



**Australian Government**

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**Fisheries Research and  
Development Corporation**

**Annual Operational Plan**

**2014-15**

## 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.

\*Subject to change to reflect changes to FRDC Legislation

## 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 is the Hon Barnaby Joyce MP and Parliamentary Secretary, Senator the Hon Richard Colbeck.

### FRDC Board

The Hon Harry Woods	Chair
Ms Heather Brayford	Director
Ms Renata Brooks	Director
Mr Brett McCallum	Director
Dr Bruce Mapstone	Director
Dr Peter Obrien	Director
Mr David Thomason	Director
Dr Patrick Hone	Executive Director

### FRDC Staff

Mr John Wilson	Business Development Manager
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**Australian Government**  
**Fisheries Research and Development Corporation**

30 June 2014

The Hon Barnaby Joyce  
Minister for Agriculture  
Australian Federal Parliament  
Parliament House  
CANBERRA ACT 2600

**FRDC 2014-15 Annual Operational Plan**

Dear Minister

In accordance with Section 26(2) of the Primary Industries Research and Development Act 1989, I have pleasure in providing for information the Annual Operational Plan (AOP) of the Fisheries Research and Development Corporation for the year commencing 1 July 2014.

In developing the AOP, the FRDC has ensured it reflects the consultation with both government and industry stakeholders. The AOP for 2014–15 has allocated resources necessary to meet the needs of FRDC stakeholders.

This AOP has been developed to give effect to both the National Fishing and Aquaculture RD&E Strategy; the FRDC's RD&E Plan and changes made to the PIRD Act in December 2013. The AOP investment strategy targets the key priorities of:

- Improve public confidence in fishing and aquaculture as a major part of Australia's economy.
- Address resource access and allocation issues to ensure socially acceptable use of Australia's marine resources.
- Reduce regulation complexity and duplication
- Grow the value and productivity of the industry
- Address workforce development
- Address bycatch and habitat loss

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

CC: Parliamentary Secretary, Senator Colbeck  
CC: Representative Organisations – Commonwealth Fisheries Association; Recfish Australia; National Aquaculture Committee and National Seafood Industry Association

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# Contents

FRDC Vision .....	2
The planned outcome for the corporation* .....	2
Stakeholders.....	2
Portfolio Minister .....	2
FRDC Board.....	2
FRDC Staff.....	2
<b>Executive Summary.....</b>	<b>5</b>
Looking out – the external operating environment.....	5
Looking in - the internal operating environment .....	7
<b>Annual Operational Plan 2014-15 Budget .....</b>	<b>8</b>
FRDC PRORITIY AREAS 2014-15 .....	9
<b>The FRDC .....</b>	<b>11</b>
<b>Strategic planning environment.....</b>	<b>13</b>
Relationships with stakeholders .....	16
The Australian Fishing and Aquaculture Industry .....	19
<b>Planned Outputs for 2014-15.....</b>	<b>20</b>
Environment .....	21
Industry .....	24
Communities .....	27
People development.....	28
Extension and Adoption.....	30
<b>Marketing .....</b>	<b>31</b>
Enabling of FRDC Marketing Functions.....	32
Development of marketing activities.....	32
<b>Management and Accountability.....</b>	<b>34</b>
Management and Accountability.....	35
Deliverables and services for 2014-15 .....	36
<b>The FRDC Governance framework .....</b>	<b>37</b>
<b>Government Research Priorities .....</b>	<b>38</b>
Rural Research Priorities .....	39
Strategic Research Priorities .....	40
<b>Portfolio Budget Statements 2014-15 .....</b>	<b>41</b>
Tables from the 2014-15 Portfolio Budget Statements.....	42

# Executive Summary

## Looking out – the external operating environment

### Industry overview

The Australian fishing and aquaculture industry is complex and diverse in nature. Forecasting conditions for the fishing industry remains variable as is the case for all primary industries. The value of Australia's currency, fuel prices and climate variability all play a role. Notwithstanding, it is the Australian government's focus to reduce red and green tape, reduce operating costs and improving profitability. A significant component of the regulatory reduction will involve improved harmonisation of fisheries and aquaculture management between jurisdictions including resolving and improving shared stock management arrangements as well as sharing of research and development capabilities.

Industry will continue to work on community perception, demonstrate a high level of performance, stewardship and focus on best practice. It will continue to work on the community perception of the industry, to assure the community of its credentials by building on existing partnerships with key stakeholders, such as recreational and environmental organisations. New research projects that provide benchmarks and consistency in reporting will also address concerns raised by the community on issues such as sustainable management of fisheries, catching methods, the use of fishmeal for fish feed, the effect on marine environments of climate change, and interactions with marine mammals and sharks.

Aquaculture production will continue to grow, led by the expansion of the Atlantic Salmon sector and underpinned by research and development advances in genetic breeding, feeds and animal health. Other key sectors such as yellowtail kingfish, prawns and barramundi are also looking to increase production levels. The focus for shellfish will be around aquatic animal health – managing Pacific Oyster Mortality for the Oyster industry; and harmful algal blooms for shell fish producers in the south eastern states.

The focus for the recreational fishing sector will be to measure fishing participation and catch to assist with responsible management of that sector. This has been a core focus for recreational representatives as well fisheries managers. The lack of quantifiable data on participation and catch rates for the sector will be addressed over the next two years with a number of states having commenced new recreational surveys and the federal government looking at options for a national survey.

The FRDC Indigenous Reference Group has developed a number of principles around when developing R&D projects for Indigenous Australians. The group has also identified a number of strategic priorities focused on improved communication between Indigenous groups and addressing obstacles to Indigenous employment in fishing and aquaculture sectors.

### Habitat and ecosystems

The 2011 State of the Environment Report identified that Australia's aquatic environment was in relatively good condition. However, there is significant habitat degradation in eastern seaboard estuaries and near coastal communities; including key river systems such as the Murray River. Further increasing coastal development, including ports and housing, is adding to the coastal habitat loss.

Reversing habitat loss and degradation would ensure that Australia's fisheries production was maintained and could in some areas lead to significant increases in fisheries productivity.

## Management of Fisheries

A range of research projects that focus on extending the knowledge of fisheries management and addressing consistency of approach will be completed during 2014-15. Key projects include:

- **Australian Fisheries Management Standard** – this project will help develop a national fisheries management standard based on the FAO code of conduct for responsible fishing.
- **Responsible Fishing Scheme – Enterprise/ sector** – this project will provide the basis for an auditable framework under which fishers (individually and collectively) can demonstrate to consumers and the public that they fish under an Australian Standard for Responsible Fishing.
- **Australian Fisheries Science Standard** – this project will help develop a national fisheries science standard. It will outline a base set of criteria for assessing the currency and value to all stakeholders.
- **Status of Key Australian Fish Stocks Reports** – the second edition of the Status of Key Australian Fish Stocks Reports will be completed and released in December 2014. The FRDC, Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) and State and Territory Fisheries Management Agencies will build on the first set of Reports. Part of the ongoing development and expansion of the Reports will result in more species being added, as well a new web-portal for interrogation of the data.
- **National Harvest Strategy** – work has been done to establish a national Harvest strategy framework. The goal is to harmonise this across jurisdictional boundaries using a triple bottom line approach and linking to national reporting activities.

## Looking in - the internal operating environment

The FRDC Board oversees corporate governance of the corporation and sets its strategic direction. During 2014–15 it will focus on:

- Implementation of the National Framework for Primary Industries Research, Development and Extension;
- the development of the FRDC Strategic Plan for 2015-20; and
- continued implementation of the strategy to improve the perception of the fishing industry through making research results more publically available and addressing factually incorrect media reports.

The Board will meet five times during the year and will conduct a number of meetings in regional fishing ports around the country. The board considers it essential to visit the key fishing regions to gain a firsthand feedback and an appreciation of the key issues facing the commercial and recreational fishing sectors.

### National Fishing and Aquaculture RD&E Strategy

The first National Fishing and Aquaculture RD&E Strategy was released in 2010 and was intended to run for five years. This strategy was developed as part of the federal government policy to establish a National Framework for Primary Industries Research, Development and Extension.

As this strategy concludes in 2015, the FRDC will take a lead role in developing the next iteration. The FRDC will consult with and work in partnership with key stakeholders, the Australian Fisheries Management Forum, fishing industry sectors, non-government organisations and research agencies to complete the Strategy.

### FRDC Strategic Plan 2015-20

At the same time as developing the new National Research, Development and Extension (RD&E) Strategy, the FRDC is required to prepare a new five year Strategic Plan for approval by the Minister for Agriculture.

There is considerable synergy between the development of the National RD&E Strategy and FRDC Plan; as a result the FRDC will align the planning and consultation processes.

