



FRDC

FISHERIES RESEARCH AND
DEVELOPMENT CORPORATION

ANNUAL OPERATIONAL PLAN 2023–24



YEAR 4 OF FRDC'S R&D PLAN 2020–25



FRDC acknowledges Australia's Indigenous people who are the traditional owners of country throughout Australia and recognises their continuing connection to land, waters and culture. We pay our respect to their Elders, past and present, and extend that respect to all Indigenous people.

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Summary

The Fisheries Research and Development Corporation's (FRDC) five-year research and development (R&D) plan provides a blueprint that guides the Corporation's investment approach. Every year, FRDC creates an annual operational plan (AOP) that puts into effect the next year of the R&D Plan. Each AOP specifies income, projected expenditure for the year, and groupings of activities that will receive investment. This AOP will direct FRDC's investment focus during the fourth year of our R&D Plan 2020–25.

Throughout the 2023–24 financial year, FRDC's investment will support initiatives that help realise a shared vision of what fishing and aquaculture will aim to become in Australia by 2030. This will be achieved by continued investment in the pursuit of the five R&D Plan outcomes and five enabling strategies that are designed to assist, accelerate and simplify outcome delivery.

The year 2022–23 reinforced the capacity of Australia's fishing and aquaculture sectors to adapt. Looking ahead, these sectors are well positioned with a collective focus on pandemic recovery and the importance of bringing people together, strengthening supply chains to future shocks, rebuilding domestic capability for manufacturing, and securing critical services and food sovereignty.

Ongoing modest economic growth is expected in 2023–24, with additional expansion of Australia's aquaculture sector, while Australia's wild-catch fishers continue to differentiate their value offering. The Indigenous sector consolidates their voice and position within the fishing and aquaculture community, and recreational fishers keep working to understand, increase and share the experience of fishing.

R&D will play a critical role to inform evidence-based decisions of all sectors as they seek to achieve their aspirations and realise a shared vision of creating "fish forever: collaborative, vibrant fishing and aquaculture, creating diverse benefits from aquatic resources and celebrated by the community".

Over the life of this AOP, FRDC will seek to appropriately balance our focus on tackling shared national challenges, while helping our partners respond to today's more pressing needs. We will invest in research and innovation to support implementation of the 'Aquaplan' to enhance biosecurity, develop minimum-viable products for a national data exchange and catalogue, advance technically feasible and scalable alternative fuel and energy solutions for wild-harvest fisheries and aquaculture. We will also enhance national reporting of environmental, social and governance metrics throughout fishing and aquaculture, and co-invest in knowledge and innovation to enable improved ocean management outcomes for fishing and aquaculture. To encourage collaboration on these national challenges, and promote exploration of diversification opportunities that help build resilience (such as investigation of alternative aquaculture species or catching technologies), we will offer matching investment opportunities to our industry partners in these areas at a ratio of 2:1 (\$2 Industry Partnership Agreement (IPA) for \$1 public good).

We will also keep working with our fishing and aquaculture partners to overcome current obstacles. Over the next year we will be implementing a new investment approach in collaboration with our Research Advisory Committees (RACs) that will prioritise relieving immediate problems for our fisheries and aquaculture stakeholders.

Throughout the course of this AOP, FRDC will also work to drive R&D adoption by shifting the Corporation's focus from research to development, boosting spending on the latter. New investment opportunities will provide resources for those involved in fishing and aquaculture who are interested in conducting trials and/or demonstrating emerging solutions, with matching FRDC investment available for associated capital expenditures.

FRDC will continue to make our systems, procedures and services more understandable and responsive to stakeholder needs, and form new, often unexpected alliances to address common issues. FRDC will also continue to evolve how we communicate impactful stories about what works and what does not.

During the 2023–24 AOP, FRDC will invest \$44.93 million in research, development and extension (RD&E) investments. This AOP contains information on certain groups of actions that will be carried out in the coming year.

FRDC overview

Why do we exist?

FRDC exists to facilitate thought leadership, knowledge creation, collaboration and innovation to shape the future of fishing and aquaculture for the benefit of the Australian people.

What do we do?

FRDC plans, invests in and manages research and development for fishing and aquaculture, and the wider community, and encourages adoption of the resulting knowledge and innovation for impact. We operate under the provisions of the *Public Governance, Performance and Accountability Act 2013* (PGPA Act), which applies high standards of accountability while providing for the independence required by the Corporation's role as a statutory authority.

What is our planned outcome?

FRDC plans to achieve increased economic, social and environmental benefits for Australian fishing and aquaculture, and the wider community, by investing in research and development to increase knowledge, innovation and adoption.

Why are we unique?

No other entity takes a national, evidence-based stewardship view of Australia's publicly-owned aquatic resources, their use and cultural importance. FRDC seeks to address the demands of its varied stakeholders that harvest and culture over 150 species across over 300 stocks, and the needs of Australia's fishing population, which accounts for almost 20 per cent of Australia's total population. The organisation fosters opportunities to expand the economic, cultural and wellbeing advantages that Australia's aquatic natural capital provides. This provides FRDC with a unique perspective on strategic needs and collaboration opportunities.

Who are our stakeholders?

There are three representative organisations declared under the *Primary Industries Research and Development Act 1989* (PIRD Act). They are the Australian Recreational and Sport Fishing Industry Confederation Inc. (trading as Recfish Australia), Commonwealth Fisheries Association Inc. and Seafood Industry Australia. We also involve the Indigenous Reference Group and the Australian Recreational Fishing Foundation in all our representative organisation activities.

More broadly, we work with a diverse and geographically dispersed collective of stakeholders that share a connection and interest in fishing and aquaculture. This includes Indigenous, commercial wild catch, aquaculture, recreational and post-harvest sectors, fisheries managers, researchers, non-government organisations and the Australian community.

How do we consult?

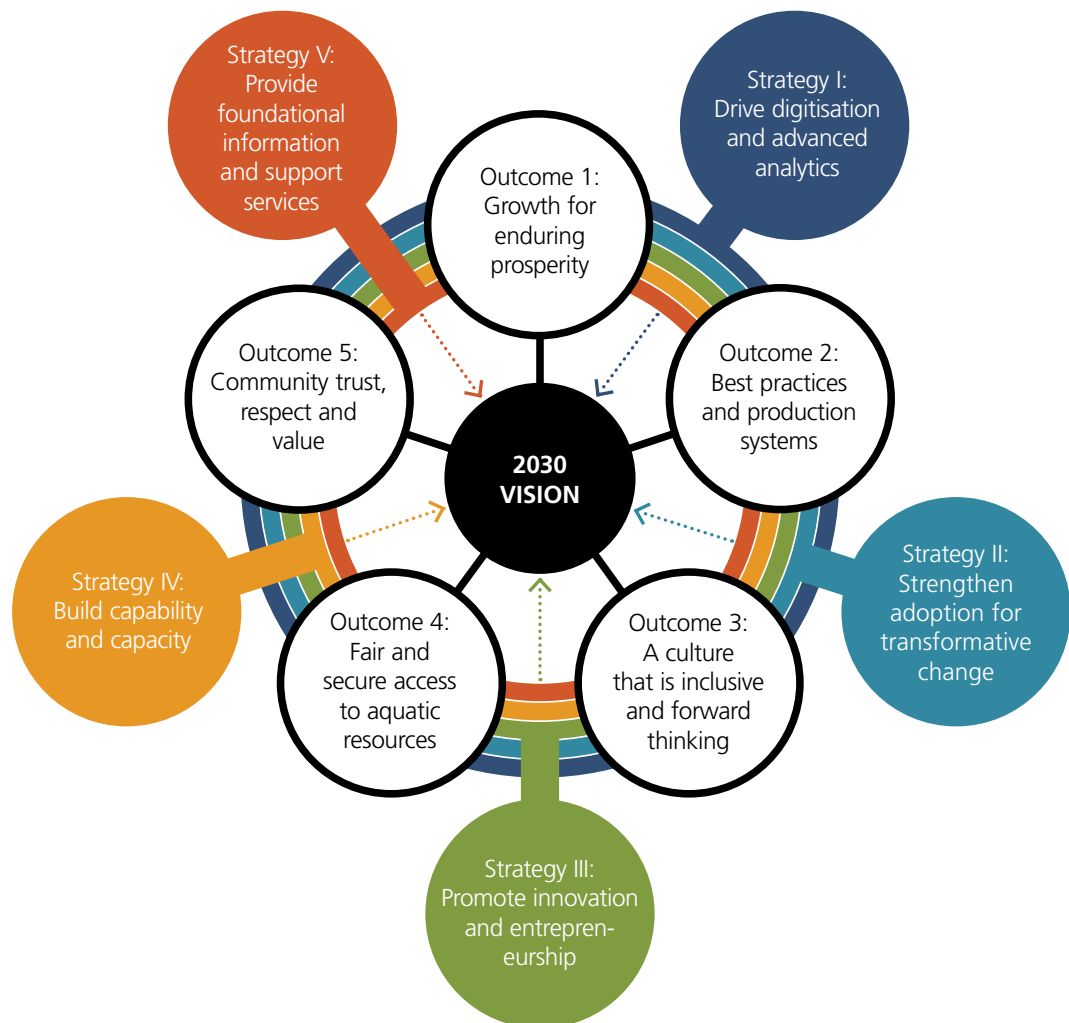
Our approach to inform our strategic focus and operational investments takes its direction from the Australian Government's Best Practice Guide for Stakeholder Consultation. Investments are also evaluated with advice from:

- Research Advisory Committees (RACs) in each jurisdiction,
- fourteen IPAs between FRDC and a sector body to manage a suite of sectoral projects over a specified time period against an agreed industry strategic plan,
- four thematic Coordinating Programs, established to engage experts on priorities relevant to key themes (human dimensions, aquatic animal health, Indigenous and recreational needs).

Our regionally located network of Extension Officers play a vital role with our stakeholders, maintaining clear lines of communication so we can understand their needs, whether it relates to accessing existing knowledge, or responding to emerging R&D priorities.

What is our strategic focus?

The investments and initiatives outlined in this AOP support the pursuit of five strategic outcomes, which are accelerated through investment in five enabling strategies designed to speed up and simplify progress towards those outcomes.



What is our investment approach?

Revenue for FRDC's R&D investment is based on a co-funding model between the Australian Government and the commercial fishing and aquaculture industries. As stipulated in the PIRD Act, our primary revenue source is based on:

- the Australian Government providing unmatched funds equivalent to 0.50 per cent of the average gross value of Australian fisheries production (AGVP) for the current year plus the two preceding years,
- commercial fishers and aquaculturists providing contributions via government,
- the Australian Government matching this amount up to a maximum of 0.25 per cent of AGVP.

FRDC's investment strategy seeks to balance short-, medium-, and long-term investments, high- and low-risk, and strategic and adaptive R&D demands. The needs of stakeholders ultimately determine FRDC's R&D investments.

We also invest in key Board Initiatives that require stronger FRDC leadership due to market failure, and administer a Response Fund for emergency needs (e.g. disease outbreaks etc).

What is our approach towards evaluation and reporting?

FRDC adopts the Commonwealth Government's input, output, outcome reporting framework with monitoring throughout to understand what is working, what is not, and enable adaptation. The Australian Government's Best Practice Guide for Knowledge Transfer and Commercialisation provides guidance on these aspects.

Performance reporting is undertaken at different intervals, from monthly financial statements through to annual whole-of-agency reporting. Objectives specifically supported by FRDC's approach to monitoring and evaluation are:

- accountability to the Australian Government and FRDC stakeholders,
- demonstration of impact to assess which R&D Plan outcomes have been realised and the impact of FRDC's investments,
- compliance with requirements under significant legislation and FRDC's Statutory Funding Agreement,
- continual improvement to efficacy, efficiency and appropriateness of investments, partnerships, communication and internal systems and processes.

Performance reporting tracks progress against the R&D Plan, National R&D Priorities, Agriculture Innovation Policy Priorities, requirements of FRDC's Statutory Funding Agreement and associated Guidelines, as well as requirements under the Finance Department's PGPA Act, and the Australian National Audit Office.

In addition to the requirements of the PIRD Act, we report to our declared representative organisations and are subject to the accountability and reporting obligations set out in the PGPA Act.

We produce annual reports for the Commonwealth Parliament and its stakeholders, which are available for download from our website on our Annual Report page, as well as a mid-year short performance report, which provides more regular updates on progress. We also report on performance across all aspects of the business which are available on our Governance and Reporting page.

Our key strategic risks

Biosecurity	Cybersecurity	Sustainability of sectors	Climate change	Ocean planning
Research and innovation to support implementation of the 'Aquaplan', with a focus on risk analysis, surveillance, diagnostic capability, safe translocation mechanisms, emergency preparedness and access to veterinary medicines.	Develop minimum-viable products for a national data exchange and catalogue.	Invest to build resilience in fishing and aquaculture sectors, and enhanced environmental, social and governance reporting.	Advance technically feasible and scalable alternative fuel and energy solutions for wild-harvest fisheries and aquaculture and understanding and responding to likely future changes.	Support knowledge sharing, spatial risk assessment, gap analysis, data sharing and framework co-design to enable improved ocean management outcomes for fishing and aquaculture.

Operating environment—broader atmospherics

Economic outlook

The Reserve Bank of Australia predicts Australia's economy will grow less quickly in 2023 as a result of diminishing real wealth, rising interest rates and increased living expenses. Stronger population growth, fuelled by more net foreign immigration, has largely countered the effects on growth prospects overall. In 2023 and 2024, the predicted GDP growth will be 1½ per cent and 2¾ per cent, respectively. From late 2024 onwards, domestic activity is predicted to increase slightly as inflation moderates and headwinds to growth caused by earlier tightening of monetary policy starts to ease. The recent increase in arrivals following international border reopening is a result of the extremely tight labour market.

Fishing and aquaculture economic outlook

The outlook for Australian commercial fishing and aquaculture in 2023–24 is one of modest economic growth. Although uncertainties remain about the future of Australian exports due to ongoing geopolitical tensions with major trading partners such as China, and shocks to trade between other countries that may impact Australian exports, there is a general sense of optimism regarding the future of Australia's export-oriented industries, including seafood.

Industry and the Australian Government have worked to diversify export markets and increase trade ties throughout Asia, Europe and the United States. New trade deals, such as the Comprehensive and Progressive Agreement for Trans-Pacific Partnership and the Regional Comprehensive Economic Partnership are expected to boost Australian exports in the longer term.

The rise of e-commerce through COVID-19 has also created new opportunities for Australian businesses to sell their products to a wider range of customers.

