# FRDC STAKEHOLDER ANNUAL PLANNING WORKSHOP

DATE: VENUE: FACILITATOR: PURPOSE:	<ul> <li>29-30 August 2018</li> <li>National Wine Centre Corner Botanic &amp; Hackney Road, Adelaide SA</li> <li>Dr Len Stephens</li> <li>1. To identify potential multi-sector, collaborative priorities and to plan their implementation.</li> <li>2. To enable industry representatives to hear and comment on updates concerning current and proposed FRDC programs, communication and extension.</li> </ul>
OUTPUT:	<u>A total of 16 potential collaborative priorities were identified at</u> the Annual Stakeholder Workshop
APPENDICES:	Appendix 1: <u>Agenda</u> ; Appendix 2: <u>List of Attendees</u> ; Appendix 3: <u>Presentations</u> .



## **MINUTES OF THE MEETING**

#### DAY ONE WEDNESDAY 29 AUGUST

#### Kaurna Welcome to Country (Mickey O'Brien)

## **Opening the Workshop and Important Background Issues (Patrick Hone)**

Patrick Hone addressed the workshop attendees asked that they keep the key messages from the welcome to country: (i) use this opportunity to listen to each other; (ii) see the bigger picture; (iii) share our knowledge and ideas; and (iv) use this collective knowledge. This was in line with the focus on the workshop – which was:

- To be collaborative we need to develop collaborative priorities.
- To ensure best use of available funds remove duplication and drive change.
- To establish large collaborative projects to bring about change to achieve this, there is a need to find commonality between jurisdictions and sectors and get people to work across platforms/stakeholder groups.

Patrick then provided a brief overview, setting the scene of the FRDC planning environment and highlighted some key aspects of the FRDC's operating environment – these included:

- Financial growth in the Australian fishing and aquaculture industry is positive (GVP increased to over \$3 billion). This has translated into increased research funds made available to the FRDC – currently > \$30 million/an.
- Aquaculture is very well positioned for growth (new infrastructure investment occurring).
- There is significant value adding for the recreational sector. Iconic recreational species are generally in good condition (with some exceptions).
- Indigenous Reference Group is contributing well but we lack an Indigenous representative body.
- A potential change to the RDC funding model has been flagged.

- Government push for cross primary industry investment, i.e. cotton, wool, graziers, fish but hard for fish to fit into this.
- FRDC performance review shows that FRDC operates in a complex environment hard to see what you are trying to achieve.

Patrick then touched on the Key national activities for the FRDC that had been recently instigated – these included:

- Addressing industry's social licence to operate led by the HDR.
- National Seismic RD&E coordination program.
- National Fisheries Management and Science Standards.
- National Digital Data Strategy and Policy for Commercial industry.
- Establishing an Inshore Commercial Fishery Subprogram.
- Investment in Biosecurity via AAHBS.
- New work initiatives on: (i) animal welfare; and (ii) work safety, wellbeing & mental health.
- Amendment to PIRD Act now allows FRDC to receive voluntary marketing contributions.

## **Research Advisory Committees (RAC Chairs)**

The RAC Chairs presented the research priorities from their respective jurisdictions (see <u>Appendix 3</u> for the individual PowerPoint slide of RAC priorities).

A total of **seven common areas for potential collaborations** that came out strongly in the RAC presentations and the subsequent discussions – these included: (1) General biology; (2) Increasing indigenous capacity; (3) Recreational fisheries licences to assist in data collection; (4) Aquaculture is a growth sector; (5) Fishing for research priorities; (6) Extension expertise process; and (7) Return on investment. Briefly, some key points of the discussion around these common areas are provided below:

## 1. General biology

- Biological information is often old (20+ years) and is being used to inform our fisheries models.
- There is a general need to improve capacity to address research around general biology.
- University sector can play a strong role in delivery of general biological information.

## 2. Increasing Indigenous capacity

- Fisheries management and governance with respect to the Indigenous community is a common priority (there is uncertainty in how best to extend research outputs to fisheries managers etc.).
- The Indigenous Reference Group has several projects currently active on building Indigenous capacity and it was suggested that everyone takes the opportunity to learn from those findings/share findings with other jurisdictions.
- Data for the Indigenous and recreational sector was flagged as common priority. There is an IRG funded PIRSA project to collect indigenous data. The Recreational sector could link in this project through PIRSA and get a bigger cross sector project up.

## 3. Recreational fisheries licences can help the data issue

- Licensing systems in Australia are both helping provide data and samples for surveys as well as in some instances providing additional funding opportunities for RD&E.
- The recreational fishing sector is a large sector (there is considerable investment in gear and travel etc.); therefore, there is a considerable public good component. It was suggested that the FRDC and DAWR consider making more funds available to address recreational based RD&E.

• Noted that recreational fishing is based on the experience not value (not business orientated).

## 4. Aquaculture is a growth sector

- Opportunity for NT development (e.g. Barramundi and Prawns) but potential to look more broadly.
- There is interest to have aquaculture in Commonwealth waters (but not currently) but this is challenging to progress because of oil and gas interests.
- Opportunities for reseeding/stock-enhancement (using new genetic tools) to help in the management of new suite of biosecurity risks.
- Wild catch and farmers should share knowledge to work better together within and between sectors, researchers and regulators e.g. cooperation in genetics, biosecurity, stock enhancement.

## 5. Fishing for research priorities

- How do you get fishers engaged in the research prioritisation process?
- It was acknowledged that researchers and managers are well-versed in this space.

## 6. Extension expertise process

- Collaboration through communication and extension will ensure that end-users see the outcomes to a particular sector (this occurs only if there is good existing process in place).
- Acknowledgement that 'Extension' needs to be built into projects at the application stage and that the translation of the science to plain English is best done by experts in this area.
- These points need to be taken into consideration by the FRDC when reviewing project applications.

