



Australian Government  
Department of Agriculture,  
Fisheries and Forestry

# Fisheries Resources Research Fund

ANNUAL REPORT  
2005-06

*Published by:* Australian Government Department of Agriculture, Fisheries and Forestry  
*Postal address:* GPO Box 858, Canberra ACT 2601  
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ISSN 1835-2499

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## **ABOUT THIS REPORT**

This report covers the operations of the Fisheries Resources Research Fund (FRRF) during the 2005-2006 financial year.

Prepared by the Australian Government Department of Agriculture, Fisheries and Forestry (DAFF), this report provides:

- a discussion of the FRRF's general operating environment in 2005-06 including the current role of the fund, general administrative arrangements, the level of funding available and relevant funding priorities; and
- a summary of the 30 fishery-related projects or conferences that were funded by the FRRF during 2005-06.

Secretariat  
Fisheries Resources Research Fund  
December 2006

## **PART A: OPERATING ENVIRONMENT**

### **ABOUT THE FISHERIES RESOURCES RESEARCH FUND**

#### **The Role of the Fisheries Resources Research Fund**

The Australian Government established the Fisheries Resources Research Fund (FRRF) in 1991 as a component of the 1989 government policy statement *New Directions for Commonwealth Fisheries Management in the 1990s*.

The FRRF was originally established to support fisheries related research undertaken by the Australian Bureau of Agricultural and Resource Economics (ABARE) and the Bureau of Rural Sciences (BRS) in support of Commonwealth fisheries. The FRRF was also intended to support management-related research categorised as being ‘in the public interest’, or where industry or other funds were not available or appropriate.

In the late 1990’s, the focus of fisheries management in Australia expanded from individual species to a broader ecosystem-wide focus. The FRRF’s funding priorities broadened to include the assessment and review of fishery and marine resources management to support evidence based policy making.

In 2005 to 2006 the FRRF funding was focussed on:

- a rolling programme of assessment undertaken by ABARE and BRS of all Commonwealth fisheries; and
- targeted biological, economic and social research to underpin the Government’s response to current and emerging fishery policy and management issues.

This focus is consistent with the Australian Government Priorities for Rural Research and Development (R&D): *Sustainable Natural Resource Management and Improved Market and Trade Access*.

The FRRF also contributes to the achievement of DAFF’s major portfolio outcome of ‘More sustainable, competitive and profitable Australian agriculture, food, fisheries and forestry industries’.

## General Administrative Arrangements

Allocation of FRRF funds is informed by priorities set by the independent FRRF Project Advisory Committee.

DAFF appoints members of the Project Advisory Committee on the basis of their skills, background and experience in fisheries management, research and assessment.

In 2005-06, the membership of the FRRF Project Advisory Committee was:

- Ms Catherine Smith, Manager, Domestic Fisheries Section, DAFF
- Dr Patrick Hone, Executive Director, Fisheries Research and Development Corporation (FRDC)
- Mr Ian Cresswell, Secretary, Sustainable Fisheries Section, Australian Government Department of the Environment and Heritage (DEH)
- Dr Bruce Wallner, Research and Data Manager, Australian Fisheries Management Authority (AFMA) and
- Ms Mary Lack, Independent Expert, Shellack Consulting Pty Ltd

In December 2005, a Heads of Agreement between the principal fisheries research bodies acknowledged the need for coordination to ensure all information required for good management of fisheries and the marine environment is available and overlaps minimised. The parties to the Agreement are AFMA, DAFF, DEH, FRDC, and the CSIRO.

It describes how these agencies will cooperate to ensure that Commonwealth fisheries research will be efficiently managed to provide best possible use of Australian Government and industry funding.

Under this Agreement the FRRF secretariat liaises with the Commonwealth Fisheries Research Advisory Body (ComFRAB) to develop project proposals and coordinate funding arrangements.

## FRRF's Funding Base for 2005-06

In the 2005-06 Budget, \$3,101,000 million was made available by the Australian Government for use by the FRRF<sup>1</sup>. A total of \$3,030,184 was spent, leaving an under-spend of \$70,816.

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<sup>1</sup> The value of the FRRF appropriation is calculated according to the formula:

$$0.25\% \text{ aGVP} - \$1,008,000 - \$1,200,000 - \$100,000$$

where: aGVP = average Gross Value of Production of Australian fisheries over the previous three financial years

\$1,008,000 = funding provided to AFMA for the AFMA Research Fund

\$1,200,000 = budgetary reductions (\$1,000,000 in 1993/94 and \$200,000 in 1997/98)

\$100,000 = deduction to offset the Australian Government's three-year contribution to the Australian Seafood Industry Council

In 2005-06, funding was allocated to:

BRS Policy Advice and Research Projects	\$1,569,260
ABARE Administered Projects	\$541,642
Market Access and Trade Project	\$169,366
AFMA Administered Projects	\$166,355
Administration Costs	\$166,000
Policy Advice and Workshops – Independent Providers (Harvest Strategy, Structural Adjustment and Resource Sharing)	\$156,118
Indigenous Aquaculture Project	\$50,000
Sponsorship of Conferences, Multilateral International Meetings and Seafood Leadership Programme	\$86,943
Other Research	\$24,500
<b>TOTAL</b>	<b>\$3,030,184</b>

### Selection of Research and Service Providers

Consistent with the purpose of the fund, a large component of FRRF's annual budget is allocated to ABARE and BRS for research that will underpin an independent assessment of the status of the Commonwealth fisheries (over the last 5 years this has averaged around 25 per cent (ABARE) and 38 per cent (BRS) of FRRF's total budget).