In parallel with these planning processes the FRDC will develop a statutory funding agreement with the Department of Agriculture. The funding agreement will focus on performance monitoring.

### Strategy to promote the science and best practice that underpins the Australian seafood and angling industry

The FRDC Board in November 2011 endorsed developing a strategy to promote the science and best practice that underpins the Australian seafood and angling industry; and to work with stakeholders to implement the strategy. The Strategy aims to defend science from poor reporting or misuse. It assists with improving public confidence in the industry by pro-actively promoting the results of research to the Australian community, media outlets and seafood consumers, and formally responding to factually incorrect media stories or information in the public arena.

The Strategy will continue until the end of the 2014-15 financial year. Its focus will remain on extension of R&D outputs and to ensure factual reporting of fisheries related media articles on the Australian seafood industry and the generation of a number of new information sources including the seafood consumer education site [fishfiles.com.au](http://fishfiles.com.au).

### Marketing

On 12 December 2013 the Rural Research and Development Legislation Amendment Bill 2013 was passed by Federal Parliament amending the FRDC enabling legislation, the *Primary Industries Research and Development Act 1989* (PIRD Act). These amendments extend the scope and range of activities the FRDC can undertake, including the delivery of marketing activities for the fishing industry – commercial, recreational and Indigenous.

As marketing is a new area of activity for the FRDC, the first 12-24 months (14/15) will focus on putting in place the necessary processes and resources to carefully engage with and consult stakeholders. The FRDC will work with stakeholders to develop a plan for both unified and stakeholder specific marketing activities. This process will also look to develop necessary infrastructure, such as access to market data to underpin and evaluate activities, as well examine how to establish industry funding mechanisms for these activities.

# Annual Operational Plan 2014-15 Budget

REVENUE		%	\$ 000
<b>Total revenues from the Australian Government</b>		<b>65</b>	<b>18,533</b>
Australian Government 0.5% AGVP		43	12,355
Australian Government matching of industry contributions		22	6,178
Contributions revenue from the jurisdictions		29	8,281
Projects revenue from other parties		3.6	1,000
Other revenue		0.8	282
Marketing (project funds SCRC)		1.3	500
<b>TOTAL REVENUE</b>		<b>100</b>	<b>28,596</b>
EXPENDITURE			
<b>Projects Expenditure</b>			<b>24,080</b>
	%	\$ 000	
Environment	36	10,354	
Industry	34	9,632	
Communities	2	482	
People development	8	2,167	
Extension and adoption	5	1,445	
<b>Marketing expenditure</b>			
Seafood market development (project funds SCRC)	1		460
<b>Management and accountability</b>			
	14		4,045
<b>TOTAL EXPENDITURE</b>		<b>100</b>	<b>28,585</b>
<b>NET RESULT FOR THE YEAR</b>			<b>11</b>



## **FRDC PRORITTY AREAS 2014-15**

### **National Fishing and Aquaculture RD&E Strategy and FRDC Strategic Plan**

The FRDC will take a lead role in developing the next version of the Strategy, while continuing to implement the current Strategy. FRDC will work in partnership with the Australian Fisheries Management Forum and FRDC's representative bodies to help advance RD&E principles, funding and management arrangements within a regional and national approach.

The FRDC is also required to prepare a new Strategic Plan for approval by the Minister for Agriculture. There is considerable synergy between the development of the National Strategy and FRDC Plan; as a result the FRDC will align the planning processes.

### **Improve public confidence in fishing and aquaculture as a major part of Australia's economy**

The FRDC will focus on evolving the approach it uses from an investor in Research, Development and Extension (RD&E) to include being a service provider for non RD&E activities such as marketing, market access, and standards development. It will continue to invest in promoting the science that underpins the fishing industry.

### **Address resource access and allocation issues**

The FRDC will assist with the risk based assessment of threats facing the marine environment for marine bioregional planning. Invest in a program of activity to manage resource access as it relates to an ecosystem based approach to fisheries. It will also look to address resource allocation issues between resource users (commercial, Indigenous and recreational), and as part of this develop a proposal to fund the national recreational fishing survey.

#### *Address bycatch and habitat loss*

The FRDC will develop options for habitat improvement based on science to inform and evaluate the performance of direct action to re-establish productivity. It will also invest in R&D to assist managers and industry develop an acceptable reporting process for Threatened, Endangered and Protected species (TEPs) and bycatch.

### **Reduce regulation complexity and duplication**

The FRDC will invest in research that will underpin fisheries management decisions, including looking at how to mainstream adaptation to climate change and variability within current management arrangements. It will contribute to establishing the principles for a harmonised national and regional fisheries management framework – including simplified performance reporting using equivalence principles – linked to the Status of Key Australian Fish Stocks Reports. The FRDC will also look for opportunities to develop new fisheries standards where possible.

### **Grow the value and productivity of the industry**

The FRDC will invest in areas that will improve productivity and value of all sectors of the industry. This will include working to improve the consumer experience; working on consistency and quality of Australian seafood products, and improving seafood labelling by expanding and promoting the Fish Names Standard; and increasing production volumes by expanding and developing new fisheries and aquaculture operations (National Aquaculture Strategy) and improve recreational fishing quality experiences. Supporting this growth the FRDC will review its investment in aquatic animal health and ensure it aligns and contributes to improved biosecurity investment planning and implementation of the new AquaVet Plan. The FRDC will work with the Indigenous Reference Group to assist in delivering the RD&E identified for Indigenous communities.

#### *Market research*

Understanding markets and what they mean to industry is a large part of growing the value and productivity of the industry. Market research will play a central role to improve knowledge and identify any trade and market access issues and technical barriers.

## **Marketing**

Prior to undertaking any marketing activities, the FRDC will develop policies and mechanisms that will underpin the management and accountability for this program of work.

At the same time the FRDC will carefully consult with stakeholders in the fishing industry – commercial, recreational and Indigenous on what the areas of priority for marketing are, what they would be willing to invest in, and what benefits they would want to see accrue from undertaking marketing activities. The consultation will also examine options for establishing funding mechanisms for these activities.

The FRDC is conscious of the need to minimise burdening stakeholders with multiple requests for input or participation in planning meetings. To minimise this FRDC will aim to align planning activities where possible. This will not only allow for cost savings in meetings, it will ensure discussions are linked, providing a holistic discussion around FRDC's RD&E investment strategy.

## **Seafood Cooperative Research Centre**

The end of the 2014–15 financial year will mark the completion of the Seafood Cooperative Research Centre (SCRC). It is anticipated that a number of SCRC projects will not be completed at its completion. The FRDC will work with the SCRC to transition unfinished projects to the FRDC for completion.

During 2014-15 the FRDC will ensure that RD&E outputs from the SCRC are extended to stakeholders to ensure that a legacy is delivered by the investment.

# The FRDC

The Fisheries Research and Development Corporation (FRDC) is a co-funded partnership between the Australian Government and the fishing industry. It was formed as a statutory corporation on 2 July 1991, under the provisions of the PIRD Act and is responsible to the Minister for Agriculture. More information on the history of the FRDC is available in the Evolution of the FRDC (historic review - [http://frdc.com.au/about\\_frdc/corporate-documents/](http://frdc.com.au/about_frdc/corporate-documents/)).

The FRDC is unique among the rural research and development corporations (RDCs) because it must balance its investment between natural resource management (sustainability), and industry productivity and development. As an outcome the FRDC's strategic investments in RD&E activities benefit all stakeholders in the Australian fishing industry: commercial (wild catch and aquaculture), recreational, Indigenous as well the broader community.

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.

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 role is to plan and invest in fisheries RD&E activities in Australia. As a national organisation with strong linkages to industry, managers and researchers it has a fundamental role in providing leadership and coordination. The FRDC achieves this through establishing strong relationships and putting in place mechanisms to identify and address RD&E priorities with industry and government stakeholders. In addition the FRDC monitors and evaluates the adoption of research and development outputs to better inform future decisions. Key areas that the FRDC focuses on are:

- 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.

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

The FRDC is seen as an independent source of un-biased information. As a result the FRDC has a significant responsibility to ensure that funds received are invested in areas that will return an optimal benefit to all its stakeholders - industry, the Australian Government and the people it represents.

## FRDC Board and staff

The FRDC is governed by a Chair and Board of Directors, while the Executive Director 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 Executive Director. The FRDC Board is responsible for strategy, policy and evaluating the organisation and its investments, and for reporting to government and the fishing industry.

The FRDC staff members are its most important resource; and a key factor in the ongoing success of the organisation. In 2013–14, the FRDC operated with 12 full-time-equivalent staff members (on average). In addition to the core staff the FRDC partners with over 100 organisations each year who employ around 200 principal investigators on FRDC research projects, and many more researchers, communicators and technicians — not to mention the many industry people who work on projects.