## 7. Return on investment (cross reference analysis)

- Portfolios (RACs, IPAs, Subprograms) need to establish how the investment is returned to the grass roots.
- The FRDC to consider reviewing common themes/groupings of projects and communicating the key findings.

## Actions:

- When reviewing project applications: (i) identify the type of communication and extension required; (ii) ensure that communication and extension is addressed clearly and concisely at the onset of or during the project (not just at the end), and (iii) determine who would be best positioned to assist with the communication and extension. **Lead:** All.
- More work is needed to (i) review research projects around common themes/groupings; (ii) compile simple and concise key messages to reach grass roots, in order to increase visibility of research and better demonstrate return on investment. **Lead:** The FRDC.

## Industry Partner Agreements (IPA Leads)

The IPA leads presented the research priorities from their respective sectors (see <u>Appendix 3</u> for the individual PowerPoint slide of IPA priorities).

There were **six common areas for potential collaborations** that came out strongly in the IPA presentations and the subsequent discussions – these included: (1) The Emergency Animal Disease Response Agreement; (2) Selective breeding; (3) Provenance/traceability; (4) Indigenous engagement; (5) Modernise industry practices through technology; and (6) Social licence. The focus of the subsequent discussion from the IPA session was largely around the need improve the community's perception of these industry groups and actions to take – briefly:

#### 6. Social licence

- Loss of social credibility can result in fishing/area closures.
- We need to tell the stories of our fishing families. The agricultural land based farmers are doing this better than the fishing industry. And it is perceived that famers get more help.
- Engagement with the public is through the food that we grow and harvest.
- There is a need to be more visible in the community (e.g. unless RD&E is seen by the community, the community will not support us). Therefore, there is a need to partner with the community upfront e.g. Atlantic Salmon.
- The value of extension and translation of the science to all audiences in a suitable form
- Acknowledged a need to become proactive as opposed to reactive (the current norm)
- Need focus on defining best practices: (i) industry management & practices and (ii) regulation.
- Best practices may need to be modernised (e.g. using sustainable energy, use of big data & technology) this leads into area "(5) Modernise industry practices through technology":
  - Adopt large scale technologies from other industries &/or internationally.
  - o Automation for bigger operators e.g. Salmon internationally, Abalone in China
  - Smaller operators can be fast followers.
  - Acknowledge that this will keep Australia competitive

#### Subprograms (Subprogram Leaders)

The Subprogram Leaders presented the research priorities from their respective committees (see <u>Appendix</u> <u>3</u> for the individual PowerPoint slide of Subprogram priorities).

The FRDC posed the question to the workshop attendees: "Are we making good use of existing subprograms – i.e. Indigenous Reference Group (IRG), Human Dimensions Program (HDR) and Aquatic Animal Health and Biosecurity (AAHBS)?"

- There was uncertainty from RACs & IPAs and the Subprograms on when to engage/consult. This is at the strategic and tactical planning stages.
  - HDR have tended to chase opportunities rather than being approached (e.g. social/economic contribution case studies).
  - IRG try to release their own priorities before RACs & IPAs.
  - IRG & HDR provide feedback on applications and seek co-investment opportunities then.
  - AAHBS comments on the science rather than co-invest.
- In general, there is a recommendation to the applicant that IRG or HDR are engaged (is this too late in the process though?).

#### Actions:

- The Indigenous Reference Group to circulate its five overarching priorities to RACs, subprograms and IPAs. Lead: Chris Calogeras
- HDR program to talk to your groups and nominate a case study of a particular form of social/economic contribution to the community – inform people about the value. Not about who has the biggest economic contribution. Lead: Emily Ogier.
- Link to you-tube video of fisher's story by the National Seafood Industry Leadership Program is to be circulated to workshop participants. **Lead:** Emily Ogier.
- The FRDC to incorporate a new sentence into the application evaluation process have you considered if IRG and HDR input is relevant. **Lead:** The FRDC.

• Co-investment as a cost shifting exercise is still an issue. How do we address this issue? Lead: The FRDC.

#### **Representative Organisations & Stakeholders (Representatives)**

Representatives from AFMF and the four Representative Organisations – Seafood Industry Australia, Commonwealth Fisheries Association, the National Aquaculture Council, and Recfish Australia – spoke about their organisations and highlighted priority areas that they considered required RD&E investment (see <u>Appendix 3</u> for individual PowerPoint slides).

At the end of the session, there was some discussion around common priority areas as highlighted by the Representative Organisations and AFMF (though noted that many of these had been addressed in the earlier RAC, IPA and Subprograms sessions). Briefly, some key areas that they considered required RD&E investment included:

#### 1. Animal Welfare

- Cattle farmers are perceived as being responsible for how a cow is killed in Indonesia. The seafood industry needs to be aware of similar issues that are associated with live export (and the repercussions).
- It was acknowledged that there are a series of tools/documentation to address Animal Welfare in the seafood industry. There is now a need to communicate and extend this work as well as evaluate whether they are fit for purpose.

#### 2. Social licence to operate

- Need to promote Australia's record of good fisheries management we have the second best fisheries management in the world
- We need to the right people to deliver this information in the most suitable format.

## 3. Improving how we communicate

- The need to improve collaboration around collective problems in a digitally enabled world.
- Acknowledge the need for greater transparency we are doing good things and this needs to be promoted.

## General Discussion: What is coming in the near future? (Len Stephens)

Len Stephens led a session that broadly discussed the common themes that had been raised in the various sessions, highlighting that day two of the workshop would focus on developing potential large, collaborative research priorities to address these priority areas.

Len then asked the workshop attendees to further elaborate on any of the common areas already highlighted and/or to introduce other areas that had not yet been captured. Briefly, some key points of the discussion around these common areas are provided below.

#### 1. Food safety

• The industry is susceptible in that if there is an incident in one sector it has the potential to affect other sectors. Therefore, there is a need to safeguard the industry – this links to Safefish.

## 2. Animal Welfare

• This was identified as a priority last year and was being addressed via a workshop.