In 2005-06, BRS delivered a mixture of stand-alone projects and an ongoing programme of work under its three year service level agreement (SLA) with the Fisheries and Forestry Division (FFD) of DAFF. Under the SLA, BRS provides FFD with a range of biological advice and services, including *ad hoc* briefings, participation in selected international and domestic fishery meetings and the development of the 2005 *Fishery Status Reports*.

The majority of ABARE's 2005-06 work programme was focussed on the economic performance and management of the Commonwealth fisheries. A major part of this work programme was ABARE's annual Fishery Economic Surveys.

Other research and service providers were also commissioned to undertake work in response to emerging policy needs.

## **PART B: FRRF FUNDING PRIORITIES FOR 2005-06**

A FRRF Priorities workshop was convened in February 2005 to identify strategic investment priorities. Participants in this workshop were members of the FRRF Priorities Committee and included officers from within FFD, ABARE, BRS and AFMA. Preparatory discussions for this meeting were also held with representatives from the Australian Seafood Industry Council, DEH and the Office of the Minister for Fisheries, Forestry and Conservation, Senator the Hon Ian Macdonald. The priorities set at the workshop reflect the identified drivers for fisheries policy and management and the major issues that need to be addressed to keep Australia's fisheries secure, sustainable and profitable.

One of the major issues discussed at the workshop, was BRS's assessment that 17 of the Australian Government managed fish species were overfished. This represented a major increase in the number of stocks that were at risk, and it was recognised that significant action was necessary to rebuild these stocks to a healthy level. As a result, it was agreed that a major focus of the FRRF should be on investing in research that will guide and facilitate the necessary management and policy decisions to bring these stocks off the overfished list.

At the same time, it was recognised that many of the issues facing the Australian Government in the management of its fisheries were economic rather than biological in nature. The strengthening of the Australian dollar, rising operating costs and changing market-access arrangements, all placed significant pressure on the Australian industry. Combined with the existing problems of excess fishing capacity, aging fishing capital and diminished rates of return, this has seen industry faced with an increasingly challenging economic future. As a result, it was agreed that another major focus for the FRRF would be on research to underpin the long term profitability of the Australian seafood industry.

Finally, members of the FRRF Priority Committee also indicated their desire to see a greater integration of social, economic and biological sciences research. Accordingly, FFD will be exploring options for fostering greater cross-discipline co-operation between research providers (particularly DAFF's two research bureaux, ABARE and BRS).

The current strategy has less focus on issues specific to aquaculture, than previous strategies. This is because the Australian Government has recently made significant investment towards addressing aquaculture issues elsewhere, through the Aquaculture Industry Action Agenda.

The priorities are consistent with the National R&D priority of 'An Ecologically Sustainable Australia', whilst also contributing to the Australian Government's rural R&D priorities of 'Sustainable natural resource management' and 'Improved trade and market access'. The FRRF also directly contributes to the achievement of the DAFF's outcome of 'More sustainable, competitive and profitable Australian agriculture, food, fisheries and forestry industries' and specifically to DAFF's third Output of "Industry Development".

## **Programme 1 – The Sustainable Management of Commonwealth Fisheries**

Management arrangements supported by good research and scientific information are critical to the long-term sustainability of wild stocks of fish and aquatic life around Australia. This Programme aims to ensure that the Commonwealth fisheries are being managed in a sustainable way. The main areas of work under this Programme will be:

- a rolling programme of research that will independently assess the status and condition of Commonwealth fish stocks and the commercial fishing industry
- research and analysis to support the development of improved domestic fishery management arrangements (especially those aimed at reducing the number of overfished stocks and better synchronising environmental and fisheries management requirements)
- the development and assessment of tools, indicators and methodologies to guide the independent assessment process, fishery policy decisions and management strategies
- research to improve our understanding of the impacts of fishing effort, habitat destruction, environmental and climatic factors on fish stocks and their habitats
- research and analysis to support the development of strategies to reduce the impact of the Australian fishing industry on the broader marine ecosystem and non-target species and
- research and analysis to support the better collection, storage and utilisation of fisheries data.

## **Programme 2 – A Healthy and Competitive Fishing Industry**

This aim of this Programme is to fund research that will lead to the development of a more innovative and resilient commercial (wild-catch and aquaculture), recreational and traditional sectors of the fishing industry. The main areas of work under this Programme will be:

- research and analysis that supports the development of a fishing industry that is more resilient to changing economic, environmental and regulatory conditions
- research and analysis that supports the commercial fishing industry's continued and expanded access to seafood markets (both domestically and internationally)
- research and analysis that supports the development of alternative and cost effective approaches to fishery management arrangements (including market driven measures)
- research and analysis that supports the development of management strategies for managing effort creep in Australia's fisheries and eliminating excess fishing capacity
- research and analysis to provide a greater understanding of the cultural, social and regional characteristics of the Australian fishing industry (including the possible impacts of fishery management decisions on regional communities) and
- research and analysis to support the development of strategies for the effective incorporation of recreational and customary Indigenous fishing into Commonwealth fisheries management.