Gross value of Australian fisheries and aquaculture production (GVP) is anticipated to increase by 8.2 per cent in 2022–23 to reach a peak of \$3.63 billion following a robust post-pandemic recovery in 2021–22. GVP is anticipated to rise by 1.9 per cent in 2023–24, primarily due to rising prawn, oyster and tuna output volume and prices.



The nominal value of fisheries and aquaculture GVP is predicted to rise annually to \$4.00 billion by 2027–28. The average annual growth rate over the medium term (2023–24 to 2027–28) is expected to be 2 per cent. While the nominal value of GVP is expected to rise, the real value of fisheries and aquaculture GVP when values are adjusted for inflation, is predicted to fall by 0.7 per cent a year on average to \$3.44 billion by 2027–28. This decline in the real value can be attributed to reduced export demand and constrained household budgets among Australian consumers, resulting from adjustments to monetary policy to control inflation (Figure 1). Forecasted reduced real pricing for seafood producers and a slowing of development in the volume of Australia's aquaculture salmonid production are reflected in the outlook for the country's fisheries and aquaculture sectors.

Over the medium term, aquaculture GVP is anticipated to stabilise to around 63 per cent of total GVP.

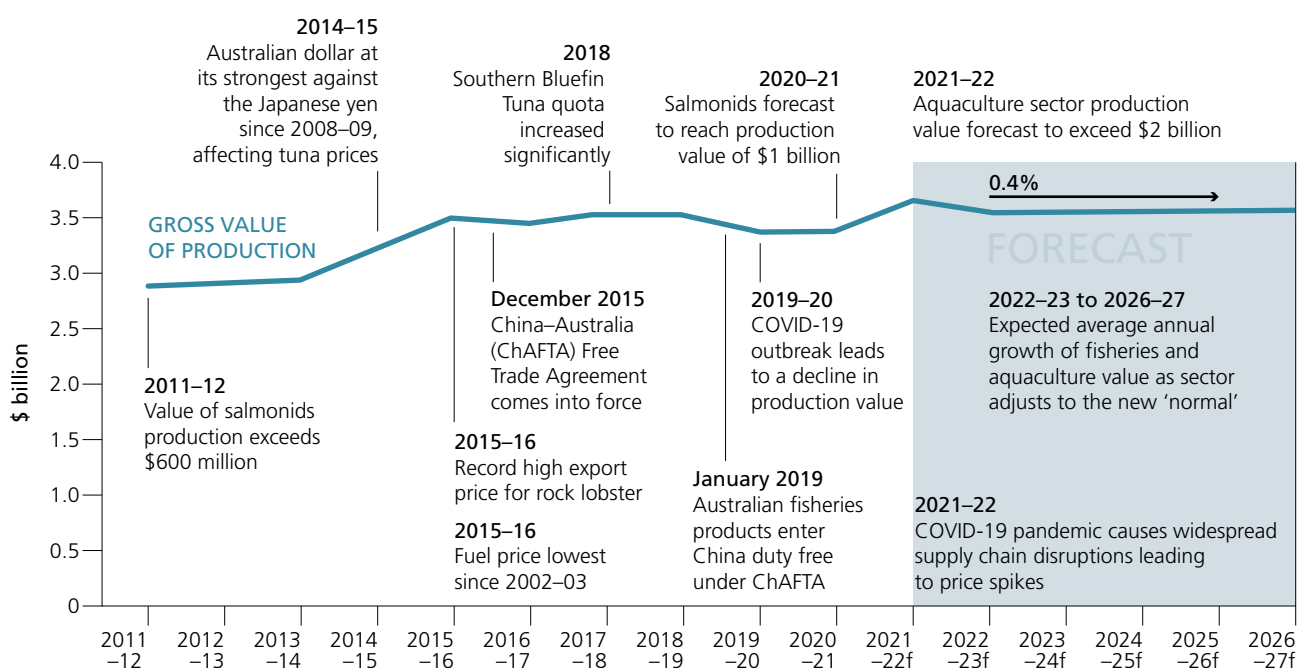


FIGURE 1. AUSTRALIAN FISHERIES AND AQUACULTURE TIMELINE, 2012–13 TO 2027–28 (SOURCE ABARES, 2023)

Recreational time use

Patterns of leisure time usage have shifted significantly over recent years due to the development of new technologies, shifting demography and the influence of social and economic conditions. In 2020, the Australian Bureau of Statistics released the first national assessment of time use in 15 years, and insights suggest Australians are likely to continue a trend of increasing use of technology-driven services and online activities as a form of recreation in 2023–24.

The average Australian now spends more time than ever before on online activities such as entertainment, including video games, streaming shows, and social networking sites. Time spent on these interests has climbed by almost 7 per cent annually since 2010, and with more individuals now able to work from home, this has further fuelled a rise in popularity. The latest national recreational time use survey suggests we are spending an average of 4 hours 23 minutes a day watching video, listening to audio or some other activity involving a computer or handheld device, with a slightly higher proportion of females (39 per cent) participating in general internet and device use compared to males (33 per cent).

COVID-19 has resulted in other major changes in how people in Australia use their free time. Although survey results point towards reduced outdoor recreational activities such as team sports and outdoor recreation such as hiking, camping and fishing during the height of the pandemic, there has been evidence since of a strong recovery in domestic tourism and outdoor leisure, with people deciding to explore regional areas instead of travelling abroad.

It seems the relationship between online activities and outdoor recreation cannot be described as one of simple direct competition for market share in our emerging 'attention economy', with trends in google analytics pointing to a spike in an interest in camping, fishing, boating and caravans, up to 25 per cent since January 2019. The relationship between online interest and participation remain unclear, but anecdotally, Australia's outdoor leisure industry has enjoyed a strong economic recovery as Australia slowly rebounds from COVID-19. As demographic and economic conditions are always shifting, it stands to reason 2023–24 will see more development in the recreational time-use pattern.



Sector summary

Commercial wild harvest

Australian commercial wild-harvest fishing is currently in a mixed state, with some fisheries flourishing and others faltering in response to challenges that include an increasingly crowded marine environment, workforce and sustainability challenges, and regulatory change burdens.

The Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) outlook for fishing and aquaculture in 2023 predicts that rock lobster wild-capture fisheries will likely continue to decline in value and production. There has been export increases into new markets, although the likelihood of continued expansion is uncertain. The possibility of export recommencement into China is a key underpinning factor in this uncertainty. Due to anticipated decreased prices, the GVP for rock lobster may fall by 0.2 per cent annually from 2023–24 to 2027–28. Production volume is anticipated to rise by about 2 per cent throughout this time, but not by enough to counteract the effects of decreased pricing.

Abalone exports to China, the main consumer, also remain subdued since COVID-19, with a shift in focus from live export to processed export (including canned). Since then, producers are seeking trade expansion into Vietnam, Canada, and the Middle East (Austrade 2023). The value of abalone exports is anticipated to rise by 5 per cent in 2022–23 to \$163 million, then to \$179 million in 2027–28 (ABARES, 2023).

Prawn export volumes are expected to remain stable at low levels over the medium term after declining by 62 per cent in 2021–22 at the start of COVID-19 due to higher export costs. The level of domestic and export market pricing, and resolution of supply chain problems that have hampered exports in 2021–22 will determine whether exports can recover. The production value for prawns is expected to rise from \$546 million in 2022–23 to \$651 million in 2027–28 with an average annual growth rate of 3.6 per cent between these periods.

The Japanese market is a major destination for the Australian tuna industry, especially for premium species such as Southern Bluefin, Yellowfin and Bigeye.

From 2020–21 to 2021–22, tuna production grew 19.8 per cent from \$129 million to \$154 million. A further 10 per cent increase in tuna GVP, to \$169 million, is predicted for 2022–23 due to increased production levels (ABARES, 2023). Tuna production value is anticipated to reach a peak of \$201 million by 2025–26 then remain steady until 2027–28. According to international agreements, expected growth is linked to an increase in Australia's total allowable catch (TAC) for the fishing seasons of 2024–26.



Aquaculture

Australia's aquaculture industry is expected to reach 64 per cent of the total Australian fisheries and aquaculture GVP by 2027–28. This is due to the industry's rising value and proportionate share of fisheries and aquaculture output volume and GVP. The rising production of salmonids is the primary factor underpinning growth in the sector.

Salmonids are projected to contribute 40 per cent of the overall fisheries and aquaculture GVP in 2022–23, when their GVP is expected to reach a record \$1.46 billion (ABARES, 2023). An increase of 14 per cent in value production from 1.29 billion in 2021–22. The production value of salmonids is expected to slow around 2023–24; over the medium term (from 2023–24 to 2027–28) the average growth rate is expected to be 1.4 per cent. The forecasted 1 per cent increase in output to 87,000 tonnes is being driven by increased farmgate prices, which are projected to grow by 12 per cent to an average of \$16.85 per kilogram in 2022–23.

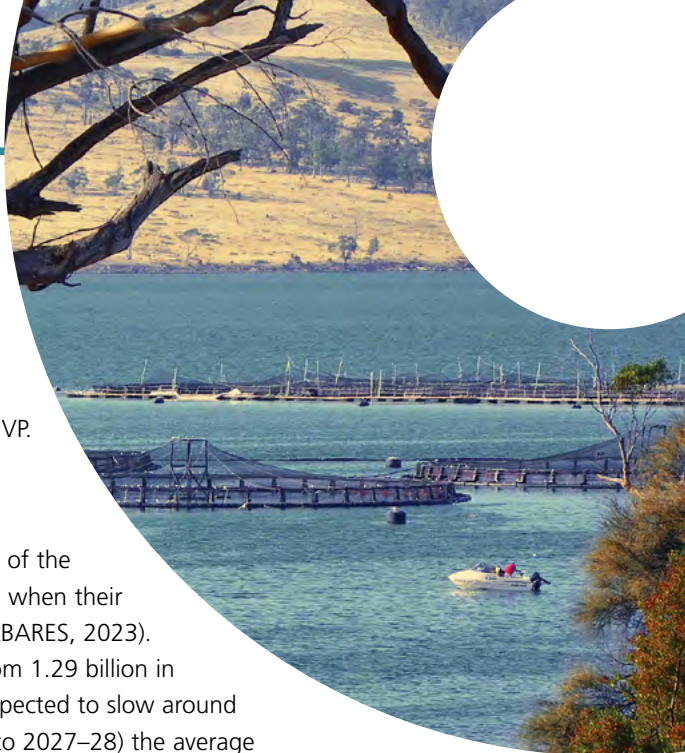
Higher farm-gate prices resulting from increased overseas demand associated with rapid production growth in Norway and Chile, which together accounted for 47 per cent of global salmonid exports by value in 2021. Constraints imposed by current licencing agreements are likely to prevent the salmonid industry from expanding much in the near-term future (Rabobank 2022).

Indigenous

For tens of thousands of years, Indigenous Australians have fished, farmed and traded aquatic species, conserving and managing the natural resources for their own survival and the health of the ecosystem as a whole. Despite this, our understanding of trends relating to Indigenous fishing and aquaculture practices remain the least understood of all sectors. Research published in 2003 continues to be the most recent source of national data on participating and fishing effort for the sector. This work estimates that at that time (1999–2000), there were 37,000 Indigenous fishers who spent 420,000 days fishing.

Research conducted by the Australian Institute of Aboriginal and Torres Strait Islander Studies (IATSIS) has provided a significant piece of the puzzle regarding how fishing contributes to livelihood values of Indigenous Australians. This work reinforced the importance of fishing as a primary way of practising culture, maintaining connection, passing on cultural knowledge, as well as strengthening social ties, improving diets and increasing discretionary income. Fishing was shown to be an integral part of people's individual and cultural identities, and thus their sense of self worth.

Encouraged by this validation of the importance of fishing for the health, identity, connectivity and culture of Indigenous Australians, the sector continues to make inroads towards realising their aspirations. A national review is currently underway to inform the sector's R&D prioritisation. IATSIS researchers are leading development of an Indigenous-led governance blueprint for collaboration in sea country processes.



Financial interest in Indigenous fishing and aquaculture operations is increasing, for example: Tasmania's Land and Sea Aboriginal Corporation abalone quota acquisition; and the Northern Territory's Aboriginal Sea Company investing in enterprises that deliver financial benefits and develop Indigenous capability and capacity, such as mud crab, Barramundi, Spanish Mackerel and coastal line fishing entitlements. Some state management agencies are also amending fisheries legislation to recognise Indigenous people's rights, and develop strategies to guide effective engagement with Indigenous fishing interests.

Recreational

The 2023 National Social and Economic Survey of Recreational Fishers provides fresh insight into the importance of recreational fishing in Australia since the last national survey in 2003. The 2023 survey shows that one in five Australians fished over the reporting period, indicating the proportion of Australians who fish has stayed relatively constant throughout time, while the population of Australia and the fishing community both continue to rise. It is estimated Australians spend 28 million fishing days annually. Fewer than 5 per cent of anglers fish more than 52 times a year for recreation. Survey results establish that recreational fishing contributes \$11 billion annually to Australia's economy and supports 100,000 jobs.

Recreational fishing contributions to Australia's economy does not represent the sectors entire value. According to the 2023 National Survey, recreational fishers have higher wellbeing compared to the general population. The survey also found that those who fish are less likely to lose their sense of wellbeing after experiencing traumatic events like divorce, the loss of a loved one, or a serious illness. Recreational fishing was found to increase wellbeing in three main ways: by fostering connections with others, reinforcing connections with nature, and by providing opportunities to unwind and recharge.

Recreational fishing benefits are disproportionately distributed geographically and demographically with people in rural areas more likely to go fishing than city dwellers. Also, Aboriginal and Torres Strait Islander persons and men under the age of 30 had greater participation rates.

Community sentiment

Since 2019, the Community Trust in Rural Industries project has helped to understand the dynamic nature of community sentiment and pathways to deeper trust and acceptance. The project showed that community trust drivers are largely unchanged since reporting began in 2019. Australians thought that 'fishers play an important role in society' rose from 80.2 per cent in 2019 to 82.5 per cent in 2021. Importantly, the project found the more rural industries are perceived to effectively manage their environmental performance and be responsive to community concerns, the more community members trust rural industries. Other important factors include distributional fairness (the extent to which Australians believe they receive a fair share of the benefits created by rural industries), the quality and role of rural industry products in Australian lives, and animal welfare. Concerns about chemical use in the community were found to undermine trust, whereas trust in government regulation and increased knowledge about how rural industries operate were found to improve trust.



The 2023 National Social and Economic Survey of Recreational Fishers provides additional insight into how the Australian public perceives fishing. According to the survey, most Australians consider recreational fishing to be a highly acceptable pastime that promotes personal wellbeing, social connection, physical activity and environmental stewardship (Figure 2). Males and those living in rural or remote areas had the most support. However, younger people were less likely to consider recreational fishing to be an acceptable activity.

