

ANNUAL STAKEHOLDER PLANNING WORKSHOP PROCEEDINGS

FRDC National Lead, Collaborate, Partner Workshop: 30-31st August 2017

National Wine Centre, Corner Botanic & Hackney Road, Adelaide SA

Facilitated by Jon Bok (Indigenous Engagement Australia Pty Ltd)

Attendance:

Name (Affiliation)

Peter Dundas-Smith (New South Wales RAC)
Rik Buckworth (Northern Territory RAC)
James Fogarty (Queensland RAC)
Brett McCallum (Western Australia RAC)
Peter O'Brien (Commonwealth RAC)
Don Plowman (South Australia RAC)
Caleb Gardner (Tasmania RAC)
Peter Rankin (Victoria RAC)
Dean Lisson (Abalone Council Australia IPA)
Nick Savva (Australian Abalone Grower's Association IPA)
Chris Calogeras (Australian Barramundi Farmer's Association IPA & Indigenous Reference Group)
Rachel King (Australian Council of Prawn Fisheries IPA)
Kim Hooper (Australian Prawn Farmer's Association IPA)
David Mills (Pearl Consortium IPA)
Justin Phillips (Southern Rocklobster IPA)
Matt Taylor (Western Rock Lobster IPA)
Peter Stanich (Western Rock Lobster IPA)
Mick Hortle (Tasmanian Salmonid Grower's Association)
Mark Crane (Animal Aquatic Health and Biosecurity Subprogram)
Emily Ogier (Human Dimensions Research Subprogram)

Name (Affiliation)

Sarah Jennings (Human Dimensions Research Subprogram)
Ross Ord (Consultant)
Stan Lui (Indigenous Reference Group)
Alan Snow (Australian Fish Names Standard)
Alison Turnbull (SafeFish)
Sevaly Sen (National Priority 1 Co-Ordinator)
Johnathan Davey (National Seafood Industry Alliance)
Aaron Irving (National Aquaculture Council)
Renee Vajtaufer (Commonwealth Fisheries Association Inc.)
Russell Conway (RecFishing Australia)
Matt Barwick (National Carp Control Plan and Recfishing Research Subprogram)
Wayne Hutchinson (Oysters Australia IPA and FRDC)
Patrick Hone (FRDC)
Crispian Ashby (FRDC)
Josh Fielding (FRDC)
Jo-Anne Ruscoe (FRDC)
Chris Izzo (FRDC)
Alison Connelly (FRDC)
Skye Barrett (FRDC)
Leah Fergusson (FRDC)
Nicole Stubing (FRDC)
Chelli Edri (FRDC – Day 2 Only)

Note: all presentations are on the FRDC website

DAY 1: Wednesday 30th August

1. Workshop overview and strategic analysis – Patrick Hone

Patrick Hone provided an overview of the workshop as well a context for priority setting. Items for consideration as part of the strategic analysis included:

- Key activities since the 2016 Stakeholder workshop
- FRDC progress in cross-sectoral collaboration and investment
- An acknowledgement of gaps in pathways for succession planning, and the need to remain relevant
- FRDC Strategy Business Principles – FRDC investments needs to enable industry capacity to take the lead, needs to be flexible and innovative
- External operating environment “atmospherics”
- Priority areas as highlight by representative organisations
- Ensuring the RD&E investment addresses priorities (delivery of science needs to inform environment interactions, community perception, and resource conflict).
- FRDC seeks to drive an innovation culture that is end-user focused, as exemplified through the recent partnership with X-Lab.

Attendees made comment for the need to ensure a proactive stance on matters (for example, biosecurity). It was also highlighted that it is important to not ‘reinvent the wheel’ and ensure that FRDC investment can leverage off of existing models that achieve desired outcomes. Adoption was maintained as a crucial component of the research pathway – with linkages between research and industry key.

See presentation here: <http://frdc.com.au/-/media/Fish-FRDC/Corporate-documents/2017-stakeholder-workshop/Presentation-1-Workshop-Overview-and-Strategic-Analysis.ashx?la=en>

2. Year in Review - Workshop – Crispian Ashby

Review of the 2016 Stakeholder Planning Workshop

- Results from the 2016 Stakeholder Planning Workshop survey indicated that attendees would benefit from receiving information regarding other stakeholder’s priorities ahead of time as well as having an increased opportunity to discuss priorities in a collaborative environment (i.e. less presentations).
- There were also queries raised as to how best to engage stakeholders in the priority setting process.
- Actions that arose from the previous workshop were reported on, all actions raised at the previous workshop were completed or an on-going.

Upon discussing how the FRDC Stakeholder Planning Workshop format could be further improved, attendees noted that in future years an invite could be extended to committees such as the Australian Fisheries Management Forum, to broaden the expertise base in the room.

Actions from the 2016 Lead, Collaborate, Partner Workshop

Actions	Next steps
FRDC to review the outcomes of the workshop and priorities, with a view to circulating possible areas of collaboration for the open call process.	Completed, call for applications sent out in November (and subsequent to it)
Once the priorities are finalised, link the priorities, and the call for applications will be sent out mid-November	Completed
Appropriate investment strategies to be developed around these common priorities by the relevant RACs, IPAs and Subprograms to facilitate co-investment into effective RD&E (e.g. research programs, standard methodologies).	<p>Ongoing - Collaboration opportunities identified and co-investment occurred. There are common priority areas across RACs, IPAs and subprograms nominated for this meeting.</p> <ul style="list-style-type: none"> • Impacts of seismic - Ongoing - nominated priority for this meeting. • Resource access/allocation - ongoing. application developed to undertake audit. A nominated priority for this meeting • Data and data gaps - Ongoing. Initial workshop held. Another to follow with industry. FSWG helping with metadata standards. AFMF have nominated harmonisation of data as a priority • People development - ongoing. Vocation and tertiary training opportunities explored. • Community support/demonstration of the broader contribution of fishing and aquaculture - ongoing. Still a priority for IPAs and jurisdictions. Also on the radar for the HDR
FRDC to consider moving the Social Science and Economics Research Program into a dedicated Subprogram with a budget allocation to invest in sector, jurisdictional and national priorities	Completed. The Social Science and Economics Research Program has become a subprogram. Also changed its name to Human Dimensions Research Subprogram.
FRDC to establish mechanisms to further encourage partners to leverage funding from the collaboration fund	Completed. Rules developed and communicated. Further priorities for consideration as part of the collaborate fund to be decided at this meeting.
FRDC to consider using the collaborate fund to address the area of capacity building and leadership development. This approach could be used for each subsequent year's allocation of the collaborate fund with regard to the stakeholder workshop identifying an annual theme and then allocating the incentive funds against that activity	Completed. The NSILP was successful in obtaining collaborate funds. People development again a common priority. Further collaborate funds possible.
FRDC to invest in stakeholder and staff capacity and capability building for innovation and commercialisation	Completed. FRDC has partnered with X-Lab to progress innovation training for staff and stakeholders.
FRDC to work with TechMAC to assess which projects have commercialisation potential, develop business plans for new services, and assist with their implementation	Ongoing - projects with potential IP identified. Likely that not many commercialisation opportunities will materialise.