### **Programme 3 – Improved Fishery Governance Arrangements**

This programme is focused on improving the governance, legislative and administrative instruments and arrangements that underpin the immediate and longer-term management of Australia's fishery resources. The main areas of work under this Programme will be:

- research and analysis to support the development of more effective compliance and regulatory regimes to counter illegal fishing activity in Australia's Exclusive Economic Zone, including illegal activity by foreign fishing vessels (FFV) and domestic criminal groups
- research and analysis to improve the consistency in cross-jurisdictional and joint management approaches (including the review of the Offshore Constitutional Settlement agreements)
- research and analysis to support Australia's involvement in relevant international fora (including international trade negotiations and regional fishery management organisations)
- research and analysis to support the development of policies that enact Australia's international fishery management obligations
- research and analysis to support Australia's joint management of fishery resources with Indonesia, East Timor, New Zealand and Papua New Guinea and
- research and analysis to underpin Australia's continued involvement in high seas fishing (including issues related to foreign fishing access, joint venture opportunities and an increased Australian presence on the high seas).

## **Out of Scope**

The FRRF is only one of several Australian Government programmes that invest in research related to the fishing industry and the marine environment. Other organisations such as the FRDC, DEH and AFMA also invest significant resources into research that underpins the sustainable development of Australia's marine resources.

Recognising the important research contributions made by these other organisations, and in order to minimise any duplication of effort, FFD generally exclude the following areas of research from FRRF's funding scope:

- routine fisheries data collection or collation, such as management-related fish stock assessments
- general fisheries biology research (unless it is related to the assessment of fishery management arrangements)
- issues related to the control or management of invasive-marine pests
- projects that focus on the development of processes that are aimed at adding value to fish and fish products
- development of aquaculture production systems or new fishing technologies
- the development of human capital within the fishing industry
- areas of work that fall within FFD's everyday business and
- other areas of research that are clearly better undertaken and/or implemented by other Government agencies.

## **Joint Funding of Projects**

Occasionally, there will be situations where the Australian Government will want to draw upon a number of funding sources to support a significant research programme or project. Such situations usually occur when a project satisfies the research needs of multiple agencies and/or requires levels of investment that are prohibitively expensive from the point of view of a single funding provider.

In such cases, as long as the project is consistent with FRRF's current funding priorities and will deliver direct benefits to the Australian Government, FFD may consider using the Fund to jointly contribute to a project.

## PART C: PROJECTS FUNDED IN 2005-06

In 2005-2006, FRRF funded 30 new and existing research projects at a total cost of \$2,030,184. A further \$166,000 was allocated to administer the fund.

Projects funded during the 2005-06 financial year are set out in the Table below.

**TABLE 1: PROJECTS FUNDED IN 2005-06**

All figures are GST exclusive and show the level of funding provided during the 2005-06 financial year.

Provider	Project Title	Funding
ABARE	Australian Fisheries Surveys 05-06	\$160,000
ABARE	Bioeconomic Model for the South East Trawl Fishery	\$90,000
ABARE	Bioeconomic model of the Northern Prawn Fishery (from 04-05)	\$15,000
ABARE	Economic Advice for the Structural Adjustment Taskforce	\$66,969
ABARE	Economic Policy Advice (Use of Maximum Economic Yield in Fisheries Management)	\$31,673
ABARE	Economic Status of Commonwealth Fisheries	\$83,000
ABARE	Efficiency and Management Options in Eastern Tuna and Billfish Fishery	\$75,000
ABARE	Supplementary Fishery Surveys	\$20,000
AFMA	Assessment of the Torres Strait Prawn Fishery (from 04-05)	\$11,355
AFMA	Development of Harvest Strategy Guidelines	\$70,000
AFMA	Estimating Reliable Foreign Fishing Vessel Effort off Northern Australia	\$35,000
AFMA	Individual Transferable Quota / Statutory Fishing Rights Review	\$50,000
AFMA	Joint sponsorship (with AFMA) of International Fisheries Observer Conference	\$6,057
ANU / Independent	Independent Advice on Fisheries Structural Adjustment	\$56,517

<b>Provider</b>	<b>Project Title</b>	<b>Funding</b>
Australian Institute of Criminology	Crime in Australian Fisheries Study	\$12,500
BRS	Analysis of Interactions Between Commercial and Recreational Striped Marlin Fishing	\$39,033
BRS	Effects of Circle Hooks on Target and non-Target Species - Stage 1 Feasibility Study	\$12,540
BRS	Service Level Agreement <ul style="list-style-type: none"> <li>Scientific Support for International Fisheries Policy Development</li> <li>Scientific Support for Domestic Fisheries Policy Development</li> <li>Science for Sustainable Management of Marine Resources – Fisheries and Environment (Ad Hoc Advice)</li> <li>Contribution to the OECD Ministerial Taskforce of Illegal, Unregulated and Unreported Fishing</li> </ul>	\$1,517,687
DAFF FFD	Aquaculture Industry Development for Indigenous Australians	\$150,000
DAFF FFD	Fisheries Market Access and Trade Project	\$169,366
DAFF FFD	Support for Meeting to Establish South Pacific Regional Fisheries Management Organisation	\$3,250
DAFF FFD	Support for Western and Central Pacific Fisheries Commission Technical and Compliance Committee Meeting	\$25,000
Independent	Advice on Development of Harvest Strategy Policy	\$57,147
Independent	The Changing Nature of High Seas Fishing Document Translation (English to Japanese)	\$4,000
Independent	Flag of Convenience High Seas IUU Report Extension	\$8,000
Independent	Sponsorship of Advance in Seafood Leadership Programme	\$4,000
Independent	Sponsorship of Australasian Aquaculture Conference (in support of Indigenous Participation)	\$30,000
Independent	Sponsorship of Australian Society for Fish Biology Conference	\$13,636

<b>Provider</b>	<b>Project Title</b>	<b>Funding</b>
Independent	Western Tuna and Billfish Fishery and Eastern Tuna and Billfish Fishery Resource Allocation Facilitator	\$42,454
WAFIC	Support of Attendance at European Seafood Exposition	\$5,000
DAFF FFD	Administration Costs	\$166,000
	<b>TOTAL</b>	<b>\$3,030,184</b>

### PROJECTS COMPLETED IN 2005-06

Of the 30 projects funded in 2005-06, FRRF's funding commitment to 21 concluded during the financial year.