## **Performance evaluation**

The FRDC started undertaking economic evaluations of randomly selected clusters of FRDC project investments in 2010. The projects were grouped into clusters that focused on a similar issue e.g. projects on supply chains or genetics. In total, twenty five clusters were assessed using benefit cost assessments (BCAs) over the two years. These evaluations are all available on the FRDC website at [http://frdc.com.au/research/benefits\\_of\\_research/Pages/default.aspx](http://frdc.com.au/research/benefits_of_research/Pages/default.aspx)

In 2014-15 the FRDC will continue its program of project evaluation undertaking the evaluation of six new clusters.

## **People Development Program**

The People Development Plan (2013-15) has been developed taking into consideration the recommendations of the review of the program. The plan runs for two years and will allow these activities to align with the FRDC five year Strategic Plan.

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; and 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 2014-15 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 Australian Government's Rural 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.

# Strategic planning environment

## Planning environment

On 23 April 2010, the then Primary Industries Ministerial Council (PIMC) approved the *"Working Together: the National Fishing and Aquaculture RD&E Strategy 2010"*, that outlines how 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 framework<sup>1</sup>. Implementation and funding of any component will be dependent on coordinated implementation by state and territory governments. In this light, 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 Strategic Plan for 2015–2020. Importantly, the strategy and plan provides a foundation for further improvement in the outcomes for stakeholders from their RD&E investment.

## Planning update

In 2014-15 the FRDC will commence the process to review the National Fishing and Aquaculture RD&E Strategy and the FRDC Research, Development and Extension Plan. The review and development of both documents will be run in parallel. The FRDC will undertake broad stakeholder consultation and research to develop the documents. It is anticipated the document will be completed by April 2015.

## Australian Government research priorities

The FRDC will work closely with the Minister for Agriculture, the Parliamentary Secretary to the Minister and the Department of Agriculture to ensure it delivers results in line with the Australian Government's Strategic and Rural Research and Development priorities – see *Australian Government Research Priorities* section at Attachment 1. The FRDC invests in targeted projects that will assist in the delivery of the Australian Government priorities. The Government's priorities are consistent with the FRDC's four legislated objects (section 3 of the *PIRD Act 1989*) as shown in Figure 1: FRDC's framework for integrating legislative, government and industry priorities.

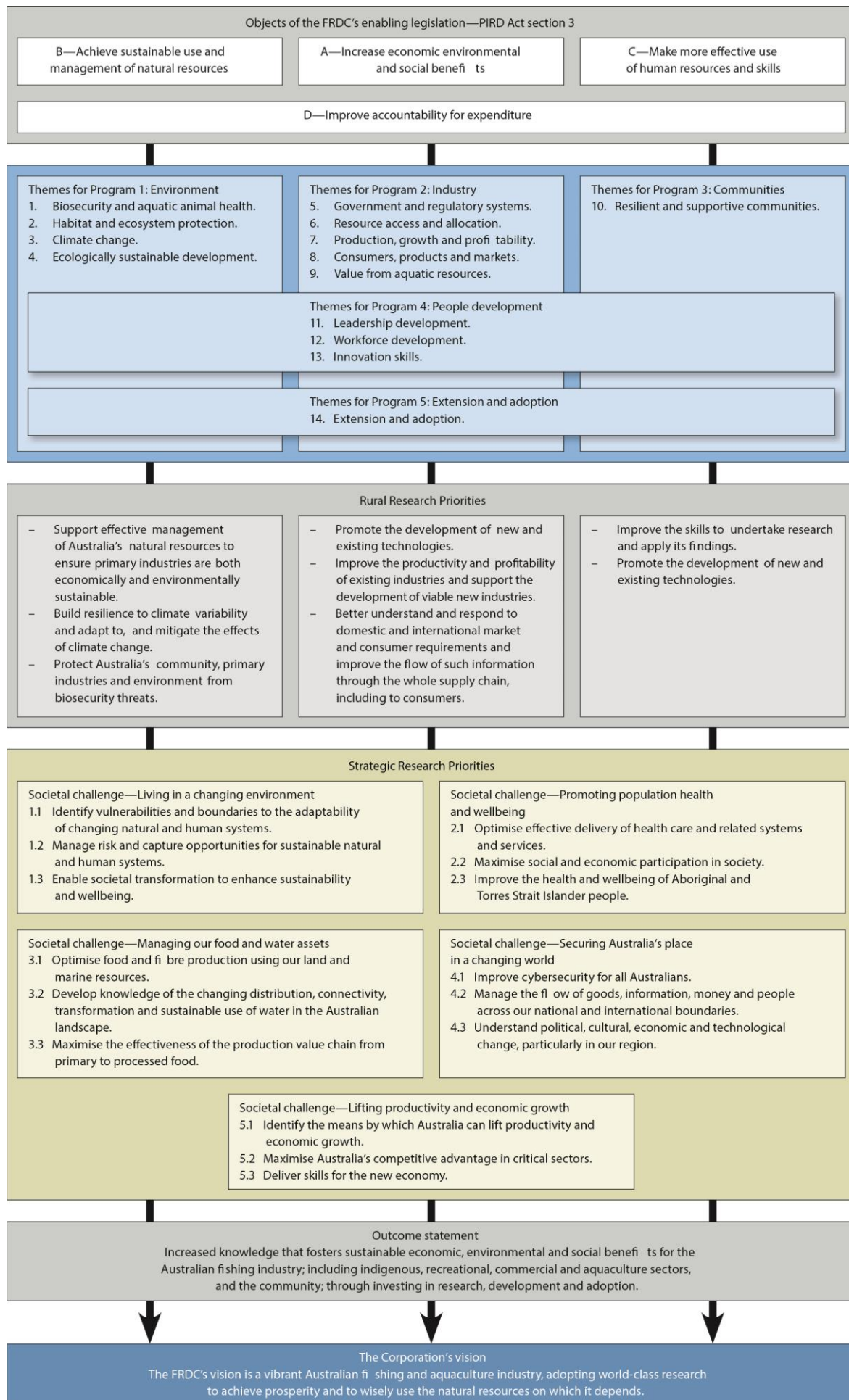
**Integration of the planned outcome with legislative, stakeholder priorities** – the FRDC's objectives, derived from section 3 of the *PIRD Act 1989*. The FRDC's RD&E programs mirror the core themes of sub-sections 3(a) and (b) of the Act. This alignment has brought simplicity and robustness to the FRDC's planning, implementation and reporting, and to many of its kindred organisations. It has also facilitated a triple-bottom-line approach to funded activities.

## 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 Strategic 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 Fisheries Research Advisory Bodies (FRABs). The FRDC tries to ensure where possible, industry and management is directly engaged and integrated into the delivery of every project.

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





## The FRDC investment areas

The FRDC has three overarching RD&E programs that address the “triple bottom line” of environmental, economic and social factors:

- Program 1: Environment
- Program 2: Industry
- Program 3: Communities.

In addition, two enabling programs address various aspects of programs 1–3 and add value to them:

- Program 4: People Development
- Program 5: Extension and Adoption.

To focus the FRDC investment 15 themes (below) have been established. These themes were identified during the development of 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 priority areas and page 10 for forecast percentages.

Programs	Themes
<b>Environment</b>	<ol style="list-style-type: none"> <li>1. Biosecurity and aquatic animal health</li> <li>2. Habitat and ecosystem protection</li> <li>3. Climate change</li> <li>4. Ecologically sustainable development</li> </ol>
<b>Industry</b>	<ol style="list-style-type: none"> <li>5. Governance and regulatory systems</li> <li>6. Resource access and allocation</li> <li>7. Production, growth and profitability</li> <li>8. Consumers, products and markets</li> <li>9. Value from aquatic resources</li> </ol>
<b>Communities</b>	<ol style="list-style-type: none"> <li>10. Resilient and supportive communities</li> </ol>
<b>People Development</b>	<ol style="list-style-type: none"> <li>11. Leadership development</li> <li>12. Workforce development</li> <li>13. Innovation skills</li> </ol>
<b>Extension and adoption</b>	<ol style="list-style-type: none"> <li>14. Extension and adoption</li> </ol>
<b>Marketing</b>	<ol style="list-style-type: none"> <li>15. Marketing</li> </ol>

## Investment strategy

The FRDC aims to spread its investment 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.

Running a value adding model, compared to a simple ‘granting’ model for R&D funding which can be carried out at minimal cost, is that the returns are significantly better. This is because 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.

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.

## Relationships with stakeholders

In developing the projects that address the five programs, priorities 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.

