



Australian Government

**Fisheries Research and
Development Corporation**

Annual Operational Plan

2013-14

FRDC Vision

The vision of the Fisheries Research and Development Corporation is a vibrant Australian fishing and aquaculture industry, supporting and adopting world-class research to achieve prosperity; and wisely using the natural resources on which it depends.

The planned outcome for the corporation

Increased knowledge that fosters sustainable economic, environmental and social benefits for the Australian fishing industry; including indigenous, recreational, commercial and aquaculture sectors, and the community; through investing in research, development and adoption.

Stakeholders

Stakeholders in the FRDC are the fishing industry and the Australian Government. There are many other partners, collaborators, beneficiaries and interest groups who influence the FRDC in its priority setting processes, and assist in the conduct of its business and the adoption of its research, development and extension. These arrangements are addressed in this Plan. In addition the legislation recognises that the people of Australia ultimately are the principal beneficiaries of much of the work of the FRDC.

Portfolio Minister

The portfolio Minister for Agriculture, Fisheries and Forestry is Senator the Hon. Joe Ludwig



FRDC Board

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Ms Renata Brooks	Director
Mr Brett McCallum	Director
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Dr Peter Obrien	Director
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Australian Government
Fisheries Research and Development Corporation

26 April 2013

Senator Joe Ludwig
Minister for Agriculture, Fisheries and Forestry
Australian Federal Parliament
Parliament House
CANBERRA ACT 2600

FRDC 2013-14 Annual Operational Plan

Dear Minister

In accordance with Section 26(1) of the Primary Industries and Energy Research and Development Act 1989, I have pleasure in submitting for your approval the Annual Operational Plan (AOP) of the Fisheries Research and Development Corporation for the year commencing 1 July 2013.

In developing the AOP, consideration has been given to the Government Research and Development Policy Statement released in July 2012. The Policy Statement highlights that some changes would be made to the Primary Industries Energy Research and Development Act 1989 (PIERD Act) to broaden the role of FRDC to collect and invest levies for purposes other than R&D – including marketing and promotion. The AOP for 2013-14 has provisionally allocated (based on the PIERD Act changing), processes and resources necessary to commence marketing and promotion activities.

The FRDC has also ensured it reflects the consultation with both government and industry stakeholders. This AOP has been developed to give effect to both the National Fishing and Aquaculture RD&E Strategy and the FRDC's RD&E Plan.

The AOP investment strategy targets the key priorities of:

- Development of a national fisheries management standard;
- improving the profitability of the seafood sector;
- improving the capacity of people in the fishing industry;
- improving the customary values for indigenous fishers; and
- Extension and adoption of research.

The research activities outlined in this annual operational plan will contribute to implementing the strategies and achieving the objectives set out in the Australian Government's National Research and Rural R&D Priorities.

Yours sincerely

The Hon. Harry Woods
Chair

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Executive Summary

The Fisheries Research and Development Corporation (FRDC) plays a pivotal role in planning, funding and managing Research, Development and Extension activities (RD&E) for its stakeholders; the Australian Government, the fishing industry and the broader Australian public.

The FRDC aims to maximise the benefits from its investment by ensuring that it is well targeted, meets governments' and industry's RD&E priorities, and builds on previous achievements.

The FRDC is unique among the rural research and development corporations (RDCs) because it takes a leadership role in balancing investment priorities between natural resource management and industry productivity and development. The majority of the FRDC's RD&E investment addresses public good priorities so as to ensure sustainable fisheries management, sustainable habitats and sustainable industries.

FRDC is strategically placed to broker partnerships between the Australian Government, industry and research partners around Australia. This positioning also allows the FRDC to communicate and network with partners to leverage funds, and to get the best results from RD&E investment made by government, industry and the community.

The FRDC plays a leadership role in fisheries RD&E through:

- project planning, management, and extension across government agencies and industry and the community nationally;
- facilitation and partnership activities with research partners;
- collaboration across other RDCs, independent agencies/states and international organisations;
- leverage of investment funds across Australia.

To ensure the FRDC meets stakeholder needs, and increases the speed of output delivery, it will continue to improve the way it invests in, and manages RD&E. This will involve reviewing its current funding mechanisms to ensure they are flexible and tailored to meet stakeholders' needs.

Innovation remains a key focus for FRDC investment. The FRDC will strive to fund more projects that will deliver substantial change, rather than investing in projects that deliver gradual incremental increases in knowledge and adoption. The FRDC also has a strong linkage with the Seafood Cooperative Research Centre (SCRC). The FRDC, as a core participant of the SCRC, will invest over \$28 million cash and \$1.4 million in-kind, over the seven year life of the SCRC. The goal of FRDC's investment in the SCRC is to assist end-users of its research to deliver safe, high-quality, Australian seafood and increase the profitability and value of the industry.

R&D Policy Statement

The Governments R&D Policy Statement was released in July 2012. This is the government's response to the Productivity Commission inquiry into the RDC model and feedback from consultative processes undertaken by the Department of Agriculture Fisheries and Forestry (DAFF). It has many elements to it. The key points for FRDC to work on are:

- Implementation of marketing and promotion following changes to the PIERD Act ;
- Development of a Statutory Funding Agreement (SFA) with DAFF;
- Prepare to undertake an independent review of FRDC operations and consistent benefit cost analysis of projects;
- Incorporate extension and adoption pathways as part of Strategic RD&E plans; and
- Improved collaboration and cross-sector investment, and reporting on this annually.

Priorities and Outputs for 2013-014

Development of a National Fisheries Standards — Fisheries management in Australia is administered across multiple jurisdictions. The development of a national management standard seeks to provide a minimum requirement for management across all these jurisdictions, reducing duplication and improving efficiency. The development of harmonised harvest and bycatch strategies, as well as standard stock status reporting, will help underpin the development of the national fisheries management standard.

Improving profitability and understanding value — FRDC's investment will aim to optimise the use of wild catch fisheries resources, and increase capacity in the aquaculture sector. A number of social science research projects will look to define the values the Australian community place, or associate with seafood and the fishing industry. The results will be incorporated into other areas of research being carried out by the Seafood CRC for the FRDC which look to improve seafood products, consumption and retail supply.

The FRDC will fund work on trade and market access issues in a number of international markets, including China and European Union to assist Australian industry access and these markets in a more efficient way.

Bycatch — Mitigation of incidental catch of threatened, endangered or protected (TEP) species will continue to be an area where investments are made. A key area of research is to reduce the interaction between certain gear types and TEP species, including sharks, cetaceans, pinnipeds and seabirds. FRDC will also provide input and advice into the DAFF review of the Commonwealth Policy on Fisheries Bycatch.

Climate change — The FRDC has created a coordinated funding program to enhance the fishing industry's capacity to adapt, mitigate against, and take advantage of further climate change. At just over half way through the program, results from the funded research are starting to become available. At this point more focus will be placed on dissemination of the findings and results. The program partners are DCCEE, DAFF and participating state government agencies.

People development — During the course of the year a range of opportunities to continue to develop skills and share knowledge will be provided through programs including a visiting experts program, travel awards and conferences. FRDC will enhance the opportunities for young industry members and government participants to build their leadership capabilities.

Resource access and allocation — Over the coming year methods will be explored for incorporating spatial management into fishery management arrangements, including harvest strategies, and developing improved data collection techniques for recreational fishers relevant to resource-sharing. In addition to techniques for collecting fine-scale recreational catch data, this will extend to studies identify a value on commercial and recreational fishing activities.

Enhance the value from customary fishing — Work with an Indigenous Fisheries Reference Group, will be undertaken to gain input into management, planning and project assessment with indigenous Australians on fishing and seafood related issues. The FRDC has funded a number of projects to identify approaches that will result in improved consultative processes between representatives of the indigenous community and other fishers.

Extension and adoption — The FRDC will assist in the development of a national Fisheries Extension and Adoption Plan that will aim to improve the input into development of research projects. uptake of research and transfer of knowledge to stakeholders. This may include the development of an extension network and a range of information resources for industry. It will also look to fund research to better target extension activities.

Marketing and Promotion — The release of the Government Research and Development Policy Statement indicated changes to the PIERD Act that would allow for RDCs to undertake marketing and promotion activities. Foreshadowing these changes the FRDC will put in place the necessary processes and resources to carry out the marketing and promotion activities as required.

It is important to note that the timing and commencement of this activity will be dependent on changes to the PIERD Act passing through Parliament and industry agreeing to contribute to marketing activities.

Joint Rural Research and Development Council and Government Initiatives

National Fishing and Aquaculture RD&E Strategy — The FRDC will continue to take a lead role in implementing the strategy. It will work in partnership with the Australian Fisheries Management Forum and FRDC's representative bodies to help advance funding and management arrangements within a regional and national approach.

National Strategic Rural R&D Investment Plan — The FRDC will work with the Council of Rural RDCs (CRRDC) to ensure the proposed national plan developed by the Rural Research and Development Council delivers desirable outcomes to government, industry and other stakeholders. Integral to this will be the implementation of strategies under the National RD&E Framework for all rural sectors, particularly the fishing and aquaculture sectors.

Shared services — In partnership with other RDCs, FRDC is working to share services to reduce administrative costs and ensure efficient delivery of RD&E investment. In line with this the FRDC will trial shared office space with Horticulture Australia for its out posted staff.

Rural Research and Development Policy Statement — The FRDC will work with the Australian Government to implement the any changes that are made to the operation of the RDCs following the release of the Rural Research and Development Policy Statement.

Stakeholder consultation

The FRDC works with its primary stakeholders the Australian Government and the fishing industry to prioritise, implement and review progress of strategic RD&E directions; disseminate the results; and when appropriate assist commercialisation.

In addition the FRDC partners with many other organisations in both the research funding and service provision areas. In particular the FRDC has a strong linkage with the Seafood Cooperative Research Centre (SCRC).

Investment strategy

The FRDC invests in RD&E across the whole value-chain of the commercial fishing and aquaculture industry, and for the benefit of both indigenous and recreational fishers. The FRDC seeks to achieve maximum leverage from its investment by providing research administration and services using a value adding model. Research projects have input provided during the development and assessment phase to deliver a specific outcome, and are actively managed and monitored.

The value proposition to running the value adding model, compared to a simple 'granting' model for research and development funding which can be carried out at minimal cost, is that the returns are significantly better. This is because more time is spent ensuring the design and implementation of each project is correct and aligns with desired outcomes of the stakeholders. The FRDC manages the implementation of the value adding model through its ongoing investment in systems that deliver best practice in project development management and assessment (see page 12 on Fisheries Research Advisory Bodies), integrated project, financial and human resource management.

The FRDC commissions RD&E through a variety of flexible investment approaches. These include:

- an open-call for project applications;
- formal partnership agreements with industry sectors;
- subprograms and coordination programs that are tailored to specific industry sectors or activity;
- short-term tactical research investment; and
- specifically targeted commissioned RD&E; especially where there is market failure by private investment.

The focus for investment aligns with the 15 themes (below) outlined in the FRDC 2010-2015 Strategic RD&E Plan. In any given year the investment balance between themes may vary depending on strategic needs – see page overleaf for current percentages.

