

Investigating social acceptance for the wild catch commercial fishing industry of Southeast Queensland



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Executive Summary

Rationale for the study

This research project aimed to develop an engagement strategy that would assist the Southeast Queensland (SEQ) wild catch commercial fishing industry to gain social acceptance, or a Social Licence to Operate (SLO). SLO is needed to maintain access to the resource and market confidence.

For the purpose of this research, we define SLO as - the community's ongoing acceptance or approval of a company/industry and its local operations which must be earned, can be withdrawn, and must be continually renewed in order to be maintained (adapted from Boutilier and Thomson 2011; Boutilier and Zdziarski 2017; Syn 2014).

While commercial fisheries are subject to substantial regulations, are undergoing more reforms, and have made considerable changes to improve sustainability, key stakeholders and the broader community continue to raise issues with impacts on targeted fish stocks, habitats and ecosystems (food webs); threatened, endangered or protected species (by-catch or accidental catch); an unclear supply chain or provenance; and compliance with best practice and government regulations.

Methods leading to an engagement strategy

A scan of Australian and New Zealand news print media over the last five years searching for commercial fishing and SEQ, revealed that of the 157 articles, the commercial fishing industry was predominantly portrayed in a negative light (70%), with 22% neutral. There were few good news stories.

A literature review provided the foundation for the research, identifying that factors contributing to building SLO were legitimacy, credibility, and trust, combined with procedural (processes used), distributional (equity in resource allocation) and interactional fairness (e.g. mutual respect and transparency). These factors are fostered by good communication and engagement with stakeholders that includes investing in relationships, listening to stakeholders and building a professional culture of innovation and collaboration. Hence the need for an engagement strategy.

For the purposes of this strategy, we define 'engagement' as 'a process in which stakeholders or community influence decisions that affect or interest them and this input is used to make better decisions' (adapted from IAP2 and World Bank). It implies an exchange of information.

A draft engagement strategy was developed through USC/QSIA collaboration, founded on IAP2 principles and engagement spectrum. Good engagement tailors the methods of engagement to the purpose and needs of, or desired outcomes for each individual or group of stakeholders. The methods may need to change over time. Thus it is important to understand key stakeholders, their interests in the wild catch commercial fishing industry, their level of influence on matters that affect the industry, and how best to communicate with them. For example, in some cases information may assist in alleviating misunderstandings; in others, involving or collaborating through interaction or dialogue may be appropriate.

The methods used in the project were designed to contribute to the development of the engagement strategy: photovoice interviews and focus groups with commercial fishers in the three selected case study areas of Tin Can Bay, Moreton Bay, and Gold Coast; key stakeholder interviews; and interviews with industry leaders in Queensland.

Because of the negative perceptions of the industry, it was important to understand and demonstrate who are commercial fishers in the three selected case study areas. The photovoice technique was used to gain insight into live catch commercial fisher values, characteristics and concerns. Four key themes emerged from analysis of interviews and the photos taken by 13 participating fishers. These were used in a display of four posters covering themes of:

- Pride and market appeal of quality product, especially through direct supply to consumers;
- Efforts towards a sustainable fishery through innovative techniques, compliance, care for the environment;
- The range of knowledge, skills and professionalism needed for the modern fisher to operate e.g. navigation, weather, mechanics, product handling, regulations; safety, boat handling/maintenance; and crew management and
- Contribution to family and broader community – many were multi-generational family businesses, providing both direct and indirect employment in the region.

The photostories were shown on four posters displayed for a week to 10 days at local libraries in Tin Can Bay and Southport, the Bribie Island Seaside Museum and the Moreton Bay Marine Discovery Centre in Manly in October and November 2018 (see Attachments 5 & 6 of the report).

Additional perceptions and concerns that emerged from fisher interviews included:

- lack of future security in the industry due to misrepresentation in the media, environmental change, limited training opportunities and incentives;
- community's lack of awareness of the fishing industry, rules that apply, and challenges;
- poor (i.e. one-way) consultation by government about continuing reforms;
- sensitivity about unfair distribution of benefits and costs, from previous reform processes that were poorly justified;
- continuing focus on compliance of commercial fishers rather than whole of resource fish stock monitoring and management; and
- little recognition of the limited by-catch in SEQ fisheries.

Interviews were used to gain an understanding of concerns of 16 key stakeholders from State government, conservation, recreation fishing, and supply chain (wholesalers and direct purchasers), as well as suggestions from four industry leaders. It was clear that there was lack of good quality data or misinformation about resource sustainability and compliance measures, specific to SEQ, and especially by recreational fishing and conservation sectors. There was also debate about how to demonstrate sustainability and compliance with regulations, the need to get rid of rogue commercial operators, consider third party accreditation, better process for developing a sustainable fish guide, and to put a human face on the industry. A State government officer stated 'our job is to demonstrate to the community that we've got a system in place that manages the stocks well, that's sustainable, that minimises impact on the environment and protected species', supports jobs, provides community benefits, and gives people satisfaction - so 'we need to reform our management system to bring it up to a better standard'. From these interviews, it is clear that unless the management regime is shown to be effective, then the fishing industry will not achieve measures of SLO: credibility, legitimacy, and trust.

Interviews of the four industry leaders emphasised that decisions about fishery management should be made on science not politics. Other suggestions tended to relate to formation of community and consumer attitudes such as: social media needs to be used more effectively; point of sale food

labelling illustrating provenance and tapping into the human side industry; better reward for high levels of product quality control to provide an incentive; a strong government message of a well-managed industry; and education of consumers and in schools.

A draft engagement strategy

The draft engagement strategy proposed a purpose and methods for engaging each type of stakeholder (see Attachment 11). Mechanisms that QSIA could consider to improve engagement include:

- Update QSIA website with factual information supported by graphics to clarify misconceptions about regulations, fishing methods, sustainability measures, fish stocks and bycatch. Continually add to podcasts to tap into local knowledge, experts on topics of relevance, and promote dialogue, via a comment mechanism. Add to and continually update Fishquiz.
- Develop a more detailed social media strategy based on a coordinated approach and key messages across all platforms.
- Regional stakeholder forums to bring key stakeholders together to resolve issues respectively. These worked well in the days of QCFO (Qld Commercial Fishermen's Organisation) and some catchment management committees.
- Develop a bank of fact sheets that can be drawn on quickly to respond to negative print media and social media, addressing misconceptions about fishing type, regulations, bycatch, resource sustainability.
- Develop an image bank for use with media, including positive images from fishers.
- Develop a specific 'media' page on the QSIA website to house the fact sheets, images and other resources.
- Further develop the QCatch consumer-oriented website and social media presence with a trusted sustainable seafood guide and link to humanising fishers' stories.
- Develop QR product code that provides a link showcasing fisher profiles, species, and sustainability credentials and downloadable mini factsheets, printable for use by retailers and marketers.
- Build partnerships with recreational fishers through fish stocking; with community through participation in Clean Up Australia; and with State government re access and interpretation of resource sustainability data.
- Explore training opportunities for the QSIA board in media skills, engagement and conflict resolution.
- Develop awareness raising material such as posters based on the Qcatch consumers orientated website.
- Ensure appropriate metrics and analytics are in place for monitoring and evaluation of all online platforms, and whether it made a difference to outcomes.

The current proposed strategy is very much information-based. This reflects the state of industry relationships with stakeholders, the ongoing reform process and challenging negotiations, difficult policy history and operating environment, and overall resource and human capacity.

QSIA has little hard evidence that it can use to demonstrate that the fishery resource is well managed, sustainable in the long term, and that there is minimal threat to SOCI. This is a major concern of conservation and recreational fishing stakeholders, and good engagement entails listening and responding to stakeholder concerns. Filling this knowledge deficit is an initial crucial

step to building SLO, with shared responsibility: the management agency, DAF, needs to develop justifiable harvest whole of fish stock management strategies, with appropriate monitoring and compliance; fishers need to contribute their local environmental knowledge and insights to effective management strategy development and comply with regulations including continuing to report catch data. This would contribute to building trust in fisheries management.

One barrier to improving engagement is what Mazur and Brooks (2018) refer to as a motivational deficit to engage. We suggest that past engagement by government and criticism of the industry by various stakeholders, some of which is unsubstantiated, have lowered trust and confidence in engagement processes, as well as demoralised fishing industry members. Understanding good engagement and conflict resolution practice and being prepared proactively with information (fact sheets) that can take emotion out of dialogue, would increase mutual respect, credibility and trust with stakeholders over time.

Communicating about how fishers are contributing positively would enhance QSIA's credibility. Communicating that 'rogue' fishermen are not welcome in QSIA, based on a member code of practice would build its legitimacy. QSIA can also continually review whether its messages on social media are consistent with its stated objectives to demonstrate its core values of stewardship. Given that improving level of SLO is influenced by good quality relationships, face-to-face dialogue with trusted members of a stakeholder advisory group, initially, could also contribute to building SLO. It is expected that the 'information-based' engagement strategy will evolve over time with improving industry capacity.

Evaluation of draft engagement mechanisms

A common criticism of engagement strategies is the lack of independent evaluation and the narrowness of evaluation if it is done. The second phase of the study developed and/or evaluated three pilot engagement mechanisms: the photovoice displays; Fishquiz; and a fisher-initiated Instagram group and QSIA social media. These were chosen for feasibility within the time constraints and broader long-term applicability and adaptability. The photovoice displays in local libraries and museums were expected to engage the community emotionally and increase awareness about fishers and the industry – evaluation was mainly via a feedback survey and online analytics. Fishquiz aimed to test and increase cognitive understanding of the industry in a fun way – evaluation was of completion rates, scores, online analytics and stakeholder feedback. Social media was expected to improve awareness of fishing industry views – evaluation assessed reach, impact, and response mainly through Google analytics tools and stakeholder feedback.

Photovoice display - The relatively low number of survey responses (25) to the photovoice displays is attributed to the fact that visitors had to complete the survey while standing in front of the displays (for the most part). However almost all of the respondents responded in a positive way about the industry being sustainable and well-managed, providing quality seafood, being important to the economy, and source labelling being important. The images that appealed to participants the most were those showing beach netting for mullet, a fisherman saving a stranded baby whale and people lining up to buy seafood at the wharfs. These images included quotes from fishermen discussing how they value the environment, their commitment to reduced bycatch and the popularity of their product with consumers. Thirteen people selected the following images as credible: an environmental award, recycling oil, and quality product. Question 7 asked which key messages would positively influence your perceptions of the coastal wild catch fishing industry. The

most popular response related to good environmental stewardship, followed by locally caught and sold seafood is a premium product that supports local businesses, and industry complying with regulations. 47% said their views had changed as a result of the display.

Fishquiz - A total of 118 responses were received between 15th October and 5th December 2018. In general, there was a relatively low level of knowledge about the Australian seafood industry with very few getting all answers correct. The highest scores were about skills needed by commercial fishers (85%), and identification of non-native seafood (73%), with a low correct score for the amount of by-catch in tunnel netting (40%). In response to a question about their source of information about the commercial fishing industry, the highest was word of mouth (42.91%), followed by social media (40.25%) newspapers (20.37%), fishing specific TV shows (17.72%), and others.

Social media - Instagram – The Instagram followers steadily grew to 344 followers. The post receiving most likes was with a politician unlocking ‘the value of Australian seafood’; and ‘Tagged Southern Rock Lobster – quota management rely on community and fisher reporting ensuring the fishery long-term sustainability’.

Most comments were received in relation to the aesthetics of the image to a recreational fisher and his catch. Posts that received likes, comments and shares were an image related to fishing in a pristine environment and another highlighting a fishing method that has no bycatch – ‘undersized are released ... and no damage to seabed’. The post that had the highest reach (total of 171) features a female working on a boat posted on the 20th October 2018.

QSIA online and social media – Since October 2016, the QSIA website received 10,283 visitors with average session of approximately a minute and half. The vast majority were first time visitors. Popular pages are the Home and News pages. For the 6 month period from the 27th August 2018 to the 4th December 2018 the QSIA Facebook page ‘likes’ grew from 1482 to 1674. A dramatic spike in post likes was caused by a post in October circulating a petition to generate support for locally caught seafood. A post that was widely shared (218 times) was a petition asking ‘the Queensland government to stop adding fishing restrictions that are reducing commercial fisher’s ability to supply the community with fresh local seafood.’ Another was a link to the QSIA webpage about the white spot prawn disease outbreak, ‘Unravelling the failure at our border’. Because of the way the podcasts were embedded it was difficult to determine which is the most popular but a few comments in interviews found them positive and informative.

Additional feedback from key stakeholders about QSIA social media included comments on the importance of being proactive, positive, and accurate, rather than negative. One thought the podcasts and news were good but Facebook can become contentious. Another commented that it is not clear from the posts whether the audience of the website is fishers or government.

Discussion of the piloted techniques to engage and affect SLO

The three engagement techniques that were trialed were intended to improve SLO, however none were tested for long enough to conclusively suggest attitude change in relation to some of the key indicators: credibility, legitimacy and trust. While the photovoice concept and displays were well regarded by fishermen, it was difficult to gauge the impact on the community and invariably the displays had limited reach within the case study port coastal areas. Using similar images and messages on a website or social media would provide broader exposure, similar to the Instagram account. While anecdotal feedback was that the Fishquiz was fun and engaging, without follow-up it

is difficult to know the extent to which it improved awareness, knowledge and attitudes about the industry over the long term. Social media is increasingly used to gain and share information. QSIA social media would benefit from a clear detailed strategy with audience differentiation and purpose for different types of media (news, Facebook, and Queensland Catch), improved links and analytics. A social media checklist has been developed to provide guidance to improve use of social media (see Attachment 16).

Take Home Message

The QSIA engagement strategy suggests ways that the fishing industry can build broader support. Gaining social acceptance, or a Social Licence to Operate (SLO) needs a long-term commitment to demonstrating good environmental stewardship, leadership capacity, and effective engagement and communication to inform and garner support from stakeholders. Key features are being proactive, positive, and ready with factual information to clarify any misinformation quickly. Because stock sustainability and by-catch are big issues for key stakeholders, unless Queensland government's fisheries management is considered best practice and sustainable, it will be difficult for SEQ fishers to build the credibility and trust necessary for a high level of SLO.

Social media and online tools present good opportunities to spread information quickly and get feedback. A detailed social media strategy as well as a Queensland fisheries industry sponsored stakeholder advisory group that allows face-to-face dialogue would be a good start to building the relationships needed for improving levels of SLO. Methods for evaluation of impact on SLO of all techniques need refinement and a much longer timeframe for assessment.

1.0 Introduction

1.1 Background – the problem statement

Live-catch seafood makes a significant contribution to the Queensland economy. In value terms, the wild-catch sector accounted for 61 per cent (\$177.1 million) of the state's total fisheries production with aquaculture 39 per cent. Exports of all seafood in 2014-15 was valued at \$160 million. The gross value of Queensland's wild-catch fisheries production declined between 2005–06 and 2015–16. Most of the decline in value since 2009–10 can be attributed to lower production volumes of finfish and prawn products due to decreased participation in commercial fisheries (the Queensland Government ran three commercial fishing licence buybacks schemes between 2012 and 2014) and increased import competition among finfish and prawn products. (Aus Fisheries and Aqua Stats FRDC 2017). The highest contribution was from prawns (35%) followed by crabs (17% per cent and coral trout (14 %).

The Queensland commercial fishing industry provides healthy food for the community, the tourist industry, and for export, has implemented sustainable operating standards, and is highly regulated. In spite of this, access to fish stocks are being reduced partly through competition with other users and conservation based closures, not always based on biological and stock assessment data (Pascoe 2013). Research over several years indicates a low level of social acceptance of the commercial fishing industry by the community and its sustainability¹, contrasting starkly with perceptions of the recreational fishing industry (Sparks 2011, 2013, 2015, 2017; Horvat & Sparks 2018). Issues include perceived impacts on targeted fish stocks, habitats and ecosystems (food webs); threatened, endangered or protected species (by-catch); supply chain, labelling and provenance; and compliance with best practice and government regulations (Christoe 2015; Mazur et al 2014; Sparks 2013). Other issues include perceived access denied to recreational fishers from a community owned resource; closures needing to be based on scientific evidence of sustainable yield and impacts; and a government that is willing to defend that evidence. Meanwhile the commercial sector has indicated that 'the economic and social contribution of commercial fishing to the community is undervalued' (Queensland Government 2017, p5). These perceptions, lack of comparable publicly available evidence and support make the wild-catch industry vulnerable in resource allocation decisions.

Voyer et.al (2016) made a major contribution to understanding of the "true worth" of the social and economic contribution of the commercial fishing industry to communities of New South Wales (NSW) through a 'social well-being approach', which included a review of existing literature and qualitative surveys (Voyer et al. 2017; Voyer et al. 2016). They demonstrated that the commercial fishing industry contributes sizeable economic value in terms of direct and indirect production, employment and household income. They showed interdependency with other industries such as tourism and recreational bait supply as well as high motivation for buying local product to support their local community. A limitation in achieving that is that even though consumers have a strong demand for local seafood, they are less aware of the provenance of seafood from popular outlets. In addition fishers play an important role in on-water safety such as search and rescue activities and in coastal stewardship with many cleaning up rubbish and rescuing injured wildlife.

¹ Sustainability, for the purpose of their survey, is defined as 'the industry having the necessary practices and policies in place that ensure the future of fish species and the marine environment, while at the same time providing sufficient supply of fish for commercial and recreational fishing needs' (Horvat and Sparks 2018, p 6)

The study found that support for the NSW coastal fishing industry is 'largely predicated on trust in its sustainability', a key factor of SLO (Voyer et al. 2016, p 162). They recommend development of materials by trusted independent bodies that clearly explain the environmental sustainability credentials as well as development of local branding strategies and traceability of seafood provenance. This reinforced outcomes of an earlier study identifying social objectives and indicators for applicability to national fisheries management (Triantafillos et al 2010). Key objectives were related to both industry stakeholders and community having trust in fisheries agencies to manage fisheries.

Gaining social acceptance, or a Social Licence to Operate (SLO) needs a long-term commitment to demonstrating good environmental stewardship, leadership capacity, and effective engagement and communication to inform and garner support from stakeholders. Given rapidly evolving policy and digital media, the wild catch commercial fishing industry is in urgent need of effective and detailed engagement and communication strategies that extend well beyond interactions with government and regulators (FRDC 2016; Mazur et al 2014).

This project aims to build on the considerable research and guidance about developing SLO by the FRDC (Christoe 2015; Mazur et al. 2014, Ogier et al. 2016, FRDC 2016) and others (Quigley 2014). Core research components include understanding self-identified values and capacity for and need for engagement of the fishers and key stakeholders, and identifying areas of common ground as a basis for continual improvement of relationships and perceptions of legitimacy, credibility, and trust.

Phase one research findings contributed to development of a community engagement strategy for the wild catch commercial fishing industry in Southeast Queensland. Phase two tested selected engagement strategies for effectiveness.

1.2 Purpose of the study

This project undertook research about fisher and key stakeholders' values, issues, and capacity as a basis for QSIA developing an Engagement Strategy on behalf of the wild catch commercial fishing industry in Southeast Queensland. The strategy is essential as a means of improving the Social Licence to Operate (SLO) and social acceptance of this important industry.

Objectives:

1. To provide the basis for building fishing industry capacity to engage with community to improve social licence to operate.
2. To test impact of pilot engagement strategies on stakeholder perceptions of fishing industry and ability to achieve SLO.

Outcomes

Local and global pressures facing the live caught commercial fishing industry are increasing, such as the impacts of climate change and increased competition for resources domestically and with overseas product. These pressures mean that ensuring the industry has a SLO or social acceptance is crucial. Results from this project will directly benefit the wild catch commercial fishing industry by providing guidance for leadership and capacity building, and practical engagement strategies to increase live caught fishing industry SLO. Self-reflection by industry and better community understanding will increase industry resilience.

Outputs

- Report on research outcomes to FRDC and participating organisations
- Workshops, photovoice exhibitions

- Three 'How to' guides: photovoice guide; evaluation template; social media checklist
- Key components of an Engagement Strategy including strategies to contribute to improving levels of SLO. This also includes some examples of potential engagement approaches
- Academic publications

Overall approach

Initial research in phase one of this project aimed to inform development of an engagement strategy. A literature review aimed to:

- Clarify concepts and terminology relating to Social licence to operate (SLO);
- Identify gaps in literature that explain why this research is important; and
- Provide the theoretical basis for the methods used including measures for assessing levels of SLO and for assessing effectiveness of an engagement strategy in affecting levels of SLO.

A profile of each of the case study communities based on demographic and fisheries data gave an idea of stability, economic diversification, and social and economic reliance on the fishing industry. Media (both print and online) analysis provided insight into what is reported and how, in relation to commercial fishing. Interviews of fishers and key stakeholders identified values of and perceived impacts on commercial fishing, as well as networks and opinion leaders.

This approach provides an understanding of the current level of SLO in the case study areas, identifies priorities for an engagement strategy, and provides measures for assessing level of SLO and successful engagement, post-engagement strategy implementation.

1.3 Definitions of social licence to operate and social acceptability

The systematic literature review was undertaken to inform the engagement strategy based on a search of two main databases. Over 100 articles and reports of national and international academic articles and grey literature were examined in-depth. While the term SLO has been used in mining, forestry and other resource industries, it has been more recently applied to marine systems and fisheries (Cullen-Knox, Haward, et al. 2017; Kelly et al. 2017; Leith et al. 2014; Mason et al. 2010; Voyer et al. 2016; Voyer, Gladstone, et al. 2015; Voyer, Gollan, et al. 2015; Warren 2013).

SLO relates to the level of implicit approval to operate that industry has from the community, and is demonstrated by community support exhibited for the industry (Perez 2016). It is dynamic and intangible (Sen 2013), distinct from a legal or regulatory license granted by a government (Syn 2014).

For the purpose of this research, we define SLO as - the community's ongoing acceptance or approval of a company/industry and its local operations which must be earned, can be withdrawn, and must be continually renewed in order to be maintained (adapted from Boutilier and Thomson 2011; Boutilier and Zdziarski 2017; Syn 2014).

Applying the concept of SLO involves judgements about what is, and how that compares to what should be, noting that judgements can and do change (Mazur et al. 2014), depending on the awareness of and trust in facts, the community's perception of policy and practice (c.f Wustenhagen et al. 2007) and 'the process by which people judge a policy or practice' which is dynamic, complex and underpinned by societal values (Ford, RM and Williams 2016, p.2). Thus the SLO concept needs

to consider the identifiable parts of society that make the judgements (Mazur et al. 2014) i.e. the stakeholders (discussed further below). The term ‘social acceptance’ is often used interchangeably with SLO, and used extensively in forest sector research in Australia (Ford and Williams, 2015 in Edwards et al. 2016). Some prefer the term ‘social acceptance’ as it does not infer a formal licence.

1.4 Components of social licence and how to gain it

One framework used to describe social licence differentiates between different degrees of approval (Mazur et al. 2014). Boutilier and Thomson’s (2011) pyramid model (Figure 1) introduces four levels of acceptability measures: the lowest level demonstrates that SLO is “withheld or withdrawn”, one level higher is ‘acceptance’ where the community perceives that the company may offer a benefit. Acceptance implies a ‘tentative conditional willingness to allow a project to proceed while waiting to see how complaints and problems are handled’ (Boutilier and Zdziarski 2015 p3). At the next level, the community has given approval based on legitimacy and credibility and is willing to give socio-political support to a project, while the peak indicates a very high level of trust, trustworthiness, and ‘psychological identification’. Under this model an SLO is withdrawn or withheld, until a legitimacy boundary is crossed to achieve social acceptance, followed by a credibility boundary for approval to be given and finally a social licence to operate is formally granted based on trust (Boutilier and Thomson 2011), though this level is seldom achieved (Boutilier and Zdziarski 2017).

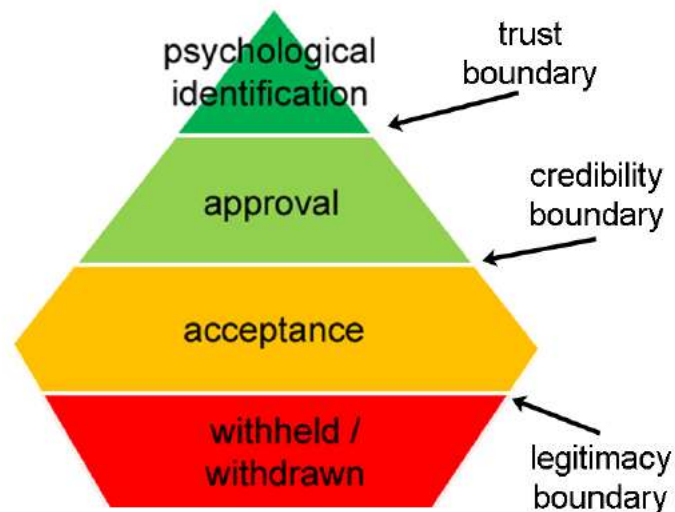


Figure 1.1 – The pyramid model of SLO (Thomson and Boutilier, 2011)

This model suggests factors that contribute to building SLO include legitimacy and credibility, with full trust of the community achieving the highest level of social licence. In fact, significant trust building with local communities is a central element of SLO literature (Curran 2017; Ford, RM and Williams 2016; Mercer-Mapstone, Rifkin, Moffat, et al. 2017; Moffat et al. 2015; Moffat and Zhang 2014; Walsh et al. 2017; Wustenhagen et al. 2007)². In referring to SLO in fishing, Warren (2013) argues that community trust is related to the ethical conduct of industry and ongoing environmental

² Mercer Mapstone, Walsh, Curran, Moffat et al, Moffat and Zhang - Extractive industries; Ford and Williams – forestry; Wustenhagen- renewable energy industries; Warren - fishing

stewardship of the common property resource which is owned by the community and is subject to competition between sectors.

Boutilier and Thomson (2011) measured levels of SLO using a cumulative scale, suggesting that institutionalised trust (the highest) can be gained by building on perceptions of socio-political legitimacy and interactional trust, with perceptions of economic legitimacy being a basic prerequisite. They suggest that sustained experience of working together, exchanging knowledge, and interactively fulfilling each other's expectations over time contributes to credibility.

We argue that many of the elements discussed by various authors as contributing to social licence fit well within a social justice framework (SJF) that includes three dimensions of justice: procedural, distributional, and interactional justice (Lukasiewicz and Baldwin 2014). In the SJF, distributive justice refers to how the resource benefits and costs are distributed or allocated, reflecting the *outcomes* of a decision.

Procedural justice refers to the decision-making process itself and includes a) representativeness – i.e. who is allowed to participate; b) the level of power that participants have to affect the decision; and c) process rules - the rules of the process that ensure fairness. In order to be fair, process rules are needed such as: 'transparency, consistency, neutrality [impartiality] of the decision-maker, accuracy (scientifically informed decisions), ability to correct errors, decisions being compatible with fundamental moral and ethical values, timeliness, accessibility, and accountability' (Lukasiewicz and Baldwin 2014, p. 4). Equal access to knowledge, skills and resources enable meaningful participation (Owen and Kemp 2013). Engagement strategies often focus on procedural factors.

Interactional justice concerns the interpersonal relations between stakeholders and decision-makers which include dimensions of trust, mutual respect, truthfulness. The manner in which parties relate to each other is crucial and includes: sharing and acknowledging the value of information provided by all parties; respecting other's values; shared understanding of issues and effects; recognising each other's needs; and following through on commitments (Vanclay 2012) - the latter often referred to as promise-keeping.

That is, the concept of SLO requires consideration of 'an *outcome* of various social *processes* arising from the *relationships* between various parties that have overlapping interests in the use of contested public resources' (Baines and Edwards 2018, p. 140).

In this research we add the Social Justice Framework to the pyramid model to provide structured guidance for analysing levels of and factors that affect SLO. In applying the SJF, process, outcomes, and interactive fairness can affect the level of SLO and need to be reflected in an engagement strategy.