- It is important how this issue is presented to industry i.e. handling seafood to maximise animal welfare also results in a better product and a better return on product (x cents per kg value add). As opposed to a regulatory requirement etc.
- Noted TGSA's experiences in getting support from RSPCA. It received no positive media, and instead resulted in loss of support for RSPCA.

### 3. Slavery/indentured labour/Forced labour

• There is a need to have consideration of work conditions for the full supply chain – this is gaining increased international interest.

#### 4. Social media

• Seeing intense conflict on social media platforms at both the company and sector level.

## 5. Genomic research – opportunities

- A powerful tool (whole genome sequencing) but we need guidance as there are a suite of issues that this raises:
  - Who should determine R&D?
  - Who 'owns' the IP?
  - How to use this information?
  - What is currently out there?

#### 6. Traceability

- There is a need for a strategic approach to future RD&E investment to avoid duplication and draw upon existing technology etc.
- Acknowledged that there is a need for improved traceability systems to address fraud, brand recognition, demonstrating provenance etc.
- Noted that <u>SafeFish</u> released a tool on their website providing some guidance regarding nano tags.

#### Action:

• Patrick to send Seafood Traceability Statement to the workshop participants. Lead: The FRDC.

#### DAY TWO THURSDAY 30 AUGUST

#### **Opening (Patrick Hone)**

Patrick touched on the task for the day – establishing large collaborative projects to bring about change in the Australian seafood industry.

#### Potential Collaborative Themes from Day 1 & Priorities Supplied Ahead of the Workshop (Crispian Ashby)

Crispian Ashby provided an overview of the common areas for potential collaborations that came out from the RAC, IPA, Subprogram and stakeholder session on Day 1 (refer to the PowerPoint slide below).

Crispian noted that for a number of the areas identified the FRDC already had invested in activities to address them (note that the blue highlighted priority areas in the slide below are ones where there is already activity occurring). These highlighted priority areas would then be removed from the list.

Potential Collaboration The	emes:	R FRDC
<ul> <li>Potential Collaboration The</li> <li>Animal Welfare</li> <li>Aquaculture development &amp; growth</li> <li>automation/technology</li> <li>Biosecurity planning</li> <li>Bycatch mitigation</li> <li>Centro eradication</li> <li>digital data</li> <li>disease &amp; vaccine</li> <li>EADRA - Aquatic Deed</li> </ul>	<ul> <li>Extension &amp; synthesis</li> <li>Future proofing</li> <li>Genomics/Microbiomes/ eDNA</li> <li>husbandry</li> <li>industry safety</li> <li>inshore fishery</li> <li>International collaboration</li> <li>Labour issues</li> </ul>	<ul> <li>Resource access</li> <li>Indigenous &amp; recreational data</li> <li>Food Safety</li> <li>TEPS</li> <li>traceability</li> <li>training</li> </ul>
<ul> <li>Ecosystem/System modelling</li> </ul>	<ul><li>Market research</li><li>modelling &amp; HS</li></ul>	<ul> <li>valuations &amp; contributions</li> </ul>
<ul><li>Engagement &amp; SLO</li><li>enviro impacts</li></ul>	<ul> <li>Oceanography</li> <li>oil and gas</li> </ul>	Welfare & Safety

Crispian provide a brief description of the activities already occurring on some of the priority areas:

- Animal Welfare Support a new work program for Animal Welfare (for recreational, aquaculture and the aquarium industry) led by Brett McCallum et al. FRDC has a dedicated <u>animal welfare</u> webpage which has a code of conduct etc. (Key contact: Brett McCallum and Nicole Stubing).
- Biosecurity & EADRA Increased the investment in biosecurity through AAHBS. EADRA Terms of reference is still being developed and FRDC are supporting this (Contact: Wayne Hutchinson and AAHBS Subprogram).
- **Digital data** Supporting development of a National Digital Data Strategy and Policy (currently focused at commercial wild catch). Key focus is the need to get the architecture right first e.g. the 'e-fish' project with AFMA. Precision to decision project in R&D for Profit (Contact: Nicole Stubing).

- **Disease and vaccines** Established a centre for Aquatic Animal Health and Vaccine in Tasmania. Work occurring on disease and vaccine for: Atlantic Salmon, Barramundi, Prawns and Yellowtail Kingfish (Contact: AAHBS Subprogram and relevant IPAs).
- Engagement, Social licence, Valuation & Contributions Support SIA's priority for social licence by working with National Farmers Federation and other national bodies (Contact: HDR Subprogram Emily Ogier).
- Inshore fishery Subprogram in initial phase suggested activities to include: seafood trails, seafood festivals and local seafood branding (Contact: Chris Izzo).
- Oil and gas Coordination program has been developed (Contact: Mannie Shea, WAFIC).
- **Threatened Endangered and Protected Species (TEPS)** National Plans of Action for sharks and seabirds, and NMSC subcommittee (Contact: Carolyn Stewardson).
- Welfare and Safety AMSA requirements; see SeSAFE project (Contact: John Harrison who chairs the SeSAFE project steering committee).

## **Potential National Research Priorities**

The attendees were asked to indicate their interest in a number of potential/common RD&E themes that had been highlighted on Day 1 that are not currently being addressed by ongoing FRDC funded activities (refer to the PowerPoint slide below).

## Potential Collaboration Themes:

- Aquaculture development & growth
- Automation/technology
- Bycatch mitigation
- Ecosystem/System modelling/HS
- Environmental impacts
- Fishing for research
- Extension & synthesis
- Future proofing
- Genomics/Microbiomes/eDNA
- International collaboration

Labour issues

- Market research
- People development & training (inc fisheries mgt)
- · Plastics and debris
- Resource access
- Indigenous & recreational data
- · Incident Response Plan
- · Traceability & authenticity

The attendees were then divided into various groups around those common themes and tasked with developing/drafting a collaboratively focused research priority that could be shared among the workshop attendees as well as the broader committees of the FRDC Advisory Groups to get buy-in.

