which the fishery operates (e.g. the declaration of a marine protected area)?
- Is the issue primarily due to the nature of the fishery (e.g. prawn trawling where there is a high bycatch) or the management regime under which that fishery operates (e.g. where a bag limit or quota system may require the discarding of some of the landed catch)?

- What information and/or analyses are available on:
 - the status of fish stocks concerned (both target and bycatch, by fishery/area);
 - the economic benefits of reducing discards;
 - the status and the vulnerability of other populations interacting with the fishery/method concerned, and the impacts of that fishery;
 - the survival of discards (including those that are not actually hauled on board, but escape during fishing activities);
 - the conservation significance of the issue and its:
 - impact on biodiversity (ecosystem, species or genetic);
 - impact on foodwebs;
 - impact on interacting fisheries (recreational and commercial), stock and biological community structure;
 - impact on trade and the economy;
 - impact on the environment.
- Are there specific strategies already in place in other areas which minimise the possibility of taking vulnerable species (e.g. turtles, seabirds and other), and how effective are these strategies in minimising fisheries interactions?
- Which groups are affected by the issue - who needs to be involved in addressing the issue and implementing the suggestions?
- Are there engineering solutions (mitigation measures) for the bycatch issues? Are they being implemented? Are they effective? If not, why not?
- Are there international obligations (treaties and conventions) or trade issues which must be considered? How should they be considered?
- Are there any existing Commonwealth/State/Northern Territory policies and/or initiatives to address the issue and, if so, are they effective? Could they be extended to other jurisdictions?
- Are there legislative obligations (Commonwealth, State or Northern Territory)? Have these been satisfied?

- Are there existing industry codes of practice? Are they being applied? Are they working? Are they effective?
- Are current management or sectoral practices, or other factors, leading to increased bycatch or capture of lower-value by-product species which are then discarded (e.g. the inability to store bulky, low-value bycatch aboard vessels)? Can more appropriate practices be identified and implemented, or solutions found to other causative factors?
- Are there cumulative impacts on the same species from different fisheries and non-fisheries sources?
- What management options are available and what would be the impact of each of these on the seafood industry, consumers and other groups? Will raising awareness and conducting education programs need to be considered and can these fit into existing frameworks such as Coastcare and the Fisheries Action Program?
- Who should pay?

In summary, the most important thing in the development of bycatch reduction plans is that these should be developed in a consistent and transparent way and that they are implemented effectively. The basic steps are:



- determine the availability of data and its usefulness;
- decide what the bycatch issue is; then
- look at all the options (utilise, avoid or reduce) that are available; and
- decide how to address the problem (strategies) and determine whether new ways to address the issue need to be developed;
- outline actions required that are practical and effective to achieve the objectives of the policy; and
- review progress or evaluate the effectiveness of the program.

ACTION BY JURISDICTIONS TO ADDRESS BYCATCH

The Commonwealth and States/Northern Territory are addressing bycatch through a range of approaches. The action being taken by jurisdictions is outlined below:

Western Australia

In June 1999, the Minister for Fisheries adopted the National Policy on Fisheries Bycatch as the Western Australian Policy on Fisheries Bycatch. In association with industry and other stakeholders, Fisheries Western Australia has developed a program and timeframe for the implementation of the policy across commercial and recreational fisheries, and is preparing action plans for all fisheries on a priority basis. The Action Plan for the Shark Bay Prawn and Scallop Managed Fisheries is well under way, for example, and drafts should be available later during 1999. Other fishery action plans will be developed on a priority basis, beginning in the near future with the Exmouth Prawn Trawl Managed Fishery and the Pilbara Fish Trawl Managed Fishery.

Victoria

Victorian fisheries management provides that fishing is conducted in an ecologically sustainable manner. All licences are subject to a range of prescribed conditions which control gear use, and set seasonal and area closures. A major objective of fisheries regulations is to control bycatch. Regulations are reviewed regularly and updated as required. Management Plans are being developed for all commercial fisheries and these are required to address any existing or potential bycatch issues.

Tasmania

When developing new or revised management arrangements for a fishery, Tasmania actively considers the issue of bycatch. In this way, Tasmania continues to build on existing protective measures. Restrictions on netting, which include aspects such as mesh size, gear limits and no-netting areas, are all designed to reduce the catch of non-target fish. Other measures to reduce bycatch that have been implemented include exclusion zones for trawling and areas closed to scallop dredging. Tasmania is also actively researching and modifying the practices of longline fishers with the direct objective of reducing the incidental mortality of sea birds.



