The Right Conversations

Building industry engagement capacity for socially-supported fisheries and aquaculture

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Executive Summary

This research was directly commissioned by the Human Dimensions Research Subprogram (FRDC HDR) of the Fisheries Research and Development Corporation (FRDC). The FRDC HDR commissioned Dr. Nicki Mazur of Envision Environmental Consulting and Dr. Kate Brooks of KAL Analysis Pty Ltd to undertake research into the drivers of and barriers to the seafood industry's engagement activities used to improve its social license to operate. The Project was conducted between October 2017 and June 2018 and was prompted by increasing recognition across the seafood industry and the FRDC that if the industry's social license to operate is to be improved, substantive change to its engagement practices is required. While the FRDC and others have invested significant funds to develop engagement capacity building materials for the seafood industry, there is very low awareness and use of those resources. There is increased sophistication of communications and marketing practices, but also limited use of the full range of best practice engagement approaches for building trust and engagement evaluation.

Background

Controversy over how best to manage common pool resources, such as fisheries, results from inappropriate approaches to resolving conflicts and engaging communities and stakeholders. Accordingly, government policies or seafood industry activities and practices can lose local community and broader societal acceptance, even if they are profitable and supported by sound science (Shindler et al 2004). While the Australian seafood industry enjoys general social support, that support is conditional on the industry being trusted - by those with direct influence on fisheries decisions – to move beyond mere compliance with environmental regulations, to be continually improving their practices (Mazur et al 2014).

It is apparent from previous research and the seafood industry's current circumstances that the industry's engagement practices need to be reviewed. Those practices include engagement with government decision makers, interest groups, as well as the broader Australian public. The FRDC and others have made substantial investment in engagement capacity building tools in the past two decades. However, it has been uncertain how and to what extent industry members are using these and other resources to help them improve how they engage with their stakeholders/communities

Aims and objectives

This Project aimed to improve understanding of how and to what extent certain barriers keep the seafood industry from making substantive progress towards building greater stakeholder and community trust. The Project was designed to meet this aim by researching obstacles to, and enablers of, practice change; examples of good engagement; and evaluation practices in fisheries settings, and collate that information into a cogent report and end user frameworks, that will be both useful in guiding the FRDC HDR in future investments and for dissemination by the FRDC HDR as appropriate for the benefit of the industry.

Methodology

The Project was undertaken in three parts: a literature review; followed by a set of 10 interviews with a purposeful (non-probabilistic) sample of seafood industry leaders identified by the FRDC HDR; and a telephone workshop with those participants to review findings and relevance of pilot support materials. Project participants came from across all the States and Territories of Australia.

Key findings

This research identified several barriers to the uptake of best practice engagement and evaluation of engagement that may be generalisable beyond the situations of our small, non-probabilistic sample of seafood industry leaders to the wider population of seafood industry leaders. One of the major barriers has been a lack of motivation to change current industry engagement practices. Engagement was typically undertaken without a clear articulation of what the aims/goals and objectives for engagement were or are, and consequently, relatively ad-hoc methods were used. Engagement was rarely evaluated in a formal or systematic way according to best practice. Another significant finding was that despite a range of support tools being available to assist the seafood industry build their capacity to engage (internally, externally), there has been very little uptake of those resources. This low rate of use has been attributed to a lack of more effective extension actions and approaches, as well as the materials being somewhat inaccessible due to their use of scientific/technical language, dense formats, and/or other academic styles of presentation.

Implications

This Project's findings provide beneficial implications. The findings provide FRDC HDR with greater clarity about how best to invest FRDC funds to improve industry capacity for engagement and evaluation of engagement. In turn, seafood industry leaders will have a better idea of what the FRDC HDR is prepared to support. Furthermore, both parties will be better equipped to enhance enabling factors for and reduce obstacles to engagement and evaluation.

However, when it comes to mitigating obstacles and facilitating more enabling factors for engagement uptake, strategies for addressing personal (and professional) factors (i.e. *Do I want to do it?*) require especially careful consideration. This category is made up of complex and interrelated elements. Individuals choices about adopting practices are affected by their values and belief systems, attitudes and (risk and other kinds of) perceptions, personalities, goals, family situations, and social networks. How and to what extent is it appropriate and/or effective for organisations like the FRDC and industry associations to 'enter' this realm of people's personal space and circumstances in order to try to increase individuals' use of more effective engagement practices? This question becomes especially pertinent if the low motivation to take up more progressive engagement practices is widespread among industry leaders, as their behaviour can set an important and influencing example on industry members' practices.

Recommendations

This Report makes five recommendations for consideration by the FRDC HDR which include:

1. Encourage industry members to carefully consider what 'engagement' (and its associated synonyms: 'consult', 'communicate', etc) means to them and to seek clarification from others on their respective understanding and use of those terms;
2. Work with seafood industry stakeholders to improve the accessibility of this Project's 'strawman' frameworks for engagement and evaluation;
3. Address low stakeholder awareness and use of FRDC's and other organisation engagement and evaluation resources in part by using several techniques to improve accessibility of those materials and their dissemination;
4. Further improvements to extension by trialling the use of knowledge brokers who could work closely with selected industry representatives on select engagement and evaluation pilot projects; and

5. Recognise the significant role that personal and professional factors ('Do I want to do it') can play when people are deciding how and to what extent they will take up new/different engagement practices.

Keywords

Seafood industry, engagement, consultation, communication, evaluation, social license to operate, social acceptability, trust, motivation, adoption of innovation

1. Introduction

1.1 Background

It is widely recognised that natural resource management is contested, especially in the case of common pool resources, such as fisheries, where numerous interests compete for development and use of those resources. Controversy is common in these settings, because people's different and conflicting values and beliefs about how those resources should be utilised and/or managed are not well-recognised or reflected in decisions. Instead, too much time is taken trying to prove the facts often creating or escalating any conflict. In turn, government policies or industry activities and practices can lose local community and broader societal acceptance, resulting in a failure to gain approval (let alone support) to operate, even if they are profitable and supported by sound science (Shindler et al 2004).

Contemporary social research suggests that the Australian seafood industry is generally supported (Sparks 2017, Voyer et al 2016, Mazur et al 2014). However, that support depends on the sector being trusted to move beyond mere compliance with environmental regulations, and to demonstrate how it applies best-practice environmental management, by continually seeking improvements that address community concerns and issues (Mazur et al 2014). Where trust in the Australian seafood industry's environmental credentials and behaviours has been low, public controversies have erupted. These incidences have contributed to unfavourable outcomes, such as reduced access to aquatic resources and lowered industry morale and mental health (Mazur et al 2014).

The Fisheries Research & Development Corporation (FRDC) and others have made substantial investment in engagement capacity building tools in the past two decades. However, it is apparent from previous research and the seafood industry's current circumstances that the industry's engagement practices needed review. Those practices include engagement with government decision makers, interest groups, as well as the broader Australian public. The FRDC and others have made substantial investment in engagement capacity building tools in the past two decades.

1.2 Need

Improved seafood industry engagement with its stakeholders/communities remains a high priority for the FRDC to enhance society acceptance of, and support for, the industry. The FRDC recognises that social support for the industry relies heavily on members improving their understanding of people's views about the Australian seafood industry, and on building more trusting relationships with those people - especially those with direct influence on resource access decisions. In order for the industry to have greater confidence that their engagement practices are effective in building trust and are therefore worth investing the necessary time and resources for, they need to be able to evaluate those practices. Towards that end, the FRDC has funded a range of projects focusing on building the seafood industry's capacity for effective stakeholder/community engagement (e.g. Ogier & Brooks 2016, FRDC 2014/301, 2011/525; Ham 2010, 2001/310), long term industry leadership (e.g. FRDC 2011/410), and adaptation and well-being (e.g. 2012/402) - all of which are necessary elements for the industry to develop internally in order to build social support.

However, it remains unclear how and to what extent industry members are using these and other resources to help them engage with their stakeholders/communities. It is believed that there are obstacles that can limit industry members use of these resources and their general engagement practices, including:

1. Industry members not seeing the full relevance or need for engagement;
2. Industry members perceiving engagement as marketing and/or product promotion;
3. Industry members lacking the necessary expertise, capability and capacity in engagement;
4. Lack of knowledge and information about the comparative effectiveness of various engagement activities and strategies, particularly in a fisheries context; and

5. Ineffective extension of existing information (e.g. unsuitable formats).

This Project seeks to fill the need to understand how and to what extent these and other barriers keep the seafood industry from making substantive progress towards building greater stakeholder and community trust.

2. Objectives

The key objectives of *The Right Conversations Project* have been to:

1. Conduct desktop research to ascertain the range of factors influencing (primary) industry's use of available and best practice engagement strategies, tools and practices.
2. Identify examples of effective and accessible processes for designing and evaluating targeted engagement strategies (for primary industries, including fisheries).
3. Identify means for industry to assess the effectiveness of engagement activities (evaluation) to give confidence in their investments
4. Share project findings with the primary audience (the FRDC HDR and seafood industry leaders).
5. Improve understanding of key barriers to the seafood industry's adoption of existing best practice models and methods of engagement.
6. Improve applicability of existing engagement resources for seafood industry to increase their capacity to effectively engage with its stakeholders and communities.

3. Method

A mixed-method approach was used to collect data and information for this research. These included a literature review, stakeholder interviews, and a stakeholder telephone workshop. Each of those methods is discussed in the context of the project below.

3.1 Literature review

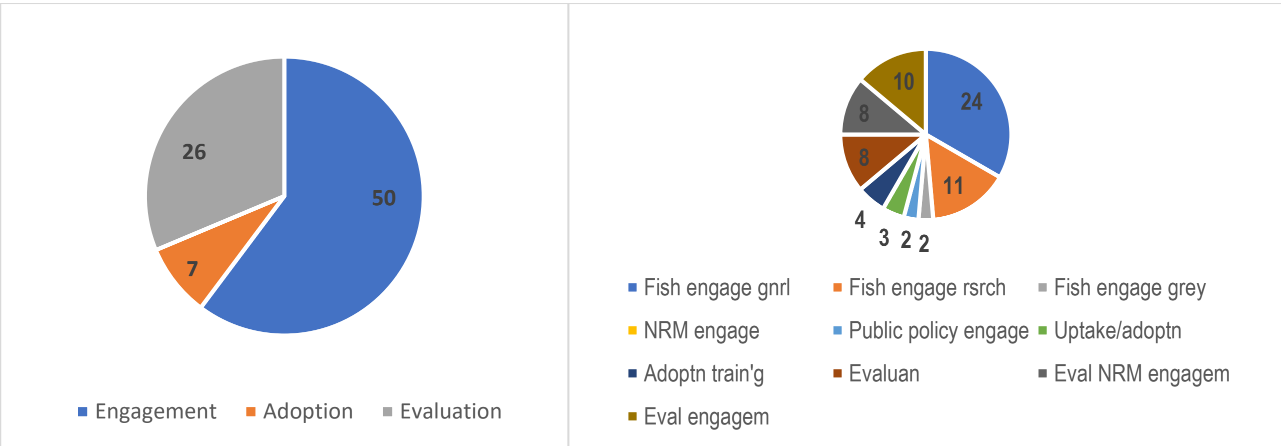
A selection of contemporary articles from three main areas were reviewed, including:

1. Diffusion of innovation theory – which seeks to explain how, why and at what rate new ideas, technologies and practices are spread;
2. Evaluation theory – which looks at methods for collecting, analysing and using information to assess the effectiveness and efficiencies of projects, policies and/or programs; and
3. Stakeholder/community engagement theory and practices (Refer Figure 1).

The main search engines used included Academic Search Premier, Google Scholar. Highly topical journals were also searched directly (e.g. Society & Natural Resources, Marine Policy, etc). Ninety-nine articles were reviewed, with thirteen of those being rejected for insufficient relevance to the topics above. Other selection criteria included articles being published in the last decade. Eighty-six pieces were included in the full analysis. The majority of that information was drawn from the scientific literature. The grey literature included a number of stakeholder/community engagement guidelines produced for practitioners in public policy generally, health policy, social policy, education (tertiary), environmental and natural resource management, and fisheries management.

The key objective was to draw both from the academic literature, as well as case study examples in fisheries and other natural resource management sectors, to identify 'best practice' for both engagement and evaluation, to allow benchmarking against industry practice. The review found that the majority of engagement literature was written with reference to specific projects or events, rather than long term relational engagement, and that evaluation literature was heavily biased toward evaluation of research rigour, rather than the achievement of engagement outcomes itself.

Figure 1: Topics covered in literature review and their percentages



3.2 Interviews

The findings of the desktop study were synthesised, and that information was used to develop a set of interview questions put to seafood industry leaders. The interviewees were selected in collaboration with the FRDC HDR and this was a purposive sample. This sampling technique is form of non-probability sampling and is based on selecting for particular characteristics of a target population and exploring issues in depth. While there are limits to how much the resulting data from this technique can be statistically generalised to an entire target population, the technique is very useful when the research goal is to examine issues in depth, to look at the degree of variety in responses, and when there is limited time and resources available to conduct the project.

For this Project, the target population was all leaders of the seafood industry. Our sample was 11 leaders – primarily representing wild-catch commercial fishing - who expressed an interest in improving engagement for better social license to operate and a willingness to be involved in the Project. While our findings may not hold true for all leaders of the seafood industry, they do provide an indication of what is likely to apply. The interview questions (see Appendix 1) focused on seafood industry members' awareness of existing engagement resources, attitudes towards stakeholder/community engagement current practices relating to stakeholder/community engagement, and beliefs about obstacles to (and enabling factors for) improved stakeholder/community engagement. The purpose of the interviews was to ground truth issues identified from the literature review on uptake and adoption of engagement and evaluation frameworks to increase ability of the industry to engage with stakeholders and the broader community. The interviews also tested familiarity with and responses to concepts emerging from the literature regarding elements of potential evaluation and engagement frameworks.

We conducted a total of 11 telephone interviews, as well as having two additional stakeholders respond to Interview Question No. 5 (the familiarity ratings table for engagement resource materials, see Appendix 1). The interviews took 45 – 60 minutes to conduct.

