

## **April 2018 Competitive Round Call for Expressions of Interest Closing date for applications 15<sup>th</sup> June, 2018**

### **Call for Applications**

The Fisheries Research and Development Corporation ([FRDC](#)) is calling for Expressions of Interest (EOI) that address research, development & extension (RD&E) priorities nominated by the FRDC's Advisory Groups: Research Advisory Committees ([RACs](#)), Industry Partnership Agreements ([IPAs](#)) and [FRDC Subprograms](#).

The nominated RD&E priorities for investment are outlined below. EOI's that address multiple priorities are encouraged.

Applicants may also submit an EOI that does not address a nominated priority; however, it should be noted that preference may be given to applications that address nominated priorities. If you do wish to submit an application that does not address one of these priorities, it is recommended that you first discuss your research concept with the relevant [FRDC Advisory Group](#) contact. In addition, FRDC strongly recommends that all applicants consult with the relevant stakeholder groups and expected end users to ensure that research concepts has the support of beneficiaries. Support can be demonstrated through formal letters of support, in-kind contributions and project cash contributions.

### **Minimum EOI Requirements**

All EOIs **MUST** be completed via [FishNet](#). Refer to the FRDC website for more information on the FRDC's process for [Applying for Funding](#).

**Once you have completed your EOI you must finalise it on FishNet so that FRDC receives notification that the application is submitted. Failure to do so may mean that your application is not submitted and therefore not considered for funding.**

If you have any questions or issues with FishNet, please contact the FRDC by phone (02) 6285 0400 or email [frdc.programs@frdc.com.au](mailto:frdc.programs@frdc.com.au).

**Applications must be finalised by the 15<sup>th</sup> of June, 2018. Applications not submitted by this date may not be accepted unless prior approval for a later submission date is provided by the FRDC.**

Each EOI must clearly outline how it will meet the relevant identified Need(s). Provide a clear description of the proposed Method to achieve the stated Objectives, and deliver the expected Outputs and Outcomes. The application should include a quantification of the impact of the research if the outputs were adopted such as a change in fisheries management, an improvement in the species population, increased profitability or efficiency of the commercial sector or improvements in recreational fishing experiences. This needs to be described in the outputs and outcomes section. Applicants also need to define project extension activities that will be used to disseminate expected project findings. A realistic Budget that reflects the activity to be undertaken is to be provided along with Justification for the budget request. Where appropriate, applicants should demonstrate collaboration with other relevant research providers and end users and also consider past and current research to avoid duplication and build on previous outputs.

After the 15<sup>th</sup> of June 2018, the FRDC will forward each EOI to the relevant FRDC Advisory Group(s) (e.g. RAC/IPA/Subprogram) for assessment. Following their meetings in July/August 2018, each FRDC Advisory Group will provide advice that will be communicated to applicants on whether their application has been supported or not supported in the round. An application that is not supported by an FRDC Advisory Group(s) is unlikely to be successful in obtaining funding.

The FRDC will assess all applications received in June, taking into consideration the level of FRDC Advisory Group(s) support and provide final advice to applicants on the result of their application once the results are finalised.

Under the FRDC's flexible approach to investment this is one of three potential [Calls for Applications](#) in 2018; with subsequent calls for applications to be made in August and November if additional research priorities are nominated. If the RACs, IPAs and Subprograms do not have any priorities they wish to address, a call for applications may not occur.

**Nominated RD&E Priorities for Investment**  
(relevant Funding Partner(s) are shown in parentheses)

Leadership and change challenge	Northern Territory Research Advisory Committee (NT RAC)
To gain a better understanding of the spawning aggregations and dynamics of Pearl Perch ( <i>Glaucosoma scapulare</i> )	Queensland Research Advisory Committee (QLD RAC)
Challenges and opportunities provided by range extending species: understanding population dynamics, ecosystem impacts and management needs	Tasmanian Research Advisory Committee (TAS RAC)
Socio-economic characterisation of the Tasmanian Scalefish Fishery: barriers and opportunities for future profitability and a strategic vision for the sector	Tasmanian Research Advisory Committee (TAS RAC)
Assessing the impact of marine seismic surveys on commercial scallop larvae	Tasmanian Research Advisory Committee (TAS RAC)
Non-market values to inform decision-making and reporting in fisheries and aquaculture – an audit and gap analysis	Human Dimensions Research Subprogram (HDR)
Engaged fisheries and aquaculture: Case studies of Designing, Doing, Learning	Human Dimensions Research Subprogram (HDR); Relevant Research Advisory Committees
Knowing who has influence: key influencers and networks for socially-supported fisheries and aquaculture	Human Dimensions Research Subprogram (HDR)