Northern Territory

The Northern Territory has embraced the National Bycatch Policy as a key initiative in improving the sustainability of its fisheries and as a complementary tool in conserving marine biodiversity.

The NT has already taken a number of actions to reduce bycatch. These include closing an area to net fishing to reduce dugong mortality, introduction of the Julie-Anne trawl to reduce bycatch and habitat damage, and favouring fishing methods which are less damaging to the marine environment, such as potting and line fishing. Related policies, such as excluding net fishing for barramundi in Darwin Harbour and Shoal Bay, have also reduced bycatch. The NT will continue to build on these initiatives, which all involve the active participation of and often leadership from key fisheries sectors.

New South Wales

Research and management initiatives dealing with prawn trawl bycatch have resulted in the first Australian fisheries to have mandatory bycatch reduction devices (BRDs) that are designed to save large quantities of juvenile fish. BRDs were introduced into the Port Jackson and Botany Bay prawn fisheries last December, and will be extended to all other estuarine prawn trawl fisheries within the next year or so.

On 1st July, 1999, approved BRDs were legislated for the ocean prawn trawl fishery off NSW. Attention is now turning to addressing the discarding of small fish associated with estuarine prawn and fish hauling. Marked progress has already been made in research into this fishery, with several modifications to gears and fishing practices already tested, and new permits to use them issued to fishers in certain areas.

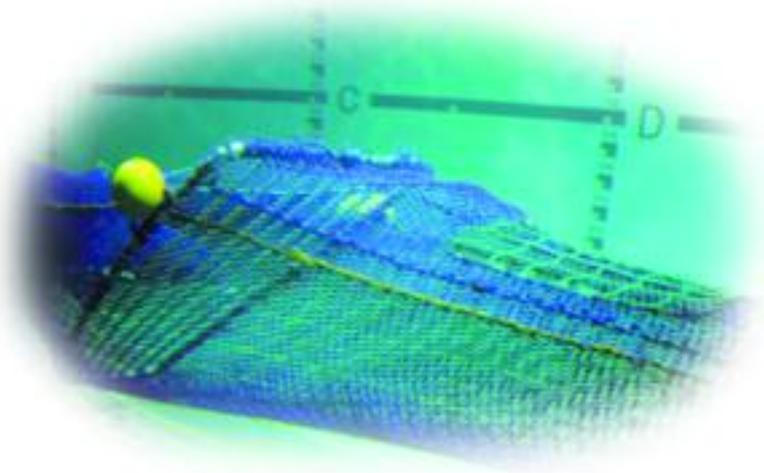


South Australia

South Australia's response to implementing the National Bycatch Policy has several research and management threads. These initiatives include:

- a successful research program on prawn trawl technology to reduce bycatch of small prawns;
- reviewing net mesh sizes to reduce capture of non-target species;

- an increase in no-netting areas to protect juvenile fish and critical habitat;
- research into the impact of other fishing gear (such as rock lobster pots) on habitat (ie sponges, bryozoans) to assess and quantify any impacts; and
- investigation of market opportunities for some bycatch species.



Queensland

Over the last 5 or 6 years, Queensland has been developing management plans for each of the fisheries under its jurisdiction, which address the range of issues that each faces, such as effort, stock sustainability, allocation, and environmental impacts (including bycatch). The Queensland East Coast Trawl Fishery is one of the major Queensland fisheries for which such a plan has been developed. Following stakeholder and community consultation, turtle excluder devices (TEDs) were made compulsory in 7 priority areas of the Queensland east coast, including Moreton and Hervey Bays, effective in the fishery as of 1st May 1999.

Provisions relating to BRDs will be extended progressively around the coastline and throughout the Great Barrier Reef region from 1st January 2001. A number of areas have also been created along the Queensland coast to protect dugong from being caught in gillnets.

Commonwealth

The Commonwealth is finalising a bycatch policy—the original model for the National Bycatch Policy—which should be released later in the year. Under the Commonwealth's policy, all Commonwealth fisheries will be required to prepare Bycatch Action Plans to reduce the impacts of fishing on non-target species. A bycatch action plan for the Northern Prawn Fishery has been endorsed by the Australian Fisheries Management Authority, requiring all operators to adopt and use TEDs to protect turtles and BRDs to reduce fish bycatch in the fishery next year. The Torres Strait Prawn Fishery has also finalised a bycatch action plan. Other plans will be prepared for Commonwealth fisheries on a priority basis under the Commonwealth Bycatch Policy.



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