

Audits and reviews completed during the period included the following:

- ◆ share management of abalone and lobster
- ◆ application control review of SUN FMS
- ◆ regional office review - Northern Region
- ◆ taxation compliance review
- ◆ registered fish receiver arrangements
- ◆ commercial fisheries licensing arrangements.

Appendix 36

TRUST FUND REPORT 2002-03

Five special fisheries trust funds have been created under Division 3 of the *Fisheries Management Act 1994*. Moneys held in these trust funds are under the control of the Minister for Agriculture and Fisheries and can be expended by the Minister only for the purposes authorised by the Act, in consultation with ministerial advisory committees.

The activities funded by each of the special fisheries trust funds during 2002-03 are outlined below. Expenditure estimates include a number of assumptions relating to allocated shared costs, overheads and flow of benefits from projects to different programs.

RECREATIONAL FISHING (FRESHWATER) TRUST FUND

Recreational Fishing (Freshwater) Trust Fund expenditure

Project	Total Available 2002-03* \$'000	Actual Expenses 2002-03 \$'000	Carry Forward \$'000
Bass habitat	102	65	37
Carp assessment and reduction program	51	166	...
Eastern cod stocking program	20	20	...
Effectiveness of stocking research	253	113	140
Enhanced Government fish production	305	310	...
Field operations (inland) staffing	608	574	34
Fish passage/weir removal	102	91	11
Fishcare volunteer program	306	301	5
Fisheries management strategy on fish stocking	140	305	...
Fisheries management strategy on recreational fishing	125	0	125
Freshwater catch monitoring program	253	154	99
Habitat restoration grants	100	5	95
Impoundments access program	43	8	35

Recreational Fishing (Freshwater) Trust Fund expenditure continued

Project	Total Available	Actual Expenses	Carry Forward
	2002-03*	2002-03	
	\$'000	\$'000	\$'000
Purchase of native fish from private hatcheries	200	146	54
Recreational advisory and education program	222	209	13
Recreational fishing expenditure survey	71	6	65
Regional fish habitat	295	250	45
Small project enhancement program	20	6	14
Statewide angler survey	13	0	13
Total	3,229	2,729	786

* The 'total available 2002-03' consists of allocations from the trust fund in 2002-03 and amounts carried forward from 2001-02.

Bass habitat

This project involves anglers in the mapping of habitats of three key bass rivers, the Macleay, Hawkesbury and Shoalhaven rivers, in order to establish a baseline for a long term monitoring project of these environments.

Carp assessment and reduction

The carp assessment and reduction project is a whole-of-government initiative jointly funded by a number of state agencies, with a small contribution from the freshwater trust. The project has several major components, including research into the development of effective fishing methods to target carp but mitigate impact on non target species, community education about carp, an incentive scheme to encourage commercial fishers to take carp, and increasing the commercial utilisation of carp.

Eastern cod stocking program

This conservation stocking program is part of the Eastern Cod Recovery Plan. Approximately 5,400 eastern cod fingerlings produced by a private hatchery were released in early January 2003 into the Orara River near Glenreagh and the Karangi Dam.

Effectiveness of stocking research

This project encompasses research into effective marking techniques for hatchery produced trout and native fish, surveys of fish populations in key impoundment fisheries, experiments in hooking mortality in stocked silver perch, as well as trial stocking projects. A number of reports on the project have been published in popular angling magazines, and presentations given to angling clubs.

Enhanced Government fish production

Government hatcheries at Narrandera Fisheries Centre, Gaden Trout Hatchery (Jindabyne), Dutton Trout Hatchery (Ebor) and Port Stephens Fisheries Centre received funding to boost production of native fish species (trout cod, Murray cod, golden perch, silver perch and Australian bass) and salmonid species (Atlantic salmon, brook trout, brown trout and rainbow trout). Funds were used for additional staffing and additional operational expenditure.