3.3 Telephone Workshop

Upon completion of the literature review and stakeholder interviews, the Project Investigators synthesised these two sets of data. These data were summarised and informed the development of a stakeholder telephone workshop where the draft engagement and evaluation frameworks were discussed (see Appendix 2 – Workshop Meeting Minutes). The purpose of the workshop was to:

1. Deliver the key research findings to Project stakeholders and the FRDC HDR;
2. Enable workshop participants to query the data and provide comments on the information provided;
3. Identify any implications of the research findings for the Australian Seafood Industry; and
4. Review and comment on the proposed draft Engagement and Evaluation of Engagement Frameworks (with a particular focus on the applicability and feasibility of suggested practice changes).

4. Results

The following material provides the findings for the Project's five main topic areas:

1. clarifying the meaning of 'engagement';
2. Reasons for using engagement;
3. Characteristics of 'best practice' engagement;
4. Definition and features of 'best practice' evaluation, and
5. Factors influencing the use of engagement and engagement evaluation.

In each of the main sections, data summaries are provided from the literature review, stakeholder interviews, and the stakeholder telephone workshop. In some sections, more detailed background data and information is provided in the Appendices.

4.1 What is 'engagement'?

As noted in the previous section, the literature review covered articles from a range of areas, including public health, environmental and natural resource management, and fisheries management (see Appendix 8 for the list of References). This body of information demonstrates that there are different terms and definitions used where people refer to 'consulting' or 'collaborating' or 'engaging' with 'stakeholders' or 'the community' or 'the public'(Appendix 3). Despite this variation, what these conversations have in common is that they are essentially about organisations in public, private and NGO sectors *involving people to different degrees* in some kind of decision making. Such a decision-making process may be relation to public management of the marine resource or in relation to private actor/sector decisions regarding employment or procurement policy, for example. 'Decision making' can be as simple as a one -off matter, or highly complex on-going matters requiring substantial relationship building, and/or something in-between (Mazur et al 2014)(refer Table 1). Further variation comes from determining what the 'involvement' will look like, why it is being sought, and how it is facilitated.

Table 1: Defining Engagement

Defining 'engagement' according to …	
Best practice literature	**Interviewees (n = 11)**
'Engagement' is about involving (to varying degrees and ways) people in some kind of decision making process in a way that meets Best Principles and Best Practices.	• Need to involve stakeholders non-emotionally (evidence-based) and generate common values by getting them to understand *our* perspective. • Having regular conversations which are necessary to conducting business • Emphasis on two-way ***conversations***. Reciprocal flow of information and ideas. • Some note that it goes beyond exchanging ideas, – but also needs to include active listening; • Fewer still (n=2) saw engagement as being about having good relationships with others. • One identified that it's not just about industry becoming part of community, but about allowing community to become a part of industry. • Engaged means being 'meaningfully involved in the decision-making process' - we don't like it when government says that but doesn't involve us, we have to be careful not to do the same to our stakeholder communities - as, like us, they don't like it!

The interview process with seafood industry leaders showed that 'engagement' is often referred to as a "two-way" conversation. Some interviewees believed the purpose of these conversations was to get others to 'hear' the seafood industry better. Others desired that too, but also talked about reciprocal flows of information and ideas and active listening[1]. Two interviewees talked about engagement as a means to improve industry's relationships with others. There was also some concern that 'engagement' was being used too much as a "buzz word" and losing its original meaning.

The diversity of perspectives on how best to define and therefore understand 'engagement' does create some difficulties (Foroushani et al 2012; Hart 2010; Reed 2008). During the Workshop, conversations about the meaning of 'engagement' revealed that people in the seafood industry remain confused about the differences between terms such as 'engagement' and 'consultation'. That confusion was due to participants not necessarily realising that 'consultation' is only one type of activity in a spectrum of engagement activities (as per the IAP2 Engagement Spectrum in Table 2, following). What was evident, was that the majority of industry's experience of engagement fell into the activities of 'inform' and 'consult' in the majority of cases, despite a few examples of 'Involvement' being utilised by some industry groups (as articulated in Table 5).

Table 2: IAP2 Engagement Spectrum

		Objectives		
Inform	**Consult**	**Involve**	**Collaborate**	**Empower**
To ***provide participants with balanced and objective information*** to assist them in understanding the problems, alternatives and/or solutions.	To ***obtain feedback*** on analysis, alternatives and/or decisions.	To ***work directly with participants throughout the process*** to ensure that their issues and concerns are consistently understood and considered.	To ***partner with participants*** in each aspect of the decision including the development of alternatives and the identification of preferred solutions.	To ***place final decision-making in the hands of participants***.
		Promise to participants *(stakeholders, communities, 'the' public)*		
We will ***keep you informed***.	We will ***keep you informed, listen to and acknowledge concerns and provide feedback*** on how your input influenced the decision.	We will ***work with you to ensure that your concerns and issues are directly reflected in the alternatives developed*** and provide feedback on how your input influenced the decision.	We ***will look to you for direct advice and innovation in formulating solutions*** and incorporate your advice and recommendations into the decisions to the maximum extent possible.	We ***will implement what you decide***.
		Example approaches		
Fact sheets, web sites, displays.	Public & stakeholder comment, focus groups, surveys, public meetings, open houses.	Workshops, deliberative polling.	Advisory committees, consensus building.	Citizen juries, ballots, delegated decisions.

[1] Active listening is a communication technique that is used in counselling, training, and conflict resolution. It requires that the listener fully concentrate, understand, respond and remember what is being said. This is opposed to reflective listening where the listener simply repeats back to the speaker what they have just heard.

4.1.1 How does ‘engagement’ differ?

Whichever of the above-mentioned terms people use, one of the most important distinctions to make is how much *influence or power* is going to be conferred upon the parties that the seafood industry is seeking to engage with, and for what period of time. That engagement could be in relation to a relatively small, specific, and/or define action or decision, or something more amorphous and complex, such as an overall direction that the seafood industry is moving towards. Typologies of engagement have been developed to help people understand the different approaches (Reed 2008), however, while they are presented as discreet activities, in practice engagement activities are not typically mutually exclusive. They can contain various objectives and may be at different points in time (Thompson et al 2009). A common and important distinction that is often made among these approaches, is how the spectrum is used to demonstrate how much “power sharing” there will be between those initiating the engagement initiative(s) and those invited to be involved (e.g. Reed 2008; Arnstein 1969; Benham 2017; Aslin & Brown 2004). For example, approaches can range from simple information provision (Inform) to limited negotiation or dialogue (Consult or Involve) to more intensive approaches that hand over decision making power to those being ‘engaged’(Collaborate or Empower). Mashek & Nanfit’s (2015) continuum sheds further light on how closely people can work together – whether that is in an engagement context or not (See Appendix 4). Their continuum shows that the intensity of commitment, trust, and responsibility sharing – as well as the risks – increase as you move from one side of the spectrum to the other (from simple networking to intense collaboration).

The IAP2 Spectrum (Table 2 above) has been used in both its original and modified form in a range of public policy contexts to help people clarify the purpose for engaging and therefore improve their engagement outcomes (e.g. Foroushani et al 2014), and more recently in the Australian biosecurity (Thompson et al 2009) and fisheries context (e.g.; Mazur et al 2014; Van der Geest & MacDonald 2009). The Spectrum’s designers were intent on demonstrating that the differing levels of participation are all legitimate. Furthermore, the goals, time frames, resources and levels of concern about the decision or activity to be made are critical to how legitimate stakeholders will see the ‘engagement’ activity will ultimately have with stakeholders. In other words, tools such as the IAP2 Spectrum highlight that ‘engagement’ is going to (and should) vary depending on WHY it is being used – what outcomes are people seeking and commitments they are prepared to make to those they are engaging with, and therefore what approach is most suitable to use.

4.2 Why do we ‘engage’?

People may use a range of different terms to refer to ‘engagement’ and accordingly, may (knowingly or unknowingly) be generating an expectation by those they are engaging with, of more or less influence (or power) in whatever is being decided on. The degree of influence given to the persons being engaged, is typically determined by the reasons that drive an engagement process. Reed’s (2008) distinction between “normative” and “pragmatic” justifications for seeking to involve people in decision making (Table 3, and Appendix 5), provide a potentially useful perspective on understanding these drivers of engagement and have been used to categorise responses from seafood industry leaders participating in this Project.

Table 3: Reasons for engaging

Why engage? Reasons for doing so according to …	
Best practice engagement & fisheries literature	**Seafood industry interviewees**
Moral & ethical (normative) reasons: • To meet/support values of democratic society: people's right to participate in matters of interest[2] to them, helping to empower people, working to reduce conflict & build trust, and achieve social learning	**Moral & ethical (normative) reasons:** • Not explored or stated explicitly
Pragmatic reasons: • Improve accuracy, effectiveness, and efficiency of decision processes that better meets needs and interests of as wide a range of stakeholders as possible • Improving social acceptance of/support for decisions	**Pragmatic reasons:** • Increase sales and therefore profit. • Instills community's level of confidence in industry and industry's self-confidence • Engaging on issues puts out 'fires' that are or could become damaging to the industry. • Dispel myths about fishing - durability/ use/ smell etc. • A range of reasons, primarily focused on improving social license to operate via: increasing the visibility and deep appreciation of the industry's value to society, with the expectation that the industry will therefore have more of a say in how it's regulated, and will achieve more favorable regulatory and other decisions

Normative reasons for engagement are moral and ethical claims about what we *should* do, how much we should care about doing engagement or consultation. They are based on norms – values, behaviours, and thoughts that are shared by a majority of people within society, and more often than not underpins a social license to operate. For example, the desk top review revealed that there is advocacy in some quarters for engaging a wide range of people in fisheries management decision processes, because they believe that fishers as well as others have a fundamental right to 'have a say' about a shared public resource such as fish stocks/the marine environment (e.g. Santiago et al 2015; Campbell et al 2014). In fisheries co-management, good engagement practices may be seen as a way to improve fishers' sense of empowerment (e.g. Johnson 2011; Yochum et al 2011).

Complimenting these justifications are numerous practical benefits people claim will result from well-executed engagement or consultation. For example, lower transaction costs and more accurate data collection are claimed to result from well-designed fisheries co-management arrangements (May 2016, Yochum et al 2011). Other practical justifications include reducing opposition to commercial seafood or aquaculture activities (e.g. Uhrea & Leknesb 2017; Ogier & Brooks 2016), legitimizing regulatory decisions, increasing resource user compliance, and potentially increasing fishing business profits (e.g. Leite & Pita (2016), Santiago et al (2015), Campbell et al (2014), Davis (2011), Van der Geest & Macdonald (2009), Ertor & Ortega (2015).

The interview process did not reveal any particular ethical or moral perspectives held by the interviewees' on why the seafood industry should pursue best practice engagement. Table 3 shows that the research participants were primarily motivated by and therefore focused on a range of pragmatic reasons for engaging – comparable to those found in the fisheries specific literature on engaging with others (see

[2] *We are defining 'interest' according to Aslin & Brown (2004): A stakeholder is anyone who has an interest in an issue, whether that interest is financial, moral, legal, personal, community-based, direct or indirect. 'Stakeholder' is a very inclusive term. Any citizen or member of the public can be a stakeholder if they have an 'interest' in the subject being discussed.*

Appendix 6 & 7). Foremost among those stated reasons was to improve the seafood industry's social license to operate (being four of the five pragmatic dot points identified in Table 3).

4.3 What does 'best practice' engagement look like?

Not all engagement is created equally. Simply having an engagement strategy or undertaking a particular engagement initiative does not guarantee it will be effective in achieving a positive or desired change (Mazur et al 2014). Further, when engagement benefits are not achieved it is typically because there are some barriers in place, which are discussed below (May 2016; Leite & Pita 2016). It is important to note that there is less chance of reaping the benefits of engagement activities when the *how-to-do-it-well* knowledge and information is neglected (Thompson et al 2009:9), as the realisation of benefits from engagement are typically linked to 'good' principles and practices.

We have made a distinction between 'principles' and 'practices' for engagement and evaluation. Best principles are the fundamental tenets that underpin stakeholder/community engagement activities, the abstract ideals or standards of judgement. Best practices are the recommended specific procedures for people to follow when they are planning and implementing engagement activities, in order to realise and achieve the best principles.

Interpretations of best principles and practices vary, but there are strong points of consensus among experts that 'Good' engagement should be guided by the following principles (Table 4), which identify clear benchmarks of achievement for engagement activities, which (interestingly) are closely aligned with the types of normative (moral and ethical) modes of behaviour listed in Table 3 and Appendix 5. It should have: a clearly articulated purpose; reach out to more than the 'usual suspects' through a wide range of stakeholders; share information openly and readily; involve people in respectful, meaningful and reciprocal interactions; and attempt to satisfy multiple interests.

Best practices should adhere to those principles – where the stated purpose of the engagement informs who will be involved; how much and what type of influence they are going to have; how the engagement will be resourced, evaluated, and implemented; and deciding how – if at all – people's input should inform current industry practices and change any future engagement. Further and most importantly, for best practice principles to be achieved, all this information should be shared with those who are to be engaged. Nonetheless, best practice engagement should follow a strategy of "horses for courses" – matching the variety of methods and tools (of which there are many) to the overarching purpose of engaging, and the climate it is occurring in, in the first place.

Table 4: Best principles for engagement*

Effective engagement processes should be ...	In layman's terms
... clearly scoped (planned)	• To ALL involved you can say exactly what the engagement activity is, why it's happening, what the goal is, and how the activity will be evaluated against that goal. • Everyone in the industry who's involved knows exactly what the each other's role is; and also, what level of involvement/input is being sought from external stakeholders.
... inclusive & representative	• A wide variety of people (inside and outside the industry) who have an 'interest'[3]have opportunities to participate in the engagement activity(ies).
... transparent	• You make sure that people participating (inside and outside the industry) know what the engagement process is and how their input is being used.
... connected to decision-making	• Information that is asked for or obtained during engagement activities, is collated and analysed; • Analysis of that information is clearly linked to what you are trying to decide on.
... timely	• When asking people for their input, do it as early as possible – so you can avoid inviting feedback on something that has already been or is about to be decided. • Be clear with people when you need their input by.
... informative & empowering	• The people you want involved are able to participate given their awareness/ time frames/travel/ and personal resources ($; time; intellectual interest etc)
… respectful and equitable	• Treat people the same despite their race, religion, gender, age, points of view, etc. • Treat people with courtesy, politeness, kindness • Encourage people to express their opinions and ideas • Listen carefully to others before expressing your own opinions
... designed to involve deliberation	• Make enough time to distribute information, for people to go through that information, and for discussion about the information, issues, assumptions, and possible alternatives.
... providing clear feedback	• Clearly communicate to people how their input has been used after the engagement is finished.
... influential	• Clearly communicate to participants that their input is genuinely valued and can/may/has influence(d) the issue(s) or projects that the industry is deciding on.
... building trust[4]	• Be careful about expecting big gains in trust after a single engagement activity - other people's trust comes from people seeing the industry reliably adhering to the above principles over the longer term .