FRDC to distribute a post-workshop survey seeking feedback from the participants on the new workshop format	Completed and reported on at this workshop
FRDC to identify suitable common metrics/KPIs that can be adopted by all RACs, IPAs and Subprograms and explore mechanisms to enhance extension and adoption	Ongoing - FRDC exploring other RDC methods and metrics for KPIs and also measuring impact. Further improvements to extension and adoption being explored
FRDC to collate and review the metrics proposed by each group during the break out session 3. These will aid in identifying suitable shared KPIs for all RACs, IPAs and Subprograms.	Ongoing - related to action above

Update on National Priority 1: Product Of Australia Is Sustainable And Acknowledge To Be So (presented by Sevaly Sen – NP1 Co-ordinator)

- Activities underway include development of a fisheries management guidelines (FRDC project 2015-203), developing bycatch performance metrics (FRDC project 2015-208), methods to assist small scale data limited fisheries (FRDC project 2015-227) and ‘undefined’ species (FRDC projects 2016-135, 2017-102).
- Work to enhance community and consumer perceptions through activities such as SAFS and Risk Assessment for Sourcing Seafood reports (‘Whichfish’), harmonisation of data, common approaches and easier assessment and determining ecosystem and TEP impact of fishing gears.

Attendees made comment that critical in progressing this work will be in the extension and adoption pathways and ongoing investment into this work. It is expected that Seafood Industry Australia (SIA) will also help to derive a co-ordinated industry approach towards the message of sustainability, including but not limited to investment in a marketing strategy. ‘Influencers’ and champions of this work will also help in progressing this priority, beyond the consumer level, market access often require an element of sustainability. There was also a noted gap in where aquaculture fits into this work (as SAFS and the risk assessment tool do not currently cover aquaculture species).

Update on National Priority 2: Improving Productivity And Profitability Of Fishing And Aquaculture

- Some work has progressed; however, this priority and will require a concerted push to achieve targets by the end of the 2015-2020 RD&E plan
- Activities currently being undertaken include:
 - Establishing / collating trade and market data
 - Scoping studies for underutilised and undervalued species
 - Scoping areas for improvements along the supply chain from production with fishing gear and aquaculture to processing improvement and developing innovation awards to showcase and develop innovations.
 - Working nationally to develop harmonised data platforms, starting with commercial fisheries metadata.
 - Recreational angler champion programs for fish habitat and habitat restoration and wetland repair adjacent to the Great Barrier Reef.
 - Measuring contributions to well-being (through the Human Dimensions Research Subprogram).

Following the update on NP2, attendees questioned if there was to be any emphasis on reducing cost of regulation and compliance. It is expected that as the priority progresses and existing activities are finalised, efficiencies will be achieved throughout the supply chain.

Update on National Priority 3: Developing New And Emerging Aquaculture Growth Opportunities

- This priority is well developed with the establishment of the “New and Emerging Aquaculture Opportunities” (NEAO) Subprogram.
- Key projects in the subprogram include the Commonwealth Rural R&D for Profit programme project on progressing Yellowtail Kingfish production. Potential for involvement in the Northern Development CRC is also being scoping (however, it was noted that the focus of the CRC is shift towards investment in infrastructure and is less focused on our end users).
- The Subprogram is also exploring options for Cobia and Grouper for QLD Prawn Farmers.
- An audit is being undertaken on gaps and opportunities to further develop activities across the six barriers (hatchery production, breeds, feeds, husbandry, health systems, market access) that will inform further investment.

Update on Key Stakeholder Priority: Impacts Of Seismic Exploration On The Marine Environment

- The FRDC developed a working group to forward a CRC-P bid to development a programmatic approach to investigating the effects of seismic surveying. This was led by researchers from Curtin University and IMAS. Unfortunately, due to timing issues with submission dates, there was insufficient time to engage with the oil and gas industry.
- In the meantime, AIMS has secured around \$12 million of funding from Quadrant Energy through a Good Standing Agreement to undertake a regional environmental study, which includes research related to the impacts of seismic testing. The work focuses on the North West Shelf.
- FRDC will remain in contact with AIMS.

See presentation here: <http://frdc.com.au/-/media/Fish-FRDC/Corporate-documents/2017-stakeholder-workshop/Presentation-2-Year-in-Review.ashx?la=en>

3. Planning and Investment – Crispian Ashby

An update was provided on the FRDC funding model and corresponding ‘buckets’ for all FRDC Advisory Groups. FRDC investment falls under 3 core mechanisms:

- Lead: National Priorities, National Infrastructure – Subprograms, People Development, Fish Names Standard, SafeFish.
- Collaborate: leverage opportunity for common priorities
- Partner: Industry Partnership Agreements and Research Advisory Committees.

Planning and Investment

All FRDC Industry Partnership Agreements and Research Advisory Committees are required to develop a RD&E plan to inform stakeholders. Part of this process requires the development of key performance indicators (KPIs) against which the success of the plan will be measured. Attendees were updated on mechanisms to monitor investment:

- Outcomes and strategies
- Monitoring and evaluation
- Investment and assessment

Attendees highlighted that priority setting mechanisms and conveying the mechanisms behind this process is key to sound investment. Whilst the recently established model of multiple calls for applications each year was supported, emphasis is still required to drive further co-investment. Comments were also raised regarding ex ante analysis (anticipating potential value); FRDC will seek to opportunities to do so, noting that evaluation resources are lesser than other research and development corporations, however there is a move to generate a more concerted joint RDC capacity for further evaluation.