Field operations staff

Six additional inland NSW Fisheries officer positions are funded from the freshwater trust. These positions are



located at Inverell, Bathurst, Wellington, Cooma/Jindabyne, Albury and Buronga. Additional operational funding to all inland fisheries districts enhances the levels of compliance and advisory services available. Funds are provided for staff, and for operational expenses such as vehicle running, boats and travel, and specialist equipment.

Fishway passage/weir removal

Barriers to fish passage are one of the primary threats to native fish populations. A project officer was part funded to investigate improved fish passage at human-made barriers in inland regions including the decommissioning of discontinued weirs. Funding has facilitated the removal of Banarway Creek Weir as well as several small barriers in the Namoi Catchment on Gunidgera Creek. Progress is being made on a further priority sites for barrier removal or fish passage on both coastal and inland rivers including the Northern Rivers, Central Coast and Shoalhaven catchments.

Fishcare Volunteer Program (Freshwater)

Fishcare Volunteers are community members involved in face-to-face education of the recreational angling community. Volunteers donate their time and effort, promoting awareness and advising anglers about the rules and values of sustainable recreational fishing. They assist in a range of activities such as fishing clinics, catch surveys, fishing community events and volunteer training weekends. At 30 June 2003, there were 132 active inland volunteers.

Fisheries Management Strategies

Preparation of Fisheries Management Strategies and Environmental Impact Statements under the *Environment Planning and Assessment Act*, to identify, assess and address environmental, social and economic issues associated with freshwater fish stocking and recreational fisheries management.

Freshwater catch monitoring

The trust provides funding for angling research to be conducted at fishing tournaments throughout NSW. This work is a collaborative project between NSW Fisheries and anglers. It has proven a cost effective means for collecting quality angling data and provides the opportunity for anglers contribute to the management of their fisheries. The project monitors a wide range of events in both freshwater and saltwater fisheries. Catch and effort information is collected from anglers at these events. Competitors are asked to complete fishing report forms on which they record number of fish captures, fish measurements and their time spent fishing. This information is used to determine an angling catch rate (i.e. the number of fish caught for every hour spent fishing in the particular area) and the fish population structure in each fishery. The freshwater component of this project has recorded over 70,000 fish captured during 200,000 hours of angling. 60 major freshwater tournaments are presently being monitored annually.

Habitat restoration grants

This program provides grants to angling and community groups works for the on-ground enhancement and rehabilitation of fish habitats in inland waters through projects such as riparian zone protection through fencing, native tree planting, exotic vegetation removal, fish passage restoration and re-snagging.

Impoundment access

Increased access to impoundments for anglers will improve angling opportunities, decrease pressure on wild fish stocks and stimulate regional employment and economic activity. A project officer was part funded to negotiate improved access to impoundments.

Purchase of native fish from private hatcheries

Angling clubs, councils and community groups manage and take ownership of the fish stockings in their local areas. They receive dollar-for-dollar funding to increase the numbers of Murray cod, golden perch and Australian bass stocked in NSW. The dollar for dollar fish stocking project supports private hatcheries, increases stocking rates and increases compliance with reporting requirements for stocking groups.

Recreational advisory and education

This project provides advisory information to organised angling groups, licence sales agents and stocking groups, and supports the Advisory Council on Recreational Fishing and the Recreational Fishing Freshwater Trust Expenditure Committee. In 2002-03, the project subsidised a number of fishing clinics held at government hatcheries and funded advisory material such as signs, brochures, and booklets. A new freshwater recreational fishing guide was prepared and distributed.

Recreational fishing expenditure survey

No funds were expended on recreational fishing expenditure surveys this year. The table shows an accounting adjustment of funds returned to the trust.

Regional fish habitat

Protection, restoration and rehabilitation of fish habitat enhance the sustainability of recreational fisheries in inland regions. Two conservation managers based at Narrandera and Inverell ensure that the habitat implications and the potential impact on fish stocks are considered for a range of activities including modifying bridges, causeways, roads and culverts, water releases from dams, development approvals, and water management plans.