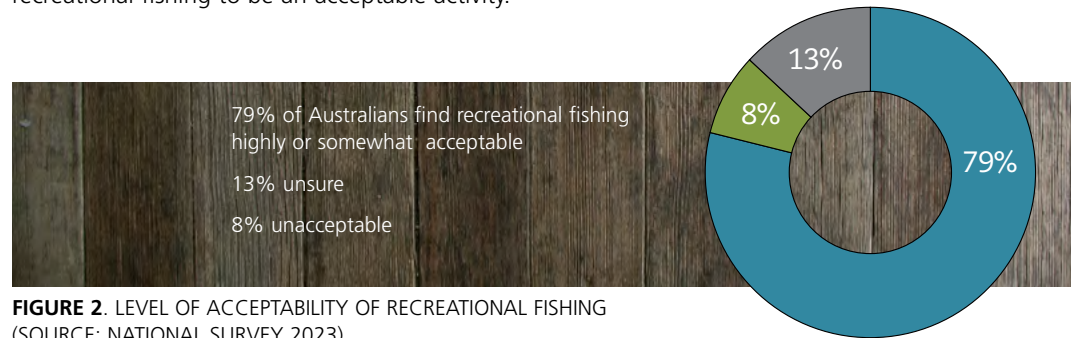


FIGURE 2. LEVEL OF ACCEPTABILITY OF RECREATIONAL FISHING
(SOURCE: NATIONAL SURVEY 2023)

Fishing and aquaculture resource status

Fishing and aquaculture rely heavily on natural ecosystems. For continued social and economic benefits from the sector, natural ecosystems must be restored and conserved.

The term 'blue natural capital' refers to aquatic ecosystem assets such as mangroves, saltmarsh, seagrass, coral reefs, etc. that provide ecosystem services, including supporting fishing and aquaculture productivity, to people. Blue natural capital describes the aquatic part, which is one of six types of capital that make human societies productive (the others being financial, human, intellectual, social and relationship and manufactured).

The Australian Government is in early stages of trying to track and report on the status of Australia's blue natural capital through national ocean accounts. The aim is to estimate its value over time, to understand if Australia's national account balance is healthy or overdrawn.

Australia's Ocean Ecosystem Account summarises information on saltmarsh, intertidal seagrass and mangrove ecosystems, which are vital nurseries for important fishing and aquaculture species. The Australian Bureau of Statistics is looking into ways that national kelp systems can be added to National Ocean Account processes.

In 2021, there were 1.1 million hectares of saltmarsh, with 45 per cent in Queensland and 38 per cent in the Northern Territory (Figure 3).

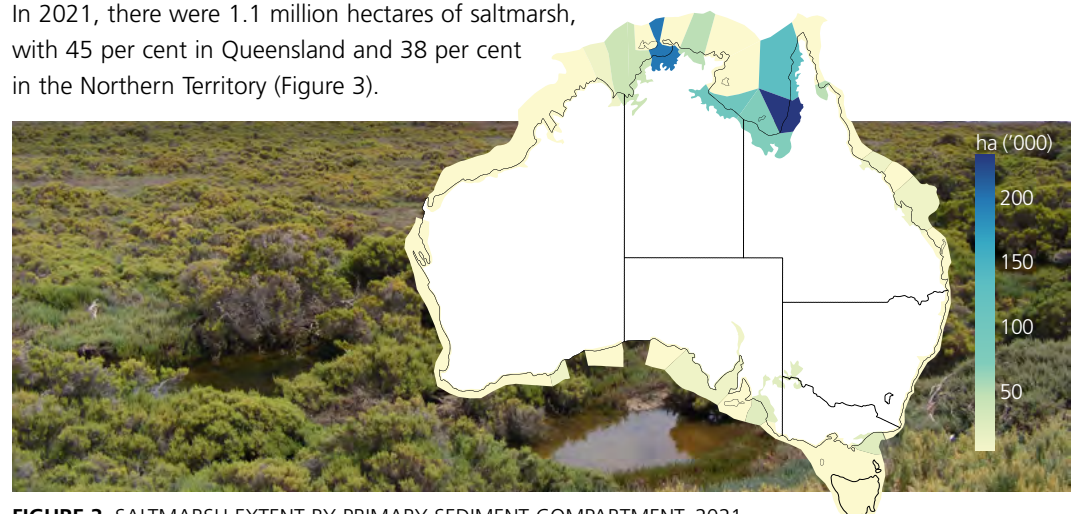


FIGURE 3. SALTMARSH EXTENT BY PRIMARY SEDIMENT COMPARTMENT, 2021
(SOURCE: NATIONAL OCEAN ACCOUNTS)

Australia's intertidal waters had 389,000 hectares of seagrass meadows in 2020, with 31 per cent in Queensland, 23 per cent in Western Australia and 19 per cent in the Northern Territory (Figure 4).

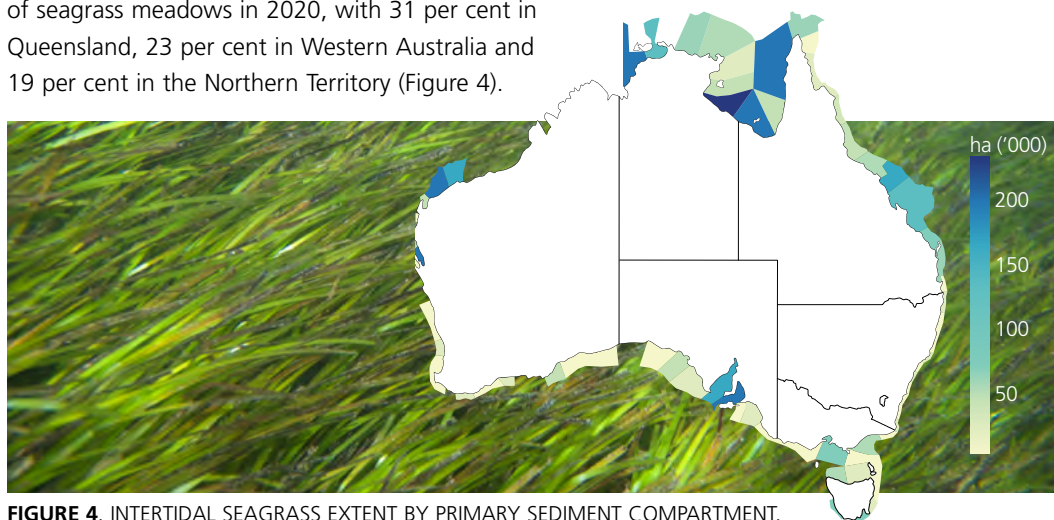


FIGURE 4. INTERTIDAL SEAGRASS EXTENT BY PRIMARY SEDIMENT COMPARTMENT, 2020 (SOURCE NATIONAL OCEAN ACCOUNTS)

Ocean accounting is a young field of monitoring and reporting. As Australia's ocean accounts continue to grow, the aim is to track how they change over time in response to investments and processes that affect ocean ecosystems. This will help to develop a clear picture of how change will impact on benefits enjoyed by fishing and aquaculture sectors, and the Australian public.

Status of fish stocks

Findings from the Status of Australian Fish Stocks show that overwhelmingly Australian fish populations are healthy and well-managed. However, an increasing number of commercially and recreationally important species have concerning stock statuses. For example, Spanish Mackerel in Queensland, Mulloway in New South Wales, Sand Flathead in Tasmania, Snapper in South Australia, and demersal scale fish species in Western Australia show evidence of decline. To identify and stop the causes of depletion, a comprehensive approach is required, with R&D investment crucial to guide and inform management decisions.



Operating environment review

Future development in domestic and global markets, and Australia's ability to continue to enjoy the social and economic benefits delivered by fishing and aquaculture will be influenced by variables that include pandemic recovery, changes in monetary policy to slow inflationary pressures, trade relations within the changing geopolitical landscape, shifting consumer tastes and events that impact society and supply chains.

Throughout this AOP's duration, FRDC will work with stakeholders to design and implement solutions that aim to address issues of national importance, including boosting resilience to climate change, increasing biosecurity, enhancing cybersecurity, promoting the long-term viability of the fishing and aquaculture industries, and supporting evidence-based and responsible spatial management.

The four measurement and evaluation drivers of profitability, productivity, competitiveness and preparedness will continue to be our focus as we work to address the investment priorities outlined by our jurisdictional and industry partners.

Investment

FRDC's R&D Plan outlines the five outcome areas where we intend to maintain our investment. Commitments against RD&E activities already in place span multiple years, with 56 per cent of investment in 2023–24 coming from pre-existing obligations.

FRDC's planning and operations will continue to be informed by our Statutory Funding Agreement and associated guidelines and best practice recommendations to ensure optimal investment across time horizons, risk and strategic/adaptive posture.

Income and expenditure summary

FRDC revenue is based on a co-funding model between the Australian Government and the commercial fishing and aquaculture sectors. Funds are collected by the Australian, state and territory governments as part of their fisheries and aquaculture management activities. The Australian Government also collects a farmed prawn levy. As stipulated in the PIRD Act, our primary revenue source is based on:

- A. the Australian Government providing unmatched funds equivalent to 0.5 per cent of the average gross value of Australian fisheries production (AGVP) for the current year plus the two preceding years,
- B. commercial fishers and aquaculture operators providing contributions via government,
- C. the Australian Government matching this amount up to a maximum of 0.25 per cent of AGVP.

There is no legislative impediment to fishers and aquaculturists contributing to FRDC above the maximum level at which the Australian Government will provide a matching contribution.



Industry contributions: FRDC is forecast to receive \$9.13 million as contributions from commercial fishers and aquaculture operators via jurisdictions in 2023–24. Included in this forecast is \$0.6 million from the farmed prawn levy (Table 1).

Government contributions: FRDC is forecast to receive \$18.27 million in revenue from the Australian Government in 2023–24 as unmatched funds equivalent to 0.5 per cent of the AGVP. An additional \$9.13 million in revenue is anticipated from the Australian Government as matching contributions, up to a maximum of 0.25 per cent of AGVP, bringing total revenue from the Australian Government to \$27.40 million in 2023–24.

A comprehensive income statement is provided as Appendix 1.

Table 1 also provides a summary of forecast expenditure for 2023–24. Total forecast expenditure in R&D, including stakeholder engagement, planning and performance and R&D support for 2023–24 is estimated at \$44.93 million. Corporate costs for the year, which include information and communications technology (ICT), are estimated at \$4.91 million.

FRDC is projecting a loss in the 2023–24 financial year of approximately \$5.35 million (Table 1). This is a deliberate FRDC decision to increase annual expenditure on RD&E activities, reduce project investment delays and drive continued delivery of our 2020–25 R&D Plan.

TABLE 1. AOP 2023–24 BUDGET

REVENUE	\$
Australian Government 0.5% AGVP	18,268,979
Matching of industry contributions 0.25% AGVP	9,134,490
Total revenue from the Australian Government	27,403,469
Projects revenue from the Australian Government	4,600,000
Interest	300,000
Contributions revenue industry	9,134,490
Contributions revenue projects	1,900,000
Other revenue	1,150,000
TOTAL REVENUE	44,487,959
FORECAST EXPENDITURE	
TOTAL research and development	44,929,243
Including:	
• Stakeholder engagement	
• Planning and performance	
• R&D support	
Corporate costs (includes ICT)	4,913,136
TOTAL EXPENDITURE	49,842,379
NET RESULT FOR THE YEAR	(5,354,420)



Table 2 describes committed investments, and potential new investments for 2023–24 and the following three years.

TABLE 2. INVESTMENT ALLOCATION

Public good allocation	2023–24	2024–25	2025–26	2026–27
	\$	\$	\$	\$
Committed investment	8,844,613	4,617,521	4,024,446	131,683
Potential new investment	–	4,001,471	9,711,294	14,287,219
Residual industry (non-IPA)				
Committed investment	3,679,425	2,518,963	2,876,248	965,921
Potential new investment	5,804,468	1,851,537	1,736,252	3,687,079
Industry Partnership Agreements (IPAs)				
Australian Abalone Growers Association				
Committed investment	97,306	94,881	60,000	120,000
Potential new investment	193,952	97,271	131,840	71,840
Australian Barramundi Farmers Association				
Committed investment	225,854	40,750	10,000	–
Potential new investment	388,178	135,250	166,000	176,000
Abalone Council of Australia Ltd				
Committed investment	542,522	45,138	–	–
Potential new investment	126,967	396,423	440,000	440,000
Australian Council of Prawn Fisheries				
Committed investment	535,034	389,860	42,123	–
Potential new investment	1,561,295	126,600	473,557	515,680
Australian Prawn Farmers Association				
Committed investment	628,520	348,209	236,015	–
Potential new investment	464,476	356,571	467,985	704,000
Australian Southern Bluefin Tuna Industry Association				
Committed investment	467,077	108,712	–	–
Potential new investment	–	128,210	352,000	352,000
Oysters Australia				
Committed investment	751,180	352,113	31,700	–
Potential new investment	314,116	54,248	373,100	404,800
Pearl Consortium				
Committed investment	5,778	5,217	–	–
Potential new investment	333,733	346,783	352,000	376,000
Southern Ocean				
Committed investment	604,986	129,217	141,813	–
Potential new investment	342,130	337,495	324,587	466,400
Southern Rock Lobster Limited				
Committed investment	469,205	349,106	17,600	7,500
Potential new investment	2,331,646	585,876	914,320	925,920

TABLE 2. CONTINUED

Industry Partnership Agreements (cont.)	2023–24	2023–24	2023–24	2023–24
	\$	\$	\$	\$
Tasmanian Salmonid Growers Association (TSGA)				
Committed investment	2,063,638	1,477,912	–	–
Potential new investment	–	–	863,129	2,112,000
TSGA—Huon				
Committed investment	50,000	50,000	50,000	–
Potential new investment	1,093,329	618,800	618,800	668,800
TSGA—Petuna				
Committed investment	100,000	270,000	–	–
Potential new investment	669,582	–	246,400	246,400
TSGA—Tassal				
Committed investment	185,880	42,080	42,080	42,080
Potential new investment	2,511,130	943,520	943,520	943,520
Western Rock Lobster Council Inc.				
Committed investment	2,339,492	1,284,074	613,400	7,500
Potential new investment	719,792	–	231,400	838,800
TOTAL COMMITTED INVESTMENT	21,123,433	12,015,043	8,145,426	1,274,684
TOTAL POTENTIAL NEW INVESTMENT	16,854,794	9,851,846	17,994,183	26,864,457

Stakeholder engagement

For R&D to deliver impact its outputs must be useful, usable and used. Consultation with stakeholders is critical throughout the planning, investment and learning cycle. Our consultation approach is informed by the Australian Government's Best Practice Guide for Stakeholder Consultation.