**Adapted from Aslin & Brown (2004); Dentoni & Klerx (2015); Fouroushani et al (2012); Hartley & Robertson (2008); Johnson (2011); Lavery (2015); May (2016); Mazur et al (2014); McCool & Guthrie (2001); Ogier & Brooks (2016); Pattilo & Wright (2010); Rosenthal (2014); Sonderblohm et al (2015); Thompson et al (2009); Uhrea & Leknesb (2013); Yochum et al (2011)*

4.3.1 What engagement is being used in fisheries management settings?

There are different kinds and amounts of 'engagement' being practiced in a fisheries context. The most frequent examples and analyses of 'best principles' and 'best practices' were found in fisheries co-management and collaborative/cooperative fisheries research settings – both internationally and in Australia (see Appendix 6 & 7). In these settings, there is an increasingly strong mandate for federal and state government policy-makers/regulators and fisheries scientists to work together with range of stakeholders (namely fishers, but not limited to them) in order to achieve a particular goal. The degree to

[3] *We are defining 'interest' according to Aslin & Brown (2004): A stakeholder is anyone who has an interest in an issue, whether that interest is financial, moral, legal, personal, community-based, direct or indirect. 'Stakeholder' is a very inclusive term. Any citizen or member of the public can be a stakeholder if they have an 'interest' in the subject being discussed.*

[4] *Trust is really about our willingness to be vulnerable to the actions of someone. It is all about deciding how much a person (or an industry) is "trustworthy". When deciding that, we are focusing on a person's (or an industry's) 1. Abilities: their knowledge, skills, and competencies; 2. Benevolence: how much will they act in my best interests; and 3. Integrity: how much are their values similar to mine or acceptable to me.*

which governments and researchers share responsibility with the seafood industry and other stakeholders for what is being decided on varies in these cases.

In the literature covering social license to operate for commercial fishing and aquaculture, there are fewer analyses of engagement best principles and practices and examples of them being used, than there are in fisheries co-management and collaborative research settings (see Appendix 6 & 7). This lower incidence may be due to a range of obstacles. However, initial indications from this research is that there may not yet be the kind of inherent imperative for people to 'work together' to achieve 'something', as there is in co-management/collaborative research settings. Concerns about Social License to Operate (SL2O) are typically about the diffuse concept of a lack of 'social acceptability', or a conflict resulting public controversy, which typically only raises the issue of engagement after relationships have already broken down, making engagement highly challenging. In these instances, it is less obvious – or even very hard to see – what it is that people might work together to achieve. In these situations, there is typically more distance (geographic, emotional, professional, values) between fishers and others (often perceived as 'antagonists' such as governments, NGOs, recreational fishers, etc.). Consequently, people in the seafood industry may (knowingly or otherwise) prefer strategies that allow them to maintain the perceived 'protection' of that distance rather than lessen it. For example, social media tools like Facebook allow people to voice their opinions or make claims without having to interact with others in person.

The literature review and discussions with Australian seafood industry leaders suggest that the kind of 'engagement' that tends to dominate industry practices are marketing and communications (Inform and Consult) approaches. These approaches typically seek to build seafood sales and the perceived value of the industry to society – largely by telling people about the 'good' aspects of the industry. This Project has found examples of the (Australian) seafood industry building its skills in getting more consistent, clear, and coordinated messages out to the wider public. There have also been discussions of focusing more on having two-way conversations – where active listening and a reciprocal flow of information and ideas is generated. There were, however, fewer examples of the seafood industry using the other kinds of engagement that are designed to and more effective in building trust (which is largely lacking where SL2O is lacking).

Table 5: Examples of seafood industry engagement raised in interviews

Industry Group	Activity	Engagement Objective level
Sydney Fish Market (SFM)	❖ Get to know a fisher: QR Codes to connect with the providence and fisher of product. ❖ Target Audience: Consumers.	***Inform***
West Australian Fishing Industry Council (WAFIC)	❖ Provision of posters about underutilised species for school and TAFE cooking classes. ❖ Target audience: Teachers and students	***Inform***
	❖ Sponsorship of Hospitality Industry Annual Gala Awards Dinner. ❖ Target Audience: Emerging chefs.	***Inform***
	❖ Monitoring of Social Media hits and mentions: ❖ Target Audience: Industry	Potentially ***'Consult'*** depending on feedback provided.
	❖ Working with Home Economics teachers in schools to provide fish and support in preparing and cooking it, so positively familiarise school students with seafood. ❖ Target audience: Teachers and students.	***Consult***
Australian Council of Prawn Fisheries (ACPF)	❖ Community Engagement Strategy. Initial stages and commencing with stakeholder meetings to understand concerns. ❖ Target Audience: Consumers/ general public	***Consult***
SA WildCatch	❖ Partnership with 2 Foodlands Supermarket outlets in Adelaide, identifying with fresh locally sourced produce. Involved weekly promotion of fresh locally provided seafood with fishers and chefs to explain the catch history and preparation of the product, and to engage in two way conversations with shoppers about seafood, their expectations, perceptions and concerns. ❖ Target Audience: Consumers	***Involve***: as it involved the fishers in getting themselves in front of the public and giving them a face and personality that the public could decide to trust. It not only improved consumer knowledge and awareness of the product, but also of the operating environment and allowed two-way exchange as fishers also came to understand more about consumer concerns and desires.
Seafood Industry Victoria (SIV)	❖ Seafood Festival Trail. A series of five festivals across the year and the breadth of Victoria in partnership with Tourism Victoria and the towns involved. ❖ Target Audience: Seafood industry local community members; Tourists/consumers.	***Collaborate:*** Decisions about where and when festivals to be held, and the content of them, made in collaboration with the local communities, Tourism bodies and celebrity chefs.

Importantly, the stakeholder workshop discussions shed light on how some people in the seafood industry feel about their experiences as an 'engage-ee' – not just as the 'engage-or'; which was generally negative. They noted that these experiences tend to influence their attitudes toward engagement generally. It was noted that governments and other interest groups (e.g. the oil and gas industry) are often not aware of the conditions that commercial fishers and aquaculturists operate in. They believed these parties had unrealistic expectations about the industry's available resources (human, financial, time) and a complete unawareness of the impost of engagement requirements in these very limited resources.

An unexpected outcome of the workshop was that these workshop participants felt that the engagement resources being developed by this Project could help them become more informed ‘engage-ees’. This was particularly in relation to the inherent (and different) purposes and promises of different types of engagement, and the necessity for these to be clearly articulated at the outset, to ensure effective and transparent engagement.

4.4 Principles and practice for evaluating engagement

The evaluation materials reviewed for the desk-top study were drawn from similar areas as the materials for engagement. The policy settings included general public policy, health and social services, information technology, tertiary education, environmental and natural resource management, marine and coastal management, and fisheries management. The review found that across these settings, the definition of ‘evaluation’ was consistent in all articles. It is to enable the identification of how well an initiative is achieving its goals, through the systematic collection of information about an activity and the results of it.

Further to this basic interpretation of ‘Evaluation’, it was clearly identified in the literature that the commonly agreed benefits - aside from achieving headline goals - was to better understand the cost-benefit of an activity; and therefore, making more informed decisions about what – if any – changes need to be made to those activities or future ones. Evaluation was identified as a way to pose questions, such as “What did (or why do) we do that work/ed?”; “What difference did it (does it) make to do it?”; “What would have happened (will happen) if we did not do this work?”; “What have we learned as a result of doing this work?”; and “What should we do next?”.

There a many, many different ways to ‘do’ evaluation generally, and evaluation of engagement in particular. The main ‘best practice’ materials reviewed were synthesized into a best practice framework (refer to

Table 6). In short, the preferred features of good evaluation practice include using a cyclical process that is underpinned by *a commitment to understanding* how well an activity is achieving its goals and seeking to make adjustments based on what one finds out. To operationalize that commitment, anyone evaluating needs to:

- Clarify what they are trying to achieve through their engagement (what is the 'problem'?);
- Carefully reflect on how accurate their assumptions are about, how much, and what kind of, change that an engagement activity can realistically bring about;
- Think about what questions the evaluation will seek to answer and from where the information will be collected; and
- Eventually create the space to reflect on how the gathered information can be used to improve their engagement practices and implement those changes.

Table 6: Best practice evaluation of engagement*

Evaluation Steps	Questions to ask. Things to do.
1. Clarifying the engagement issue to be evaluated.	• *Return to question of "Why are we engaging?" (as above in Table 4). What issue we are trying to address through engagement?* • *What is the goal of the engagement initiative(s)?*
2. Who should/will be involved in the evaluation?	• *Who has the time and resources ($/knowledge/capacity) needed to undertake the evaluation?* • *Who (internally, externally) is going to be utilizing and/or be interested in the evaluation findings? Why?*
3. What resources are required & available to implement the evaluation?	• *Money, time and people needed to help design evaluation plan, collect and analyse evaluation data and information.*
4. Check and document assumptions about change that is sought by engagement initiative	• *What is 'problem' that is being addressed by the engagement (why are you doing what you plan to do?);* • *What is it that you want to change through the engagement (what would success look like?);* • *How reasonable/rigorous are your assumptions[5] that underpin the change you expect to bring about or contribute to, also considering time frames and scale?* • *What evidence do you have for your assumptions?* • *How 'risky' are your assumptions?*
5. a) Formulate evaluation questions, b) identify appropriate indicators, c) identify appropriate (and available) sources of data and information, d) set target(s) if appropriate	• *Think about whether you are assessing impact, appropriateness, effectiveness, efficiency, and/or legacy of the engagement inititiave(s)[6]* • *Use SMART criteria[7] to develop indicators – indicators are features of the engagement initiative that are most important to track[8]* • *Data can be qualitative and/or quantitative* • *Targets can be qualitative and/or quantitative*
6. Using sound methods - collect the chosen data and information!	• *Think about how often you will do this* • *Workshops, meetings, interviews, surveys, media searches, etc.*
7. Evaluate	• *Analyse what the information tells you about how successful the engagement initiative has been? (e.g. what was successful and what wasn't - why?)* • *What could be changed now or in the future for other initiatives to improve the success of the engagement initiative?*

**Adapted from Bjurulf et al (2012); Dyer et al (2014); Entwistle (2009); Fort (2018); Guthrie (2001); Hart (2010);Hendrick (ND); Johnson (ND); Lavery (2015); Milton et al (2012); Ofek (2017); Pattillo & Wright (2010); Roughley (2009); Stein & Valters (2012)*

The desk top study found that in the fisheries context, there are few examples of engagement being evaluated in a comprehensive way. The scientific articles covering fisheries co-management and collaborative research had greater coverage of engagement evaluation than other fisheries or aquaculture articles reviewed. In most cases these evaluation assessments were not necessarily incorporated into the collaborative management or research initiative by government authorities or the seafood industry, but rather were undertaken at the initiative of academic researchers with interests in fisheries. For example, Davis (2011) in a summative evaluation of a Canadian commercial groundfish management initiative, asked study participants to 'evaluate' the effectiveness of the management committee on which they sat and how it might be improved. This study and other articles did not always have information about how – if at all – their recommendations for improved engagement were taken up. Leite & Pita (2016) reviewed different participatory systems across the European Union, noting that insufficient (quantitative and qualitative data) and vague and different definitions of 'participation' make it difficult to evaluate the

[5] *An assumption is something that is taken for granted. For example, thinking that "most people don't respect the fishing industry or understand what we do"; or "if we tell people how sustainable our industry is they will support us".*

[6] ***Impact** – in what ways and to what extent has the engagement contributed to achieving your desired outcome(s)? Have there been any unanticipated changes? **Appropriateness** – to what extent has the engagement met needs of intended beneficiaries and been consistent with 'best practice'? **Effectiveness** – to what extent have the planned engagement activities & outputs been achieved and been the best way to do so? **Efficiency** – to what extent has the engagement attained the highest value out of available resources? What could be done differently? **Legacy** – will the engagement's impacts continue over time? How and by whom should it be managed?*

[7] *Definition of SMART critieria - https://www.thehealthcompass.org/how-to-guides/how-develop-indicators*

[8] *They include **inputs** (resources, contributions, investments going into an initiative), **outputs** (activities, services, events, products reaching your audience) and **outcomes** (desired results or changes).*

impact of fisheries co-management arrangements on communities. That is, evaluation appears to only be undertaken for academic purposes, but it is not evident that such evaluations are taken up by the industry and reflected in changed/improved practices or programs.

Several guides or tool kits produced for the seafood industry on engagement-related matters recommend that engagement initiatives be evaluated. Mazur et al (2014) provides an overall recommendation that in the process of planning and implementing engagement strategies that those are evaluated. In their engagement guide, Brooks & Ogier (2016) recommend that the seafood industry ensures they monitor and evaluate their engagement activities in order to determine how well it is working. They note that evaluation is a continuous process, where one should be asking if they have completed their five recommended steps thoroughly. Neither of these guides provides detail about 'how' to evaluate engagement. Plowman (2011) recommended that seafood industry associations annually assess their capacity to deliver their respective goals. He notes that in addition to evaluation being a regular part of business practices, the process and findings should be made clear to respective members.