Small project enhancement

This project funds small projects that benefit recreational fishing. Organisations are encouraged to apply to the expenditure committee for support. Proposals are then prioritised and expenditure recommended. Projects funded in 2002-03 included, a disabled fishing platform on Lake Canobolas, and support for an angling club's native fin fish hatchery.

Statewide angler survey

No funds were expended on angler surveys this year.

RECREATIONAL FISHING (FRESHWATER) AND (SALTWATER) TRUST FUNDS

Two projects are funded on a one-third/two-thirds basis by these respective special fisheries trust funds as shown in the table below.

Recreational Fishing (Freshwater) and (Saltwater) Trust Funds expenditure

Project	Total Available 2002-03* \$'000	Actual Expenses 2002-03 \$'000	Carry Forward \$'000
Fishing information	133	100	33
Recreational fishing fee administration	828	774	54
Total	961	874	87

* The 'total available 2002-03' consists of allocations from the trust fund in 2002-03 and amounts carried forward from 2001-02.

Fishing information

Both expenditure committees recognised the need to inform anglers about the recreational fishing licence in NSW. The information project involved distribution of information about the fishing fee, exemptions from the fishing fee and the purpose of the fishing fee.

Recreational fishing fee administration

The NSW Government has made a commitment that no more than 10 per cent of fishing fee revenue is absorbed by administration costs.

Administration of the licensing system ensures the efficient servicing of enquiries from licence sales agents and licensed recreational fishers. It also covers running costs associated with maintaining the licence sales network, licence printing, postage, financial management and audit requirements, data management and payment of the five per cent agent commission to standard agents.

RECREATIONAL FISHING (SALTWATER) TRUST FUND

Recreational Fishing (Saltwater) Trust Fund expenditure

Project	Total Available Project \$'000	Actual Expenses 2002-03* \$'000	Carry Forward 2002-03 \$'000
Angler tournament monitoring	150	22	128
Communication and education	469	283	186
Expenditure committee meeting expenses	33	24	9
Expenditure patterns of Sydney recreational fishers	72	72	...
Field operations (coastal) staffing	1405	1240	165
Fish aggregation device program	137	120	17
Fishcare Volunteer Program	539	488	51
FMS on recreational fishing	300	...	300
Gamefish tagging program	100	61	39
Impact of restocked mulloway fingerlings	75	75	...
Licence research database	47	55	...
Marine recreational management	91	91	...
Marine recreational research	213	213	...
Pilot habitat restoration program	60	6	54
Recreational fishing platform at Yamba	10	10	...
Recreational harvest of baitfish in NSW	106	43	63
RFH survey	84	...	84
Selection of recreational fishing areas	774	544	230
Small grants program	51	7	44
Stock enhancement workshop proceedings	10	10	...
Stock structure and population genetics of yellowfin bream	6	6	...
Striped marlin economic survey	88	...	88
Study of landed fish at game fishing tournaments	18	18	...
Total	4,838	3,388	1,458

* The 'total available 2002-03' consists of allocations from the trust fund in 2002-03 and amounts carried forward from 2001-02.

Angler Tournament monitoring

Angling research is being conducted at fishing tournaments throughout NSW. This work is a collaborative project between NSW Fisheries and anglers. It has proven a cost effective means for collecting quality angling data and provides the opportunity for anglers to contribute to the management of their fisheries. The project monitors a wide range of events in both freshwater and saltwater fisheries of NSW. Catch and effort information is collected from anglers at these events. Competitors are asked to complete fishing report forms on which they record number of fish captures, fish measurements and their time spent fishing. This information is used to determine an angling catch rate (i.e. the number of fish caught for every hour spent fishing in the particular area) and the fish population structure in each fishery. The saltwater project has recorded over 16,000 fish captured during 22,000 hours of angling.

Communication and education

Licence fees support a range of projects aimed at educating the community about responsible fishing and fishing rules. Activities included the management and enhancement of fishing clinics along the coast; participation in community events and schools education programs, informing the community about fishing rules through advertisements, posters and flyers; and the preparation and distribution of a new saltwater fishing guide.