FRDC works to achieve best-practice stakeholder engagement by making sure it is transparent, accessible, uncomplicated, well-planned, appropriate for the situation and responsive. We work closely with the sectors we invest on behalf of, to make sure we understand and can meet their requirements and help them understand our service offerings. Investment to address needs of stakeholders is made possible through IPAs, jurisdictional RACs, and Coordination Programs, all of which are geared towards helping Indigenous, commercial, and recreational fishermen and aquaculturists. FRDC also collaborates with fishery and natural resource managers to understand their needs, and ensure they can be met with up-to-date, reliable scientific data on which to base their choices.

Extensive stakeholder contact influences FRDC's strategic focus, which is documented in our five-year R&D Plan, as well as its operational implementation, which is detailed in our AOPs. Our annual Stakeholder Planning Workshops in November help to build on the unique recommendations obtained from each of the 24 advisory committees that shape FRDC's focus and initiatives. These workshops bring together FRDC's key stakeholders to examine current and big-picture challenges and trends, discuss R&D Plan progress, and plan for the future. This enables each AOP to be submitted to the Minister before its implementation on 1 July.

By talking to people in different fields, FRDC's new Extension Officer Network will be able to better serve their informational requirements and provide them with the resources they require.

Key activities for 2023–24

RD&E investments can yield results from immediate, dramatic shifts to longer-term, incremental gains. Long-term viability in business requires bold, game-changing innovation. Investment in RD&E to support transformative change (long and short term) often entails more risk, but rewards can warrant risk if the change is successful. During the 2023–24 financial year, FRDC will continue to invest in a portfolio of RD&E that has a sensible balance of risk and potential return.

FRDC's 2023–24 investment approach will address pressing national problems with transformative potential and at the same time invest to support incremental development potential. Realising our shared 2030 vision for "collaborative, vibrant fishing and aquaculture, creating various benefits from aquatic resources, and celebrated by the community" relies on these two facets of our investment plan working in tandem.

During 2023–24 we will continue to collaborate with our jurisdictional, industrial and sectoral partners to: encourage trade diversification, enhance profitability, optimise production, and drive innovation to boost preparation and competitiveness. We will also seek to enhance biosecurity outcomes by supporting implementation of Australia's Strategic Plan for Aquatic Animal Health, the 'Aquaplan'; develop minimum-viable products for a national agrifood data exchange and catalogue; invest in the second year of our Climate Resilience Program with particular focus on scaling technically feasible and desirable alternative fuel and energy solutions; enhance national reporting of environmental, social and governance metrics; and co-invest to enable improved ocean management outcomes for fishing and aquaculture. We will also continue to promote development of new talents, skills and networks through investment in the next phase of our Capability, Capacity and Culture Change investment program.

Table 3 (following page) describes the activity groupings FRDC has invested in that will be completed during the life of this AOP. Table 4 describes activity groupings and initiatives that have been prioritised to receive new investment over the life of this AOP.



TABLE 3. ACTIVITY GROUPING THAT WILL BE ADDRESSED THROUGH COMPLETED INVESTMENTS DURING THE LIFE OF THE 2023–24 AOP, GROUPED BY THE PRIMARY R&D PLAN OUTCOME THEY RELATE TO.

Outcome 1: Growth for enduring prosperity	Projects
Understanding and managing susceptibility to diseases and pathogens.	2015-239, 2019-176, 2020-074, 2020-096, 2021-061, 2021-076, 2018-098
Understanding and managing factors impacting on product quality.	2016-232, 2017-206, 2019-003
Understanding and managing factors that impact on stock survival.	2019-147, 2019-156, 2021-038, 2019-151
R&D into process efficiencies.	2019-041
Understanding how environmental factors impact on productivity.	2017-004, 2018-034
Identification of alternative management options to ensure long-term viability.	2017-014
Novel approaches for assessing threatened, endangered and protected species interactions and populations.	2017-119, 2018-042
Understanding biology and ecology of target species, for use in assessments and decision making.	2018-074, 2019-010
Understanding community values and aspirations, and aligning practices.	2018-075
Improving diagnostics for pathogens and diseases.	2018-086
Closing lifecycles and lengthening spawning windows on aquaculture species.	2018-113
Measuring productivity to inform fisheries management.	2019-026
Factors impacting on acceptance of seafood products by consumers and supply chains.	2019-067
Use of chemicals to optimise animal welfare, quality and yield.	2019-106
Turning waste into value.	2021-065, 2020-078
Outcome 2: Best practice and production systems	
Supporting strategic planning and prioritisation.	2018-117, 2018-128, 2019-206
Genetic sequencing.	2018-198
Measuring adoption and effectiveness.	2020-120
Exploring systems of governance and representation.	2020-130
Research to guide business improvement.	2021-128
Outcome 3: A culture that is inclusive and forward-thinking	
Understanding and supporting increased diversity across fishing and aquaculture.	2018-174
Understanding and responding to future workforce needs.	2021-019
Bursaries and events.	2022-114
Understanding and improving digital literacy and use.	2019-022
Outcome 4: Fair and secure access to aquatic resources	
Tools, resources and processes that support spatial planning.	2017-186
Outcome 5: Community trust, respect and value	
Understanding social, economic and cultural contributions.	2018-181, 2018-161
Improving compliance through use of behavioural insights.	2019-011
Understanding and influencing community trust and acceptance.	2020-058



TABLE 4. ACTIVITY GROUPINGS THAT HAVE BEEN IDENTIFIED BY RACs, IPAs AND COORDINATING PROGRAMS THAT WILL RECEIVE NEW INVESTMENT DURING THE LIFE OF THIS AOP.

Nominating Advisory Committee(s)	Activity description
AAGA: Australian Abalone Growers Association. ABFA: Australian Barramundi Farmers Association. ACA: Abalone Council of Australia. ACPF: Australian Council of Prawn Fishers. ASBTIA: Australian Southern Bluefin Tuna Industry Association. APFA: Australian Prawn Farmers Association. HDR: Human Dimensions Research Coordinating Program. IRG: Indigenous Reference Group. OA: Oysters Australia. Pearls: Pearl Consortium. RAC: Research Advisory Committee. SO: Southern Ocean. SRL: Southern Rock Lobster.	
COM: Commonwealth. NSW: New South Wales. NT: Northern Territory. QLD: Queensland. SA: South Australia. TAS: Tasmania. WA: Western Australia.	
Outcome 1: Growth for enduring prosperity	
Recfishing Research	Analysis of national recreational fishing survey results to produce jurisdictions sub-reports.
Recfishing Research	R&D to support better integration of other sectors into harvest strategies.
Recfishing Research	Improvements that allow more rapid data collection and dissemination to inform management, with specific focus on understanding additional forms of mortality (e.g. recreational fishing) or directly estimating biomass.
Recfishing Research	RD&E to inform development of strategies for managing data-poor fisheries in the face of new and emerging threats.
IRG	Understand broad cultural impacts on Indigenous Australians of ongoing spatial and temporal aquatic closures and protection of various key species.
ACA, WA, TAS, SA, NSW, COM & QLD RACs	Establish pathways and collaborative processes to support recovery of declining fish stocks, including the role of enhancement.
WA, TAS & NSW RACs	Support fishery growth, including the use of under-utilised/valued species and waste.
SA, NT & QLD RACs	Support aquaculture growth, the role of integrated multi-trophic aquaculture.
NT & NSW RACs	Mitigate fishing gear loss and reduce the impacts of 'ghost gear'.
WA, NT, QLD & NSW RACs	Identify options to reduce unwanted shark interactions such as depredation.
ASBTIA, ACPF, SO, QLD, NT & SA RACs	Reduce impacts on the environment, including threatened, endangered and protected species interactions to assist industry address accreditation requirements.
SA & TAS RACs, ASBTIA	Improve the efficiency of fishing operations, including through novel technologies.
WA, NT RACs & IRG, National	Co-invest to create economic opportunities for Indigenous communities in fishing and aquaculture.
SA RAC	Ensure industry post-harvest capacity.
AAGA, ASBTIA, OA, Pearls	Understand and address animal health outcomes and mitigating biosecurity risks, including Innovative approaches to disease preparedness.
Pearls	Improve survival of hatchery grown spat through the nursery phase.
VIC, COM, NSW & QLD RACs	Address key data gaps for important commercial and recreational fisheries.
QLD RAC	Explore opportunities to enhance the recreational fishing experience.
COM, SA & NT RACs, Recfishing Research	Assist in better reflecting recreational fishers in fishery management processes and decision making.
ABFA, Pearls	R&D to support product quality improvements.
OA, Pearls	Genetic improvement.

TABLE 4.
CONTINUED

Nominating Advisory Committee(s)	Activity description
AAGA: Australian Abalone Growers Association. ABFA: Australian Barramundi Farmers Association. ACA: Abalone Council of Australia. ACPF: Australian Council of Prawn Fishers. ASBTIA: Australian Southern Bluefin Tuna Industry Association. APFA: Australian Prawn Farmers Association. HDR: Human Dimensions Research Coordinating Program. IRG: Indigenous Reference Group. OA: Oysters Australia. Pearls: Pearl Consortium. RAC: Research Advisory Committee. SO: Southern Ocean. SRL: Southern Rock Lobster.	
COM: Commonwealth. NSW: New South Wales. NT: Northern Territory. QLD: Queensland. SA: South Australia. TAS: Tasmania. WA: Western Australia.	
Outcome 1 (cont.)	
National	Research and innovation to support implementation of the 'Aquaplan', with focus on aquatic risk analysis, surveillance, diagnostic capability, emergency preparedness, and access to veterinary medicines.
National	Commence building minimum-viable products for an Agrifood Data Exchange and catalogue.
National, SRL	Improve climate resilience of fishing and aquaculture through investment in the first year of Climate Resilience Program.
Outcome 2: Best practice and production systems	
Recfishing Research	Effective extension and education initiatives to engage fishers in responsible and sustainable fishing practices.
SRL, NT, TAS, WA, SA, QLD & NSW RACs	Identify management efficiencies and the application of best practice in the implementation of harvest strategies.
ABFA, APFA	Evaluate humane harvest strategies and animal welfare optimisation.
ABFA	Manage harmful algae in ponds.
APFA, AAGA	Nutrient and emission reduction technologies.
ACA, APFA, AAGA	Automation, mechanisation and adoption of digital solutions.
National	Collection of information, development of frameworks and processes for consultation and compensation that support improved ocean management.
Outcome 3: A culture that is inclusive and forward-thinking	
National, ACPF, ACA	Promote development of new talents, skills, and networks through investment in the first year of our Capability, Capacity and Culture Change investment program.
HDR	Profile and track change in Australia's seafood workforce: establishing a baseline workforce dataset, supporting FRDC's Capability and Capacity Steering Committee.
National, HDR	Fishing and aquaculture workforce capability framework development, supporting FRDC's Capability and Capacity Steering Committee.
HDR	Target behavioural change in fisheries and aquaculture.
Outcome 4: Fair and secure access to aquatic resources	
National	Support knowledge sharing, spatial risk assessment, gap analysis, data sharing, and framework co-design to enable improved ocean management outcomes for fishing and aquaculture.
IRG, HDR	Develop approaches for incorporating Indigenous rights, practices and catch into resource sharing, sea country planning and harvest strategy models and frameworks, based on international experiences, in collaboration with the IRG.
Outcome 5: Community trust, respect and value	
National, HDR, SRL	Review and enhance environmental, social and governance reporting.
HDR	Optimise use of available data for economic and social analysis in fisheries and aquaculture, including supporting FRDC in its food security data challenge project.

Investment approach

Over the life of this AOP, FRDC will focus on strengthening our foundational skills while expanding our network of solution providers and potential co-investors to maximise our ability to deliver widespread, positive change. To do this, we will broaden our investment strategy to incorporate innovative techniques into value creation processes, bringing in a larger range of service providers and investors to address fishing and aquaculture issues. Effective dissemination and sharing of our knowledge assets will be crucial to achieving this goal.

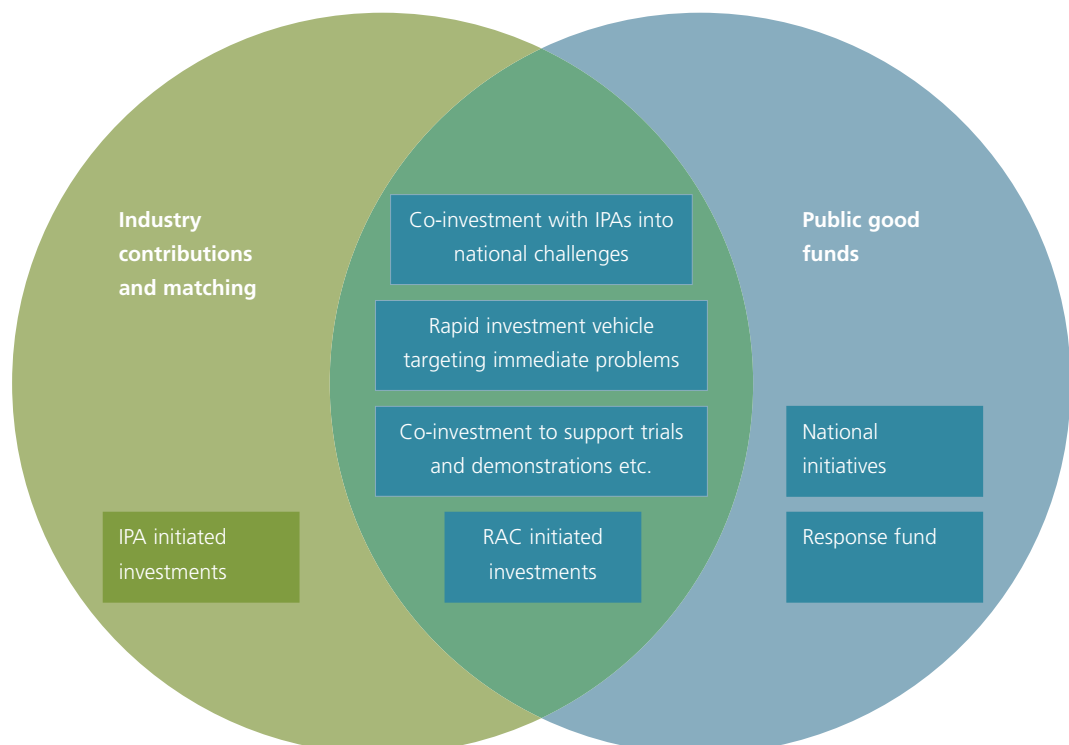
To incentivise collaboration on shared national challenges and promote exploration of diversification opportunities that help build resilience (such as investigation of alternative aquaculture species or catching technologies), we will offer matching investment opportunities including to our industry partners in these areas.