**TABLE 2: PROJECTS COMPLETED IN 2005-06**

FRRF's funding commitment to the following projects ended in 2005-06. Where projects were co-funded from another source, work on the project may have continued beyond the end of the financial year.

<b>Research Organisation</b>	<b>Project Title</b>	<b>Funding Commenced</b>
ABARE	Bioeconomic Model of the Northern Prawn Fishery	04-05
ABARE	Economic Advice for the Structural Adjustment Taskforce	05-06
ABARE	Economic Policy Advice (Use of Maximum Economic Yield in Fisheries Management)	05-06
AFMA	Assessment of the Torres Strait Prawn Fishery	04-05
AFMA	Development of Harvest Strategy Guidelines	05-06
AFMA	Estimating Reliable Foreign Fishing Vessel Effort off Northern Australia	05-06
AFMA	Individual Transferable Quota / Statutory Fishing Rights Review	05-06
AFMA	Joint sponsorship (with AFMA) of International Fisheries Observer Conference	05-06
ANU / Independent	Independent Advice on Fisheries Structural Adjustment	05-06

<b>Research Organisation</b>	<b>Project Title</b>	<b>Funding Commenced</b>
BRS	Effects of Circle Hooks on Target and non-Target Species - Stage 1 Feasibility Study	04-05
BRS	Service Level Agreement <ul style="list-style-type: none"> <li>• Scientific Support for International Fisheries Policy Development</li> <li>• Scientific Support for Domestic Fisheries Policy Development</li> <li>• Science for Sustainable Management of Marine Resources – Fisheries and Environment (Ad Hoc Advice)</li> </ul> Contribution to the OECD Ministerial Taskforce of Illegal, Unregulated and Unreported Fishing	05-06
DAFF FFD	Aquaculture Industry Development for Indigenous Australians	05-06
DAFF FFD	Fisheries Market Access and Trade Project	05-06
DAFF FFD	Support for Western and Central Pacific Fisheries Commission Technical and Compliance Committee Meeting	05-06
Independent	Advice on Development of Harvest Strategy Policy	05-06
Independent	Flag of Convenience High Seas IUU Report Extension	05-06
Independent	Sponsorship of Advance in Seafood Leadership Programme	05-06
Independent	Sponsorship of Australasian Aquaculture Conference (in support of Indigenous Participation)	05-06
Independent	Sponsorship of Australian Society of Fish Biologists Conference	05-06
Independent	Western Tuna and Billfish Fishery (EBF) and Eastern TBF Resource Allocation Facilitator	04-05

## PROJECT DESCRIPTIONS

### Ongoing Projects

FRRF's financial commitment to the following projects continues beyond the 2005-06 financial year.

#### **ABARE – Australian Fisheries Surveys 05-06**

Total Funding: \$201,615                      2005-06: \$160,000                      Ongoing: \$41,615

Objective – Analyse survey data collected in 2005 for the Northern Prawn and Torres Strait Prawn Fisheries. Assess the financial and economic performance of these fisheries. Collect economic data for the Eastern Tuna and Billfish Fishery (ETBF) and the Southern and Eastern Shark and Scalefish Fishery (SESSF) for the 2003-04 and 2004-05 financial years. The results of these analyses will be presented in the Fishery Surveys Report 2006.

#### **ABARE – Bioeconomic Model for the South East Trawl Fishery**

Total Funding: \$108,307                      2005-06: \$90,000                      Ongoing: \$18,307

Objective – Construct a bioeconomic model for the South East Trawl Fishery (SETF). This will enable ABARE to provide advice to AFMA on setting Total Allowable Catches (TACs) that are consistent with the objective of maximising economic efficiency. Assess the impact of sub-optimal TACs and advise how TACs should be generated when stock status is uncertain or subject to fluctuation.

#### **ABARE – Economic Status of Commonwealth Fisheries**

Total Funding: \$95,046                      2005-06: \$83,000                      Ongoing: \$12,046

Objective – Summarise the health of the major Commonwealth fisheries in economic, social and biological terms. The aim is to produce a single point of reference that summarises all the major aspects of a fishery's performance, and describes how biological and economic aspects are related. ABARE's Economic Status Report will be published for general distribution as an eReport on ABARE's website.

#### **ABARE – Efficiency and Management Options in Eastern Tuna and Billfish Fishery**

Total Funding: \$87,938                      2005-06: \$75,000                      Ongoing: \$12,938

Objective – Assess the economic efficiency of the ETBF since the early 1990's and the management measures likely to maximise efficiency of the fishery. This project complements an existing ABARE, AMFA and FRDC jointly sponsored project, which is developing measures and indicators to assess the economic performance of Commonwealth fisheries. This project will effectively act as a 'case study' for the larger project by applying some of its outcomes to the ETBF.