## April, 2018 Competitive Round Call for Expressions of Interest

<b>Priority</b>	<b>Leadership and change challenge</b>
<b>Need</b>	<p>The self-identity of many fishers is characterised by high levels of self-reliance and independence from authority. As a consequence, fishers are often limited in their capacity to engage with, and adapt to, shifts in policy and context. Fishers commonly express the need for a stronger sense of being heard and participating on an equal footing with other stakeholders. Without this, there is reluctance to work together to achieve mutually beneficial outcomes. Strategies are needed to facilitate more active and productive participation of fishers in industry and stakeholder forums.</p> <p>We need to build capacity at the grass roots level for:</p> <ul style="list-style-type: none"> <li>• Understanding individuals behaviours/personality (and the impact this may have on others)</li> <li>• Communication skills</li> <li>• Logistical planning of meetings and forums</li> <li>• How to create and build relationships within industry and with stakeholders</li> <li>• Succession planning (both own business and sector)</li> </ul>
<b>Planned outcomes</b>	Delivery of programs and training that result in increased leadership and development of processes that enable change driven by fishermen
<b>Funding Partners</b>	Northern Territory Research Advisory Committee

<b>Priority</b>	<b>To gain a better understanding of the spawning aggregations and dynamics of Pearl Perch (<i>Glaucosoma scapulare</i>)</b>
<b>Need</b>	<p>A recent stock assessment (<i>Stock assessment of the Queensland and New South Wales pearl perch fishery – 2017</i>) has indicated a stock status classification of “transitional depleting”, with the risk of recruitment overfishing uncertain. A relatively small fishery that is data poor, there is a current lack of understanding of the spawning reproduction, biology and spatial distribution of the species. Current restrictions on knowledge include:</p> <ul style="list-style-type: none"> <li>• Pearl Perch differ from other rocky reef species (such as Snapper) where the spatial and temporal extent of spawning is fairly well known.</li> <li>• There is still uncertainty around the spawning and reproductive biology of this species as previous research, as well as ongoing monitoring, has sampled very few fish in spawning condition.</li> <li>• Given the number of fish sampled by extensive research and long-term monitoring project (LTMP) sampling over many years, this is surprising and suggests an unusual reproductive dynamic.</li> </ul>

<b>Planned outcomes</b>	<ul style="list-style-type: none"> <li>• Improved accuracy of stock estimates</li> <li>• Better informed stock assessment model and harvest strategy assessments</li> </ul>
<b>Funding Partners</b>	Queensland Research Advisory Committee

<b>Priority</b>	Challenges and opportunities provided by range extending species: understanding population dynamics, ecosystem impacts and management needs
<b>Need</b>	<p>Species-level responses to ocean warming is a priority research area as they underpin the structure and function of marine ecosystems and the productivity of fisheries that operate within them.</p> <p>There are a number of range extending species that have become increasingly abundant in Tasmanian waters, providing new fishing opportunities for recreational and to a lesser extent commercial fishers. Species in this group include Snapper, King George Whiting and Yellowtail Kingfish. While King George Whiting are known to spawn off the north coast it is unclear as to whether the other species have or are likely to become established as self-sustaining populations in Tasmanian waters or simply persist as spill-over from populations that are centred off mainland Australia. If the former is the case, it will be especially important to consider population attributes such as growth, mortality and reproductive dynamics relevant to the Tasmanian populations when developing and refining management arrangements.</p> <p>In addition, the broader ecosystem impacts of such range extending species, including competition with species at similar trophic levels, are unknown but could have consequences for other recreationally and commercially important species. Understanding these relationships will have benefits for the assessment and management of the Tasmanian recreational fishery more generally.</p>
<b>Planned Outcomes</b>	Development of new fishing opportunities and improved management of existing fisheries in a changing environment.
<b>Funding Partners</b>	Tasmanian Research Advisory Committee

<b>Priority</b>	Socio-economic characterisation of the Tasmanian Scalefish Fishery: barriers and opportunities for future profitability and a strategic vision for the sector
<b>Need</b>	The Tasmanian Scalefish fishery (TSF) is a multi-species fishery involving many operators and a wide diversity of operations. For some fishers the TSF represents a full-time business whereas for others it is a component of a larger diversified fishing operation or a part-time pursuit. Overall, catch and effort in the fishery has declined during the past two decades, impacted by management change, changing market demand, variability in the abundance/availability of some species and pressure from the recreational sector. At both the broad industry and individual operator scales, the current social and economic characteristics and business operating environment is poorly understood; the future of many operators seems uncertain in the face of these changes and challenges.