See presentation here: <http://frdc.com.au/-/media/Fish-FRDC/Corporate-documents/2017-stakeholder-workshop/Presentation-3-Planning-and-Investment.ashx?la=en>

4. Project Updates

4.1 *People Development – Ross Ord*

Ross (co-investigator on a People Development funded project 2016-418) informed the workshop of the outcomes and recommendations of the project *Building education and training pathways for R&D adoption*. Points for consideration that Ross raised with the workshop included:

- Recommendations:
 - Form strategic partnerships with priority training providers—focus on strengthened incorporation R&D outputs in curricula, Position RACs to provide informed comment on extension component of R&D proposals – emphasis on identifying proposals suitable for incorporation in VET, Higher Ed pathways.
 - National forum- Strategic dialogue around core topics essential for industry’s future.
 - Greater engagement by senior FRDC staff/Board with executives of priority institutions.
 - Facilitate dialogue between providers.
 - Advise on priorities subjects.
 - Share industry intelligence.
 - Explore opportunities for collaboration to address industry needs.

Ross emphasised to attendees that researchers need to consider training pathways in project development, researchers need to ask could students benefit from certain information being included in curriculum. Attendees enquired about the fate of the Seafood Industry Training Package and it was noted that there is a review slated to be undertaken over next 12 months however there is a reduction in capacity in training, reduction in specialist training. Attendees also made comment that project outputs not always right product and that there is a need for outputs need to be peer reviewed

See presentation here: <http://frdc.com.au/-/media/Fish-FRDC/Corporate-documents/2017-stakeholder-workshop/Presentation-41-People-Development.ashx?la=en>

4.2 *National Carp Control Plan – Matt Barwick*

Matt Barwick (National Co-Ordinator of the National Carp Control Plan (NCCP)) provided an update of the NCCP to the workshop:

- Explaining what the NCCP is.
- Reviewing the science underpinning NCCP.
- Summarising progress against the research program.

Attendees demonstrated interest in the collaborative opportunities in the proposed Native Fish research. Attendees also echoed comments and concerns of the broader community with concerns such as potential impact of the virus on human health as well as potential opportunities of utilisation of biomass, for example for human consumption or aquaculture feed. Matt re-iterated that the National Carp Control Plan hopes to inform such enquiries, ensuring that the effort to control carp biomass is underpinned by robust scientific research.

See presentation here: <http://frdc.com.au/-/media/Fish-FRDC/Corporate-documents/2017-stakeholder-workshop/Presentation-42-NCCP-Update.ashx?la=en>

4.3 SafeFish – Alison Turnbull

Alison Turnbull (SafeFish Project Manager) provided a summary of the SafeFish program to workshop attendees. This was in light of SafeFish distributing their revised value proposition to stakeholders, which will inform future funding opportunities for SafeFish beyond 2018:

- SafeFish is an unincorporated partnership combining government regulatory agencies with seafood industry bodies and research institutions.
- SafeFish undertakes three main responsibilities:
 - Food safety incident responses.
 - Technical input to inter-government consultations on food regulations and market access.
 - Proactive research, risk analyses, capability development and training.
- SafeFish presents short-, medium- and long-term food safety value to the industry.
- Future work program will progress priorities as highlighted at the 2016 SafeFish Prioritisation Workshop (i.e. CODEX input, food authenticity and traceability, food safety incident response).
- *‘Food safety is not negotiable’.*

Attendees queried the scope of SafeFish to address recreational food safety issues, it was outlined that this beyond the scope of SafeFish and such research needs are addressed through other FRDC funding mechanisms. Feedback was also given in regards to potential scope for an accreditation, however it was agreed that this is also beyond the scope of SafeFish and the primary function of SafeFish is to support science that can underpin claims. It was also reiterated that it is optimal to be proactive, and that current co-investors in SafeFish believe that their return on investment is valuable.

See presentation here: <http://frdc.com.au/-/media/Fish-FRDC/Corporate-documents/2017-stakeholder-workshop/Presentation-43-SafeFish-Update.ashx?la=en>

5. Year in Review - Workshop – Crispian Ashby

Attendees were broken up into predefined groups based on commonalities of interests and asked to identify high-level priorities. The 'high-level' priorities identified by each group is outlined below.

1. Subprograms (People Development, Human Dimensions Research, Indigenous Reference Group, RecFishing Research)
 - Communications and improved understanding of knowledge networks and influence for effective messaging including science –communication
 - Data
 - Extension and adoption
 - Free Trade Agreement, Provenance, Branding
 - People development
 - The subprograms also made high-level observations regarding common ground: work nationally, include people capacity, public good focus, high priorities that need to be driven and coordinated, research design role, end users include other FRDC groups, across all jurisdictions, species and bioregions; thematic.
2. Commonwealth RAC, Victoria RAC, South Australia RAC, Tasmania RAC
 - Data: Data poor sectors (develop tools); Recreational data (cost-effective; for management) – for what, what is needed, how do we collect?; Indigenous data
 - Cumulative impacts
 - Employment in the seafood industry
 - Biomass estimation (workshop)
 - Capacity building
 - Animal welfare
 - Education (extension)
3. Northern Territory RAC, Queensland RAC, New South Wales RAC, Western Australia RAC
 - Data:
 - Develop novel and cost effective approached to data collection
 - Data quality assurance and cleansing
 - Curation and analysis of data
 - Engagement:
 - consistent evaluation approaches to understand social and economic contribution of fisheries and aquaculture
 - Designing, doing and evaluating engagement
 - Undefined:
 - Management of small-scale, data poor undefined fisheries
4. Molluscs (Australian Abalone Grower's Association, Oysters Australia, Pearl Producers Association)
 - Aquatic disease, health, biosecurity, epidemiology
 - Efficient production systems:
 - Nursery culture systems for intermediate growth
 - Automation, mechanisation robotics
 - Biofouling