### **ABARE – Supplementary Fishery Surveys**

Total Funding: \$48,483                      2005-06: \$20,000                      Ongoing: \$28,483

Objective – The Supplementary Fishery Surveys accompany the 2006 surveys of the ETBF and SESSF. They include information on the geographical location of fishers' expenditure for major cost items such as fuel, repairs, and maintenance and administration, and fishers' views with respect to management changes, industry viability and suggestions for improving management of their fishery.

### **Australian Institute of Criminology – Crime in Australian Fisheries Study**

Total Funding: \$170,000                      2005-06: \$12,500                      Ongoing: \$30,000  
(previous years: 2003-04 \$42,500; 2004-05 \$85,000)

Objective – Determine the extent of organised criminal involvement in the seafood industry and identify the worst hit fisheries. Improve Australia's capacity to detect and deter crime in Australian fisheries by investigating illegal activities.

### **BRS – Analysis of Interactions between Commercial and Recreational Striped Marlin Fishing**

Total Funding: \$65,239                      2005-06: \$39,033  
(previous years: 2004-05 \$26,206)

Objective – Collate fishery specific data for both charter and longline sectors taking striped marlin and provide updated reviews. Develop detailed fine-scale maps and animations of charter and longline catch and effort off the NSW coast. Assess both charter and longline vessel behaviour in the vicinity of recreational game-fishing tournaments. Discuss findings and potential implications under different scenarios for current and future management of the commercial and recreational sectors.

### **DAFF FFD – Support for Meeting to Establish South Pacific Regional Fisheries Management Organisation**

Total Funding: \$70,000                      2005-06: \$3,250                      Ongoing: \$66,750

Objective – Host a meeting on establishing a South Pacific Regional Fisheries Management Organisation. The objectives of the meeting include: addressing the development of a multilateral treaty for the management of non-highly migratory fish stocks in the southern Pacific Ocean; establishing science and data working groups to deal with the issues related to fisheries science and data management; consideration of interim arrangements based on advice from the working groups and information provided by the Chair of the International Conference; and working toward establishment of interim targeted protection mechanisms for vulnerable species.

Ongoing: \$3,000

## Western Australian Fishing Industry Council – Support of Attendance at European Seafood Exposition

Ongoing: \$10,000

## DAFF FFD – Administration Costs

2005-06: \$166,000

## Completed Projects

## ABARE – Bioeconomic model of the Northern Prawn Fishery

(previous years: 2004-05 \$70,442)

Outcome – The NPF bioeconomic model was constructed and a final report delivered. The model will be used to inform management decisions.

**ABARE – Economic Advice for the Structural Adjustment Taskforce**

Total Funding: \$66,969

2005-06: \$66,969

Objective – Provide a report on excess capacity and structural adjustment in the Northern Prawn Fishery (NPF). Provide ongoing economic advice, analysis and briefing to the fisheries adjustment taskforce.

Outcome – This project delivered advice on excess capacity in the NPF, advice and analysis on the structural adjustment buyback of entitlements and on shore assistance, economic input into harvest strategies, analysis of bids in the Torres Strait Prawn Fishery, and economic advice on proposed marine protected areas in the south east.

**ABARE – Economic Policy Advice (Use of Maximum Economic Yield in Fisheries Management)**

Total Funding: \$57,338

2005-06: \$31,673

(previous years: 2004-05 \$25,665)

Objective – This project was designed to improve the effectiveness and accountability of fisheries management and to increase profits from the major fisheries. A background paper and briefing outlining the rationale for the economic efficiency objective and input into the submissions on economic efficiency and overfishing in Australian fisheries will be circulated throughout relevant agencies.

Outcome – An internal background paper was released by ABARE and delivered to DAFF. It will not be published publicly. The paper included a discussion on a range of issues affecting Australian fisheries.

**AFMA – Assessment of the Torres Strait Prawn Fishery (from 04-05)**

Total Funding: \$60,576

2005-06: \$11,355

(previous years: 2003-04 \$26,494; 2004-05 \$22,727)

Objective – Reinforce the scientific advice provided to the Torres Strait Protected Zone Joint Authority in order to inform decisions on effort-reduction aimed at restoring sustainability in the Torres Strait Prawn Fishery. This will involve provision of scientific advice on sustainable fishing levels in the prawn fishery, and alternative management strategies to cap effort directed at tiger prawns to sustainable levels, while diverting effort towards endeavour prawns.

Outcome – The report entitled, *Stock Assessment of the Torres Strait Tiger Prawn Fishery (Penaeus esculentus)*, was produced. The scientific advice provided was reinforced by updating the tiger prawn stock assessment to 2003. An industry workshop held in July 2005 developed alternative management strategies to direct efforts towards sustainable levels in regards to endeavour prawns.

**AFMA – Development of Harvest Strategy Guidelines**

Total Funding: \$70,000

2005-06: \$70,000

Objective – Develop guidelines to allow users to interpret the Commonwealth Harvest Strategy Policy (HSP). Provide examples of how the HSP has and can be applied. Develop harvest strategies for AFMA's small fisheries.

Outcome – Although FRRF's financial support for this project concluded in 2005-06, the project continues under the guidance of the Harvest Strategy Policy Committee.

### **AFMA – Estimating Reliable Foreign Fishing Vessel Effort off Northern Australia**

Total Funding: \$35,000

2005-06: \$35,000

Objective – Estimate fishing effort by FFV in northern Australia from Coastwatch Surveillance data. The project includes an initial assessment of the data.