	<p>The objectives of this study are to:</p> <ul style="list-style-type: none"> <li>• explore and document declining catches in the TSF;</li> <li>• assess social and economic characteristics of operators within the fishery;</li> <li>• assess the economic viability of sub-sectors of the fishery;</li> <li>• determine regional and state-wide social and economic contributions and community net benefits; and</li> <li>• identify factors in the current operating environment which act to constrain economic viability, and possible strategies to address these.</li> </ul> <p>Such an assessment will not only benefit the industry directly in helping the sector develop a vision for its future but will also benefit resource managers and researchers in targeting management strategies and research in a more strategic manner to optimise social, economic and environmental outcomes.</p>
<b>Planned Outcomes</b>	Improved economic and social outcomes for the Tasmanian Scalefish Fishery and a more holistic and strategic approach to the management and assessment of the fishery.
<b>Funding Partners</b>	Tasmanian Research Advisory Committee

<b>Priority</b>	Assessing the impact of marine seismic surveys on Commercial Scallop larvae
<b>Need</b>	<p>Seismic surveys are commonly undertaken around Australia's coastline. Often, these surveys overlap with areas that are commercially exploited by a range of seafood industries, including those for marine bivalves. As a prime example, participants in Bass Strait Scallop fisheries fear that seismic surveying may have a negative impact on Scallops, including affecting larval stages and thus recruitment. These types of concerns led to the Commonwealth Fisheries Association applying (unsuccessfully) in 2013 to have seismic surveys listed as a "key threatening process" under the EPBC Act. Experimental seismic research has been recently undertaken on adult invertebrates (Scallops and Lobsters), yet there is currently a limited understanding of potential impacts of seismic surveys on larvae, with virtually nothing known about bivalves.</p> <p>As a consequence of this limited understanding, significant attention has been given to a published study that exposed Scallop larvae to simulated seismic signals in tanks and demonstrated substantial developmental delays and abnormalities. However, laboratory studies do not replicate the noise or signal-behaviour of seismic sources in the natural environment. As such, there is a need for targeted experimental work examining the effect of seismic surveys on larval bivalves in the natural environment.</p> <p>This project will use a field and laboratory experimental approach to provide a thorough assessment of the potential impacts of seismic surveys on Scallop larvae in the natural environment, as a model species for commercial bivalve fisheries. This approach will assist bivalve fisheries and petroleum regulators to make informed decisions on the timing and manner in which surveys are performed. It is expected that this project will build upon recent effect of seismic research (FRDC 2012-008).</p> <p>Resultant applications will need to demonstrate industry support for the proposed activities and expected outputs.</p>

<b>Planned Outcomes</b>	<p>It is expected that this project will provide a thorough assessment of the potential impacts of marine seismic surveys on larval commercial scallop and other important bivalve species. This will assist fisheries and petroleum regulators to make informed decisions on the timing and manner in which surveys can be performed.</p> <p>Expected outputs will address fishers concerns and improved confidence about the extent of impacts (if any) arising from the exploratory activities of the petroleum industry.</p>
<b>Funding Partners</b>	Tasmanian Research Advisory Committee

<b>Priority</b>	Non-market values to inform decision-making and reporting in fisheries and aquaculture – an audit and gap analysis
<b>Sub-priority</b>	<p>This project aligns with the following HDR priorities:</p> <p>Priority 1. Ensuring social, cultural and economic benefits</p> <ul style="list-style-type: none"> <li>• 1.1 Understanding distributions</li> <li>• 1.2 Informing resource allocation</li> </ul> <p>Priority 5. Enhancing human dimensions RD&amp;E</p> <ul style="list-style-type: none"> <li>• 5.1 Social, cultural and economic data platforms and standards</li> </ul>
<b>Need</b>	<p>Decisions about the use and management of marine resources increasingly require data on the value of benefits (and costs) that are not expressed through market transactions (non-market values). For example, in the case of fisheries, allocation decisions often require estimates on the value of recreational fishing, including health benefits, and cultural fishing. Aquaculture planning and development also requires information on impacted values such as water and habitat quality, carbon footprint and visual amenity. Such values are also sometimes used in reporting sectoral contributions and in evaluating and demonstrating industry performance. Such decisions may in future require estimates on the value of benefits arising from Indigenous customary fishing.</p> <p>The imperative for evidence-based decision-making in fisheries and aquaculture will intensify the need for robust and defensible estimates of values, including those generally viewed as difficult to measure. When done poorly, the inclusion of non-market values can undermine the scientific rigour of decisions and reporting, weakening trust in practitioners and users of non-market values and in decision making processes. There is a strong need to ensure that practitioners and users of non-market values in fisheries and aquaculture in Australia have the understanding and resources to account for non-market values in a robust and defensible manner.</p> <p>In response to this need this project will address the following specific research questions:</p> <ol style="list-style-type: none"> <li>1. What non-market values are required to support decision-making and reporting at various scales and stages in fisheries and aquaculture (inclusive, as appropriate, of recreational, cultural/customary, and commercial)?</li> <li>2. What are the empirical estimates of the values identified in the first step, and what are the key gaps that need to be addressed?</li> </ol>