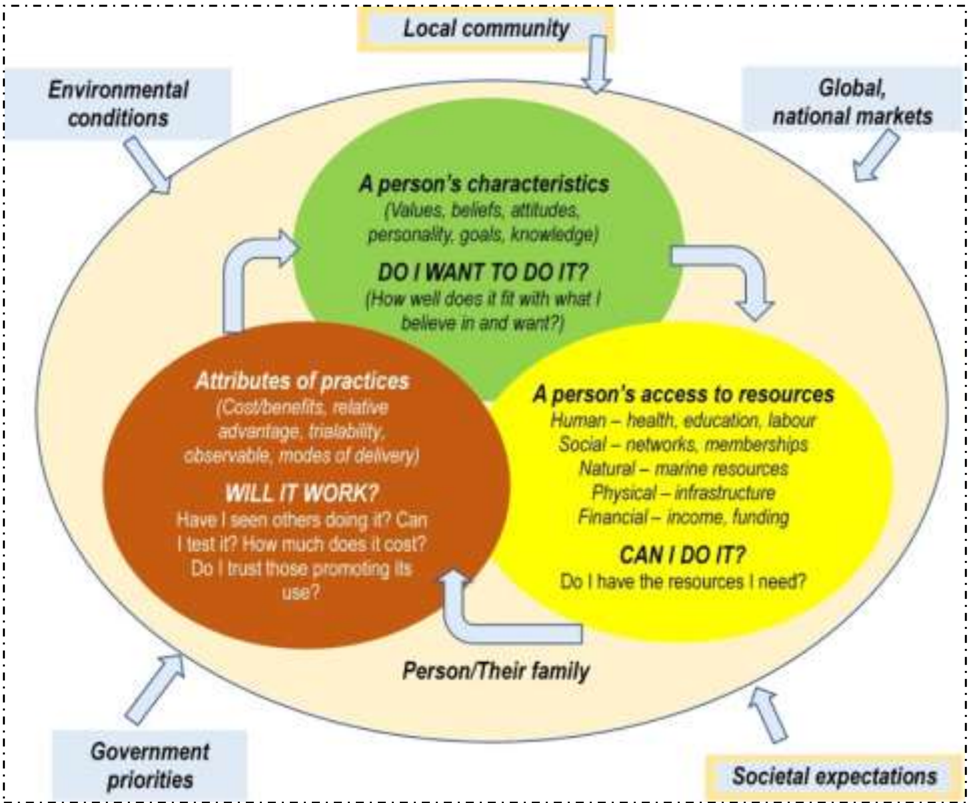
The interview data generally revealed a lack of formal and/or comprehensive evaluation of the seafood industry's engagement activities, and this finding was confirmed during the stakeholder workshop discussions. Where seafood industry leaders spoke about how they knew their engagement activities were successful - most people talked about using an informal, intuitive process, rather than assessing engagement success on the basis of how closely they achieved a set of clearly articulated goals and objectives.

4.5 Factors influencing use of engagement and evaluation of engagement

If the seafood industry wishes to improve its social license to operate through better engagement practices and evaluation of that engagement, it is important to better understand the factors making it harder for them to do so. The work in the field of natural resource management about factors that drive or constrain landholders taking up more sustainable land management practices lends some insight into why and to what extent people in and around the seafood industry are choosing to 'engage' with their stakeholders and communities.

Firstly, clarity is required when we talk about 'improved' or 'more' engagement by the seafood industry – are we asking people in the seafood industry to do something 'different' from what they have been doing to date? Getting people to do something 'different' is about behaviour change. Social scientists have shown that people do not necessarily change their behaviour just because someone suggests that they do (e.g. Pannell et al 2006; Pickworth et al 2007; Stern et al 1993, 1999; Stern 2000). They have shown that when people decide to change their behaviour (or not, or only a little) and take up different or new practices – it is because they are being influenced by a range of factors (personal, social, structural) that can encourage or discourage them from doing so (see Figure 1)(Pannell et al 2006; Pickworth et al 2007). We can summarise those factors into a set of questions that a person might (consciously or otherwise) ask themselves when considering whether to take up that practice/activity: *Do I want to do it?, Can I do it?, and if I do it Will it work?* (See Figure 2*).* Those three questions represent personal and situational matters that people tend to have some control over–personal control being a key element in motivations to change. In addition, there are always macro-level factors affecting people's choices, that they do not necessarily have direct control over (e.g. economic conditions and pressures; government policies, legislation, programs and priorities; public pressures; and environmental conditions of which a more detailed explanation of this framework is provided in Appendix 8).

Figure 2: Uptake and adoption decision matrix



We found that several types of these obstacles restrict the seafood industry's use of the full range of engagement approaches (see Table 7), and those obstacles are largely consistent with what was found in the fisheries-specific literature. Personal factors (*Do I want to do it?)* include people's (inside and outside the seafood industry) preference for the more familiar approaches of defending their practices using marketing and communications tools. There appears to be insufficient motivation to take up different approaches. Another common engagement obstacle was insufficient resources (*Can I do it?*), such as the time, funding, and skill sets needed to do more and new kinds of engagement. A significant obstacle for the industry – which can affect the 'Do I want to do it' factors - is seafood industry members' lack of certainty about whether their (existing or new) engagement practices are effective ('*Will it work?'*). While it should be noted that the seafood industry's approach to marketing and communications has become more sophisticated, those approaches dominate industry's practices as well as stretch their current capacity and capability levels. They represent the left-hand side of the full spectrum of the engagement options available to them (see Table 2). Currently, it appears that the perceived value/benefits of the recommended engagement practices are not very high, given calls for examples of what has been done previously and how well it has worked. Consequently, it is relatively uncommon to see use of engagement approaches that are more effective in building trust within the seafood industry and between the seafood industry and other stakeholders. It is more common to see engagement approaches on the left-hand side of the IAP2 Spectrum (see Table 2), such as 'inform' and 'consult'.

Macro-level factors, such as media sensationalism, political trends affecting the industry's practices were not mentioned frequently, except for the existing draw on their available resources for engagement by others such as government and competing sectors. In some cases, engagement of the industry by authorities and others was made more difficult by seasonal fishing patterns. One of the interviewees felt that media hostility and /or a focus on 'bad news' was very alienating and made it more difficult to engage media and therefore broader communities with positive information about the industry.

Table 7: Obstacles to better engagement

Things that get in the way of/constrain engagement (BARRIERS) according to …	
Fisheries specific literature	**Interviewees**
Do I want to? (values, beliefs, attitudes, personalities) • Lack of respect (by industry for community, regulators, scientists, NGOs; by community for industry, regulators, scientists, etc.) • Self-interest (of any particular stakeholder) pursued more than wider public or others' interests • Defensive posturing & lack of self-awareness	***Do I want to? (values, beliefs, attitudes, personalities)*** • Burnout of industry champions • Negativity of those in the industry. • Certain industry cultural characteristics: being in battle mode (defensive), introversion, old-fashioned, fear of failure
Can I do it? (do we have what we need: human, social, etc capital) • Lack of (or lack of awareness of) shared values between community and industry	***Can I do it? (do we have what we need: human, social, etc capital)*** • Time, money, skillset to appropriately reach stakeholders/communities • Industry's internal conflicts & external conflicts (with detractors) • Human capital - in terms of industry members confidence to engage non-industry people about the industry. • Not having an industry-wide platform to involve everyone in the same objectives.
Will it work? (practice features) • SLO measures - confusing acceptance and approval, cooperation for trust, technical credibility for social credibility • Insufficient inclusivity of fishers' interests by regulators' consultation practices • Oversimplified stakeholder analyses (by regulators, industry, ENGOs, etc) • Stakeholders invited too late in decision process – e.g. after decisions largely made • Lack of incentives to participate in engagement processes • Practices not sufficiently tailored according to issue, region, stakeholders' capacity *(Re: internal industry engagement)* • Unclear role for industry associations & complicated layers of associations • Members' needs not adequately met – followed by apathy/cynicism • Training and meetings not sufficiently tailored to participant needs & interests; high 'costs' ***Wider operating environment*** Distance & seasonality of fishing sectors' activities	***Will it work? (practice features)*** • Lack of consistent (national) industry messages • Regulators' decisions viewed by industry as 'bad' • Engagement being used as a buzzword and losing its intended/true meaning, so that all that is actually occurring is communication out - not engagement. • Lack of more accessible (FRDC) research *(Re: internal industry engagement)* • Don't have enough common messages to be able to speak to the same objectives. • Have not been able to demonstrate adequately that engagement has worked before, either locally or elsewhere. • Fishers' lack of confidence in engaging with non-industry people ***Wider operating environment*** • Negative/hostile media

4.5.1. Can I do it? – Engagement resources for the seafood industry

As noted above, industry members who participated in the interviews and workshop felt that a significant obstacle to engaging more (and engaging better) was a lack of human, financial and informational capital. Since one of this Project's aims has been to examine the extent that industry members are using existing information materials on engagement, we tested interviewee's awareness of reports and guidelines on social license to operate and engaging stakeholders and communities (see Table 8). Interviewees were asked to rate their familiarity with thirteen available resource materials. The data illustrate that there is significantly low awareness of the plethora of materials available to help build the seafood industry's engagement capacity - specifically addressing their resources in the areas of informational and capabilities. The average familiarity rating across the different documents was 2.2 on a scale of one (No awareness) to five (Very aware).

Table 8: Seafood Industry leaders' awareness of engagement resources

<table>
<tr><td colspan="5">1--------------------------2--------------------------3----------------------------4--------------------------5</td></tr>
<tr><td>No awareness
Not heard of it or read it</td><td>Little awareness
Recall hearing about it once</td><td>Some awareness
Recall hearing/ reading about it on several occasions</td><td>Fairly aware
Recall hearing about it AND have read it and remember what it is about</td><td>Very aware
Recall hearing about it AND have read it and <u>regularly use it</u> when designing/ implementing engagement or consultation processes</td></tr>
<tr><td colspan="5">Average rating for all the engagement resources listed: 2.2</td></tr>
<tr><td colspan="5">Average rating for each of the engagement resources listed (see below)</td></tr>
<tr><td colspan="4">Community Engagement Charter - Scottish Salmon Producers Organisation (2016)</td><td>1.2</td></tr>
<tr><td colspan="4">License to engage: Gaining and retaining your social license in the seafood industry. A Handbook of available knowledge and tools for effective seafood industry engagement with communities (FRDC Report. Ogier, E.M. & K. Brooks. 2016)</td><td>3.3</td></tr>
<tr><td colspan="4">Social License to Operate: What does it mean for the Australian commercial seafood industry? (Queensland Seafood Industry Research Report, 2016)</td><td>2.7</td></tr>
<tr><td colspan="4">Common Language Group (FRDC 2012/500. Christoe 2015)</td><td>2.5</td></tr>
<tr><td colspan="4">Community attitudes towards Australian Fisheries Management. (Essence Communications report for the Department of Agriculture, 2015)</td><td>2.1</td></tr>
<tr><td colspan="4">How to improve your social license to operate: A New Zealand industry perspective. (Ministry for Primary Industries, Wellington, New Zealand. Quigley, R. & J. Baines. 2014)</td><td>1.6</td></tr>
<tr><td colspan="4">Let's talk fish: Engagement strategy foundations. (FRDC Report 2012/301. Mazur, N., Curtis, A., Bodsworth. 2014).</td><td>2.3</td></tr>
<tr><td colspan="4">Your Marine Values : Public Report 2013 (Ogier and MacLeod 2014)</td><td>2.0</td></tr>
<tr><td colspan="4">Building seafood industry representational capacity: "Charting Your Own Course": a seafood industry training package. (FRDC Report No. 2009-322. Harrington, J.J. & N.E. Stump. 2013)</td><td>1.9</td></tr>
<tr><td colspan="4">Empowering Industry: Improving two-way membership communication in peak industry bodies of the fishing and seafood industry (FRDC Report 2011-400, Briggs. 2013)</td><td>2.5</td></tr>
<tr><td colspan="4">Community perceptions of the sustainability of the fishing industry in Australia (FRDC 2011, 2013)</td><td>2.8</td></tr>
<tr><td colspan="4">Building viable industry associations (FRDC Report 2011/410)</td><td>2.4</td></tr>
<tr><td colspan="4">The drivers of fisher engagement in their representative associations. (FRDC Report 2008/0335, Canberra van der Geest, C and N. MacDonald. 2009).</td><td>1.9</td></tr>
<tr><td colspan="4">Developing a Community Communication Guide and Communication Resources for the seafood industry. (FRDC Project 2001/310. Hamm, J. 2003)</td><td>1.2</td></tr>
</table>

During the stakeholder workshop, seafood industry leaders were asked why they felt that existing (engagement and general) research and support tools were not more familiar to them. Industry leaders felt that:

- Reports were not easily accessible or could not be found at all on the FRDC website;
- People do not know where to look or what to look for (regarding engagement-specific topics) within the documents, even if they could be found;
- Reports are regarded as too lengthy and 'academic' to wade through to find the relevant parts; and
- The FRDC's website and report formats are not considered conducive to "on-the-ground" use by industry members.

One recommendation offered during the discussion was that a specific tab for such tools be established on Seafood Industry Australia's website. Here FRDC report outputs could be made available as one to two-page documents with a 'step-process-outcomes' format. Such a document would use layperson language (i.e. easily understandable by fishers and industry persons and FRDC Project Managers) to convey recommended actions for industry members to take in order to achieve the benefit(s) of the research - something that the workshop participants did not feel that the current 'non-technical' summary achieves.

This format would also include reference at appropriate points to where in the full reports more in-depth descriptions and details can be found.

4.5.2 Barriers to evaluating engagement

The interview and workshop data showed there was low awareness and understanding of evaluation practice, particularly as it applies to assessing the effectiveness of engagement practices (refer Table 9). When asked about how they determine the success of their engagement activities, some interviewees referred to a range of qualitative and quantitative indicators (e.g. support on social media, seafood festival attendance rates, FRDC surveys, seafood sales figures, positive industry member feedback and awareness of issues, positive media coverage, securing project funding, favorable government decisions). It was far less clear, or not at all apparent, as to how these indicators were related to the particular goals and objectives of engagement activities. The data also revealed a lack of enthusiasm for evaluating engagement, which was stated by the interviewees and workshop participants as stemming from feeling burdened by a shortage of appropriate (human, financial, other) resources. Enablers for engagement evaluation were largely seen to be an inverse of the obstacles listed in Table 9, such as the recent increased awareness of its importance and benefits.