### 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.

### Fisheries Research Advisory Bodies (FRABs)

The FRDC supports a network of FRABs – one covering Commonwealth fisheries and one in each state and the Northern Territory. The FRABs have an extremely important role in delivering on efficient, effective planning and investment processes; and the development of project applications. The FRDC works to ensure a majority of Annual Open Call and Tactical Research Fund applications are submitted through, reviewed and prioritised by the FRABs.

The FRABs represent the fishing industry, fisheries managers and researchers; and most also have environmental and other community interest representation.

### Australian Government

The Minister for Agriculture 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 office of Minister, Parliamentary Secretary and the FRDC. The Australian Management Fisheries Authority and the Department of the Environment also play an important role in contributing to research priorities.

### 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 understands that adoption of research outputs by management agencies is a key to optimising management outcomes. It will continue to work with AFMF, participating as an invited representative to its meetings, providing advice and ensuring AFMF priorities are incorporated into planning processes.

### Consultation with representative organisations

The FRDC has four representative organisations with which it will consult during 2014-15.

- 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 *PIRD Act 1989* and the Guidelines on Funding of Consultation Costs by Primary Industries Statutory Authorities, the FRDC may meet travel and other expenses incurred in connection with consultation between the FRDC and each of its representative organisations. While the FRDC has budgeted up to \$30,000 to facilitate consultation in 2014-15, payments are only made to reimburse for costs associated with this consultation.

The consultation with the representative organisations allows the FRDC to gain valuable insight and views on the RD&E priorities for their associated industry sectors. It also provides a mechanism for the FRDC to report the outcomes from the associated RD&E investment.



In addition the FRDC may invest individually in RD&E projects with a representative organisation. Active projects (with major work still to be undertaken) currently under contract with the FRDC representative bodies at the commencement of 2014-15 are:

#### *Recfish Australia*

Project 2014/402	Planning, developing and coordinating national/regional research, development and extension (RD&E) for Australia's recreational fishing community.	\$300,320
Project 2014/500	Australia's National Recreational Fishing Conference 2015	\$60,000

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 relevant 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 of the Department of Agriculture. An administration cost is charged by LRS to manage the levy. In the coming year it is not expected that any overpayments will occur.

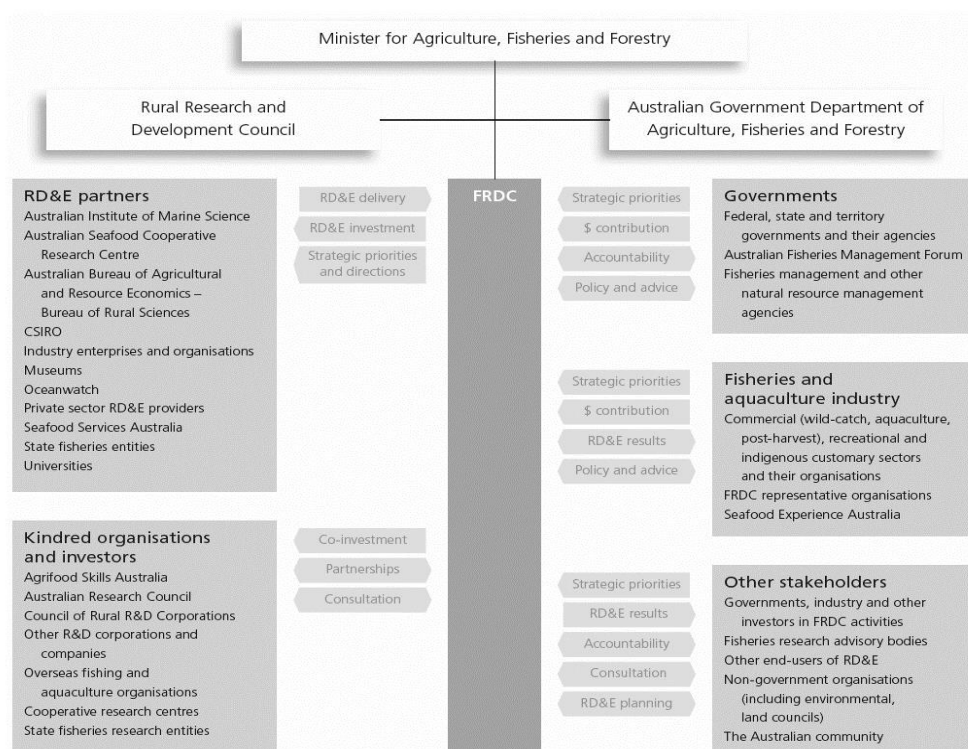
The FRDC's investments in prawn farming research and development is driven by the APFA's RD&E Plan. FRDC and the APFA enjoy a very close working relationship. The APFA has nominated that the majority of its investment is to be through co-investment with the SCRC. The APFA has a lead role with FRDC in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

Year	2011-12	2012-13	2013-14	2014-15
APFA contribution	\$150,000	\$180,000	\$190,000	\$190,000*
FRDC expenditure on projects	\$263,623	\$230,582	\$178,880	\$190,000*

\* Approximate investment in coming year.

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

- Research that improves price / kg;
- Research that improves growth per week; and
- 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.

## **Seafood Cooperative Research Centre**

The FRDC is a core participant of the SCRC 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.

The end of the 2014–15 financial year will mark the completion of the SCRC. It is anticipated that a number of SCRC projects will not be completed at its completion. The FRDC will work with and assist the SCRC to transition unfinished projects to the FRDC for completion.

## **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
- Australian Fisheries Management Authority (AFMA)
- State/Territory fisheries research centres
- Commonwealth Scientific and Industrial Research Organisation (CSIRO)
- Universities
- Cooperative Research Centres (CRCs)
- Other Rural RDCs and companies
- Industry groups
- Co-investors from the private sector.

## The Australian Fishing and Aquaculture 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 and aquaculture industry comprises three sectors:

- **commercial sectors**; 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 PIRD 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 its 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 2011–12\***

Australian Fisheries Statistics **	2009–10	2010–11	2011–12	Change
The wild catch sector earned and caught slightly less	\$1.34 b 173,357 t	\$1.32 b 164,180 t	\$1.30 b 157,505 t	\$: % -1.10 t: % -4.07
The aquaculture sector earned and produced more	\$878 m 73,829 t	\$954 m 76,671 t	\$1,054 m 84,605 t	\$: % 10.45 t: % 10.35
Overall production was more and the value was greater	\$2.19 b 243,255 t	\$2.24 b 237,065 t	\$2.32 b 237,540 t	\$: % 3.36 t: % 0.2

\* The figures quoted from *Australian Fisheries Statistics* are for 2011–12, and are from the latest edition that can be downloaded from the FRDC website — [www.frdc.com.au](http://www.frdc.com.au)

\*\* To avoid double counting, total has been reduced to allow for Southern Bluefin Tuna caught in the Commonwealth Southern Bluefin Tuna Fishery, as an input to farms in South Australia.

# Planned Outputs for 2014-15

# 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 2014-15

During 2014-15, \$10.6 million (about 37 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
<b>Biosecurity and aquatic animal health</b>	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.	Establishment of Atlantic Salmon health centre  One to project to develop positive control materials for exotic pathogens.
<b>Habitat and ecosystem protection</b>	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 develop techniques to mitigate whale interactions with fishing gear.  One project to assess interaction of fishing gear southern ocean benthos.

<b>Climate change</b>	<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>Report on completion of Fishing and Aquaculture Climate Change Program.</p>
<b>Ecologically Sustainable Development</b>	<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>Pilot project to assess potential for reporting on social economic and environmental parameters for individual fisheries.</p> <p>Second Status of Australian Fish Stocks report Completed.</p>