The drafted priorities are provided below in Table 1. A designated industry leader was identified at the time as was an FRDC staff member – they are responsible for progressing the priorities. The priorities in their current form are directly transcribed from workshop notes and FRDC will continue to work with the designated leader and nominated collaborators and then discuss with the RACs and IPAs with the view to release those that are supported in subsequent call(s) for applications.



 Table 1. List of draft national research priorities identified at the 2018 FRDC Annual Stakeholder

 Workshop. This includes the designated leader as identified at the workshop.

#	Draft issues to inform future priorities	Designated leader
1	Genomic / microbiomes / eDNA	Nick Moody & Len Stephens
2	Attracting & retaining an 'on water' workforce	Hayley Abbott & David Mills
3	Development of a Seafood Incident Response Plan	
4	A review of the need to update the biological information with novel techniques: Stage 1	Cathy Dichmont & Peter O'Brien
5	Automation / Technology	Nick Savva
6	Plausible and Possible Futures for the Australian Seafood Industry	Sevaly Sen
7	Making environmental information available to the fishing industry in real time	Rik Buckworth
8	Marine Debris Code of Practice – Stopping it at the source	Adam Main
9	Fishing for Research Priorities	Peter Rankin
10	Traceability and authenticity	Matt Taylor
11	Resource access allocation	Claire Webber
12	Examination of licensing / permitting / modern systems for recreational and Aboriginal (traditional) fishing	Sean Sloan
13	Modern/innovative catch and participation data collection – Indigenous & recreational data	Sean Sloan
14	Develop and trial fisheries management induction program for fisheries	Peter Dundas- Smith
15	Extension & synthesis	Peter O'Brien

#### Drafted Potential Priorities based on outputs from the workshop

Priority	Genomic / Microbiomes / eDNA
Need	<ul> <li>Whole genome sequenced for major production species         <ul> <li>Understanding the host</li> <li>Whole genome – what do you do with it then?</li> <li>Who does it? Who owns the IP?</li> <li>What do you do with other things that you find?</li> </ul> </li> </ul>

	<ul> <li>Don't know what you can do with it until you have done it</li> <li>Urgency – pay a commercial company; if not so urgent then look into training opportunities</li> <li>How do you select the test animal?</li> <li>How many do you do?</li> <li>Microbiomes</li> <li>Review of what has already been done (commission a review)</li> </ul>
Planned outcomes	Need good wording for the benefits
Jurisdictions	Individual sectors: Pearls
Other	The designated leader: Nick Moody and Len Stephens (FRDC: Wayne)

Priority	A. How to attract & retain workers 'on the water'
	<ul><li>B. Attracting &amp; retaining an 'on water' workforce</li><li>C. "Bums on Boats"</li></ul>
Need	<ul> <li>To encourage people onto fishing boats and creating clear pathways and direction for their future         <ul> <li>Mapping exercise – e.g. cadetships offered</li> </ul> </li> <li>Review what is happening in this space internationally – e.g. New Zealand</li> <li>Collaborative         <ul> <li>Safety issue for new workers especially</li> <li>Mental health</li> </ul> </li> <li>How do we target younger people who may be unaware of how to enter the industry? e.g. schools/school career advisers; Centrelink etc.</li> </ul>
Planned outcomes	<ul> <li>The industry considered a worthwhile career choice</li> <li>Increased employment of Australian workers</li> <li>Collaborate with what HDR program is doing to improve image of the industry</li> </ul>
Jurisdictions	<ul> <li>National         <ul> <li>Need to create a network of interested people</li> </ul> </li> </ul>
Other	<ul> <li>Potential funding partners:</li> <li>The designated leader: Hayley Abbott &amp; David Mills (FRDC: Carolyn)</li> </ul>

Priority	Development of a Seafood Industry Response Plan
Need	Currently, the seafood industry does not have a unified process by which to respond to issues that have the potential to affect the seafood industry's national reputation (Food safety, biosecurity/disease/pest incursions, market access (domestic & international), animal welfare, labour). Whilst some sectors within the industry have developed strategies to respond to sector-specific issues, there exists a need to develop a comprehensive framework to respond to all national

	<ul> <li>emergencies in a unified manner that can also be used to guide responses to jurisdictional issues</li> <li>The scope of the proposed incident response plan could include potential issues pertaining to food safety, market access, biosecurity, disease, pest incursions, animal welfare, and labour. Incidents could apply to imported, exported or domestic product.</li> <li>The response plan would need to consider: <ul> <li>establishment of a national process for identification of whether the incident is an emergency, and if so, how to respond</li> <li>development of a communications plan – including media contact</li> <li>proactive identification of potential issues – and related fact sheet</li> <li>an iterative process for identification of emerging issues, and update of the plan accordingly</li> </ul> </li> </ul>
Planned outcomes	<ul> <li>Inform a co-ordinated response that provided a professional, united and agreed response that mitigates impact</li> <li>The ability for specific sectors and jurisdictions to inform their own relevant modules</li> <li>Consideration as to how the incident response plan implementation can be funded and managed beyond the life of the project</li> <li>Options for identifying national emergencies and categorising these (national/regional etc)</li> <li>Developed pre-prepared comms plans (internal &amp; external media)</li> <li>Capacity building</li> </ul>
Jurisdictions	Tasmanian Salmon Growers Association IPA, Australian Prawn Farmers Association IPA, Southern Rock Lobster IPA, Western Rock Lobster IPA?
Other	<ul> <li>Potential funding partners:</li> <li>The designated leader: Alison Turnbull (FRDC: Nicole)</li> <li>Links to establishing a national seafood communication strategy</li> </ul>