- Breeding tools (including early growth predictors, spawning/conditioning, challenge testing)
5. Representative Organisations (National Seafood Industry Alliance, National Aquaculture Council, RecFish, Commonwealth Fisheries Association)
- Data:
 - Ownership, validation, standards
 - Data conflict – how to overcome conflicting interpretations of data
 - Flexibility of interrogation
 - Biosecurity:
 - Case definitions/diagnostics (prawns, pearls, oysters)
 - Improved knowledge, fluidity (disease threats emerging infectious diseases)
 - Animal Welfare:
 - Retained and non-retained
 - Education and training (e.g. difference between husbandry welfare); extend education to public; recreation need cultural change)
6. Wild Catch IPAs (Southern Rocklobster Ltd, Western Rock Lobster, Australian Council of Prawn Fishers, Abalone Council Australia)
- Market intelligence (aid marketing, positioning and decision making):
 - Price data
 - Trend data (consumption and production other sources)
 - Market dashboard (similar to Meat and Livestock Australia, see: <https://www.mla.com.au/prices-markets/market-reports-prices/>)
 - Food tourism:
 - How to achieve 1) Social License; 2) Market share (domestic) and export market via tourist
 - Social license:
 - Are there social license to operate threats and who are the organisations)
 - Evaluating effective methods of achieving social license to operate
7. Aquaculture IPAs (ABFA, APFA, TSGA)
- Biosecurity:
 - National border
 - Regional
 - On farm
 - Fish health:
 - Vaccines
 - Access to chemicals
 - Test kits/diagnostics
 - Barriers to industry expansion:
 - Access to new capacity
 - Farming discharge
 - Qualified staff

DAY 2: Thursday 31st August

Day 2 enabled the workshop attendees to further progress priorities. The 'high-level' priorities nominated at the previous session were categorised into five key themes: (I) Biosecurity and Food Safety, (II) Data, (III) People and Capacity, (IV) Animal Welfare and (V) Community Engagement, Social License, Branding of Industry with each theme assigned to a respective table in the room. Attendees were then able to choose which table they sat on and which theme they wished to progress, detailing strategic priorities within each theme, tabling what potential projects could look like and the potential collaboration mechanisms for such projects.

6. Discussion on 2017/18 Priorities and Potential Areas for Collaboration

Following on from the prior discussions, commonalities across all groups were identified and broad priorities discussed. Attendees were able to select which priority discussion they wished to join

Overarching Theme	Strategic Priorities
Biosecurity and Food Safety	<ul style="list-style-type: none"> • Aquatic Deed <ul style="list-style-type: none"> • Animal Health Australia • Aquatics has now been recognised • Animal Aquatic Health and Biosecurity Subprogram <ul style="list-style-type: none"> • Biosecurity requires recognition that it has separate R&D needs • Subprogram requires a broader skill set to address biosecurity • Australian Brand <ul style="list-style-type: none"> • Key attributes: food safety, healthy habitat, biosecurity, quality
Data	<ul style="list-style-type: none"> • Digital technology <ul style="list-style-type: none"> • Scoping data collecting and analysis innovations for policy, management, operations • New apps. Commercial rec catch, mgmt., markets, effort • Monitoring and sensors (environment to consumers) • Database structure • Data collection methods and electronic reporting <ul style="list-style-type: none"> • Proper structure first, harmonisation • AFMF approval for data collect <ul style="list-style-type: none"> • Research scope for proposal • Market data <ul style="list-style-type: none"> • Consumer research (in-market) • Trading data (prices, volumes, competitors) • Understanding our markets • Reporting formats for end-user consumptions

Overarching Theme	Strategic Priorities
	<ul style="list-style-type: none"> • Different dashboards from a common database
People and Capacity	<ul style="list-style-type: none"> • Ross and Anwen projects <ul style="list-style-type: none"> • Adopt recommendations • Communicating mechanisms to advance identified training needs: leadership, social media, WH&S induction/training • Succession: Understanding issues around entry, exiting and consolidation to industry • Decision making skills/capability <ul style="list-style-type: none"> • Labour: Where is the pool? Understanding labour markets, understanding the issues • What makes the industry attractive • Leadership: Building the capacity of the pool of people to undertake engagement and representation. Understanding barriers for participation in industry and in capability building • Leadership investments <ul style="list-style-type: none"> • Understanding the benefits and the capacity that has been built and increasing visibility • Strategic approach to leadership development
Animal Welfare	<ul style="list-style-type: none"> • Work on developing tools for industry use is already done • Priority now is effort to maximise industry adoption/uptake • Assessment of welfare outcomes from industry adoption of tools • Evaluation • Promotion of welfare practices (i.e. RSPCA – demonstration) • Consistent defensible messages • Development of an animal welfare ethos • Long term requires industry responsibility
Community Engagement, Social License, Branding of Industry	<ul style="list-style-type: none"> • Internal and external engagement • Communication is a form of engagement • Capacity issues – need capacity management

<i>Overarching Theme</i>	<i>Strategic Priorities</i>
	<ul style="list-style-type: none"> • License to engage: HDR Co-Ordination project • Social and economic contribution studies, level of co-ordination, process and information (community and policy engagement, content for communication , branding for community • What: puts you at risk of social support • Who has influence? Who to communicate with? Who decides? • How – ‘License to Engage’: HDR, RAC, IPA, IRG; HDR experts in design and evaluation, RACS/IPAS facilitate engagement

7. Discussion on 2017/18 Priorities and Potential Areas for Collaboration

Attendees further refined identified priorities to detail more specific project concepts

Priority	Lead (Who is the organisation that will lead the project?)	Linkages (What are the broader issues this work links with?)	Partners (Who are potential co-investigators?)	Planned Outcomes	What does success look like?
Biosecurity	National Aquaculture Council	Aquatic deed, brand, market access, trade, food safety, healthy habitat, animal welfare, NZ	End users, researchers, investors) DAWR, AAHBS, SIA, IRG RecFish, State Departments, FRDC, AHA	Protection from disease, demonstrate freedom from disease, improve biosecurity at scale of country, state, farm A risk based approach to national biosecurity underpinned by good science What is needed: \$\$\$, collaboration fund, the right person, governance, stakeholder engagement workshop, aquatic deed.	
Data	Industry (Seafood Industry Victoria)	All sectors and government (state and federal)	People (RecFishing Australia, Indigenous Reference Group, Industry associations)	Mapping what are we collecting now and what do we want to collect? Government and other Scoping of tools, systems, operators, innovation Objectives development: privacy security guidelines, interoperability linkages ad talking between databases	