Social Justice Framework



Pyramid model

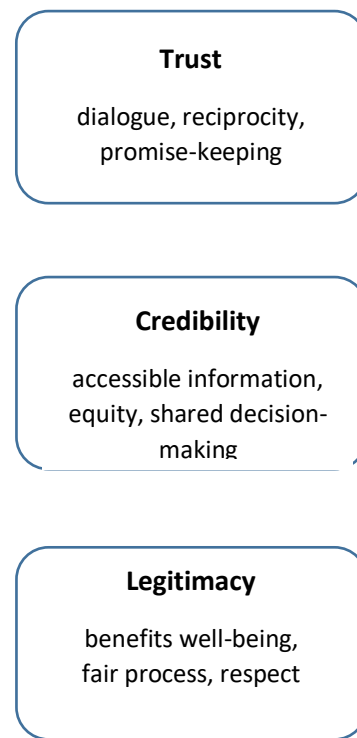


Figure 1.2 - Relationship between Lukasiewicz and Baldwin's (2014) social justice framework and Boutilier and Thompson's (2011) pyramid components - they don't directly map across but SJF includes pyramid model components

1.5. Engagement

Reflecting process components, strong consensus in the literature indicates that achieving an acceptable level of SLO is reliant upon effective and high quality community engagement (Cullen-Knox, Haward, et al. 2017; Dare, LM et al. 2014; Ford, RM and Williams 2016; Gallois et al. 2017; Hall 2014; Leith et al. 2014; Mason et al. 2010; Mercer-Mapstone, Rifkin, Moffat, et al. 2017; Moffat et al. 2017; Moffat and Zhang 2014; Parsons and Moffat 2014; Prno and Slocombe 2012; Walsh et al. 2017; Yunes and von Keyserlingk 2017). 'Contact quality' rather than 'contact quantity' in engagement is more important, to ensure concerns are acknowledged and acted on (Moffat and Zhang 2014). 'Quality' also can refer to meaningful relationships with 'the right people' (Prno 2013) i.e. key stakeholders.

Various authors define engagement slightly differently (Patiillo and Wright 2010; Lavery 2015; Reed 2008; Aslin and Brown 2004; and Leite and Pita 2016). For the purposes of the QSIA Engagement Strategy, we define 'engagement' as 'a process in which stakeholders or community influence decisions that affect or interest them and this input is used to make better decisions' (adapted from IAP2 and World Bank). 'Better' decisions are those that are informed, understood, implementable, sustainable, and justifiable.

The IAP2 Spectrum is a well-accepted framework for linking the purpose of engagement (i.e. to inform, consult, involve, collaborate, and empower) with the outcomes and tools to achieve them. The key message of the Spectrum (Attachment 1) is that methods of engagement need to be

tailored to the purpose of engagement with each individual or group of stakeholders. The purpose of engagement may vary according to the stakeholder. Different levels of interaction can be used at different stages in a project depending on outcomes sought and resource capacity. Mazur and Brooks (2018, p.vii) reinforce the need for 'use of the full range of best engagement approaches for building trust and engagement evaluation'.

1.6 Developing an engagement strategy: stakeholder analysis

The initial step of developing an engagement strategy is to undertake a stakeholder analysis, or stakeholder mapping to identify relevant stakeholders, their interest in (and potential influence) in the topic, and potential suitable ways or tools of engagement.

Stakeholders are any individual, group or institution who has an interest in or are affected by a project or activity. They may be at a local, regional, or wider scale. They may have something to gain or lose if conditions change or stay the same.

To gain a desired level of SLO, it is important to understand the interests of stakeholders relevant to the fishing industry, including policy makers, conservation and recreational fishing sectors, people in the supply chain, the broader local community, as well as consumers (local and international). Stakeholders can influence resource access, cost-effectiveness of management and compliance, as well as sales and income. A stakeholder analysis can provide insight into:

- potential conflicts or risks that could affect or jeopardise fishing industry goals and outcomes;
- opportunities for building relationships;
- the best time and methods for engagement; and
- ways to identify and reduce negative impacts and develop win/win solutions.

Consequently having a good understanding of the knowledge, motives and values of interested stakeholders along with individuals and groups who exert (or can potentially exert) influence on stakeholder perceptions and decision-making processes is relevant for negotiation of an SLO (Luke 2017; Murphy-Gregory 2017; Syn 2014). In the case of live catch fishing industry, these may include politicians who make decisions or consumers who drive public opinion which can influence politicians. Unless there is an understanding of underlying values and perceptions of parties in a decision-making process, a mutually satisfactory outcome is unlikely (Hassan 2001; Hassan et al. 2001; Ross et al. 2002). Understanding values improves the likelihood of stakeholders having their views reflected in potential solutions. Traditional conflict between conservation values and production values, for example can be reframed by focusing on shared interests of the parties and building common ground, possibly in maintaining ecosystem integrity or providing for future generations (Sandall et al. 2001).

A stakeholder analysis can be informed through investigating bridging, bonding and linking social capital (Szreter and Woolcock 2004), or by doing a stakeholder social network analysis (SNA) which identifies opinion leaders, to understand who has effective influence (Dare et al. 2014). In the case of this research, we use photovoice interviews with fishers and interviews with key stakeholders and industry leaders to inform the stakeholder analysis.

1.7 Developing an engagement strategy: tools of engagement

Critical to building common understanding and designing engagement strategies is dialogue. Voyer et al. (2015) highlighted the importance of small-scale collaborative participatory approaches that directly engage fishers, policy and decision-makers, and scientists together in a multi-dimensional dialogue. Various authors suggest that dialogue contributes to SLO through quality relationship-building; sharing knowledge (by tapping into local expertise and alternative sources of information); mutual respect and understanding of needs, deeply-held values, and aspirations; as well as procedural fairness leading to reciprocal trust, co-learning, co-ownership and shared or collaborative decision-making, among other things (Mercer-Mapstone et al. 2017; Akpo et al. 2015; Franzel et al. 2001).

However, face to face dialogue is just one form of stakeholder engagement to assist in gaining an SLO. Media, and increasingly social media, influences community perceptions of industry (Benham 2017; Dare, et al. 2014; Hedding 2017; Lester 2016) and is becoming an important way for fishers to remain 'connected'. It is becoming an increasingly powerful tool in a number of ways:

- It can be an important source of information especially when the public has little knowledge of an issue (Hedding 2017). Dare et al. (2014) found that community members sourced much of their information about forestry management from 'alternate sources' such as the internet, 'because where else does it come from?' (Dare et al. 2014, p. 193).
- Social media is being used more frequently and effectively by stakeholders who oppose a project or industry (Cullen-Knox, Eccleston, et al. 2017; Murphy-Gregory 2017; Vince and Haward 2017; Voyer, Gladstone, et al. 2015). In particular, the speed and range of mobilisation, information and claims are at a much faster time scale than management agencies, science providers, and other key stakeholders can easily respond.
- Media is a tool for political engagement; it is used by policy-makers to track public opinion, understand social trends, identify issues, and interpret their issue management efforts (Lester 2016).
- It is particularly useful for engagement among fishers, many of whom spend considerable time away from home base. It may also be the main mechanism for dialogue between some fishers and other stakeholders due to unpredictable timing of work. For example, some coastal fishers do not work on the weekend to avoid conflict with recreational users, yet stakeholders with regular work weeks are not available to meet at that time.

Social media platforms are dynamic and fast paced and have the potential to utilise data analytics and other engagement tools to target specific audiences. However as this participatory form of communication is often initiated by lay persons, non-professional journalists or communicators, it is critical to establish ethical and legitimacy boundaries (Cullen-Knox, Eccleston, et al. 2017; Splichal and Dahlgren 2016) to avoid poor contact quality. The potential reach for negative communication can far outweigh an industry's attempt to build positive perceptions and trust through local engagement. Hence positive 'good news' stories need to be available and circulated widely as well.

1.8 Characteristics of the fishing industry that could contribute to SLO

Since industry cannot have SLO without being trusted and trustworthy, Perez (2016, p5) asks, 'what is the Australian seafood industry doing to engage their respective communities in order to influence public trust and hence the level of SLO? Furthermore, *how* can they influence the level of SLO?'

Reflecting process components, strong consensus in the literature indicates that achieving an acceptable level of SLO is reliant upon effective and high quality community engagement (Cullen-Knox, Haward, et al. 2017; Dare, LM et al. 2014; Ford, RM and Williams 2016; Gallois et al. 2017; Hall 2014; Leith et al. 2014; Mason et al. 2010; Mercer-Mapstone, Rifkin, Moffat, et al. 2017; Moffat et al. 2017; Moffat and Zhang 2014; Parsons and Moffat 2014; Prno and Slocombe 2012; Walsh et al. 2017; Yunes and von Keyserlingk 2017). 'Contact quality' rather than 'contact quantity' in engagement is more important, to ensure concerns are acknowledged and acted on (Moffat and Zhang 2014). 'Quality' also can refer to meaningful relationships with 'the right people' (Prno 2013) i.e. key stakeholders.

Clearly, illustrating that fish stocks are sustainably harvested and managed, by-catch is minimised, and regulations are complied with – and communicating that, is fundamental to fishing industry gaining SLO. This requires engagement based on accurate evidence of these parameters. Hence it is important that the fishing industry assist with monitoring and reporting on catch, and government provides transparent user friendly data and support for the industry. Likewise, to gain/maintain respect, a mature industry would not tolerate rogue operators who negatively affect public opinion.

Given that building relationships through 'contact quality' is important, it needs to be recognised that response of the commercial fishing industry to ongoing reforms and its approach to seeking SLO has been affected by a sense of injustice arising from previous reform and resource allocation history that excluded professional fishing from zones in favour of recreational and charter fishing or conservation purposes (Voyer et al 2016). Of the three case study areas, this particularly affected fishers in Moreton Bay Marine Park where allocation decisions were perceived as a 'shift away from evidence-based management' and 'likely occurred solely for political reasons' (Brown 2016, p 204). The lack of trust and a request for procedural and distributional fairness is also echoed more recently in the QSIA response to the *Green Paper on Fisheries Management Reform in Queensland* (2016) which states that 'access to the communal fisheries resource comes with the responsibility that all sectors report accurate and verifiable catch data, enter into 'good faith' negotiations on all matters'... there is a transparent and representative consultative structure; and that expansion of one sector is not to the detriment of another' (QSIA 2016).

1.9 Evaluation of engagement

A common criticism of engagement strategies is the lack of independent evaluation (Mazur and Brooks 2018; Baldwin and Twyford 2007) and the narrowness of evaluation if it is done. That is, evaluation is often through simple measures of numbers attending meetings, time for review of documents, rather than whether engagement actually made a difference to a decision, or in this case, affected SLO. Reasons for limited evaluation of engagement include lack of understanding of the importance of evaluation, lack of resources, skills, and knowledge of how to do it, and difficulty in attributing the engagement process to outcomes (Mazur and Brooks 2018). In addition, a motivational deficit or lack of interest may arise because of past experience with poor engagement practice. Understanding what makes good engagement and practising respectful interaction will assist in building trust and levels of SLO in industry (Mazur and Brooks 2018).

We base our evaluation of engagement around four themes, derived from IAP2 and social justice parameters: purpose, process, outcomes, and relationships. We also show how this approach maps directly to steps 1-4 in Masur and Brooks' proposed best practice evaluation of engagement (2018, p16) and adds to it (Attachment 2). The four points below all guide the type of evaluation methods (eg interviews), questions, indicators (both qualitative and quantitative), targets if appropriate (M&B steps 5&6), and analysis (M&B step 7).

1. The **purpose** of the engagement - What issues are we trying to address, or what change or outcomes desired? Why, and on what basis (i.e. are assumptions rigorous)? (M&B steps 1&4).
2. The **process** used – Was information accurate, user friendly, timely and was it considered credible? Did it reach the target audience/stakeholders? Did the communication style (e.g. inform or interactive) meet stakeholder needs, consider their values and interests, based on what evidence? (M&B step 4) Was it cost-effective but adequately resourced to produce good quality engagement? Was anyone left out that should not have been? Was independent evaluation built in at the start? Who should be involved in the evaluation and who is interested in the findings? (M&B step 2) Who has the resources to do the evaluation? (M&B step 3)
3. The **outcome** – Were stakeholder interests well identified? Did the engagement make a difference to outcomes or decisions? (M&B step 4) Was there reflective learning by all participants? Did any of the outcomes have unexpected (perverse or maladaptive) results? Did it provide feedback used to improve the process?
4. **Relationships** - This could be considered part of a process or outcome evaluation but is separated here, to highlight factors that are important for building social licence: legitimacy, credibility, and trust and the fact that these are often affected by interpersonal relationships. Over time, was there increasing dialogue, reciprocity, trust, transparency? Was there respectful, fair and shared decision-making? Was information seen to be credible and legitimate? Did it benefit well-being?

Methods of evaluation of engagement that aims to achieve high levels of SLO almost always need to include interviews, surveys, focus groups or workshops with targeted stakeholders to determine the influence or impact of the engagement. If it involves print media, then a media analysis is needed. If it involves on-line communication and/or social media, then typically Google analytics measures and metrics (acquisition, page views visitors, bounce rate) should be identified and supplemented with feedback from the intended audience.

1.10 Gaps and aim of this research

While conceptual frameworks around SLO and engagement are fairly well developed, engagement is rarely evaluated in a systematic and independent way. Mazur and Brooks (2018, p.vii) also found that fishing industry engagement seldom identified the purpose of engagement and there has been little uptake of engagement tools for a number of reasons including limited extension action and inappropriate materials. This research therefore takes an applied approach to developing an engagement strategy to enhance SLO, to pilot three techniques, and evaluate their success according to the proposed framework. In the end, we propose a revised template for evaluation and recommend future applied research.

2.0 Overview of methods

The project drew on information from fishers and key stakeholders in three Queensland case study areas. Steps included a synthesis of relevant reports and literature regarding SLO; strategic interviews with industry groups and key stakeholders; regular tracking of public opinion in media with a particular focus on the barriers to social acceptance; and testing effectiveness of three industry engagement activities.

2.1 Phase 1

The aim of phase 1 was to provide key components of an engagement strategy for building fishing industry capacity to engage with community improve social licence to operate.

1. Preparation

- a) Synthesis of relevant reports and literature, particularly examining SLO and engagement approaches by other relevant industry groups such as agriculture about audience, messages, methods, capacity, and outcomes.
- b) Ongoing scan of issues to identify public opinion re the live catch commercial fishing; and assist with stakeholder analysis.
- c) Agreement on 3 case study locations within SEQ (Moreton Bay, Gold Coast, and Tin Can Bay); fishing sector contacts (trawl, line and net); identification of key stakeholders and purpose of engagement, in conjunction with QSIA
- d) All interaction for interviews, workshops, surveys (phase 2) received USC ethics approval (A171038). The interview guide for photovoice interviews in phase 1 are in Attachment 3, as an example.

2. Interviews with Fishers

- a) Fishers and partners in each sector and location, were recruited to be involved in semi-structured interviews supported by photovoice. Initial contacts were provided by QSIA with others invited through the local industry network. Photovoice involved fishers taking photos where possible demonstrating how they fish, their concerns and values, current and potential engagement strategies and attitudes and capacity to contribute to engagement. Interviewees gave guidance about the range of key stakeholders to be interviewed and the purpose of engagement. This approach is documented as a 'how to...' guide in Attachment 4. Thirteen fisher participants were interviewed individually using photos as reference material (where comfortable), including 5 from the Gold Coast; 4 from Moreton Bay, and 4 from Tin Can Bay. While not a large number of participants, we expected little new data would be derived from more interviews i.e. saturation point was reached.

3. Fisher feedback sessions/focus groups on photovoice

- a) Feedback sessions were run with fishers (trawl, line, net, and pot) in each case study location, to seek agreement on thematic analysis of data and on the message about fishing and values, engagement strategies and capacity. At this point some fishers were identified as potential subjects of marketing material.
- b) Exhibition of agreed photostories in a four-poster display at four locations for a week each in the key case study port communities including Tin Can Bay Library; Southport Library, Gold Coast; Bribie Island Seaside Museum (north Moreton Bay), and Moreton Bay

Discovery Centre, Manly (south Moreton Bay). Launches were held at Tin Can Bay, Southport, and Shorncliffe to thank fishers, their families and colleagues. Each launch had about 10-15 attendees.

4. Interviews with key stakeholders
 - a) Phone and in-person interviews with 16 key stakeholders including 3 from State government Dept of Agriculture and Fisheries, 4 from recreational fishing, 6 from conservation groups, and 3 from supply chain organisations to identify values and issues, possible areas of common ground and perspectives on engagement with fishing industry, and what would influence their perspectives of the live caught fishing industry. This information was used to identify the purpose and best means of engagement of these stakeholders. This number seemed to reached saturation point.
5. Interviews with fishing industry leaders
 - a) Undertaken with 4 innovation leaders in the Queensland fishing industry about purpose, potential strategies and capacity for engagement with key stakeholder communities of interest including influencers. These were identified through recommendations from QSIA or fishers.
6. Analysis of common ground and social and institutional barriers
 - a) Utilising NVIVO software for analysis of fisher and key stakeholder interviews, and the media scan (i.e. all activities to date), key values and interests, issues of contention, and areas of common ground were identified.
7. QSIA draft engagement strategy
 - a) A workshop with the executive officer of QSIA formulated potential CE strategies and identification of priorities for engagement strategy testing in phase 2. Feedback was sought from fisher groups and key stakeholders in meetings.

2.2 Phase 2

The aim of phase 2 was to test impact of pilot engagement strategies on stakeholder perceptions of fishing industry and ability to achieve SLO. This involved developing and assessing three engagement activities that aimed to address key stakeholder concerns. The three engagement activities were: a) the exhibition/display; b) Fishquiz; and c) QSIA social media over the last two years. The evaluation framework was designed around the four themes of purpose, process, outcomes, and relationships, which emerged from the literature review. These were supplemented with the recent Mazur and Brookes (2018) 7 steps of evaluation. More detailed discussion of methods of analysis is in the Results.

1. The photovoice display

Because of the negative perceptions of the industry, it was important to understand and demonstrate who are commercial fishers in the three selected case study areas. The photovoice technique was used to gain insight into live catch commercial fisher values, characteristics and concerns. The photovoice display was developed over a period of several months to incorporate photos from 13 participating fishers, with text derived from interviews in participating SEQ locations: Tin Can Bay; Moreton Bay and Gold Coast. Before finalising the displays, a pilot photovoice display

was tested at the National Symposium on Seafood Marketing 28th September 2018, earlier than planned to take advantage of this event. The display posters were then revised.

The purpose of the display in the draft engagement strategy was to:

- a) display images taken by fishers from each case study area as a method to inform and educate the general public about the seafood industry of southeast Queensland
- b) demonstrate the industry's strengths and concerns from the perspective of the fishers from each case study area
- c) demonstrate fishers' commitment to environmental stewardship, sustainability and adherence to strict regulations
- d) demonstrate fishers stance in the community including their contributions to community wellbeing and a resilient local economy
- e) highlight the level of misinformation being circulated by the media and other groups.

Four key themes emerged from analysis of interviews and the photos taken by 13 participating fishers which were used in a display:

- Pride and market appeal of quality product, especially through direct supply to consumers;
- Efforts towards a sustainable fishery through innovative techniques, compliance, care for the environment;
- The range of knowledge, skills and professionalism needed for the modern fisher to operate e.g. navigation, weather, mechanics, product handling, regulations; safety, boat handling/maintenance; and crew management and
- Contribution to family and broader community – many were multi-generational family businesses, providing both direct and indirect employment in the region.

See Attachment 5 for the four display posters. Four photovoice exhibits were displayed for a week or more - at Southport library 23-30 Oct; Tin Can Bay library 24-31 October; Bribie Island Seaside Museum 20-30 November and the other in Moreton Bay Discovery Centre 30 November – 14th December, to cover north and south ends of Moreton Bay (MB). Each commenced with a 'fishers and friends' launch (photos of Launches at Attachment 6).

Feedback was solicited through an online survey at the launch, hard copy surveys left in the libraries, and others were received via an online request to key stakeholders with pdfs of the displays attached. The survey is at Attachment 7. A total of 25 surveys were completed. The surveys sought to determine impact of the displays on understanding and clarity, legitimacy, and emotional connection, related to SLO.

2. Fishquiz - How much do you know about Australia's seafood industry?

Fishquiz was developed as an easy and fun educational tool which also gives researchers some insight into community knowledge and awareness of the fishing industry. It involves 10 multiple choice questions with the correct answer appearing once a user has chosen an answer so they can see the correct response. It was initially tested at Hervey Bay Seafood Festival on 12th August 2018 (94 responses). We also asked two specific expert participants to provide feedback about the questions. They both indicated they enjoyed the survey. One suggested these Q&A based questions are quite effective for reaching the public and improving awareness, but would have further reach on a Facebook page or the ABC. They suggested fine tuning by:

- referring to different species e.g. swapping spanner crabs with mud crabs as they are more readily available in markets;
- asking which Australian fish by volume is most readily available to consumers;
- asking how much Australian caught fish is exported;
- adding fish photos and fish identification questions;
- adding references for each Q&A (they were in the pilot but removed to make it less academic).

We made some revisions in response to this feedback, but note these as potential future questions. In fact, to increase response rate, QSIA did provide an invitation and link from its website for the next version.

The draft Engagement Strategy purpose of Fishquiz was to:

- a) use a method to inform and educate the general public about the seafood industry of southeast Queensland
- b) demonstrate fishers commitment to environmental stewardship, sustainability and adherence to strict regulations
- c) highlight the level of misinformation being circulated by the media and other groups about the industry.

In the process of its development, we added to the purpose:

- To gauge the community's general knowledge of the seafood industry
- To ascertain the community's most popular source of information about the seafood industry.

The revised version was administered between the 15th October to 5th December 2018 to fisher participants, key stakeholders, and consumers either face-to-face using i-pads or by sending the weblink to the quiz to key stakeholders. An initial 34 responses were received. Fishquiz was then shared by the QSIA Facebook page and a further 84 responses were received, giving a total of 118. Fishquiz sought feedback about legitimacy and cognitive understanding about the industry. Data was analysed using Excel spreadsheets and Survey Monkey's own data extraction tools. See Attachment 8 for the Fishquiz.

3. Social media - QSIA Facebook site, news, Facebook pages and Podcasts

QSIA website, news, and Facebook pages

The website for the Queensland Seafood Industry Association was created prior to 2009 and upgraded early 2018 due to limitations in functionality and audience reach. Over a period of four months it was redesigned to modernise content, to reorganise content for use by a range of audiences and to link content development between the site, other websites and Facebook.

The new version was launched on February 19th 2018. The website serves as the main source of information about the association and is connected to other online mediums including Facebook and the new website for podcasts. The QSIA set out to combine the use of the QSIA corporate website (using blogs) and the QSIA Podcast sites to send out messages to communities of interest including members, seafood consumers, the general public, industry (State and national) and government (public servants and politicians). This is also true of the Queensland Catch and QSIA Media sites. It is accessed at www.qsia.com.au. The QSIA news page www.qsia.com.au/news was created on the 17th February 2018 and is used as a page for media releases and 'from the CEO' emails. These are also

shared on the QSIA Facebook page. The news section of the website has provided the association with a means to discuss key industry and fisheries reform issues. The intended audience is the same as for the website.

The overall aim of the association's social media strategy is to lay the foundations for a new type of conversation between industry and the Queensland and Australian communities. Another benefit for industry is that industry is given a voice to industry to challenge and unpack the policy making approach of government.

The QSIA Facebook page was created approximately 5 years ago to engage with the social media space. Its initial development was not guided by any clear strategy, however it is becoming an increasingly important communications and engagement tool for the organisation. Facebook posts are created to share information including petitions, workshops, podcasts, newsletters and to also share information from other relevant groups. A new use of the Facebook site is to post stories in public and closed sites to ensure maximum coverage of issues important to QSIA members. The audiences for the Facebook site include: members, seafood consumers, politicians, and industry groups (State and national).

The QSIA draft engagement strategy described the purpose to:

- a) inform and educate consumers as to the sustainability credentials of the industry
- b) demonstrate industry's commitment to environmental stewardship, sustainability and adherence to strict regulations
- c) demonstrate fishers' commitment to providing premium quality seafood to the local market
- d) promote the industry by creating a profile for specific fishers and humanizing the industry
- e) demonstrate to the public that the industry is valued part of the Australian economy and should be supported.

QSIA Podcasts

The QSIA media page <https://qsiamedia.weebly.com/> was created in February 2018 to 'provide a new platform for wild and post-harvest commercial fishing sectors to engage with our most important stakeholder - the Queensland seafood consumer'. The podcasting content of the QSIA Media website was formed as a result of the work undertaken by Commercial Fishing Media (link – [CFM](#)). The association participated in many podcasts with CFM and a decision was taken to mirror the approach taken by CFM. The audience for the podcasts are: members, seafood consumers, politicians, industry groups (State and national).

One of the pages on this site is entitled 'pod casts' <https://qsiamedia.weebly.com/podcasts.html> which contains a number of embedded audio files of interviews with commercial fishers and stakeholders discussing various topics important to the industry. Rather than a conventional podcast format, audio files are simply listened to on the web page by pressing 'play'. The weebly platform is a free to low cost website builder which does not require any coding or javascript experience and is known as a 'drag and drop' website similar to the wix platform.

The QSIA draft engagement strategy described the purpose as follows:

- a) To inform and educate consumers as to the sustainability credentials of the industry

- b) To demonstrate industry’s commitment to environmental stewardship, sustainability and adherence to strict regulations
- c) To promote the industry by creating a profile for specific fishers and humanizing the industry
- d) To demonstrate to the public that the industry is valued part of the Australian economy and should be supported.

Twenty-seven podcasts have been posted since its commencement early in 2018, with the latest one about this project (Table 2.1).

Table 2.1 - List of Podcasts

Date	Title of podcast and interviewee
28/07/2018	Discussion with Keith Harris, QSIA President regarding the introduction of vessel monitoring systems in Queensland.
28/07/2018	Discussion with Keith Harris, QSIA President focusing on the Queensland fisheries reform process.
28/07/2018	Inaugural Podcast - Keith Harris
1/08/2018	Eric Perez, CEO QSIA discussing White Spot issues.
2/08/2018	Discussion with Richard Hamilton regarding the issues (including quota) impacting the Queensland Spanner Crab Fishery.
3/08/2018	Discussion of mental health issues amongst commercial fishers. – Dr Tanya King, Keith Harris, Dave Swindells and Lionel reisenweber
17/08/2018	Chris Thompson - White Spot class action
24/08/2018	An update regarding the work of Seafood Industry Australia (SIA) with our national peak body CEO, Jane Lovell.
26/08/2018	Some materials regarding volunteering: Eric Perez - Some Materials regarding volunteering - See discussion from p.20 of the attached Hansard.
30/08/2018	Matthew Blyth, Director, Millstream Productions provides some commentary on working with the Australian seafood industry
13/09/2018	Discussion with Jane Lovell, CEO, Seafood Industry Australia. The issue – the defeat of Senator Whish-Wilson's motion to disallow an existing regulation relating to the commercial catch of Hammerhead Shark.
18/09/2018	A great introduction to one of the teams working on an industry level project through the National Seafood Industry Leadership Program. - Richard Hamilton, Toni Clark, Angela Williams, Cameron Shields
18/09/2018	Jill Briggs Managing Director of Affectus 2018 National Seafood Industry Leadership Program
23/09/2018	Draft QSIA submission to the Queensland government's review of the Fisheries Act 1994. - Eric Perez
23/09/2018	Pod Cast Update - Eric Perez
27/09/2018	An update with the graduates of the 2018 National Seafood Industry Leadership Program. - Richard Hamilton, Toni Clark, Angela Williams, Cameron Shields
29/10/2018	Discussion with Jane Lovell to update industry on the work Seafood Industry Australia is undertaking regarding mental health and stress.

2/11/2018	Victorian Labor Party seeking to remove commercial fishing from the Gippsland Lakes Johnathon Davey, Executive Director Seafood Industry Victoria Keith Harris, President Queensland Seafood Industry Association
3/11/2018	VMS from a commercial fisher perspective Keith Harris and Greg Savige, Queensland commercial fishers
5/11/2018	VMS from a post-harvest commercial seafood perspective David Caracciolo
6/11/2018	VMS from a post-harvest commercial seafood perspective Kelly Morgan
9/11/2018	NSW Fisheries Issues Tricia Beatty Chief Executive Officer, Professional Fishermans Association of New South Wales
9/11/2018	Mental health and stress and the Tasmanian Seafood Industry Julian Harriton, Chief Executive Officer Tasmanian Seafood Industry Council
14/11/2018	Protesting the introduction of VMS in Mackay Kelly Morgan, Queensland Seafood Industry Association
14/11/2018	Mental health and stress Dr Jennifer Bowers, Managing Director/Chief Executive Officer Rural and Remote mental health
23/11/2018	Discussing Gippsland Lakes before the 2018 Victorian election Gary Leonard, Johnathon Davey and Michael Hobson, Seafood Industry Victoria
28/11/2018	Social Licence to operate project Associate Professor Claudia Baldwin, University of the Sunshine Coast

In general, social media analysis aimed to examine indicators about level of engagement, clarity, trust, relationships, legitimacy, cognitive understanding, emotional impact, and potential behaviour (Sheppard 2015; Lorenzoni et al 2007).