Priority	A review of the need to update the biological information with novel techniques: Stage 1
Need	<ul> <li>National review of key regions / species / ecosystems to update biological information</li> <li>Understand the role of new methods to collect this data</li> <li>Identify Stage 2 case studies</li> </ul>
Planned outcomes	Pathways to updating and applying key tools and management arrangements
Jurisdictions	National
Other	<ul> <li>Potential funding partners: CSIRO, AFMA, AIMS, IMOS</li> <li>The designated leader: Cathy Dichmont &amp; Peter O'Brien (FRDC: Chris)</li> </ul>

Priority	Automation / Technology
Need	<ul> <li>Greater efficiency</li> <li>Profitability</li> <li>OH&amp;S</li> <li>Better quality jobs</li> <li>Productivity</li> <li>Security, biosecurity and environmental monitoring</li> <li>Processing</li> <li>Logistics</li> </ul>
Planned outcomes	<ul> <li>Data collection</li> <li>New machinery</li> <li>Robots, drones – cleaning, grading, harvesting, feeding, data collection</li> <li>Vision systems (image recognition) stock assessments, gliders</li> <li>Environmental monitoring</li> <li>Programmers, developers – e.g. 'control tower' salmon feeding (feed technology); 'smolt truck' salmon transport (cameras, water quality parameters)         <ul> <li>Who are the suppliers? Who to work with? New frontiers / innovators</li> </ul> </li> <li>Cloud problem solving – e.g. 'Fish Hack' (prizes, hackathons)</li> <li>Product processing</li> <li>Collective power to access automation / technology / economies of scale / collective bargaining</li> </ul>
Jurisdictions	AAGA, ABFA, APFA, Salmon, SRL, WRLC
Other	<ul> <li>Potential funding partners: RRD4Profit, AgriFutures</li> <li>The designated leader: Nick Savva (FRDC: Wayne)</li> </ul>

Priority	Plausible and Possible Futures for the Australian Seafood Industry
Need	<ul> <li>Need to know:</li> <li>Scenarios: What might the future look like?</li> <li>Sign Posts: How will we know where the Industry is going?</li> <li>Strategies: How do we prepare for the future?</li> <li>Future uncertainties to explore could include climatic changes, food safety risks, demographic shifts (both in terms of the seafood industry and the seafood consumer), automation, market changes (export, import and domestic)</li> </ul>
Planned outcomes	<ul> <li>Outcomes:</li> <li>The seafood industry is well positioned to prepare for and take advantage of future changes</li> <li>Outputs/process:</li> <li>Commission a futures report – CSIRO doing work in this space</li> </ul>

	<ul> <li>Participatory process/workshop with generalists, futurists, demographers etc. for RACs / IPAs – and allow time for these groups to discuss implications for their sectors</li> </ul>
Jurisdictions	<ul> <li>All</li> <li>National Priority 1 Subprogram, Human Dimension Research Subprogram Commonwealth RAC, Australian Council of Prawn Fishers</li> </ul>
Other	<ul> <li>Informed investment strategies for seafood sector</li> <li>The designated leader: Sevaly Sen (FRDC: Nicole)</li> </ul>

Priority	Making environmental information available to the fishing industry in real time			
Need	<ul> <li>Part one: What is the scope for expanding current programs that provide environmental information to industry, e.g. SBT</li> <li>Part two: Improving the ease of use and extension of that information to a wider group of fisheries, including all sectors.</li> </ul>			
Planned outcomes	<ul> <li>Understanding the extent of impact of environmental drivers</li> <li>User friendly interface (s) to maximise utility for recreational, commercial and indigenous fisheries; and improving efficiency in commercial fisheries</li> </ul>			
Jurisdictions	• All			
Other	<ul> <li>CSIRO, AIMS, IMOS, SARDI (e.g. eSA-marine), Agrifutures</li> <li>The designated leader: Lead: Rik Buckworth (FRDC: Nicole)</li> </ul>			

Priority	Marine Debris Code of Practice – "Stopping it at the source"			
Need	<ul> <li>Aquaculture, Rec, wild catch, IRG, HDR (behaviour change)</li> <li>Marine debris (including micro-plastics) is having a significant effect on aquatic ecosystems, with impacts ranging from food safety through to mortality in a range of aquatic organisms</li> </ul>			
Planned outcomes	<ul> <li>Code of practice for minimising the contribution of the seafood and fishing industries to marine pollution</li> <li>Recommend courses of action needed to fulfil that Code of Practice</li> <li>Gap analysis (what we're already doing and what's necessary).</li> <li>Making use of existing work done in New Zealand</li> </ul>			
Jurisdictions	All sectors and New Zealand			
Other	The designated leader: Adam Main (FRDC: Carolyn)			

Priority Fishing for Research Priorities
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Need	<ul> <li>Addressing the problem – Why is there a lack of engagement?</li> <li>FRDC's Research Advisory Committees are expertise based committees that advise the FRDC on investment relating to their relevant jurisdiction (Commonwealth, state or territory). Key roles of the RAC include: <ul> <li>being responsive to the RD&amp;E needs of stakeholders within each jurisdiction</li> <li>setting RD&amp;E priorities to maximise the opportunities of investment to meet identified priorities, avoid duplication and achieve the greatest potential return</li> <li>inviting RD&amp;E applications to address identified priorities</li> </ul> </li> <li>Many RACs have identified the need to develop improve consultative and engagement mechanisms in order to better inform the development of research priorities. Enhanced engagement will seek to maximise the representation of the relevant stakeholders and optimise investment advice that maintains a strategic direction and can be responsive to changing circumstances.</li> </ul>			
Planned outcomes	<ul> <li>Ensure identification and delivery of efficient and effective research that meets the RD&amp;E needs of stakeholders</li> <li>Identify mechanisms to capture aspirational and high level research themes</li> <li>The above outcomes could be achieved through the following potential undertakings:         <ul> <li>Development of a cost effective program to engage directly with active fishers/processors and other stakeholders</li> <li>Mechanism by which to identify research capacity to address specific RD&amp;E</li> <li>Improvement of industry knowledge of Research Advisory Committee (and more broadly FRDC) roles and functions in supporting research</li> <li>Development industry "Champions" to engage with industry and aid communication</li> </ul> </li> </ul>			
Jurisdictions	Commonwealth RAC, Northern Territory RAC, Victoria RAC, Western Australia RAC			
Other	• The designated leader: Peter Rankin (FRDC: Carolyn)			