**Examples of projects with funds to be expended in 2014-15**

Project Id	Project Title
2014/500	Australia's National Recreational Fishing Conference 2015
2014/030	Status of key Australian fish stocks (SAFS) reports 2014 and beyond
2014/023	An industry based mark recapture program to provide stock assessment inputs for the Western Rock Lobster Fishery following introduction of quota management
2014/022	Developing a rapid molecular identification technique to improve egg production based fish biomass assessments
2014/012	Tasmania's coastal reefs: deep reef habitats and significance for finfish production and biodiversity
2014/005	The application, needs, costs and benefits of Habitat Enhancement Structures in Western Australia and cost effective monitoring methods
2014/004	Mitigation measures to reduce entanglements of migrating whales with commercial fishing gear
2013/401	Recfishing Research 2.0: a revitalized approach to addressing national RD&E priorities and increasing investment and co-investment in RD&E relevant to the recreational sector
2013/233	Benchmarking Australia's national status reporting system
2013/053	Summer spawning patterns and preliminary Daily Egg Production Method survey of Jack Mackerel and Sardine off the East Coast
2013/052	Bycatch Reduction Devices (BRDs) to reduce the incidental catch of cuttlefish in the Spencer Gulf Prawn Trawl Fishery
2013/051	The Australian Aquatic Animal Health and Vaccine Centre: First Phase to Establish Atlantic Salmon Biosecure Fish Facility Capabilities and Develop Strategy for an Australian Centre of Excellence
2013/047	Tactical Research Fund: synthesis of existing information, analysis and prioritisation of future monitoring activities to confirm sustainability of the red-legged banana sub-fishery in the Joseph Bonaparte Gulf
2013/046	Life history specific habitat utilisation of tropical fisheries species
2013/037	Tactical Research Fund: cost-benefit analysis of mitigation measures to reduce interactions between commercial fishing gear and whales
2013/036	Tactical Research Fund: Aquatic Animal Health Subprogram: Viral presence, prevalence and disease management in wild populations of the Australian Black Tiger prawn ( <i>Penaeus monodon</i> )
2013/032	PIRSA: Surveying, searching and promoting cuttlefish spawning activity in northern Spencer Gulf
2013/031	A trophic model for Gulf St Vincent: balancing exploitation of three fisheries in an EBFM framework
2013/030	Extension of MSC Certification for Western Australian Fisheries
2013/029	The Comparative Performance of Management of the Individual Threats to Marine Environments and Fisheries Resources
2013/028	Review and update harvest strategy settings for the Commonwealth small pelagic fishery
2013/027	ASBTIA: Optimising the use of praziquantel to manage blood fluke infections in commercially ranched SBT
2013/026	Can commercial harvest of long-spined sea urchins reduce the impact of urchin grazing on abalone and lobster fisheries?
2011/503	FRDC-DCCEE: climate change adaptation - building community and industry knowledge
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



# Industry

Demand for high-quality seafood is predicted to outstrip supply in both domestic and export markets. Similarly in the recreational and Indigenous 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 2014-15

During 2014-15, \$9.0 million (about 34 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
<b>Governance &amp; regulatory systems</b>	<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>	<p>Extension of National Harvest Strategy Guidelines undertaken</p> <p>Methods for setting economic target reference points multi-species fisheries completed.</p>
<b>Resource access and allocation</b>	<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>	<p>Development of processes for efficient, transparent allocation of shares and associated property rights for all aquatic resource users.</p>	<p>One report on Indigenous cultural fishing and fisheries governance.</p>



Strategies	Priority area – RD&E will help end users to:	Performance indicator	Targets
<b>Production, growth and profitability</b>	<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>	Transition of SCRC projects and outputs to FRDC.
<b>Consumers, products and markets</b>	<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>	Two industries undertaken market development activities into export markets.
<b>Value from aquatic resources</b>	<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>	Establishment of two new FRDC subprograms to address priorities for the Indigenous and recreational sectors.

**Examples of projects with funds to be expended in 2014-15**

Project Id	Project Title
2014/206	Measurement of Fisheries Compliance Outcomes: A Preliminary National Study
2013/711	Centre of Excellence Science Seafood & Health (CESSH): Post Harvest Research Program
2013/412	International Institute of Fisheries Economics and Trade Conference (IIFET) 2014
2013/411	Tactical Research Fund: 2013 Trans Tasman Lobster Congress - improving the environmental and economic performance of Australian rocklobster fisheries through collaboration and cooperation across research, management, harvest, transportation and markets
2013/240	2014 Trans Tasman Abalone Convention
2013/237	Tactical Research Fund: Identification and development of the domestic and export market requirements for packaged (MAP, frozen and pasteurised) pipis
2013/235	Fisheries Managers' Workshop
2013/234	Survey of Foodborne Viruses in Australian Oysters
2013/231	IPA APFA: Characterising and managing harmful algal blooms that cause production loss on Australian prawn farms
2013/230	Tactical Research Fund: Defining a resource sharing option in a multi-sectoral fishery: using the Queensland Coral Reef Finfish Fishery as a test case
2013/227	Tactical Research Fund: Addressing the urgent need to identify viable refrigerant alternatives for use in the Northern Prawn Fishery
2013/226	Tactical Research Fund: Development of an industry representative framework for co-management in NSW Fisheries
2013/225	Tactical Research Fund: Developing a management framework and harvest strategies for small scale multi-species, multi-method community based fisheries, using the South Australian Lakes and Coorong Fishery as a case study
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
2013/218	Building the Capacity and Performance of Indigenous Fisheries
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
2013/205	Beyond engagement: moving towards a co-management model for recreational fishing in South Australia
2013/204	Meeting sustainability expectations: translating and aligning objectives, reporting and evaluation of the performance of Australian fisheries
2013/203	Development of an approach to harvest strategy management of internationally managed multi-species fisheries
2013/202	Options for Tier 5 approaches in the SESSF and identification of when data support for harvest strategies are inappropriate
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
2013/061	Tactical Research Fund: 2014 independent sampling program for the G trap fishery
2013/054	Reducing the impact of paralytic shellfish toxins on Australian shellfish industries

# 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 2014-15

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
<b>Resilient and supportive communities</b>	<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 report that develops and tests social objectives for fisheries management completed.

## Examples of projects with funds to be expended in 2014-15

Project Id	Project Title
2014/301	Social and Economic Evaluation of NSW Coastal Commercial Wild-Catch Fisheries
2013/301	Beyond GVP: The value of inshore commercial fisheries to fishers and consumers in regional communities on Queensland's east coast
2012/301	Let's Talk Fish: Assisting industry to understand and inform conversations about the sustainability of wild-catch fishing
2012/300	Social Science Research Coordination Program (SSRCP) II
2011/525	A bibliography of FRDC and CRC aquaculture environmental research reports and related publications

## 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 2014-15

During 2014-15, \$2.0 million (about 8 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
<b>Leadership development</b>	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
<b>Workforce development</b>	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.	Second capability audit completed for research capacity.
<b>Innovation skills</b>	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 2014-15**

Project Id	Project Title
2014/403	Aquatic Animal Health Subprogram: Development of a national aquatic animal health curriculum for delivery by tertiary institutions
2014/218	Building precision into the Australian Industry Live Mud Crab Grading Scheme (AILMCGS) through addressing grading and regional anomalies
2013/414	Aquatic Animal Health Subprogram: Review of vocational education courses on aquatic animal health available to fisheries and aquaculture sectors in Australia for the FRDC Aquatic Animal Health Subprogram (AAHS)
2013/410	RD&E capability audit and assessment for the Australian fishing and aquaculture industry 2013
2013/408	People Development Program - Media and communications training 2013-2015
2013/404	Australian Society for Fish Biology: Promoting scientific exchange and supporting early career researchers
2012/512	Review of structural and funding options for a peak body for the Queensland seafood industry
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
2012/403	Development of the East Arnhem Fisheries Network Training Framework
2012/402	Staying Healthy: Industry organisations' influence on behaviours and services used by fishers
2012/401	National Seafood Industry Leadership Program: 2012-2014
2012/400	Australian Rural Leadership Program
2012/011	Revolutionising fish ageing
2012/002	Aquatic Animal Health Technical Forum
2011/527	RFIDS: National recreational fishing education program - "Establish activities and tools to promote recreational fishing on a national level"
2011/412	Industry bursaries - European Seafood Expo and international market experience
2011/403	RFIDS: future leaders in recreational fishing
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

## 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 2014-15

During 2014-15, \$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
<b>Extension and Adoption</b>	<p>Have timely access to RD&amp;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.	80% of projects complete extension strategies at start of project.

### Examples of projects with funds to be expended in 2014-15

Project Id	Project Title
2012/513	Status of key Australian fish stocks reports and companion national fishery status reports - review of the 2012 reporting process and planning for future reports
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
2012/504	Tactical Research Fund: industry-extension of acoustic release technology for at-call access to submerged head-gear in the NSW rocklobster fishery
2011/524	Transforming science outputs for communication to the general public and seafood consumers
2011/523	Contribution to Ocean Policy Science Advisory Group (OPSAG) strategic plan revision - A Marine Nation
2011/521	ABARES Outlook Conference 2012-2014
2011/514	FRDC Stakeholder Survey Program
2011/504	Evaluation of completed RD&E projects
2010/309	Extension and Adoption - Climate Change Effects on Fish and Fisheries: Forecasting Impacts, Assessing Ecosystem Responses, and Evaluating Management Strategies
2010/208	Australian Fisheries Statistics (2009 – 2013)

# Marketing

## Enabling of FRDC Marketing Functions

On 13 December 2013 the *Rural Research and Development Legislation Amendment Act 2013* amended the FRDC enabling legislation, the PIRD Act. These amendments extend the scope and range of activities the FRDC can undertake to include marketing for the fishing industry – commercial, recreational and Indigenous.