Programs	Themes
Environment	1. Biosecurity and aquatic animal health 2. Habitat and ecosystem protection 3. Climate change 4. Ecologically sustainable development
Industry	5. Governance and regulatory systems 6. Resource access and allocation 7. Production, growth and profitability 8. Consumers, products and markets 9. Value from aquatic resources
Communities	10. Resilient and supportive communities
People Development	11. Leadership development 12. Workforce development 13. Innovation skills
Extension and adoption	14. Extension and adoption
Marketing and Promotion	15. Marketing and Promotion

Performance evaluation

FRDC will build on the first three research rounds of benefit cost assessments (BCAs) and analyse projects across 25 area clusters – groups of projects that have a similar issue or focus i.e. projects on supply chains or genetics. This will build on the existing clusters analysis by adding new projects to those that have already been assessed. This will increase the number of projects assessed significantly, build on the existing data set, and provide more fine scale intelligence with regards to project outcomes.

People Development Program

The FRDC completed a review of the five year People Development Program 2008-2013. The review completed in December 2012 supports the ongoing investment in people development with focus on integrating it with the FRDC's program areas of environment, industry and communities, and extension and adoption.

A new People Development Plan (2013-15) has been developed taking into consideration the recommendations. The plan will run for two years which will allow these activities to align with the FRDC five year Strategic RD&E Plan.

While the goal is to integrate with the FRDC's other planning structures, the evidence shows that at this time a dedicated people development program is still needed. This dedicated program approach is consistent with findings from other RDC's, and supports the Government's capacity building priorities.

This dedicated approach means that investment will need to continue to be delivered through a combination of FRDC's various funding rounds, and FRDC-initiated activities, as per the FRDC RD&E Investment Framework Policy.

Extension and Adoption (E&A)

The National Fisheries and Aquaculture Extension and Adoption Framework will to a large degree guide the FRDC investment in E&A activities over the 2013-14 year. The FRDC will align with the framework to focus on increasing the emphasis of E&A before, during and after projects to ensure that stakeholders support the need for the research, are involved where possible during the research and are well placed to take up the results. The FRDC will also use the framework to identify gaps in the E&A landscape, and directly commission or invest in activities to address these gaps.

Further research into E&A will continue to inform the knowledge base from which the fishing industry can draw. It will also provide the FRDC with a sound basis for future investment in this area.

In line with the Government Research and Development Policy Statement focus on extension and adoption the FRDC will aim to keep abreast of E&A developments at the broader primary industry level, working with other RDCs, drawing upon the bank of knowledge that has been developed and feeding this information into the National Fisheries and Aquaculture Extension and Adoption Framework and FRDC activities.

Marketing and Promotion

In July 2012, Senator the Hon, Joseph Ludwig, Minister for Agriculture, Fisheries and Forestry, released a Government Research and Development Policy Statement in response to the Productivity Commission inquiry into the Rural Research and Development Corporations (RDC).

The Policy Statement supported the current RDC model. It also highlighted that some changes would be made to the Primary Industries Energy Research and Development Act 1989 (PIERD Act) to broaden the role of FRDC to collect and invest levies for purposes other than R&D – including marketing and promotion.

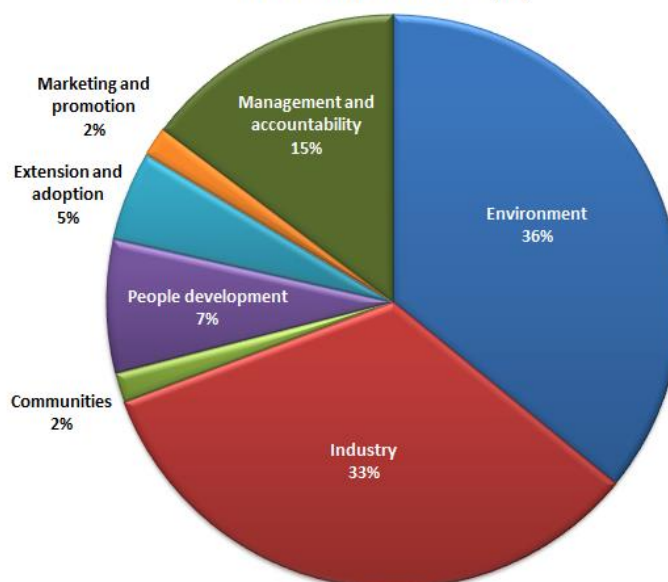
In preparing for the changes, the FRDC will put in place the necessary processes and resources to manage the marketing and promotion activities in consultation with industry and government. Much of the initial work will be conducted in partnership with the Seafood Cooperative Research Centre (SCRC) who are investing in market research and development that will underpin the FRDC activities.

It is important to note that the timing and commencement of this activity will be dependent on changes to the PIERD Act passing through Parliament and industry agreeing to contribute to marketing activities.

Annual Operational Plan 2013-14 Budget

REVENUE	\$	%	\$
Total revenues from the Australian Government		64%	17,291,815
Australian Government 0.5% AGVP	11,527,877	67%	
Australian Government matching of industry contributions	5,763,938	33%	
Sub-total	17,291,815	100%	
Contributions revenue from the jurisdictions	7,929,842	29%	
Projects revenue from other parties	900,000	3.5%	
Other revenue	395,000	1.5%	
Marketing and promotion (project funds SCRC)	500,000	2%	
TOTAL REVENUE			27,016,657
EXPENDITURE	\$	%	\$
Projects Expenditure		84%	22,567,000
Environment	9,703,810	43.0%	
Industry	9,026,800	40.0%	
Communities	451,340	2.0%	
People development	2,031,030	9.0%	
Extension and adoption	1,354,020	6.0%	
Sub-total	22,567,000	100%	
Marketing and promotion expenditure		1.7%	460,000
Seafood image (project funds SCRC)	110,000	70%	
Seafood markets (project funds SCRC)	300,000	20%	
Seafood trade and market access (project funds SCRC)	50,000	10%	
Sub-total	400,000	100%	
Management and accountability		14.7%	3,987,423
TOTAL EXPENDITURE			27,014,424
NET RESULT FOR THE YEAR			2,234

FRDC Expenditure (%)



The FRDC

The Fisheries Research and Development Corporation (FRDC) is a co-funded partnership between its two stakeholders, the Australian Government and the fishing industry. It was formed as a statutory corporation on 2nd July 1991, under the provisions of the *Primary Industries and Energy Research and Development Act 1989 (the PIERD Act 1989)* and is responsible to the Minister for Agriculture, Fisheries and Forestry. For a short history of the evolution of the FRDC refer www.frdc.com.au/aboutus/about-us.

The FRDC's role is to plan and invest in fisheries research, development and extension (RD&E) activities in Australia. This includes providing leadership, coordination, monitoring, extension and evaluation and reporting on RD&E activities. In some cases this will lead to commercialisation of the research outputs. The FRDC achieves this through coordinating government and industry investment, in partnership stakeholders to establish and address RD&E priorities. In addition the FRDC monitors and evaluates the adoption of RD&E to inform future decisions.

The primary revenue for the FRDC comes from the Australian Government and the fishing and aquaculture industry; in addition it manages additional contributions by stakeholders and other partners in FRDC-funded projects. The FRDC's primary revenue source is based on:

- the Australian Government providing unmatched funds equivalent to 0.5 per cent of the Average Gross Value of Production (AGVP);
- fishers and aquaculturists providing contributions of at least 0.25 per cent of AGVP; and
- the Australian Government matching contributions by fishers and aquaculturists up to a maximum of 0.25 per cent of AGVP.

The FRDC's strategic investments in RD&E activities primarily benefit the three sectors of the fishing industry: commercial (wild catch and aquaculture), recreational and indigenous.

However, the FRDC has a significant responsibility in ensuring, on behalf of the Australian Government, that research is undertaken to assist in the management of the fisheries and aquaculture resource for ongoing sustainability. This means that a significant proportion of funding is directed at research that has a public good benefit.

FRDC Board

A Chair and a board of directors govern the FRDC, while an Executive Director (ED) leads the corporation's business activities on a day to day basis. The board oversees corporate governance, sets strategic direction and monitors the ongoing performance of the FRDC and the ED. The FRDC board and the ED are responsible for managing and evaluating the organisation and its investments, and for reporting to Government and its representative fishing industry organisations. During 2013-14 the focus for the FRDC Board will be on:

- implementing the National Framework for Primary Industries Research, Development and Extension;
- developing strategic investment options to ensure delivery of outcomes against the FRDC RD&E Plan;
- responding to findings of the Productivity Commission inquiry into the RDCs and the Rural Research and Development Council's National Strategic Investment Plan; and
- developing a plan to improve the perception of the fishing industry through making research results more publically available and addressing factually incorrect media (and similar) reports.

Fisheries Research Advisory Bodies (FRABs)

The FRDC supports a network of FRABs covering Commonwealth fisheries and the fisheries and aquaculture industries of each state and the Northern Territory. The FRABs have an extremely important role in optimising the efficiency of the FRDC's planning and investment processes. The FRDC works to ensure a majority of open call and Tactical Research Fund applications are submitted through, or reviewed by, the FRABs.

The FRABs represent sectors of the fishing industry, fisheries managers and researchers; and in some cases also have representatives from environmental and the community.

RD&E planning environment

Planning environment

On 23 April 2010, the Primary Industries Ministerial Council (PIMC) approved the *"Working Together: the National Fishing and Aquaculture RD&E Strategy 2010"*, which outlines the future direction to improve the focus, efficiency and effectiveness of RD&E to support Australia's fishing and aquaculture industry.

A key factor to consider with regards to the development of the national strategy is that there remains on-going activity that will take several years to complete. The FRDC has worked closely with key stakeholders to develop the Fishing and Aquaculture RD&E Strategy Governance Committee, a Research Providers Network and a National Extension and Adoption Working Group. The three groups will work together to progress the allocation of activities and responsibilities set out within the strategy and against the Major-Support-Link framework¹. Implementation and funding of any component will be dependent on coordinated implementation by State and Territory Governments. In light of this, the FRDC will continue to fund and allocate resources to existing priorities, while monitoring the broader context.

Running in parallel to the development of the national strategy has been the development of the FRDC's new Research, Development and Extension Plan (RD&E Plan) for 2010–2015. The Minister for Agriculture, Fisheries and Forestry approved the plan on 13 July 2010. Importantly, the strategy and plan provides a foundation for further improvement in the outcomes for stakeholders from their RD&E investment.

The most important elements are that the RD&E Plan outlines 15 themes areas on which the FRDC will focus and on which Annual Operational plans are based – see page 9.

Likewise the implementation and uptake of a National Fisheries and Aquaculture Extension and Adoption Strategy by all stakeholders will take time. During this phase the FRDC will continue to look for areas where investment in activities will deliver optimum results.

Australian Government research priorities

The FRDC will work closely with the Minister for Agriculture, Fisheries and Forestry and the Department of Agriculture, Fisheries and Forestry (DAFF) to ensure it delivers results in line with the Australian Government's National and Rural R&D priorities – see *Australian Government Research Priorities* section at Attachment 1. The FRDC are investing in targeted projects that will assist in the delivery of the Australian Government priorities – such as work on bycatch policy and resource sharing. The Government's priorities also align to the FRDC's four legislated objects (section 3 of *the PIERD Act 1989*) as shown in Figure 1: FRDC's framework for integrating legislative, government and industry priorities.