Table 9: Barriers to evaluating Engagement

Things that get in the way of evaluating engagement (BARRIERS) according to …	
Best practice literature	**Interviewees**
Do I want to? (values, beliefs, attitudes, personalities) • People's lack of appreciation for the importance of evaluation generally, and evaluation of engagement particularly	*Do I want to? (values, beliefs, attitudes, personalities)* • It's too early for evaluation of engagement at national level
Can I do it? (do we have what we need: human, social, etc. capital) • People's lack of awareness of, and/or skills in evaluation of engagement • Not having clear objectives for the engagement in the first place; • Evaluating in general and evaluating engagement can be resource-intensive in nature	*Can I do it? (do we have what we need: human, social, etc capital)* • Lack of expertise, time, & money; • Not knowing what evaluation questions to ask/how to 'do' evaluation; • Not knowing how to channel findings towards achieving change.
Will it work? (practice features) • Evaluation often being tacked on to the end of an engagement project without dedicated (human, financial) resources, and hence ending up more of an assessment of IF anything was done - not how effectively it achieved the objective. • Design of evaluation focused on collecting data without consideration of what the right questions are, and who to ask them of, or how the data is going to specifically be used to evaluate if the objective was achieved effectively; or how the findings will be used or shared. • Difficulty in defining an 'end point' of an engagement process and therefore being able to attribute the engagement process to particular outcome(s)	*Will it work? (practice features)* • Lack of extension from FRDC • Not knowing how much SLO there is (lack of definitive metrics) & how much SLO is 'enough' - where are we on the continuum? *Wider operating environment* Highly changeable & diverse stakeholder environment

Conclusion

The FRDC and the Australian seafood industry place great importance on improving the seafood industry's engagement with its stakeholders and communities in order to improve the industry's degree of social acceptance. The Right Conversations Project was implemented to improve understanding of the enabling and constraining influences on the Industry's use of engagement, and evaluation of engagement, practices. The following material provides a summary of the Project's findings according to its key objectives, as well as statements about the significance of those findings.

What influences industry's use of engagement?

The **first objective** of this Project has been to conduct desktop research to ascertain the range of factors influencing the seafood industry's wider use of available and best practice engagement strategies, tools and practices. To meet this objective, we drew heavily on a framework used in natural resource and fisheries management that explains the factors influencing uptake and adoption of new and/or different practices (Pannell et al 2006; Pickworth et al 2007).

Essentially, adoption of new or changed practices depends on various personal, social, cultural and economic factors. This is then further influenced by the characteristics of the practices themselves. People use recommended practices when they feel that:

- doing so will help them meet their (personal and professional) goals;
- they have what they need (resources) to support their use of the new practices; and
- they are more effective than other options, and they can practice or trial them to build confidence in their effectiveness prior to substantial investment (of time, money, reputation or other resources).

These categories, endorsed by the interview and workshop findings, can be used to understand and formulate an approach to lessening the industry's existing barriers to and strengthening enabling influences on, increased uptake of engagement and evaluation practices.

Examples of 'good' engagement and evaluation processes

The second objective of this Project, was to identify examples of effective and accessible processes for designing and evaluating targeted engagement strategies (for primary industries, including fisheries) - industry applicable engagement and evaluation frameworks. The desk top study identified examples in the scientific literature of some 'best practice' engagement. These examples tended to be found in analyses of fisheries co-management and collaborative research settings, where there seems to be a far more explicit mandate for stakeholders working together to achieve something than in the fisheries literature covering social license to operate. It is worth noting that a key driving factor for best practice engagement is not just a range of pragmatic objectives, such as more efficient and profitable business operations, but also a certain type of normative objective: seeking benefits for the greater common good (see Results chapter

Table 3, p.9) While the scientific literature advocates for better engagement practices, examples of industry practice tend to focus on marketing and communications strategies, rather than engagement for relational purposes, such as those undertaken by Wildcatch Fisheries South Australia and Seafood Industry Victoria (Table 5, p.13).

There are some informal evaluations of how well the industry is engaging internally and externally, as well as unsatisfactory experiences of industry being engaged by governments and other industry sectors. However, our research revealed, commonly evaluation is intuitive and there is little to no systematic or comprehensive evaluation of engagement activities of activities undertaken by the seafood industry leaders participating in this Project.

The key element arising from this research is that seafood industry practice as represented by our sample of leaders and data from the desk top review primarily focuses on only two of the engagement approaches, neither of which are those designed to build trust. This lack of a greater use of the full range of engagement approaches and of engagement evaluations is a significant risk and barrier to the seafood industry's ability to improve its social license to operate.

Evaluation processes for the seafood industry

The **third objective** of this Project was to consider ways for the seafood industry to evaluate their engagement activities. The desk top review of best practice evaluation generally and the practice of engagement evaluation in particular, revealed a plethora of analyses of and guides for using evaluation to determine how well engagement activities (programs, projects, policies) are going and/or have gone. Those materials have been synthesised into a framework (see

Table 6, p.15) of sequential steps that the seafood industry can use to evaluate all or any of their engagement activities, as well as to help them when they are being engaged by others. That framework (as well as the engagement framework) was reviewed by the workshop participants, who all agreed they were useful and simple, easy to follow tools. However, they felt that the frameworks need to be revised to make the language even more accessible to a lay audience and include on-ground scenarios of what use of each of them would look like.

Despite the agreement that the tools could help address the 'how to' element of capacity to evaluate, capacity issues remain for undertaking such evaluations, subsequent to applying more effective engagement practices for SL2O objectives. The interview process revealed that a selection of seafood industry leaders believe that they lack a range of different resources (motivation, time, expertise, funding, accessibility of support tools) required for designing and implementing evaluation and better engagement. This gap may be partly redressed by establishing more clearly the benefits of engagement and evaluation.

Sharing project findings

The **fourth objective** for this Project was to share its findings the primary target audience, being the FRDC FRDC HDR. Consequently, there has been extensive consultation and collaboration with the FRDC HDR throughout the life of the Project, including determining the need for the Project, its goals and objectives, its methodological design, which stakeholders to approach for involvement, progress reports, and draft and final report content. The secondary target audience has been seafood industry leaders (association heads, members of jurisdictional Research Advisory Committees). A selection of these leaders expressed interest and eventually participated in the Project (interviews, workshop). They had opportunities to provide input on the concepts and frameworks developed in the Project. These stakeholders will receive copies of the Project's final report.

Improve understanding of barriers to better practices

The **fifth objective** of this Project was to improve understanding of barriers to the seafood industry's use of better engagement and engagement evaluation principles and practices (see Tables 7 & 9). Prior to the Project's implementation, the FRDC HDR had some idea about what might be restricting the seafood industry's use of engagement and evaluation practices and of capacity building materials produced by the FRDC and other organisations (see Table 10). This Project has confirmed that those obstacles are indeed present in the Australian seafood industry context as well as in international settings. This Project has also identified other obstacles to improve and more use of engagement and evaluation practices, namely a range of personal factors: '*Do I want to do it*?' (see Table 10).

Table 10. Factors constraining the seafood industry's engagement and evaluation practices

Factors influencing uptake	Prior to Project 2017-133	Project 2017-133's findings
Do I want to do it? End users' values, beliefs, attitudes, personalities, goals, motivations	Not considered.	• Resistance/reluctance – stemming from negativity, defensive posturing, introversion, fear of failure, preference for convenient more familiar practices
Can I do it? End users access to resources required (e.g. human, knowledge, social, financial capital)	• Industry members perceiving 'engagement' as marketing &/or product promotion (*knowledge*) • Industry members lacking necessary expertise, capability & capacity in engagement & evaluation	• Lack of time, funding, skills • Internal & external conflict, & insufficient social cohesion within industry • Low awareness of shared values
Will it work? Features of the recommended practice(s) & their extension – effectiveness, relative advantage, ease of use, trialability, etc.	• Industry members not seeing full relevance/need for improved engagement • Lack of information re: comparative effectiveness of various engagement strategies/activities, particularly in fisheries contexts • Less than fully effective extension of existing engagement support materials (e.g. unsuitable formats)	• Many (seafood industry, government, NGO) programs/activities lacking features designed to build trust • Numerous weaknesses in engagement (and evaluation) practices of governments and NGOs • Existing engagement (and evaluation) capacity building materials need more effective extension/dissemination • Engagement and evaluation benefits not being made sufficiently clear to (seafood industry) end users (low to no incentives)

These personal factors (people's particular values, beliefs, attitudes, personalities, goals, and motivations) are very powerful influences on seafood industry members' choice to use (a little, a lot, none at all) best practice engagement and/or evaluation. These personal drivers are not easy to change directly. Consequently, careful thought is needed about how the FRDC and the HDR and seafood industry leaders can best reduce obstacles and enhance enablers in the '*Can I do it*' and '*Will it work*' categories. Rural sociologists have found that landholders' resistance to recommended land-care practices can be reduced through personal contact with extension staff and others in local networks where practice change is occurring (Curtis & Mendham 2017). In these cases, some peer pressure and being able to see first-hand the benefits of practice change can encourage landholders to at least try something different.

Improve uptake of existing engagement & evaluation resources

The **sixth and final objective** was to contribute to improved uptake rates of existing engagement and evaluation resources. This objective has been met by providing data and information in this report about:

- The key barriers and enablers of the seafood industry's adoption of existing best practice engagement models and methods;
- Examples of effective and accessible processes for designing and implementing engagement strategies; and
- Two strawman frameworks: one for designing and implementing engagement practices and another for evaluating those practices.

Further, this information was shared with, discussed and commented upon by self-selected seafood industry leaders. In so doing, the Project has helped raise their awareness that the resources exist to build capacity, but also that they need to more fully consider the type of engagement practices that build trust if they wish to improve their SL2O.

The information generated by this Project is an important starting point for improving the utility of existing engagement resources designed for the seafood industry, as well as for newer engagement evaluation resources. It should be noted that increased applicability of capacity building resources is only one, and a secondary one at that, of a range of factors that affect actual practice change. Constraints on practice change across all three categories identified in this Report will need to be addressed in order to increase the likelihood of greater uptake.

As noted above, the FRDC and the FRDC HDR can have some direct influence on uptake and adoption of best practice engagement and evaluation by targeting changes in two of the influence categories: *Can I do it?- Availability of required resources* and *Will it work? – Features of desired practices.* The first category of factors *Do I want to do it? – Individuals' (personal, professional) preferences* is more elusive in terms of trying to directly foster substantive change. It may be partially influenced using indirect methods, such as more clearly establishing to the seafood industry the benefits of practicing a wider array of engagement practices (e.g. using the SIV and Wildcatch Fisheries SA activities as case studies). Actions like funding support ('*Can I do it?*') and changes to extension design ('*Will it work*?') can go some way to making the uptake of recommended engagement practices (and materials) more appealing. However, sufficient motivation of any person considered an actual or potential end-user must be present and remains primarily an individual's (versus institutional, organisational) responsibility.

Implications

The Right Conversations Project provides information to the FRDC HDR that can be used by Program Officers to clarify appropriate investment in building greater industry capacity building for engagement and evaluation of engagement. Improved engagement and evaluation capacities are needed if the industry wishes to improve its social license to operate. This Project's impacts also extend to the seafood industry generally, and its leaders in particular. The FRDC will be able to provide greater clarity to industry on engagement policy, 'next steps', and what the FRDC's HDR is prepared to support.

Secondly, this Report contains information to improve the use of existing engagement and evaluation resources and current activities. The three key questions (*Do I want to do it, Can I do it, and Will it work*) can help the FRDC HDR and seafood industry leaders to reduce obstacles to and enhance enabling factors for the uptake and adoption of engagement and evaluation resources. Workshop participants also provides suggestions on how to make existing resources more accessible.

Finally, the Report provides two clear frameworks that can guide seafood industry members when they are designing, implementing and evaluating engagement programs and activities. Those frameworks can help build seafood industry confidence in achieving its engagement goals and objectives.

The Project has identified significant factors influencing parts of the international and Australian seafood industry's ability to improve its engagement practices and therefore social license outcomes. There appears to be a lack of motivation to alter engagement practices (i.e. *Do I want to do it?*). This resistance to change may be informed by seafood industry leaders feeling:

- Negative about their experiences with being engaged by governments and others (e.g. poor practices such as unclear objectives, broken promises, inadequate resourcing for engagement);
- Overworked and under resourced, yet still being expected to facilitate substantive changes in industry behaviour and approaches; and
- Frustrated by individual operators who have developed a 'siege mentality' in the wake of regulatory and other industry restructures. This mentality is seen to inhibit industry members' preparedness to be open, transparent and genuine in their engagement, and therefore threatens the goal of greater social acceptability.

The FRDC HDR will need a suite of approaches to address the motivational deficit present in parts of the seafood industry, should it identify this deficit as a priority area to pursue. One avenue in particular that can be pursued is to support the seafood industry to be more skilled 'engage-ees'. That is, the industry can gain some control of engagement they are subject to by improving their understanding of best practice engagement. With this knowledge in hand they can make more informed requests to governments, NGOs, and others to be engaged in particular ways. Such an approach may increase industry members' confidence and feelings of control and decrease the siege mentality and resistance to greater industry-initiated engagement. We are not suggesting that becoming more skilled 'engage-ees' is sufficient to improve in the industry's social acceptability. However, where industry members take care to do so in a collaborative, respectful but firm manner over time they can engender greater respect for the industry as well as increase stakeholder understanding of, and trust in, the industry.

Recommendations

In order to fully capitalise on the research findings of this Project, it is recommended that the Australian Seafood Industry in general, and the FRDC and the FRDC HDR in particular consider the following recommendations. These five recommendations have been formulated to help mitigate the factors found to be constraining better use of engagement and evaluation practices by the eleven seafood industry leaders participating in this Project. However, because this Project's findings are also drawn from an international literature review, the recommendations are also likely to be applicable to the wider (national, international) seafood industry context.

Recommendation 1 – Encourage people to 'hear' and clarify engagement purposes

Varying understandings of the term 'engagement' can cause confusion inside and outside of the seafood industry, which in turn can contribute to reduced motivation to engage (i.e. *'Do I want to do it?'*). However, it is not necessarily good use of the time and money needed to secure a single, precise, formal definition of 'engagement' for everyone to agree on. 'Engagement' will (and should) vary depending on the purpose for which it is being undertaken. What may be a better use of the FRDC's and the seafood industry's resources is to (formally and informally):

- Acknowledge and raise awareness of the fact that people have varying understandings of and therefore uses for 'engagement';
- Advocate that all members of the seafood 'community of interest' commit to seeking clarification from others about what they mean when they use the term 'engagement' or any of its associated synonyms (e.g. 'consult', 'communicate', etc.), and thereby clarify their expectations of what is to be achieved from an 'engagement' activity, and what they want from and/or are willing to provide to those participating in terms of input and influence.