	<p>The scope of this project include those non-market values likely to be included in formal benefit cost type analysis.</p> <p>These questions will be addressed largely through desk-based research, and will include reviews of relevant non-market valuation studies and databases, and current use of empirical estimates of non-market values in Australian fisheries and aquaculture decision-making. Research question 1. will be supported by a workshop of key management/policy analysts, decision-makers and researchers at State and Commonwealth levels to define needs of decision makers for non-market values. Synthesis of these project elements will inform an assessment of key research gaps and recommendations related to the need for further empirical non-market valuation studies.</p> <p>Project outputs will include:</p> <ol style="list-style-type: none"> <li>1. A concise review identifying: <ol style="list-style-type: none"> <li>a. the current use of non-market values and benefit transfer in Australian fisheries and aquaculture, and</li> <li>b. the needs of decision makers for non-market values to support evidence-based decision-making and reporting;</li> </ol> </li> <li>2. An audit of relevant non-market valuation studies and of existing databases (national or international);</li> <li>3. A gap analysis identifying key areas where further valuation studies are needed to support the use of non-market values in fisheries and aquaculture decision-making.</li> </ol>
<b>Planned outcomes</b>	<ol style="list-style-type: none"> <li>1. Ensure decision makers are aware of how non-market values can be incorporated in decision making</li> <li>2. Greater transparency, consistency and reliability in the use of non-market values in fisheries and aquaculture.</li> <li>3. Support evidence-based setting of investment priorities in non-market valuation research in fisheries and aquaculture.</li> </ol>
<b>Funding Partners</b>	Human Dimensions Research Subprogram

<b>Priority</b>	Engaged fisheries and aquaculture: Case studies of Designing, Doing, Learning
<b>Sub-priority</b>	<p>This project aligns with the following priority and sub-priority:</p> <p>Priority 4: Effective engagement to achieve socially supported fisheries and aquaculture</p> <ul style="list-style-type: none"> <li>• 4.4 License to Engage: Designing, doing and evaluating engagement</li> </ul>
<b>Need</b>	<p>When commercial fisheries and aquaculture activities do not have sufficient levels of social support – it can negatively affect industry member well-being; contribute to restricted resource access, etc. More and appropriate engagement is needed to improve stakeholder and community trust and support; both with those <u>affected by</u> industry activity, and with those <u>who affect</u> industry activity (i.e. decision-makers and ‘influencers’).</p>



	<p>This project addresses the need to ensure that the range of engagement activities and strategies undertaken by organisations and operators within fisheries and aquaculture are effective at:</p> <ul style="list-style-type: none"> <li>• building relationships and trustworthiness;</li> <li>• understanding concerns and needs arising from industry activity; and</li> <li>• influencing preferences and decisions.</li> </ul> <p>Limited evaluation has been undertaken regarding the effectiveness of engagement strategies and activities in meeting pre-defined goals. Similarly, limited opportunities exist to transfer knowledge between industry organisations of successful and future engagement practice; or to support improved return on investment of engagement strategies.</p> <p>To address this gap, applications are invited for small-scale projects that will undertake the following at a sector/region or engagement strategy-specific scale:</p> <ol style="list-style-type: none"> <li>1. Design and implement community engagement activities and strategies to meet a range of pre-defined goals of engagement, with reference to the stages and principles of community engagement identified in recognised guides, such as the <a href="#">FRDC's License to Engage Handbook</a></li> <li>2. Evaluate these engagement activities and strategies against their pre-defined goals, applying an engagement evaluation framework developed as part of an HDR-funded project (2017-133) using standardised and defensible evaluation methods</li> <li>3. Pilot and refine the evaluation framework using the above</li> <li>4. Develop materials to support other organisations based on the specific case studies in selecting, designing, implementing and evaluating types of engagement activities and strategies which have been demonstrated to be highly effective at achieving specific engagement goals.</li> <li>5. Contribute to extension and knowledge mobilisation of these findings and materials</li> </ol> <p>Projects should directly involve representative organisations relevant to the sector/region or engagement strategy-specific scale. Projects should also apply for support from relevant RACs and IPAs. HDR Subprogram investment is capped per case study to enable 2-3 case studies to be funded.</p> <p>The project will use a participatory action research approach (learning by doing). The project team will include industry and extension group collaborators, and those with research expertise in relevant fields.</p> <p>The project will generate the following outputs:</p> <ul style="list-style-type: none"> <li>• Examples of evaluations which provide information about the purpose and effectiveness of various engagement activities and strategies</li> <li>• Tools and resources on different stages and steps of designing, doing and evaluating an engagement strategy (based on the License to Engage handbook), using a variety of extension and learning formats to increase their availability and uptake</li> </ul> <p>Applicants are advised to contact HDR Subprogram Leader, Emily Ogier (<a href="mailto:Emily.Ogier@utas.edu.au">Emily.Ogier@utas.edu.au</a>, 0438697081) to discuss materials available from other FRDC HDR-funded projects, and case study requirements.</p>
<p><b>Planned outcomes</b></p>	<p>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>