Integration of the planned outcome with legislative, stakeholder priorities

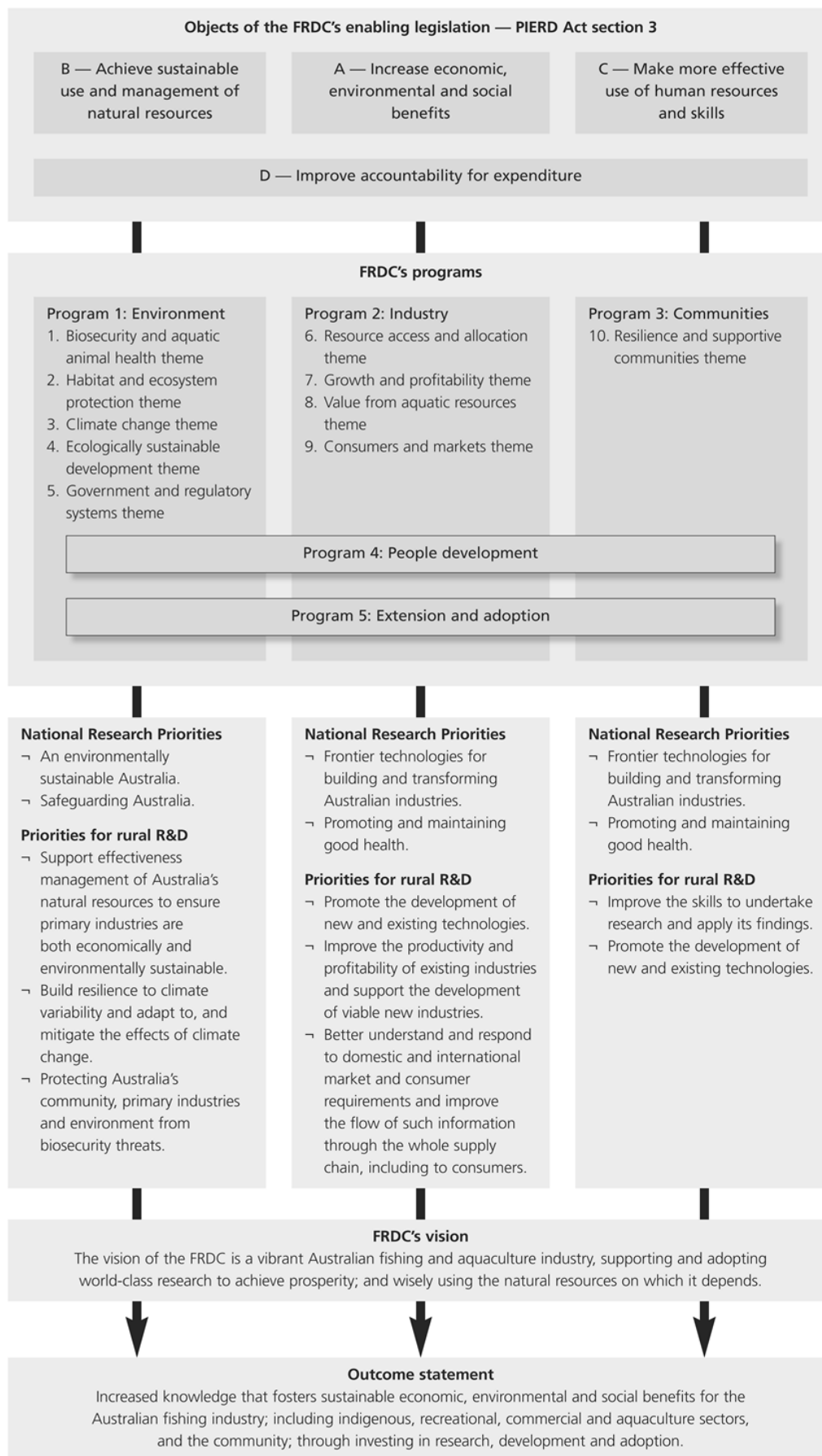
The FRDC's objectives, derived from section 3 of the PIERD Act 1989, are incorporated in its vision and planned outcome. The FRDC's RD&E programs mirror the core themes of sub-sections 3(a), (b) and (c) of the Act. This alignment has brought simplicity and robustness to the FRDC's RD&E planning, implementation and reporting, and to many of its kindred organisations. It has also facilitated a triple-bottom-line approach to funded activities.

1. The Primary Industries Standing Committee (PISC) agreed to a concept that is called Major-Support-Link (MSL) to describe the role of government research providers in delivering primary industries RD&E. In summary these are defined as:

- Major Government will play a leadership role in developing & facilitating a national approach to research & development
- Support Government will undertake R&D, but leadership in this area will fall within another state or jurisdiction
- Link Government will not undertake R&D, but will access information & resources from other states or jurisdictions

MSL when implemented will result in consolidation, reduced duplication, ensure capability meets needs (including potential investment in new science and capability if required) and more efficient delivery of RD&E.

Figure 1: FRDC's framework for integrating legislative, government and industry priorities.



Relationships with stakeholders

In developing the projects that address the five programs, directions are established in association with the FRDC's stakeholders — government, industry stakeholders and partner research organisations.

The FRDC works with its stakeholders and partners to only undertake program management in an effective manner, and to disseminate the results and assist with their adoption, including when appropriate, commercialisation. Over the course of the year, the FRDC will continue to collaborate and work with its stakeholders and partners.

Industry stakeholder research priorities

One of the primary challenges for the FRDC is to gain a solid understanding of the needs and priorities of its industry stakeholders — many of whom come from a diverse range of sectors and operations. FRDC in assisting with developing the National RD&E Strategy and its RD&E Plan has consulted widely with a majority of these groups. In addition the FRDC has undertaken industry research to build on this knowledge. While there are common, national issues, each sector faces unique challenges and has specific research, development and extension needs, and these vary around Australia.

To ensure a balanced portfolio, and to align with industry research priorities, the large majority of project applications are developed and reviewed by the FRABs. The FRDC tries to ensure where possible, industry and management is directly engaged and integrated into the delivery of every project.

Australian Government

The Minister for Agriculture Fisheries and Forestry is integral to the running of the FRDC. The Minister and his Department outline the areas or priorities that need to be addressed from a government perspective. The Department acts as the day to day policy intermediary between the Minister's office and the FRDC. The Australian Management Fisheries Authority and the Department of Sustainability, Environment, Water, Population and Communities also play an important role in contributing to research priorities.

Fishing and Aquaculture RD&E Strategy Governance Committee

The FRDC has worked closely with key stakeholders to develop, and now implement, the National Fishing and Aquaculture RD&E Strategy. A key component is the development of the Fishing and Aquaculture RD&E Strategy Governance Committee, Research Providers Network and Extension and Adoption Working Group. Over the coming year the three groups under the direction of the Fishing and Aquaculture RD&E Strategy Governance Committee will meet and focus on developing the Major-Support-Link Framework and governance arrangements to improve RD&E for the fishing and aquaculture industries.

Australian Fisheries Management Forum (AFMF)

AFMF comprises the heads/CEOs of the Commonwealth, state and territory government agencies responsible for the management of fisheries. The AFMF discusses issues relating to fisheries and aquaculture management.

The FRDC understand that adoption of research outputs by management agencies is a key to optimising management outcomes. It will continue to work with AFMF, sitting as an invited representative to their meetings, providing advice and ensuring their priorities are incorporated into RD&E planning processes.

Consultation with representative organisations

The FRDC has four representative organisations with which it will consult over the course of 2013-14.

- Australian Recreational and Sport Fishing Industry Confederation Inc. (trading as Recfish Australia)
- National Aquaculture Council Inc. (NAC).
- Commonwealth Fisheries Association Inc. (CFA).
- National Seafood Industry Alliance (NSIA).

Under section 15(2) of the *PIERD Act 1989* and the Guidelines on Funding of Consultation Costs by Primary Industries and Energy Portfolio Statutory Authorities, the FRDC may meet travel and other expenses incurred in connection with consultation between the FRDC and each of its representative organisations. The FRDC has budgeted \$30,000 on such consultation in 2013-14.

In addition the FRDC invests in RD&E projects with its representative organisations. All projects currently under contract with the FRDC representative bodies at the commencement of 2013-14 are:

National Aquaculture Council

Project 2009/303 Australasian Aquaculture Conference 2010 to 2014 \$240,000

Recfish Australia

Project 2007/227 Recfishing Research: National Strategy for Recreational Fisheries RD&E \$358,880

The project values are totals – (whole of project life) (most projects run 18-36 months) and may not be what is expended on the project during the course of the year. The actual expenditure will be reported in the FRDC Annual Report.

Consultation with levy organisations – Australian Prawn Farmers Association

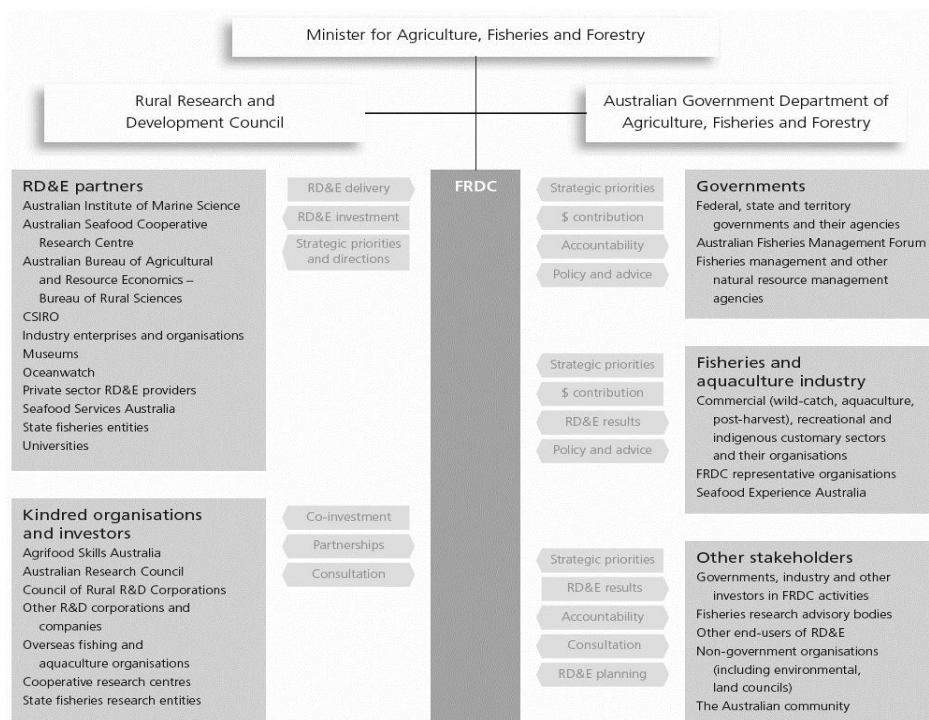
The FRDC administers a research and development levy on behalf of the Australian Prawn Farmers' Association (APFA). The levy is collected by the Levies Revenue Service (LRS) of DAFF. An administration cost is charged by LRS to manage the levy. In the coming year it is not expected that any overpayments will occur.