Priority	Lead (Who is the organisation that will lead the project?)	Linkages (What are the broader issues this work links with?)	Partners (Who are potential co-investigators?)	Planned Outcomes	What does success look like?
				Communication of opportunities across all stakeholders Development of a steering committee	
People and Capacity Building	HDR	Cross-industry	RACS, IRG, IPA	Understanding labour needs, barriers and market dynamics anecdotal evidence that there are challenges in having a skilled workforce	Clarity on labour market issues, recommendations on addressing, market issues
Aquatic Animal Welfare	Seafood Industry Australia, with external project management	Aquatic Animal welfare group, market access, brand Australia (adds value), animal welfare groups (RSPCA, Animals Australia, WWF)	RACs, IPAs, HDR, National Priority,	Create Animal wellbeing ethos through adoption of best practice animal welfare Stocktake: attitudes, materials, legislation Adopt principals in each industry code of practice Education – how adopting principles will enhance their commercial practice Survey and sampling on results of adopting principles (community perception) Review and update new information and technology Adopt principals in each industry code of practice	Adoption of best practice resulting in sustainable commercial outcomes (flow on effects with Animal Welfare groups)

Priority	Lead (Who is the organisation that will lead the project?)	Linkages (What are the broader issues this work links with?)	Partners (Who are potential co-investigators?)	Planned Outcomes	What does success look like?
Community Engagement, Social License, Branding of Industry	National call required to locate best candidate		Does the project align with IPA and RAC priorities? – Critical works, need iteration, there are ~5 groups that have identified these topics but all are a little different of detail	As per HDR license to engage: Building relationships and trust Data on concerns Pressure points for engaging Social and economic indicators – state capability, extension systems to communities, effect of issue e.g. change in business structure improving capacity to enhance engagement (e.g. IRG program, rec fish etc)	Uptake by end users Clarity and acceptance of process by participants Co-investment, not re-tabled, meeting balance of program goals License to engage – groups do effective engagement Social and economic contributions use of results to make decisions considering more than biology and producer profit

8. Performance Reporting

8.1. FRDC Benefit Cost Analysis Process – Patrick Hone

Patrick provided an overview of the FRDC's monitoring and evaluation processes. As part of FRDC's 2015-2020 RD&E plan, FRDC has mechanisms in place to monitor and evaluate the impact of research across the life of the plan. Evaluations for the first year of the plan, 2015/16 were recently completed. Agrtrans Research, on behalf of FRDC, completed a benefit-cost analysis of a random sample of 20 projects that concluded in 2015/16. The findings of these assessment are soon to be published in the 2016-17 Annual Report as well on the FRDC website.

8.2. ABFA Economic Planning Tool – Chris Calogeras

Chris Calogeras provided an update of the output of project *2015-228 IPA Australian Barramundi Farmers Association - ABFA RD&E investment model*, an economic planning tool developed by Ridge Partners to assist Barramundi farmers with planning both at the farm level and industry level. Whilst this tool is commercial-in-confidence and not available to stakeholder workshop attendees, it did provide an insight into mechanisms that can be used to plan RDE investment.

9. Actions and next steps

Following on from the prior discussions, commonalities across all groups were identified and broad priorities discussed. Attendees were able to select which priority discussion they wished to join

Actions	Current Status
FRDC to compile a list of other organisations that need to be invited to the stakeholder workshop – e.g. chair of AFMF, chair of RPN	Ongoing
RD&E Strategy Governance Committee – how does it input into this process?	
Scope opportunities for ex ante analysis (anticipating potential value)	Ongoing - FRDC to work with Monitoring and Evaluation providers, to determine decision rules required for ex ante analysis
Distribute the recommendations from Ord and Lovett report for consultation. Are FRDC products suitable for training providers? Or do we need new synthesised reports across?	Final report available at http://frdc.com.au/Archived-Reports/FRDC%20Projects/2016-418-DLD.PDF - FRDC to progress recommendations
FRDC to do FISH article on seafood training and education – e.g. NFF and the new body; PIEFA (Johnathon Davey chaired sub-committee)	Ongoing
FRDC to distribute a copy of the FRDC’s Communication and Extension plan	To be circulated upon completion
Send to industry a briefing on the NSW DPI “Community and Consumer Engagement” project	
Arrange a presentation of MLA “Market Insights” project to ACA, ACPF, SRL, WRL – re their priority on market intelligence	
Document the Idea and priorities ID and ensure the “white” ideas are not lost	Ongoing

Actions	Current Status
Provide the link to the BCA work	Completed – see: http://frdc.com.au/Research/Benefits-of-research/2017-Portfolio-Assessment
Send link to the latest community perception survey	Completed – see: http://frdc.com.au/-/media/Fish-FRDC/Corporate-documents/market-research/2017-Community-Perceptions-Australian-Fishing-Industry.ashx?la=en
Workshop notes to be sent out to delegates, provide all PowerPoints presented	Completed – this document (also available at: http://frdc.com.au/Partners/Stakeholder-workshops/2017-Stakeholder-Workshop)

Appendix 1: Priorities matrix

The following matrix details the priorities nominated by each of FRDC's stakeholder groups prior to the workshop. Commonalities that occur across stakeholders have been highlighted, and the point of commonality annotated in the 'Theme' column. Cells that have not been highlighted do not necessarily exclude the priority from being addressed as part of a broader collaborative undertaking, however the priority was deemed more likely to be specific to that stakeholder group that nominated the priority by FRDC management.