It is important to note that activities within the Marketing Program may use a combination of research, development and marketing funds to undertake the activities. For example, market research or product development is clearly not a promotion activity but part of the marketing program.

The FRDC will continue to reinforce with stakeholders that only marketing funds collected from industry can be used for promotion of seafood. In addition the FRDC will clearly report on the separation of and the use of marketing funds in its annual report.

### Market overview

The markets for Australian fishing and aquaculture sectors reflect, and are as wide spread as its product diversity, geographical spread and size.

For the commercial sector, there is an increasing community and consumer preference for products that have been shown to be sustainable. This in part is being driven by the community's poor perception of commercial (wild catch) fishing industry. Some companies and sectors have commenced addressing these concerns by investing in seeking independent third party certification of their practices. For example, the Western Australian Government has invested in an ambitious investment to obtain third party certification for its fisheries from the Marine Stewardship Council. Other companies are forming alliances with key environmental groups such as the partnership between Atlantic Salmon producer Tassal and the World Wide Fund For Nature. To support this, the seafood industry is investing in market knowledge and changing catching and handling practices to improve product quality and consistency.

The seafood supply chain is focusing on other ways to meet consumer needs following the trends being set in other food sectors by investing in branding, packaging and developing new products - ready meals and less known species, and market diversification are all happening. The retail sector is also driving the need for the processing sector to evolve. As a result seafood processors are investing in new technology, training and new facilities for fish processing. This is leading to a consolidation within the sector.

It is not only the commercial fishing sector that sees advantage in for marketing. The recreational fishing sector is facing a generational change both in participants who fish, and in attitudes towards for leisure time activities. While the changes are leading to a drop in participation rate, it does not necessarily translating to reduced effort or expenditure. Recreational fishers are investing more on equipment and tackle.

## Development of marketing activities

Marketing is a new area of activity for the FRDC. In the first 12-18 months (January 2014-June 2015) the focus for the FRDC will be to engage with stakeholders on marketing.

It is anticipated that the FRDC will only undertake limited marketing activities during 2014-15.

The engagement strategy will underpin the FRDC developing a business case that meets needs and delivers a return on their investment. The business case will aim to encapsulate needs at both the national and stakeholder specific level.

The strategy will combine a range of approaches including face to face meetings with the key stakeholders, organised group meetings with stakeholders who have an interest adhoc meetings, and a range of broad communication methods to deliver key messages to general seafood industry participants.

The aim of the engagement strategy is to gain intelligence and feedback from industry to identify the key areas of marketing activity and funding mechanisms. A number of areas already identified that may be included in the development of a business case for seafood marketing activities include: image of seafood; seafood trade; seafood markets; seafood promotion; seafood training and quality.



## **Image of seafood**

The perception of the seafood industry is recognised by both the community and industry itself as being poor. This is one area that industry has identified a real business need for activity. Central to this could be the 'coordination and collaboration', of activities that would work to improve public confidence in the industry, its practices and the positive contribution it makes to the Australian community.

## **Seafood promotion**

Selling seafood and establishing awareness and a point of difference for products is one key area identified by the commercial fishing industry. A business case for developing seafood markets would incorporate promotion of seafood at the broadest category level (all seafood) but also cover activity at the sector (prawns, oysters) or regional level (Spencer Gulf, Lakes Entrance).

## **Seafood trade**

Australian seafood businesses export to 10 key 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 could form a significant business case for some export sectors.

## **Seafood markets**

The Australian seafood market is quite diverse. Understanding this and ensuring quality products reach the end consumer is another key area that could be developed. Market trade data and understanding volume, buyer trends, and prices will be a vital area to explore. Incorporated into this could be establishing supply chain standards for seafood products, supply chain handling and retail customer service.

## **Seafood training and quality**

At the foundation of all primary industries there is a range of activities that add value to the sector, but are not necessarily a priority at an individual company level. One area that could form part of a business case to industry would be a coordinated emergency response plan.

## **Industry funding mechanism**

Changes to the PIRD Act 1989 do not result in any form of collection mechanism being put in place. Stakeholders must first agree there is a need and or compelling business case for them to need a collective marketing function. Contributions will only be collected from those stakeholders (groups, sectors, or companies) that agree to put in place a collection arrangement. It is important to note that Marketing funds are not eligible to be matched by the Australian Government.

There are a range of collection options that are open to stakeholders. However, the key for establishing a successful collection mechanism is likely to be keeping the formula as simple as possible and having the smallest number of collection points.

The overarching objective is to gain broad scale support for a combined, industry-led and marketing program that benefits the whole industry and to which all participants contribute. Further to this it is important to acknowledge that some stakeholders may wish to undertake activities that are specific to their needs – for example Australian Prawn farmers and fishers have a voluntary process for the collection of funds, to undertake marketing activities that aim to increase the number of times consumers purchase Australian prawns. The administration of this during 2014-15 will be carried out by the SCRC with a new transitioning the actual to the FRDC after that date.

## **Assessment of Performance**

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

# 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 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 and e-zine), 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.

It is estimated that the total remuneration for the board and directors will be around \$300,000.

## Deliverables and services for 2014-15

- 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 2014-15

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

Key performance Indicators	2014-15	2015-16	2016-17
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	The <i>PIRD Act 1989</i> which sets out the legislative framework and rules for the establishment and operation of the FRDC.
Governance legislation	The <i>Public Governance, Performance and Accountability Act 2013</i> (PGPA Act) which specifies requirements for good governance, performance and accountability.
Priorities of key stakeholders	Australian Government Strategic 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.
Strategic 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.

# Government Research Priorities

In June 2013 the Australian Government announced the Strategic Research Priorities (see below) which updated the previous National Research Priorities and complement the Rural Research Priorities.

As part of implementing the Actions in the National Research Investment Plan (Investment Plan), the Australian Research Committee (ARCom) developed the SRPs to drive investment in areas that are of immediate and critical importance to Australia and its place in the world.

The SRPs will complement the broad base of support for research provided by the Australian Government and will foster a more coordinated and strategic approach within the identified areas.

## Strategic Research Priorities

### Living in a changing environment

- 1.1: Identify vulnerabilities and boundaries to the adaptability of changing natural and human systems
- 1.2: Manage risk and capture opportunities for sustainable natural and human systems
- 1.3: Enable societal transformation to enhance sustainability and wellbeing

### Promoting population health and wellbeing

- 2.1: Optimise effective delivery of health care and related systems and services
- 2.2: Maximise social and economic participation in society
- 2.3: Improve the health and wellbeing of Aboriginal and Torres Strait Islander people

### Managing our food and water assets

- 3.1: Optimise food and fibre production using our land and marine resources
- 3.2: Develop knowledge of the changing distribution, connectivity, transformation and sustainable use of water in the Australian landscape
- 3.3: Maximise the effectiveness of the production value chain from primary to processed food

### Securing Australia's place in a changing world

- 4.1: Improve cybersecurity for all Australians
- 4.2: Manage the flow of goods, information, money and people across our national and international boundaries
- 4.3 : Understand political, cultural, economic and technological change, particularly in our region

### Lifting productivity and economic growth

- 5.1: Identify the means by which Australia can lift productivity and economic growth
- 5.2: Maximise Australia's competitive advantage in critical sectors
- 5.3: Deliver skills for the new economy

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.

## Total expected investment 2014–15 — Government research priorities attributed to each RD&E Program (\$ and %)

### Rural Research Priorities

<i>Rural Research Priorities</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	536,623	2.34%	3,089,928	13.45%	275,732	1.20%	485,130	2.11%	217,964	0.95%	4,605,377	20.04%
Supply Chain and Markets	216,269	0.94%	909,276	3.96%	158,902	0.69%	340,795	1.48%	248,177	1.08%	1,873,419	8.15%
Natural Resource Management	4,922,732	21.42%	3,537,861	15.40%	360,854	1.57%	388,671	1.69%	388,451	1.69%	9,598,569	41.77%
Climate Variability and Climate Change	1,034,104	4.50%	104,607	0.46%	14,024	0.06%	38,103	0.17%	129,484	0.56%	1,320,322	5.75%
Biosecurity	1,221,783	5.32%	308,456	1.34%			95,610	0.42%	125,167	0.54%	1,751,016	7.62%
Innovation Skills	198,230	0.86%	391,605	1.70%	250,488	1.09%	506,377	2.20%	123,009	0.54%	1,469,709	6.40%
Technology	198,230	0.86%	850,267	3.70%			213,315	0.93%	146,748	0.64%	1,408,560	6.13%
Other research	953,029	4.15%						0.00%		0.00%	953,029	4.15%
TOTAL	9,281,000	40%	9,192,000	40%	1,060,000	5%	2,068,000	9%	1,379,000	6%	22,980,000*	100%

\* Please note that this table takes into account a reduction in funding of \$1.1 m announced as part of the 2014 Budget Measures.