The FRDC's investments in prawn farming research and development is driven by the APFA's RD&E Plan. FRDC and the APFA enjoy a very close working relationship. The APFA has nominated that the majority of its investment is to be through co-investment with the Seafood CRC. The APFA has a lead role with FRDC in ensuring its priorities are met. The table below outlines the financial record of the relationship:

Year	2011-12 Budget	2012-13 Budget	2013-14 Budget
APFA contribution	\$150,000	\$180,000	\$190,000
FRDC expenditure on projects	\$263,623	\$230,582	\$178,880

The APFA has been consulted in the development of this AOP. FRDC is investing with APFA in:

- Research that improves price / kg
- Research that improves growth per week
- Research that helps to reduce cost of feed



Not all entities involved with the FRDC are shown.

For simplicity, only the relationships between the FRDC and other entities are shown — not relationships between those entities.

Many of the entities have multiple relationships with the FRDC: for example, CSIRO is a co-investor and a research provider.

Sector industry bodies

The FRDC has continued its close relationship with the National Seafood Industry Alliance (NSIA). The NSIA represents the commercial fishing, pearling and aquaculture industries through state industry councils and peak sector associations.

The FRDC will build upon the partnerships established with individual industry sectors, such as Southern Rocklobster Ltd, Australian Southern Bluefin Tuna Industry Association, Tasmanian Salmonid Growers' Association, Australian Pearl Producers and both the Prawn and Barramundi Farmers' Associations in funding research priorities that is required and co-funded by their sectors.

Rural research and development corporations

The FRDC will continue to partner with other RDCs on a range of activities to enhance joint strategic outcomes. Most significant of these include climate change, evaluation of RD&E, and the "Appetite for Excellence" primary producer's tour – a chef, waiter and restaurateur competition. Not only will the FRDC partner other RDCs at the project level, but it will also work more broadly to collaborate in functional areas. The FRDC will continue to attend meetings of the Council of Rural Research and Development Corporations (CRRDC), as well as meetings of Executive Directors, Business Managers and Communications Managers. In conjunction with other RDCs, the FRDC will assist in coordinating sponsorship and participate in events such as the Outlook and producer conferences. Additionally, the FRDC will continue to provide advice and services in relation to project management and the FRDC project management software – OmniFish.

Seafood Services Australia

The FRDC will continue to work with, and invest on a project by project basis, in Seafood Services Australia (SSA). A key focus of this partnership is to develop industry's ability to engage on a number of industry standard related issues. It will also facilitate responses to key trade and market access issues.

Seafood Cooperative Research Centre

The FRDC is a core participant of the Seafood CRC whose research program aims to increase the profitability and value of the Australian seafood industry, increase access to premium markets and increase demand for Australian seafood. These priorities are aligned with the FRDC's RD&E programs, in particular Program 2: Industry. This partnership provides a mechanism for the FRDC to extend RD&E along the value chain and enhance the focus on development activities.

Research Partners

Investment in research is the FRDC's core business. As a result, it is vital to the FRDC's success that good relationships are built and maintained with its research partners. In any given year FRDC will have under management around 300 active projects. The key research partners are:

- Department of Agriculture Fisheries and Forestry (DAFF)
- Australian Fisheries Management Authority (AFMA)
- State/Territory fisheries research centres
- Commonwealth Scientific and Industrial Research Organisation (CSIRO)
- Universities
- Cooperative Research Centres (CRCs)
- Seafood Services Australia (SSA)
- Other Rural RDCs and companies
- Industry groups
- Co-investors from the private sector.

The Australian Fishing Industry

The fishing and aquaculture industry is one of the most complex of Australia's primary industries in terms of both its structure and the natural resources on which it depends. The business environment is made more complex by their dependence on access to natural resources that are publicly managed in the interests of present and future generations. The Australian fishing industry comprises three main sectors:

- **commercial sector**; comprising of wild catch fishing, aquaculture and through-chain activities undertaken by seafood importers, processors, manufacturers, handlers and retailers
- **recreational fishing**, which includes the tackle, tour guides and charter sectors; and
- **Indigenous fishers**.

The "fishing industry" is further defined in the FRDC Regulations 1991 under the PIERD Act 1989 such that it includes any industry or activity carried on in or from Australia concerned with:

- taking; or
- culturing; or
- processing; or
- preserving; or
- storing; or
- transporting; or
- marketing; or
- selling;

of fish or fish products.

The commercial sector comprises approximately 120 wild catch fisheries and 70 aquaculture species. Commercial seafood and products (e.g. pearls) were valued at \$2.2 billion in 2010–11. The recreational sector has 3.4 million participants, who were estimated in a 2001 survey to spend \$1.9 billion on their fishing. Aboriginal and Torres Strait Islander people participate in commercial and recreational fishing, as well as customary fishing. The legal rights around indigenous fishing are being refined over time and some aspects are now part of existing legislation and court decisions.

Employment statistics (Australian Bureau of Statistics) for the fishing industry indicate that in 2010–11, there were 11,699 people employed in the commercial fishing, hunting and trapping industry, with 7326 employed in the fishing, hunting and trapping sector, and 4373 in aquaculture enterprises.

Demand for seafood is rising in Australia because of increasing affluence and awareness of seafood's prominent role in a healthy diet. Consumption in Asian markets is also increasing; contributing is the growth of the middle class, especially in China and India. While consumer demand is strong they are also concerned with sustainability. This has led to a focus on industry demonstrating their commitment to best practice and in some cases pursuing third party accreditation. The focus has also meant governments have pursued policies to protect and restrict access to some areas through developing reserves and protected areas.

Australia's commercial seafood production only accounts for around 28 per cent of domestic consumption. Combined with the strength of the Australian dollar the commercial sector is re-orienting its market portfolio towards better serving the Australian market. Increasingly, value chains will encompass both domestic and imported product. Other factors, such as further improvements in fisheries management and better utilisation of catch, will become more important. But it is not only seafood for consumption that Australia produces. Australian pearls are high value items that are produced at the highest level of quality through leading edge technology.

The FRDC has a significant responsibility in ensuring, on behalf of the Australian Government, that research is undertaken to assist in the management of the fisheries resource for ongoing sustainability. This means a significant proportion of funding is directed at research that has a public good benefit.

TABLE 1: FISHING INDUSTRY RESULTS 2010–11*

Australian Fisheries Statistics*	2007–08	2008–09	2009–10	2010–11	Change
The wild catch sector	\$1.38 b for 181,668 t	\$1.4 b for 172,433 t	\$1.3 b for 171,512 t	\$1.30 b for 162,376 t	\$: 0% t: -0.5%
The aquaculture sector	\$869 m for 64,032 t	\$867 m for 70,092 t	\$870 m for 73,542 t	\$948 m for 75,188 t	\$: +1.1% t: +1.0%
Overall production was	\$2.21 b for 240,479 t	\$2.21 b for 237,508 t	\$2.18 b 241,123 t	\$2.24 b 233,778 t	\$: +1.0% t: -1.0%

The figures quoted are from *Australian Fisheries Statistics* 2010–11.

Planned Outputs for 2013-14

Environment

Australia's maritime zone is one of the largest in the world covering about 13.6 million square kilometres: Commonwealth, state and territory government agencies are responsible for managing the fisheries and aquaculture activities within their jurisdictions. Large components of the R&D undertaken by the FRDC focuses on providing information that will assist these agencies improve the sustainable use of Australia's aquatic resources.

Investment Budget for 2013-14

During 2013-14, \$9.7 million (about 43 per cent of the total RD&E investment) will be invested in RD&E activities within this program.

Strategies	Priority area – RD&E will help end users to:	Performance indicator	Targets
Biosecurity and aquatic animal health	Prevent and manage disease incursions Develop diagnostic procedures and techniques to rapidly detect and identify pathogens. Develop protocols to ensure biosecurity within the fishing and aquaculture industry to mitigate and control disease Improve access to fit-for-purpose aquacultural veterinary chemicals and vaccines.	Development and dissemination of protocols, techniques and technologies to mitigate and minimise the impact of disease outbreaks. Development of knowledge to assist industry to register vaccines and veterinary chemicals.	Two projects to respond to disease outbreaks.
Habitat and ecosystem protection	Mitigate the impacts of fishing, aquaculture, pollution, habitat destruction and land-based activities, and non-fishing occurrences, on fish, aquatic habitats and ecosystems. Develop and adapt technologies to reduce by-catch; impacts on threatened, endangered and protected species; and the effects of fishing on aquatic habitats. Enhance recreational fishing experiences through enhancement of fish habitats. Provide information to the community to demonstrate improvements in the fishing and aquaculture industry's environmental performance.	Demonstrated improved sustainability performance from the use of RD&E outputs. Development of innovative technologies to reduce fishery take and interaction with by-catch and with threatened, endangered and protected species.	One project to assess impact of habitat loss and scope rehabilitation options. Two projects to assess the current status of Threatened or Endangered or Protected (TEP) species

Climate change	<p>Understand the vulnerability of fish stocks and ecosystems to climate change.</p> <p>Adapt to the impacts of climate change, including the impacts on resource access.</p> <p>Reduce the greenhouse gas emissions of the fishing and aquaculture industry, with a focus on energy efficiency.</p> <p>Develop tools to improve cross-jurisdictional resource access and management as part of adaptation to climate change.</p>	<p>Improvement in understanding of the impacts of climate change that leads to adaptation by fisheries management and industry.</p> <p>Development of mitigation methods to reduce greenhouse gas emissions of industry.</p>	<p>One project to assess oceanographic influences on marine species.</p>
Ecologically Sustainable Development	<p>Improve the knowledge of key biological attributes for target species.</p> <p>Develop practical tools that implement ecosystem-based fisheries management and incorporate understanding of the cumulative impacts of fishing into fisheries management plans.</p> <p>Incorporate improved understanding of environmental factors, including oceanographic and ecological processes, into fisheries management.</p> <p>Develop tools and technologies to acquire environmental, economic and social data underpinning harvest strategy evaluation systems, especially for data-poor fisheries.</p> <p>Quantify the environmental carrying capacity of aquaculture operations</p> <p>Develop and implement standardised environmental impact assessments and statements for the aquaculture sector.</p> <p>Implement environmental management systems and acquire third-party certification, including eco-labelling.</p> <p>Improve recreational sector performance based on acquiring information about sustainable, ethical fishing; motivations; demographics; participation; fishing methods; and catch and effort.</p>	<p>Development of mechanisms and technologies to collect economic, environmental and social data to inform management processes.</p> <p>Improvement in knowledge of the relationship between environmental processes and known biological processes.</p> <p>Development of techniques for incorporation of ecosystem-based fisheries management in fisheries.</p> <p>Development of knowledge to help the industry to meet environmental standards.</p>	<p>Develop a project to examine a Murray Darling Basin wide approach to Murray Cod management.</p> <p>Assess the post catch survival of one recreational species.</p>