Name	#	Priority	Theme
VicRAC	1	Developing solutions to enhance productivity and profitability across the value chain	Productivity, profitability
VicRAC	2	Minimise impacts of fishing and aquaculture on the aquatic environment and threatened, endangered and protected species	Impacts of fishing
VicRAC	3	Develop novel and cost effective approaches to data collection and monitoring of the fishing and aquaculture industries	Data
SARAC	1	Implications of Gulf St Vincent productivity loss: developing tools to optimise multi-fishery management in a changing environment	
SARAC	2	Development of Aboriginal traditional fishing data collection techniques	Data
SARAC	3	Fisheries biology of Western Australian Salmon: Improving our understanding of population dynamics to enable quantitative stock assessment and improved fisheries management	
SARAC	4	Using new technologies to monitor fishing for sharks and rays and encourage modified angler behaviour	
SARAC	5	Further improvement of King George whiting hatchery techniques for aquaculture development and investigation of strategies to ensure sustainable harvest of this species in South Australia	
SARAC	6	Stock distribution, population structure, and movement patterns for two sympatric <i>Centroberyx</i> species in South Australia – Bight Redfish and Swallowtail Nannygai.	
SARAC	7	Identification of the barriers and opportunities for growth in the South Australian Charter Boat Fishery through an assessment of client needs and wants and a survey of current industry services and operator aspirations.	
SARAC	8	Seal-fisher-ecosystem interactions in the Lower Lakes and Coorong: understanding causes and impacts to develop longer-term solutions	
SARAC	9	Defining stock structure for Black Bream in southern Australia: implications for management	

Name	#	Priority	Theme
SARAC	10	The influence of fish provenance and movement on fishery production and stock structure of South Australia's Golden Perch fishery.	
SARAC	11	Workshop on reviewing contemporary micro-/macro- approaches to surveying recreational fishing behaviour, effort and catches (potential national)	Recreational
TASRAC	1	Review of abalone stock status indicators: is estimation of stock biomass defensible?	
TASRAC	2	Systems for local scale stock enhancement: developing and testing portable larval production facilities?	
TASRAC	3	Communication research around community concerns and how these can be addressed (RE aquaculture)	Community, Social Engagement
TASRAC	4	Assessing the risk of pathogenic Vibrio Species in Tasmanian Oysters	
TASRAC	5	Industry knowledge/technology transfer between intensive primary production industries	Extension and Adoption
TASRAC	6	Development and validation of a testing process for Perkinsus sp. in asymptomatic abalone and oysters	AAH diagnostics
TASRAC	7	Risk from Diarrhetic Shellfish Toxins for the Tasmanian shellfish industry	Risk and Monitoring, HABS
TASRAC	8	Advanced biosecurity management for Pacific Oyster Mortality Syndrome (OshV1 virus)	Biosecurity
COMMRAC	1	Developing multi-species harvest strategies (with consideration for multi-year TACCs) under the new Harvest Strategy Policy	
COMMRAC	2	SBT management & resource sharing	
COMMRAC	3	Cumulative impacts of fishing	Impacts of fishing
COMMRAC	4	Discard & bycatch triggers for Commonwealth fisheries under the new Bycatch Policy	
COMMRAC	5	Developing capacity and capability within the recreational and Indigenous fishing community to better represent their sectors across a range of forum	People development, capacity
COMMRAC	6	Cost effective and statistically robust collection of data for managing shared and recreational fisheries (potential national)	Recreational
COMMRAC	7	Understanding the Economic Impacts of Changing 457 Visa Availability (potential national)	
COMMRAC	8	Development of a National Bycatch and Discards Reporting Framework (potential national)	
COMMRAC	9	Workshop to develop a toolkit for biomass estimation for all species (potential national)	
WARAC	1	Viability of small commercial fisheries	Small scale fisheries
WARAC	2	Cumulative and sub-lethal impacts of Seismic activity on wild-caught and Aquaculture species	Seismic

Name	#	Priority	Theme
WARAC	3	Australian Sea Lion (<i>Neophoca cinerea</i>) in the south west	
WARAC	4	Increased fishery productivity through habitat enhancement and protection and improvement activities	Habitat - Impacts
WARAC	5	People Development	People devlopment, capacity
WARAC	6	Industry valuation/valuation methodologies	Social and economic
WARAC	7	Improve economic and social outcomes for underutilised products	Productivity, profitability
WARAC	8	Understanding the effects of aquaculture on adjacent habitats through environmental performance monitoring	Habitat - Impacts
WARAC	9	Develop tools to educate communities and social and economic benefits of Aquaculture	Community, Social Engagement
WARAC	10	Molecular and data based Aquatic disease and Marine pest surveillance and monitoring	AAH diagnostics
WARAC	11	Increasing the health and productivity of <i>Pinctada maxima</i> Pearl Oysters	
NTRAC	1	Cost effective management strategies for small scale/capacity limited fisheries	Small scale fisheries
NTRAC	2	Leadership and change challenge	People devlopment, capacity
NTRAC	3	Investigating the impacts of seismic survey on fisheries	Seismic
NTRAC	4	Managing transition both in and out of the seafood industry	
NTRAC	5	Determining the social and economic contribution of all key fishing sectors in the Northern Territory – Improve understanding of economic contributions of fishing to the NT economy	Social and economic
QLDRAC	1	To determine the proportion of Queensland east coast (marine and estuarine) wild Barramundi catch that is of hatchery origin	Re-stocking
QLDRAC	2	To gain a better understanding of the spawning aggregations and dynamics of Pearl Perch (<i>Glaucosoma scapulare</i>)	
QLDRAC	3	Influence of changes in reef habitat condition and climate change on coral trout — to inform stock assessments and harvest strategies	Habitat - Forecast
QLDRAC	4	Industry Recovery from White Spot Syndrome Virus (WSSV)	
QLDRAC	5	Mud Crab tagging study – Commercial and Recreational feasibility	
QLDRAC	6	Impacts of Social media on public perception	Community, Social Engagement