It is essential for industry leaders to honestly ask themselves and encourage others in the industry to ask: how much they '*want to do it'*. How well does it engagement and evaluation fit with their values and goals? The answers to these questions will help them to better manage/prioritize the little time they feel they have. In others words, if they feel it is sufficiently important, then they are more likely to make the time needed to learn more about and improve their engagement and evaluation practices. Without this commitment, engagement by or with them to build their social license is not likely to succeed.

Recommendation 2 – Improve accessibility of Project's 'strawman' frameworks

Seafood industry leaders attending the stakeholder workshop agreed that the 'strawman' engagement and evaluation frameworks developed provide a good and accessible format and also made suggestions for improving that framework. Any further development of these frameworks should include: 'real world' case study examples and/or scenarios to make the theoretical foundations more accessible to a lay audience, and/or made specific to their industry experience. These adjustments would provide an important starting point to help answer the second question of '*Can I do it*'?

In addition, because uptake is also affected by how easy it is to test (and therefore learn more about) a set of practices *before* full scale adoption, the FRDC and HDR should carefully consider the designs of any future pilot engagement projects. For example, to what extent is it possible to pilot smaller scale[9] engagement practices? Where it is not possible to trial practices, adoption can be achieved, but typically only after end users have had time to discuss, analyse and reflect on what is being recommended. This action also helps answer the question of '*Can I do it*', because the answers can be used to establish a better business case for the benefits of best practice engagement activities.

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[9] By 'small scale' we do not necessarily mean only a local example or process. It could be possible to trial a small part of a regional or national scale project.

Finally, the FRDC HDR and the FRDC generally can improve the Project's 'strawman' frameworks by clarifying how their use extends beyond industry being the 'engage-or' (initiators of any engagement). The frameworks provide useful information about being an 'engage-ee' (a party who is invited to participate in an engagement activity or program). This information can help manage external parties' expectations about the seafood industry's available (human, financial, time) resources they have or may need to be provided to meaningfully participate in engagement initiatives (e.g. Government or other industry consultation processes).

Recommendation 3 – Improve design & dissemination of other engagement & evaluation resource materials

The Project revealed low awareness and use of FRDC's and other organisations' materials on engagement and evaluation of engagement, as well as of other research materials produced by the FRDC. A range of improvements to the dissemination and accessibility of materials can be addressed by several actions to address a key barrier to engaging - "Do I want to do it' - including, but not limited to:

- Establishment on the Seafood Industry Australia's and FRDC's websites of a specific tab that condenses – in lay persons' language – report outputs into 'step-process-outcomes' format. These materials would be a single to two-page summaries that reference where in full reports more in-depth information can be found.
- That the current Non-technical summary of FRDC reports for these types of tools be replaced with a two-page summary of the outcomes of the project, how to implement benefits of the research, and be written in lay persons' language.

Recommendation 4 – Improve extension

In addition to addressing motivational obstacles ('Do I want to do it?') and resources constraints ('Can I do it?'), it is important to address obstacles to uptake of engagement that exist in the design and distribution of engagement and evaluation materials ('Will it work?'). Working directly with people to help facilitate the use of new approaches and tools can help them believe 'I can do it'. Given what may be seafood industry-wide low awareness, understanding of and confidence in undertaking engagement and evaluation 'best practice', the FRDC HDR could trial one or several 'knowledge broker' positions. A knowledge broker could help seafood industry leaders find and explain how to use best practice engagement and evaluation materials. A knowledge broker could also help build relationships and networks in the seafood industry that support people in their journey to build industry social acceptability. Finally, the knowledge broker could provide the FRDC/HDR with feedback from the industry about the effectiveness and impact of its extensions approaches.

Recommendations 5 - Required resources

When people consider taking up a new or different practice, they will be asking themselves whether they have what they need ('Can I do it'), and this was one of the key barriers identified by participants - a lack of resources (time, funding, appropriate skill sets). This obstacle was most commonly mentioned by interviewees as the reason for industry's relatively low uptake of more engagement or best practice engagement and evaluation by the industry.

As noted earlier, people's values and belief systems, attitudes and (risk and other kinds of) perceptions, personalities, and goals will inform their judgements about to what extent they should undertake (more and better) engagement practices. They will be asking, "Do I want to do it?" (is it consistent with what I believe in? is it fair and reasonable?). The desktop review shows that use of best practice engagement is often taken up, in large part because people place great value on moral and ethical reasons for engaging (e.g. altruism, equity and empowerment for all, etc.).

Among the seafood industry leaders participating in this research and in the literature review, we found a preference for what appears to be the more familiar approach to improving the industry's social acceptability: that is, defending it using marketing and communications tools (Inform). There appears to be insufficient motivation by people to take up more of the full range of engagement and evaluation best principles and practices.

Consequently, actions like funding support, changes to extension design (see above) can go some way to making the uptake of recommended engagement practices (and materials) more appealing both personally, professionally, and economically. However, people will not make changes to their daily practices if they are not sufficiently motivated to do so. The challenge of an individual deciding how motivated they are, remains primarily their own responsibility – not that of an organisation or institution to directly address.

Extension and Adoption

The aim of the extension component of this Project was to:

- To directly engage and communicate with the FRDC HDR to ensure delivery of information that addresses the identified need for this research. The Project was designed to increase understanding of how and to what extent industry members are using these and other resources to help them engage with their stakeholders/communities, and what barriers exist to that utilisation if any; and
- To ensure findings are relevant, credible and provide the ability for the FRDC HDR to generate an impact with the seafood industry.

While the primary target audience of the project is the FRDC and specifically the FRDC HDR, the secondary target audience is the leaders of the Australian seafood industry (head of seafood industry sectors/associations, and key influencers). It was of particular importance to involve those who initially expressed their interest in being involved in a national-scale project to further develop the industry's engagement strategies and capacities in the area of increased social license.

As this Project was directly commissioned by the FRDC HDR, we have consulted Dr. Emily Ogier directly and regularly (email, telephone meetings) about the Project's major design components and its implementation procedures. Seafood industry leaders were involved and have been able to learn about the elements uncovered as well as provide their insights into engagement practices, through the Project's interview process and the stakeholder workshop. The FRDC HDR and interested seafood industry leaders will be able to comment on the Draft final report.

Further extension of the Project's findings to members of the Research Advisory Committees and other seafood industry leaders will primarily be the responsibility of the FRDC and the FRDC HDR.

We are unable to report on Adoption of Project findings at this stage, because further development and extension of the Project's Final Report and Engagement and Evaluation of Engagement Frameworks is to be determined by the FRDC HDR, and were not incorporated into this Project's objectives or budget.

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Appendix 1. Stakeholder interview questions

1. How do you think about/define the term ‘engagement’ (in the context of stakeholder & community relations)?

2. To what extent do you feel ‘engagement’ is necessary for the seafood industry to take up? What do you believe are the main reason for/benefits of ‘engaging’?

3. What kinds of ‘engagement’ have you/will you organise(ing)/initiate(ing)? E.g: Consideration of details such as:
   - What issue(s) and/or decisions have engagement initiatives been focused on
   - Purpose of that initiative (e.g. what was/is their goal?)
   - Who have you sought to engage with? Why? In what ways have you attempted to engage with them?
   - What formal and/or informal programs for ‘engagement’ do you have in your organisation? Kinds & amount of human and financial resources required/available for those?
   - Outcome(s) – positive, negative, neutral - of that/those ‘engagement’ initiatives?

4. What do you see as obstacles & enablers to your ‘engagement’ initiatives (e.g. What kind of things has (or would) make it easier for you to engage; What kinds of things make it difficult?)

5. Please refer to Chart on next page.

6. How do you know when you are doing ‘engagement’ well?

7. What do you see as obstacles & enablers to evaluating your various ‘engagement’ initiatives (e.g. What kind of things has (or would) make it easier for you to evaluate your engagement? What kinds of things has (or would) make it difficult?)

8. What terminology do you tend to use/prefer from the following list of synonyms:
   A. ‘social license to operate’, ‘social acceptability’, ‘socially-supported fisheries and
   B. ‘stakeholder/community consultation’, ‘communication’, ‘stakeholder/community engagement’, others?.

Appendix 1. Stakeholder interview questions cont.

Over the years there have been some resources produced by the FRDC and other organisations that relate to social license to operate and engaging and consulting with stakeholders and communities. We are interested to know which of these resources you are aware of. *[For each item listed in the table, please circle the number that best reflects your level of awareness]*.

1	2	3	4	5
No awareness *Not heard of it or read it*	***Little awareness*** *Recall hearing about it once*	***Some awareness*** *Recall hearing/ reading about it on several occasions*	***Fairly aware*** *Recall hearing about it* ***AND*** *have read it and remember what it is about*	***Very aware*** *Recall hearing about it* ***AND*** *have read it and regularly use it when designing/ implementing engagement or consultation processes*

Resource	*Your rating*
Community Engagement Charter - Scottish Salmon Producers Organisation (2016)	
License to engage: Gaining and retaining your social license in the seafood industry. A Handbook of available knowledge and tools for effective seafood industry engagement with communities *(FRDC Report. Ogier, E.M. & K. Brooks. 2016)*	
Social License to Operate: What does it mean for the Australian commercial seafood industry? *(Queensland Seafood Industry Research Report, 2016)*	
Common Language Group *(FRDC 2012/500. Christoe 2015)*	
Community attitudes towards Australian Fisheries Management. (*Essence Communications report for the Department of Agriculture, 2015)*	
How to improve your social license to operate: A New Zealand industry perspective. (*Ministry for Primary Industries, Wellington, New Zealand. Quigley, R. & J. Baines. 2014)*	
Let's talk fish: Engagement strategy foundations. *(FRDC Report 2012/301. Mazur, N., Curtis, A., Bodsworth. 2014).*	
Your Marine Values : Public Report 2013 *(Ogier and MacLeod 2014)*	
Building seafood industry representational capacity: "Charting Your Own Course": a seafood industry training package. *(FRDC Report No. 2009-322. Harrington, J.J. & N.E. Stump. 2013)*	
Empowering Industry: Improving two-way membership communication in peak industry bodies of the fishing and seafood industry *(FRDC Report 2011-400, Briggs. 2013)*	
Community perceptions of the sustainability of the fishing industry in Australia *(FRDC 2011, 2013)*	
Building viable industry associations *(FRDC Report 2011/410)*	
The drivers of fisher engagement in their representative associations. *(FRDC Report 2008/0335, Canberra van der Geest, C and N. MacDonald. 2009).*	
Developing a Community Communication Guide and Communication Resources for the seafood industry. (*FRDC Project 2001/310. Hamm, J. 2003)*	

Appendix 2. Workshop Meeting Minutes

Meeting Minutes – Teleconference Workshop

FRDC; Report;

Present: Dr Nicki Mazur – Principal Investigator
Dr Kate Brooks – Co-Investigator
Johnathon Davey – SIV
Stephanie Williams – SFM
Grahame Turk – SFM (Left the meeting at 11.20am)
Lowri Pryce – Oceanwatch
Markus Nolle – SIV
Tricia Beatty – NSW PFA
Dr Emily Ogier – FRDC HDR (11.30 – 12.05)

Apologies: Katherine Winchester – NTSIC
Julian Harrington – TSIC
Guy Leyland – WAFIC
Alex Ogg – WAFIC
Jess McInerney – SIA
Eric Perez - QSIA

1. Participants' key expectation for the Workshop were identified:
- To help clarify the difference between 'engagement' and 'consultation';
- To help clarify what good 'consultation' looks like (particularly in relation to government-mandates that the oil and gas industry consult with commercial fishing); and
- To improve understanding of why the seafood industry's awareness of existing engagement and evaluation tools is so low.

2. Subsequent discussion identified that industry confusion about the difference between 'engagement' and 'consultation' has evolved from people not recognizing that 'consultation' is only one on a spectrum of engagement activities. Using Attachment 1, Table 2 ('*The Different objectives, promises and approaches of engagement*' (IAP2 Framework)) discussion focused on the variation between the different elements of 'engagement':
- A key point made - those different kinds of engagement vary according to *how much influence* people want those they are engaging with to have in whatever is being decided/communicated.
- Another point made - activities such as product marketing are more commonly practiced by the industry and those fall more often towards the left-hand end of the spectrum (inform). In contrast, engagement for the purposes of improving SL2O (which are practiced less often), while they will invariably encompass elements of 'inform', are more successful when they include 'consult', 'involve', 'collaborate'. In the case of Oceanwatch – their limited resources require them to use techniques of 'empower'.
- It was suggested that the IAP2 framework might be used to help the seafood industry establish consistent, industry-wide parameters for – not just for initiating engagement – but importantly to industry, also in responding to invitations to engage with (external and internal) parties - the example of the oil and gas industry was used.

3. Review of Key Research Findings
- Dr Mazur reviewed the key findings from the literature for engagement and evaluation in regard to both the key principles of best practice and of activities that represented best practice.
- It was identified that the fisheries-specific research into best practice engagement and evaluation tended to center of collaborative research and co-management far more than on

seafood industry's engagement (external or internal) to address social license to operate issues. For SLO issues– the existing research points to the need for more engagement that makes use of the full range of engagement approaches (such as consult, involve, collaborate, and empower, as in the IAP2 engagement spectrum), and this was minimal in fisheries generally as well as amongst interviewees of this project. Most of the literature centered on engagement about research, and there were no examples in the fisheries literature of evaluation of (research) projects, let alone by industry of engagement with external stakeholder groups.

- The key findings from this Project's interviews (held with seafood industry leaders) were presented, structured according to the 9 Key Steps of Engagement and those of best practice. This identified major themes in the seafood industry's current practices: while a number of engagement projects are meeting some elements of best principles and practices, it tends to be unplanned and ad hoc. The review also highlighted that if any evaluation has been undertaken, that too tended to be unplanned and implemented by 'gut instincts' and not documented in relation to the activities' goals and objectives.