Examples of projects with funds to be expended in 2013-14

Project Id	Project Title
2013/025	Assessing post-release survival of southern bluefin tuna from recreational fishing
2013/021	Using local knowledge to understand linkages between ecosystem processes, seagrass change and fisheries productivity to improve ecosystem-based management
2013/020	Physical oceanographic influences on Queensland reef fish and scallops
2013/018	Using commercial and recreational fisher knowledge to reconstruct historical catch rates for Queensland pink snapper (<i>Pagrus auratus</i>) and Spanish mackerel (<i>Scomberomorus commerson</i>): long-term data for incorporation into future stock assessments.
2013/017	Optimising the management of tropical reef fish through the development of indigenous scientific capability
2013/015	Developing improved methods for stock assessment in spatially complex fisheries using Blue-eye Trevalla as a case study
2013/011	Assessment of the impacts of seal populations on the seafood industry in South Australia
2013/009	Shark Futures: A report card for Australia's sharks and rays
2013/008	Movement, habitat utilisation and population status of the endangered Maugean skate and implications for fishing and aquaculture operations in Macquarie Harbour
2012/052	Aquatic Animal Health Subprogram: development of a laboratory model for infectious challenge of Pacific oysters (<i>Crassostrea gigas</i>) with ostreid herpesvirus
2012/050	Aquatic Animal Health Subprogram: <i>Edwardsiella ictaluri</i> survey in wild catfish populations
2012/044	Aquatic Animal Health Subprogram: Exercise Sea Fox: testing aquatic animal disease emergency response capabilities within aquaculture
2012/039	Tactical Research Fund: urgent need to generate and deploy sterile "Judas fish" to assist carp eradication in Lake Sorell, Tasmania — surgical and chemical sterilisation
2012/037	The life-cycle habitat requirements of coastal fisheries species; identifying key knowledge gaps and research needs
2012/036	Revitalising estuaries and wetlands for carbon sequestration, biodiversity, fisheries and the community
2012/032	Aquatic Animal Health Subprogram: Pacific oyster mortality syndrome (POMS) - risk mitigation, epidemiology and OsHV-1 biology
2012/027	Determining when and where to fish: Linking scallop spawning, settlement, size and condition to collaborative spatial harvest and industry in-season management strategies.
2012/021	Trial and validation of Respondent-Driven Sampling as a cost-effective method for obtaining representative catch, effort, social and economic data from recreational fisheries
2012/020	The influence of fish movement on regional fishery production and stock structure for South Australia's Snapper (<i>Pagrus auratus</i>) fishery.
2012/018	Optimising the collection of relative abundance data for the pipi population in New South Wales
2012/016	Demographic Performance of Brownlip Abalone: Exploration of Wild and Cultured Harvest Potential.
2012/015	Improving confidence in the management of the blue swimmer crab (<i>Portunus armatus</i>) in Shark Bay
2012/011	Revolutionising fish ageing
2012/008	Assessing the impact of marine seismic surveys on southeast Australian scallop and lobster fisheries
2011/087	Tactical Research Fund: trial of an industry implemented, spatially discrete eradication/control program for <i>Centrostephanus rodgersii</i> in Tasmania
2011/084	Comparative sequestration and mitigation opportunities across the Australian landscape and its primary industries
2011/078	Tactical Research Fund: Shark Futures - determining the most suitable index of abundance for the school shark (<i>Galeorhinus galeus</i>) stock assessment: review and future directions to ensure best recovery estimates
2011/077	Tactical Research Fund: Shark Futures - Using molecular techniques to improve the ecologically sustainable fisheries management of shortfin makos (<i>Isurus oxyrinchus</i>) in the Australasian region
2011/070	Atlantic Salmon Aquaculture Subprogram: Comparative susceptibility and host responses of endemic fishes and salmonids affected by amoebic gill disease in Tasmania
2011/062	Tactical Research Fund: a reporting framework for ecosystem based assessment of Australian trawl fisheries

2011/058	Tactical Research Fund: National assessment of the incidental catch of seabirds in trawl, gillnet and purse-seine fisheries
2011/057	Tactical Research Fund: Reducing the impact of discarded recreational fishing tackle on coastal seabirds
2011/054	Monitoring the relative abundance and biomass of South Australia's iconic giant cuttlefish breeding population
2011/050	Climate Change Research Strategy for Primary Industries (CCRSPI)
2011/045	Tactical Research Fund: Shark futures - a synthesis of available data on Mako and Porbeagle sharks in Australasian waters - current status and future directions
2011/039	FRDC-DCCEE: preparing fisheries for climate change: identifying adaptation options for four key fisheries in South Eastern Australia
2011/033	Spatial patterns, landscape genetics and post virus recovery of blacklip abalone, <i>Haliotis rubra</i> (Leach), in the Western commercial fishing zone of Victoria
2011/032	Incorporating the effects of marine spatial closures in risk assessments and fisheries stock assessments
2011/030	Evaluating candidate monitoring strategies, assessment procedures and harvest control rules in the spatially complex Queensland Coral Reef fin-fish Fishery
2011/029	ERA extension to assess cumulative effects of fishing on species
2011/028	Development of robust methods to estimate acceptable levels of incidental catches of different commercial and byproduct species
2011/024	Periwinkle fishery of Tasmania: supporting management and a profitable industry
2011/020	Developing cost-effective industry based techniques for monitoring puerulus settlement in all conditions: trials in southern and western Tasmania
2011/017	Spawning sources, movement patterns, and nursery area replenishment of spawning populations of King George whiting in south-eastern Australia - closing the life history loop
2011/009	Assessment of novel gear designs to reduce interactions between species of conservation interest and commercial fishing nets
2010/070	Tactical Research Fund: incidence and possible causes of saddleback syndrome in the fish species of south east Queensland
2010/069	Tactical Research Fund: assessment of Great Sandy marine park go slow areas
2010/062	Shark Futures: Sustainable management of the NSW whaler shark fishery
2010/061	Development of a national harvest strategy framework
2010/060	A trial to assess benefits and effectiveness of an industry-managed Scientific Observer Program in the NPF
2010/057	Tactical Research Fund: Using innovative techniques to analyse trends in abundance for non-target species
2010/053	Tactical Research Fund: assessing technology changes and risks to the sustainable management of deepwater line fisheries in southern Queensland
2010/049	Evaluating the use of onboard cameras in the Shark Gillnet Fishery in South Australia
2010/044	Quantitatively defining proxies for biological and economic reference points in data poor and data limited fisheries
2010/043	Development of a user-friendly desktop tool based on existing Atlantis runs
2010/042	Improving gear selectivity in Australian mud crab fisheries
2010/040	Developing and testing social objectives for fisheries management
2010/034	Aquatic Animal Health Subprogram: Investigation of an emerging bacterial disease in wild Queensland groper, marine fish and stingrays with production of diagnostic tools to reduce the spread of disease to other states of Australia
2010/023	El Nemo South East: Quantitative testing of fisheries management arrangements under climate change using Atlantis
2010/016	Assessing the impacts of gillnetting in Tasmania: implications for by-catch and biodiversity
2010/013	Towards understanding greenlip abalone population structure
2010/007	Utilising innovative technology to better understand Spanish mackerel spawning aggregations and the protection offered by marine protected areas
2010/006	Estimating fishing mortality of major target species and species of conservation interest in the Queensland east coast shark fishery
2010/004	Passive acoustic techniques to monitor aggregations of sound producing fish species
2010/003	Spatial and temporal dynamics of Western Australia's commercially important sharks
2010/002	The use of BRUVs as a tool for assessing marine fisheries and ecosystems: A review of the hurdles and potential
2010/001	Predicting the impacts of shifting recreational fishing effort towards inshore species
2009/097	Tactical Research Fund: measuring dropout rates from commercial demersal gillnets in Western Australia

Industry

Demand for high-quality seafood is predicted to outstrip supply in both domestic and export markets. Similarly in the recreational and customary sectors the demand for high-quality fishing experiences will outstrip supply. There is a need to increase both the production and the value of the catch, and to take advantage of future opportunities. For the commercial sector, business profitability and international competitiveness is an overriding concern. This program aims to assist all sectors improve their overall performance.

Investment budget for 2013-14

During 2013-14, \$9.0 million (about 40 per cent of the total RD&E investment) will be invested in RD&E activities within this program.

Strategies	Priority area – RD&E will help end users to:	Performance indicator	Targets
Governance & regulatory systems	<p>Reduce the costs, complexity and duplication inherent in existing regulatory systems.</p> <p>Participate more collaboratively in fisheries and aquaculture management, including co-management.</p> <p>Develop fine-scale and spatial approaches to improve local fisheries management.</p> <p>Develop efficient multi-fishery and multi-sector fisheries management arrangements when more than one jurisdiction is spanned.</p> <p>Develop fisheries management that enables maximum economic yield.</p>	<p>Development of processes and technologies to improve the efficiency of governance and regulatory systems for fishing and aquaculture.</p> <p>Development of methods to incorporate economic knowledge into fisheries management.</p>	Undertaken assessment of one current and alternate harvest strategy
Resource access and allocation	<p>Develop improved processes and technologies to quantify rights between users and mechanisms for allocating shares.</p> <p>Develop methods to value the rights of recreational and indigenous customary users.</p> <p>Increase knowledge among diverse groups of stakeholders about each other's expectations about resource access and allocation.</p>	Development of processes for efficient, transparent allocation of shares and associated property rights for all aquatic resource users.	One resource sharing option examined for South Eastern Stocks of Snapper

Strategies	Priority area – RD&E will help end users to:	Performance indicator	Targets
Production, growth and profitability	<p>Increase and diversify opportunities for the aquaculture sector and other sectors.</p> <p>Improve productivity through operational efficiencies, new technologies and better utilisation of energy sources, and reduction of wastage.</p> <p>Develop new business opportunities.</p> <p>Develop improved business models and building business modelling skills.</p>	<p>Development of knowledge, processes and technologies to improve productivity and profitability of the commercial sectors.</p> <p>Development of knowledge and technologies in the areas of domestication and breeding genetics to support growth of the aquaculture sector.</p>	Bio-active potential of three new species explored.
Consumers, products and markets	<p>Build efficient, effective seafood value chains.</p> <p>Develop new products and processes that meet the demands of consumers.</p> <p>Improve trade and market access.</p> <p>Improve recognition of Australian products internationally and domestically.</p>	<p>Development of knowledge and technologies to support the industry's development of new products.</p> <p>Development of knowledge and technologies to improve seafood value chains and support trade and market access.</p>	Undertake product development of under-valued species from Lakes Entrance and Western Australia
Value from aquatic resources	<p>Incorporate indigenous customary practices into fisheries management.</p> <p>Enhance experiences through adoption of best-practice fishing, including catch-and-release practices.</p> <p>Enhance fish stocks.</p> <p>Advance economic self-reliance of indigenous communities based on the use of fish resources.</p> <p>Quantify the social, health and economic benefits of recreational and indigenous customary fishing.</p>	<p>Development of knowledge, processes and technologies to understand and enhance the societal and personal values obtained from recreational and indigenous customary fishing.</p> <p>Development of knowledge regarding indigenous customary fishing practices, and processes to incorporate this knowledge into fisheries management.</p>	One project to examine the potential enhancement of iconic recreational species.