Priority	Traceability and Authenticity			
Need	<ul> <li>Underpin provenance, authenticity, to be able to tell a story</li> <li>Differentiation, marketing edge, brand project         <ul> <li>This will minimise substitution, fraud, maintain market access</li> <li>Epidemiology/quality/logistics management</li> <li>Scale: through supply chain (i) opportunistic for block chain; (ii) recognise chain weaknesses</li> <li>Individual versus carton will depend on industry</li> <li>Needs to be cost effective and feasible</li> <li>Tell the market what you are doing, customers need to understand</li> </ul> </li> </ul>			
Planned	Next steps:			
outcomes	Build on Seafood Authenticity Report			

	<ul> <li>Supply Chain analysis and identification of each industry – Identify similarities and differences</li> <li>Individual animal traceability (white table; tell the story)</li> <li>Cross agriculture collaboration (MLA, Pork, Horticulture)</li> <li>Carton scale (review Safe Fish report; fraud/provenance)</li> <li>Education: (i) market knowing what you are doing; (ii) enforcement</li> </ul>	
Jurisdictions Other	<ul> <li>(1) WRL, ACA; (2) ACA, NPI; (3) ACPF, ABFA; (4) all</li> <li>The designated leader: Matt Taylor (FRDC: Nicole)</li> </ul>	

Priority	Resource access allocation			
Need	<ul> <li>The politics of multiple use is a major threat to fisheries access rights.</li> <li>To address spatial/time/resource access and allocation issues.</li> <li>Data to inform re-allocation of resources is lacking or not used.</li> <li>To develop better understanding of current approaches and new tools to he address access and allocation.</li> </ul>			
Planned outcomes	<ul> <li>Developing new fisheries – expanding existing one.</li> <li>Decisions regarding resource allocation and access are structured, transparent, well informed and less politically driven.</li> <li>Use of ecosystem risk-based tools to inform resource access.</li> </ul>			
Jurisdictions	ASBTIA, VICRAC, WARAC, WAFIC, HDR, National Priority One			
Other	<ul> <li>All money &amp; everyone welcome</li> <li>The designated leader: Clare Webber (FRDC: Crispian)</li> </ul>			

Priority	Examination of licensing / permitting / modern systems for recreational and Aboriginal (traditional) fishing			
Need	Data collection need Need for unbiased academic review of national, global non- licensing/licensing/permitting systems to inform public policy discussion Productivity Commission report recommendations Needs to be led by an independent researcher to ensure no bias			
Planned outcomes	Unbiased, policy review of the merit, costs, benefits and pros/cons of recreational/traditional permit/licensing systems (also non-permitting systems) to inform national policy decision making			
Jurisdictions	<ul> <li>SA, QLD</li> <li>FRDC HDR</li> <li>IRG – need to ensure sensitive wording on traditional/Aboriginal MOU types systems (link to IRG data collection project)</li> </ul>			

Other	<ul> <li>Look at New Zealand</li> <li>The designated leader: Sean Sloan (FRDC: Josh)</li> </ul>

Priority	Modern/Innovative Recreational catch and participation data collection				
Need	<ul> <li>Old phone book survey method no longer valid</li> <li>Resource management needs sound data on total extractions</li> <li>Electronic data collection methods needed (requires an innovative approach)</li> <li>Resource access/allocation</li> <li>Needs periodic (and annual) recreational and traditional data collect</li> </ul>				
Planned outcomes	<ul> <li>Understanding the minimum data needs</li> <li>Links to national social/economic data collection project</li> <li>Explore/identify modern – reliable data collection techniques</li> <li>Link to existing digital data program</li> </ul>				
Jurisdictions	<ul> <li>SA, WA, QLD, Recfish, Tas, IRG (link to IRG data collection project)</li> <li>FRDC HDR subprogram</li> </ul>				
Other	<ul> <li>FRDC digital program</li> <li>The designated leader: Sean Sloan (FRDC: Josh)</li> </ul>				

Priority	Develop and trial fisheries management induction program for fisheries			
Need	A major challenge facing fisheries management agencies in implementing change within fisheries (e.g. restructuring) is the lack of knowledge that fishers have about how management works. Further, the same challenge impedes the implementation of co-management arrangements.			
Planned outcomes	<ul> <li>A more informed industry about fisheries management</li> <li>A cultural change within industry</li> <li>Improvement in the implementation of management changes</li> <li>Way forward:         <ul> <li>Need to bring together key people to develop a strategy (e.g. language, la Knuckey's/existing stuff)</li> <li>Gap analysis – scoping study</li> </ul> </li> </ul>			
Jurisdictions	• All			
Other	<ul> <li>Must investigate alternative sources of funding for "training"</li> <li>The designated leader: Peter Dundas-Smith (FRDC: Chris)</li> </ul>			

Priority	Extension and synthesis		
		FRDC Annual Stakeholder Workshop August 2018	Page <b>16</b> of <b>2</b>