We will also keep working with our fishing and aquaculture partners to overcome current obstacles. Over the coming year we will be implementing a new investment approach in collaboration with our RACs that will prioritise relieving pressing immediate problems for our stakeholders.

Throughout the course of this AOP, FRDC will also work to drive adoption of new technologies and behavioural change by increasing the Corporation's investment in the development side of R&D. New investment opportunities will provide resources for members across fishing and aquaculture who are interested in conducting trials and/or demonstrating emerging solutions, with matching FRDC investment available for associated capital expenditures.

FRDC will continue to make our systems, procedures and services more understandable and responsive to stakeholder needs, and form new, often unexpected alliances to address common issues. FRDC will continue to evolve how we communicate impactful stories about what works and what does not.

FIGURE 5. CORE ELEMENTS OF FRDC'S INVESTMENT APPROACH THAT ARE DESIGNED TO INCENTIVISE COLLABORATION ON SHARED CHALLENGES, RESPOND TO PRESSING IMMEDIATE PROBLEMS AND PROMOTE GREATER FOCUS ON ACTIVITIES THAT SUPPORT DEVELOPMENT

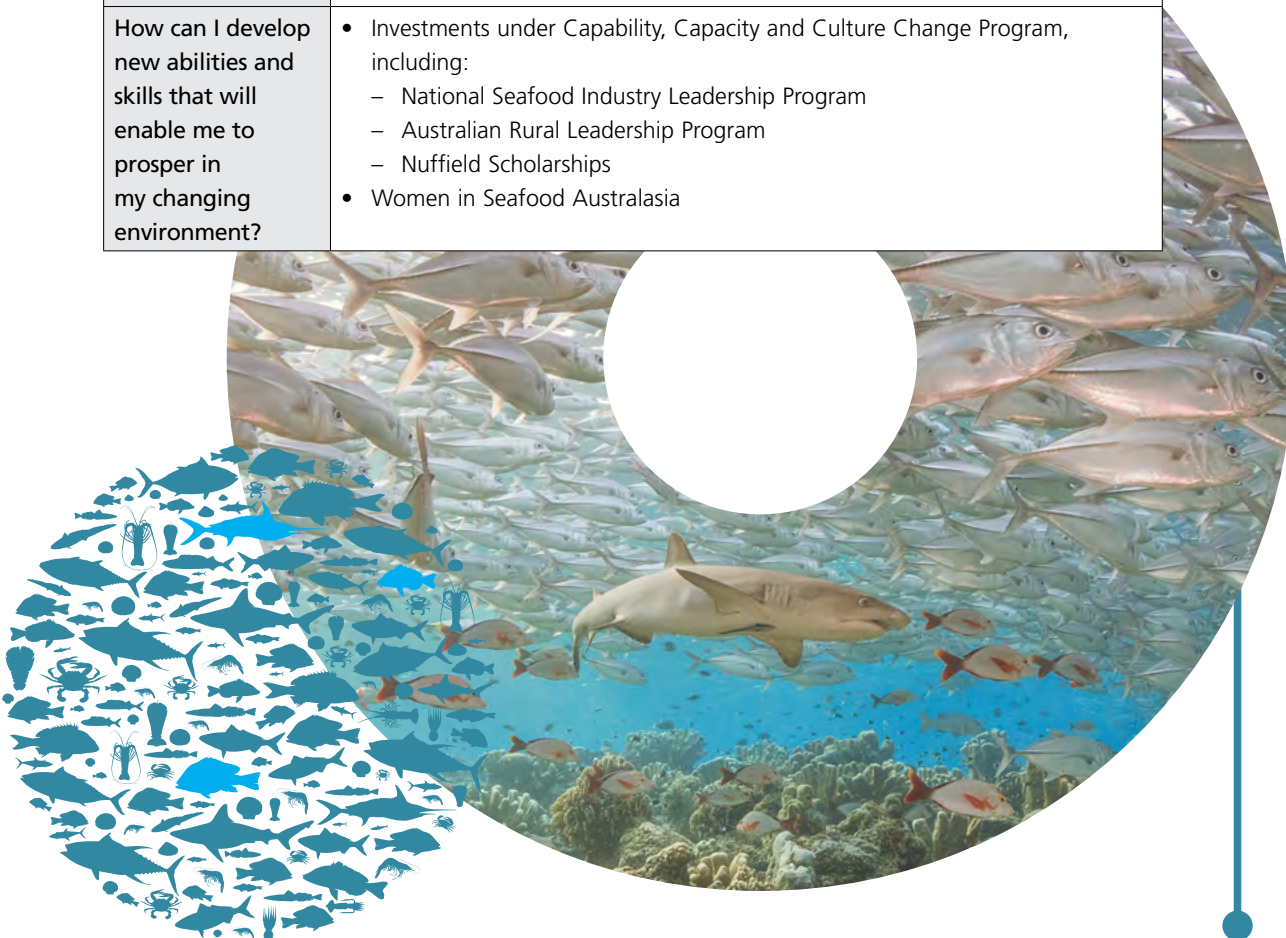


Delivering foundational information and support services

Throughout 2023–24, FRDC will provide services designed to help fishing and aquaculture stakeholders to expand their networks, find solutions and make quicker, wiser decisions. These initiatives, which complement the R&D projects covered in other sections of this AOP, are described in Table 5.

TABLE 5. FRDC SERVICES TO BE DELIVERED DURING THIS REPORTING PERIOD.

Where can I access reliable, dependable evidence to use as my foundation for decision making?	<ul style="list-style-type: none"> • Trade information • Status of Australian Fish Stocks • Whichfish • Community and consumer research • Australian Fisheries Statistics • Australian Fish Names Standard and Australian Standard for Aquatic Plant Names
Where can I obtain sound guidance to assist in removing trade and market access barriers?	<ul style="list-style-type: none"> • SafeFish • Seafood Trade Advisory Group
Where can I locate info regarding how I can continue to improve the health and safety outcomes at work?	<ul style="list-style-type: none"> • SeSafe • Seafood Industry Safety Initiative • Fish Safe Australia • Clean and Green Business Framework
How can I develop new abilities and skills that will enable me to prosper in my changing environment?	<ul style="list-style-type: none"> • Investments under Capability, Capacity and Culture Change Program, including: <ul style="list-style-type: none"> – National Seafood Industry Leadership Program – Australian Rural Leadership Program – Nuffield Scholarships • Women in Seafood Australasia

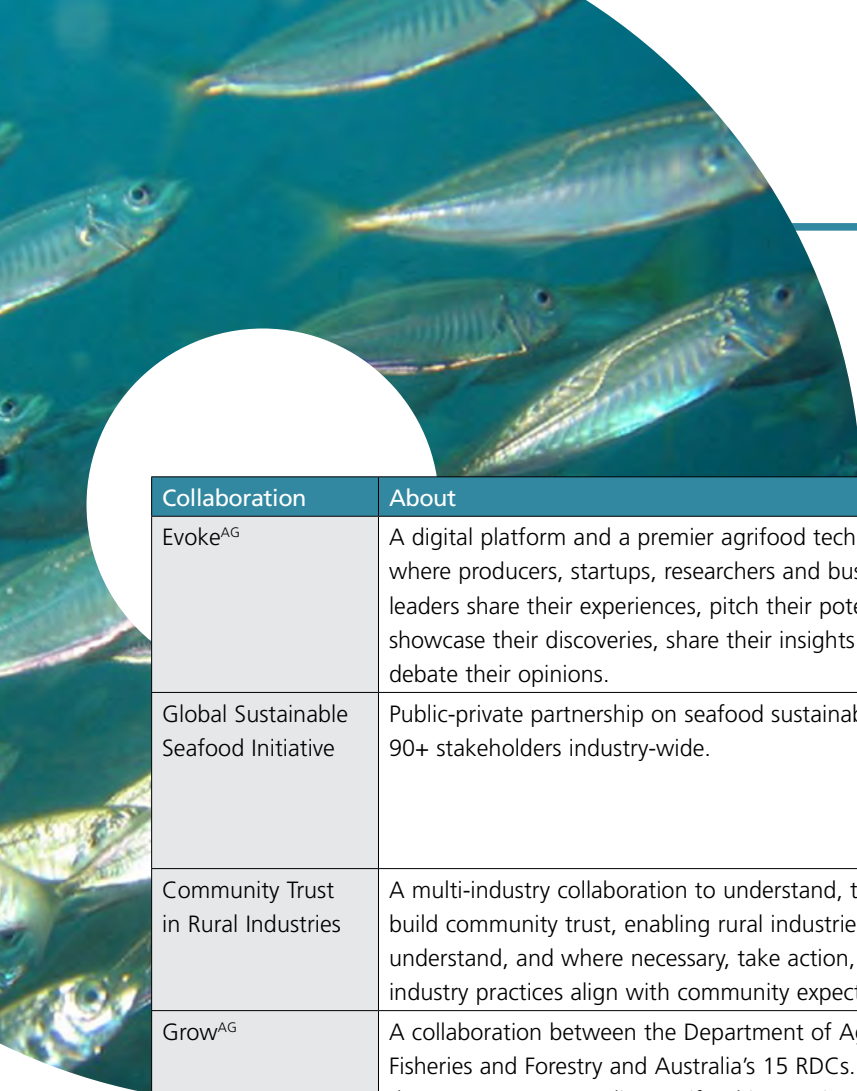


Collaboration activities

FRDC will collaborate with those with similar interests as an essential component to achieving our intended strategic goals. We will continue to work together and exert influence over fisheries, aquaculture and the larger regional development corporation system. Table 6 provides examples of external collaboration projects that will be executed during this AOP.

TABLE 6. EXAMPLE OF EXTERNAL COLLABORATIVE INITIATIVES FRDC WILL ENGAGE IN DURING 2023–24.

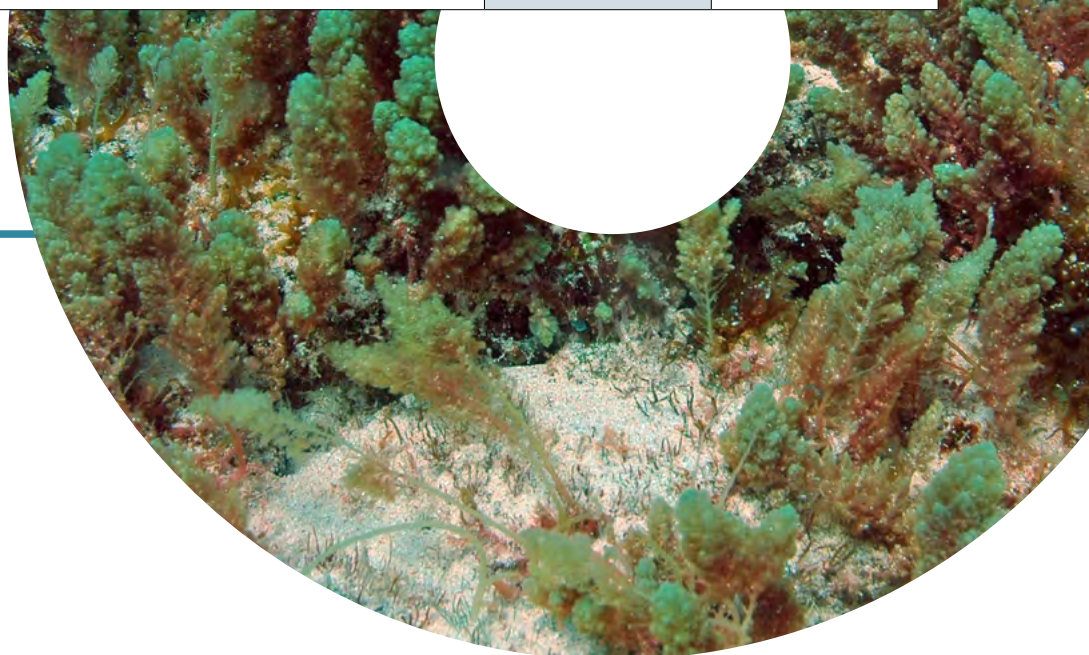
Collaboration	About	FRDC role	Outcomes
Agricultural Innovation Australia	A not-for-profit public company established to facilitate joint investment and collaboration in cross-industry agricultural issues of national importance.	Help establish and progress.	Collaborate and co-invest to address cross-industry issues of national importance.
Australian Sustainable Seaweed Alliance	National body to scale up environmentally responsible commercial farming of seaweed to provide food, feed and bioproducts.	Partner.	Develop Australia's seaweed aquaculture industry.
Blue Economy Cooperative Research Centre (CRC)	The Blue Economy CRC seeks to enable innovative, commercially viable and sustainable offshore developments and new capabilities that will see significant increases in renewable energy output, seafood production and jobs that will transform the future of Australia's traditional blue economy industries.	Collaborative investor.	Development of Australia's blue economy.
Council of Rural RDCs	Longstanding partnership between a mix of statutory authorities and industry-owned companies, who plan, invest in, manage and evaluate RD&E that delivers economic, environmental and social benefits for rural industries and the nation.	Help establish and progress.	Collaborate, coordinate, share insights.
Drought and Innovation Hubs	Part of the Australian Government's \$5 billion Future Drought Fund. The Hubs will provide networks for researchers, primary producers, community groups and others to work together to enhance drought resilient practices within their region. This focus on collaboration will make agricultural research useful and accessible, increasing innovation and commercialisation opportunities.	FRDC has been engaging with Hub leads around Australia to explore opportunities for collaboration.	Leverage benefit for fishing and aquaculture stakeholders and prevent duplication.
Economic Participation of Indigenous Communities CRC Bid	Will support strong economic participation and development of Indigenous people by identifying and co-designing pathways to engage in agribusiness while supporting their cultural, spiritual and physical relationship with Country.	Collaborative investor.	Establish culturally appropriate, commercially viable and sustainable businesses and partnerships integrated with supply and value chains.
Emerging National Rural Issues	A cross-RDC vehicle for promoting co-investment in research that informs and improves policy debate via our National Rural Issues Program.	Participant to explore collaborative and/or co-investment opportunities	Improved collaboration on shared problems.