Examples of projects with funds to be expended in 2013-14

Project Id	Project Title
2013/221	Stock enhancement of the Western School Prawn (<i>Metapenaeus dalli</i>) in the Swan-Canning Estuary; evaluating recruitment limitation, environment and release strategies
2013/219	Developing Indigenous capacity and skills to sustainably harvest abalone
2013/217	Development of management recommendations to assist in advisories around seafood safety during toxic bloom events in Gippsland Lakes.
2013/210	Adapt or Fail: Risk management and business resilience in Queensland commercial fisheries
2013/209	Optimising processes and policy to minimise business and operational impacts of seismic surveys on the fishing industry and oil and gas industry.
2013/203	Development of an approach to harvest strategy management of internationally managed multi-species fisheries
2013/202	Identification of when current Commonwealth harvest strategies are inappropriate and possible alternatives
2013/201	Development of a harvest management, governance and resource sharing framework for a complex multi-sector, multi-jurisdiction fishery: the south-east Australian 'western' snapper stock
2013/200	Testing abalone empirical harvest strategies, for setting TACs and associated LMLs, that include the use of novel spatially explicit performance measures.
2012/229	Tactical Research Fund: development and validation of effective and affordable oyster production systems in the face of POMS disease of Pacific Oysters and QX disease of Sydney Rock Oysters - evaluation from a production, research and economic perspective
2012/216	Indigenous cultural fishing and fisheries governance
2012/215	Research and Development for the modelling and establishment of a South Australian Aboriginal Sea Ranger program
2012/214	Measuring the economic value of recreational fishing at a national level
2012/213	Developing jungle perch fingerling production to improve fishing opportunities
2012/211	Securing Trade & Market Access for the Australian Seafood Industry
2012/208	The Tasmanian Freshwater Eel Industry - an industry development and directions plan.
2012/201	Improve catch rate standardizations to account for changes in targeting
2012/200	Evaluating rotational harvest strategies for sea cucumber fisheries
2011/255	Tactical Research Fund: optimisation of treatment of <i>Ichthyophthirius multifiliis</i> in farmed trout
2011/254	Tactical Research Fund: Establishing industry catch sampling for WA's crystal crab fishery
2011/253	Innovative Solutions for Aquaculture: development of a sustainable South Australian macroalgal aquaculture industry
2011/251	Review and analysis to assist the review of the Commonwealth policy on fisheries bycatch - Phase 1
2011/249	Atlantic Salmon Aquaculture Subprogram: Innovative seal exclusion technology
2011/241	Tactical Research Fund: Development of a commercial control treatment for sepiolid tube worm fouling at Port Phillip Bay mussel farms
2011/215	Resource access and resource allocation
2011/209	Optimising a novel prawn trawl design for minimum drag and maximum eco-efficiency
2011/205	Spencer Gulf Research Initiative: development of an ecosystem model for fisheries and aquaculture
2011/200	Setting economic target reference points for multiple species in mixed fisheries
2010/211	Recfishing Research - addressing recreational fishing research priorities and improving extension
2010/201	Feasibility study for integrated multitrophic aquaculture in southern Australia
2010/200	Innovative development of the Octopus <i>tetricus</i> fishery in Western Australia

Communities

The fishing industry forms an integral part of many rural and regional communities. For the long term sustainability of the fishing industry, it is important the interactions and co-dependence between the community and industry are understood.

Investment budget for 2013-14

During 2013-14, \$0.5 million (about 2 per cent of the total RD&E investment) will be invested in RD&E activities within this program.

Strategies	Priority area – RD&E will help end users to:	Performance indicator	Targets
Resilient and supportive communities	<p>Improve the resilience of the fishing and aquaculture industry and the communities in which the industry operates.</p> <p>Understand and influence the perceptions that the community holds about the fishing and aquaculture industry and improve interactions between them.</p> <p>Increase the community's capacity to accept and incorporate higher levels of fishing and aquaculture activity.</p> <p>Address the social impacts of change in industry business environments.</p>	<p>Development of knowledge to better inform the community's perceptions of the industry and to increase support for the industry.</p> <p>Development of knowledge that can help the industry to adapt to change.</p>	One project to investigate drivers of community perception of fishing industry.

Examples of projects with funds to be expended in 2013-14

Project Id	Project Title
2013/301	Beyond GVP: The value of inshore commercial fisheries to fishers and consumers in regional communities on Queensland's east coast
2012/303	Tactical Research Fund: understanding and quantifying community attitudes to a recreational fishing licence in South Australia
2012/300	Social Science Research Coordination Program (SSRCP) II
2010/315	The International Seafood and Health Conference and Exhibition
2010/304	Impact of management changes on the viability of Indigenous commercial fishers and the flow on effects to their communities: case study in NSW.
2010/313	Omega 3 Centre Membership

People development

People are the cornerstone of any industry. For the fishing industry, it is vital that it continues to attract and develop people who will lead the industry towards a sustainable and profitable future. The FRDC has taken a strong role in supporting people development, from employing and developing young researchers, through to facilitating access to leadership development at all levels of industry.

Investment budget for 2013-14

During 2013-14, \$2.0 million (about 9 per cent of the total RD&E investment) will be invested in RD&E activities within this program.

Strategies	Priority area – RD&E will help end users to:	Performance indicator	Targets
Leadership development	Develop industry leadership across all stakeholder groups. Move to co-management of fisheries. Build industry capacity to drive change, including to manage resource conflicts.	Provision of knowledge and opportunities to develop leadership skills and diversity across all sectors of the industry and across aligned stakeholder groups, including researchers and resource managers. Development of knowledge, skills and processes to support industry to engage in debate, adapt to change, and move toward co-management of fisheries.	17 participants complete leadership courses
Workforce development	Plan for future workforce needs. Improve workplace health and safety. Identify and address reasons for poor uptake of training and education in the fishing industry. Identify education and training needs and preferred delivery mechanisms.	Development of knowledge and tools to meet future workforce and skill needs.	Partnership project developed to improve workforce development
Innovation skills	Be responsive towards new practices and innovation. Develop relationships that encourage new ideas and make more effective use of scientific and community resources, knowledge and skills. Ensure human RD&E capability is available to meet end-users' future needs.	Mechanisms and tools to attract and nurture RD&E capability in priority areas. Opportunities to acquire insights, knowledge and skills to create innovative, market-driven enterprises and organisations.	15 participants complete bursary program

Examples of projects with funds to be expended in 2013-14

Project Id	Project Title
2013/402	Identification workshop of marine invasive worm species. Such worms impact on the oyster industry, and other aquaculture activities as well changing benthic habitats which can impact on wild stocks
2012/409	People development program: Primary industries health and safety collaborative partnership 2012-2015
2012/407	Tactical Research Fund: improved line weighting method for tuna longline fishing using live-baiting to mitigate sea bird bycatch and improve worker safety
2012/402	Staying Healthy: Industry organisations' influence on behaviours and services used by fishers
2011/412	Industry bursaries - European Seafood Expo and international market experience.
2011/409	People development program: strategic media training for the Australian seafood industry
2012/302	Seafood Industry Partnerships in Schools - Phase 2 Program
2010/405	Facilitation of the FRDC Indigenous reference group (IRG) to progress RD&E outcomes
2010/403	People development program: Linking Australian schools with Australia's primary industries
2010/319	People Development Program: Investment in AICD In-Board Governance Training
2010/312	Ridley Aqua-feed Australian Prawn and Barramundi Conference
2010/304	Impact of management changes on the viability of Indigenous commercial fishers and the flow on effects to their communities: case study in NSW.
2009/334	People development program: Partner with DEEWR, Universities and other RDC's in the National Primary Industry Centre for Science Education (PICSE)
2009/315	People development program: scholarship program for enhancing the skills of aquatic animal health professionals in Australia
2009/303	Australasian Aquaculture 2010 to 2014

Extension and Adoption

Knowledge arising from R&D will be used and transformed into appropriate mediums to: support stakeholder decision making; assist with achieving objectives; and inform the broader community.

Investment budget for 2013-14

During 2013-14, \$1.4 million (about 6 per cent of the total RD&E investment) will be invested in RD&E activities within this program.

Strategies	Priority area – RD&E will help end users to:	Performance indicator	Targets
Extension and Adoption	<p>Have timely access to RD&E project outputs and other knowledge.</p> <p>Be part of appropriate knowledge management systems that build extension and adoption capacity.</p>	Increase in rates of adoption.	Alternate method for disseminating final reports and project outputs trialled.

Examples of projects with funds to be expended in 2013-14

Project Id	Project Title
2011/525	Communicating sustainability to build aquaculture's social license to operate
2011/523	Contribution to Ocean Policy Science Advisory Group (OPSAG) strategic plan revision - A Marine Nation
2010/521	FRDC-DCCEE: Vulnerability of an iconic Australian finfish (barramundi, <i>Lates calcarifer</i>) and related industries to altered climate across tropical Australia
2010/510	FRDC-DCCEE: Adapting to the effects of climate change on Australia's deep marine reserves
2012/507	Australian Animal Welfare Strategy: the development of specific operator (boat) level Welfare Codes of Practice in the commercial capture fishing sector
2012/506	Animal Welfare Strategy: development of guidelines for restaurant owners who hold 'live seafood' in aquaria
2010/506	FRDC-DCCEE: adaptive management of temperate reefs to minimise effects of climate change: developing new effective approaches for ecological monitoring and predictive modelling
2012/505	Seafood Directions 2013 - Adapt, Interact, See Food
2012/504	Tactical Research Fund: industry-extension of acoustic release technology for at-call access to submerged head-gear in the NSW rocklobster fishery
2011/503	FRDC-DCCEE: climate change adaptation - building community and industry knowledge
2012/500	To establish a forum (Common Language Group) for working with all stakeholders to reach agreement on issues which are contentious in the fishing and aquaculture sectors

Marketing and Promotion

Development of FRDC Marketing and Promotion Capacity

In July 2012, the Commonwealth Minister for Agriculture, Fisheries and Forestry, Joe Ludwig, released a Government Research and Development Policy Statement in response to the Productivity Commission inquiry into the Rural Research and Development Corporations (RDC).

The Policy Statement supported the current RDC model. It also highlighted that some changes would be made to the Primary Industries Energy Research and Development Act 1989 (PIERD Act) to broaden the role of the Rural Research and Development Corporations, to collect and invest levies for purposes other than R&D – including marketing and promotion.

Minister Ludwig wrote to key members of the seafood industry on the 2 November 2012 outlining that the Government will progress making changes to the FRDC governing legislation to allow for marketing and promotion activities. The Australian seafood industry, in turn has responded showing support for this change.

It is important to note that the timing and commencement of promotion activities will be dependent on changes to the PIERD Act passing through Parliament and industry agreeing to contribute to marketing activities.

Industry levy development

Changes to the PIERD Act in themselves will not result in an automatic, mandatory levy for any part of the seafood industry or specific sector unless the industry or sectors agree to develop that collective marketing function. Industry contributions will only be collected from those sectors that agree to the arrangement.

It is important to note that Marketing Levies collected are not eligible to be matched by the Australian Government.

The Australian Prawn Farmers and Fishers have put in place a voluntarily collection of funds, to undertake marketing and promotion activities in 2013-14. The administration of this process is being carried out by the Seafood Cooperative Research Centre.

The FRDC will put in place the necessary processes and resources to administer the marketing and promotion activities. This will include working with individual industry sectors, similar to the Prawn Farmers and Fishers to develop mechanisms to undertake marketing and development activities.

Key Performance indicators

The FRDC will develop a range of key performance indicators for the Marketing and Promotion Program in line with the development of a National Seafood Marketing and Promotion Framework. It is important that the performance indicators that the FRDC develop are consistent with both the business requirements of the organisation but also the framework developed in consultation with the seafood industry.

Marketing and promotion activities

It is important to note under the Marketing and Promotion Program, activities and projects may use a combination of research, development and marketing funds. For example, market research or product development is clearly not promoting seafood but fits under this program.

The FRDC has made it clear to all stakeholders that that marketing funds can only be used for promotion of seafood. In addition the FRDC will clearly report on the separation of the use of these funds.