4. Social media – photovoice by Instagram

We took advantage of a project initiated by one of the Gold Coast fisher participants. His project team participated in the Fisheries Research Development Corporation's National Seafood Industry Leadership program (NSILP), and developed an Instagram account [seafoodcommunities_au](https://affectusaus.com.au/program/nsilp/) as a photovoice vehicle. The team included Richard Hamilton (spanner crab fisher, Gold Coast) Cameron Shield (Tassal, Tasmania), Toni Clarke (Tasmania) and Angela Williams (Darwin). The groups' mission is to encourage and empower the community to connect with Australian Seafood with a focus on utilising images as a communication medium. Participants and facilitators of the program were asked to provide images representing their views of Australia's seafood industry with three themes in mind: the consumer; the environment; and the community. The Instagram account [seafoodcommunities_au](https://affectusaus.com.au/program/nsilp/) was created on the 27th August and by 9th December 2018 [seafoodcommunities_au](https://affectusaus.com.au/program/nsilp/) had 344 followers and 57 image posts. More information can be accessed at <https://affectusaus.com.au/program/nsilp/>.

This opportunistic evaluation complemented the QSIA social media evaluation as QSIA did not use Instagram.

5. The draft engagement strategy was revised through collaboration between QSIA and USC.

2.3 Case study selection and characteristics

The three case study areas in SEQ were selected based on the interest and ability to engage fishers efficiently through identified fishers groups: Gold Coast Fishermen's Cooperative <https://www.freshestcatch.com.au/>, Moreton Bay Seafood Industry Association <http://mbsia.org.au/>, and Tin Can Bay fishers.

Two areas, the Gold Coast (GC) with 600,000 population and Moreton Bay (MB) with 400,000 are within close proximity to Queensland's capital Brisbane (population 2.5 M in 2018) offering a sizeable market for seafood and wide range of occupational, employment and educational opportunities.

In contrast, TCB with a population just over 2000, is 50 km from the nearest major regional centre, Gympie (population 10,800). TCB is more vulnerable to changes in the employment situation and relies heavily on commercial and recreational fishing and boating industries. TCB's annual population growth rate of 1.7% is slower than the Queensland average; it has a high median age of 60 years in the TCB region, and has the highest unemployment levels of the case study areas at 14.8%, steadily increasing since 2006 (Australian Bureau of Statistics 2006, 2011, 2016). TCB's most common occupation was labourer.

The number of people directly employed in the fishing industry in each port is difficult to determine as ABS does not differentiate fishers from other 'marine transport professionals'; some fishers have more than one commercial licence; others lease or fish under someone else's licence, and even knowing the number of people holding licences does not give an idea of crew size. To clarify, a commercial fisher licence allows the holder to undertake activities on a boat in charge of commercial fishing activities aboard their own or another person's commercial fishing boat. It allows use of authorised equipment to commercially take fish species under the fishery symbols that appear on the commercial fishing boat licence; and supervision of crew members assisting in those fishing activities. A licence costs \$104 and the applicant needs to demonstrate knowledge of fisheries laws in Queensland, handling practices and reporting requirements relevant to species of conservation interest, transport requirements associated with using a vessel commercially, food handling and storage, and how to undertake a commercial fishing operation in a safe and socially acceptable manner. How rigorously applications are assessed is unknown. One area of criticism is that while a licence holder needs to demonstrate this knowledge, the crew do not.

In each of the case study areas, the greatest number of licences are for the otter trawl, net and pot licences with the exception of no net licences granted to fishers on the Gold Coast (Department of Agriculture and Fisheries 2018). Target trawl species include prawns, scallops, stout whiting and Moreton Bay bugs. A wide range of measures are used to regulate the industry including boat sizes, catch limits, area closures and limits on operating time. Trawl nets are also required to have turtle exclusion devices and other bycatch reduction devices (Business Queensland 2018). Commercial coastal net fisheries employ a variety of nets and catching methods including mesh and seine nets

and in south-east Queensland target species such as mullet, tailor and whiting. Strict regulations are applied to net fishers including area closures, gear restrictions, net numbers and fish legal size limits. The commercial crab fishery utilise different types of baited crab pots depending on the target species, mud crabs, blue swimmer and spanner crabs (Business Queensland 2018).

Significant changes in the number of fishing licences, catch and days fished can be seen in each of the 3 case study areas (QFish). In the GC case study area, less than 30% of the number of Otter Trawl licences that existed in 1990 are still current today. A steadier decline across the case study areas can be seen in pot licences though there is a slight increase in pot licences in MB (Department of Agriculture and Fisheries 2018). The commercial fishing industry has seen other substantial changes such as the closure of the Saucer Scallop fishery impacting the TCB case study area, following record low catch rates in 2015 and early 2016 triggering fishing closures in identified replenishment areas from Fraser Island to Yeppoon (Yang 2016).

In addition to fisheries regulations, each of the case study ports are adjacent to Queensland Marine Parks, managed by the Queensland Parks and Wildlife Service (QPWS) under the *Marine Parks Act 2004*. A number of marine park zones are no-take zones (Queensland Government 2017). TCB is part of the Great Sandy Marine Park and Great Sandy Strait Ramsar listed internationally important wetland. MB and GC is part of the Moreton Bay Marine Park. Part of a Ramsar Listed wetland including a wide variety of habitats from floodplains and estuaries to swamps is in the MB case study area and at risk of coastal development.

The well-established Gold Coast Fishermen's Co-operative, established in 1970, sells their catch direct to the public or to shop fronts situated at the wharves. It consists of a fleet of 12 fishing vessels including prawn trawlers, tuna long-liners and crab vessels who sell direct to the public, from the wharf each day. This retail market provides higher return to fishers, as well as a cultural experience for locals and tourists alike (Gold Coast Fishermans Co-operative 2018). Fishers in other ports make their own individual arrangements for direct sale of their product. For example, in TCB, Lee's Fishing company, operating since 1951, operates a fully integrated operation incorporating catching, processing and marketing of quality fresh and frozen seafood, which is distributed throughout Queensland, Interstate and Internationally. The company runs a fleet of trawlers that operate in the coastal regions of Queensland and receives stock from other trawlers in the region.

3. Results - Phase 1 – Stakeholder analysis and development of engagement strategy

3.1 Media scan of issues

The purpose of the print media snapshot was to gain insight into how the commercial fishing industry of SEQ is portrayed in newspapers to provide an understanding of the current level of SLO in the case study areas. Media can influence community perceptions of industry and thereby the industry’s SLO (Benham 2017; Dare et al. 2014; Hedding 2017; Lester 2016). This simple analysis identified whether the articles portrayed the industry in a positive, neutral or negative light. Negative articles were also further analysed to identify the main themes for each. This analysis provided insights into priorities for an engagement strategy and successful engagement and post-engagement strategy implementation.

Keyword searches using ‘commercial fishing’ and ‘Queensland’, were conducted using the online database Australian and New Zealand Newstream (proquest) to identify newspapers articles and letters to the editor both within Australia and internationally. The keyword search resulted in 1,382 articles which were then refined manually for articles relating to SEQ resulting in 161 articles analysed in depth. Other print media such as Journals, trade documents and theses were excluded to focus on media more readily accessible to the public. The search timeline was for a five year time period from July 01 2013 to June 30 2018.

Articles were downloaded to an Excel database. Each article was read and classified as to whether the SEQ commercial fishing industry was mentioned in a positive, negative or neutral tone. Example articles and their classification are provided in Table 2.2 below.

Table 2.2: Example articles classified positive, neutral and negative (search results 1/7/2013 to 30/6/2018)

Date	Article	Excerpt	Classification
10/4/2013	‘Check Easter seafood sources’ The Queensland Times	‘Fisheries Queensland director Mark Doohan said Queensland had a well-deserved reputation for supplying top-quality, fresh seafood. We have diverse aquaculture farms and 1500 licensed commercial fishing boats that work year round to deliver seafood straight to our doors, rain or shine," Mr Doohan said.’	positive
20/10/2017	‘Commercial fishing boats to be fitted with GPS trackers in Australian state to promote sustainable fishing’	‘All commercial fishing vessels in the Australian state of Queensland will soon be fitted with GPS tracking devices in order to assess the sustainability of fish stocks across the tropical northern waterways.’	Neutral

	Xinhua News Agency		
20/8/2014	'Lines tangled on fish review' Gold Coast Bulletin	'They're netting the Broadwater and taking everything out there. When we go fishing all we catch is undersized fish," Mr Gaven said.'	Negative

It is important to note that the subject matter of an article may be replicated for different newspapers. These were counted as two articles and might have a different classification. An example of this is shown in Table 2.3.

Table 2.3: Example articles with the same subject matter (search results 1/7/2013 to 30/6/2018)

Date	Article	Excerpt	Classification
12/8/2016	'Taxes increasing IN THE last State Budget Curtis Pitt shattered...' Fraser Coast Chronicle	'The Palaszczuk Labor Government's 'Green Paper' is a devastating blow for our region's commercial fishing sector that will lead to serious job losses.' (Stephen Bennett MP)	Negative
13/8/2016	'Holy mackerel! The Courier Mail	'Hervey Bay, Tin Can Bay and the Great Sandy Strait region suffers some of the highest jobless rates in Queensland, he said. 'The commercial fishing and seafood industry is vital to the region.' (Ekka chief Brendan Christou)	Neutral

Results

The majority of articles were classified as negative (70%). The remainder were neutral (23%) and positive (9%) (Table 2.4).

Table 2.4: Articles classified positive, neutral and negative (search results 1/7/2013 to 30/6/2018)

Positive	Neutral	Negative
15	37	109

Further analysis identified the main themes of the negative articles, see Table 2.5 and Figure 2.1.

Table 2.5: Theme analysis of negative articles (search results 1/7/2013 to 30/6/2018)

Theme	# articles
Commercial fishing should be restricted	29
Commercial fishing is not sustainable	20
Political	39
Regulation	3
Infringements	8
White spot	6

The most popular theme is the 'political' theme followed by 'commercial fishing should be restricted', 'commercial fishing is not sustainable', with less on the other themes. The theme 'commercial fishing should be restricted' included articles which primarily referred to net free zones, their introduction or in opposition of. Examples of headlines include 'calls for net-free zones in the bay' and 'strong support for net-free zones'. The theme 'commercial fishing is not sustainable' refers to articles which questioned the sustainability of certain commercial fishing techniques or commercial fishing in certain areas is not sustainable or that the industry as a whole is unsustainable. Headline examples include, 'Noosa council urges north shore commercial fishing ban' and 'Tailor catches on the decline'. The 'political' theme were articles with direct reference to stakeholder groups or political parties accusing the current Queensland government (at the time of publication) or the opposition in regards to fisheries management regulations. Examples of article headlines include 'Queensland fishers see red over fisheries management green paper' and 'something fishy in the state of Queensland'. The 'regulation' theme included articles discussing the management requirements of commercial fishers and an increased presence of fisheries officers ensuring compliance. Headline articles include 'Barra off limits on east coast' and 'FISHERMEN are being urged to brush up on their zoning'. The 'infringements' were articles which specifically announced details regarding infringements by commercial fishers. This articles usually included the amount of the fine such as 'Maryborough fishermen fined \$4712 for illegal nets' and 'Fisher faces \$1800 fine'. The 'white spot' theme included articles pertaining to the white spot outbreak. Example headlines include 'Prawn fishermen abandoned' and 'White spot detected in Moreton Bay'.

Discussion

This simple quantitative analysis demonstrates that much of the newspaper print media about the commercial fishing industry in Australia can be described as mixed, given that that there may be different interpretations of the same article by different people. The majority of the articles were negative in tone and most often in relation to regulatory requirements of the industry or attacks on the sustainability of the industry.

In particular, a common 'political' theme consisted of the industry questioning fisheries management reform, recreational or green groups suggesting more stringent reforms or government members stating their political agendas. The second most common theme was 'commercial fishing should be restricted' which included articles which were 'for' or 'against' net-free zones or the removal of certain types of fishing from some areas all-together. Some articles suggested that many types of commercial fishing were unsustainable - these referred to the AMCS's Australia Seafood Sustainability Guide. Collectively there is an overall sense of the industry taking a defensive stance, with an offensive stance on management reform and sustainability issues.

Since media is known to influence community perceptions of industry (Benham 2017; Dare, et al. 2014; Hedding 2017; Lester 2016), it is important for SLO. Hedding (2017) also found that the media can be an important source of information when the community has little knowledge of an issue. Furthermore, Essence Communications found that the commercial fishing industry lacks a 'public face'. Hence, it can be assumed that this snapshot of articles may have influenced the community to perceive the commercial fishing industry in a negative light.

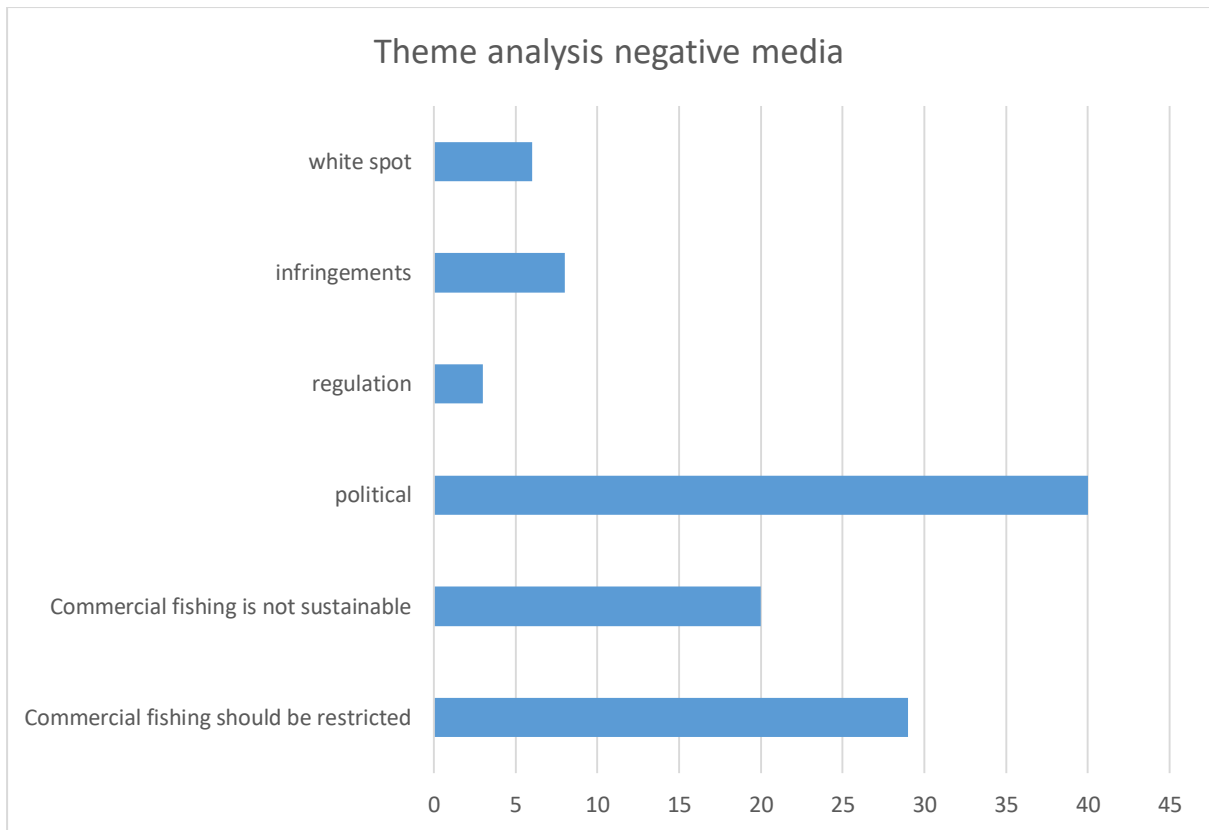


Figure 2.1: Analysis of themes from negative media

3.2 Stakeholder analysis

The stakeholder analysis identifies issues and interests of those with a stake in the SEQ live catch seafood industry. Attachment 9, Stakeholder Analysis, reports on the results of photovoice interviews with fishers, and interviews with key stakeholders and fishing industry leaders. It describes their issues and concerns, estimated level of influence of the stakeholder and with whom, as well as our assessment of the way that QSIA as an industry association could engage and communicate with each stakeholder sector to gain SLO, including within the fishing industry. The latter assessment is based on interviews, feedback on the draft strategy, and expert analysis. We use this to identify potential conflicts as well as opportunities and common ground that can be addressed through an engagement strategy.

Our interviews with SEQ fishers and key stakeholders indicated that while there are positive individual relationships among the sectors, in general, the legitimacy, credibility, and trust around areas of sustainability and relationships, needed to build SLO is lacking among QSIA, other fishers, and key stakeholders. Understanding underlying interests can help find common ground which can be a basis for dialogue. Some examples follow.

Social media by certain conservation groups targeting commercial fishing is perceived as imprecise, not based on credible information, and at times emotive and extremist. Because of conservation influence on the public, consumers and policy-makers, fishers feel unfairly targeted and at an increased risk of diminished livelihood and well-being. Conservation groups have concerns about long term sustainability of both SOCI and fish stocks, based on what they see as a general lack of

adequate data about the status of fisheries, and their perception of Queensland government's inadequate fish management. The 'common ground' between fisher, conservation and government sectors is long term environmental sustainability. Fishers want to be able to fish and earn an income into the future, and avoid catching unwanted species that can ruin nets, may not survive and are time-consuming to release if caught. Points for negotiation are lack of agreement on methods and data for determining catch levels (quotas), the speed of introduction of new technology, and trust in compliance. A re-commencement of dialogue needs to be based on discussion of underlying interests rather than hardened positions, and avoidance of emotive language.

In Southeast Queensland, the relationship between the fishing industry and government has been greatly affected by past negotiations in regard to Marine Park zoning in Moreton Bay. Commercial fishing grounds were reduced, the compensation process was seen as inconsistent, fisher health and well-being was impacted, and recreational fishing was seen to benefit inequitably. The perception of fishers is that there is of an over-emphasis on the priority given to compliance in the current reform process which demonstrates government's lack of trust of commercial fishers. Since both parties have a vested interest in effective management based on good science and data, a re-focus and collaboration on determining fish stock status may reduce this lack of mutual trust. Points for negotiation include confidentiality and impacts of compliance methods.

Inshore commercial fishing and recreational fishing compete for a shared resource. There is uncertainty about the size of the recreational fishing sector since marine recreational fishing does not require a licence in Queensland. The fishery resource does not appear to be managed as whole. Perception of inadequate recreational catch data in particular in the popular Moreton Bay area and black market fishers, lead to a feeling of inequity by commercial fishers. Licensing of recreational fishing in Queensland, as in NSW, would be seen to start to remedy the imbalance, particularly given the number of recreational fishers in proximity to major centres in Queensland.

3.3 Engagement strategy

The purpose and methods of engagement for each of QSIA's stakeholder groups including its members is in Attachment 10 and the draft engagement strategy is in Attachment 11. The content is based on analysis of interviews with commercial fishermen in SEQ; key stakeholders in SEQ; and Queensland fishing industry leaders, as well as media analysis. The draft engagement strategy was refined after consultation with key stakeholders – DAF, conservation, and recreational fishers.

The interviews reveal that in many cases, perspectives and opinions of both fishermen and stakeholders are based on incorrect or selective use of information, data gaps, and lack of easy access to existing fish stock, modelling, compliance and by catch data on which decisions are made or opinions are formed. So a number of the proposed early strategies aim at rectifying information provision, access, and exchange. While some information provision is the responsibility of QSIA, Qld Department of Agriculture and Fisheries (QDAF) also has a role. Consultation with QDAF indicated that they are investigating ways of improving monitoring and making data more accessible. Engagement based on provision of data is necessarily at the level of 'Inform' on the IAP2 spectrum of engagement, although more advanced levels of collaborative information exchange can and do occur through 'co-production of knowledge'. Already fishers provide logbooks and report on Species of Conservation Interest (SOCI) caught. This could be expanded to record sighting (or negative sighting) of SOCI through an app which may provide 'citizen science' type data to enable understanding of SOCI movements. For example, several trawl fishers reported that they seldom see or have never seen turtles while fishing, so while they may have a TED, it is unnecessary where they

fish. An additional suggestion from one fishing industry leader was that, while VMS is being introduced to record boat location, it could also be used to record catch and thus negate the need for separate logbooks.

While provision of accurate fisheries data may appear to represent a 'knowledge deficit model', to support the need for information as a basis for SLO, we refer to Cullen-Knox et al (2017) who suggest that well-resourced groups can amplify their views through campaigning, social media and other media platforms to affect social licence to operate (SLO), and that the perceived legitimacy of knowledge and information is crucial to underpinning an SLO. They suggest that 'those driving a SLO must take responsibility and be accountable for the information produced and influence this has on political decision-making' (Cullen-Knox et al 2017, p76). The effectiveness of social media will also depend on strong networks and relationships that increase likelihood of information being listened to.

A proposed interactive method of enhancing public understanding of the industry is Fishquiz, a fun way for participants to learn about the live-catch commercial fishing industry and provide feedback about their level of understanding. This represents both the 'inform' and 'consult' level of engagement. Modelled on an Australian meat industry quiz, we developed Fishquiz as one of the pilot engagement strategies, and asked 'how much do you know about Australia's seafood industry?' Questions tested knowledge about how much seafood we import and from where; how much do we eat; non-native fish available for sale locally; skills needed by commercial fishermen; frequency of completing logbooks; amount of bycatch associated with tunnel netting; and how spanner crabs got their name. The quiz is at Attachment 8. Our evaluation is reported in section 4, Results - Phase 2 and Attachment 18.

The exhibition of fishing industry engagement via photovoice, planned as part of this project, focuses on two aspects: who are SEQ fishers and how they relate to the environment. Four key themes emerged from analysis of the photovoice interviews with 13 participating fishers and follow up meetings and focus groups in the three case study areas. They were:

- Pride and market appeal of quality product, especially through direct supply to consumers;
- Efforts towards a sustainable fishery through innovative techniques, compliance, care for the environment;
- The range of knowledge, skills and professionalism needed for the modern fisher to operate e.g. navigation, weather, mechanics, product handling, regulations; safety, boat handling/maintenance; and crew management; and
- Contribution to family and broader community – many were multi-generational family businesses, providing both direct and indirect employment in the region.

The photostories were shown on four posters displayed for a week to 10 days at local libraries in Tin Can Bay and Southport, the Bribie Island Seaside Museum and the Moreton Bay Marine Discovery Centre in Manly in October and November 2018 (Attachment 5).

Additional perceptions and concerns that emerged from fisher interviews included:

- lack of future security in the industry due to misrepresentation in the media, environmental change, limited training opportunities and incentives;
- poor (i.e. one-way) consultation about continuing reforms;

- sensitivity about unfair distribution of benefits and costs, from previous reform processes that were poorly justified;
- continuing focus on compliance of commercial fishers rather than whole of resource fish stock monitoring and management; and
- little recognition of the limited by-catch in SEQ fisheries.

The display of the photostories was to address two issues. First, there is a general lack of awareness in the community about the commercial fishing industry; it lacks a ‘public face’ (Essence Communications 2015; Ogier and Brooks 2016); and support for the industry is ‘largely predicated on trust in its sustainability’, a key factor of SLO (Voyer et al. 2016). Secondly, these themes align well with QSIA’s website home page which introduces ‘Who we are’; and ‘Responsibility’. Content of the exhibition could thus be easily adapted to reinforce these aspects on the website. This is at the level of ‘Inform’ on the IAP2 spectrum of engagement. As one of the pilot engagement strategies, our evaluation of the displays is reported in in section 4, Results - Phase 2 and Attachment 17.

To further enhance the fishing industry relationship with the consumer and broader public, other mechanisms are also proposed for an industry ‘public face’ that illustrates sustainability values and community connectedness. One feature of the SEQ industry is intergenerational fishing families and knowledge of the environment passed down through generations. Thus a key aspect of humanizing the SEQ wild catch commercial fishing industry involves telling stories that portray human thought and action, reveal heritable expertise and understanding of the natural environment, and exemplify the moral character and behaviour of industry stakeholders. Narratives are ideal vehicles for understanding social relationships and social identity. Moral lessons and inspirations drawn from narratives recognise and respect other people’s dignity and capacity for growth; care and service towards other persons and the natural environment; and concern for promoting common good will. We attach an example of an SEQ intergenerational fisher story, ‘Jason, Marjodie and the Bay’ in Attachment 12. Such a story (and there are many) could be embedded in an industry webpage ‘introducing our fishers’; on Twitter or Instagram; used to promote an event such as a seafood festival; or linked to a QR code that identifies provenance/source of seafood and fisher profile, for marketing purposes. QR codes are much easier to use than a few years ago. An illustration of how this story could be adapted for different social media is in Attachment 13. An explanation of QR codes is at Attachment 14. Links to examples of humanising the industry from other industry associations in Australia, New Zealand and Alaska are provided in Attachment 15.

Each sector commented on the lack of strong evidence that the commercial fishing industry can refer to as indicating it is a sustainable fishery. Improving the ‘inform’ level of data provision may provide the transparency on which to enhance face to face interactions. For example prepared fact sheets that can be posted or sent in response to negative or critical media by QSIA, could be used to correct misinformation and de-escalate conflict as part of crisis management, taking emotion from the response. Other stakeholders thought these fact sheets would be a good idea. It is also recognised that core messages could be clearer and some dialogue more respectful.

Strengthening certain QSIA messages may also help. Currently QSIA Core Values are:

- Respect for every person and the environment
- Working for the “greater good” of members collectively and the industry generally
- Truthfulness, integrity and timeliness in all dealings.

- Leadership with courage: “if is to be, it’s up to me”.

A code of practice for QSIA members might demonstrate commitment to membership requirements and a lack of tolerance for members who do not adhere to the industry association code. This is different from a third party accreditation for a fishery. Links to other commercial fishing industry associations and recreational fishing organisations that have such codes are in Attachment 15.

Additional messages that might be incorporated in the code, or on the website or in other media, not necessarily as core values, are:

- ‘We are a progressive and professional industry aiming for a sustainable fishery in the long term’; and
- ‘We do not support shoddy operators; our members operate within the law. We are proud to identify as licenced fishers’.

More interactive ways of engagement are through direct communication (face to face; telephone/skype conversations) as well as social media. The former is already used in conversations within the QSIA membership, between DAF and QSIA and its members, among various types of fishing groups and other stakeholders. More recently, in SEQ, the relationship between QSIA and conservation organisations has deteriorated. One proposed initiative is training in consensus-building and dispute resolution for QSIA staff and members, as well as key stakeholders. This requires a safe space for participants to listen and learn from one another. Dialogue enables understanding underlying values and identifies common interests to build shared goals, and provides the opportunity to share knowledge and build trust.

Both QSIA and QDAF increasingly use social media – each has a website and Facebook page; QSIA posts podcasts online. Likewise other stakeholders use such interactive methods. These enable readers to respond quickly and give feedback in a very dynamic and influential way. According to Cullen-Knox et al (2017), contemporary SLO manifests at ‘a fast pace and increasingly outside of traditional consultation channels, using social media and networking platforms’ (p76). Social media can represent the ‘inform’, ‘consult’ or ‘involve’ level of the Spectrum. A ‘how to’ social media guide to explain where and how different types of social media (Facebook, Instagram, Twitter) could be used, is at Attachment 16.

Collaborative mechanisms of the IAP2 Spectrum are also proposed, to build partnerships with groups that represent conservation and recreation fishing interests, marketers, consumers as well as government. One proposal involves a gradual and ambitious transition from a local consumer guide to sustainable seafood purchasing to a collaborative national approach that identifies seafood by region, level of sustainability, and identifies what’s in season, all based on agreed data – a non-debated guide for the consumer. Currently seafood consumer guides are developed in each state by the fishing industry (in Queensland, QSIA’s Q-Catch) or by conservation groups (e.g. AMCS Sustainable Fish Guide), Sustained experience of working together, exchanging knowledge, and interactively fulfilling each other’s’ expectations over time contributes to credibility, a key component of SLO. See links in Appendix 15 for examples of the range of different guides in Australia, some of which are inconsistent with each other.

Mazur and Brooks (2018) suggest that people may be more likely to accept change:

1. if it fits with their values and goals - 'do I want to do it?';
2. if it's feasible and capacity is available - 'can I do it?';
3. if it's effective - 'will it work?' and
4. with consideration of the wider operational environment.