Name	#	Priority	Theme
QLDRAC	7	Document Net (N1 & N11) bycatch in South east Queensland	Impacts of fishing
QLDRAC	8	Does fish fecundity increase with fish size? Implications for size-limit management	
QLDRAC	9	The impact of anthropogenic activities on the health of seagrasses	Habitat - Impacts
QLDRAC	10	Climate change effects on wild-caught species in South East Queensland	
NSWRAC	1	Improved data reporting App	Data
NSWRAC	2	The need for approaches to distinguishing between stocked and wild-recruited native fish	Re-stocking
NSWRAC	3	Investigating opportunities and logistics for a live Blue Swimmer Crab market in NSW	
NSWRAC	4	Investigation into cost effective and practical transport tubs for larger fish species	
NSWRAC	5	Marking of offshore fishing gear for navigational purposes	
NSWRAC	6	Quantifying elemental residues in commercially important crustaceans: quality assurance for export markets	
NSWRAC	7	Use of innovative technology as a cost effective means to improve resource assessment outcomes.	
NSWRAC	8	Quantifying the value of community engagement	Community, Social Engagement
IRG	1	Indigenous Capacity Building Program: A national, culturally appropriate capacity building program for Indigenous Australians	People development, capacity
IRG	2	Improved data on Aboriginal and Torres Strait Islanders fisheries resource use to better inform fisheries agency decision making and Indigenous community planning:	Data
IRG	3	Developing a concise summary of R&D undertaken to date: - A number of Indigenous focussed projects are nearing completion.	
IRG	4	Sharing and preserving knowledge through story	
IRG	5	Taking R&D to E&A – extending adoption pathways to policy and management: - The natural progression for much of the Indigenous focussed R&D being undertaken is to work towards changed policy and management arrangements (like for most other sectors)	Extension and Adoption
Recfishing	1	National social and economic survey	Social and economic
Recfishing	2	Development of a national funding model for Australia's recreational fishing community	
Recfishing	3	Upskilling current and emerging leaders within Australia's recreational fishing community	People development, capacity
Recfishing	4	National Recreational Fishing Conference	

Name	#	Priority	Theme
HDR	1	<p>Using Benefit Transfer to inform decision-making and reporting in fisheries and aquaculture. Planned outcomes: 1. Ensure scientific rigour of decisions and reporting based on the use of BT and confidence in practitioners and users of non-market values and in decision making processes.</p> <p>2. Greater transparency, consistency and reliability BT in fisheries and aquaculture.</p> <p>3. Support evidence-based setting of investment priorities in non-market valuation research in fisheries and aquaculture.</p>	
HDR	2	<p>Change for the better: drivers and barriers to adoption and transfer of desirable practices in fisheries and aquaculture. Planned outcomes: • Industry associations and RD&E managers are better able to direct financial and human resources into the most effective interventions to increase uptake and transfer of standards of performance, tools and guides to best practice across a range of diverse operational domains.</p> <ul style="list-style-type: none"> • Contribute to higher rates of uptake and transfer of preferred practices 	Extension and Adoption
HDR	3	<p>Determinates of socially-supported fisheries and aquaculture. Planned outcomes: The project will contribute to enabling Australian fisheries and aquaculture sectors to make decisions about undertaking engagement activities and, potentially, developing engagement strategies which are better informed about the range of factors that determine their societal support.</p>	
HDR	4	<p>Understanding selected relationships in a range of key Australian seafood markets. Planned outcomes: 1. Specific outcomes will depend on the selected case studies.</p> <p>2. Improved performance through better use of existing knowledge of key relationships in Australian seafood markets.</p> <p>3. Support evidence-based setting of investment priorities into key relationships in Australian seafood markets fisheries.</p>	
HDR	5	<p>Knowing who has influence: key influencers and networks for socially-supported fisheries and aquaculture. Planned outcomes: The RD&E undertaken will contribute to improved understanding of how key decisions affecting fisheries and aquaculture are influenced by the actions and judgements of external and internal actors, and how these networks and processes can be engaged with.</p>	

Name	#	Priority	Theme
HDR	6	<p>License to Engage: Designing, doing and evaluating engagement. Planned outcomes: Members of participating fisheries and aquaculture sector groups are able to increase their capacity to design, implement and evaluate engagement activities and strategies to meet their needs</p> <p>Members of Australian fisheries and aquaculture sector more broadly are able to make informed decisions about investing resources in building their engagement capacity and undertaking specific engagement activities and strategies.</p>	Community, Social Engagement
HDR	7	<p>Retrospective assessment of ITQs to improve future design and performance. Planned outcomes: The performance of existing ITQ markets and the design of new tradeable rights markets in Australia will be strengthened through knowledge of retrospective performance of ITQ systems.</p>	
HDR	8	<p>Understanding social and economic contributions of fisheries and aquaculture. Planned outcomes:</p> <ul style="list-style-type: none"> • Improved Return on Investment of contribution studies • Methods to identify, measure and evaluate those social and economic contributions relevant to target audiences and information needs are available for future contribution studies 	Social and economic
AAHB	1	<p>Nature of disease threats:</p> <ul style="list-style-type: none"> • Improved knowledge of the biology of disease agents (including epizootiology, taxonomy of pathogens, pathophysiology, histology, etc.) • Improved knowledge on the host response to disease agents (aquatic animal immunology and immunomodulators) • Knowledge about new and emerging infectious diseases • Knowledge about disease translocation risk factors. 	

Name	#	Priority	Theme
AAHB	2	<p>Aquatic animal health management:</p> <ul style="list-style-type: none"> • R&D to inform risk analyses (including disease risk minimisation procedures for exported and imported aquatic animals and products) • R&D to facilitate inter-jurisdictional harmonisation of domestic and international approaches (common tests, common protocols (e.g. translocation), common certification) • Development of protocols, methods and operational instruments to manage routine biosecurity and also emergency aquatic animal disease outbreaks • Methods of aquatic animal product treatments to prevent spread of disease (sterilisation, disinfection and decontamination) 	Biosecurity
AAHB	3	<p>Endemic and exotic aquatic animal disease diagnostics:</p> <ul style="list-style-type: none"> • Review and assessment of existing screening and diagnostic tests, and those under development • Development of sampling methodology to detect sub-clinical infections at low levels of prevalence • Development of case definitions and diagnostic criteria • Development and validation of screening tests and diagnostic tests • Facilitate transfer of knowledge and technology in aquatic animal diagnostics • R&D to support QA for diagnostic services 	AAH diagnostics
AAHB	4	<p>Surveillance and monitoring:</p> <ul style="list-style-type: none"> • Support projects to enhance existing surveillance and monitoring programs and those under development • Research into aquatic animal disease surveillance methodology • Strategic R&D to inform disease control programs, translocation, zoning, surveillance and monitoring, and risk analyses in relation to disease organisms 	Biosecurity
AAHB	5	<p>Aquatic animal disease therapy and prophylaxis:</p> <ul style="list-style-type: none"> • Support projects to enhance existing surveillance and monitoring programs and those under development • Research into aquatic animal disease surveillance methodology • Strategic R&D to inform disease control programs, translocation, zoning, surveillance and monitoring, and risk analyses in relation to disease organisms 	