Outcome – A strictly confidential report entitled *Estimating reliable foreign fishing vessel fishing effort from Coastwatch surveillance and apprehension data* is to be delivered in 2007. The report will provide estimates of both legal and illegal FFV Effort. Together with the results from research into identification of shark species from fins, the results will inform managers and provide the foundation for future work to estimate the impact of FFV activity on shark stocks.

### **AFMA – Individual Transferable Quota / Statutory Fishing Rights Review**

Total Funding: \$50,000

2005-06: \$50,000

Objective – Engage a consultant to review fisheries not subject to individual transferable quotas, and to undertake a cost-benefit analysis of the use of boat statutory fishing rights and boat permits in fisheries under management plans.

Outcome – AFMA commenced the above review and analysis in 2006 by preparing a background paper. A joint AFMA/DAFF group was set up in order to deliver the review.

### **AFMA – Joint sponsorship of International Fisheries Observer Conference**

Total Funding: \$6,057

2005-06: \$6,057

Objective – Joint sponsorship with AFMA of the 5<sup>th</sup> International Fisheries Observer Conference. The conference brings together representatives from the fisheries community to address key issues concerning fisheries observer programs, emerging fisheries monitoring technologies and other approaches for fishery dependant data collection.

Outcome – The conference is to be held in mid 2007. AFMA staff will attend the conference and staff an exhibition booth.

### **ANU / Independent – Independent Advice on Fisheries Structural Adjustment**

Total Funding: \$56,517

2005-06: \$56,517

Objective – Obtain independent economic advice on the design of the *Business Exit Tender* component of the *Securing Our Fishing Future* structural adjustment package. This advice relates to the types of fishing concessions to be bought out of each fishery and the types of tender processes that will meet economic objectives.

Outcome – The advice obtained was used in the design of the Securing Our Fishing Future structural adjustment programme. The final report entitled, “*Securing Australia’s Fishing Future: Design of the Structural Adjustment Package in Australia’s Commonwealth Fisheries*” was delivered in January 2006.

### **BRS – Effects of Circle Hooks on Target and non-Target Species - Stage 1 Feasibility Study**

Total Funding: \$30,533                      2005-06: \$12,540  
(previous years: 2004-05 \$17,993)

Objective – Determine the feasibility of interspersing circle and tuna hooks along longlines. Determine the size of circle hooks and bait types that should be tested in a larger project. Estimate the costs involved in providing experimental fishing gear and the likely effects of circle hooks on the relative costs and profits of vessel. Define experimental procedures and data collection requirements for a larger project.

Outcome – The report entitled, *The effect of circle hooks on target and non-target catches in Australia's longline fisheries* comprehensively describes the outcomes of the four objectives. This report was delivered by the BRS in late 2005.

### **BRS Service Level Agreement**

Total Funding: \$1,517,687                      2005-06: \$1,517,687

Objective – Under the Service Level Agreement (SLA), BRS provides the FFD with scientific advice and support. The SLA has four separate components:

*Scientific Support for International Fisheries Policy Development:* Support Australia's engagement in emerging regional fisheries issues and international fisheries conferences and meetings. Participate in conferences, provide scientific data, and required analysis and research. Support for scientific engagement in international management arrangements to which Australia is involved.

*Scientific Support for Domestic Fisheries Policy Development:* Provide in-depth case studies of individual Commonwealth fisheries to support the improved effectiveness and efficiency in assessing fisheries. Produce the Fishery Status Report.

*Science for Sustainable Management of Marine Resources – Fisheries and Environment:* Promote the sustainable development of Australia's fishing and aquaculture industries to identify, give advice on and facilitate scientific engagement in emerging policy issues regarding ecologically sustainable development of Australia's fishing and aquaculture industries. Assist to resolve environmental issues that impact industry development. Engage FFD Policy Officers in discussions on appropriate responses, such as issue related projects.

*Contribution to the OECD Ministerial Taskforce of Illegal, Unregulated and Unreported Fishing:* Provide scientific support on IUU fishing throughout the world's oceans. Provide a full time fishery specialist on assignment to the Ministerial Task Force on IUU Fishing Secretariat hosted by the Organization for Economic Co-operation and Development in Paris. This Task Force will focus on prevention recommendations for IUU fishing.

Outcomes –Due to the ongoing nature of this project, any outcomes to the objectives listed above were updated progressively in several Fishery Status Briefs and progress reports.

### **DAFF FFD – Aquaculture Industry Development for Indigenous Australians**

Total Funding: \$150,000

2005-06: \$150,000

Objective – Improve delivery and communication of fisheries and Indigenous policies and programs to Indigenous Australians. Involve indigenous people in sustainable aquaculture development in Australia. Provide funding and support to lever access to other grant-based programs, sources of technical advice and potential investors. Provide informative advice to indigenous communities undertaking aquaculture projects by utilizing the resources of BRS and ABARE.

Outcome – DAFF's Indigenous Aquaculture Unit undertook a major round of consultations across Northern and Western Australia. These consultations involved the Indigenous community and other stakeholders in talks about regional aquaculture opportunities and/or impediments towards Indigenous involvement. These engagements with Indigenous communities resulted in DAFF supporting the establishment of several projects in 2006/07 – including an integrated aquaculture/agriculture project involving a partnership between the Ngalang Boodja Aboriginal community of Collie WA, Collie coal mining companies and WA government's strategy to establish businesses under the Collie Sustainable Mine Lakes Project.