For this reason, the stakeholder analysis has endeavoured to uncover values, issues, and common interests or goals (1), as well as be cognisant of the broader context of past and current fishery reforms (4). The first activities to be trialled as part of this project are feasible and within the current project scope (2). Future priority activities are within QSIA's mandate, even if at this point, unfunded (2). To determine effectiveness, an evaluation process is proposed (3).

Additional factors need to be considered as part of an engagement strategy involving the commercial fishing industry.

Engagement needs to be continuous. A strategy implemented for one year will not deliver SLO forever. Personnel and issues change over time. External stresses (political change, climate change) can create new challenges. So an engagement strategy needs to be reviewed and revised regularly, with activities added which build networks and relationships, and once built, relationships continually maintained.

In addition, most members of the commercial fishing industry are unavailable seasonally for periods of time, and even those not fishing at a distance from home port need to work around environmental conditions; many inshore netters do not work holiday periods to avoid interactions with recreational fishers. As a result, opportunity for face to face interaction with other stakeholders is constrained. Improved internet service while at sea is crucial. Great reliance for industry engagement is placed on older fishers (the elder statesmen) and the Industry Association.

4 Results - Phase 2 – Evaluation of three engagement tools

4.1 Photovoice Display and Survey

The photovoice display consisted of four posters comprising photos contributed by fishers. Each poster had a different theme: quality seafood product; sustainability; professionalism and skills; and community and family. These were derived through themes elicited during the interviews.

Twenty-five surveys were received. The survey was designed to discover the impact on the viewers/audience. This is reported in more detail in Attachment 17. Data was analysed using Excel spreadsheets and Survey Monkey's own data extraction tools.

4.2 Fishquiz

A total of 118 responses were received between 15th October and 5th December 2018. Data was analysed using Excel spreadsheets and Survey Monkey's own data extraction tools.

See Attachment 18 for the detailed responses. An earlier progress report compared results from Hervey Bay with interim results from the updated version.

4.3 QSIA Website, News and Facebook pages and Podcasts

The purpose of these interlinked types of social media was to communicate industry news and issues to both members and the wider community.

Google analytics (www.analytics.google.com) was used to collect data to track who uses www.qsia.com.au, for how long, and how they access it. Analytics for the website was retrieved for the time period 20th October 2016 to 20th October 2018, for the news page from 17 February 2018, and for the Facebook page for the time period 27th August 2018 to the 4th December 2018. Detailed analysis is in Attachment 19.

As part of this assessment, we reviewed QSIA social media related to this SLO project. Posts included introducing the project; inviting the public to the exhibitions, testing their knowledge on Fishquiz; and a Podcast with Claudia Baldwin about the project. Facebook and posts about the project did moderately well for reach and impressions with an average reach of 1,475, average impressions of 2,199 and the link clicks for Fishquiz were quite good with 72. Unfortunately it was not possible to differentiate the project podcast from the rest of the podcasts.

While social media analytical tools can give some idea of reach, to better understand how QSIA social media affected key stakeholders, we asked stakeholder interviewees where possible for their views of QSIA social media. Ten of those interviewed had viewed various aspects of the website and commented on the positive aspects of the website and Podcasts, but many thought Facebook was too contentious. Some specific comments were as follows.

The website:

- QSIA website has improved and is being a good source of information – recreational fisher.
- Like the new website it has a fresh approach; now some depth on the website; great in terms of information but it really depends on the mood of the industry in terms of content; question who the website is targeted at, fishers or government – conservation sector
- QSIA is seldom proactive, need someone adept at social media, who can get the message out and say ‘this is what Queensland fishermen are doing’, get photos out on Instagram and try to engage the younger population - NGOs do very well at targeting campaign style younger people with disposable income, and they do that by shouting doom and gloom about our ocean and reefs. ‘Me, I would rather promote the positive’. – conservation sector
- Instead of specific comment on the QSIA website, I refer you to the NZ fishing industry example (see links Attachment 15). If you can replicate this, you will go a long way to increasing SLO. – government sector.

Facebook:

- Active on Facebook and like to keep track of ‘other negative comments’ from other stakeholders; QSIA is just stating the facts and what's important to them; like what QSIA has to say and supports them – commercial fishing sector
- Dealing with Facebook is like putting petrol on fire; QSIA very reactionary attitude not collaborative; churning out gripes; not well planned and very reactive – commercial fisher
- Do stay away from QSIA Facebook page - there is so much poison online - some of their board members have been attacked previously in a New South Wales context – conservation sector
- Oppose pretty much everything QSIA says, website, Facebook – recreational fishing
- QSIA aren't being strategic they're not picking the right battles especially around VMS and a lot of the things they're saying are just plain wrong. QSIA could have been on the front foot and instead they just piss everyone off; social media too argumentative - various conservation sector.

Podcasts

- The Podcasts provided good content, they're positive, but the actual recording was poor – recreational sector; marketing.

4.4 Photovoice by Instagram

The images submitted by the team reflected their purpose which was to connect the community with seafood by showing photos of consumer, environment, and community. As each image is accompanied by a caption, it also shows the intent of the submitter (eg to illustrate sustainability).

The analysis aims to determine the extent the Instagram posts connected to the target audience. Instagram analytics was collected using the tool Iconosquare (www.pro.iconosquare.com) one of the most popular online tools which works superficially with Instagram. Iconosquare links with existing Instagram accounts and is primarily used as a media scheduling and monitoring tool but also provides comprehensive analytics. Analytics was retrieved for the life of the Instagram account 27th August 2018 to 9th December 2018. Detailed results are in Attachment 20.

4.5 Discussion

Each of the three tools are discussed in terms of evaluation indicators of Purpose; Process; Outcomes; and Relationships.

Photovoice

Purpose: The display responded to the identified purpose of the technique by providing fishers with an opportunity to inform the public and provide an insight into SEQ fishers' lives and concerns. The photos demonstrated positive characteristics of fishers and their commitment to environmental stewardship, sustainability, regulations, and community. The photovoice concept has proven to be popular and is adaptable for use directly by fishers in other situations, as seen by the adaptation for use with Instagram as part of the team project for the National Seafood Industry Leadership program.

Process: Not all fishers interviewed contributed photos. While the themes and photos had been discussed with fisher groups prior to the launch, it was at the launch that they saw the display for the first time. Individual fishers identified their own photos and those from the other SEQ fisher groups. Anecdotal feedback from fishers was that it captured what they wanted to say and they felt it conveyed positive aspects of the industry, yet some of the challenges as well.

While the photovoice displays were well received, they had limited reach via the libraries close to fishers' ports (process aspect of evaluation). Our fisher participants are keen to see the photovoice stories turned into a hard copy book, and QSIA would like to place that on its website.

Outcomes: While promoted through networks and QSIA social media, print media did not take it up in spite of press releases. Dominant themes from respondents were about sustainability, adherence to regulation and quality seafood, highly consistent with issues identified in literature. More in-depth follow-up would be needed to determine if it made a difference in attitudes to the industry. The survey results indicated increased awareness by some participants (40%) and generally positive views of the industry. One piece of feedback was that there was no hard evidence of fishery sustainability, rather the photos demonstrated fishers' values.

Relationships: No negative comments were made about fishers.

Of the surveys administered as part of this project, this is the only instance where social media did not feature as the first or second source of information about the industry. This could be related to most of the participants being over 55. The age-range of respondents in other surveys was more evenly spread.

Fishquiz

Purpose: The quiz achieved its purpose which was to develop a method to educate the general public about the seafood industry; demonstrate commitment to sustainability and compliance with regulations; gauge community's knowledge, and determine the general source of information about the industry.

Process: The process used to administer Fishquiz was intentionally targeted to participants, visitors to events, as well as consumers at retail seafood outlets. It was made available on QSIA's website. We did not release it to the wider community because the platform used to develop the quiz, Survey Monkey, had limitations and more sophisticated mechanisms (at higher cost) should be used for a wider exposure in future.

Outcomes: In terms of educational outcomes, for both the Hervey Bay pilot and final surveys, accurate information was provided to remedy misconceptions e.g. about how much seafood is imported into Australia (Q3); professionalism (Q5); compliance requirements (Q6); and amount of bycatch associated with tunnel netting (Q10). While anecdotal feedback was that it was engaging, without follow-up it is difficult to know the extent to which survey users remember the correct answers, and whether it changed attitudes about the industry.

Relationships: It is difficult to determine if it improved respect for the industry.

Social media was the most common source of information about the seafood industry, with 'word of mouth' and 'newspapers' the next popular sources. The higher response rate to Fishquiz than the display feedback would suggest more credibility could be placed on the response indicating social media is a key communication vehicle. The importance of word of mouth suggests that friends and associates opinions are influential.

QSIA Social media

Purpose: Feedback indicated that readers felt better informed by the website about fishing industry matters after the website revision in February. It provided opportunities for fishers to explain their views. It is unclear that it achieved its other purposes, of promoting environmental stewardship, quality seafood, and economic contribution.

Process: Website engagement and interactions increased when the new website was published in February 2018 indicating that the new content and design was welcomed by readers. In terms of how the site is received and how it affects users, feedback was positive about information/content on the website and news pages.

The bounce rate for the home page, ie those who leave without clicking further, is 67%. A good bounce rate is considered to be around 50% with a very good bounce rate being around 40%. The news page has an excellent bounce rate of 28% which indicates that people are clicking on other news articles on that page. Facebook referrals are increasing to the web page with potential for this to increase more with the success of the news page. Continued monitoring and evaluating the performance of the website will add to these insights.

The QSIA Podcast page is a separate page from the QSIA website and was created for media articles, news and pod casts in the form of audio files. A link from QSIA website to the podcasts was broken during the time of the study which would have affected viewer numbers. Because of the way the podcasts were embedded it is difficult to determine which is the most popular. There is also the potential for confusion for visitors who may visit the main site looking for specific podcasts or media releases. The majority of traffic is being referred from Facebook and there is significant potential for more referrals and interactions hence the development of a detailed online communications and engagement strategy is recommended.

Outcomes: The QSIA Facebook page is an important tool for the organisation to connect with their members and the wider community. Feedback from a few people suggested the Facebook page was too contentious, so it is unclear that it met QSIA's objectives about environmental stewardship. Currently the majority of the posts are advocating for government and wider community support for the industry. Posts promoting articles on the QSIA news webpage articles contribute to increased page views for the QSIA webpage. There is potential for increased engagement which utilises the QSIA Facebook page, QSIA webpages and QSIA podcasts which will require further analysis and the development of a strategy specific to online communications.

Relationships: Feedback was positive from some and negative from others about effect on relationships.

Photovoice by Instagram

Purpose: It is difficult to know if the Instagram project achieved its purpose of encouraging the community to connect with Australian Seafood. While there were positive responses to images of seafood, a limitation of the analytics is that users are not identified so it is unclear if participants were consumers.

Process: During its short life span of only three months, the Instagram account `seafoodcommunities_au` has received a number of followers and Instagram engagement. For this trend to continue and improve, some planning into developing key messages, defining target audiences, consistency of messages, integration with other sites and monitoring and evaluation would be required. Key messages and defining target audiences will assist in generating specific content along with informing possible strategies to increase engagement. Hashtags could also be used in a more consistent and strategic way. For example hashtags could be specific to the image but also to the target audience as well. Hashtags are like keywords and can assist in engagement rates by increasing the chance of the Instagram post and account becoming more visible through a Google search. For example, if a key purpose is to increase consumption of live catch seafood, a simple hashtag like `#loveaustralianseafood` could be used consistently on each post. A hashtag popular through a Google search could also be included to improve visibility.

Engagement could also be improved by including links to other online content such as a website. The Instagram account `seafoodcommunities_au` does not currently have a website but the current managers of the account could include links specific to their businesses and communities. For example a link to the Gold Coast Fishermen's Coop website could be included on an image of seafood product caught by Gold Coast Coop fishers.

Monitoring and evaluating the performance of the Instagram account is important. Insights into the most popular posts will assist in identifying trends. This could be further supported by google analytics on business web pages to monitor whether incoming traffic has originated from the Instagram account.

Outcomes and Relationships: Innovative methods would be needed to identify the effect on users' attitudes to the seafood industry.

5. Implications for improving levels of SLO

While the trialled techniques enabled fishers to 'show and tell' about their environmental, professional and community *values*, QSIA has little hard evidence that it can use to demonstrate that the fishery resource is well managed, sustainable in the long term, and that there is minimal threat to SOCI. This is a major concern of conservation and recreational fishing stakeholders, and good engagement entails listening to stakeholder concerns. Filling this knowledge deficit is an initial crucial step to building SLO, with shared responsibility: the management agency, DAF, needs to develop justifiable harvest whole of fish stock management strategies, with appropriate monitoring and compliance; fishers need to contribute their local environmental knowledge and insights to effective management strategy development and comply with regulations including continuing to report catch data. Hopefully the current reform process will achieve some of this. Communicating about how fishers are contributing positively would enhance QSIA's credibility. Communicating that 'rogue' fishermen are not welcome in QSIA, based on a member code of practice would build its legitimacy. QSIA can also continually review whether its messages on social media are consistent with its stated objectives to demonstrate its core values of stewardship. Face-to-face dialogue with trusted members of a stakeholder advisory group could also contribute to building SLO.

One barrier to improving engagement is what Mazur and Brooks (2018) refer to as a motivational deficit to engage. We suggest that past engagement by government and criticism of the industry by various stakeholders, some of which is unsubstantiated, have lowered trust and confidence in engagement processes, as well as demoralised fishing industry members. Understanding good engagement and conflict resolution practice and being prepared proactively with information (fact sheets) that can take emotion out of dialogue, would increase mutual respect, credibility and trust with stakeholders over time.

Given improved levels of SLO are influenced by good quality relationships, the proposed 'information-based' engagement strategy needs to evolve over time. This can occur with building of capacity and overcoming the recent negative political history and operating environment.

In terms of community's views, we relied on other research (Horvat and Sparks 2018; Christoe 2015; Mazur et al 2014) to identify issues and concerns, and on the key stakeholders interviewed for ideas for engaging the general community including consumers. Techniques included putting a face to fishers and humanising the industry through identifying fishers and their values on websites and social media, as well as using a QR code to provide provenance traceability and links to fisher profiles. These are not just marketing tools; they are a way of engaging consumers on matters that are important to them.

Evaluating the effectiveness of engagement in achieving SLO was challenging in the short time period for developing, implementing and evaluating engagement techniques. Building SLO needs a commitment to a consistent approach over a longer period of time, regular evaluation of progress, and adapting the approach if not meeting goals or achieving desired outcomes. Methods of evaluating engagement for the purpose of improving SLO necessarily needs to examine human responses and attitudes through surveys and interviews, which can be resource demanding, as well as tracking print and social media. The evaluation exercise provided several learnings. One of these was the challenge and time-consuming nature of getting feedback from the target audience of an engagement initiative.

Adapted evaluation template

The framework below builds on Mazur and Brooks (2018) checklist by adding indicators and methods relevant to engaging for SLO, based on this applied case study research. Given the cyclical nature of evaluation and adaption, and that the factors for consideration are inter-related, we suggest it as a framework, rather than as steps. It is essential that evaluation is taken into account when designing the engagement strategy and actions. As the framework is applied more in practical situations, no doubt it can and will be further refined.

Table 5.1 – Five factors for consideration in evaluation of engagement for improving levels of SLO (adapted from Mazur and Brooks 2018)

	Matters for consideration
1	<p>Purpose of SLO engagement: May differ according to stakeholder e.g. to build trust, credibility, legitimacy; to share information, build relationships, collaborate? What issues does it aim to address? What outcome is being sought through the engagement e.g. change in attitude, behaviour? What would success look like? What is a reasonable expectation, timeframe for engagement and to see results?</p>
2	<p>Mechanics of evaluation: Why evaluate; what is the incentive Who should do the evaluation (we recommend an independent neutral where possible, though there are acceptable alternatives) Resources available; timeframe, capacity, feasibility</p>
3	<p>Identification of indicators and data sources: Purpose, process, outcome, relationships e.g. behaviour and attitude change re legitimacy, credibility, trust, in relation to key issues of sustainability and stewardship; product traceability and provenance; compliance; and connection to community.</p>
4	<p>Identification of methods: Need to be tailored to the purpose of engagement and stakeholder group/participant Interviews, surveys, workshops, focus groups Media tracking and analysis; social media analytics</p>
5	<p>Evaluate and adapt: Analyse data, consider how to improve, report and implement</p>

6. Conclusion

This project aims were to:

1. Provide key components of an engagement strategy for building fishing industry capacity to engage with community to improve social licence to operate; and
2. Test impact of pilot engagement strategies on stakeholder perceptions of fishing industry and ability to achieve SLO.

Preparation for the study included a literature review that identified key measures for achieving SLO; community profiles to provide a context for case study selection; and print media analysis to identify media's effect on fishing industry SLO.

To achieve the first aim, we used photovoice interviews to understand fishing industry and fisher characteristics and capacity for engagement. Key stakeholder interviews identified issues of concern and prompted ideas to improve interaction with industry. Industry leader interviews elicited successful approaches and provided an opportunity to test engagement ideas. The displays from fisher photos were intended to show that fishers are addressing areas of concern and to build industry credibility. The engagement strategy, developed in collaboration with QSIA EO, incorporated suggestions from all parties. Given the lack of awareness of industry sustainability, several techniques were included to fill this gap.

Three engagement activities were evaluated based on feasibility: the photovoice displays; Fishquiz; and QSIA and other social media. The timeframe did not allow for wide distribution and feedback regarding the first two techniques, although feedback suggested they were achieving their major purposes, to convey information and insights about the SEQ seafood industry. The benefit of evaluating QSIA social media was that the new version had been in place for ten months which was sufficient time to gauge stakeholder impressions. Feedback was that the website was informative for both fishers and other stakeholders but logistical aspects of the overall site were 'clunky'. The comment that some Facebook material was contentious, is seen by QSIA as fulfilling its desire for a new level of conversation and public debate about the issues. Further review and development of a social media strategy might ensure that QSIA better meets all of its engagement objectives.

The engagement strategy included in this report was revised with the benefit of the evaluation trial.

7. Recommendations for Future Engagement and Evaluation

Support is needed for implementation of QSIA's engagement strategy and its evaluation. Some activities are low cost; others require considerable coordination and investment of time and expertise. Many of the activities are widely applicable across the wider Queensland wild catch fishing industry, so consideration should be given to collaboration across all the Queensland fishing industry associations for implementation to be cost-effective and have an inclusive identifiable industry approach. Our understanding is that the key industry organisations in Queensland have commenced working on a collaborative basis on mutually important fisheries management issues and projects where appropriate.

Social media has become a core vehicle in today's busy world allowing communication across geographic spaces and time, but it needs to be carefully managed. Training and a specific social media strategy would be of benefit to the fishing industry.

FRDC sponsors a biennial survey of Community Perceptions of the sustainability of the fishing industry in Australia (Sparks 2013, 2017). If industry as a whole implements many of these engagement outcomes, it is expected that positive results would be reflected in this survey. Given the importance of social media, one question of the survey could be modified for the future – about where do respondents hear about the fishing industry – social media should be added as an option to the other choices.

An evaluation framework is proposed, to be tested on future evaluations and refined through learning from application.

8. Extension and Adoption

USC's partnership with QSIA and participation of its members in a 'bottom-up' process using the participatory visual method of fisher 'photovoices' contributed to a sense of identity, self-worth and self-reflection and stimulated interest in engagement. The displays in local case study areas extended results with the broader community. The process of seeking and building on common ground with key stakeholders generated interest in the research outcomes and how they could contribute to an improved SLO.

Media, including QSIA sponsored social media about the project (Podcast), the Fishquiz and displays have generated wider awareness of the project. An article has been prepared for *Queensland Seafood*. A brief overview of project outcomes will be prepared for QSIA's website and sent to all participants once the report is finalised and approved. Academic journal publications are planned.

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Attachments

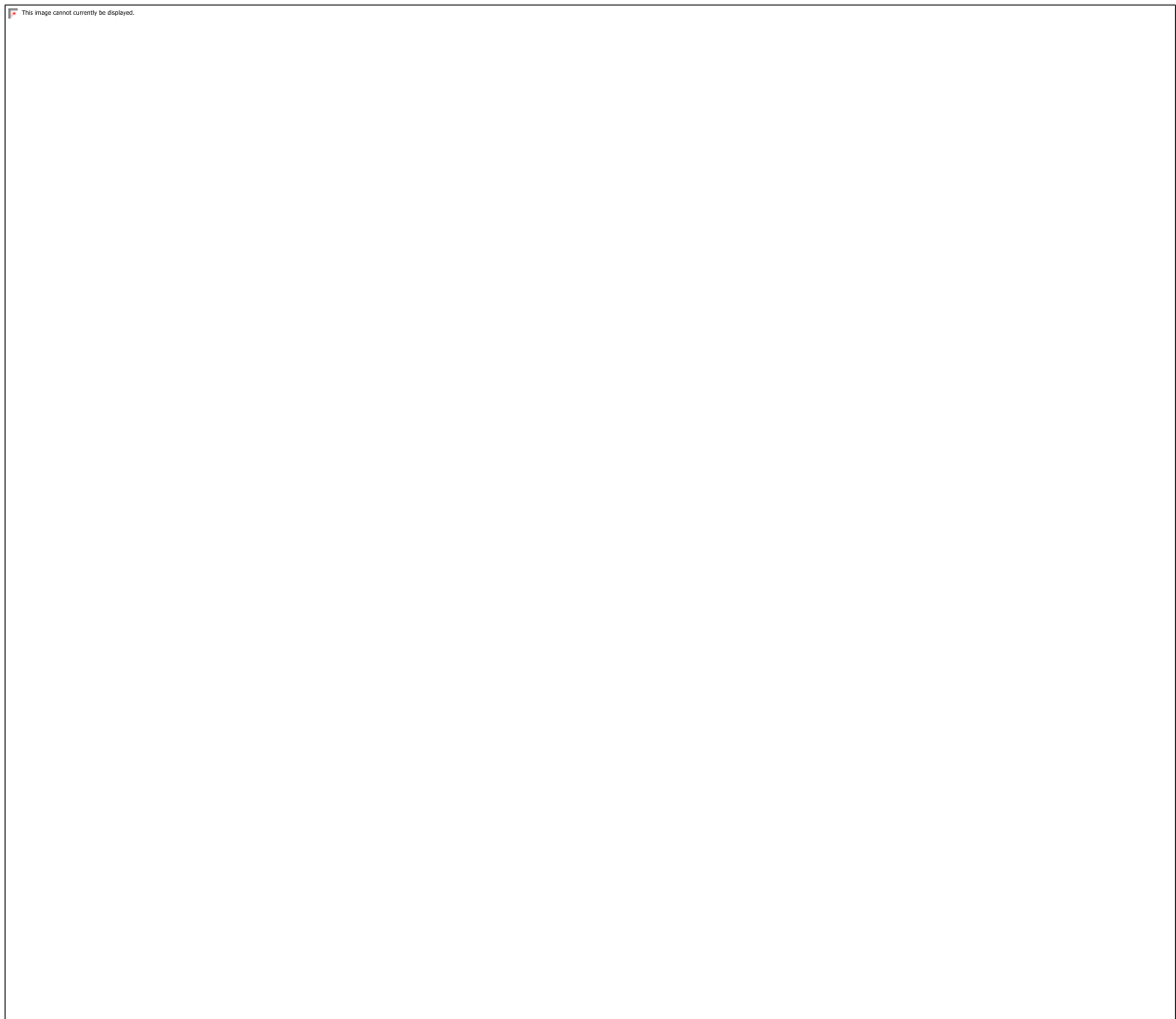
Attachment 1 - Level of Interaction

Table 1.1 - IAP2 Engagement Spectrum (adapted from Masur and Brooks 20018, for QSIA)



<i>Objectives</i>				
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.
<i>Promise to participants (stakeholders, communities, 'the' public)</i>				
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 for QSIA				
Social media, web sites, podcasts, fact sheets, displays.	Social media, focus groups, surveys, meetings	Working groups, workshops, participatory research	Advisory committees, Partnerships for co-production of knowledge; research; policy advocacy. Partnerships for education & awareness e.g. with schools. consensus building.	Self-regulated, accredited

Attachment 2 – Best practice evaluation



Source: Mazur and Brookes (2018, p 16)

Table 2 - Evaluation of engagement - Comparison of two complementary tools

	Mazur and Brookes Evaluation steps	Baldwin evaluation parameters
1	Clarify engagement issue to be evaluated	Purpose of SLO engagement: to build trust, credibility, legitimacy
2	Who involved? Capacity? Why?	Independent ideally
3	Resources available	
4	Check assumptions about change sought: reasonable; what would success look like; timeframe, evidence, risk	Similar to 1
5	Evaluation questions: indicators, data sources	Indicators: Process, outcome, relationships
6	Sound methods: interviews, surveys, workshops, media search	Tailored to purpose and target stakeholder group/participant.
7	Evaluate and analyse; how improve	Report and adapt

Attachment 3 – Photovoice interview guide

Photovoice instructions

Many Australians acknowledge that it's important to have a fishing industry that can supply locally caught fresh seafood for consumption while at the same time having policies and practices that protect the marine environment and enable a sustainable fishery. We would like your views about what you think about this.

To do so, we are using an innovative method that captures visual images and voices from those involved in the fishing industry. We would like you to take up to 20 photos of what you think represents how you fish, your values and concerns about the industry and what sustainability means to you and your business. It would be great if you can take photos with either a digital camera or mobile phone. A digital camera can be supplied on loan if needed.

There is no right or wrong way of taking photos for this project. We are not looking for the perfect photo but about what you want to communicate. Try to make that the dominant image or the key focus in the frame. You might want to show a relationship between elements by taking a scene in the distance rather than a close-up.

There are different ways of taking photos of people. If you want to protect an individual's anonymity, you might take a crowd scene, a silhouette, from behind, or even a part of their body such as a foot, so their face isn't revealed. You may also want to take some notes when taking the photos to discuss later with the researcher.

We'll then ask you to download your images to a USB stick and mail it to us (prepaid envelopes will be provided). We'll contact you to arrange a time and location that is convenient so we can interview you about your photos and ask about your business and ideas about how to communicate better about the industry's values.

Some topics to think about when taking photos:

- What does your business mean to you?
- What is important to convey to others about how you fish?
- What motivates you to fish?
- What are your concerns about the industry?

Semi-structured Interview Question Script

Thanks for agreeing to the interview and taking photos. I'll go over the Research Information Sheet with you and leave it with you. I would like to start by asking you questions about your photos. We'll then ask a few questions about how your business operates.

Q1: Can you show me photos about what your business means to you? (probe: family, employees, relationship to environment, food for nation).

Q2: Can you show photos that illustrate how you fish and what is important in the way you fish? (probe: sustainable fishing)

Q3: Can you show photos that illustrate your motivation for fishing?

Q4: Can you show photos that illustrate your concerns about the industry?

Q5: Can you show photos that show what you think others are concerned about with your industry?

Detailed Questions

Q1: Can you tell me about your role in the fishing industry and how you operate?

- Owner, skipper, crew, family business?
- Type of fishing gear and general location - trawl, line or net fishing; inshore (within 3 nm); offshore; estuaries; freshwater
- Licence/concessions holder/lease/ quota
- Number, size, and ownership of commercial fishing boats in operation
- Number of employees
- Who does administrative/book work in your business?
- Length of time in business

Q2: Do you feel you are a member of a community? Explain. (fishing, community, neighbourhood-probe re sense of belonging, feeling accepted, treated fairly)

Q3: How would you describe your relationship with ocean/coastal environment? (probe re sense of identity; attachment to place; sustainable inter-relationship)

Q4: How would you describe sustainability? Probe: sustainable business; adhering to regulations; applying EMS; food on the table; TBL.

Q5: What are your perceptions of how the fishing industry is portrayed, how and by whom? (probe eg How much control do you think you have regarding your business?)

- Regulators/ Government
- Other fishers
- Science
- Conservation
- Media
- General public

Q6: What elements of communication and engagement do you think would be a key factor in generating support from the general public?

Q7: What do you consider are your strengths, and how could they be used to build social acceptance of commercial fishing in SEQ? (probe: expertise and skills)

Q8: Demographics: age group (use ABS groups); gender; education level (use ABS groups); group membership; relationship status; main source of income in family.

Thanks for your time.

Attachment 4 – ‘How to’ guide 1 – How to engage using photovoice

What is photovoice?

(excerpt from Baldwin and Chandler, under review, 'Ripples and Reflections: Photovoice and Community Narratives of Climate Change' in *Sharing qualitative research: Showing lived experiences and community narratives*)

Photovoice is an engaging visual research methodology which can be employed in diverse contexts to elicit community perspectives on issues of local and global relevance. It uses participants' photos which visualise their responses to particular issues as a basis for consensus building and communication to a wider audience.