At the highest level, the FRDC will work with stakeholders (commercial, indigenous and recreational) in the seafood industry to develop a National Seafood Marketing and Promotion Framework. The framework will outline the structure and key areas that require investment to make the seafood industry more sustainable, supported and profitable.

The key areas that would look to be included in the development of the National Seafood Marketing and Promotion Framework are:

Seafood Image

Community support (social licence to operate) for any industry is key to their social, environmental and economic wellbeing. A foundation area for the National Seafood Marketing and Promotion Framework will be the 'coordination and collaboration', of activities to improve community understanding of sustainable fishing practices and the positive contribution of seafood and angling activities has on the Australian community.

Seafood Markets

Selling seafood and establishing awareness and a point of difference for products is a key area for the National Seafood Marketing and Promotion Framework. The Framework would start at the broadest level, with awareness of the category and then move down the scale, providing structure for how to promote at the sectors or around a region.

Seafood Training and Standards

Ensuring quality products reach the end consumer is another key area to the National Seafood Marketing and Promotion Framework. This would entail establishing quality standards for not only products, but throughout the supply chain.

Seafood Trade & Market Access

Australian seafood businesses export to around 70 countries around the world. Each country has its own seafood regulations, customs procedures, taxes and tariffs. Over recent years trade with many countries has become increasingly expensive, bureaucratic and complex. Understanding these regulations and being able to proactively pursue strategies to improve the position for Australian companies is an important part of the National Seafood Marketing and Promotion Framework.

Seafood Capacity

At the foundation of all primary industries are a range of activities that add value to the sector, but at an individual company level are not necessarily a priority. As part of the developing a National Marketing and Promotion plan activities such as information collection and analysis, industry specific issues management (traceability and emergency response), training, regulation and certification should be considered and where appropriate funding allocated.

Management and Accountability

Management and Accountability

The FRDC delivers RD&E services ethically, efficiently and cost effectively. FRDC's ISO-certified quality management system encompasses all these activities. As a quality organisation the FRDC recognises the importance of reporting on the efficiency with which its research investments are delivered, as well as on their effectiveness. The FRDC will work with DAFF and the other RDCs to develop an approach to measuring efficiency that will be incorporated into its performance measurement framework.

Management and accountability elements

Since management and accountability arrangements contribute to the planned outcome of the FRDC RD&E programs, they are crucial to the FRDC's effectiveness and efficiency. The elements are detailed below.

Corporate governance

The FRDC aims to have a best practice system of corporate governance. These governance arrangements are underpinned by legislation and the adoption of best practice, and are documented through a range of policies and ISO certified procedures that the FRDC regularly updates and reports to the Australian Government each year through its annual report. The FRDC is subject to both internal and external quality audits, and financial audits.

Business planning

The FRDC maintains a Corporate Plan and business strategy aligned to government and industry needs that are understood and supported by stakeholders. Complementing this process, the FRDC maintains a five-year Strategic Research, Development and Extension Plan - Investing for Tomorrow's Fish 2010-2015; thus ensuring on-going research, development and extension builds on, and drives innovation in the fishing industry.

The FRDC maintains an Australia-wide system of FRABs that assist in determining research priorities and assessments, and provide stakeholder engagement for the FRDC.

Information management systems

The FRDC aims to provide business systems that meet both its own and stakeholders requirements. Investment in this area has recently been increased to update the systems' capacity to handle an increasingly complex array of project management issues and reporting requirements. Increasingly the FRDC is being engaged to manage the activities of other organisations with these enhanced systems. The FRDC's website is also used to promulgate its research reports.

Quality system

The FRDC is a quality-driven organisation, with a focus on leadership, continuous improvement, and accreditation. The FRDC is an accredited organisation under ISO9001:2008 and maintains the policies, processes and procedures required for that accreditation.

Corporate communications

The FRDC aims to inform all stakeholders of its goals, strategies and achievements; and provide them access to information that will help them. A wide range of corporate communication avenues are used, including printed publications (FISH magazine), web-based, e-mail and media outlets. Direct communication through committees and meetings is used, as are regional and port visits.

Risk management

FRDC aims to ensure its risks and opportunities are identified, assessed and appropriately managed. It maintains a Finance, Audit and Risk Management Committee with an independent member; and at each meeting the FRDC's risk profile is discussed and updated, and any necessary remedial action set in train.

Finance and administration

The FRDC aims to have best practice accounting and investment functions, managed in accordance with board and statutory requirements. The FRDC has to satisfy all government requirements; (legislative and policy based), and is subject to audit by the Australian National Audit Office.

Human resource management

The FRDC aims to have best practice in human resource management, clearly focused on delivering the FRDC's business objectives.

Remuneration policy

Remuneration of non-executive directors is determined by the Remuneration Tribunal.

Remuneration of the Executive Director and staff is determined by an FRDC policy set by the Board, and is administered through the Board's Remuneration Committee. The amount of individual remuneration of the Executive Director and staff is based on advice by Mercer Human Resource Consulting Pty Ltd. The amount is also influenced by performance measured against individual performance agreements and by the size of the program support component within the total FRDC budget, from which salaries are paid.

FRDC has, in line with Government policy commenced the process to develop a certified agreement for all staff that will cover a range of employment conditions.

Deliverables and services for 2013-14

- Meet statutory and Australian Government requirements.
- Undertake benefit cost analyses to quantify the effectiveness of the FRDC's investments.
- Provide access to information through website, publications and reports.
- Support workshops, forums and conferences to encourage debate, discussion and adoption of research funded by the FRDC.

Key Performance Indicators for 2013-14

KPIs will be measured by reports on performance against requirements and better practice.

Key performance Indicators	2013-14	2014-15	2015-16
Projects focus on the FRDC Board's assessment of priority research and development issues.	95%	95%	95%
Projects are assessed as meeting high standards/peer review requirements for improvements in performance and likely adoption	95%	95%	95%
Maintain ISO9001:2008 accreditation.	1	1	1
Submit planning and reporting documents in accordance with legislative and Australian Government requirements and timeframes.	100%	100%	100%
Implement best practice governance arrangements to promote transparency, good business performance, and unqualified audits.	100%	100%	100%
Demonstrate the benefits of RD&E investments by positive benefit cost analysis results.	100%	100%	100%

The FRDC Governance framework

Element	Scope
Enabling legislation	<i>The PIERD Act 1989</i> which sets out the legislative framework and rules for the establishment and operation of the FRDC.
Governance legislation	<i>The Commonwealth Authorities and Companies Act 1997</i> (CAC Act), which specifies requirements for good governance and accountability.
Priorities of key stakeholders	Australian Government National and Rural Research Priorities. The RD&E priorities of representative organisations: Recfish Australia, Commonwealth Fisheries Association and National Aquaculture Council.
Annual report	Requirement of various legislation; Reports to the Australian Parliament and FRDC stakeholders on RD&E activities during the financial year and on measures to ensure good governance.
Quality management system	Systematic, ISO-certified processes CAS/NZS ISO 9001:2008 designed to meet or exceed the expectations of stakeholders and other people and organisations with which FRDC does business. Incorporates management of FRDC policies.
RD&E planning and priority-setting	FRDC works with nation-wide Fisheries Research Advisory Bodies (FRABs) to undertake planning for RD&E in consultation with governments, AFMF, industry, stakeholders and research partners. Priorities for RD&E at state, regional or fishery level are significantly determined by the FRABs, managed subprograms and other priority-setting structures, with the FRDC determining the balance between projects funded within the RD&E programs.
Board governance	Key functions include overseeing corporate governance, including the systems and processes used to direct and control its operations and investment decisions. This is enhanced by the Board's spread of skills and experience and ongoing development in directorship.
Performance monitoring	Includes monitoring and measuring of performance to continually improve the FRDC's effectiveness and efficiency.
Reporting to stakeholders	Includes consultation with, and formal reporting to the three representative organisations; reporting of RD&E investment activities via FISH; and participation in conferences, workshops and other activities.

Australian Government Research Priorities

In 2007 the Australian Government updated its Rural Research Priorities. The new set of Rural Research Priorities build on those first introduced by the Australian Government in 1994 and complement the Australian Government's National Research Priorities. The government requires FRDC to incorporate them into its planning and report activities against them. This section sets out those priorities and shows the predicted FRDC expenditure against both sets of priorities. More information on priority setting can be found on pages 6 and 7 of this document.

The following table outlines the FRDC anticipated expenditure against the National and Rural Research Priorities. These have been mapped against the five FRDC programs.

The **National and Rural Research Priorities** can be viewed at <http://www.daff.gov.au/agriculture-food/innovation/priorities>

National research priorities and their associated goals (for use with following table)

Priority 1 — An environmentally sustainable Australia

- A1 Water — a critical resource
- A2 Transforming existing industries
- A3 Overcoming soil loss, salinity and acidity
- A4 Reducing and capturing emissions in transport and energy generation
- A5 Sustainable use of Australia's biodiversity
- A6 Developing deep earth resources
- A7 Responding to climate change and variability

Priority 2 — Promoting and maintaining good health

- B1 A healthy start to life
- B2 Ageing well, ageing productively
- B3 Preventive healthcare
- B4 Strengthening Australia's social and economic fabric

Priority 3 — Frontier technologies for building and transforming Australian industries

- C1 Breakthrough science
- C2 Frontier technologies
- C3 Advanced materials
- C4 Smart information use
- C5 Promoting an innovation culture and economy

Priority 4 — Safeguarding Australia

- D1 Critical infrastructure
- D2 Understanding our region and the world
- D3 Protecting Australia from invasive diseases and pests
- D4 Protecting Australia from terrorism and crime
- D5 Transformational defence technologies

Total expected investment 2013–14 — Government research priorities attributed to each RD&E Program (\$ and %)

Rural Research Priorities

<i>Rural Research Priorities (RRP)</i>	Program 1: Environments		Program 2: Industries		Program 3: Communities		Program 4: People		Program 5: Extension and Adoption		Total expenditure	
	\$000	%	\$000	%	\$000	%	\$000	%	\$000	%	\$000	%
Productivity and Adding Value	754	3.34	2,601	11.52	62	0.27	310	1.37	227	1.01	3,954	17.51
Supply Chain and Markets	136	0.61	765	3.39	48	0.21	152	0.68	259	1.15	1,360	6.04
Natural Resource Management	6,421	28.45	2,978	13.19	211	0.93	312	1.38	406	1.8	10,328	45.75
Climate Variability and Climate Change	1,343	5.95	88	0.39	11	0.05	89	0.39	136	0.6	1,667	7.38
Biosecurity	1,447	6.41	259	1.15			61	0.27	132	0.58	1,899	8.41
Innovation Skills	234	1.04	329	1.46	41	0.18	323	1.43	128	0.57	1,055	4.68
Technology	234	1.04	716	3.17			72	0.32	154	0.68	1,176	5.21
Other research	1,128	5.00									1,128	5.00
TOTAL	11697	51.84	7,736	34.27	373	1.64	1319	5.84	1,442	6.39	22,567	100.00

National Research Priorities

<i>National Research Priorities (NRP)</i>		Program 1: Environments		Program 2: Industries		Program 3: Communities		Program 4: People		Program 5: Extension and Adoption		Total expenditure	
		\$000	%	\$000	%	\$000	%	\$000	%	\$000	%	\$000	%
An environmentally sustainable Australia	A1												
	A2	945	4.19	2,193	9.72			25	0.11	363	1.61	3,526	15.63
	A3												
	A4			152	0.67					34	0.15	186	0.82
	A5	6,179	27.38	1,437	6.37	158	0.7	551	2.44	994	4.41	9,319	41.3
	A6												
	A7	1,891	8.38			134	0.59			191	0.84	2,216	9.81
Promoting and maintaining good health	B1												
	B2												
	B3	12	0.05	371	1.65					71	0.31	454	2.01
	B4	27	0.12			55	0.24	381	1.69	209	0.93	672	2.98
Frontier technologies for building and transforming Australian industries	C1	309	1.37	382	1.69			32	0.14	79	0.35	802	3.55
	C2	230	1.02	1,813	8.04					191	0.84	2,234	9.9
	C3	50	0.22	255	1.13					33	0.15	338	1.5
	C4	129	0.57	63	0.28					26	0.12	218	0.97
	C5			668	2.96	36	0.16	265	1.17	99	0.44	1,068	4.73
Safeguarding Australia	D1												
	D2												
	D3	1,161	5.15	71	0.31			98	0.43	200	0.89	1,530	6.78
	D4												
	D5												

Notes: (a) When looking at the RD&E expenditure estimates across RRP and NRP, note that expenditure estimates differ for similarly themed priorities as a result of differences between descriptors. (b) National Research Priorities and their associated Goals are listed above.