Collaboration	About	FRDC role	Outcomes
Evoke ^{AG}	A digital platform and a premier agrifood tech event where producers, startups, researchers and business leaders share their experiences, pitch their potential, showcase their discoveries, share their insights and debate their opinions.	Participant, collaborator and co-investor.	A connected innovation ecosystem.
Global Sustainable Seafood Initiative	Public-private partnership on seafood sustainability with 90+ stakeholders industry-wide.	Collaborate with participants to drive sustainable seafood outcomes.	Align global efforts and resources to address seafood sustainability challenges.
Community Trust in Rural Industries	A multi-industry collaboration to understand, track and build community trust, enabling rural industries to better understand, and where necessary, take action, to ensure industry practices align with community expectations.	Collaborative co-investor.	Understand community sentiment and align actions.
Grow ^{AG}	A collaboration between the Department of Agriculture, Fisheries and Forestry and Australia's 15 RDCs. It is the gateway to Australia's agrifood innovation system, formalising a shared vision to showcase world-leading agricultural research, unique technologies and commercialisation opportunities in one, easy-to-use location.	Publish active and historical portfolio of RD&E activities, and commercialising opportunities.	Maximise visibility and accessibility to RD&E and find partners for commercialisation opportunities.
High Level Panel for Sustainable Ocean Economy	Collaborative commitment of 14 nations to build momentum for a sustainable ocean economy in which effective protection, sustainable production and equitable prosperity go hand in hand.	Contribute towards implementation of action agenda.	Building momentum towards a sustainable ocean economy, where effective protection, sustainable production and equitable prosperity go hand in hand.
Memorandum of Understanding with Indigenous Land and Sea Corporation	A corporate Commonwealth entity that invests in activities that seek to promote: <ul style="list-style-type: none"> growing the value and productivity of Country, owning and managing their Country sustainably, for future generations to enjoy, driving and influencing policy and opportunity for Country, preserving and protecting culture through reconnection with Country. 	Co-investing partner.	Improved economic opportunities for Indigenous communities in fishing and aquaculture.



Collaboration	About	FRDC role	Outcomes
International Coalition of Fisheries Associations	Coalition of the national fish and seafood industry trade associations from the world's major fishing nations, who collectively harvest more than 85% of the world's seafood.	Collaborate to develop shared approach on issues relevant to the long-term sustainable use of living marine resources.	Global collaboration on key strategic issues for the benefit of global food security and prosperity.
Marine Bioproducts CRC	A not-for-profit CRC bringing together more than 70 partners from academia and industry dedicated to producing new and sustainable products from our marine environment.	CRC partner.	Create more value from marine resources, with particular focus on seaweed.
National Marine Science Committee	An advisory body promoting coordination and information sharing between Australian Government marine science agencies and across the broader Australian marine science community.	CRC partner.	Develop Australia's blue economy.
Cooperative Research Centre for Solving Antimicrobial Resistance in Agribusiness, Food and Environments (CRC SAAFE)	Focus on protecting Australia's food and agribusiness industries, and the environments they operate in, from the growing threat of antimicrobial resistance (AMR). CRC SAAFE aims to tackle AMR at the source, across a diverse and complex range of origins and environments.	CRC partner.	Addressing threat of antimicrobial resistance.



Strategic alignment

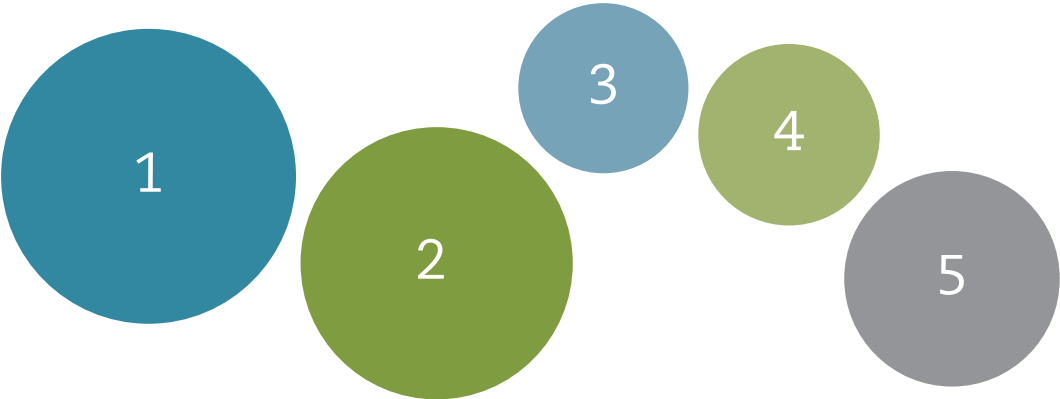
Government research priorities

The proposed focus areas described within this AOP align with the Australian Government’s Agriculture Innovation Priorities and Science and Research Priorities, as summarised in Figure 6.

Agriculture Innovation Priorities

FIGURE 6. ALIGNMENT OF ACTIVITY GROUPING DESCRIBED WITHIN TABLE 4 TO AGRICULTURAL INNOVATION PRIORITIES. SIZE OF CIRCLE INDICATES PROPORTIONAL FOCUS

1.	Trusted exporter of premium food and agricultural products.
2.	Champion of climate resilience to increase the productivity, profitability and sustainability of the agricultural sector.
3.	World leader in preventing and rapidly responding to significant pests and diseases through future proofing our biosecurity systems.
4.	Mature adopter, developer and exporter of digital agriculture.
5.	Other.



Science and Research Priorities

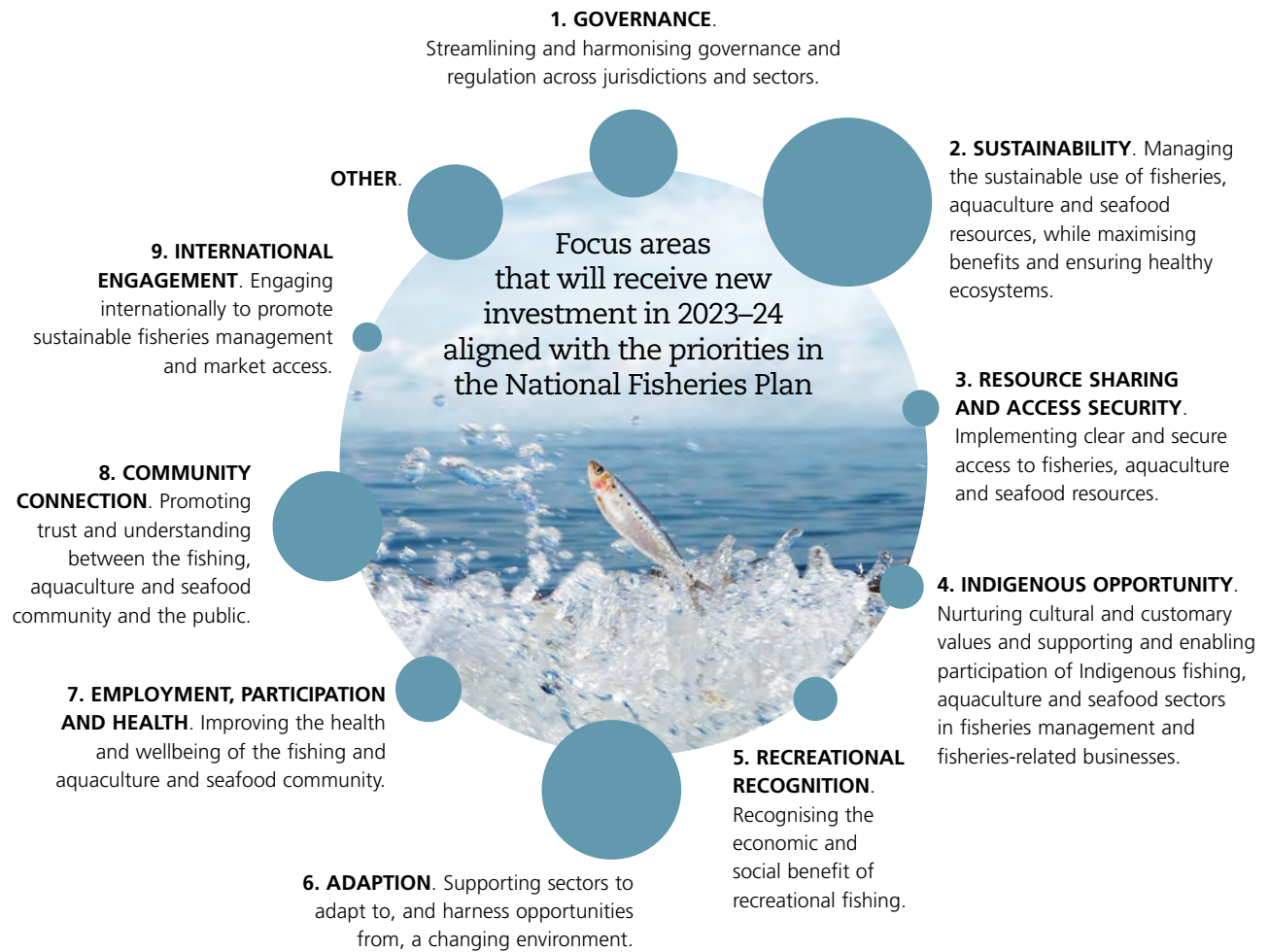
The Australian Government is currently consulting to allow Australia’s Science and Research Priorities and national science priorities to be contemporised. FRDC will continue to consider national priorities in making investment decisions to ensure alignment.



National Fisheries Plan

The National Fisheries Plan provides a shared vision to grow Australia's fishing and seafood sectors in a sustainable way. It does this by outlining initiatives and targets to be achieved by 2030 across nine priority areas. Our new investments commencing during the life of this AOP against each of the nine priority areas is summarised in Figure 7. Circle size denotes the number of discrete outputs addressing each opportunity.

FIGURE 7. ALIGNMENT OF ACTIVITY GROUPINGS DESCRIBED WITHIN TABLE 4 TO NATIONAL FISHERIES PLAN PRIORITIES. CIRCLE SIZE INDICATES PROPORTIONAL FOCUS ON EACH PRIORITY



Evaluation framework

This AOP meets requirements under section 35(1)(b) of the PGPA Act and aligns with the principles-based approach to accountability and reporting outlined within the Statutory Funding Agreement.

Our Monitoring and Evaluation Framework has been developed to provide a coordinated approach for monitoring, evaluation and reporting that will enable us to better meet the needs of our diverse stakeholders. The framework sets out a forward-looking, results-based process for evaluating performance over the life of our R&D Plan. Specifically, the framework aims to drive:

- monitoring of performance—of FRDC’s progress against R&D Plan outcomes,
- demonstration of impact—to determine the extent to which R&D Plan outcomes have been achieved, and the impact of our investments,
- accountability—to the Australian Government and our stakeholders,
- compliance—with requirements under key legislation and our Statutory Funding Agreement,
- continual improvement—regarding the effectiveness, efficiency and appropriateness of investments, partnerships, communication, and internal systems and processes.

Performance management framework

The seven elements of performance management (inner ring of Figure 8) make up the core components of our performance management framework, and expand on the Commonwealth input, output, outcome and impact reporting framework. These are further broken down into 28 facets (outer ring of Figure 8). Data collection for each will occur on a frequency that is appropriate for intended use and balances the costs of evaluation and project delivery.

Progress against performance focus areas

As a part of FRDC’s annual performance evaluation, we meet with the Department of Agriculture, Forestry and Fisheries (DAFF) annually to present and discuss how we have met our key performance indicators under our Statutory Funding Agreement. This includes demonstrating our activities and indicators towards achieving impact, how we are engaging with our stakeholders and how we are meeting our governance requirements. This discussion supports FRDC’s annual report and provides an opportunity to consider practical continuous improvement for the following year. In 2022 four areas of focus were identified. A summary of progress against each follows.

1. Increased in-depth consultation: ensuring stakeholders understand the overarching objective and rationale for the path taken to achieve it, highlighting outcomes up front and continued strong engagement with stakeholders to ensure they are informed of progress on key activities.
 - Project underway working with Extension Officer Network to explore the use of systems planning and impact pathway thinking, in prioritisation, working with IPAs, RACs and Coordinating Programs.
 - Evolution of methods for delivery of annual Stakeholder Planning Workshop to explore shared strategic needs.
 - Continued engagement with sectors through IPAs.
 - Mid-year short-form report showing impact highlights and overall progress against the R&D Plan, including a list of projects and key activities to date.

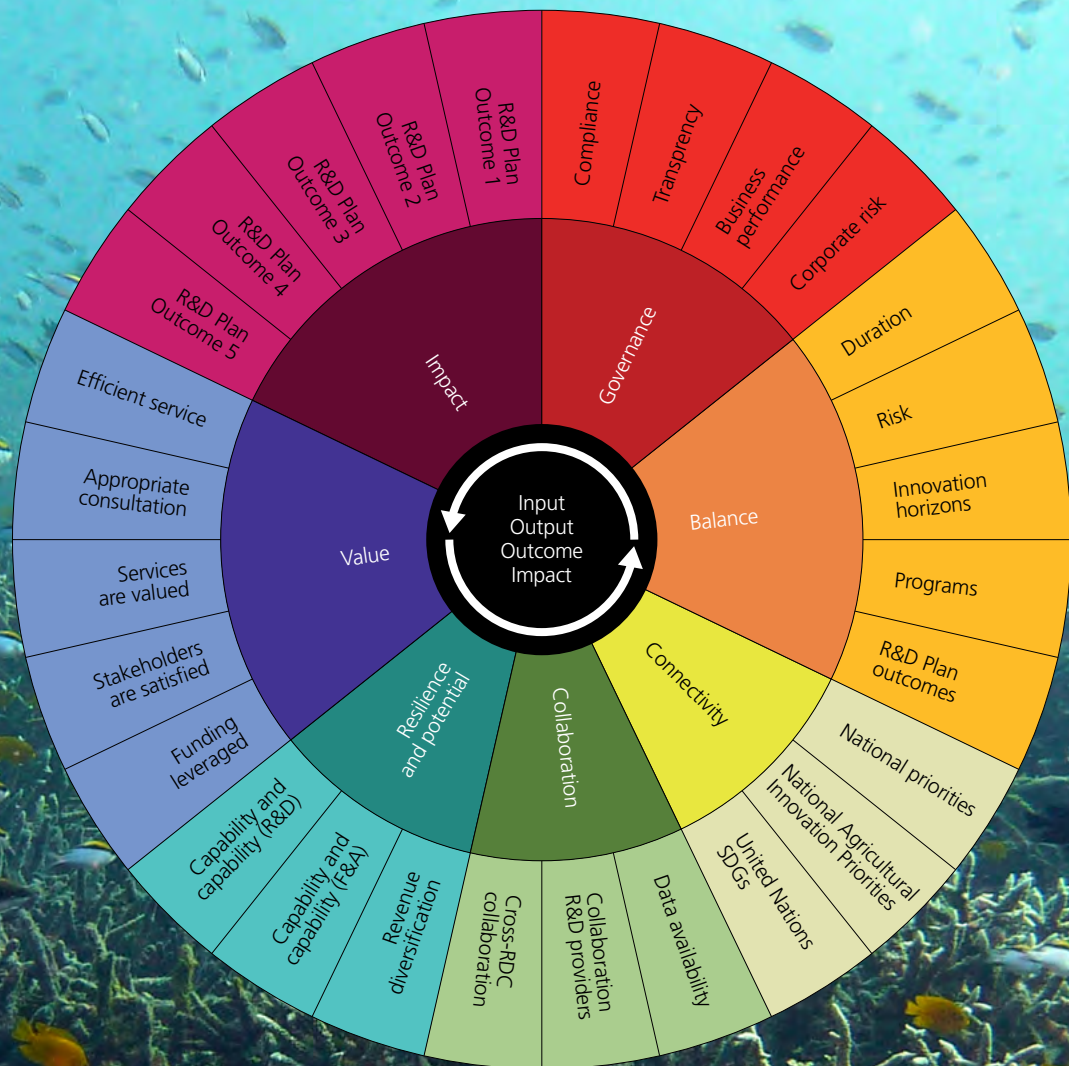


FIGURE 8. OUR PERFORMANCE MANAGEMENT FRAMEWORK

THE INNER RING SHOWS SEVEN ELEMENTS OF PERFORMANCE, AND OUTER RING SHOWS 28 FACETS GROUPED UNDER EACH ELEMENT. KEY INFORMATION, INTELLIGENCE AND PLANNING ELEMENTS ARE LISTED BELOW. TEXT IN WHITE (LEFT PANEL) INDICATES REGULATORY AND GUIDANCE INPUTS TO FRDC. TEXT IN BLACK (RIGHT PANEL) INDICATES INFORMATION, INTELLIGENCE AND PLANNING OUTPUTS FROM FRDC.