Photovoice involves asking participants to take photos around certain themes or questions over a period of time. They then come together in a group to share and explain their photos in interviews and/or in a session similar to a focus group. The photos operate as a focus for discussions centring on key messages that participants would collectively like to extend to policy-makers or another audience. Selected images, which are provided with relevant captions, are used in communicating these overall ideas and responses. In this way, the photos continue to play a role in distilling ideas and enriching the dialogue throughout the process (Carlson, Engebretson & Chamberlain 2006; Wang & Burris 1997).

Photovoice has been used in a range of contexts and was originally applied in health and community development (Baker & Wang 2006; Carlson, Engebretson & Chamberlain 2006) as it can be empowering and create a sense of ownership in relation to local issues (Castleden, Nookemus & Dennis 2006). It fosters critical reflection through the various stages of the process as participants first decide what photos to take, select photographs for discussion, engage in contextualising and storytelling in a group, codify issues, themes and theories, and write down stories (Wang et al. 1998). It enables dialogue around issues so that people better understand each others' perspectives (Baldwin, Osborne & Smith 2012), to create a shared vision and develop a consensus among participants (Baldwin 2011; Baldwin & Chandler 2010; Baldwin & Ross 2012; Carlson, Engebretson & Chamberlain 2006). Increasingly, it is being used for exploring human-environment interactions (Berbes-Balzquez 2012; Bosak 2008; Baldwin & Chandler 2010; Beh 2011; Bennett & Dearden 2013; Shaw & Stocker 2014). As a research method it is particularly engaging, innovative and effective for gaining insight into deeply held values.

Photovoice has been adapted in various ways in response to research aims, so what 'counts' as the photovoice method varies. Approaches include: (a) participant written narratives and open-ended interview surveys without discussion groups (Baker & Wang 2006); (b) a survey questionnaire (Wang et al. 1998) or interviews only (Bennett & Dearden, 2013; Shaw & Stocker 2014); (c) access to journals written by participants when taking photos (Pierce & McKay 2008); (d) storytelling to explain photos in discussion groups (Baldwin, Osborne & Smith 2012; Baldwin & Chandler 2010; Carlson, Engebretson & Chamberlain 2006; Wang, Cash & Powers 2000), and (e) interviews based around photos held prior to the photovoice discussion group (Baldwin 2008; Baldwin et al. in press).

For participants, photovoice can function as an empowering process. It has been found to enhance participants' self-esteem and peer status; affirm creativity, brainstorming and problem-solving abilities; increase credibility by virtue of affiliation and collaboration; increase local control and autonomy; and increase access to power (being listened to by policy makers) by conveying local

expertise and knowledge to others who govern their lives (Wang 2001). It can ensure that people are talking about the same topic and agreement can be established, rather than being assumed, on shared meanings of images. Furthermore photovoice can be fun, and give participants an opportunity to express themselves in new and imaginative ways (McIntyre 2003).

One of the gaps in the photovoice research literature has been a lack of identifiable impact beyond the participants. For this reason, in this research, we include a mechanism to get feedback about the photovoice outcomes.

Briefing: Tips for taking photos

We would like you to take at least six photos of [theme 1] and at least six photos of [theme 2]. We would like you to take the photos over the next two weeks, as you go about your normal activities, to capture what you do and think about [the topic]. This could be [specify possible locations e.g. where you work, on the sea, on your boat, in the port, in the community].

There is no right or wrong way of taking photos for this project. We are not looking for the perfect photo but about what you want to communicate.

When you look through the frame, the view will suggest different images. When you see an image, ask what is it saying to you. What do you want to communicate? Try to make that the dominant image or the key focus in the frame.

You might want to show a relationship between elements by taking a scene in the distance rather than a close-up.

There are different ways of taking photos of people. If you want to protect an individual's anonymity, you might take a crowd scene, a silhouette, from behind, or even a part of their body such as a foot, so their face isn't revealed.

You might want to make notes about why you took the photo, to explain later to the researcher.

We will ask you to sign a consent form allowing the use of the photos in our research, for report or other publication. You can indicate if you want the photo to be attributed to you, or anonymous.

Attachment 5 - Display posters

LICENCE TO FISH 'Photovoices' of SEQ coastal wild catch commercial fishing industry

Associate Professor Claudia Baldwin, Chief Investigator and Sarah Connor, Researcher, Sustainability Research Centre, University of the Sunshine Coast (contact cbaldwin@usc.edu.au)

A key component of the research project 'Investigating social acceptance for the Southeast Queensland (SEQ) coastal wild catch commercial fishing industry' is to understand the concerns and values of fishers and their partners and seek their views on how to garner community support to ensure a sustainable and prosperous industry.

These photos were taken by members of the coastal wild catch commercial fishing industry in SEQ and used in conjunction with interviews (a technique called photovoice), to capture their thoughts. Photographic images can be powerful for the observer, conveying messages more effectively than words.

Quality seafood product

Fishers are proud of the high quality product available in Queensland coastal waters. Connections are also built outside of the local community. Strategies that build social capital among sectors such as tourism and consumers are based on strong communication and engagement.



'We get Aussies coming down for the prawns... because we only sell fresh... we don't sell anything that's been frozen... those are large Eastern King prawns. It's hard work... a lot of lifting, ringing people... but I quite like... the people. Because you've got such a good product its easy to sell' (Gold Coast fisher)



'We work in 5% of Moreton Bay... because that's the best 5%... those areas have all the things that fish need to feed and be happy... like a restaurant' (Moreton Bay fisher)



'We sell direct to the public... and a couple of restaurants... the owners bring their bucket down, all excited... They recognise the quality of the product and they're willing to pay it... we don't even have to export.' These are 'a couple of happy chappies - they got straight off the plane... with their bags - first stop, grab some seafood' (Gold Coast fisher)



'We were with Gold Coast Tourism... got a brochure at the airport... [and] I think word of mouth gets out. Today there's been a lot of [international visitors] because they love crabs... some days it's like 80% [of our catch]!' (Gold Coast fisher)



Sustainability

Fishers want a fishery that is sustainable for the long term.

'People don't understand- the last thing in the world we want to do is overfish the resource.. because where's my income coming from next year?' (Moreton Bay Fisher)

Fishers aim to release as much bycatch alive as possible. In this case, they've come up with a simple but innovative solution to ensure unwanted and undersized fish live to grow bigger.



*'Pelicans try and get inside the net, always hanging around...the tunnel end traps, where the fish get concentrated...you're sorting, and the pelicans are just lining up.'
'What I do is put a dinghy beside the tunnel where you're sorting, so it gives these fish somewhere to hide... All you've got to do is give them half a chance and they're all right... [otherwise the pelicans] will eat every fish.'* (Moreton Bay fisher)

Many of the general public do not understand the differences among types of inshore netting. This is beach netting which has almost no bycatch.



'... [the by-catch is] less than 1%... we could do a shot and you could have that amount of fish, and there won't be one other fish- it'd just be 100% mullet... it is a really targeted fishery.' (Tin Can Bay fisher)

Fishers are concerned about impacts on the habitat that supports the industry. They frequently collaborate with scientists and students.



'Japanese [students]... came over as part of their study with nutrients in waterways, so took them on the big boat... up the passage, show them Glasshouse creek, and they took samples up and down...'

'[Algae had] taken over really badly in all the dead spots... That's not conducive to any fish breeding at all- they don't eat it, they don't use it... the dugongs don't eat it... When we had this... we had turtles with tumours on them' (Moreton Bay fisher)



'... The farmers had no idea about... the problems they're causing our industry... the algae blooms out here... we raised funding to get scientists in northern Deception Bay, they can actually track [nutrients] to nearly which farm it came from... we got [funding] for the farmers to try and change their practices, so I got on that committee to... go and talk to farmers.' (Moreton Bay fisher) ... *'That was a group award'* (Moreton Bay fisher)



'That's a fishermen doing the right thing, that's waste oil recycling... that's in our fuel shed... That gets picked up by a recycler, and they break it down and use it.' (Gold Coast fisher)



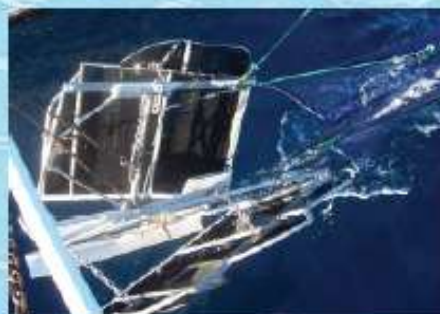
'That's saving a little humpback whale just year on the beach... the mum was just out the back waiting... we'd get him back into the water and 100 metres up the beach he'd lose his bearings and come back again... I was happy when he finally stayed out.' (Tin Can Bay fisher)

Professionalism and skills

The nature of skills and knowledge required to participate in the modern fishing industry is quite complex. The typical fisher needs to understand seafood and the environment, the regulations, navigation, technical and mechanical aspects of boat operation, crew management, safety, food handling and marketing



'That's at the mouth of the trawl so only our fish get through that- like legal fish, all sorts of fish, but no turtles, no stingrays, no flinders- no sharks, no big animals get through' (Moreton Bay fisher)



'I'd been ... developing better trawl systems for fuel consumption... and one of them, the bat-wing otter board... was... very kind to the seabed... We in the gear development fraternity always struggled with gear that's better for the environment. So I got a WWF smart gear award, for the bat wing otter board... commercialisation though is hard work and needs a business case and marketing!' (Moreton Bay fisher)

'The old fishermen ...were taught what the bay can handle and what it can't handle...there is a sustainable way of fishing, but you need the knowledge' (Moreton Bay Fisher)

'industry has got to offer a career for people to come to the industry...to get school leavers to look at us and say "wow, that's where I want to go". There used to be a 21 day master fisherman's course on how to catch, process, look after the catch, to become a master fisherman. Now, you can ...sign a form to say "I can catch fish, I know how to look after product", pay your money and you walk out a master fisherman' (Tin Can Bay fisher)

'I won't encourage young people to go into the industry' (Gold Coast fisher)



'One of our deckhands ... packing cartons of crabs on the deck every morning... the boys have gloves, they have to wear the right equipment, they have hand washing facilities.' (Tin Can Bay fisher)



'That's Charlie- he's mending a net for one of the operators. He's been a skipper... used to take the trawler up north and spend eight months of the year away... he does a bit of net work now for the guys. There's a skill to those nets, to get them hung properly.' (Gold Coast fisher)



'That's when we were getting the old engine out, putting the new engine to go back in. He's not a crew member, he's ...a tradesperson that we employ to help.' (Tin Can Bay fisher)



'I didn't do a thing until the insurance company signed off on it through their assessor... and I'm happy to say that when we did get her off, we never left one litre of diesel in her or one drop of oil on the beach. The product was saved and boat towed away within 72 hours.' (Tin Can Bay fisher)

Grounded trawler – The lack of future security in the industry and the onerous working conditions means that at times, licenced fishermen end up with unreliable crew. In this case, a trawler ran aground on Fraser Island



'...we had fuel tankers in and we took 8500 litres of fuel off her, and then when we were trying to get off she fell over on her side... we worked all night there with an excavator digging a hole under it to stand her back up again, then the tug came and lifted it all.' (Tin Can Bay fisher)

Community and Family

Much of the coastal fishing industry is made up of small family owned businesses that have accumulated knowledge and skills over several generations but some worry that the uncertainty in the industry will not provide a good career choice for future generations.

"Because it's such a family-based boat and it's all about the community and what we do, Dad's always been a community person ... he's the longest fisherman in the port, since 1963, so he's seen a lot of changes within the fishing industry, and even now, if he comes down, they all come and ask him ... in the way of fishing, information" (Gold Coast fisher)



"Even if my daughters wanted to, I don't know. It's a great industry and it's a great life, but there's been plenty of times when I worried that I might lose what I do, and it's a terrible feeling when you've got a family to support and you're thinking they're going to take it off me" (Moreton Bay fisher)



"That's the line-up at the co-op, Christmas day ... they'd been waiting there since 2 o'clock in the morning. That's the front gate ... (Christmas and Easter) are the two peaks. We still get regulars that come every weekend, like locals, that's their ritual like a farmer's market, get your veggies, the come and get their seafood!" (Gold Coast fisher)



Illustrating the QLD Catch logo to promote locally caught sustainable seafood to consumers (Tin Can Bay Fisher)



Fishers have promoted local sustainable produce at seafood festivals and other events but special events are time consuming (Moreton Bay Fisher)

Future of the Industry - 'My Dream'

"I've always dreamt of having this little fishing community that was linked closely with this community ... where you buy a fish and it's got the fisherman's picture on it, and you can see him up on the wall catching the fish. I'd like to see the community and the fishermen and the conservation groups, and everyone be more together, as a community, and work together. That's my dream of the fishing industry! ... and to have policy or legislation put in place that provides a direction from the government that there's some sort of security for the fishermen ... a guarantee for the future. Unless some long term measures are put in place, we can't guarantee it's always going to be sustainable ..." (Moreton Bay fisher).

Attachment 6 - Launch Photos



Southport Community Centre launch – Fishermen looking at the displays



Southport launch - Visitor discussing display; visitor doing survey



Shorncliffe – Moreton Bay launch – Fishers discussing photos



Tin Can Bay Library - Visitors discussing display: from Coast Guard and recreational fishing



Tin Can Bay Library - Three fishers with researcher; Fishing industry person posing with her photo in the display

Attachment 7 – Display survey

Social Licence to Fish – Photographic Exhibition survey

Photographic exhibition survey supporting research by the University of the Sunshine Coast

We are inviting you to complete a brief 5 minute survey to give us feedback on the display.

The purpose of this project is to identify how the coastal wild catch fishing industry of South east QLD can improve engagement with the community and promote better understanding of the fishery. The information will be used by Queensland Seafood Industry Association (QSIA) to develop an engagement strategy.

The project is funded by the Fisheries Research Development Corporation (FRDC) (project 2017-012).

Ethical Considerations and Consent

Your participation in this project is completely voluntary. If you do not wish to take part you are not required to.

Please note, that if you wish to withdraw from the project after you have submitted your responses, the Research Team will be unable to remove your data from the project if you have not identified yourself. If you do wish to withdraw from this project, please contact the chief investigator below. Your decision to participate (or not), will in no way impact your current or future relationship with the University of the Sunshine Coast or any other party.

Consent is for the use of non-identifiable data in this research project and future related research.

Privacy, Confidentiality and Results

Any data collected as a part of this project will be stored securely as per USC's Research Data Management policy.

All comments and responses will be treated confidentially.

The survey is being undertaken by Associate Professor Claudia Baldwin, Regional and Urban Planning, University of the Sunshine Coast. Email: cbaldwin@usc.edu.au; telephone: (07) 5430 1283.

Thank you for participating in this study.

1. Before viewing the exhibition, which of the following words or themes would you associate with the Australian commercial fishing industry (that is Australia's commercial fishing industry as a whole)

You can identify more than one and add an 'other'.

- Australia's commercial fishing industry is sustainable and well-managed
- Australia's commercial fishing industry is unsustainable and not well-managed
- Australia's commercial fishing industry provides top quality seafood for local consumption
- Most of Australia's seafood is shipped overseas rather than consumed locally
- Bycatch and accidentally catching threatened species is the biggest issue
- Commercial fishers don't want to share the resource with other stakeholders
- Commercial fishers share the resource with other stakeholders
- Commercial fishing is an important part of Australia's economy
- Labels which better explain where seafood has been caught would help consumers choose more wisely

Other (please specify)

2. Please identify 3 of these images/stories that appealed to you most?

(refer to numbers in top right hand corner of photos)

_____, # _____, # _____.

3. Why?

4. Which of the images improved or reinforced your understanding of the coastal wild catch fishing industry?

(You can identify more than one)

5. Why?

6. Can you indicate any images that seem particularly credible or engender feelings of trustworthiness?

7. Which of the following key messages do you think would positively influence your perceptions of the coastal wild catch fishing industry?

(Please rank for order of importance 1 to 6)

- Good environmental stewardship, minimising by-catch, sustainable take, environmentally conscious
- Fishers are important members of the community not just economically but socially and culturally
- Fishing businesses are often family owned and operated and intergenerational
- The industry is complying with regulations
- Seafood caught and sold locally is a premium product and supports local businesses

The coastal wild catch fishing industry of Southeast Qld is an important part of the local and export economy

8. Have the images and quotes from fisherman changed some of your views of the coastal wild catch fishing industry?

Yes

No

How? (Please specify)

9. Are you a commercial fisher or employed as part of Australia commercial fishing industry?

Yes

No

10. Which age range best represents you?

Under 18

18-24

25-34

35-44

45-54

55-64

65+

11. Where do you get MOST of your news about Australia's commercial fishing industry?

(You can provide more than one answer)

- Newspapers
- Social media
- Word of mouth
- Fishing specific TV shows
- Fishing specific websites
- Fishing specific magazines
- Radio

Other (please specify)

That concludes this survey. Thank you for your participation.

If you would like to know more information about this research please contact Assoc. Professor Claudia Baldwin at cbaldwin@usc.edu.au



Attachment 8 - Fishquiz - How much do you know about our fishing industry?

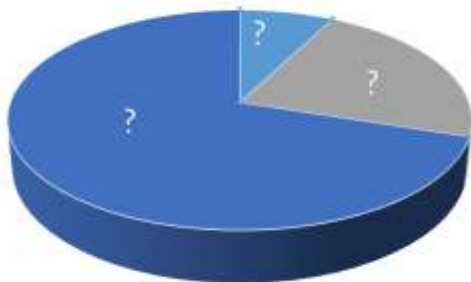
1. How many kilograms of seafood does the average Australian eat each year?

- a) Between 5 and 10 kg
- b) Between 10 and 15 kg
- c) Between 15 and 20 kg
- d) Between 20 and 25 kg



2. How much of our seafood do we import to keep up with demand?

- a) Between 30% and 40%
- b) Between 40% and 50%
- c) Between 50% and 60%
- d) Between 60% and 70%



3. Where do we get most of our imported seafood from?

- a) New Zealand
- b) China
- c) Thailand
- d) USA



6. Which of these seafood products is sold in our local markets but isn't native to Australia

- a) Bream
- b) Barramundi
- c) Basa
- d) Blue Grenadier

7. What kind of skills do commercial fishermen need to produce seafood for the consumer?

- a) Boat handling, navigation, crew management, understanding environmental conditions and fish habits
- b) Food processing
- c) Regulations and digital technology
- d) All of the above

9. How often does a prawn fishers need to fill out logbooks that report amount of catch:

- a) Once a week
- b) Once a day
- c) At the end of each trip
- d) Once a year



10. Why do we call Spanner crabs Spanner crabs?

- a) They're useful for taking off your wheel nuts
- b) Their whole body is shaped like a spanner
- c) They are known for using tools to help them catch their food
- d) Because of their spanner shaped claws

11. How much by-catch is associated with tunnel netting for mullet?

- a) 10%
- b) almost none
- c) 20%
- d) 30%



12. Where do you get most of your news about the seafood industry?

- a) Newspapers
- b) Social media
- c) Word of mouth
- d) Fishing specific TV shows
- e) Fishing specific websites
- f) Radio
- g) Other (please specify)

If you would like further information about University of the Sunshine Coast, please tick this box and add your name and email address.

References & Notes

(1, 2 & 5) Mobsby, D and Koduah, A 2017, Australian fisheries and aquaculture statistics 2016, Fisheries Research and Development Corporation project 2017-095. ABARES, Canberra, December. CC BY 4.0.

13kg, \$167 million, Thailand

(6) <http://www.qm.qld.gov.au/Find+out+about/Animals+of+Queensland/Fishes/Venomous+fishes/Rabbitfish+and+scat/Black+Rabbitfish#.W2EnHdIzaUk>

(5) Department of Agriculture 2015, Australia's seafood trade. CC BY 3.0 (67%, Thailand)

(7)

<http://www.qm.qld.gov.au/Find+out+about/Animals+of+Queensland/Crustaceans/Common+marine+crustaceans/Prawns+and+Shrimps/Eastern+King+Prawn#.W2IZQtIzaUk>

(9) <https://www.business.qld.gov.au/industries/farms-fishing-forestry/fisheries/monitoring-reporting/requirements/logbooks>

(each day)

(10)

<http://www.qm.qld.gov.au/Find+out+about/Animals+of+Queensland/Crustaceans/Common+marine+crustaceans/Crabs/Spanner+Crab#.W2IZ7NizaUk>

(2) <http://queenslandseafoodmarketers.com.au/>

(5) <https://www.countries-ofthe-world.com/flags-of-the-world.html>

(11) http://www.mbsia.org.au/uploads/PDF/cobp_MBTNF_may%202012.pdf

Image credit Jason Thomson

Attachment 9 – Stakeholder Analysis

Table 9.1 – Stakeholder analysis

Stakeholder group	Interests and issues	Influence on decision-making	Assessment of how QSIA could engage/communicate
The 3 fisher groups (common themes)	<ul style="list-style-type: none"> • Understanding of fish behaviour in relation to environment. • Acceptance of reforms based on good data. • Demonstrated relationship between long term sustainable fish stock and financial viability. • Skills and knowledge in navigation, weather, mechanics, product handling, safety, boat handling/maintenance. • Long term relationships with services (mechanics, electricians) and suppliers (fuel, nets, plastic bags, ice) that support industry. • Lack of community understanding of risk (due to weather and reforms) and variable costs which include fuel, boat maintenance, equipment, training, crew. • Future of the industry in doubt: need to offer a career that is seen as skilled and professional. Need good operators to stay in the industry. • Potential for local seafood festival for community education and fund raising for monitoring. • Need for better communication and engagement with all stakeholders particularly the public and government. • Concern about incorrect information and misrepresentation of the industry by the media and some stakeholders • Need to make fishing as a career more attractive to the younger generation, and encourage their leadership. 	<p>Little influence with government</p> <p>Influential with consumer</p>	<p>Need for consolidated communication among fishers within QSIA and outside of QSIA.</p> <p>Need for collaborative forums with other stakeholders.</p> <p>Need for better science communication.</p> <p>Need to build consumer awareness of industry, its sustainability values and connection to community, its human face.</p> <p>Use more social media.</p>
Tin Can Bay (TCB) Fishers	<ul style="list-style-type: none"> • Family businesses (some intergenerational) rely on complementary skills in family to make business work. Longevity in the business is important for training employees about fish and environment. 	As above	As above + opportunity to share good news stories about

	<ul style="list-style-type: none"> • Demonstrated interest in environmental quality e.g. trawler grounding in WHA and no pollution. • Examples of pollution clean-up, whale rescue and boat rescues. • Concerns re impacts on habitat and fish viability from downstream pollution and dammed rivers (can't manage inshore fisheries unless manage impacts on habitat). • Important to educate public about fishery e.g. minimal bycatch in tunnel netting. • Relationships with others: <ul style="list-style-type: none"> • strong community support. • provide bait for dolphin feeding tourism venture in TCB. • occasional threat from rec fishers but mainly good relationships built and maintained intentionally. • need for regional multi-stakeholder consultative groups like previous MAC/ZAC; ICM/NRM groups could do it but avoid marine areas. • Concern re potential Gt Sandy Marine Park reforms. • Media circulates incorrect information about the industry and sensationalises stories • Some fishers have received very negative comments in person and via social media • The industry isn't valued by the community as it once was. Views that the media and other stakeholders have tarnished their reputation with incorrect information 		intergenerational fishing and community connection.
Moreton Bay (MB) Fishers	<ul style="list-style-type: none"> • Still sensitive to MB Marine Park reforms in 2008 which has resulted in lack of trust in government, mainly DEH-Marine Parks. Questions whether MPs are best way to manage fisheries. • Wary about new reforms, gov't focus on compliance rather than providing data, support for industry and meaningful consultation. Need for information exchange to ensure government and conservation understand industry. Keen for reforms based on good data, not lobbying. 	As above	As above + opportunity to promote innovation; educate re tunnel netting; and promote intergenerational businesses.

	<ul style="list-style-type: none"> • Go out of their way to avoid interaction with large # of recreation fishers in MB but critical of lack of management of the large recreational fishery. • Technology innovations and entrepreneurial challenges. Collaboration on research. • Important to educate public about fishery e.g. minimal bycatch in tunnel netting. • Family businesses. Passionate fishers who spend holidays rec fishing with family. • QSIA needs to communicate with quality messages, not just rely on social media. • The industry isn't valued by the community as it once was. Views that the media and other stakeholders have tarnished their reputation with incorrect information 		
Gold Coast (GC) Fishers	<ul style="list-style-type: none"> • Value being able to directly to consumers (restaurants, tourist boasts, tourists, and locals), provides opportunity to educate the public. Direct supply means higher return with no middle man so less time on the water harvesting which supports sustainability of fishery. • Importance of product handling to ensure safe high quality seafood. Image important. • Relationships: <ul style="list-style-type: none"> • Communicate with other commercial fishers to sort out territorial disputes; concern with others (commercial 'visitors') and rec fishers who don't fish with appropriate care. • Good community relationships, evidenced by support for local wharves and retaining habitat. • Family businesses (some intergenerational) rely on complementary skills in family to make business work. Longevity in the business is important for training employees about fish and environment. • Examples of boat rescues and pollution clean-up. • Would like to take people out on boats to educate them but licences/insurance prohibits that. • Have TEDs on prawn trawlers but never caught a turtle; seldom see one. 	As above	As above. Opportunity to demonstrate good fisher-consumer relationships, product handling, rescues and pollution clean-up; intergenerational businesses.