### **DAFF FFD – Fisheries Market Access and Trade Project**

Total Funding: \$169,366

2005-06: \$169,366

Objective – Develop a targeted market access agenda. Publish industry identified export market guides. Implement a work plan to promote greater cooperation between the Australian Seafood Industry and Commonwealth and State governments in dealing with market access issues. Develop a program to alleviate current inadequacies in the collection and distribution of market information.

Outcome – *Fish Book II – A guide to Australian government programs, grants and services for the Australian seafood industry* was delivered. Several Australian prawn fisheries were certified by the US, and Australia entered into Free Trade Agreements with many Asian countries. Australian seafood industry positions were developed for the World Trade Organization negotiations.

### **DAFF FFD – Support for Western and Central Pacific Fisheries Commission Technical and Compliance Committee Meeting**

Total Funding: \$25,000

2005-06: \$25,000

Objective – Host the second meeting of the Western and Central Pacific Fisheries Commission (WCPFC) Technical and Compliance Committee in Brisbane. The meeting will allow WCPFC members to canvas the broad range of compliance arrangements that are available for the management of the highly migratory fisheries resource of the Pacific. Facilitate the WCPFC members' understanding of and application of management arrangements by the members of the Commission.

Outcome – The second regular session of the WCPFC Technical and Compliance Committee was held in 2006. A report was produced from the meeting.

### **Independent – Advice on Development of Harvest Strategy Policy**

Total Funding: \$57,923

2005-06: \$57,147

Objective – In December 2005, the Minister for Fisheries, Forestry and Conservation, issued a directive to AFMA under section 91 of the *Fisheries Administration Act 1991*. A stipulation of the directive was that catch and effort levels should be set in a manner consistent with a world's best practice Commonwealth Harvest Strategy Policy. This project provided independent expert input into the development of this policy.

Outcome – The independent experts provided input to the Commonwealth Harvest Strategy Policy, which is currently in draft form (the policy is expected to be completed in 2007). The policy provides the framework for Harvest Strategies to be implemented in each Commonwealth Fishery.

### **Independent – Flag of Convenience High Seas IUU Report Extension**

Total Funding: \$28,000

2005-06: \$8,000

(previous years: 2004-05 \$20,000)

Objective – To obtain additional information needed to combat Flag of Convenience IUU fishing. To provide governments, regional fisheries management organizations, inter-governmental organizations, scientists, trade unions, the seafood and fishing industries, and non-government organisations with independent, detailed and accurate information to assist their efforts in preventing, deterring, and eliminating flag of convenience IUU fishing.

Outcome – The extension of the project allowed additional information to be gathered. A comprehensive report entitled, *"The Changing Nature of High Seas Fishing: How flags of convenience provide cover for illegal, unreported and unregulated fishing"*, was the main conduit for disseminating the information and was delivered in late 2005.

### **Independent – Sponsorship of Advance in Seafood Leadership Programme**

Total Funding: \$4,000

2005-06: \$4,000

Objective – The programme provides learning and development opportunities for people involved in the seafood industry, with the aim of producing industry leaders.

Outcome – The Advance in Seafood Leadership Programme 2006 concluded in Canberra in late 2006. Eleven members of the seafood industry graduated from the programme.

### **Independent – Sponsorship of Australasian Aquaculture Conference**

Total Funding: \$30,000

2005-06: \$30,000

Objective – "Silver" sponsor the 2006 Australasian Aquaculture Conference. The conference is one of the world's largest aquaculture events and brings together over 1,000 delegates to share knowledge and showcase innovations in aquaculture. A key feature of the sponsorship was the provision of 19 registrations for Indigenous participants (in conjunction with a similar sponsorship from the Australian Government Department of Employment and Workplace Relations).

Outcome – The Australasian Aquaculture Conference was held in August 2006. The conference featured strong indigenous participation, and all 19 registrations were used by Indigenous operators.

**Independent – Sponsorship of Australian Society for Fish Biology Conference**

Total Funding: \$13,636

2005 06 Funding: \$13,636

Objective – Sponsor the 2006 (and 2007) Australian Society for Fish Biology (ASFB) conferences. The ASFB annual conferences provide an opportunity for scientists, managers and industry to come together and discuss the most recent developments in fish and fisheries science.

Outcome – The 2006 ASFB Conference was held in Hobart late in the year. A DAFF exhibition booth featured at the conference.

**Independent – Western Tuna and Billfish Fishery and Eastern Tuna and Billfish Fishery Resource Allocation Facilitator**

Total Funding: \$92,454

2005-06: \$42,454

(previous years: 2004-05 \$50,000)

Objective – Engage an independent facilitator to progress development of resource sharing arrangements for the Western Tuna and Billfish Fishery (WTBF) and the Eastern Tuna and Billfish Fishery (ETBF). An independent facilitator was deemed necessary to keep the process at arms length from the Government in order to balance perceptions of a fair and unbiased consultation process.

Outcome – A principal investigator with broad experience in fisheries management was engaged to act as an independent facilitator. Two final reports entitled, *Resource Sharing in the Eastern Tuna and Billfish Fishery* and *Resource Sharing in the Western Tuna and Billfish Fishery* were released. The resource allocation processes were overseen and the final arrangements were assigned to the WTBF. The resource allocation report on the ETBF was completed in July 2006 and presented to the Minister for consideration.