REGULATORY

- PIRD Act
- PGPA Act
- Other legislation (e.g. EPBC Act) and associated regulations, policy orders and rules, Statutory Funding Agreement

GUIDANCE

- Guidelines for Statutory Funding Agreement
- Companion to Statutory Funding Agreement
- RDC Knowledge Transfer and Commercialisation Guide
- Best Practice to Stakeholder Engagement
- Agriculture Innovation Policy Statement
- National R&D Priorities
- National Agricultural Innovation Priorities
- National Fisheries Plan
- FRDC Policies and Procedures — Quality

PLANNING AND IMPACT

- R&D Plan
- Annual Operational Plans
- Risk Framework
- Annual reports
- Periodic web-based performance reports
- Financial reports
- Stakeholder reports
- Independent performance review

2. Increased focus on post-project delivery: connecting industry and project leaders to maximise benefits and to support further innovation.
 - Extension Officer Network established May 2022 with one extension officer is located in each jurisdiction.
 - The role of extension officers is to connect research and stakeholders at a regional scale to maximise the impact of R&D.
 - Extension Officers work with all stakeholders including wild catch, recreation, aquaculture, Indigenous, post-harvest and natural resource management sectors.
 - Augments efforts to promote adoption of investment outputs.
 - Extension officers have undertaken more than 700 engagement activities, to date. Impact from these interactions include:
 - Approximately 50 per cent of these interactions have connected stakeholders and researchers to enable R&D design, ideation or future innovation based on stakeholder needs.
 - Approximately 20 per cent of these interactions have resulted in direct extension of previous or current projects.
 - Increased stakeholder input to FRDC's R&D priority setting process.
3. Improving project timeframes from concept stage to on-the-ground delivery, where possible.
 - Running internal sprint process for application evaluations.
 - Engaging the extension officer network to collate areas of need.
 - Activating alternative application types to reduce transaction time and costs.
 - Developing a new milestone template to expedite project delivery.
 - The Board is currently considering new strategies including:
 - Programmatic investments.
 - Tactical investment stream to expedite short term investments to address more immediate pain-points of high adoptability.
4. First nations engagement: providing opportunities for broader engagement beyond the Indigenous Reference Group in the longer term and providing additional time for consultation with First Nations stakeholders.
 - Co-invested with National Environmental Science Program Marine and Coastal Hub in a workshop to advance a national framework for Sea Country research and monitoring in Australia, 10–11 August 2022.
 - Engaged an independent consultant to review processes used by FRDC for the identification of Indigenous RD&E needs.
 - Became a tier 1 partner in the Economic Participation of Indigenous Communities CRC bid.
 - Memorandum of understanding in place with the Indigenous Land and Sea Council (ILSC).
 - Explored opportunities to share information within the broader Extension Officer Network.
 - Investigated options to partner with the ILSC to increase capability and capacity for Indigenous extension.

Governance framework

Organisational structure and function

The Managing Director oversees five functional areas: Finance and Business, Information and Communication Technology, R&D Investment, Strategy and Innovation, and Stakeholder Engagement. The Minister appoints a Chair and up to eight directors with varying areas of experience to serve on FRDC's Board, which is responsible for governance, management of strategic direction and delivering accountable performance.

The Board meets five times each year, excluding meetings called for special reasons. The Board also plans a schedule of regular regional site visits to meet with fishing and aquaculture stakeholders face to face and understand their needs.

FRDC's workforce and the wider virtual community that support our operations are always evolving to better meet fishing and aquaculture needs. During their second year of operation (2023–24), our team of Extension Officers will continue to facilitate adoption of R&D through in-person engagement in the regions.

Key governance measures

Element	Scope
Enabling legislation	The PIRD Act sets out the legislative framework and rules for the establishment and operation of FRDC.
Governance legislation	The PGPA Act specifies requirements for good governance, performance and accountability.
Quality management system	Systematic processes designed to meet or exceed the expectations of stakeholders and incorporates management of FRDC policies.
Board governance	Key functions include overseeing corporate governance, systems and processes used to direct and control FRDC operations and investment decisions. This is enhanced by the Board's spread of skills and experience and ongoing development in directorship.
Statutory Funding Agreement	FRDC's funding agreement with the Australian Government specifies terms and conditions on which money is paid by the Commonwealth and expended. The funding agreement companion document describes performance principles to guide RDC performance, accountability and reporting.
Strategic planning and priority setting	FRDC works with jurisdictions and sectors to undertake planning and priority setting for R&D in consultation with government, Australian Fisheries Management Forum (AFMF), sectors, stakeholders and research partners.
Delegation	The Board oversees the policy and issues an instrument that delegates specific powers of the Board to FRDC employees.
Portfolio Investment	FRDC investment is overseen by the Board. The Board can approve funding where deemed appropriate, or on a risk-based system.
Performance monitoring	Includes monitoring and evaluating progress against the R&D Plan, and corporate performance.
Reporting to stakeholders	FRDC is required under the PIRD Act to consult and report to the Government and the statutory appointed representative organisations and reports to stakeholders on R&D investment activities and issues through a number of formal and informal approaches.

Investment allocation

FRDC's Board ensures the necessary policies, systems and procedures are in place so that R&D investment addresses stakeholder needs and delivers adoption-promoting initiatives. The Board approves each AOP and accompanying expenditure (see Table 2). Investment comprises ongoing commitments, contracts and new spending on activities, initiatives and programs aligned to stakeholder needs, the AOP and the R&D Plan. The Board delegates to FRDC's Leadership Team those matters that are best suited to management, with the Board providing necessary governance and oversight in the form of:

- updates on achievements against R&D outcomes on a rotational timeframe (one per Board meeting per year),
- a summary of the proposed investment areas for the given period in the AOP,
- an update on the current budget, including available funds for a four-year period in the AOP.

In carrying out the Board's delegated responsibilities, the Executive Leadership Team:

- develops applications in accordance with the investment in R&D policy and associated procedures,
- evaluates applications submitted, using additional external review where necessary,
- assesses the level of risk of an investment and determines whether an application should be elevated to be reviewed by the Board,
- prepares an evaluation sheet for the appropriate FRDC delegate (as per the delegation policy) or to support the Board in making a decision on the investment request,
- jointly monitors activities of our partners and stakeholders (including budget allocations) to ensure that agreed priorities, needs and outcomes are being realised, and budgets are not exceeded within agreed levels of project slippage (when a projects misses a deadline).

The objective is to develop a more adaptable approach so we can evaluate investment proposals at any time of year (see Appendix 4). Variances may occur each year based on available money and timing of contractual activity. This strategy will be modified during this AOP based on feedback from RACs, IPAs and Coordination Programs as they examine new developments and update their priorities.

Proposals will be evaluated against the following criteria using a risk-based approach:

- Reputational—Is there a danger to its stakeholders' reputation/brand, and might operations cause unwanted publicity?
- Political—Is the intended action in conflict with government policy? Has a political party requested the activity?
- Ethical—Is there a risk of deaths of vulnerable, endangered, or protected species?
Are there any tangible consequences for workplace health and safety, animal welfare, or human welfare?



Appendix 1: Portfolio Budget Statements 2023–24

Budgeted statement of comprehensive income (showing net cost of services) for the period ended 30 June

	2022–23 Estimated actual	2023–24 Budget	2024–25 Forward estimate	2025–26 Forward estimate	2026–27 Forward estimate
	\$,000	\$,000	\$,000	\$,000	\$,000
EXPENSES					
Employee benefits	4,213	4,529	4,756	4,996	5,243
Suppliers	1,125	1,199	1,259	1,322	1,388
Grants	39,029	43,729	38,196	37,903	39,653
Depreciation and amortisation	370	375	375	375	375
Finance costs	9	10	5	3	1
Total expenses	44,746	49,842	44,591	44,596	46,660
LESS:					
OWN-SOURCE INCOME					
Contributions	8,998	9,445	9,948	10,506	11,091
Interest	300	300	300	300	300
Other	4,651	5,750	4,000	2,000	2,000
Total own-source revenue	13,949	15,495	14,248	12,806	13,391
Total own-source income	13,949	15,495	14,248	12,806	13,391
Net cost of (contribution by) services	30,797	34,347	30,343	31,790	33,269
Revenue from Government					
Commonwealth contribution	26,797	28,993	30,374	31,812	33,323
Total revenue from Government	26,797	28,993	30,374	31,812	33,323
Surplus/(deficit) attributable to the Australian Government	(4,000)	(5,354)	31	22	54
Total comprehensive income/(loss) attributable to the Australian Government	(4,000)	(5,354)	31	22	54

The Portfolio Budget Statements include the Australian Fisheries Management Authority levy and farmed prawn levy, in the line item 'Revenue from the Australian Government'. This is due to the requirement by DAFF, as the levies are paid from the consolidated revenue fund to FRDC.

Appendix 2: Budgeted Statement of Financial Position

(as at 30 June)

	2022–23 Estimated actual	2023–24 Budget	2024–25 Forward estimate	2025–26 Forward estimate	2026–27 Forward estimate
	\$,000	\$,000	\$,000	\$,000	\$,000
ASSETS					
Financial assets					
Cash and cash equivalents	23,115	18,566	19,516	20,194	19,227
Trade and other receivables	2,802	3,054	2,310	1,985	2,208
Total financial assets	25,917	21,620	21,826	22,179	21,435
Non-financial assets					
Land and buildings	521	351	181	11	641
Property, plant and equipment	81	106	91	76	61
Intangibles	284	244	204	164	124
Total non-financial assets	886	701	476	251	826
Total assets	26,803	22,321	22,302	22,430	22,261
LIABILITIES					
Payables					
Projects	1,477	2,504	2,733	3,026	2,034
Suppliers	200	200	200	200	200
Total payables	1,677	2,704	2,933	3,226	2,234
Interest bearing liabilities					
Leases	567	396	217	31	800
Total interest bearing liabilities	567	396	217	31	800
Provisions					
Employee provisions	1,214	1,200	1,100	1,100	1,100
Total provisions	1,214	1,200	1,100	1,100	1,100
Total liabilities	3,458	4,300	4,250	4,357	4,134
Net assets	23,345	18,021	18,052	18,073	18,127
EQUITY*					
Parent entity interest					
Reserves	620	650	650	650	650
Retained earnings	22,725	17,371	17,402	17,423	17,477
Total parent entity interest	23,345	18,021	18,052	18,073	18,127
Total equity	23,345	18,021	18,052	18,073	18,127

* 'Equity' is the residual interest in assets after deduction of liabilities.

Prepared on Australian Accounting Standards basis.