## Strategic Research Priorities

<i>Strategic Research Priorities</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	%
Living in a changing environment	1.1	3,267,756	14.22%							250,571	1.09%	3,518,327	15.31%
	1.2	1,546,554	6.73%	103,410	0.45%	1,379	0.01%	252,780	1.10%	128,688	0.56%	2,032,811	8.85%
	1.3			2,316,384	10.08%	234,464	1.02%	388,671	1.69%	252,780	1.10%	3,192,299	13.89%
Promoting population health and wellbeing	2.1												
	2.2					229,800	1.00%					229,800	1.00%
	2.3	528,540	2.30%	390,660	1.70%							919,200	4.00%
Managing our food and water assets	3.1	1,217,940	5.30%									1,217,940	5.30%
	3.2												
	3.3			1,543,107	6.72%							1,543,107	6.72%
Securing Australia's place in a changing world	4.1												
	4.2	1,222,536	5.32%	770,290	3.35%			95,610	0.42%	125,167	0.54%	2,213,603	9.63%
	4.3												
Lifting productivity and economic growth	5.1	536,623	2.34%	2,768,208	12.05%	274,381	1.19%	485,130	2.11%	240,944	1.05%	4,305,287	18.73%
	5.2	446,042	1.94%	909,276	3.96%	158,902	0.69%	340,795	1.48%	248,177	1.08%	2,103,191	9.15%
	5.3	428,028	1.86%	391,605	1.70%	250,488	1.09%	506,377	2.20%	145,989	0.64%	1,722,487	7.50%

\* Please note that this table takes into account a reduction in funding of \$1.1 m announced as part of the 2014 Budget Measures.



# Portfolio Budget Statements 2014-15

## Tables from the 2014-15 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 2014-15 as at Budget May 2014**

Source	Estimate of prior year amounts available in 2014–15 \$'000	Proposed at Budget 2014–15 \$'000	Total estimate 2014–15 \$'000	Actual available appropriation 2013–14 \$'000
<b>Opening balance/Reserves at bank</b>	<b>5,398</b>	<b>-</b>	<b>5,398</b>	<b>4,963</b>
<b>REVENUE FROM GOVERNMENT</b>				
<b>Special appropriations<sup>1</sup></b>				
<i>Primary industries and Energy Research and Development Act 1989, s. 30A(3) – Fisheries R&amp;D Corporation</i>	-	19,433	19,433	18,161
<b>Total special appropriations</b>	<b>-</b>	<b>19,433</b>	<b>19,433</b>	<b>18,161</b>
<b>Total funds from government</b>	<b>-</b>	<b>19,433</b>	<b>19,433</b>	<b>18,161</b>
<b>FUNDS FROM INDUSTRY SOURCES</b>				
Levies <sup>2</sup>	-	900	900	890
<i>less amounts paid to the CRF</i>	-	(900)	(900)	(890)
Industry contributions	-	7,832	7,832	8,032
<b>Total</b>	<b>-</b>	<b>7,832</b>	<b>7,832</b>	<b>8,032</b>
<b>FUNDS FROM OTHER SOURCES</b>				
Interest	-	260	260	250
Sale of goods and services	-	20	20	52
Other	-	602	602	500
<b>Total</b>	<b>-</b>	<b>882</b>	<b>882</b>	<b>802</b>
<b>Total net resourcing for agency</b>	<b>5,398</b>	<b>28,147</b>	<b>33,545</b>	<b>31,958</b>

All figures are GST exclusive

CRF - Consolidated Revenue Fund

<sup>1</sup> 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.

<sup>2</sup> The levies are collected under *The Primary Industries Research and Development Act 1989 (PIRD Act)* 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.	2013–14 Estimated actual expenses \$'000	2014–15 Estimated expenses \$'000
<b>Program 1.1: Fisheries Research &amp; Development Corporation</b>		
Revenue from government	18,161	19,433
Revenues from industry sources	8,532	8,434
Revenues from other independent sources	302	280
<b>Total for Program 1.1</b>	<b>26,995</b>	<b>28,147</b>
<b>Outcome 1 Totals by resource type</b>		
Revenue from government	18,161	19,433
Revenues from industry sources	8,532	8,434
Revenues from other independent sources	302	280
<b>Total expenses for Outcome 1</b>	<b>26,995</b>	<b>28,147</b>
<b>Average Staffing Level (number)</b>	<b>12.1</b>	<b>12.6</b>

**Program Expenses**

	2013–14 Revised budget \$'000	2014–15 Budget \$'000	2015–16 Forward year 1 \$'000	2016–17 Forward year 2 \$'000	2017–18 Forward year 3 \$'000
Annual departmental expenses:					
Fisheries Research & Development Corporation	27,552	28,585	28,775	28,775	29,315
<b>Total program expenses</b>	<b>27,552</b>	<b>28,585</b>	<b>28,775</b>	<b>28,775</b>	<b>29,315</b>

**Program Components**

	2013–14 Revised budget \$'000	2014–15 Budget \$'000	2015–16 Forward year 1 \$'000	2016–17 Forward year 2 \$'000	2017–18 Forward year 3 \$'000
<u>1.1.1 – Component 1</u>					
Annual Departmental Expenses:					
Environment	9,640	10,552	10,447	10,344	10,481
<u>1.1.2 – Component 2</u>					
Annual Departmental Expenses:					
Industry	8,965	9,816	9,718	9,622	9,750
<u>1.1.3 – Component 3</u>					
Annual Departmental Expenses:					
Communities	467	491	486	481	487
<u>1.1.4 – Component 4</u>					
Annual Departmental Expenses:					
People Development	2,055	2,209	2,186	2,165	2,194
<u>1.1.5 – Component 5</u>					
Annual Departmental Expenses:					
Extension and Adoption	1,362	1,472	1,458	1,443	1,463
Management and Accountability	5,063	4,045	4,480	4,720	4,940
<b>Total program expenses</b>	<b>27,552</b>	<b>28,585</b>	<b>28,775</b>	<b>28,775</b>	<b>29,315</b>

**Table 3.1.3: Australian Government Indigenous Expenditure (AGIE)**

	Approp Bill No. 1 \$'000	Approp Bill No. 2 \$'000	Special Approp \$'000	Total Approp \$'000	Other \$'000	Total \$'000	Program
<b>Fisheries Research &amp; Development Corporation Outcome 1</b>							
Departmental 2014–15	-	-	-	-	694	694	1.1
Departmental 2013–14	-	-	-	-	1,102	1,102	1.1
<b>Total outcome 1 2014–15</b>	-	-	-	-	<b>694</b>	<b>694</b>	
Total outcome 1 2013–14	-	-	-	-	1,102	1,102	
<b>Total departmental 2014–15</b>	-	-	-	-	<b>694</b>	<b>694</b>	
Total departmental 2013–14	-	-	-	-	1,102	1,102	
<b>Total AGIE 2014–15</b>	-	-	-	-	<b>694</b>	<b>694</b>	
Total AGIE 2013–14	-	-	-	-	1,102	1,102	

**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 2013–14 \$'000	Budget estimate 2014–15 \$'000	Forward estimate 2015–16 \$'000	Forward estimate 2016–17 \$'000	Forward estimate 2017–18 \$'000
<b>EXPENSES</b>					
Employee benefits	2,158	2,375	2,542	2,669	2,802
Supplier expenses	1,265	1,420	1,685	1,795	1,880
Grants	22,339	24,080	23,595	23,255	23,535
Depreciation and amortisation	450	250	253	256	258
Write-down of intangibles	1,140				
Other	200	460	700	800	840
<b>Total expenses</b>	<b>27,552</b>	<b>28,585</b>	<b>28,775</b>	<b>28,775</b>	<b>29,315</b>
<b>LESS:</b>					
<b>OWN-SOURCE INCOME</b>					
<b>Own-source revenue</b>					
Sale of goods and rendering of services	52	20	20	20	20
Interest	250	260	260	260	260
Contributions	7,960	7,881	7,483	7,106	6,846
Other	593	1,002	1,103	1,103	1,525
<b>Total own-source revenue</b>	<b>8,855</b>	<b>9,163</b>	<b>8,866</b>	<b>8,489</b>	<b>8,651</b>
<b>Total own-source income</b>	<b>8,855</b>	<b>9,163</b>	<b>8,866</b>	<b>8,489</b>	<b>8,651</b>
<b>Net cost of (contribution by) services</b>	<b>18,697</b>	<b>19,422</b>	<b>19,909</b>	<b>20,286</b>	<b>20,664</b>
Revenue from government <sup>1</sup>					
Commonwealth contribution	18,161	19,433	19,922	20,293	20,669
<b>Total revenue from government</b>	<b>18,161</b>	<b>19,433</b>	<b>19,922</b>	<b>20,293</b>	<b>20,669</b>
<b>Surplus (Deficit) attributable to the Australian Government</b>	<b>(536)</b>	<b>11</b>	<b>13</b>	<b>7</b>	<b>5</b>
<b>Total comprehensive income (loss)</b>	<b>(536)</b>	<b>11</b>	<b>13</b>	<b>7</b>	<b>5</b>
<b>Total comprehensive income (loss) attributable to the Australian Government</b>	<b>(536)</b>	<b>11</b>	<b>13</b>	<b>7</b>	<b>5</b>