	<ul style="list-style-type: none"> • Pros and cons to reforms on a regional basis, as boats like flexibility to travel around Qld depending on season. On the other hand, local fishers know their area well and can fish appropriately. • By catch depends on where trawl; have to return to water even if don't survive. • Government consults but doesn't listen. Lobbyists have more influence. Conflict not so much with rec fishing (though some competition for resource), but with conservation. • Still feel part of the Gold Coast community, the public has a direct link with fishers 		
<p>Dept of Agriculture and Fisheries Qld (DAF)</p>	<ul style="list-style-type: none"> • Reforms: • Engaged in current reforms to increase compliance and manage fishery on a regional basis according to biomass and quotas 'based on science'; strongly influenced by conservation lobby which appears to have community support. • 'our job is to demonstrate to the community that we've got a system in place that manages the stocks well, that's sustainable, that minimises impact on the environment and protected species', supports jobs, provides community benefits, and gives people satisfaction - so need to reform our management system to bring it up to a better standard. • A lot of face to face consultation on recent reforms, some disappointing but had direct engagement with fishers as only small %age are members of a fish assn. Using fishery working groups to bring rec and commercial fishing to agree on a standard. • Fishermen would have more credibility if they accept more acceptance of their role, take responsibility, and not blame others. Wish all operators could be like the best. • Provide quality food, supports tourism, but doesn't feed the nation. • Information/data: • Have good data for some fisheries but not others. \$20M for fish strategy: half to monitoring, half to compliance but stock assessment costs; lots of trawl data; use logbook data or observation as indicators. eg basis of having 	<p>High; have the power; control the data</p>	<p>Face to face dialogue, on specific topics and in working groups.</p> <p>Written submissions.</p> <p>Liaise for better science communication and transparency of data; collaboration; possible joint research project.</p>

	<p>quota in spanner crab fishery was catch rates going down and effort going up.</p> <ul style="list-style-type: none"> • Understand impact on sector of regulation decisions so have postponed decisions about closures due to lack of hard data until too late eg scallop fishery • Fallacy that no data on rec sector but rec fish don't see the cumulative effect • Recognises misinformation is common. <ul style="list-style-type: none"> • Sustainable fish guide was not a very robust process, in some cases based on fish management (lack of independent observers on boats) rather than data on fish stocks. Reforms are looking at digital observer program/automated fish monitoring. • Industry needs to add a human dimension to their media and marketing. e.g. spanner crab was well promoted. Some funding available for profiling commercial fishers, breaking misinformation, put a human face on it. • QSIA website is much improved with good stories, but more positive comments about change management would help. 		
<p>Conservation (includes AMCS, Oceanwatch, WWF)</p>	<ul style="list-style-type: none"> • See role as including: advocacy, policy development and community engagement • Main concerns with SOCI as by-catch and fish stock sustainability. Lobbying to reduce # of licences and for % take of biomass through current reforms. • Queensland's always had a real issue with lack of good science, lack of robust stock assessments; data is deficient in SEQ – at least 25% of \$20M fishery strategy reform will go to science and data – move towards electronic logbooks, VMS adds integrity to data; dispute about models used for quotas; wary of research co-funded by industry. Fishery must be managed according to harvest strategy based on good data and only open if it's sustainable. • Advocate for fewer fishers but higher price and volume (high quality seafood with social licence) whereas imports and aquaculture will have lower value, higher volume (feed the planet). Need to reduce # of fishers; advocating a buyback program. 	<p>Influence on government, consumers, general public. Effect on fishers' livelihood</p>	<p>This sector is familiar with social media, so could engage by placing positive messages on industry webpage, Facebook, and other social media.</p> <p>Respond to controversial social media via factsheets.</p> <p>Provision of accurate science and data, agreement on</p>

	<ul style="list-style-type: none"> • Approach to sustainable fish guide is precautionary due to risk associated with management with no data and lack of independent observers on boats based on effective management and protected species interactions. • Supply chain transparency - Missing at point of sale is the message for the consumer about where that product is from, who has harvested it, and how. QR code could humanise industry and show status of stock, but need data to show this. Probably premature in reform process. Unless sustainable, won't get buy-in from Coles or Woollies. • Lack of trust of fishers, fishers have to demonstrate their professionalism, need for transparency; illegal catch; concern with fishing industry asking for removal from advisory committee; note that some industry people have great credibility. It would be good to go from commercial to professional. • MSC accreditation provides transparency; is a positive (no negative campaign) but industry is not seeing higher sales value commensurate with the extra work required; does assist with export; works well with seafood promotion by chefs. • Tunnel netting has a code of practice; videos. It would pass MSC if it was a separate fishery. Need to promote. • Would like more education about sustainable fishing in schools • Fishers could promote pollution clean-up of plastics since it's currently such a prominent issue – could promote on social media. • Need to include younger fishers and have a better gender mix. • Online and social media quiet contentious and negative in nature 		<p>sustainable seafood guide.</p> <p>Seafood provenance and humanising industry through QR code</p> <p>Build good news stories about professionalism, seafood value, sustainable types of fishing methods</p> <p>Collaboration on pollution clean-up. Participation in Clean-up Australia.</p> <p>Face to face negotiations</p>
Recreational fishers	<ul style="list-style-type: none"> • Recognise that they are in competition with commercial fishery for resource. • Willing to pay for licence and use some of it to fund data gathering as data is poor, mainly based on boat ramp and telephone surveys. • Query data basis for 60% biomass retention sought by conservation. • Needs research re what MB fishery can sustain to keep sectors of industry viable. • Query data for inshore stocks of snapper; could be local depletion issue. • Unsure of where locally caught seafood is sold. • Need better management of inshore fish stocks. 	High influence on government, general public	<p>Need for better science and communication re fish stock assessment and industry</p> <p>Provenance of locally bought seafood</p> <p>Industry association code of practice</p>

	<ul style="list-style-type: none"> Commercial fishers need to better represent themselves, get rid of the rogue/shoddy operators. Often collaborate with commercial fishers to identify rogues. 		
Marketers/wholesalers	<ul style="list-style-type: none"> Public has no idea what fishers do, complexities of the industry, the costs, pressure, extreme conditions. Need campaign to educate public on seafood sustainability. Gov't decisions are not based on science, rather on politics. Need more robust, peer reviewed science. No effort by government to assess the correct take of the recreational and charter sector – could use a phone app to register catch. Critical of scallop fishery management, no data so scallop fishery closed out. Mis-match of level of compliance effort for commercial and recreational fishing. MSC accreditation should have a market advantage Majority of consumers would support buying local if price similar. Little promotion within industry of seafood as local and sustainable – this was promised as part of NSW reforms but did not happen. Educate consumers, draw relationship with bait 	Medium	<p>Need for better science and communication with whole of harvest (rec and commercial) management and equitable compliance requirements.</p> <p>Need for community awareness re seafood provenance, sustainability of industry, and connection to community.</p>
Fishing Industry leaders	<p>Need to educate consumers; public has no idea what fishers do. Believes sustainable seafood for consumer is important. More education in schools. Lack of research and poor past policy – decisions not made on science, rather on politics. Need to use emotive language in campaigns, like ENGOs do. Need to be wary of social media as some can be nasty, can use podcasts, not expensive media campaigns. Little trust between industry and government– little 'walking the talk' – officers have to do what politicians want. Concern with the way been treated in the past and continually treated. Need acknowledgement that we are a conduit to the community- as a food supplier, and the importance of fresh food being supplied to the community. Gov't needs to give a clear message that industry is well managed</p>	Influence within industry and with public	Improve communication of innovation and positive direction

	<p>Food labelling at point of sale with info on fisher and sustainability – ‘capture to cook’</p> <p>Fishers are not rewarded for providing high level of quality control</p> <p>Rec fishers often misinformed.</p> <p>Some fishers do not want to be associated with QSIA which appears combative and not promoting sustainable fishing practices like harvest strategies and electronic tracking, so will have trouble gaining traction with broader community or accessing major seafood buyers.</p> <p>VMS could have included logbook type data and make life easier</p> <p>Social media could be used to tell fishers’ stories better</p>		
Consumers and general public (not interviewed)	<p>Fishers and stakeholders commented on their perceptions of the consumers and the public. Consumers like fresh live caught product, with a portion preferring sustainably caught seafood. Point of origin, chain of supply are important.</p> <p>Consumers and general public are highly influenced by traditional and social media.</p> <p>Government reacts to the loudest voices.</p>	Influence on government, effect on fishers’ livelihood	Improve communication about data, sustainability, and the value contributed by the fishing industry.

Attachment 10 - Purpose and methods of engagement for each stakeholder group

Stakeholder	Purpose	Method of engagement
Government – Department of Agriculture and Fisheries (DAF)	<p>a) To ensure accurate up-to-date data is available on fish stocks and by-catch, economic value of commercial fishing to Qld economy. (origin/destination of local seafood; number of active commercial fishing licences; imported seafood statistics)</p> <p>b) To ensure DAF understands impacts of current regulation and current reform (about commercial fishers themselves; who; the efforts they go to; skills; commitment)</p> <p>c) To clarify purpose of DAF reforms (by-catch reduction; fish stock sustainability; compliance with all regulations including closures; outline how regulation and reforms assist the industry and the environment)</p>	<ol style="list-style-type: none"> 1. Dialogue with executive and submissions regarding current data and impacts. 2. Data easily accessible on DAF and QSIA website 3. QSIA website, podcasts, Facebook page 4. SLO project Exhibition
Conservation Oceanwatch	<p>a) To promote a partnership with Oceanwatch</p> <p>b) To improve awareness of who is fishing industry (types of fishing and their impact; distinguish between regions; impacts and regulations; fishing industry efforts to sus; chain of supply; value of industry)</p> <p>c) To investigate liaison re codes of conduct and/or international benchmarks (Australian fisheries are managed well but there is always commitment to improve)</p>	<ol style="list-style-type: none"> 1. Collaborative seafood sustainability guide (national coverage with regional options long term) 2. Link with QCatch Fishermen QR code³ (providing information on seafood provenance; fisher profiles; sustainability credentials) 3. Link quality seafood with health and wellness (local = fresh = quality rather than omega oils etc.)

³ QR code would link seafood at point of sale with individual fishers and location

Conservation Marine Stewardship Council	<p>a) To investigate more cost-effective environmentally sustainable fishing standard and chain of custody standard including rapid assessments.</p>	<ol style="list-style-type: none"> 1. Seafood guide and QR codes 2. QSIA website learning resources for schools 3. QSIA to liaise with the Marine Teachers Association of Queensland
Conservation AMCS	<p>a) To improve conservation group members understanding of types of fishing and their impact; distinguish between regions; impacts and regulations; fishing industry commitment and ongoing commitment to sustainability</p> <p>b) To clarify basis for conservation group concerns including bycatch, species of conservation interest, fish stocks, locations of concern.</p> <p>c) To encourage any seafood guides or related material is produced using accurate data</p> <p>d) To investigate more cost-effective third party certification</p>	<ol style="list-style-type: none"> 1. QSIA website to include information and photos/videos outlining quotas/regulations, fishing type and methods. 2. DAF and FRDC data including sustainability 3. Promote fisheries and fishing type which are under pressure to clarify misconceptions (i.e. net fishing; specific species; bycatch)
Recreational fishing	<p>a) To educate recreational fishing groups (data on fish stocks and bycatch; fishing types; distinguish between regions; impacts and regulations; origin/destination of local seafood; amount of imported seafood)</p> <p>b) To demonstrate support for rec fishing groups</p>	<ol style="list-style-type: none"> 1. Proactive information on DAF and QSIA websites (fishing type; fish stocks and bycatch; regulations and regional differences) 2. Fishquiz 3. QSIA website, podcasts, Facebook page 4. Partnership with fish stocking groups depending on regional area and community (e.g. sponsorship/funding for restocking of fingerlings)
All key stakeholders	<p>a) To improve awareness of who is fishing industry (demonstrate consensus on many issues; alignment of values/objectives; moving forward)</p>	<ol style="list-style-type: none"> 1. Podcast/interviews 2. Q catch and QSIA website and social media
Marketers	<p>a) To gain support for chain of supply</p>	<ol style="list-style-type: none"> 1. QCatch Fishermen QR code (providing information on chain of supply;

	b) Possible partnership QLD marketers (brokered by Qld Marketers Association)	fisher profiles; sustainability credentials sourced from existing research)
Commercial fishers QSIA members (and non-members)	<p>a) To enable a range of stakeholders to understand more about fishing industry (family oriented; professionalism; skills; sustainability measures/concern for env (stock, by-catch and ecosystem); amount of regulation; and impacts of reform; build connection with community; ethos of responsible fishing; increase visibility)</p> <p>b) To understand purpose and need for reforms, and impacts</p> <p>c) To investigate alternatives, innovations, and create benefits</p> <p>d) To build relationships with other stakeholders</p>	<ol style="list-style-type: none"> 1. Proactive information on DAF and QSIA websites outlining quotas/regulations, fishing type and methods. QSIA statement on black-market fishing ('the black') 2. QSIA website and podcasts, QSIA QCatch website and Facebook page, Facebook live 3. Exhibition/website (who are the fishermen?; Skills professionalism; values; 'Humans of New York' style) 4. Sandwich boards with info about fishing type, licence and sustainability credentials at net fishing sites 5. Use of fishing industry leaders (promoting good practice and innovative ideas) 6. Training re conflict resolution - understand opportunities for common ground 7. Posters on Ferries 8. Q Catch or collaborative site
Traditional Media	a) To educate and increase awareness of the industry (level of regulation; sustainability credentials; regulation; fishing type and methods)	<ol style="list-style-type: none"> 1. Managed on a case by case basis 2. Regular press releases and face to face interviews with fishing leaders 3. Create an image bank for QSIA website for use by media (ensure links are obvious and easily accessed) 4. Create a bank of fact sheets addressing misconceptions about fishing type; regulations; bycatch 5. Exhibition (retain images for reuse)

Consumer	<ul style="list-style-type: none"> a) To improve consumer understanding of Qld seafood industry and where seafood is caught. b) To demonstrate sustainability efforts of the industry and improve consumer understanding of sustainability of Qld seafood c) To improve consumer support of live caught seafood – build connection through supplying food d) To ensure accurate up-to-date data is available on fish stocks and by-catch; economic value of commercial fishing to Qld economy; origin/destination of local seafood; amount of imported seafood 	<ul style="list-style-type: none"> 1. Podcast/interviews 2. Exhibition (personalise and give a face to fisherman) 3. Better labelling of seafood provenance 4. Fish quiz 5. Instagram pilot NSILP 6. Communication at point of sale (QR Code and print form re chain of supply, fisher profiles, sustainability credentials) 7. Collaborative consumer oriented website (Qld catch; Which fish to include sustainability) 8. Humans of New York style social media posts (personalise and give a face to fisherman; possible repurposing information into traditional print form) 9. Feasibility of Seafood trail
General public	<ul style="list-style-type: none"> a) To improve community understanding of benefit/value of commercial fishing to region b) To demonstrate sustainability efforts of the industry and science c) To improve community understanding of amount of regulation d) To build connection with community 	<ul style="list-style-type: none"> 1. Fish quiz 2. Social media posts and podcasts, press releases with accurate data 3. Humans of New York style social media posts (personalise and give a face to fisherman; possible repurposing information into traditional print form)

Attachment 11 – QSIA Engagement Strategy - Priorities and methods of evaluation

Note: Impact is based on IAP2's spectrum of engagement: Inform (INF); Consult (CON); Involve (INV); Collaborate (COLL); Empower (EMP) and Complementary tools –see Attachments 1 & 2

Engagement techniques	Impact	Evaluation indicators and methods of evaluation*
Information and photos/videos on QSIA website outlining: status of stock, quotas/regulations, fishing type and methods.	INF	<i>Purpose:</i> Assess if achieved purpose of awareness raising, reducing misunderstanding <i>Process:</i> accessible, understandable <i>Outcome:</i> credibility, legitimacy <i>Relationship:</i> respect
Information on DAF and QSIA websites: sustainability of fish stocks and levels of bycatch by fishing type and species; regulations and regional differences	INF CON COLL	<i>Purpose:</i> awareness raising, reducing misunderstanding <i>Process:</i> accessible, understandable, legitimate <i>Outcome:</i> Pages uploaded on DAF site <i>Relationship:</i> respect
**Fishquiz - questions changed regularly	INF CON	<i>Purpose:</i> awareness raising, reducing misunderstanding <i>Process:</i> easily accessible, understandable, take up by external media e.g. ABC <i>Outcome:</i> balanced understanding, credible, legitimate <i>Relationship:</i> respect
Create an image bank for QSIA for use on website and media	INF	<i>Purpose:</i> awareness raising, reducing misunderstanding, proactive in case of criticism <i>Process:</i> links are obvious and easily accessed, positive images, level of use <i>Outcome:</i> credible, legitimate images, requests by external media e.g. ABC <i>Relationship:</i> respect

<p>Create a bank of fact sheets addressing misconceptions about fishing type; regulations; bycatch</p>	<p>INF</p>	<p><i>Purpose:</i> awareness raising, reducing misunderstanding and reactive emotional responses to criticism <i>Process:</i> Fact sheets uploaded to the QSIA site; links in QSIA website are obvious and easily accessible, understandable, take up by external media e.g. ABC <i>Outcome:</i> credible, legitimate <i>Relationship:</i> respect</p>
<p>Press managed on a case by case basis; occasional press releases and face to face interviews with fishing leaders</p>	<p>INF</p>	<p><i>Purpose:</i> awareness raising, reducing misunderstanding and reactive emotional responses to criticism <i>Process:</i> Press releases circulated to media list (release date recorded); Face to face interviews with media and uploaded to QSIA site where appropriate <i>Outcome:</i> reduced conflict; credible, legitimate <i>Relationship:</i> respect</p>
<p>Training re social media; engagement and conflict resolution</p>	<p>INV</p>	<p><i>Purpose:</i> skill improvement in fisher assn; reduce conflict with agencies and stakeholder groups <i>Process:</i> # participants in Intensive training and follow-up workshops; comfort in negotiations <i>Outcome:</i> reduced conflict; improved feedback to fishers; credible, legitimate <i>Relationship:</i> respect, trust</p>
<p>**QSIA social media communication and engagement strategy: QSIA blog, QSIA pod casts, Facebook page, Podcast/interviews</p>	<p>INF CON</p>	<p><i>Purpose:</i> high level engagement with range of stakeholders with positive messages <i>Process:</i> easily accessible, understandable clear messages <i>Outcome:</i> increased credibility, legitimacy, and trust</p>

		<i>Relationship:</i> respectful feedback
Collaborative consumer-oriented website ('Qld Catch'; 'Which fish' to include sustainability) Eventual transition into collaborative seafood sustainability guide - national coverage with regional options	INF COLL	<i>Purpose:</i> consensus-based consumer sustainable fish guide <i>Process:</i> developed collaboratively involving inclusive processes; easily accessible, understandable clear messages; includes species sustainability, markets, seasonality <i>Outcome:</i> increased adoption by consumer, credibility and trust; media uptake <i>Relationship:</i> less conflict and reaction from fishing industry
Q Catch: Roadshow opportunities; seafood festivals, conferences and foodies events	INF CON	<i>Purpose:</i> awareness raising; listening to community/consumers; build relationships <i>Process:</i> fisher and industry participation; clear messages <i>Outcome:</i> improved feedback from community, credibility and trust; Media uptake, press releases <i>Relationship:</i> less conflict; respect
**Photovoice exhibition in public spaces utilising images from the FRDC SLO projects and approved quotes from fisherman	INF CON	<i>Purpose:</i> awareness raising; listening to community/consumers <i>Process:</i> fisher and industry participation; clear messages <i>Outcome:</i> positive feedback from community, credibility and trust; Media uptake <i>Relationship:</i> respect
Who are the fishermen? (see Attachment 15)	INF	<i>Purpose:</i> awareness raising; illustrate skills, professionalism; environmental knowledge and values <i>Process:</i> fisher and industry participation; clear messages; uptake in media, uploaded to QSIA and Q Catch websites where appropriate, also used in

		<p>conjunction with QR Code and mini fact sheets where appropriate</p> <p><i>Outcome:</i> positive feedback from community, credibility and trust; Media uptake</p> <p><i>Relationship:</i> respect</p>
<p>QR Code linked with fisher profiles, species, and sustainability credentials; online content found on Q Catch website based on mini factsheet.</p>	<p>INF CON</p>	<p><i>Purpose:</i> awareness raising; listening to community/consumers</p> <p><i>Process:</i> wholesalers and retail shops participation and support; clear messages; press releases</p> <p><i>Outcome:</i> positive feedback from community, credibility and trust; Media uptake; Mini factsheets in easily downloadable format and used by retailers and marketers; Media uptake</p> <p><i>Relationship:</i> respect</p> <p><i>Methods:</i> QR code metrics and google analytics tracking</p>
<p>Stakeholder Advisory Group (change Board membership to only fishers and have a separate stakeholder advisory group)</p>	<p>INV COLL</p>	<p><i>Purpose:</i> get input and feedback about QSIA approaches</p> <p><i>Process:</i> key stakeholders meet twice yearly with QSIA to discuss ideas and provide feedback</p> <p><i>Outcome:</i> credibility and legitimacy</p> <p><i>Relationship:</i> mutual respect</p>
<p>**Instagram pilot NSILP support</p>	<p>INF</p>	<p><i>Purpose:</i> awareness raising; build relationship with consumers/community</p> <p><i>Process:</i> fisher participation; clear messages about sustainability and community values</p> <p><i>Outcome:</i> positive feedback from community, credibility and trust</p> <p><i>Relationship:</i> respect</p>
<p>Identify opportunities to build partnerships with fish stocking associations (sponsorship/funding for</p>	<p>INF COLL</p>	<p><i>Purpose:</i> improve environmental credentials and build relationships</p>

<p>restocking of fingerlings) and build relationship with community via Clean Up Australia</p>		<p><i>Process:</i> # active fisher participation; # partnerships; regular commitment press releases; Promoted on QSIA website, blogs, press release and social media <i>Outcome:</i> cleaner marine/coastal environment; positive feedback from stakeholders and community; credibility; media uptake <i>Relationship:</i> respect</p>
<p>Promotional material - posters</p> <p>Sandwich boards with information about fishing type and sustainability credentials by inshore net fishers</p>	INF	<p><i>Purpose:</i> improve environmental credentials and increase awareness <i>Process:</i> # fisher participation; promoted on QSIA website, blogs, press release and social media <i>Outcome:</i> positive feedback from stakeholders and community; credibility; media uptake; uptake by fishers <i>Relationship:</i> respect</p>
<p>Support fishing industry leaders and facilitate media and promotional opportunities (promoting good practice and innovative ideas)</p>	COLL	<p><i>Purpose:</i> Identify and support leaders to use opportunities to promote environmental credentials, good practice, innovation <i>Process:</i> # fisher participation; promoted on QSIA website, blogs, press release and social media <i>Outcome:</i> positive feedback from stakeholders and community; credibility; media uptake <i>Relationship:</i> respect</p>
<p>Investigate feasibility of Seafood trail - pilot South East Queensland</p>	COLL	<p><i>Purpose:</i> improve environmental credentials and increase awareness <i>Process:</i> # fisher participation; promoted on QSIA website, blogs, press release and social media <i>Outcome:</i> positive feedback from stakeholders and community; credibility; media uptake; funding</p>

	<p>opportunities identified; partnership established with sector-wide group of industry bodies <i>Relationship:</i> respect</p>
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*Methods of evaluation of engagement to achieve high levels of SLO almost always need to include interviews, surveys, focus groups or workshops with targeted stakeholder to determine the influence or impact of the engagement. If it involves print media, then a media analysis is needed. If it involves on-line communication and/or social media, then typically Google analytics measures and metrics (acquisition, page views visitors, bounce rate) should be identified.

** Indicates engagement techniques evaluated through this project.

Attachment 12 - Humanising narrative – ‘Jason, Marjodie and the Bay’

Jason, Marjodie and the Bay.

She began her ocean-going life forty six kilometres south-east of Brisbane, in saltwater wetlands bustling with tiny prawn larvae. Jason was four when he first saw her floating in the Bay. Watching on from the dinghy’s bow as her rudimentary shell launched into Weinman Creek, he imagined himself as her skipper, perched upon his father’s knee. *Marjodie*, named after his sister Jodie and mother Marilyn, would become so much more than just a beautiful boat.



From left – Norm, Jodie, Dave and Jason. Marjodie in the Background.

Built in 1980 by his father Dave, and local boat builder Norm Weller, she was the pride of his old man’s fleet. A second generation fisherman, Dave knew the value of a first-class boat; a lesson learnt the hard way when his father drowned at sea. A distinguished member of Moreton Bays’ fishing flotilla, she weaved her way into Thomson family daily life. For eight years she fished the Bay, starring in Jason’s earliest memories, ‘As a kid, my holidays were always on the boat netting with Dad, always, no matter what’. Aboard Marjodie he became acquainted with the Bay. Aboard Marjodie he sorted fish and loaded nets. Aboard Marjodie his father taught him how to ‘fish the country’ sustainably and not to overfish.



Jason and Marjodie - 1980

When she was sold in 1988 to a Townsville fisherman they vowed to get her back if they ever had the chance.

People ask me sometimes 'do you enjoy fishing' and really it was just something I was born doing; I've never done anything different. I wouldn't say I chose to be a fisherman – I kind of always knew I'd be one. I remember as a kid the old man used to pay me two percent or something. He gave me a cut when I was about twelve or thirteen. It was big money for a twelve year old.

About twelve years ago Jason bought the fishing business from his father. With business partner Ron, once a member of his father's crew, they fish the Northern and Southern ends of Morton Bay. A greener fisher than his father, he sees the Bay flourish. She is an amazing place, he says.

Fishermen know, it's always been survival of the fittest but Jason believes it's survival of the smartest. Banding with another crew – comrades and rivals alike – they thoughtfully work the resource, and spell the Bay as she needs. 'She is in charge', he will tell you. 'You can sit there and huff and puff and say, alright we are going to have five crews, but if Moreton Bay says no I only want there to be three, that's all she'll give you, and that's all she's going to let you sustain. No one controls that apart from Mother Nature - that's just how it is'.

We always said we'd get her back. And we did. I brought her back. She's been mine now for longer than she was his. She is our primary vessel - we use her every week. But it's funny; I don't know if she'll ever really be mine.



Marjodie – Spotted in the Trade-a-Boat ad, 2004.

When he saw her in the *Trade-a-Boat* in 2004, Jason and his dad were on a plane the very next day. Married now, when not fishing with her in the Bay, Jason holidays aboard Marjodie with his three daughters and his wife. Somehow trying to reproduce his memories, he shares his inherent knowledge with his girls. He'd like to put a young bloke on who's keen, and train him up: he knows one day he'll be too old to fish. If he can't find Marjodie a skipper, fit for the esteemed job, he will throw his licence in the cupboard and it will be all over. He will tell you, she is a beautiful boat. The pride of his fleet. But she is much more than that. She is the heart of his business, the symbol of a lifestyle and a lifetime connected to the Bay.

Reference List

Melé, D. 2003, "Organizational Humanizing Cultures : Do they generate social capital?", *Journal of Business Ethics*, vol.45, pp. 3–14. Retrieved from <https://link-springer-com.libraryproxy.griffith.edu.au/content/pdf/10.1023%2FA%3A1024112226673.pdf>.

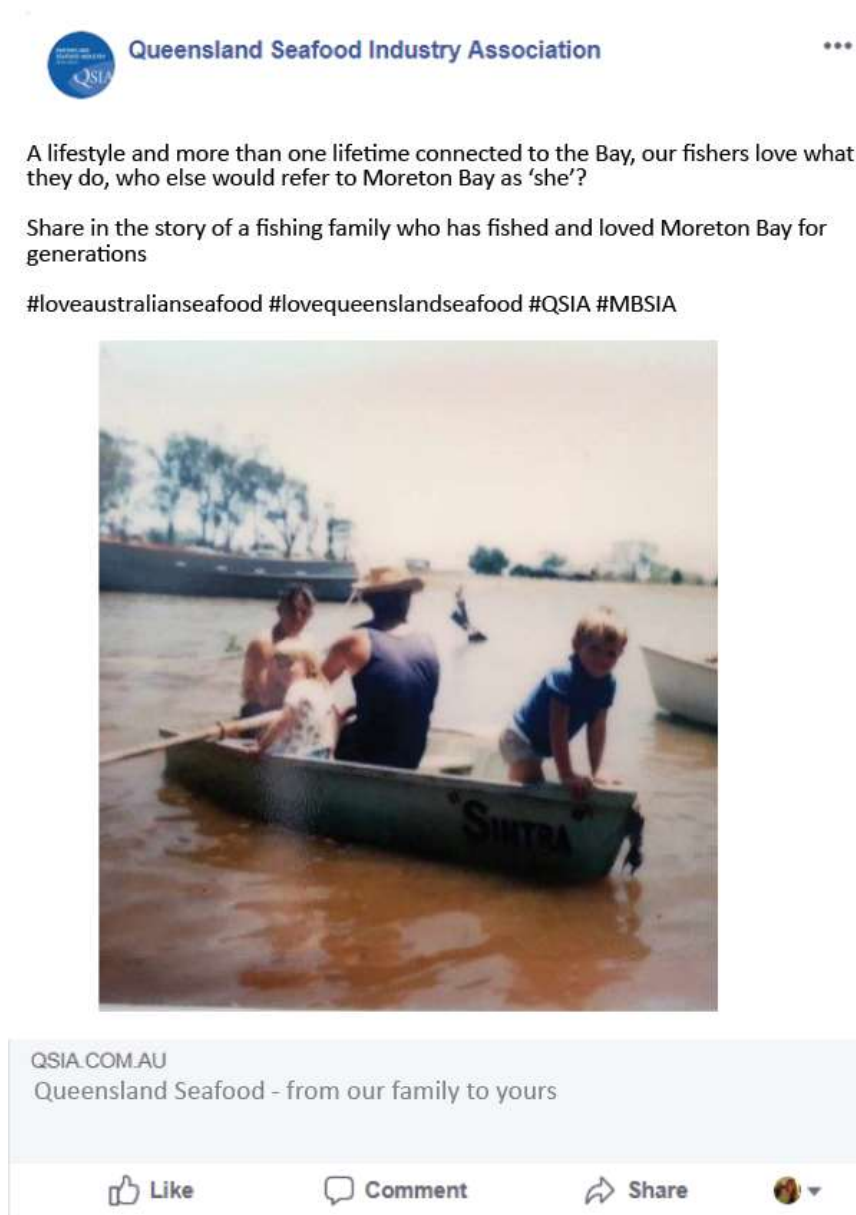
Attachment 13 - Examples of narratives demonstrated by different social media

Purpose

This project developed an article which aimed to humanize the SEQ wild catch commercial fishing industry as an example of a positive news media story which could be circulated by industry in print, online and social media. The full story can be found in Attachment 12. Examples of how this could be portrayed are given below.

Example 1: A basic Facebook post sharing a story

Tips: A great image, interesting text, a succinct introduction to the story, break up lines of text for readability, a link to the story should be embedded on a website or blog, a 'call to action' to prompt the reader to click on the link, use consistent hashtags to increase searchability on search engines.



Queensland Seafood Industry Association

A lifestyle and more than one lifetime connected to the Bay, our fishers love what they do, who else would refer to Moreton Bay as 'she'?