4. **Comments on Key Findings**
    - Industry participants did not correct or disagree with the findings presented.
    - The issue of a lack of resources to undertake engagement or evaluation was further endorsed and appeared to often be related to frustrations in the methods used by external parties in engaging the industry and therefore industry resource use incurred.
    - Discussion regarding the reasons why the existing (engagement and general) research and tools available were not more widely known (refer Interview Question 5 Results) identified the following key elements and suggestions:
        - Reports were not easily accessible or could not be found at all;
        - People don't know where to look or what to look for, even if they could be found;
        - Reports are too lengthy to wade through to find the relevant parts and the FRDC format is alienating to on the ground industry use; and
        - **Recommendation**: That a specific tab for such tools be established on the SIA website and FRDC report outputs be condensed in 'step process outcomes' in layperson language (i.e. easily understandable by fishers and industry persons) in a 1 to 2 page summary with reference at appropriate points to where in the full reports, more in-depth descriptions and details can be found.
    - One area of interest that was discussed at length was that of applying the best principles and practices of engagement to industry as an 'engage-ee' (not just as an 'engage-or'). Participants felt that this Project's frameworks could help them to:
        - clarify (internal and external) expectations about the availability of (human, financial, time) industry resources required to respond to requests for participation in engagement initiatives (e.g. Government consultation processes);
        - Establish greater and more consistent understanding (among all parties) about what the inherent purpose and promise of actions like 'consultation' are in an engagement context and how they might differ from other approaches (e.g. 'involve' or 'collaborate'); and
        - Therefore, improve the seafood industry's engagement with external parties seeking to engage the industry.
5. **Review of Proposed Engagement and Evaluation Frameworks**
    - While some of the workshop participants agreed that the frameworks presented would be helpful, in the context of available resources (and familiarity with these processes), the actual and potential benefits of best practice engagement do not appear to be highly valued. Some of this can be attributed to seafood industry leaders being more focused on the range of demands for their time, including requests (from government, other industry sectors) that the seafood industry participate in their consultation processes.
    - It was agreed that the basic frameworks provide a good and accessible format.
    - **Recommendation:** That further development of the frameworks (through subsequent projects) be accompanied by 'real world' case study examples and/or scenarios to better explain/make more accessible theoretical dimensions.

6. Project next steps.

- As there was no further business, the Project's next steps were identified:
    - the Workshop minutes are to be distributed to all Workshop participants and invitees by the 19^{th} of May; and
- The project draft final report is due with the FRDC HDR by 30^{th} of May and to be finalized by the 30^{th} of June.

7. Meeting Close: 12.05pm with thanks to All participants!

Appendix 3. Definitions of ‘engagement’

Definition	Source
A process of involving the public in problem solving or making decisions and using public input to make decisions	Pattillo & Wright (2010)
A two way process where citizen and communities are involved; their concerns and needs incorporated into decisions – about policy, planning, and service delivery	Lavery (2015)
Involving the community in decision-making processes	Victorian Lit Review (2015)
A process where individuals, groups, and/or organisations choose to take an active role in making decisions that affect them	Reed (2008)
Processes and practices where a range of people work together to achieve a shared goal guided by commitment to a common set of values, principles and criteria	Aslin & Brown (2004)
A process in which stakeholders influence and share control over management initiatives and decisions concerning the resources they exploit	Leite & Pita (2016) – citing the World Bank

Appendix 4. A continuum of working together

(Source: Mashek and Nanfito 2015).

Networking	**Coordinating**	**Cooperating**	**Collaborating**
Exchanging information for mutual benefit	Exchanging information for mutual benefit	Exchanging information for mutual benefit	Exchanging information for mutual benefit
Low to no level of trust required	Some altering of activities to achieve shared purpose	Increased altering of activities	Altering activities – may include modifying and/or adding positions
Limited time commitment	Slight increase in organizational involvement	Additional increase in organizational involvement	Substantial increase in organizational involvement
No sharing of decision making or other matters	Some degree of trust	Some sharing of resources (e.g. staff, finances)	Commitment to sharing of resources (e.g. staff, finances)
		Increasingly formal organizational commitment	Formalised organizational commitment
		Substantial time commitment	Substantial time commitment
		High level of trust	Very high level of trust
		Significant sharing of turf	Extensive sharing of turf
		May involve written agreements	Written agreements
			Sharing of risks, responsibilities, resources, rewards
			Commitment to learning from each other

Appendix 5. Reasons for engagement

Source	***Normative reasons:*** *moral and ethical matters, the 'right thing' to do*	***Practical reasons****: improving the quality & durability of decisions*
Corporation social responsibility Sorkin (2018); Gunningham (date)		To maintain support from investors; to maintain and improve reputational capital corporation should engage with society and make "positive" contributions
Health policy Lavery (2015), Foroushani et al (2012), Johnson (ND)	Citizens have the right to participate in making decisions and choices on a range of issues relating to individual care and health service planning Citizens wanting to feel heard by health care authorities and providers. Enhanced feelings of empowerment and connectedness among stakeholders (social capital, community capacity)	Services more responsive to people's needs & therefore improved health outcomes Decreased costs of services Ways to address increases in chronic & complex health conditions Improved quality of patient information, to help improve services' ability to meeting needs
Environmental policy/ management & biosecurity Rosenthal (2014), Benham (2017), Reed (2008), Thompson et al (2009)	To reduce marginalization of some parts of society Using (transparent, inclusive & fair) processes to reduce marginalization of some people, build greater trust Empower people through co-generation of knowledge, problem-solving & social learning Foster sense of belonging Reduce conflict through establishment of common ground	Greater adaptiveness & responsiveness of governance arrangements to community concerns, emergency situations Interventions & technologies better adapted to local social & environmental conditions More robust research findings from higher quality & diverse information inputs Improve government efficiencies Improve community ability to identify priorities and manage expectations
Reducing fishery-related conflict & improving social support for fisheries		
Uhrea & Leknesb (2017), Leite & Pita (2016), Ogier & Brooks (2016), Santiago et al (2015), Campbell et al (2014), Mazur et al (2014), Davis (2011), Van der Geest & Macdonald (2009), Ertor & Ortega (2015),	Support democratic values generally Provide opportunities for diverse voices to be heard, improve stakeholders' sense of ownership & responsibility for problem-solving Reduce conflict, increase trust and empathy among people Facilitate social learning & sense of empowerment & belonging among wide range of people involved & interested in fisheries Promote public ownership of fisheries resources Adhere to procedural justice principles Explore alternatives to globalized & industrialised seafood industries	Legitimize the final decision(s) & increase stakeholder buy-in and resource user compliance Integrate local knowledge into formal decisions to gain new/useful insights that increase policy/management relevance, practicality & service delivery Increase efficiency of fisheries management tools (MPAs, discard bans, quotas, access rights, input-output controls) Reduce opposition to commercial fishing activities & to fisheries management decisions Potential to increase seafood businesses' activities & profits Increase access to local seafood
Fisheries co-management and collaborative research		
Sonderblohm et al (2017), Dubois et al (2016), Dentoni & Klerx (2015), Hartley & Roberston (2008), May (2016), Johnson (2011), Yochum et al (2011), Miller et al (2010)	Greater social justice for interested parties Improve fishers' sense of empowerment & professional duty & self-care Increase social learning and trust among participants (industry groups, resource managers, scientists), & therefore reduced conflict Improve bridging social capital	Decrease transaction costs Data & information more accurate Increase access to fishery-dependent data Greater integration of scientific & stakeholder knowledge Greater consideration of fishery system dynamics Diverse input providing for improved &/or new insights into proposed management actions Stakeholder needs better met & therefore greater likelihood of innovation and research uptake Strengthened professional networks Improved policy & management responsiveness to changing conditions

Appendix 6. Engagement practices occurring in fisheries settings

It has been noted that fisheries management is more about managing people's actions than about managing fish per se (Dorner et al 2015; McPhee 2008; Acheson 1981 cited in Reedy-Maschner 2013). Consequently, information about 'engagement' in a seafood industry context was found across several main topic areas. Those topics included: conflict resolution by competing industry sectors, such as the oil industry and commercial fishing or commercial and recreational fishing; designing effective fisheries co-management and research regimes; fisheries management more generally; analysis of social acceptability issues and processes, including for aquaculture. This research addresses various interactions between people with some kind of interest in fisheries – formal or otherwise.

Conflict resolution by competing industry sectors

Several authors spoke about a widespread and powerful paradigm that mandates participatory fisheries management regimes (e.g. Dubois et al 2016, Davis 2011). Despite that mandate being enshrined in (national, international) legislation in many cases, it is not always practiced. Analyses of resolving conflicts between competing industry sectors note that a "state of non-cooperation" can persist even where engagement mandates are in place (May 2016; Meyer-McLean & Nursey-Bray 2017). These conflicts may persist because of authorities neglecting inequitable use of power as was seen in a resource allocation case in Alaska whereby transient salmon fishers used their influence over resident indigenous salmon fishers (Nakhshina 2016; Reedy-Mascher 2013). Voyer et al (2017) note other weaknesses in engagement approaches that include framing competing resource users in an 'us and them' narrative. They note that situations like that limits awareness and understanding of the (historical, current, and potential) complementarities among users, and therefore creation of better resource-sharing regimes (e.g. techniques specifically designed to facilitate mutual learning, reduce dysfunctional relationships, and redress power inequalities). Uhrea & Leknesb (2017) found that while Norway's co-existence regime has gone some to reduce conflict between the oil and gas industries and commercial fishing, some mistrust remains due to a lack of scientific knowledge about seismic testing impacts and inconsistent government practices in different regions.

Fisheries (co) management and collaborative/cooperative research

There were numerous analysis of fisheries co-management and collaborative research arrangements to determine the degree of their effectiveness in achieving program goals (see Appendix 7). Domer et al (2015) asserts that in these settings there is a notable paradigm shift where it is being increasingly recognised that full engagement of stakeholders at all levels in a fishery system is needed and is taking place. They also note that to maintain and increase that participation, further trust needs to be fostered. That trust is initially developed in informal settings, but it is solidified through formal arrangements.

Similarly, Sonderblohm et al (2017) note that top-down fisheries management approaches are ineffective and are gradually being replaced internationally by more inclusive, people oriented, power-sharing approaches. Their case study of an Octopus fishery in Portugal showed how participatory stakeholder workshops helped to design and implement a more effective strategy to regulate fishing effort. Davis (2011) similarly observed Canada's formal mandates (legistative) for broader stakeholder involvement in fisheries management decisions. While noting the greater complexity that results from having a greater diversity of voices to reconcile, he found that a particular advisory committee model that afforded participants genuine opportunities to influence fisheries planning decisions was more effective.

In analyses of cooperative and collaborative fisheries research cases (Conway & Pomeroy 2006; Dentoni & Klerx 2015; Dubois et al 2016; Hartley & Robertson 2088, 2011; Johnson 2011; Santiago et al 2015; Zollett et al 2015), researchers have found that more desirable outcomes (more rigorous data and information, improved sustainability of catch, improved capacities for participants) can be achieved where there is a high degree of clarity among all participants about the purpose of and methods for the collaboration, participants' roles and responsibilities, and how participants' input will and has been used. Not surprisingly, some problems with participants expectations not being met, some cynicism about research purposes and promises, and low engagement knowledge and skills remain (Conway & Pomeroy 2006; Hartley & Robertson 2011; Zollett et al 2015). Overall, however, similar to the analyses of co-management cases, they believe there is a notable paradigm shift away from top-down fisheries management systems towards greater recognition of the need for more multi-stakeholder partnerships that seek to build trust and reciprocal benefits among participants.

Social acceptability/Social license to operate contexts

The desk top review revealed some several analyses of commercial fisheries controversies in Australia, Europe and North America. Tracey et al's (2013) and Haward et al's (2014) analysed the chronology of the 'super trawler' controversy and showed how a complex situation is rarely solved by claims of 'good science' informing governments' or industries' decisions. They noted that the science-policy interface is better served by more effective integration of research, collaborative governance, and public communication where attention is paid to different interpretations of 'sustainability'. The authors did not provide detail about how such integration can be created and maintained.

Gansbauer & Wilfing (2016) analysed political conflict in the harvesting of herring and mackerel (migratory species) in the North-east Atlantic as example of need to understand diversity and alignment of stakeholder perspectives, in order to better manage conflict. Similarly, Ertor & Cerda (2015) examined aquaculture conflicts in the European Union that have constrained the sectors' development. They found that oversimplified understandings of people's concerns – "you are either for us or against us" only served to magnify conflict. They point out that stakeholder concerns more typically include numerous dimensions, including matters of procedural justice and recognition (being heard). A lack of attention to these matters greatly reduces the potential effectiveness of strategies to increase social license to operate.