Need	<ul> <li>Project level extension needs to continue to be built in and overseen by principle investigators.</li> <li>Additionally there is a need to bring together (synthesise) the key insights from major past FRDC investments in key areas – e.g. SESSF, climate change, sharks, bycatch, sea urchins, fuel, ESD.</li> <li>This will require the development of a new approaches to deliver program level extension insights</li> <li>The key focus is on areas of major long-term FRDC investment (similar to the way FRDC undertakes programmatic Benefit Cost Analysis).</li> <li>The synthesis reviews will generate material that covers:         <ul> <li>\$\$ expended, project list, gaps, extent of uptake</li> <li>Key lessons and insights: top 10 messages – fact sheets for end users</li> <li>Future research implications</li> <li>Will set the ground for stakeholder engagement in <i>"Fishing For Research Priorities"</i></li> </ul> </li> <li>Adds value to the project extension undertaken by research providers etc.</li> <li>Promote and extend FRDC's body of research</li> </ul>
Planned outcomes	<ul> <li>FRDC to undertaken 2 pilot extension synthases</li> <li>Fully understanding and leveraging past major investments</li> <li>Improve performance of RACs</li> <li>Identifying key insights and gaps</li> <li>Understanding where future research priorities should be</li> <li>Specifying what the key extension implications and messages should be</li> <li>Top 10 messages – fact sheets for extension and to promote FRDC</li> <li>Trial a new extension approach</li> </ul>
Jurisdictions	<ul> <li>Individual stakeholder groups (IPAs, RACS, Subprograms) can identify key areas and co-invest.</li> <li>FRDC core business</li> </ul>
Other	<ul> <li>The designated leader: FRDC Communications</li> <li>Sponsor for the concept Peter O'Brien</li> </ul>

*Note: (i) Labour issues; (ii) Market research; and (iii) Bycatch mitigation were removed from the list as workshop participants felt that these were not collaborative in nature at this point.* 

#### Action:

• Each priority to be scoped up initially for further refining in the future through FRDC, lead contacts and RACs, IPA's and subprograms. **Lead:** All.

#### **FRDC Year in Review**

The FRDC provided a brief summary of the activities against each of the National Priorities and highlighted the Oil & Gas Coordination project that was funded in 2018. Briefly, some key points from each FRDC National Priority are provided below:

## National Priority One (Sevaly Sen)

- There are number of products being developed targeted at different audiences:
  - Fish files consumer facing (recipes fish handling etc.)
  - Jurisdictions performance reporting (e.g. SAFS)
  - o Whichfish pilot (retailers, synthesis or range of information not just stock status)
  - Aquaculture planning a cumulative risk assessment with Beth Fulton and Belinda Yaxley (regional type assessment)
- Information has to be trusted (e.g. science and management standards)
- Increase in positive media on sustainable fisheries (key influences project by HDR program) this data base is open and available to those who are interested.

## National Priority Two (Chris Izzo)

- There is a focus on improving commercial opportunities through:
  - The establishment of the Inshore Commercial Fishery Subprogram
  - o Developing/incentivising commercial opportunities for lesser known/underutilised species
- Progressing industry's use and governance around digital data
- Founding the National RD&E Seafood Industry Safety & Welfare Initiative this includes the SeSAFE

## National Priority Three (Wayne Hutchinson)

- Addressing barriers to aquaculture development and primarily focused on a number of species: Yellowtail Kingfish, Tropical Oysters, Cobia, Grouper, Murray Cod.
- Finalising audit of new and emerging aquaculture species.

## Oil & Gas Coordination Project – 2017-186 (Mannie Shea, WAFIC)

- Established to improve the engagement and consultation process between the seafood industry and the oil & gas industry this includes developing "best practice" documentation.
- Developing a "one stop shop" for seismic research bibliographies, case studies and other relevant commercial fishing O&G information etc.

## **Communications & Extension (Peter Horvat)**

Peter Horvat provided an overview of the key findings from the recent stakeholder survey. This is an initiative that the FRDC have employed for a number of years to ensure that the FRDC is doing the best to listen to fishing and aquaculture sectors. Some key observations included:

- The unprompted awareness of the FRDC is 82%
- A perception that the commercial sector pays for all the R&D
- That there is good engagement with the Indigenous sector through the IRG
- There appears to be a re-engagement with the recreational sector through investment
- There is a lack of transparency around RAC process and priority setting
- It is a struggle how to see how all activities all fit in within the FRDC's Communication Strategy
- Considered that FRDC's spend on social media; online advertising and sponsorship brings value
- Survey participants value the FISH magazine and were agnostic to digital versus printed

World Fisheries Congress 2020 (Gavin Begg, SARDI)

Gavin Begg provided a brief update on the planning progress of the 2020 <u>World Fisheries Congress</u> to be held in Adelaide – briefly:

- The theme is "*Sharing our oceans are rivers*" with the conference planned to accommodate all sectors and stakeholders.
- This is an opportunity for Australia to showcase what our industries are about and where they want to go.
- EOIs are sought for session/workshop ideas/themes what are the issues important to you?
- There are opportunities to host other meeting/workshops around or in conjunction with the conference.
- There is a focus to make the trade show large and relevant to the future needs and opportunities.
- There is also a prospectus available for sponsorship and exhibition.

## Wrap Up and Close of the Workshop (Patrick Hone & Len Stephens)

Patrick & Len thanked all of the workshop attendees for their efforts and focus over the two days.

## **APPENDIX 1: AGENDA**

## DAY ONE WEDNESDAY 29TH AUGUST

Time	Agenda Item	Presenter	Information
9.30	Morning Tea on arrival		
10.00	Kaurna Welcome to Country	Mickey O'Brien	
10.10	1. Objectives of the workshop and important	Patrick Hone	
	background issues		
10.30	2. Workshop process	Len Stephens	
10.40	3. Research Advisory Committees (RACs)	Respective RAC	Presentations
	Commonwealth	Chairs	
	New South Wales	(5 minutes each)	
	Northern Territory		
	Queensland		
	South Australia		
	Tasmania		
	Victoria		
	Western Australia		
	Questions & Discussion (20 minutes)		
11.40	Stretch		
11.45	4. Industry Partner Agreements (IPAs)	Respective IPA	Presentations
	Abalone Council Australia	Representatives	
	Australian Abalone Growers Association	(5 minutes each)	
	Australian Barramundi Farmers Association		
	Australian Council of Prawn Fisheries		
	Australian Prawn Farmers Association		
	Australian Southern Bluefin Tuna Industry		
	Association		
	Oysters Australia		
12.30	LUNCH		
1.30	Pearl Consortium	Respective IPA	Presentations
	Southern Rocklobster Limited	Representatives	
	- Cube attained a Fish and	(5 minutes each)	
	Subantarctic Fishery		
	Tasmanian Salmonid Growers Association	(***********	
		(	
	Tasmanian Salmonid Growers Association		