Name	#	Priority	Theme
AAHB	6	Training and capacity building: <ul style="list-style-type: none"> • Human capital development • Facilitate the development of training and extension tools • Sustain and further develop technical skill-base in aquatic animal health • Facilitate R&D knowledge transfer in aquatic animal health 	People development, capacity
ASBTIA	1	Blood fluke control – improvements to use and efficacy for praziquantil	
ASBTIA	2	Lice (<i>Caligus sp.</i>) Understanding the parasite and impacts, treatment options if needed?	
ASBTIA	3	Habitat forecasting	Habitat - Forecast
ASBTIA	4	Improve efficiency and reduce cost of pilchard feeding	
APFA	1	Support for industry nucleus breeding facility for domestication and selective breeding of <i>Peneaus monodon</i> (disease free and ultimately disease tolerance stock)	
APFA	2	R&D to support WSD (and other diseases) surveillance and farm biosecurity. NOTE - WSD R&D needs will be resolved at AAHB Subprogram facilitated meeting 18 Oct.	Biosecurity
APFA	3	Water remediation methods to remove microalage to reduce total nitrogen discharge from farms to support industry expansion.	
APFA	4	Nursery systems to improve farm productivity	
APFA	5	Best practice pond management to enhance prawn health and performance	Pond water quality
AAGA	1	Tools to assist selective breeding	
AAGA	2	Mechanisation to reduce cost and improve efficiency of farm husbandry and harvesting	
AAGA	3	Development of controlled environment nursery culture systems to improve farm productivity	
AAGA	4	Australian seafood brand capturing value of "brand Australia"	FTA, provenance
AAGA	5	Innovation in digital stock counting and performance monitoring to improve production and marketing	
ABFA	1	Assessment Of Omega 3 In Australian Farmed Barramundi	
ABFA	2	Real Time Monitoring Of Water Quality And Mechanisation Of Pond Management To Boost Productivity And Increase Profit In Australian Farmed Barramundi Industry parameters to enable electronic control of equipment.	Pond water quality

Name	#	Priority	Theme
ABFA	3	Optimising Feed Rations And Frequencies For Australian Farmed Barramundi At Different Temperatures.	
ABFA	4	Optimisation Of Treatment Of <i>Cryptocaryon Irritans</i> And <i>Chilodonella Sp</i> In Tropical Aquaculture.	
ABFA	5	Identify Value Adding Opportunities For Australian Farmed Barramundi.	Productivity, profitability
ABFA	6	Who buys Australian farmed Barramundi and why?	
ABFA	7	Influencing chefs and retailers to use and endorse Australian farmed Barramundi	
ABFA	8	Good Consistent Tasting Australian Farmed Barramundi	
ABFA	9	Opportunities for Disruptive Technologies in the Australian Farmed Barramundi ndustry	
ABFA	10	How Much and Where is Imported <i>Lates calcarifer</i> Coming From	
OYSTERS	1	No priorities specific to that plan will be called for in 2018 as it is fully subscribed.	
PEARLING	1	The Pearl Consortium IPA R&D Plan is in review. No priorities specific to that plan will be called for in 2018 as it is fully subscribed. The number one issue for the entire pearling industry is pearl oyster health, and priorities are in development. These are likely to include (a) understanding the nature of OOD (is it a pathogen?) and (b) the effects of seismic testing.	
PPL DEVELOP	1	Investment in post graduate training in fields of study identified as high need in partnership with universities	
SALMON	1	Development of information to further expansion plans in south east Tasmania	
SALMON	2	Continued vaccine development and understanding of vaccine needs	
SRL	1	Food tourism opportunities	
SRL	2	understanding and monitoring HABs	Risk and Monitoring, HABS
SRL	3	Map and benchmark SRL accreditation standards	
SRL	4	Product development for processed product	
SRL	5	Traceability systems	Productivity, profitability
SRL	6	quantify and understand how SRL can develop international markets, exploit FTA opportunities	FTA, provenance
SRL	7	Facilitate joint market development oportunities	
SRL	8	Better understand stakeholder perceptions	Community, Social Engagement

Name	#	Priority	Theme
SRL	9	Capacity building (succession planning, supporting participation in NSILP and ARLP)	People development, capacity
SRL	10	Seismic	Seismic
ACA	1	AWA marketing levy	
ACA	2	Development of new RD&E plan	
ACPF	1	Bycatch utilisation/trawl efficiency extension of existing techniques and research on new techniques; keeping a watching brief on EU discard ban (on going and in progress from 2016-17)	Impacts of fishing
ACPF	2	Effect of trawl on habitat and zoned recovery times (if not covered by Hillbourne and Pitchar) as content in community engagement initiatives	Habitat - Impacts
ACPF	3	Community engagement strategies to achieve SL20 (on going and in progress from 2016-17)	Community, Social Engagement
ACPF	4	Metabisulphate replacement and improving shelf life (on going and in progress from 2016-17)	
ACPF	5	Cost effective automation of on-board prawn grading (adjunct to cooling product quicker) and packaging initiatives	
ACPF	6	Social and environmental metrics of the use of imported prawns vs local Australian prawns which could be used to inform Government regulations/lobbying and consumers in addition to the calculated value of a fishery.	
ACPF	7	Electronic log system that can change boundary in real time that records data as to where boats fish	Data
WRL	1	Identify and plan for coordination and collaboration across fishery sectors on common issues like resource access	
WRL	2	Collaborate with WAFIC and other sectors to develop a high standard of marine occupational health and safety	
WRL	3	Invest in building human capacity and improving professionalism to sustain industry advocacy and leadership	People development, capacity
WRL	4	Develop and implement an integrated communications strategy to manage the industry's reputation with clarity, consistency and collaboration	Community, Social Engagement
WRL	5	Demonstrate the WRL fishery's value to the WA economy and regional communities with evidence based information (underway)	Social and economic
WRL	6	Further develop international markets and take advantage of recent FTA's	FTA, provenance

Name	#	Priority	Theme
SUB-ANTARCTIC	1		