Expenditure committee meeting expenses

The Recreational Fishing Saltwater Trust Expenditure Committee oversees expenditure from the Recreational Fishing (Saltwater) Trust. There are thirteen members representing all 8 regions along the coast and the major angling organisations in NSW. The committee met four times during 2002-03 and was also requested to consider issues out of session. Expenses associated with the committee meetings included sitting fees, travel expenses and accommodation.

Expenditure patterns of Sydney recreational fishers

This study is surveying a sample of saltwater licence holders to obtain detail on the expenditure of Sydney's many recreational fishers in rural areas of NSW.

Field operations coastal staff

Ongoing funding has been provided for nine coastal Fisheries Officers positions to enhance the level of compliance and advisory services. These Officers are based in the Clarence, Hastings, Port Stephens, Hunter, Sydney (2), Shoalhaven, Batemans Bay, and Far South Coast regions. A new mobile squad of three Fisheries Officers has also been formed which is dedicated to recreational fishing compliance activities with a big focus on recreational fishing havens and suspected illegal commercial fishing.

Fish aggregation device (FAD) program

This new project assesses the effectiveness of FADs, and the value of FADs to recreational fishers in NSW. The project also aims to optimise FAD location and design, and to refine effective deployment and maintenance techniques to ensure cost effectiveness.

Fishcare Volunteer Program (saltwater)

The successful Fishcare Volunteer Program first expanded from freshwater to saltwater with a trial at Lake Illawarra. At 30 June 2003, a total of 239 volunteers have attended two-day training courses on the NSW coast. In 2003/03, courses were held in Tweed Heads, Maclean, Coffs Harbour, Wallis Lake, The Entrance, Long Reef, Lake Illawarra, Jervis Bay, Narooma and Eden. Volunteers participate in fishing clinics, schools education, community events, research programs and community education.



Fisheries Management Strategy (FMS) on recreational fishing

A recreational fishing management strategy and associated environmental assessment is being prepared which will place NSW at the forefront of recreational fishery management, with a clear vision for the future of recreational fishing in NSW. The Fisheries Management Strategy will cover all recreational fishing activities including angling, spearfishing, hand gathering and charter boat fishing. This strategy will be subject to a full environmental assessment. In recognition of the diverse issues for consideration, separate fresh and saltwater planning committees have been established to assist with the development of the strategy.

Gamefish tagging program

Funds have been allocated towards the Game Fish Tagging Project, the largest recreational tagging project of its kind in the world. The objectives are to obtain information on the biology (distribution, movement, growth, exploitation) of billfish, tuna, sharks and sportfish, and to encourage gamefish anglers to participate in fisheries management and research. The project provides the only tag/recapture information on species such as black marlin, sailfish, albacore, dolphin fish and sharks. A new double barbed tag regarded as the 'world's best' has also been introduced. The new tag will significantly improve tag retention rates.

Impact of restocked mullet fingerlings in NSW estuaries

This project will undertake research into the environmental impacts of mullet stocking in NSW estuaries and provide information on appropriate levels of stocking.

Licence research database

Information on the number and distribution of recreational fishers is important for the management of recreational fishing and the conservation of fish stocks. This project involves the development and maintenance of a database of anglers who buy the licence. This will provide information on a broad geographic and fisheries based cross-section of the recreational fishing community. It also allows for cross checking of the accuracy and reliability of records and will enable licence spending decisions to be better targeted to benefit the majority of anglers.

Marine recreational management

Funds have been allocated to a range of marine recreational management activities. This includes providing advisory information to angling groups, stocking groups and stakeholders, consulting and corresponding with fishing clubs and other key stakeholder groups, responding to angler enquiries, collating community submissions and maintaining a database of over 800 NSW based recreational fishing clubs.