Portfolio Budget Statements 2013-14

Tables from the 2013-14 Portfolio Budget Statements

Please note the format for tables are set to comply with the Portfolio Budget Statements.

**Table 1.1: CAC Act Body Fisheries Research & Development Corporation Resource Statement
Budget Estimates for 2012-13 as at Budget May 2012**

Source	Estimate of prior year amounts available in 2013–14 \$'000	Proposed at Budget 2013–14 \$'000	Total estimate 2013–14 \$'000	Actual available appropriation 2012–13 \$'000
Opening balance/Reserves at bank	4,265		4,265	4,879
REVENUE FROM GOVERNMENT				
Special appropriations¹				
<i>Primary industries and Energy Research and Development Act 1989, s.30A(3) – Fisheries R&D Corporation</i>		17,291	17,291	16,528
Total special appropriations	-	17,291	17,291	16,528
Total funds from government	-	17,291	17,291	16,528
FUNDS FROM INDUSTRY SOURCES				
Levies ²		180	180	180
<i>less amounts paid to the CRF</i>		(180)	(180)	(180)
Industry contributions		7,623	7,623	7,008
Total	-	7,623	7,623	7,008
FUNDS FROM OTHER SOURCES				
Interest	-	340	340	353
Sale of goods and services	-	52	52	52
Other	-	1,403	1,403	850
Total	-	1,795	1,795	1,255
Total net resourcing for agency	4,265	26,709	30,974	29,670

All figures are GST exclusive
CRF - Consolidated Revenue Fund

¹ FRDC is not directly appropriated as it is a CAC Act body. Appropriations are made to FMA Agency DAFF which are then paid to FRDC and are considered 'departmental' for all purposes.

² The levies are collected under *The Primary Industry Levies and Charges Collection Act 1191* and the Fishing Levy Regulations and are remitted to DAFF and transferred to the CRF.

An equivalent amount of the FRDC management levy is paid by DAFF to FRDC under a special appropriation under the *PIERD Act 1989*.

Table 2.1 Budgeted Expenses for Outcome 1 CAC

Outcome 1: Increased knowledge that fosters sustainable economic, environmental and social benefits for the Australian fishing industry; including indigenous, recreational, commercial and aquaculture sectors, and the community; through investing in research, development and adoption.	2012–13 Estimated actual expenses \$'000	2013–14 Estimated expenses \$'000
Program 1.1: Fisheries Research & Development Corporation		
Revenue from government	16,528	17,291
Revenues from industry sources	7,437	8,013
Revenues from other independent sources	826	1,405
Total for Program 1.1	24,791	26,709
Outcome 1 Totals by resource type		
Revenue from government	16,528	17,291
Revenues from industry sources	7,437	8,013
Revenues from other independent sources	826	1,405
Total expenses for Outcome 1	24,791	26,709
Average Staffing Level (number)	12.2	12.5

Program Key Performance Indicators					
Key Performance Indicators	2012–13 Revised budget	2013–14 Budget target	2014–15 Forward year 1	2015–16 Forward year 2	2016–17 Forward year 3
Projects focus on the FRDC Board's assessment of priority research and development issues.	0.95	95%	95%	95%	95%
Projects are assessed as meeting high standards/peer review requirements for improvements in performance and likely adoption.	0.95	95%	95%	95%	95%
Invest in projects to respond to disease outbreaks.	2	-	-	-	-
Assess alternate gear to minimise interaction with threatened, endangered or protected species (TEP).	1 project.	-	1	-	-
Investigate impacts of seismic surveying on environment.	1 project.	-	-	-	-
Trial one alternate data collection methodology for recreational anglers.	1 approach trialled.	-	-	-	-
Assess environmental flow impacts on tropical estuarine species.	1 project.	-	-	-	-
Investigate alternate methods to improve real time data collection and storage methods.	1 method investigated.	-	-	-	-
Undertake one workshop to progress resource access and allocation in Queensland.	1 workshop.	-	-	-	-
Bio-active potential of new species explored.	3 species.	-	-	-	-
Market research undertaken on the domestic prawn market (aquaculture and wild capture).	1 project.	-	-	-	-
Examine the potential enhancement of iconic recreational species.	1 project.	-	-	-	-
Investigate drivers of community perception of fishing industry.	1 project.	-	-	-	-
National Seafood Industry Leadership Program.	17 graduates.	-	-	-	-
Investigate improving workforce development.	1 project.	-	-	-	-
Education bursaries funded.	15	-	-	-	-
Alternate method for disseminating final reports and project outputs trialled.	1	-	-	-	-
Maintain ISO9001:2008 accreditation.	1	1	1	1	1
Submit planning and reporting documents in accordance with legislative and Australian Government requirements and timeframes.	1	100%	100%	100%	100%
Projects focus on the FRDC Board's assessment of priority research and development issues.	0.95	95%	95%	95%	95%
Projects are assessed as meeting high standards/peer review requirements for improvements in performance and likely adoption.	0.95	95%	95%	95%	95%
Implement best practice governance arrangements to promote transparency, good business performance, and unqualified audits.	1	100%	100%	100%	100%
Demonstrate the benefits of RD&E investments by positive benefit cost analysis results.	1	100%	100%	100%	100%

CAC ACT AUTHORITY - GGS NFP**Table 3.2.1 Comprehensive Income Statement (Showing Net Cost of Services)**
for the period ended 30 June

	Estimated actual	Budget estimate	Forward estimate	Forward estimate	Forward estimate
	2012–13	2013–14	2014–15	2015–16	2016–17
	\$'000	\$'000	\$'000	\$'000	\$'000
EXPENSES					
Employee benefits	2,135	2,158	2,287	2,424	2,570
Supplier expenses	955	1,265	1,410	1,460	1,510
Grants	20,997	22,567	22,582	22,720	22,209
Depreciation and amortisation	585	564	547	538	521
Other	60	460	612	704	796
Total expenses	24,732	27,014	27,438	27,846	27,606
LESS:					
OWN-SOURCE INCOME					
Own-source revenue					
Sale of goods and rendering of services	52	52	52	52	52
Interest	353	340	275	275	275
Contributions	6,951	7,930	7,397	7,408	6,981
Other	850	1,403	2,104	2,203	2,303
Total own-source revenue	8,206	9,725	9,828	9,938	9,611
Total own-source income	8,206	9,725	9,828	9,938	9,611
Net cost of (contribution by) services	16,526	17,289	17,610	17,908	17,995
Revenue from government ¹					
Commonwealth contribution	16,528	17,291	17,616	17,916	18,000
Total revenue from government	16,528	17,291	17,616	17,916	18,000
Surplus (Deficit)	2	2	6	8	5
Surplus (Deficit) attributable to the Australian Government	2	2	6	8	5

¹ Revenue from government includes a Commonwealth contribution under the *PIERD Act 1989*, and levies collected from industry by the Department of Agriculture, Fisheries and Forestry for Research and Development activities.

Table 3.2.2: Budgeted departmental balance sheet (as at 30 June)

	Estimated actual	Budget estimate	Forward estimate	Forward estimate	Forward estimate
	2012–13 \$'000	2013–14 \$'000	2014–15 \$'000	2015–16 \$'000	2016–17 \$'000
ASSETS					
Financial assets					
Cash and cash equivalents	4,265	4,189	3,807	4,771	5,163
Trade and other receivables	1,253	1,560	2,188	1,645	1,679
Investments	5	5	5	5	5
Total financial assets	5,523	5,754	6,000	6,421	6,847
Non-financial assets					
Property, plant and equipment	133	68	86	120	82
Intangibles	1,854	1,495	1,261	814	431
Total non-financial assets	1,987	1,563	1,347	934	513
Total assets	7,510	7,317	7,347	7,355	7,360
LIABILITIES					
Payables					
Suppliers	101	109	110	110	110
Projects	67	169	177	177	177
Other	324	85	85	85	85
Total payables	492	363	372	372	372
Provisions					
Employee provisions	555	489	504	504	504
Total provisions	555	489	504	504	504
Total liabilities	1,047	852	876	876	876
Net assets	6,463	6,465	6,471	6,479	6,484
EQUITY*					
Reserves	194	194	194	194	194
Retained earnings	6,269	6,271	6,277	6,285	6,290
Total equity	6,463	6,465	6,471	6,479	6,484

*This disclosure is not required if an entity does not have non-controlling interests.

Table 3.2.4: Budgeted departmental statement of cash flows (for the period ended 30 June)

	Estimated actual	Budget estimate	Forward estimate	Forward estimate	Forward estimate
	2012–13 \$'000	2013–14 \$'000	2014–15 \$'000	2015–16 \$'000	2016–17 \$'000
OPERATING ACTIVITIES					
Cash received					
Goods and services	52	52	52	52	52
Receipts from Australian Government	16,528	17,291	17,616	17,916	18,000
Contributions	7,008	7,623	6,650	8,028	6,943
Interest	353	340	275	275	275
Other	850	1,403	2,042	2,126	2,307
Total cash received	24,791	26,709	26,635	28,397	27,577
Cash used					
Employees	2,297	2,224	2,272	2,424	2,570
Suppliers	1,001	1,257	1,409	1,460	1,510
Projects	21,353	22,465	22,574	22,720	22,209
Other	374	699	612	704	796
Total cash used	25,025	26,645	26,867	27,308	27,085
Net cash from (used by) operating activities	(234)	64	(232)	1,089	492
INVESTING ACTIVITIES					
Cash used					
Purchase of property, plant and equipment	80	40	50	50	50
Purchase of Intangibles	300	100	100	75	50
Total cash used	380	140	150	125	100
Net cash from (used by) investing activities	(380)	(140)	(150)	(125)	(100)
Net increase (decrease) in cash held	(614)	(76)	(382)	964	392
Cash and cash equivalents at the beginning of the reporting period	4,879	4,265	4,189	3,807	4,771
Cash and cash equivalents at the end of the reporting period	4,265	4,189	3,807	4,771	5,163

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