2.30	<ul> <li>5. Subprograms (SPs)</li> <li>Aquatic Animal Health and Biosecurity</li> <li>Indigenous Reference Group</li> <li>Human Dimensions Research</li> <li>Recfishing Research</li> <li>Questions &amp; Discussion (20 minutes)</li> </ul>	Respective SP Representatives (5 minutes each)	Presentations
3.30	AFTERNOON TEA		
4.00	<ul> <li>6. Representative Organisations &amp; Stakeholders</li> <li>Australian Fisheries Managers Forum</li> <li>Commonwealth Fisheries Association</li> <li>National Aquaculture Council</li> <li>Recfish Australia</li> <li>Seafood Industry Australia</li> <li>Questions &amp; Discussion (20 minutes)</li> </ul>	Respective Org Representatives (5 minutes each)	Presentations
5.00	7. General Discussion	Len Stephens	
5.30	CLOSE		
6.30	DINNER: Griffins Head Hotel		38 Hindmarsh Square

## DAY TWO THURSDAY 30 AUGUST

Time	Agenda Item	Presenter	Papers/Info
8.30	<ul><li>Opening</li><li>Key points from previous day</li><li>Collaborative project funding</li></ul>	Patrick Hone	
8.45	Procedure for the day	Len Stephens	
9.00	List of possible collaborative, multi sector priorities	Crispian Ashby	List of Projects
9.15	Identify any additional priority areas	Crispian Ashby	
9.30	Identify the priority to which you may contribute ( <i>there may be more than one</i> )	All Attendees	Add your name to the card stuck on the wall for each project
9.45	Identify group leaders and explain tasks for each group	Len Stephens	FRDC Priority Template ( <i>Attachment A</i> )
10.00	MORNING TEA		
10.30	<ul> <li>Working groups to complete the template for each priority</li> <li>Depending on number of priorities and the number of people wanting to be involved in</li> </ul>	All Attendees	

	more than one priority, groups may be rearranged mid-session		
12.00	<ul> <li>Report on collaborative opportunities</li> <li>Depending on number of priorities, this might be curtailed, by providing copies of the completed priority templates available after the meeting</li> </ul>	Each Group Leader	
12.30	LUNCH		
1.30	<ul> <li>FRDC year in review</li> <li>Actions from last meeting</li> <li>Progress against National Priorities</li> <li>National initiatives – Inshore Fishery Subprogram, SeSafe, Oil &amp; Gas Coordination</li> </ul>	FRDC	Presentations
2.00	Communications & Extension	Peter Horvat	Presentation
2.20	<ul> <li>Stakeholder engagement &amp; prioritisation</li> <li>An open discussion on effective engagement strategies that results in RD&amp;E prioritisation</li> </ul>	All Attendees	Discussion Paper (Attachment B)
2:40	World Fisheries Congress 2020 – update <u>https://wfc2020.com.au/</u>	Gavin Begg	Presentation
2:50	Wrap up of the workshop	Len Stephens	
3.15	CLOSE		

# **APPENDIX 2: LIST OF ATTENDEES**

First Name	Surname	Affiliation
Len	Stephens	Facilitator
Dean	Lisson	Abalone Council Australia IPA
Nick	Savva	Australian Abalone Growers Association IPA
Jo-Anne	Ruscoe	Australian Barramundi Farmers' Association IPA
Rachel	King	Australian Council of Prawn Fisheries IPA
Kim	Hooper	Australian Prawn Farmers Association IPA
Tony	Charles	
Claire	Webber	Australian Southern Bluefin Tuna Industry Association IPA
David	Mills	Pearl Consortium IPA
Tom	Cosentino	Southern Rocklobster Ltd IPA
Adam	Main	Tasmanian Salmonid Growers' Association Ltd IPA
Matt	Taylor	Western Rocklobster Council Inc. IPA
Clare	Robinson	
Peter	Dundas-Smith	New South Wales RAC
Cathy	Dichmont	Queensland RAC
Peter	Rankin	Victorian RAC
Sean	Sloan	South Australia RAC & Australian Fisheries Management Forum
Brett	McCallum	Western Australia RAC
Rik	Buckworth	Northern Territory RAC
Heidi	Mumme	
lan	Cartwright	Tasmania RAC
Peter	O'Brien	Commonwealth RAC
Hayley	Abbott	
Jo	Slater	Aquatic Animal Health and Biosecurity Subprogram
Nick	Moody	
Chris	Calogeras	Indigenous Fishing Subprogram
Owen	Li	Recfishing Research Subprogram
Emily	Ogier	Human Dimensions Research Subprogram
Sevaly	Sen	National Priority 1
Mannie	Shea	Seismic Coordination Program
Jane	Lovell	Seafood Industry Australia: Representative Organisation
Russell	Conway	Recfish Australia: Representative Organisation
Renee	Vajtauer	Commonwealth Fisheries Association: Representative
		Organisation
Aaron	Irving	National Aquaculture Council: Representative Organisation
Alan	Snow	Australian Fish Names Standard
Alison	Turnbull	SafeFish
Patrick	Hone	FRDC
Annette	Lyons	FRDC
Crispian	Ashby	FRDC
Josh	Fielding	FRDC
Peter	Horvat	FRDC
Carolyn	Stewardson	FRDC
Alison	Connelly	FRDC
Chris	Izzo	FRDC
Skye	Barrett	FRDC
Leah	Fergusson	FRDC
Nicole	Stubing	FRDC
	Juning	