Share in the story of a fishing family who has fished and loved Moreton Bay for generations


#loveaustralianseafood #lovequeenslandseafood #QSIA #MBSIA

QSIA.COM.AU
Queensland Seafood - from our family to yours

Like Comment Share

Example 2: A basic Facebook post sharing a video


Tips: A great image, interesting text, a succinct introduction to the video, break up lines of text for readability, a link to the video (the video can be easily embedded on a website (via YouTube, click 'share' then 'embed', copy code and include on website) a 'call to action' to prompt the reader to click on the link.

 Queensland Seafood Industry Association ...





Ever wondered how our fantastic Queensland seafood is caught? Tunnel netting is one method that catches some of our most popular fish with almost no bycatch

This short video explains how its done

#loveaustralianseafood #lovequeenslandseafood #QSIA #MBSIA



QSIA.COM.AU
Queensland Seafood - from our family to yours

 Like  Comment  Share 

Example 3: A Facebook post encouraging interaction

Tips: A great image, interesting text asking a question of Facebook followers or asking followers to ask a question, be online to respond, break up lines of text for readability, brainstorm answers



Example 4: A twitter post - a basic tweet

Tips: No image required, a simple interesting small paragraph less than 140 characters perhaps mentioning an event, demonstrating support for a cause or consider asking a question encouraging interaction. Mention related organisations using hashtags.



Example 5: A twitter post – a tweet sharing a story

Tips: A great image, an interesting title, short introduction to the story, a link to the story (should be embedded on a website or blog), a 'call to action' to prompt the reader to click on the link, use of consistent hashtags to increase searchability on search engines, tag the author if appropriate (click 'who's in this photo' and add the author) and mention related organisations using hashtags



QLD Seafood Industry Assoc @QSIA

Share in the story of a fishing family who has fished and loved the Bay for generations

www.qsia.com/stories/frommyfamilytoours

❤️ Moretonbay #lovemoretonbay

#loveaustralianseafood #lovequeenslandseafood #buylocal



Example 6: An Instagram post sharing an image

Tips: A great image, an interesting title, a succinct introduction to the story, a link to the story (should be embedded on a website or blog), a 'call to action' to prompt the reader to click on the link, use consistent hashtags to increase searchability on search engines, tag the author if appropriate (to do this, click 'who's in this photo' and add the author) and mention related organisations.



seafoodcommunities_au • Follow

seafoodcommunities_au

Planning to visit our stunning Moreton Bay this weekend? our fishing families know the bay inside and out to bring you the freshest seafood

#loveaustralianseafood #lovequeenslandseafood #lovemoretonbay #buylocal



7 HOURS AGO

Attachment 14 – QR Code digital marketing strategy

QR Codes or quick response codes have been in the marketplace since the 1990's but their use as a marketing and engagement tool for many industries has not reached its full potential. Until recently, mobile phone users needed to download a specific app to be able to read QR codes however in 2017, Apple installed an active QR code reader as part of the iOS 11 software system which operates automatically with the iPhone's camera app. iPhone users can now simply use their camera to instantly scan QR codes and without even pressing the 'home' button. This improved mobile connectivity along with cost effectiveness, versatility and 'track-ability' means that QR codes should be an effective engagement method.

This QR Code digital marketing strategy acknowledges a similar program developed by Ocean Watch but could be more strategic, concise and targeted with three individual QR codes leading to three specific web pages. Each of the web pages will be mobile responsive and present concise and targeted information to achieve the purpose of each campaign rather than a page containing too much information.

Table 1 – QR Code targeted approaches

Method	Purpose	Evaluation
QR Code campaign – sustainability of fish species (link to specific pages on the Q Catch website)	<ul style="list-style-type: none"> a) To inform and educate consumers as to the sustainability credentials of specific fish species by displaying QR codes at point of sale, supplier packaging and marketing material b) To demonstrate fishers' commitment to environmental stewardship, sustainability and adherence to strict regulations 	Clicks measured by google analytics, page views and further engagement
QR Code campaign – chain of supply, locally caught, premium quality (link to specific pages on the Q Catch website)	<ul style="list-style-type: none"> a) To inform and promote to consumers specific fish species that are caught locally by displaying QR codes at point of sale, supplier packaging and marketing material b) To demonstrate fishers' commitment to providing premium quality seafood to the local market 	Clicks measured by google analytics, page views and further engagement
QR Code campaign – fisher profiles (link to specific pages on the Q Catch website)	<ul style="list-style-type: none"> a) To promote the industry by creating a profile for specific fishers and humanizing the industry b) To demonstrate to the public that the industry is valued part of the Australian economy and should be supported 	Clicks measured by google analytics, page views and further engagement

Attachment 15 – Weblinks

1. Illustrations of humanising the industry

Seafood New Zealand – clickable photos with individuals name and role in industry

<https://www.seafoodnewzealand.org.nz/>

Alaska Seafood – ‘Families and Communities’ – ‘Fishing in Alaska a way of life for generations; ‘One Way Alaska puts families and communities first’ – Generations of fishing downloadable brochure “Like their families before them’

<https://www.alaskaseafood.org/sustainability/>

New South Wales Professional Fishermen’s Association (NSW PFA) – ‘The PFA provides a voice for our community’ links to video ‘Drawing the Line’ showing fishers, economics, management - <http://www.nswpfa.com.au/>

Humans of New York – not related to fishing, but an examples of blogs and stories about people living in New York City

- <http://www.humansofnewyork.com/>

2. Industry values and membership codes

Seafood New Zealand - ‘A Promise made is a promise kept’ – ‘Our promise in practice’ – ‘This is our code of conduct’ – front page of website <https://www.seafood.co.nz/>

Videos of values – e.g. ‘we’re fishing smarter’; ‘we’re at the heart of communities’

Alaska Seafood - ‘Sustainability is in our genes’ – ‘Alaska, partners in global food security and a resilient planet’ - Generations of sustainability – ‘like their fathers before them’

Wide Bay Burnett/Great Sandy Region – ‘Seafood Industry Environmental Management System’ -

<https://www.qsia.com.au/media/widebayems.pdf>

Moreton Bay Seafood Industry Association (MBSIA) – ‘Tunnel Net Code of Conduct’ - <https://www.mbsia.org.au/>

NSW PFA - ‘Sustainable mud crab story’; ‘What’s in season’ <http://www.nswpfa.com.au/>

Oceanwatch Australia – ‘National Recreational Fishing Code of Practice’ -

<http://www.oceanwatch.org.au/community/fish-in-it/national-code-of-practice-for-recreational-fishing/>

Sunfish, recreational fishing – ‘Fishing for the Future’ – Go Fish rules – Sunfish Qld Code of Practice/Angling Ethics’

<http://sunfishqld.com.au/gofish.php?m=4>

Advance Rockhampton Region – ‘Rockhampton recreational fishing voluntary code of practice’ -

<https://www.advancerockhampton.com.au/Visit/Fishing/Rockhampton-Recreational-Fishing-Voluntary-Code-of-Practice>

3. Sustainable seafood guides

Seafood New Zealand: scroll down front page to ‘Best Fish Guide’; Our recipes; Our chefs

<https://www.seafoodnewzealand.org.nz/>

AMCS – ‘Australia’s Sustainable Seafood Guide’ – online and available on an app for i-phone or Android – includes searchable database by fish; assessment criteria - <https://www.sustainableseafood.org.au/pages/about-the-guide.html>

Seafood Industry Australia - Critique of AMCS guide - <https://seafoodindustryaustralia.com.au/about/>

GSSI/FRDC – Whichfish – Seafood Risk Assessment - <http://whichfish.com.au/>

NSW PFA - ‘Sustainable mud crab story’; ‘What’s in season’ <http://www.nswpfa.com.au/>

‘GoodFishBadFish’ (no longer being updated) - <http://goodfishbadfish.com.au/>

4. Fact sheets, infographics, posters and videos

Seafood New Zealand: front page – value of industry; our species <https://www.seafoodnewzealand.org.nz/>

Alaska Seafood - <https://www.alaskaseafood.org/sustainability/>

First page links to ‘Fisheries Management’; ‘Full utilization’; and ‘Certification’ and Resources – downloadable brochures:

- ‘Alaska seafood – a model for sustainability’
- ‘Alaska seafood – Sustainability in plain English’
- Economic value reports
- Report card on marketing assn, incl market transparency, improving quality
- Traceability
- Utilisation of the fish – great infographic

FRDC - Status of Australian Fish Stocks Reports – searchable by species - <http://fish.gov.au/>

MBSIA - Tunnel netting best practice - <https://www.youtube.com/watch?v=hf8KpVEuHAc>

Oceanwatch – tunnel netting videos

<https://www.youtube.com/watch?v=owilZ5JEIyk>

Tailor - <https://www.youtube.com/watch?v=ky2RAXEHLEo>

Rabbifish - <https://www.youtube.com/watch?v=XU-jTg2iyil>

Flathead - <https://www.youtube.com/watch?v=fVqyd3gEYRE>

Bream - <https://www.youtube.com/watch?v=kW5iAg6NfyA>

Sea mullet - <https://www.youtube.com/watch?v=jOJHix1ui44>

Whiting - <https://www.youtube.com/watch?v=nc-nXBvLFg8>

Attachment 16 – ‘How to’ guide 2 – Social media checklist for industry

Key terminology

Analytics –tracks and reports website performance. For example, Google Analytics, free web software, works by installing a small piece of JavaScript code on web pages which collects data and engagement.

Blog – based on the term ‘web-log’, a blog is a collection of regular posts or articles uploaded to a web page by the administrator. They differ from a static webpage as readers can like, comment and share.

Call to action – a marketing term designed to prompt a response from the reader, in this context to ‘click’ on a link to learn more. For example, a like to a website, blog post or YouTube video.

Engagement – in this context, ‘social media engagement’ is a collective term including reach, impressions, likes and shares of social media posts

Follower – a person who has subscribed or liked a social media account and receives updates and notifications

Hashtag - Instagram hashtags work like keywords, a hashtag symbol is placed in front of each key word which then become searchable ‘tags’ on the internet.

Insights –gained from analytics data to identify patterns and trends

Post – A comment, image or other media posted on a social media platform

Reach and impressions - ‘reach’ refers to the number of times users saw a post, ‘impressions’ shows how many times a post was seen. For example if one user has seen a post 3 times this would equate to 1 reach and 3 impressions. Hence the number of impressions follows a similar trend to total reach but gives an indication of how many times the Facebook post or Instagram post was visible in newsfeeds.

Retweet – a reposted or forwarded ‘tweet’

Tweet – a short message (140 characters or less) or image communicated on Twitter

What is social media and how does it work?

Social media or social networking internet sites have attracted millions of users across the globe, with projections of an estimated 2.77 billion social media users worldwide for 2019 (The Statistics Portal 2018). Similarly, the number of smartphones and mobile devices has also increased dramatically making social networks and social media more available than ever before. Facebook is currently leading the market with around 1.86 billion monthly active users. Table 1 shows the number of social network users for each of the major social media platforms in Australia. Australians are some of the most active users of Facebook with a total of around 60% of the population using Facebook and half of the population accessing Facebook at least once a day (Sensis 2018).

Table 1 - Number of social network users in Australia (October 2018)

Social network	# Users
Facebook	15,000,000 Monthly Active Australian Users
YouTube	15,000,000 Unique Australian Visitors per month (UAVs)
Instagram	9,000,000 Monthly Active Australian Users
Twitter	3,000,000 Monthly Active Australian Users approx
LinkedIn	4,200,000 Monthly Active Australian Users approx

Many users access these networks daily which can be pre-existing of friends or encourage strangers to connect based on personal or professional interests, views and activities. Social media provides an ever-increasing platform for industry to communicate and engage with the community and most importantly is an opportunity for industry to proactively communicate their values and objectives. A Sensis report (2018) found that more than half of consumers are more likely to trust a brand if they interact with consumers positively on social media. Hence a reactionary or defensive approach may impact negatively on the community's perception.

Opportunities

The benefits of such high reach and engagement levels provides an opportunity for industry to educate and increase awareness, build loyalty and create a 'movement' thereby building trust and credibility. Opportunities that social media can offer include:

- Establishment is minimal cost or low cost
- Allows industry to send out clear messages based on core values and objectives
- Provides opportunity to proactively communicate the facts
- Facilitates increased traffic on industry websites and other online sites with the potential for improved rankings on search engines
- Provides opportunity for real-time community feedback, comments and interaction
- Provides opportunity to build credibility and trust
- Can build loyalty and create a movement based on referrals and further engagement
- Provides opportunity to address misinformation and negativity, proactively and with positivity and facts

Several social media platforms provide access to powerful analytical tools which provide target audience insights

Developing a social media strategy

Step 1: Define the purpose and objectives

Developing a social media strategy should begin with clearly setting the purpose and achievable objectives for the strategy. A social media strategy should be part of an overall communications and engagement strategy, have a clear purpose, and be in line with the company or business visions and aspirations. The purpose might include to:

- Inform audience about positive attributes or facts about the industry
- Influence attitudes about the industry
- Attract more customers, sell more product, expand into new markets
- Build loyalty and create a 'movement'
- Prompt a respectful dialogue

At this point, objectives should be developed with a view to how they could be evaluated according to S.M.A.R.T indicators: Specific, Measureable, Attainable, Realistic and Timely. For example, if the purpose of the strategy is to build brand loyalty, the objective could be to increase Facebook page likes by 10 likes in one week, average 'reach' levels greater than 200 in one week and average 'impressions' greater than 400 in one week.

Step 2: Clarify your audience

The next step involves clarifying the target audience which will influence the choice of social media platform. The success of social media is based on the authenticity of the connection with the user, therefore clarifying the target audience and their preferred social media platform is essential. Considerations to help guide this process include:

- Demographic information such as age and gender
- Their interests and concerns and how these can build a relationship with industry
- Objectives of communication
- Stakeholder analysis

Step 3: Which social media platform?

Facebook is the most popular online social media platform however, depending on age, other demographic information, and key messages, other platforms such as Instagram and Twitter may be more appropriate. For example, a study by the Pew Research Centre found that Instagram and Twitter is more popular for 18 to 29 year old adults than for older age groups (Smith et al. 2018). Considerations to help choose a social media platform or platforms include:

Facebook is the most popular social media site for both individuals and businesses. Industry or business Facebook pages can interact with their followers in 'real time' via comments, likes and shares. Facebook Insights is freely included and is a powerful analytical tool for the administrators of Facebook business pages to explore reach and engagement. Facebook ads also provide an opportunity for paid targeted marketing opportunities based on demographic data and interests.

Twitter is a platform used to send very short messages or 'tweets' that are less than 140 characters. It is helpful to make announcements and 'calls to action' directing users to other sites. Followers can also interact, like and share posts. Twitter posts often include hashtags which are essentially keyword phrases which can help followers or consumers find your industry online. The use of hashtags is optional but is a useful way for categorizing content.

YouTube is an online site where industry can upload, share and view videos. It is a powerful visual tool for transmitting industry values, products and services. YouTube also has its own analytics tool to track how many time a video has been viewed, which country the video was viewed from and how many comments or ratings it has received. Videos can also be easily shared on other platforms and embedded onto websites.

The Instagram social media platform is also based on visual information. It has been used more often for photos but videos can now be uploaded and shared. Instagram posts are also often used with hashtags which can be a powerful social media engagement tool as it can improve the searchability of posts on search engines and the opportunity to connect with followers who support your industry. Hashtags can become a recognisable 'brand' and form the basis of a 'community' of followers who use the hashtag in their own posts thereby increasing reach and engagement.

Blog posts are regular articles such as news, opinion pieces or another piece of writing arranged on a web page by the administrator in reverse chronological order. They are usually updated regularly and allow for readers to comment, like and share. Blog posts allow industry to post articles about relevant topics and issues and are a useful tool which can help create a community of followers and increase search engine visibility.

Step 4: Define key messages and create shareable content

Defining key messages provides a framework for developing shareable content. A key message is the information you want your target audience to hear and remember, reflecting industry values and objectives. These messages should also be:

- Easy to understand and concise
- Positive and based on facts
- Relevant and tailored to the target audience
- Compelling and memorable

Shareable content can be developed with one social media platform in mind or several. For example a blog post or news article can be shortened for a Facebook post and shortened again for a simple 'call to action' to be used on Twitter. Images should also be used where possible as they engage the audience. The 'call to action' should also be included to maximize exposure between online platforms. For example, the core messages of a blog post can be used as the 'call to action' on a Facebook post encouraging followers to click and read the blog post. This same 'call to action' could be used on a 'tweet' to also direct traffic to the blog post.

Step 4: Review and revise

Social media analytics such as Facebook Insights and Instagram Business Insights are powerful tools to give feedback and help guide social media strategies. Social media analytics can help industry understand who and how followers are interacting with social media platforms. For example, Facebook analytics includes reach and engagement data for the page and individual posts. So comparisons can be made between the most popular posts (high number of likes, shares and comments) and who shared posts based on demographic data such as age, gender and location. This data may lead to review and revision of the social media strategy key messages and target audiences.

Researching how similar industries approach their social media can also be helpful. This requires looking at other Facebook pages to see which of their posts were the most popular shown by the number of likes and who interacted with them the most. Observing 'who' interacted with posts however is dependent on the privacy setting of the user who 'liked' or 'shared' the post.

Tips and Tricks

A social media strategy should be considered part of an overall strategic communications and engagement strategy and based on core messages. Many social media platforms offer tools which can track some level of audience engagement and offer important insights to monitor performance and understand which kind of content works best for the target audience. Keep in mind however, that there are some limitations to the simple analytics: it might not be able to identify if the audience response is from your target audience unless posted comments reveal that; and it might not reveal if your message is understood in the way intended or has influenced thinking. Social science analytical tools may need to be used for this purpose.

Facebook

An industry Facebook page should have an easily recognisable name. Unique names can be created when a page has reached 25 likes or more.

Respond to any negativity quickly and based on factual information

Liking similar pages usually results in return likes thereby increasing reach

Consider using Facebook Live to record live videos which encourages engagement. These videos are then posted to your page to enable viewing at any time.

Facebook provides a social media analytics tool, Facebook Insights, which is available to anyone who is assigned as 'admin' to a page. Reach and engagement metrics are provided for each post and can be downloaded for further analysis. Key metrics include the number of likes and shares as well as what time followers are most active.

Facebook Ads also provides an opportunity for targeted paid marketing based on audience age, locality and interests.

Twitter

Use the Twitter search function to research what is most popular and who is following who in your interest area.

Join a conversation about a topic of interest to your industry and forward on if relevant to your followers.

Be concise and consistent, utilising a small number of hashtags consisting of 3 words or less and no spaces. Add the same hashtags to each social media platform. For example '#loveaustralianseafood' followed by "#buylocal" and "lovefishing"

Twitter also has an in-built free analytics tool which tracks number of tweets, likes, retweets and engagements.

Instagram

Pin the most popular posts to the top of the profile page so when followers click the profile they can see your most popular posts and hopefully engage further.

Consider scheduling posts in advance using the Instagram scheduler program accessed from a computer. There are both free and paid programs

Use hashtags based on key messages and use the same hashtags on each social media platform

Mention other Instagrammers by tagging them by typing the symbol '@' in front of their username, they will then be notified and may join the conversation thereby increasing engagement.

Instagram insights is only available to business profiles and provides basic metrics including reach, impressions and profile visits.

Blog posts

Break up text to increase readability

Images make blog post more visually appealing so use good quality images that are either your own or are royalty free.

Proofread and fact check

Respond to any blog comments and questions promptly

Install Google Analytics to measure results including acquisition which shows how people arrived at the blog post and whether they were referred from another site such as Facebook or Twitter.

How to deal with negativity on social media

Social media platforms have created significant opportunities for industry and business however, there is also an element of risk when followers respond negatively or initiate their own posts directed at industry. Because social media can quickly be accessed and shared, negative comments can circulate quickly. Therefore it is important to be able to respond quickly so that future 'sharing' of the comments includes the industry response based on values and facts.

Assess whether social media content is contentious, anticipate possible negative comments and plan responses beforehand. Responses should be timely and based on facts which can be further supported with a 'call to action' to a website link or blog post which explains the issue further.

Conclusion

It is also important to note that building a successful social media presence is a process requiring regular interaction with followers, supported by reviewing and revising content to ascertain 'what worked' and 'what didn't work'. Social media analytics can help to narrow the target audience but gaining insights into follower's views and opinions may require follow-up surveys or interviews.

References

The Statistics Portal (2018) Accessed 28th November 2018 <https://www.statista.com/statistics/278414/number-of-worldwide-social-network-users/>

Sensis (2018) Yellow Social Media Report 2018 - Consumers Accessed 4th December 2018 <https://www.sensis.com.au/about/our-reports/sensis-social-media-report>

Smith A, Anderson M, Caiazza T (2018) Social Media Use in 2018, Pew Research Centre.

Attachment 17 – Results - Photovoice Display and Survey

The survey was designed to discover the impact on the viewers/audience. Data was analysed using Excel spreadsheets and Survey Monkey’s own data extraction tools.

Question 1 asked - Before viewing the exhibition, which of the following words or themes would you associate with the Australian commercial fishing industry (that is Australia's commercial fishing industry as a whole). You can identify more than one and add an 'other'. Almost all of the respondents responded in a positive way, about the industry being sustainable and well-managed, providing quality seafood, being important to the economy, and source labelling being important. With one response received from a participant who felt that the industry did not share the resources with other stakeholders. See Figure 1.

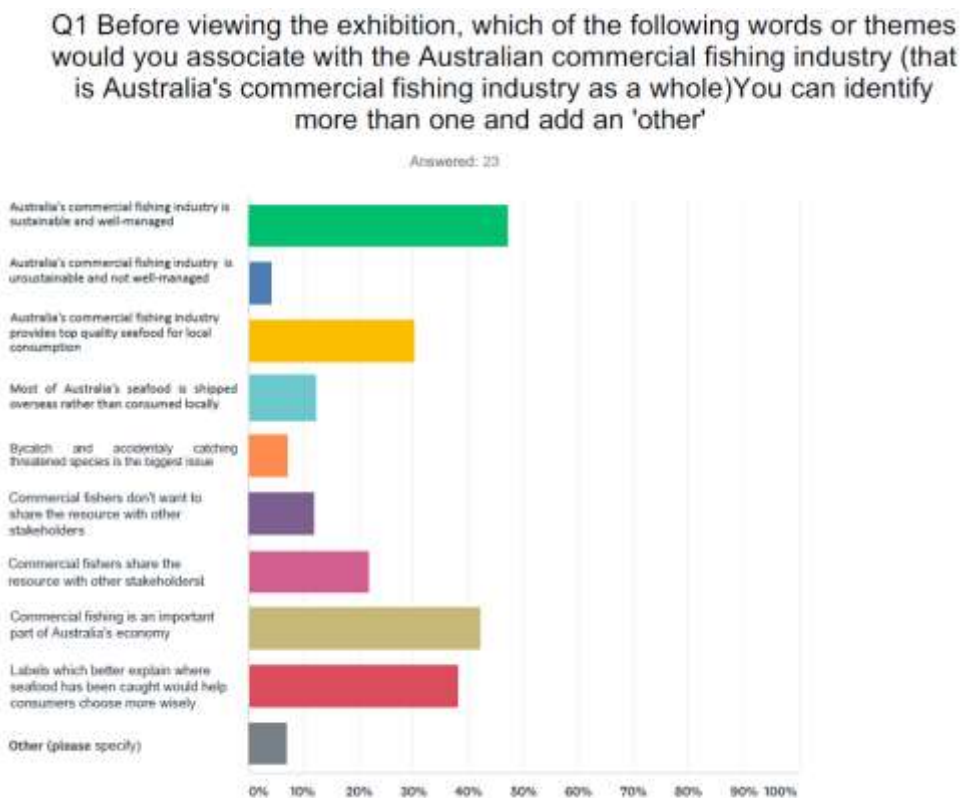


Figure 1 Themes identified with fishing industry

One response was received for 'other' and the respondent added 'I came to the exhibition hoping to learn something about the industry. I recognise that it is an important part of the Australian economy. The exhibition presented a very positive view of the industry, but there was no data to support the suggestion that it is sustainable and well-managed'.

Question 2 asked to identify three images/stories that appealed the most. The photovoice exhibition had a total of 21 images (which were numbered) and respondents were asked to identify the image which appealed to them the most. The results are shown in Table 1. The images that appealed to participants the most was an image showing beach netting for mullet, a fishermen saving a stranded baby whale and an image of people lining up to buy seafood at the wharfs. These images included quotes from fishermen discussing how they value the environment, their commitment to reduced bycatch and how popular their product can be with consumers.

Table 1: Most popular images photovoice exhibition (October 2018)

First image	Second image	Third image
11	5	8
10	6	13
21	7	19
6	5	11
6	10	
10	12	3
10	11	6
4	3	8
19	13	6
16	10	
1	13	4
		1
	2	19
6	19	18
13	2	21
5	6	12
6	10	11
4	3	8
19	13	6

Questions 3, 4 and 5 asked why images were chosen and which images improved understanding the coastal wild catch fishing industry.

Not all respondents answered these questions but answers that were received show an interest in sustainability: compassion, knowledge, minimising environmental harm and by-catch, and mentioned measures to improve sustainability include development new fuel and trawling systems. Skill and standards to produce healthy food were also mentioned.

Fourteen people responded to Question 6 which asked which images seemed particularly credible. Images included an environmental award, recycling oil, and quality product. One comment received was about keeping the environment pristine and referred to an image of a grounded trawler and a quote by a fisher who said ‘we never left one litre of diesel in her or one drop of oil on the beach.’

Question 7 asked which key messages would positively influence your perceptions of the coastal wild catch fishing industry. The most popular response related to good environmental stewardship followed by locally caught and sold seafood is a premium product that supports local businesses and industry complying with regulations. See Figure 2.

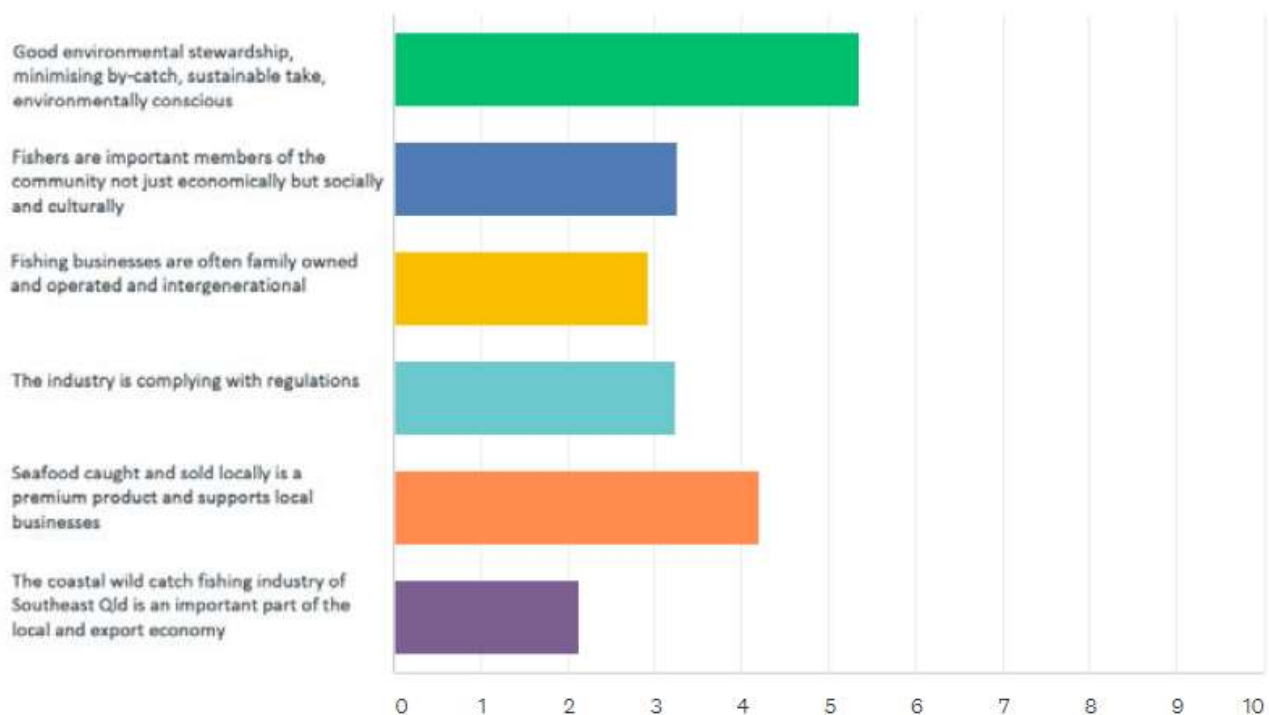


Figure 2 – Q 7 Ranking of importance of messages positively influencing your perceptions

Question 8 asked if the display changed their views of the industry. 53% of respondents said that their views hadn't changed after viewing the exhibition but 47% of respondents said their view had changed. Of the 27% who said yes, they added comments: 'trying to reduce bycatch and 'I didn't realise how much seafood is available locally and not exported'.