Appendix 3: Budgeted Cash Flow Statement

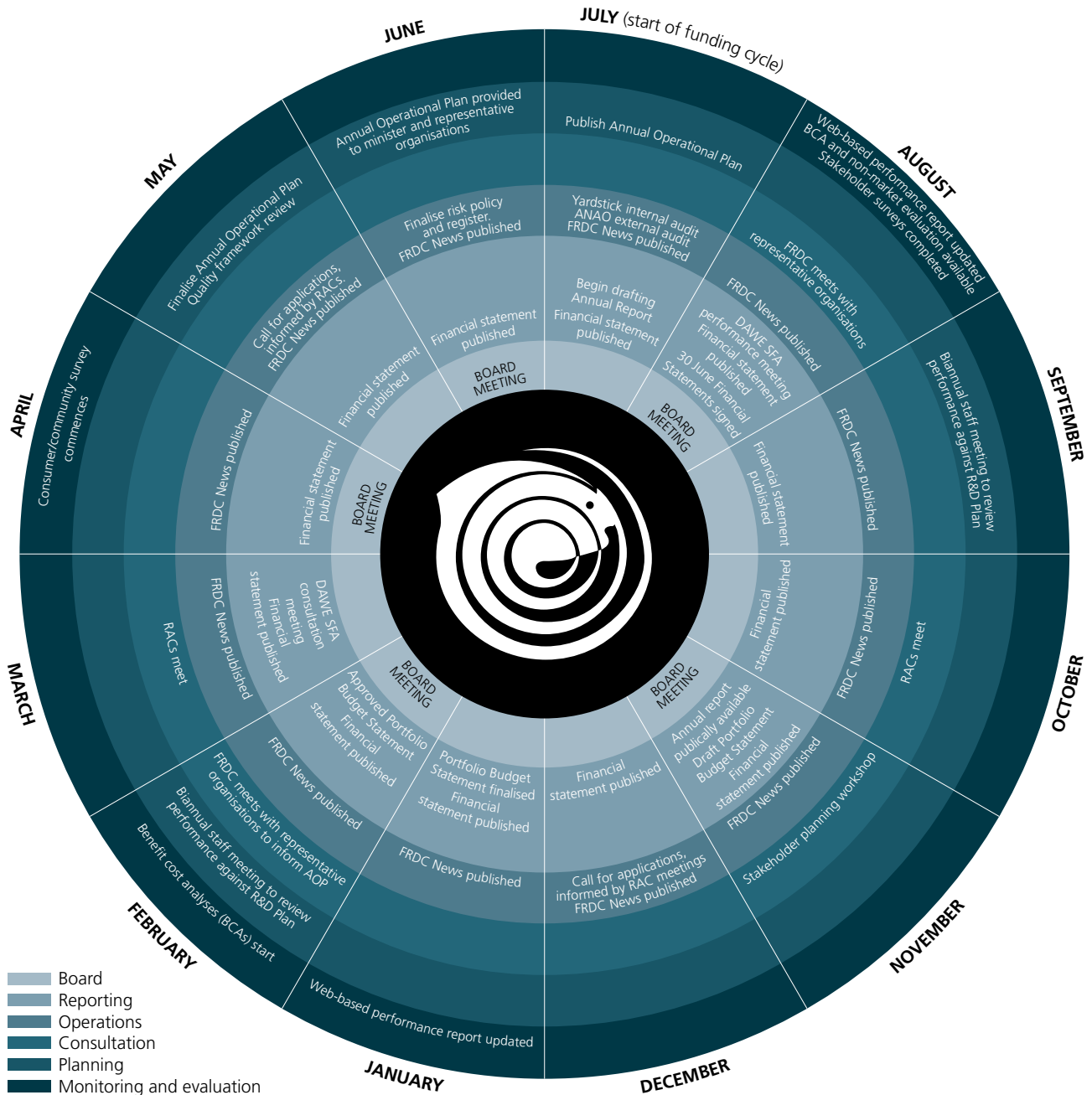
(for period ended 30 June)

	2022–23 Estimated actual	2023–24 Budget	2024–25 Forward estimate	2025–26 Forward estimate	2026–27 Forward estimate
	\$,000	\$,000	\$,000	\$,000	\$,000
OPERATING ACTIVITIES					
Cash received					
Revenue from Government	26,797	28,993	30,374	31,812	33,323
Interest	300	300	300	300	300
Net GST received	1,902	1,998	1,611	1,439	1,597
Other operating receipts	13,779	14,973	14,570	12,769	12,922
Total cash received	42,778	46,264	46,855	46,320	48,142
Cash used					
Employees	4,173	4,543	4,856	4,993	5,243
Suppliers	384	1,200	1,259	1,323	1,388
Projects	43,079	44,730	39,456	38,987	42,296
Interest payments on lease liability	9	10	5	3	1
Other operating payments	748	–	–	–	–
Total cash used	48,393	50,483	45,576	45,306	48,928
Net cash from (used by) operating activities	(5,615)	(4,219)	1,279	1,014	(786)
INVESTING ACTIVITIES					
Cash used					
Purchase of property, plant and equipment and intangibles	120	120	120	120	120
Total cash used	120	120	120	120	120
Net cash from/(used by) investing activities	(120)	(160)	(150)	(150)	(150)
FINANCING ACTIVITIES					
Cash used					
Principal payments on lease liability	155	170	179	186	31
Total cash used	155	170	179	186	31
Net cash from/(used by) financing activities	(155)	(170)	(179)	(186)	(31)
Net increase (decrease) in cash held	(5,890)	(4,549)	950	678	(967)
Cash and cash equivalents at the beginning of the reporting period	29,005	23,115	18,566	19,516	20,194
Cash and cash equivalents at the end of the reporting period	23,115	18,566	19,516	20,194	19,227

Prepared on Australian Accounting Standards basis.

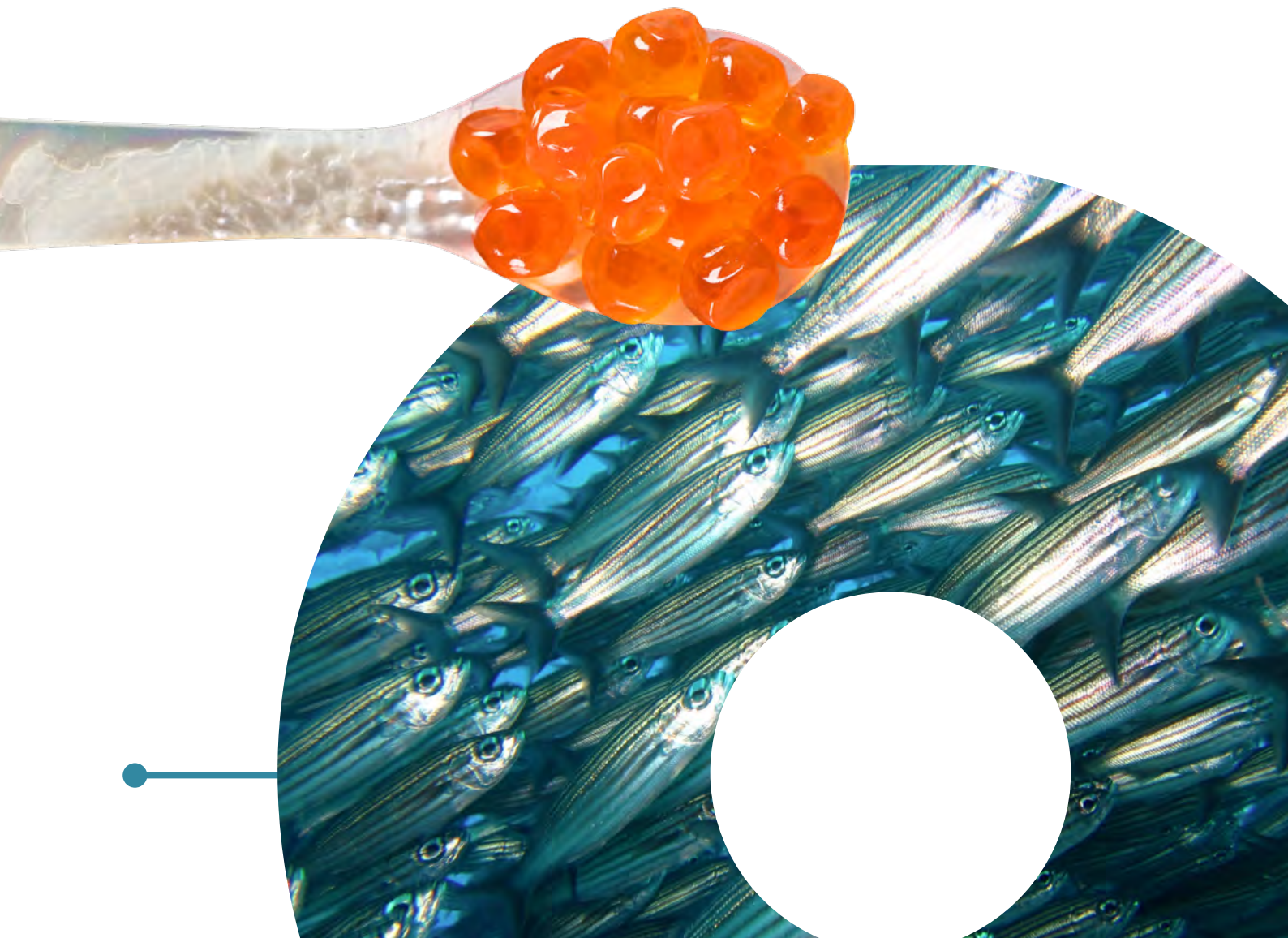
Appendix 4: FRDC's annual planning, operations, monitoring and evaluation cycle

Our planning and investment cycle is summarised in the figure below.



Appendix 5: Abbreviations and acronyms

ABARES	Australian Bureau of Agricultural and Resource Economics and Sciences
AGVP	average gross value of production
AOP	Annual Operational Plan
CRC	cooperative research centre
DAFF	Australian Government Department of Agriculture, Fisheries and Forestry
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i>
FRDC	Fisheries Research and Development Corporation
GST	goods and services tax
GVP	gross value of production
HDR	Human Dimensions Research Coordinating Program
ICT	information and communications technology
IPA	Industry Partnership Agreement
PGPA Act	<i>Public Governance, Performance and Accountability Act 2013</i>
PIRD Act	<i>Primary Industries Research and Development Act 1989</i>
R&D	research and development
RAC	Research Advisory Committee
RD&E	research, development and extension
RDC	research and development corporation



Appendix 6: Glossary

Term	Explanation
Annual cycle	FRDC's annual cycle of activities is determined by the PIRD Act and incorporated into quality management system documentation.
Annual Operational Plan (AOP)	FRDC's AOP is prepared in accordance with the PIRD Act and submitted to the Minister for approval before the beginning of each new financial year. The document gives effect to the R&D plan, specifying planned income, expenditure, strategies, outputs, and key performance indicators for the coming financial year.
Annual Report	FRDC's annual report which is tabled in Parliament.
Application	An application is a formal request, by an organisation or individual, for FRDC funding. Applications are made in writing or by an electronic medium in a prescribed format using the online FishNet system.
Competitive round	The competitive round is a transparent and competitive process to encourage a broad range of researchers and proposals for funding. It has the additional benefit of generating innovative ideas for fisheries and aquaculture science, and 'blue sky' research.
Coordinating program	A structure formed by FRDC to manage a suite of cross-sectoral projects over a specified time period. This can be either an initiative of FRDC, or at the request of a stakeholder group.
Corporate governance	The systems and processes used by an organisation to direct and control its operations, affairs and activities to ensure the objectives of the organisation are met.
Data	All information stored within FRDC's ICT systems including but not limited to e-mails, documents, analyses, animations and models in electronic format (e.g. databases and spreadsheets, spatial layers), photographs, research.
Delegation	A delegation is the act or instrument by which the Board either: (a) appoints a person as representative of the Board, or (b) commits powers of the Board to another as agent. The passing down of authority and responsibility to another person (normally from the Board to an employee; or from a manager to a subordinate) to carry out specific activities.
Deliverable	A prescribed significant progress point in a project. Each deliverable will require a report describing what has been achieved, or not, and allows the reviewer to measure the progress of the project.
Director	Part-time office holder appointed by the Minister under section 7 of the PIRD Act and under terms and conditions determined by the Remuneration Tribunal.
Evaluation	The process of reviewing an application with a view to approving or rejecting the application.
Extension	The communication of knowledge or technology to end-users, stakeholders and the community. Activities that lead to the adoption of research results to assist stakeholders to improve fishing and aquaculture profitability; environmental and stock performance; or to establish new fishing and aquaculture activities through the: <ul style="list-style-type: none"> organised communication of research and information, purposeful transfer of skills.
Fishing and aquaculture	The sectors that make up fishing and aquaculture, and associated industries. Includes commercial wild harvest, recreational wild harvest, Indigenous, aquaculture, and post harvest sectors, as well as fisheries scientists and managers.
FishNet	FRDC's online application system.
FRDC Board	FRDC is governed by a board of directors whose expertise is prescribed by the PIRD Act. The Board is responsible to the Minister and the Assistant Minister and, through them, to the Parliament.
Indigenous Reference Group (IRG)	A group of Indigenous Australians established by FRDC in 2012, made up of members nominated from Indigenous Australian communities. With respect to the facilitation of Australian fisheries and aquaculture R&D, and activities to promote adoption, the IRG: <ul style="list-style-type: none"> acts as a research coordination program, assists FRDC in engaging with Indigenous Australian communities.

GLOSSARY. CONTINUED

Term	Explanation
Industry partner	A sector, industry or enterprise that has entered into a contractual relationship with FRDC for the purposes of research, development or extension.
Industry Partnership Agreement (IPA)	An agreement between FRDC and a sector body to manage a suite of sectoral projects over a specified time period. IPAs have a budget allocation, based on forecast contributions (at least 0.25% of GVP), FRDC 'matching' contributions, less an 8% FRDC service fee.
Policy	A policy describes agreed principles of action or rules of conduct and will be developed and authorised where there is a need for a clear description of behavioural boundaries and consistency of approach.
Portfolio Budget Statements (PBS)	The PBS describes the allocation of funding under FRDC's structure to provide the means for it to meet its prescribed outcomes. The primary purpose of the PBS is to inform the Parliament of the basis for proposed budget outlays, with particular emphasis on the proposed provisions in Appropriation Bills (1 and 2). This document is drafted to ensure consistency with the AOP and is prepared annually. It is consolidated, together with the statements of other rural RDCs, by the Commonwealth Department of Agriculture, Fisheries and Forestry. Unlike the R&D Plan and AOP, it is tabled in the Commonwealth Parliament.
Primary Industries Research and Development Act 1989 (PIRD Act)	The PIRD Act is an act to provide for the undertaking of research and development relating to primary industries and natural resources, and for related purposes.
Project	A project is an FRDC-funded activity. An approved application becomes a project once an agreement has been signed by delegates of both FRDC and the research provider.
Public Governance, Performance and Accountability Act 2013 (PGPA Act)	The PGPA Act is mainly about the governance, performance and accountability of Commonwealth entities.
R&D Plan	FRDC's Research and Development Plan (the Plan) is FRDC's principal planning document and is prepared with regard to Ministerial directions and government policy. It is finalised following consultation with stakeholders from government, sectors and in particular, FRDC's representative organisations. It is the principal source of information about FRDC's future direction and: <ul style="list-style-type: none"> • describes FRDC, • defines FRDC's business environment, • lays down, against the business environment, FRDC's planned outcomes and priorities for the planning period, • outlines the strategies that FRDC intends to adopt to achieve those outcomes, • covers a period of five years starting at the end the preceding R&D Plan, • is approved by the Minister for Agriculture, Fisheries and Forestry and is reviewed annually.
Research and development (R&D)	Systematic experimentation and analysis in any field of science, technology or economics (including the study of the social or environmental consequences of the adoption of new technology) carried out with the object of: <ol style="list-style-type: none"> (a) acquiring knowledge that may be of use in obtaining or furthering an objective of that primary industry or class, including knowledge that may be of use for the purpose of improving any aspect of the production, processing, storage, transport or marketing of goods that are the produce, or that are derived from the produce, of that primary industry or class, or (b) applying such knowledge for the purpose of attaining or furthering such an objective (PIRD Act Section 4).
Stakeholder	People, organisations or groups with an interest or stake in FRDC's business. FRDC's stakeholders are the fishing and aquaculture community, fishing research providers, the Commonwealth, state and territory governments, relevant ministers and the people of Australia. This does not include FRDC staff.



FRDC

FISHERIES RESEARCH AND
DEVELOPMENT CORPORATION