The Advisory Council on Recreational Fishing provides high quality advice to the Minister for Fisheries on matters relating to recreational fishing. The Council plays a key role in consultation over new changes to recreational fishing and advises on the feasibility and acceptability of management initiatives. The Council is required to meet at least four times a year and also considers issues out of session. Expenses associated with Council meetings are funded by the Trust.

Marine recreational research

Marine research activities funded by the trust include the Estuarine Creel Survey projects, including analysis of survey data. A comprehensive range of recreational fishing statistics has been gathered in recent years by the National Angling Survey. Research staff have assisted in this survey and have created a database containing the demographic information on recreational fishing. The NSW component of the National Angling Survey was assessed and released this year, providing a wealth of information about this popular sport.

Pilot habitat restoration program

Fish habitat is critical for the sustainable management of fish stocks. However, many of the estuarine and marine habitats for juvenile and adult fish are under pressure from urban, industrial and agricultural development. The fish habitat grant project is funded by the Trust and aims to encourage recreational fisher involvement in fish habitat rehabilitation projects within the Clarence River catchment. The project has generated a range of projects that promote the natural recovery of fish stocks by improving fish habitat.

Recreational fishing platform at Yamba

The platform will provide a safe and alternate recreational fishing location for children and families. A fish measuring station and educational signage will be included as part of the project. Information on fish species, their bag and size limits and fishing safety tips will be available to better educate anglers.

Recreational harvest of baitfish in NSW

The primary objective of this project is to provide reliable estimates of the quantities of blue mackerel taken by the recreational sector to determine the total impacts of fishing and to make informed decisions about resource sharing amongst stakeholders.

Recreational Fishing Haven (RFH) survey

This project involves large scale recreational fishing monitoring to assess the size and diversity of the catch and the attitude of anglers to their sport prior to, and following the declaration of the recreational fishing havens. It will provide a measure of the biological effect of the havens on recreational species in NSW and the social impact of these havens. The survey will measure changes through time in the number of anglers, their catch, catch rate and average size of fish. The survey will provide an on-going assessment of the recreational fishing sector, which will contribute to appropriate management practices and sustainable fish stocks.

Selection of recreational fishing havens

Anglers along the NSW coast are benefiting from the new recreational fishing havens - areas closed to commercial fishing which help give anglers a fairer chance of catching fish. Twenty nine new recreational fishing havens were implemented along the coast in May 2002. A 30th haven in the Clarence started on 1 September. The area of NSW estuaries protected from commercial fishing increased from three per cent to 27 per cent.

These havens were created as a result of extensive local community consultation. Around 50,000 discussion papers were distributed, more than 10,000 written submissions received, and results of 62 public meetings were also considered. The final areas were recommended by anglers overseeing the Recreational Fishing Trusts and were accepted by the Minister for Fisheries.

Over 550 commercial fishers registered interest in voluntary buyouts. Almost \$20 million has been allocated to the buy out of commercial fishers, and implement the havens. 251 commercial fishing businesses have been bought out.

The expenditure for 2002-03 relates to ongoing administration of the buyouts. Repayments on the \$20 million crown advance to fund the buyout of licences commenced in December 2002.



Small grants program

The Small Grants Project is funded by the trust and gives fishing clubs, councils and other community members the opportunity to obtain funding for small, local or regional projects which enhance recreational fishing. Funding proposals are limited to \$5,000 and should be matched by funds from the applicant or other sources.

This project is funding the installation of fish cleaning tables in the Shoalhaven (4), Tuncurry and Eurobodalla (2). A research study aiming to investigate small scale movement of luderick is also being funded and a Fishcare volunteers pamphlet on fishing handling is also being prepared.

Stock enhancement workshop proceedings

In August 2000 the Australian Society for Fish Biology hosted a workshop on stock enhancement of marine and freshwater fisheries in conjunction with their annual conference. The workshop was established to bring together relevant experts in the general field of stock enhancement to discuss the past, present and future of restocking practices within Australia. The aim is to formulate these presented papers into a book, which will be available to parties interested in stock enhancement. A publication of this kind will have direct benefit to anglers in NSW as many fisheries currently rely on restocking. Despite the lack of marine restocking at present in NSW, several species have been highlighted for future restocking. However, there are presently many problems with restocking which are likely to hinder further progress. This book will provide techniques and guidelines to help avoid these problems whilst enhancing our native and non-native fisheries.