Appendix 7. Engagement practices in fisheries and other settings (Table)

How should we 'engage', how are we 'engaging' according to …		
Best practice literature	**Fisheries-specific literature**	**Interviewees**
Working to align specific practices (the steps of engagement processes below: 1-9) incorporating moral/ethical approaches (see above) and Best Principles (*See Attachment 1 – Table 1*) Engagement should be planned (formally or informally) according to a cycle of 'plan', 'do, 'check', 'act' and following the sequence of steps/tasks listed below.	**Collaborative research & co-management articles** *(Portugal Octopus fishery, Northwest USA – Rockfish fishery, New England USA – several fisheries, New England USA – Squid fishery, California Central Coast, European Union – variety of fisheries)* • More inclusive and participatory approaches becoming key feature of international fisheries policies, particularly for co-management and cooperative research. Various projects being evaluated on basis of how well engagement is designed and implemented and degree to which trust in built among stakeholders **Competing resource sectors & social conflict articles** *(European Union – variety of fisheries, aquaculture development; Supertrawler; N.East-Atlantic – herring & mackerel; B.C Canada – groundfish)* • Researchers note that numerous formal fisheries policies call for transparent and meaningful involvement of stakeholders & communities in order to achieve sustainable fisheries	No mention of particular recommended best practice approaches that involve a sequence of steps/tasks.
1. ***Clarify purpose for engagement***: Asking why are we engaging? What is the outcome we are seeking/decision to be made? What problem are we trying to solve?	**Collaborative research & co-management articles** Goals for engagement sometimes stated and include: • Creating partnerships & knowledge sharing space between researchers, fishers & managers; enabling participation capacity for fishers; improving quality of data & information. • Minority of cases (in EU) where participation pursued as a right versus a means to achieving a pre-determined goal. **Competing resource sectors & social conflict articles**	Engagement' is done on the basis of what seems like a good idea or needs to be done. **Key issues** • Where the acceptability of the industry's practices are questioned; the industry's resource access is restricted; and/or

	• Norwegian Co-Existence Regime – aims to improve industries' knowledge of one another and strengthen cooperation	**Goals** • Generally, to improve "social license to operate" to lessen the effects of the issues mentioned above.
2. ***Identify who needs to be engaged?*** How well do we understand stakeholders, their interest in the issue/problem, values, how they might be affect, and their capacity to be involved?	**Collaborative research & co-management articles** • Several cases where detailed analyses of who are 'interested' parties and what they care about was undertaken – which was seen as integral to the initiative **Competing resource sectors & social conflict articles** • Conflicts were found to be exacerbated by people assuming homogenous opinions existed within broad stakeholder groups, polarizing debates, in that the approach overlooks important features of people's concerns and works against potential and actual collaboration.	• Target audiences tended to be identified in broadly-defined categories, such as: Community(ies), Seafood consumers, ENGOs, Rec fishers, Government or politicians • More specific identification of interests were less common, but included Fisheries Ministers, industry association boards, RACs, local supermarkets, restauranteurs, schools, individual fishers, FRDC. • Specific definition of stakeholders' and communities' interests were not mentioned – a greater emphasis tended towards an oppositional approach of whether they are supportive of the seafood industry or not. • No mention of stakeholder or community capacity to be engaged – more focus on seafood industry's own capacity to be engaged by others.
3. ***Discuss, define, and identify to what degree of, involvement*** and influence you will seek/provide for (as per IAP2 Spectrum 3a). Select engagement methods that suit engagement goal(s) and objectives	**Collaborative research & co-management articles** • Often initiatives (stated or otherwise) are based on the 'Involve' and 'Collaborate' objectives (as per IAP2 table) and go some way to using suitable methods for those involvement objectives (e.g. participatory meetings and workshops, surveying participants re: satisfaction with procedures, etc.) • European Union analyses found it's common to have 'Consultation' (being a "two-way" information flow, where	• No mention in interviews of making a distinction between different degrees of involvement and/or influence. • Main emphasis appears to be on external 'engagement' focused on convincing stakeholders and communities of the positive aspects of the seafood industry. Lower emphasis on listening to stakeholders' and communities' concerns. **Key methods (external engagement)** • Using promotions campaigns that aim to educate people about the seafood industry's sustainability and value in providing important food source to the community, and lack of accuracy of myths being propagated • Most common tools used include social media, regular media, face-to-face activities like seafood festivals, direct lobbying of politicians and Ministers. • Emphasis on using scientific data and information about the seafood industry to establish credible facts. • A bit of interest in and planning for creating alliances or partnerships with stakeholders, such as ENGOs and/or retailers; as well as building personal connections with specific

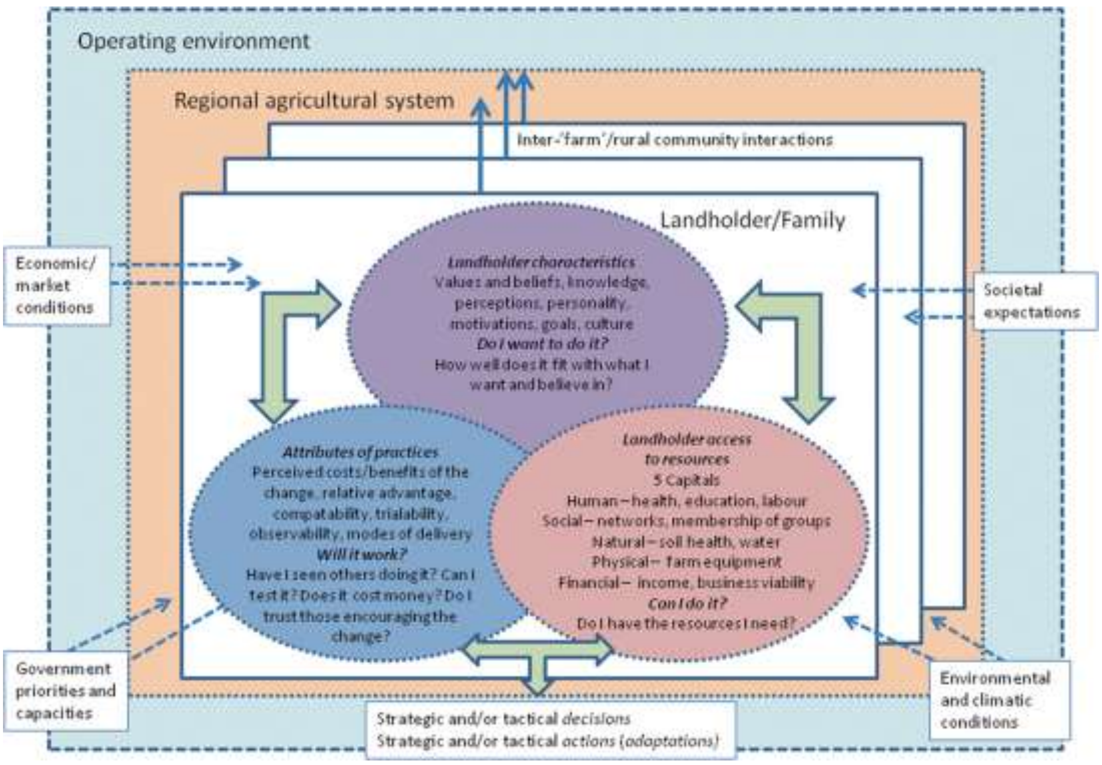
	industry responds to questions; however it does not include allowing shareing in decision-making) and 'Functional' participation (Government-driven and funded partnerships with a pre-determined goal, some shared decisions; very few cases where industry seen to have a right to lead co-management initiatives. **Competing resource sectors & social conflict articles** Norwegian Co-existence Regime – complex but also comprehensive structure of meetings, forums, and communication channels to discuss timing and implementation of seismic testing	communities/stakeholder groups in order to build trust over time; and taking care not to provoke outrage. ***Key methods (internal engagement)*** • Face-to-face through member meetings, port visits, selection of workshops, member polls, newsletters • Issues covered include services provided by industry and sector associations, member's general concerns, capacity building for a range of different practices (e.g. safety management, attending seafood festivals)
4. ***Assess resources*** (human, financial, time) required to implement plan (including its evaluation)	**Collaborative research & co-management articles** • Limited discussion in materials of how and to what extent collaboration and co-management is considered; • Analyses include recommendations for clearer systems that track and provide better resourcing (all types of); • One case where strong effort was made to arrange activities to suit fishers' schedules, information needs, etc. **Competing resource sectors & social conflict articles** Norwegian Co-existence Regime appears well resourced	Tendency to work with the time, $, people currently available – which is typically considered to be insufficient and an obstacle to doing more or different engagement
5. ***Discuss and plan*** how the engagement will be evaluated	**Collaborative research & co-management articles** • Limited discussion in materials of how and to what extent this is considered • Some instances where participants were consulted on how the key evaluation tool (survey) should be designed • Articles providing some evaluation or assessment of engagement aspects - those analyses were typically undertaken by members of the research community. Two cases where evaluation was built into engagement plan before it was implemented.	Overall, low incidence of evaluation of engagement activities. Where it does occur, people typically rely on informal, intuitive and incidental assessments of 'engagement' success.

6. ***Implement the Plan,*** documenting activities that take place and conducting them according to best principles and best practices.	**Collaborative research & co-management articles** • Methods are listed above. Assuming that in cases of largely formalized engagement activities there are requirements for standard ways of documenting activities (e.g. meeting minutes, workshop materials, academic articles about the activities, etc.) **Competing resource sectors & social conflict articles** Research article suggests that the Norwegian Co-existence Regime's engagement stated procedures were followed as promised.	This topic not explored in depth in the interviews. Assuming that there is some documentation of activities.
7. **Review information** gathered, determine how it will affect decision(s), provide stakeholders with results of the engagement	**Collaborative research & co-management articles** • Articles provide recommendations about improving research, management, and engagement practices, but tend not to report on how and to what extent those recommendations are taken up; • One report of uptake of survey data, into stock assessment procedures, and of fisher awareness of subsequent decisions about catch regulations; • One reported case where extensive outreach activities were used to provide stakeholders with feedback on engagement results. **Competing resource sectors & social conflict articles** • Numerous cases in European aquaculture where conflicts result from stakeholders being ignored in early aquaculture planning, lack of feedback, lengthy and complicated application processes.	As above, low incidence of formal evaluation of engagement activities. Unclear how and to what degree information gathered changes their practices. Mentioned by one interviewee that questions asked of shoppers, about awareness of fishing activity, in a supermarket campaign were reviewed to identify issues of most concern to consuming public.
8. ***Evaluate*** degree to which engagement has met its stated goal(s) and purpose.	**Collaborative research & co-management articles** • Several examples of success indicators, including: achieving a catch effort management goal that demonstrated success in establishing dialogue, coordination, and trust; some sustained commitment from fishers; boundary-spanning roles by industry consultants helping with knowledge transfer; some conflict & mistrust resolved through active listening techniques. • Examples of researchers surveying participants about their involvement and satisfaction with project communications;	As noted earlier, interviewees reported that evaluation tends to be somewhat informal and based on quantitative metrics (see those listed below) or on qualitative feedback from industry members, regulators and relevant Ministers. Success indicators mentioned by interviewees (*external engagement*):

	preferences for type of collaboration, and recommendations for improved practices. **Competing resource sectors & social conflict articles** • Research project evaluated Norwegian Co-existence Regime's goal achievement: clear consensus among participants that it contributes to reducing scope & number of conflicts; two remaining concerns re: mitigation of seismic testing's impacts and discrepancies in oil industry practices between regions	• Number of website hits; blog responses; Facebook likes; shares & comments; positive newspaper, TV, radio stories • Being able to secure project funding • Less restrictive government policy and management decisions • Increased seafood sales • Increased or 'high' numbers of people through the 'gates' (fish market/ festivals/ dinners/ workshops, etc) • Increased recognition of species/ brand/ origin logos (consumer knowledge) • Seeing examples of positive community attitudes toward fishermen. *(Internal engagement*) • Positive feedback from industry members on association's performance • Industry members having increased awareness of community perceptions of industry behavior • Increased fisher capability to undertake direct one on one community engagement.
9. ***Adjust engagement*** goals, practices as required and possible	**Collaborative research & co-management articles** • Many articles do not report on extent to which information from engagement activities or research recommendations taken up • One case found where protocols for collaborative research program reviewed and adjusted annually **Competing resource sectors & social conflict articles** • As above few reports on extent to which information from engagement activities or research recommendations taken up • European aquaculture conflicts found likely to worsen if expansion policies do not take up more appropriate engagement practices	Not discussed in interviews.

Appendix 8. Factors that can affect people's use of new practices

Natural resource management frameworks on drivers and constraints to farmers' taking up and maintaining more sustainable land management practices (or innovations) might lend some insight into why and to what extent people in different parts of the seafood industry are choosing to 'engage' with their stakeholders and communities. It is important to recognise that when we talk about 'improved' or 'more' engagement – we want people in the seafood industry to do something 'different' from what they have been doing to date (e.g. using a wider range of engagement practices than their current reliance on marketing and communications approaches). Getting people to do something 'different' is about behaviour change. People do not necessarily change their behaviour simply in response to someone suggesting that they need to do so (Pannell et al 2006; Pickworth et al 2006; Stern et al 1999, 1993; Stern 2000). When people decide to change their behaviour (or not, or only a little) and take up different or new practices – it is because they are being influenced by a range of factors (personal, social, structural) that can encourage or discourage them from doing so (see Figure 1, following).



People's values and belief systems, attitudes and (risk and other kinds of) perceptions, personalities, and goals will inform their judgements about to what extent they should undertake (more and better) engagement practices. They will be asking, "Do I want to do it?" (is it consistent with what I believe in? is it fair and reasonable?). For example, Mazur et al (2007) suggested that commercial fishers may be more likely to accept bycatch mitigation or reduction regimes that 'fit' with their beliefs and needs (e.g. bycatch is sometimes perceived as a costly nuisance). Therefore, management regimes that only emphasise negative perspectives of environmental or animal welfare impacts might trigger some resistance from some fishers.

But when considering new or different practices, people will also be asking, "Can I do it"? And the answer will depend on their access to different forms of required resources (or capital), such as: social capital (networks, support, peer pressure); human capital (skills, education); financial capital (revenue, investments); physical capital (equipment, infrastructure); and natural capital (water, land). Using the example of bycatch (Mazur et al 2007), fishers' acceptance and use of mitigation measures or reduction devices will be encouraged by having access to easily understood and credible information and skilled labour. Conversely restricted access to these resources may impede adoption. In this exploratory study, non-fishers identified shortages of information on the scale of bycatch problems, the cost/benefits of bycatch reduction for fishers and effectiveness of training schemes, and restricted funding for innovation and program delivery.

In addition to these personal and situational factors are the features of any prescribed engagement practice or activity, which will also affect people's choices. These features include the practice's effectiveness, practical benefits, ease of use, and how it has been designed and disseminated (e.g. the question that is "Does it work?"). Bycatch mitigation measures and reduction devices that effectively reduce bycatch, are easy and relatively inexpensive to use and are effectively disseminated are likely to have higher rates of adoption (references cited in Mazur et al 2007). Conversely, obstacles to widespread adoption include measures and devices that are expensive and have few practical benefits for fishers, low involvement of fishers in trials, weak relationships between and within government and fisher networks and a lack of systematic evaluation of communications and training (references cited in Mazur et al 2007).

Finally, there will always be a range of macro-level factors that while they may be outside people's direct control, they still affect their choices (e.g. economic conditions and pressures; government policies, legislation, programs and priorities; public pressures; and environmental conditions). For example, Public, government and industry interest in environmental sustainability can create positive momentum needed for designing and implementing appropriate regulations and management regimes to reduce bycatch (Mazur et al 2007). Factors impeding positive responses from fishers include unfavourable economic/market conditions, conservation campaigns perceived as 'antagonistic', and a shortage of appropriate incentives (positive and negative) in bycatch regulatory and management regimes. However, in some instances pressure to address an issue is so great that fishers may have no choice but to change practices as any lack of action may result in fisheries closures, changing market preferences or access.

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