	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.
<b>Funding Partners</b>	Human Dimensions Research Subprogram Potential collaborators (as relevant): NSW RAC, QLD RAC, NT RAC, WA RAC, SRL, ACPF, ABFA

<b>Priority</b>	Knowing who has influence: key influencers and networks for socially-supported fisheries and aquaculture
<b>Sub-priority</b>	This project aligns with the following priority: Priority 4: Effective engagement to achieve socially supported fisheries and aquaculture
<b>Need</b>	<p>Australian fisheries and aquaculture sectors are affected by a range of public policy decisions concerning resource access and sharing. In the absence of structured decision making, sectors may not have a clear understanding of what influences these decisions and or the ability to participate fully and effectively in these negotiations and pathways of influence. This can result in restricted resource access and support for re-structures, which negatively impact well-being of individual resource users and the flow of benefits to affected communities.</p> <p>This project will address the need for improved understanding of <u>who</u> currently has influence and what is it they have influence over (e.g. levels and perceptions of societal support, uptake and trust of science knowledge; market access; consumer perceptions and behaviour); <u>how</u> they gain and use that influence; and, <u>what</u> opportunities are available to fisheries and aquaculture to more effectively engage with influencers, build networks, and communicate messages.</p> <p>A key influencer is defined as someone with authority and standing who has the ability to influence the behaviour of others and, in this case, influence resource sharing and access outcomes for fisheries and aquaculture.</p> <p>This project will focus on who has influence over decisions about resource access, allocation, re-allocation, regulation and re-structuring within fisheries and aquaculture. As such, relevant expertise required for the project include public policy generally and resource sharing specifically.</p> <p>Research undertaken will address the following questions:</p> <ul style="list-style-type: none"> <li>• Who are the main 'actors' and key influencers in these decisions? e.g. Certification schemes and other ethical 'standard bearers'; industry advocates; other resource users; science experts; eNGO campaigners. How can they be identified for specific fisheries and aquaculture sectors?</li> <li>• What types and levels of influence and judgement do these actors have/make on policy processes?</li> <li>• How do these actors gain and maintain influence? How and to what extent is this type and strength of influence related to the social, political and knowledge networks in which actors operate?</li> <li>• What influences the judgement of key decision makers regarding the industry's social acceptability? Factors may include internal factors, such as decision-makers'</li> </ul>

	<p>individual values; and external factors, such as where in any given political cycle is a particular decision taking place; type and degree of public conflict about what is being decided; availability and type of science knowledge input; types of decision making process, macro-economic conditions.</p> <p>Suggested methods for data collection and analysis include comparative case studies (historical and current, and at different scales) that capture a range of types of influence, influencers, and networks which have or could affect outcomes for fisheries and aquaculture. For each of these cases, suggested methods include: desktop review of available information; key-informant interviews (key decision makers, industry leaders, key influencers); and, social/knowledge network analysis of networks of influencers where appropriate.</p> <p>Outputs from the project will include a report presenting:</p> <ul style="list-style-type: none"> <li>• Synthesis of case study findings in which the types of influence, influencers and networks are identified and compared</li> <li>• A conceptual model or ‘archetype’ of pathways of influence</li> <li>• Steps for identifying ‘who has influence’ for specific fisheries and aquaculture sectors</li> <li>• Recommendations of opportunities which are available to more effectively engage with influencers, build networks, and communicate messages</li> </ul>
<b>Planned outcomes</b>	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 effectively engaged with.
<b>Funding Partners</b>	Human Dimensions Research Subprogram