Stock structure and population genetics of yellowfin bream

This research will screen samples of bream for genetic diversity. It will provide the necessary information on population subdivision of yellowfin bream in NSW, which can be used for better fisheries management and in the planning of restocking projects if required.

Striped marlin economic survey

The trust is funding an economic survey of the striped marlin fishery, scheduled to start next year. The comparative economic benefits of the use of the striped marlin resource by recreational and Commonwealth licensed commercial fishers is being assessed. The outcome of the economic study will support well informed decision-making on the future use and management of the striped marlin resource.

Study of landed fish at game fishing tournaments

Funding from the Saltwater Trust has enabled a partnership to develop between gamefishing and science in NSW to study the life cycles of gamefish and sharks. This is being achieved by local and international scientists attending gamefishing tournaments in NSW.

Some of the major outcomes of this research project have included:

- ◆ determining stock structure of gamefish throughout their oceanic ranges;
- ◆ determining age and growth rates of marlin, tuna, mako and tiger sharks and mahi mahi;
- ◆ studies on vision in billfish have indicated that the retina is split into two parts - one for colour vision and the other for blues and purples in deep water.

COMMERCIAL FISHING TRUST FUND

NSW Fisheries provides a range of monitoring, scientific, compliance and administrative services to the commercial fishing industry.

Of the eight commercial fisheries, only two - abalone and rock lobster, are subject to full cost recovery of attributable costs (although this still involves some degree of government contribution). In both these cases, budgets are negotiated in detail with the relevant management advisory committees.

For the remaining fisheries, charges are levied for services such as licence administration and management, but are not project specific.

Expenditure by NSW Fisheries on activities relating to commercial fishing is funded from consolidated revenue with a contribution from the Commercial Fishing Trust Fund.

The Advisory Council on Commercial Fishing is consulted each year over the draft budget for commercial fishing.

In 2002-03 the Commercial Fishing Trust Fund contributed \$2 million to the Department's commercial fishery related programs.

AQUACULTURE TRUST FUND

NSW Fisheries provides a range of monitoring, scientific, compliance and administrative services to the aquaculture industry.

The aquaculture industry is not subject to full cost recovery and charges are not project specific.

Expenditure by NSW Fisheries on activities relating to aquaculture is funded from consolidated revenue with a contribution from the Aquaculture Trust Fund.

The Advisory Council on Aquaculture is consulted each year over the draft budget for aquaculture.

In 2002-03 the Aquaculture Trust Fund contributed \$500,000 towards the Department's aquaculture management activities.

CHARTER FISHING TRUST FUND

The Charter Fishing Trust Fund commenced in 2001. There were no activities funded during the financial year.

Appendix 37

MARINE PARKS

Expenditure incurred on marine parks during 2002-03 is shown in the following table.

Marine parks expenditure

	Budget	Actual
	\$	\$
General (recurrent expenditure)		
Solitary Islands Marine Park	565,500	610,287
Jervis Bay Marine Park	76,800	146,289
Cape Byron Marine Park	236,000	244,976
Manning bioregion	90,000	3,678
Corporate projects	321,700	316,650
	1,290,000	1,321,880
Buyouts*		
Jervis Bay Marine Park	3,500,000	3,474,439
Solitary Islands Marine Park	...	27,844
	3,500,000	3,502,283

* Buyout of commercial fishing licences for marine conservation purposes.

Appendix 38

ANNUAL REPORT COSTS

The total external costs incurred in the production of the NSW Fisheries Annual Report 2002/2003 were \$28,518 (including GST).

The report is available on the internet and can be accessed on the NSW Fisheries website:

www.fisheries.nsw.gov.au