<sup>1</sup> Revenue from government includes a Commonwealth contribution under the PIERD Act 1989, and levies collected from industry by the Department of Agriculture 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
	2013–14 \$'000	2014–15 \$'000	2015–16 \$'000	2016–17 \$'000	2017–18 \$'000
<b>ASSETS</b>					
<b>Financial assets</b>					
Cash and cash equivalents	5,398	5,071	5,373	5,851	5,919
Trade and other receivables	1,126	1,526	1,382	1,087	1,107
Investments	5	5	5	5	5
<b>Total financial assets</b>	<b>6,529</b>	<b>6,602</b>	<b>6,760</b>	<b>6,943</b>	<b>7,031</b>
<b>Non-financial assets</b>					
Property, plant and equipment	77	75	83	82	89
Intangibles	819	719	584	443	328
<b>Total non-financial assets</b>	<b>896</b>	<b>794</b>	<b>667</b>	<b>525</b>	<b>417</b>
<b>Total assets</b>	<b>7,425</b>	<b>7,396</b>	<b>7,427</b>	<b>7,468</b>	<b>7,448</b>
<b>LIABILITIES</b>					
<b>Payables</b>					
Suppliers	175	170	161	175	180
Projects	190	200	210	210	210
Other	85	85	85	85	85
<b>Total payables</b>	<b>450</b>	<b>455</b>	<b>456</b>	<b>470</b>	<b>475</b>
<b>Provisions</b>					
Employee provisions	758	713	730	750	720
<b>Total provisions</b>	<b>758</b>	<b>713</b>	<b>730</b>	<b>750</b>	<b>720</b>
<b>Total liabilities</b>	<b>1,208</b>	<b>1,168</b>	<b>1,186</b>	<b>1,220</b>	<b>1,195</b>
<b>Net assets</b>	<b>6,217</b>	<b>6,228</b>	<b>6,241</b>	<b>6,248</b>	<b>6,253</b>
<b>EQUITY*</b>					
Reserves	194	194	194	194	194
Retained earnings	6,023	6,034	6,047	6,054	6,059
<b>Total equity</b>	<b>6,217</b>	<b>6,228</b>	<b>6,241</b>	<b>6,248</b>	<b>6,253</b>

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

**Table 3.2.3 Changes in Equity**

	Retained earnings	Asset revaluation reserve	Total equity
	\$'000	\$'000	\$'000
<b>Opening balance as at 1 July 2014</b>			
Balance carried forward from previous period	6,023	194	6,217
<b>Adjusted opening balance</b>	<b>6,023</b>	<b>194</b>	<b>6,217</b>
<b>Comprehensive income</b>			
Surplus (deficit) for the period	11	-	11
<b>Total comprehensive income</b>	<b>11</b>	<b>-</b>	<b>11</b>
of which:			
Attributable to the Australian Government	11	-	11
<b>Estimated closing balance as at 30 June 2015</b>	<b>6,034</b>	<b>194</b>	<b>6,228</b>
<b>Closing balance attributable to the Australian Government</b>	<b>6,034</b>	<b>194</b>	<b>6,228</b>

**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
	2013–14 \$'000	2014–15 \$'000	2015–16 \$'000	2016–17 \$'000	2017–18 \$'000
<b>OPERATING ACTIVITIES</b>					
<b>Cash received</b>					
Goods and services	52	20	20	20	20
Receipts from Australian Government	18,161	19,433	19,922	20,293	20,669
Contributions	8,332	7,974	8,045	7,740	7,511
Interest	250	260	260	260	260
Other	200	460	700	800	840
<b>Total cash received</b>	<b>26,995</b>	<b>28,147</b>	<b>28,947</b>	<b>29,113</b>	<b>29,300</b>
<b>Cash used</b>					
Employees	2,224	2,360	2,525	2,649	2,832
Suppliers	918	1,434	1,685	1,781	1,875
Projects	22,764	24,530	24,285	24,055	24,375
Other	324	-	-	-	-
<b>Total cash used</b>	<b>26,230</b>	<b>28,324</b>	<b>28,495</b>	<b>28,485</b>	<b>29,082</b>
<b>Net cash from (used by) operating activities</b>	<b>765</b>	<b>(177)</b>	<b>452</b>	<b>628</b>	<b>218</b>
<b>INVESTING ACTIVITIES</b>					
<b>Cash used</b>					
Purchase of property, plant and equipment	50	50	50	50	50
Purchase of Intangibles	280	100	100	100	100
<b>Total cash used</b>	<b>330</b>	<b>150</b>	<b>150</b>	<b>150</b>	<b>150</b>
<b>Net cash from (used by) investing activities</b>	<b>(330)</b>	<b>(150)</b>	<b>(150)</b>	<b>(150)</b>	<b>(150)</b>
<b>Net increase (decrease) in cash held</b>	<b>435</b>	<b>(327)</b>	<b>302</b>	<b>478</b>	<b>68</b>
Cash and cash equivalents at the beginning of the reporting period	4,963	5,398	5,071	5,373	5,851
<b>Cash and cash equivalents at the end of the reporting period</b>	<b>5,398</b>	<b>5,071</b>	<b>5,373</b>	<b>5,851</b>	<b>5,919</b>

**Table 3.2.5 Departmental Capital Budget Statement**

	Estimated actual	Budget estimate	Forward estimate	Forward estimate	Forward estimate
	2013–14	2014–15	2015–16	2016–17	2017–18
	\$'000	\$'000	\$'000	\$'000	\$'000
<b>PURCHASE OF NON-FINANCIAL ASSETS</b>					
Funded internally from departmental resources <sup>1</sup>	330	150	150	150	150
<b>TOTAL</b>	<b>330</b>	<b>150</b>	<b>150</b>	<b>150</b>	<b>150</b>
<b>RECONCILIATION OF CASH USED TO ACQUIRE ASSETS TO ASSET MOVEMENT TABLE</b>					
Total purchases	330	150	150	150	150
<b>Total cash used to acquire assets</b>	<b>330</b>	<b>150</b>	<b>150</b>	<b>150</b>	<b>150</b>

<sup>1</sup> Includes the following sources of funding:

– annual and prior year appropriations

	Other property, plant and equipment \$'000	Intangibles \$'000	Total \$'000
<b>As at 1 July 2014</b>			
Gross book value	212	5,256	-
Accumulated depreciation/amortisation	(135)	(4,437)	-
<b>Opening net book balance</b>	<b>77</b>	<b>819</b>	<b>-</b>
<b>CAPITAL ASSET ADDITIONS</b>			
<b>Estimated expenditure on new or replacement assets</b>			
By purchase – or internally developed	50	100	-
<b>Total additions</b>	<b>50</b>	<b>100</b>	<b>-</b>
<b>Other movements</b>			
Depreciation/amortisation expense	(50)	(200)	-
<b>Total other movements</b>	<b>(50)</b>	<b>(200)</b>	<b>-</b>
<b>As at 30 June 2015</b>			
Gross book value	261	5,356	-
Accumulated depreciation/amortisation	(186)	(4,637)	-
<b>Closing net book balance</b>	<b>75</b>	<b>719</b>	<b>-</b>

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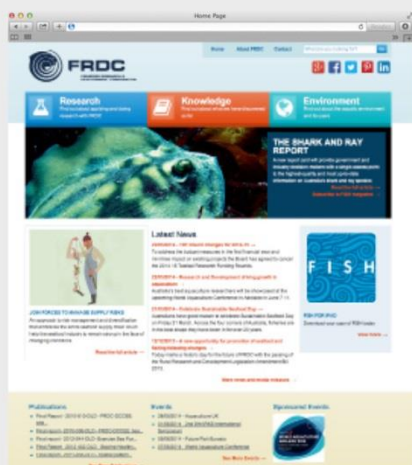
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