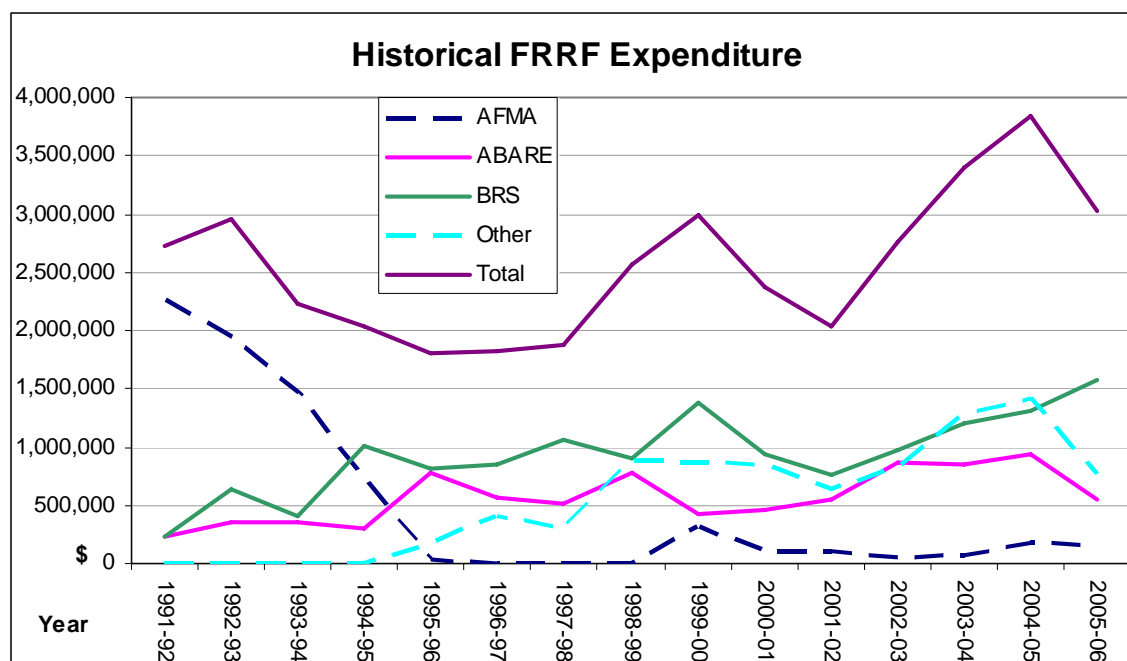
## PART D: FRRF – HISTORICAL EXPENDITURE

A summary of FRRF expenditure by service provider, in nominal terms, for the period 1991-92 to 2005-06 is shown below in both tabular and figure form. Note that from 1995-96, \$1.008 million was allocated annually to AFMA for the management-related component of research. This allocation is not shown below.

**TABLE 3: FRRF DISBURSEMENTS FOR 1991-92 TO 2005-06 IN NOMINAL TERMS**

Year	AFMA	ABARE	BRS	Other	Total
1991-92	2,270,212	232,000	230,000	Nil	2,723,212
1992-93	1,942,778	362,522	641,700	Nil	2,947,000
1993-94	1,467,243	359,257	408,500	Nil	2,235,000
1994-95	724,006	300,317	1,002,283	Nil	2,026,606
1995-96	38,702	775,555	816,880	182,580	1,813,717
1996-97	Nil	564,462	843,936	413,800	1,822,198
1997-98	Nil	511,273	1,062,213	305,236	1,878,722
1998-99	Nil	784,270	901,751	884,077	2,570,098
1999-00	318,218	420,214	1,381,058	874,332	2,993,822
2000-01	111,535	459,412	940,143	857,309	2,368,399
2001-02	98,151	542,903	762,706	635,219	2,038,979
2002-03	60,759	875,339	980,725	836,177	2,753,000
2003-04	70,009	856,910	1,206,802	1,271,890	3,405,611
2004-05	176,760	938,736	1,314,053	1,410,059	3,839,608
2005-06	166,355	541,642	1,569,260	752,927	3,030,184

**FIGURE 1: FRRF DISBURSEMENTS FOR 1991-92 TO 2005-06 IN NOMINAL TERMS**



## **PART E: ABBREVIATIONS & ACRONYMS**

ABARE	Australian Bureau of Agricultural and Resource Economics
AFMA	Australian Fisheries Management Authority
ANU	Australian National University
ASFB	Australian Society for Fish Biology
BRS	Bureau of Rural Sciences
ComFRAB	Commonwealth Fisheries Research Advisory Body
CSIRO	Commonwealth Scientific and Industrial Research Organisation
DAFF	Australian Government Department of Agriculture, Fisheries & Forestry
DEH	Australian Government Department of the Environment and Heritage
ESE	European Seafood Exposition
ETBF	Eastern Tuna and Billfish Fishery
FFD	Fisheries and Forestry Division of DAFF
FFV	Foreign Fishing Vessels
FRDC	Fisheries Research and Development Corporation
FRRF	Fisheries Resources Research Fund
HSP	Harvest Strategy Policy
IUU fishing	Illegal, Unreported and Unregulated fishing
NPF	Northern Prawn Fishery
R&D	Research and Development
SESSF	Southern and Eastern Scalefish and Shark Fishery
SETF	South East Trawl Fishery
SLA	Service Level Agreement
TAC	Total Allowable Catch
WAFIC	Western Australian Fishing Industry Council
WCPFC	Western and Central Pacific Fisheries Commission
WTBF	Western Tuna and Billfish Fishery