Respondents were predominantly in the 55 to 64 year old age group, then 65+. Two of the respondents indicated they were part of the industry.

In response to Q11, the majority of respondents indicated that they get most of their information about the industry from newspapers followed by 'word of mouth' and 'social media'. The responses for other were 'tv', 'I'm in the industry', 'my husband' (fisherman) and 'there isn't any'.

Attachment 18 - Results - Fishquiz

A total of 118 responses were received between 15th October and 5th December 2018. Data was analysed using Excel spreadsheets and Survey Monkey's own data extraction tools.

In general, in the quiz responses, there was a relatively low level of knowledge about the Australian seafood industry with the percentage of correct responses to the questions as follows. However the percentage of correct answers did increase when the quiz was shared on the QSIA Facebook page.

1. how many kg of seafood Australians eat each year -33.9%
2. how much is imported – 42.28%
3. where we get most of our imported seafood – 61.62%
4. Locally available seafood not native to Australia – 74.0%
5. Skills needed by commercial fishermen – 85.10%
6. How often prawn fishermen fill out logbooks – 53.09%
7. Why spanner crabs have that name – 70.58%
8. By-catch through tunnel netting for mullet – 39.54%

The last two questions were about age and where they got most of their news of the industry.

The lowest scored question was about tunnel netting. Answers were fairly evenly spread. 39.85% answered correctly with 'almost none', as shown in Figure 1.

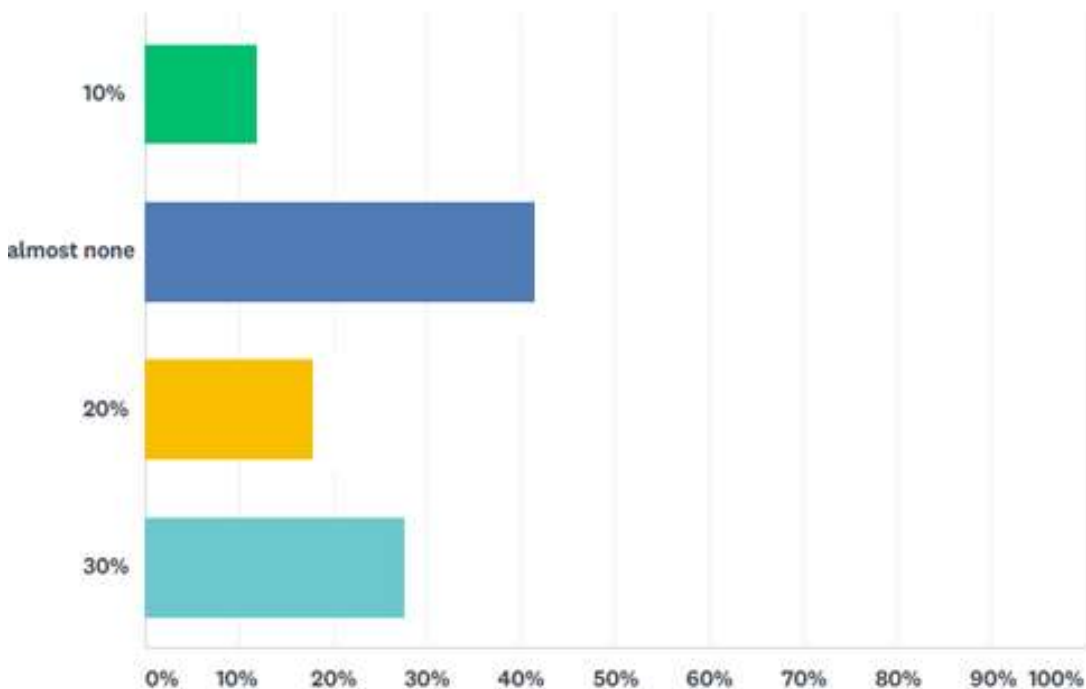


Figure 1 – Responses to by-catch in tunnel netting

The question with a highest degree of accurate responses was about the skills needed by commercial fishermen. 85% of respondents answered 'all of the above' as in Figure 2.

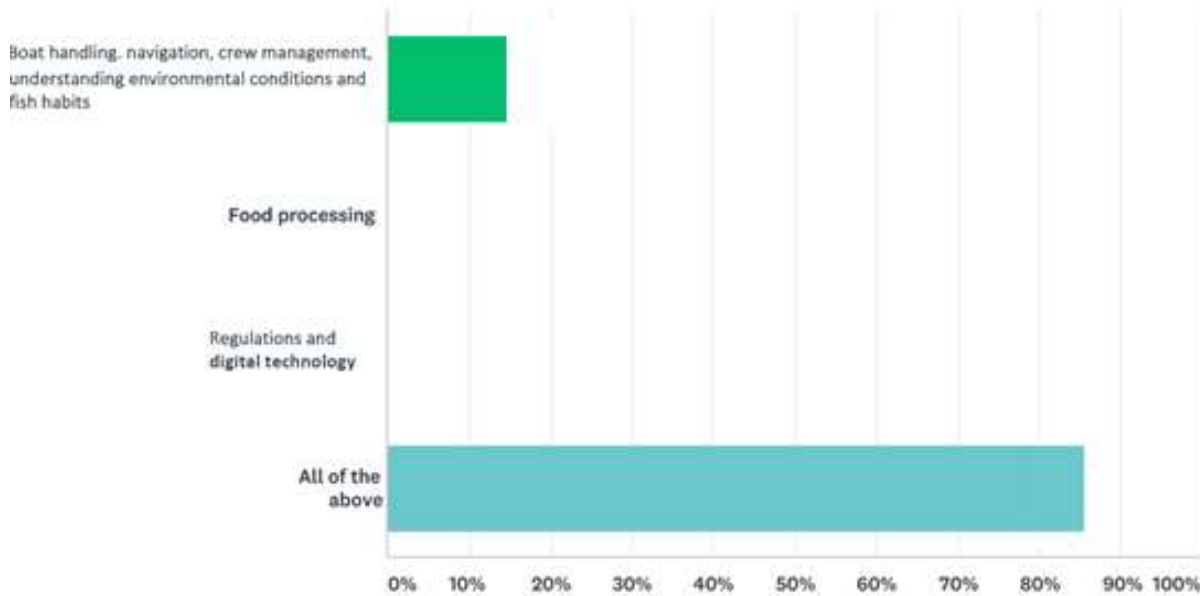


Figure 2 Results from - What kind of skills do commercial fisherman need to produce seafood for the consumer?

There was a fairly even age spread of respondents ranging from under 18 to 65+.

In response to a question about where they get most of their news about the commercial fishing industry, the most popular response was word of mouth (42.91%), followed by social media (40.25%) newspapers (20.37%), fishing specific TV shows (17.72%), fishing specific websites (16.02%), fishing specific magazines (5.65%), radio (7.57%) and other responses (9.19%) See Figure 3. A total of 23 responses were received for the 'other' section with most of the responses outlining that they work in the industry.

Q10 Where do you get MOST of your news about the commercial fishing industry? (you can provide more than one answer)

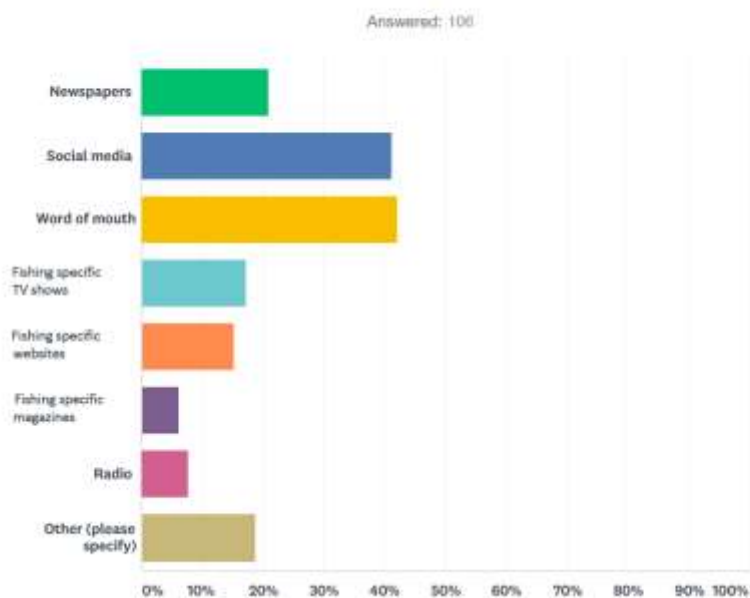


Figure 3 Results of source of news about the industry

Attachment 19 - Results - QSIA Website and social media

The purpose of these interlinked types of social media was to communicate industry news and issues to both members and the wider community. All stakeholders interviewed had viewed various aspects of the website. Some commented on its improvement and it being a good source of information.

Google analytics (www.analytics.google.com) was used to collect data to track who uses www.qsia.com.au, for how long, and how they access it. Analytics for the website was retrieved for the time period 20th October 2016 to 9th December 2018, for the news page from 17 February 2018 to the 9th December 2018, and for the Facebook page for the time period 27th August 2018 to the 4th December 2018. Analytics have also been provided for the updated QSIA website which was created on 18th February 2018.

Website and News site

Users

The term 'user' refers to an individual person who visits a particular website. Users can visit the same site a number of times which is known as a 'session'. For the time period the www.qsia.com.au site received almost 10,283 users with an average session duration of 1min and 34 seconds.

The majority of visitors (86.7%) were new visitors compared to 13.3% returning visitors. 92.3% viewed the site in English; 75.21% of viewers were from Australia. The majority of site visitors were from Brisbane (48.2%) followed by Sydney (15.73%).

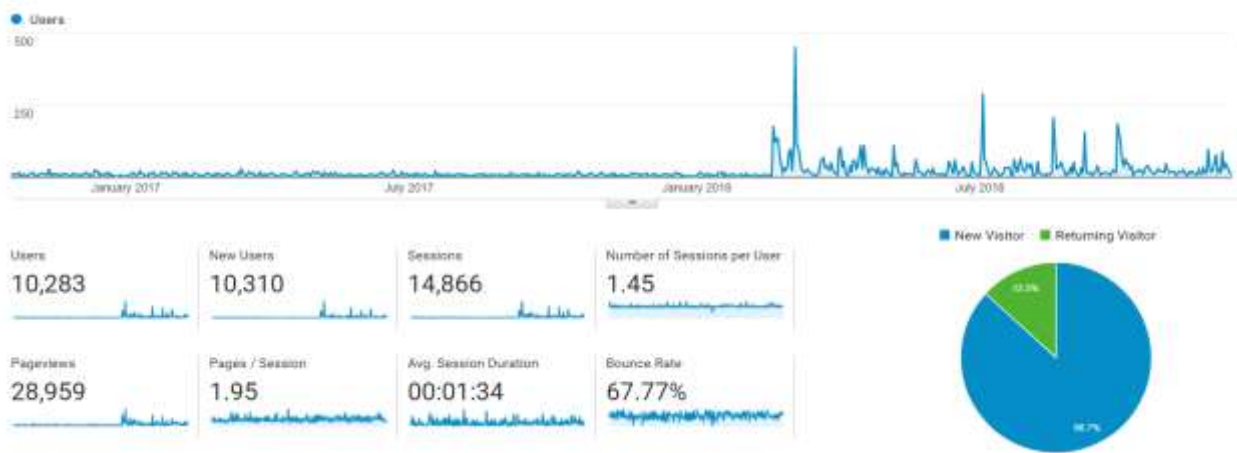


Figure 1: User analytics 20th October 2016 – 9th December 2018 (www.analytics.google.com)

Google analytics for the website since it was improved on the 19th February shows that 7,142 users had accessed the website with an average session duration of 1 minute and 32 seconds. The vast majority of the users (7,052) had accessed the site for the first time.



Figure 2: User analytics 19th February – 9th December 2018 (www.analytics.google.com)

Access

Acquisition metrics represent the most popular ‘channels’ used to find www.qsia.com.au. There are some notable changes to how the website is acquiring users. Since the website has been updated the most popular channel is now social media (41.67%) compared to organic search being the most popular when examining the data for the life of the website. Direct referral of 26.95%, organic search (22.70%) and referral from another website 8.57%. The Australian Fisheries Management Authorities webpage was the primary referral channel used to reach www.qsia.com.au.

The most popular page that users first visit is the home page (displayed as '/') followed by the news page and the 'contact us' page. Since the website has been updated the most popular page has been the home page followed by the news page.

The primary *social* channel used to reach www.qsia.com.au is Facebook (96%), followed by 2.4% from Twitter and 0.48% from QSIA's new podcast site hosted by the weebly platform. Of those accessed through social media, the most popular posts were from the QSIA new page. These were: a page titled 'primary industry on its knees' followed by 'Concerned Barramundi net fisher', 'unravelling the failure at our border' and 'questioning the role of environmental groups'.

The referral channels used to reach www.qsia.com.au/news page was primarily a google search accounting for 47.05% of referrals, followed by 20.68% of visitors typing in the page direction and 7.59% of visitors being referred from Facebook. Visitors who didn't use a referral channel to find the www.qsia.com.au/news page discovered the page from another QSIA web page. The majority of visitors clicked on the news page after the home page (47.11%), 3.35% visited the membership page first before clicking on the news page, 3.29% visited the biosecurity page and 2.63% the contact page.

Facebook page

Facebook insights is an internal tool used to generate metrics about user interactions and is accessed via an internal link on the QSIA Facebook page. Metrics relate to likes, reach, demographic data and Facebook engagement rate.

Page likes

A Facebook page 'like' or a 'follow' is when a Facebook user has 'liked' a page which allows them to receive updates when others post to the page; they can also choose to 'unlike' or unfollow that page. For the 6 month period from the 27th August 2018 to the 4th December 2018 the QSIA Facebook page 'likes' increased by 192, from 1482 to 1674.

Daily new likes and reach

The daily new page 'likes' metric displays the number of new 'likes' the QSIA page received per day. On average for the 8 month period the QSIA Facebook page received 2.4 page likes per day. There was an obvious spike in page likes from the 15th October as shown in Figure 16 below with the highest number of page likes received on the 19th October 2018.

The average number of likes for a post is 17. The dramatic spike in post likes was caused by a post posted on the 18th October 2018 circulating a petition to generate support for locally caught seafood.

Daily total reach for a Facebook page refers to how many people viewed any content posted on the Queensland Seafood Industry’s Facebook page. This metric has also increased dramatically since the 15th October 2018. The posts which received the most comments and shares were also the most liked posts.

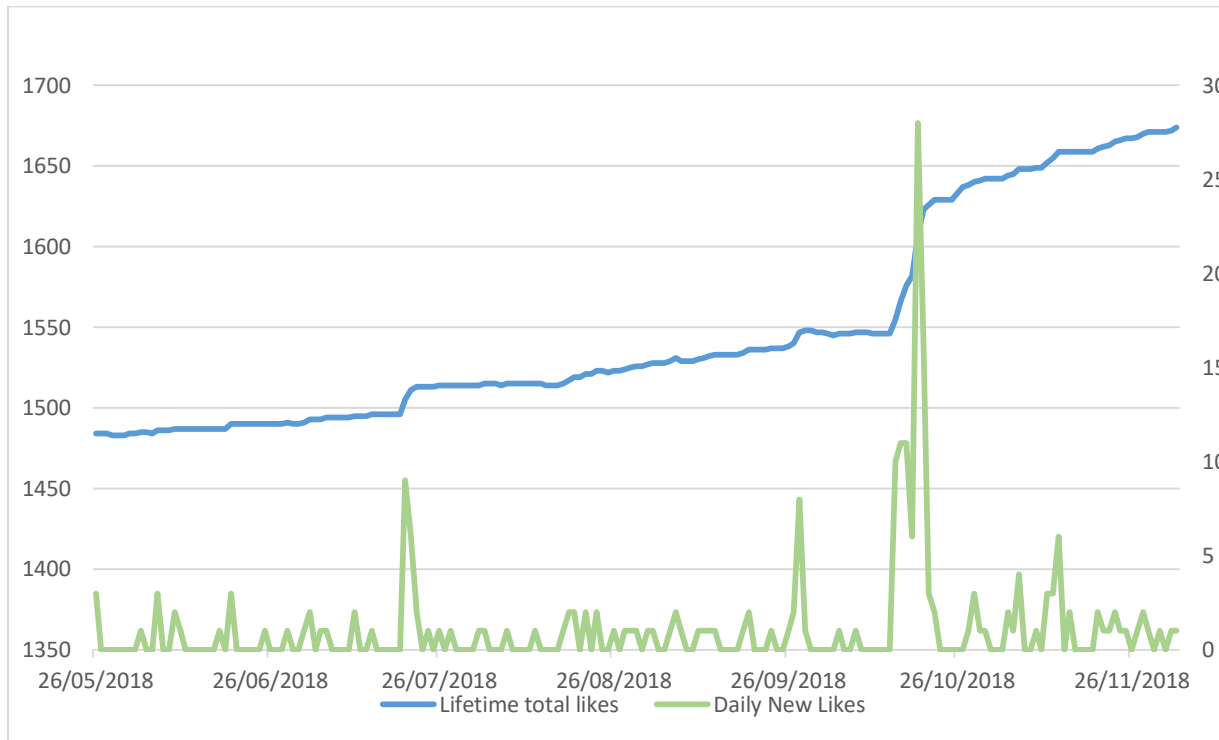


Figure 3: QSIA page likes and daily page likes 27th August 2018 to the 4th December 2018 (www.facebook.com/QLDSeafood/)

There are four posts which had a dramatic effect on the QSIA Facebook page metrics. The biggest impact resulted from a post on the 8th October 2018 circulating a www.change.org petition asking ‘the Queensland government to stop adding fishing restrictions that are reducing commercial fisher’s ability to supply the community with fresh local seafood.’ This post was shared 218 times which drastically increased the level of reach for the post.

The second post which also generated significant Facebook interactions is a post which shared a link to the QSIA news page ‘Unravelling the failure at our border’. This article discusses that the industry believes that the responsibility for the failure of biosecurity at the border lays with the Federal government for the white spot Prawn disease outbreak in 2017.

The third post refers to the same change.org petition but uses an image which includes text ‘boycott the Basa’ and an image of a catfish. This post was originally posted on the 7th July 2018 and shared again by QSIA on the 17th October and received a total of 31 shares. The fourth post shared an image of a letter detailing QSIA’s position on vessel monitoring systems on the 2th November. This image was shared 33 times.

Queensland Seafood Industry Association
18 October at 05:21

Seafood producers want to keep bringing you fresh local seafood but to do this we need your voice backing us or the government and conservation groups will take it away from you. The worst part is you won't know until it's gone... support fishing families and your right to eat fresh local seafood by signing the online petition.

<https://www.change.org/p/to-the-honourable-the-speaker-and-...>

LOCAL SEAFOOD SUPPORT IT or IMPORT IT

CHANGE.ORG
Sign the Petition
TO: The Honourable the Speaker and Members of the Legislativ...

12 1 Comment 216 shares

Queensland Seafood Industry Association shared a link.
3 July

QSIACOM.AU
Unravelling the failure at our border - QSIACOM
In conjunction with tonight's screening on 4 Corners of 'Outbreak - The...

1 Comment 60 shares

Queenland Seafood Industry Association shared a photo.
11 October at 17:38

Please sign and share

DON'T WANT TO EAT IMPORTED FISH FOREVER?

BOYCOTT THE BASA

ALWAYS BUY LOCAL EAT LOCAL
and support your local family fishing businesses

NO MORE COMMERCIAL FISHING BANS

LOCAL SEAFOOD SUPPORT IT OR IMPORT IT

Queensland Seafood Industry Association
7 July 2017

Queensland Seafood Industry Association
12 November at 14:39

Update: Thanks to the Gulf of Carpentaria Commercial Fishermen's Association for their support. Keep it coming Queensland Seafood Industry bodies – we need a united front against what is reprehensible fisheries management policy.

Commercial fishers in this State do not need to accept another beat – the current vessel management system (VMS) debacle demonstrates the low regard in which fisheries management and government hold my Industry. Instead of cooking a stay of execution Industry needs to demand a complete rethink on this issue. I'll be sending the attached media release to government in the hope someone starts to listen. We need this Industry and consumer need us here to provide what imports cannot – fresh local seafood.

MEDIA RELEASE FOR IMMEDIATE RELEASE
12 November 2018

NO VMS Vessel Monitoring Systems

VMS (Vessel Monitoring System) is a technology used to monitor the location of commercial fishing vessels. It is a requirement of the International Convention for the High Seas Fisheries Management Convention (UNCLOS) and is also a requirement of the Australian Fisheries Management Act 1954. The Queensland Government has a long history of non-compliance with the VMS requirements. This is a serious breach of the law and is a threat to the sustainability of the Queensland fishing industry.

It is a requirement of the International Convention for the High Seas Fisheries Management Convention (UNCLOS) and is also a requirement of the Australian Fisheries Management Act 1954. The Queensland Government has a long history of non-compliance with the VMS requirements. This is a serious breach of the law and is a threat to the sustainability of the Queensland fishing industry.

It is a requirement of the International Convention for the High Seas Fisheries Management Convention (UNCLOS) and is also a requirement of the Australian Fisheries Management Act 1954. The Queensland Government has a long history of non-compliance with the VMS requirements. This is a serious breach of the law and is a threat to the sustainability of the Queensland fishing industry.

Figure 4 QSIACOM posts with the highest interactions 2018 (www.facebook.com/QLDSeafood/)

Location of users - The vast majority of page likes or follows have been received from Australia with only a handful from other countries including the United Kingdom, Ireland, Malaysia and Thailand. A total of 57 page likes have been received from the United States of America. The majority of Australia Facebook users that follow the page are from Queensland and predominantly Brisbane.

QSIACOM Podcasts

The podcasts were aimed to provide interesting commentary from knowledgeable people associated with the industry. While not all stakeholders had listened to them, those that had, found them informative. A couple of comments were made about difficulty in accessing them.

Insights can be accessed via the weebly dashboard but are limited compared to google analytics. Insights such as unique visits, page views and referrals were accessed for the time period 19th February 2018 to to 4th December 2018. Because of the way the podcasts were embedded it is difficult to determine which is the most popular.

Site visits

Overall the QSIA Media pages received 1,370 'unique visits' (i.e. someone who hasn't visited the site in the last 7 days). An obvious spike in visits corresponded to the times that new audio files (podcasts) were embedded on the podcast pages.

The number of page views for the same time period is 2,274. The number of pages viewed per 'unique visit' is 1.66 pages which indicates that visitors are generally only visiting one or two pages on QSIA Media.

Referrers

Referrers or referring sites display how many times QSIA media was found via a referring web page, social media channel or link. Table 1 displays the referrer and the number of views generated. Facebook was the most popular referring site followed by the QSIA main webpage and then an email link. It should be notes that the links to podcasts from the QSIA website was broken during this period of analysis, which may have affected results.

Table 1: QSIA Media referrers and views 9th February 2018 – 4th December 2018 (<https://qsiamedia.weebly.com/>)

Referrer	Views
m.facebook.com	31
www.facebook.com	8
qsia.com.au	7
email.telstra.com	1
l.facebook.com	1

Attachment 20 - Results - Photovoice by Instagram

The images submitted by the team reflected their purpose which was to connect the community with seafood by showing photos of consumer, environment, and community. As each image is accompanied by a caption, it also shows the intent of the submitter (eg to illustrate sustainability).

The following analysis aims to determine the extent the Instagram posts connected to the target audience. Instagram analytics was collected using the tool Iconosquare (www.pro.iconosquare.com) one of the most popular online tools which works superficially with Instagram. Iconosquare links with existing Instagram accounts and is primarily used as a media scheduling and monitoring tool but also provides comprehensive analytics. Analytics was retrieved for the life of the Instagram account 27th August 2018 to 10th December 2018.

Follower Growth

Followers refer to other Instagram users who have followed seafoodcommunities_au similar to 'friends' on Facebook. When logging onto Instagram followers will be taken to a newsfeed of all the posts, videos and stories created by the Instagram accounts they follow. Follower growth for seafoodcommunities_au has been steady, reaching a total of 344 followers. See Figure 1.

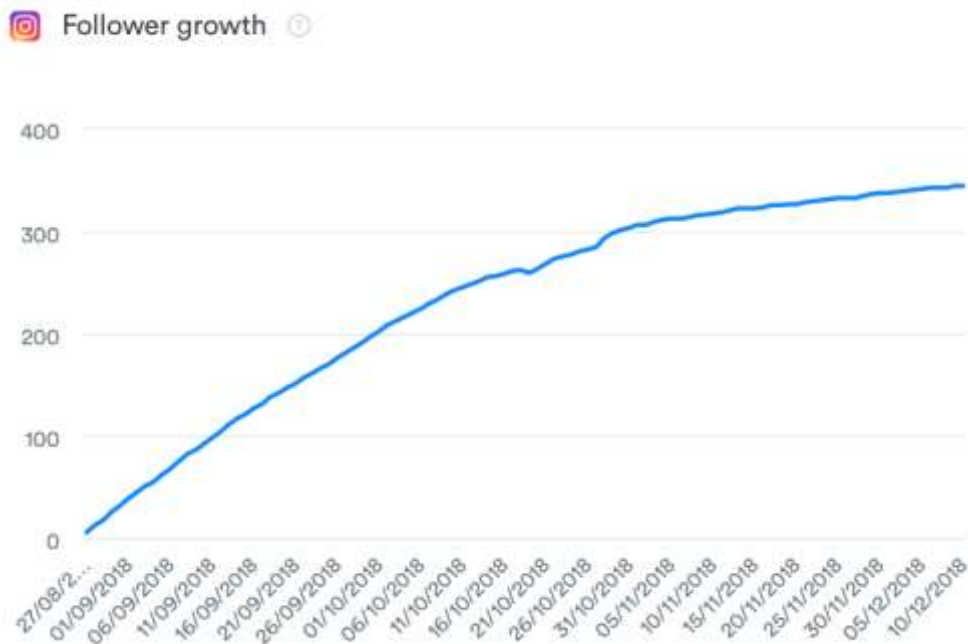


Figure 1 Follower growth seafoodcommunities_au 27th August 2018 – 20th October 2018 (Iconosquare.com)

Demographics

The distribution of men and women according to age is fairly reflective except for the 25-34 and 45-54 age groups which is dominated by male followers. Followers are primarily located on the east coast of Australia, but there are also followers in Quebec, Rome, Africa, Santiago and Jakarta.

Content

Instagram posts can consist of images, videos or stories. seafoodcommunities_au has posted a total of 59 posts up until the 10th December 2018 with the largest number of posts occurring in September (Figure 2).

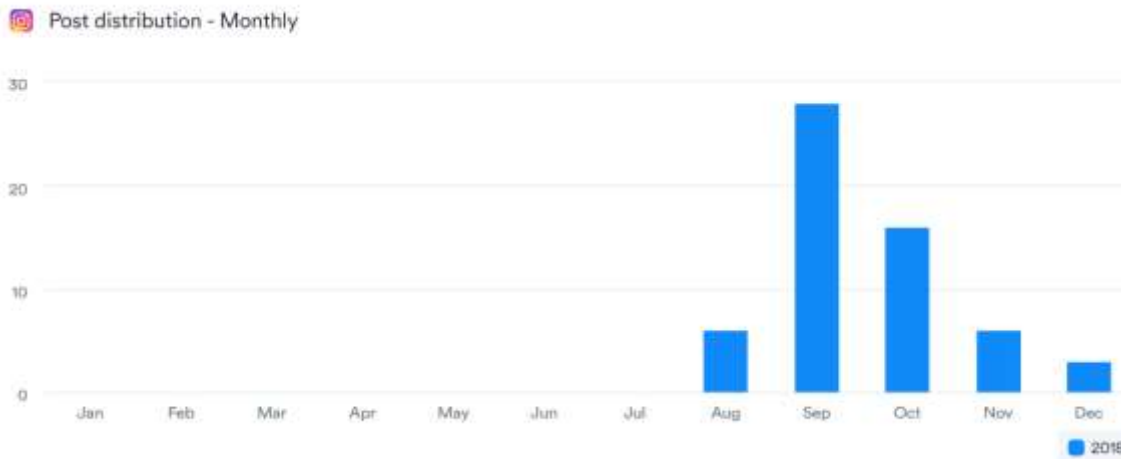
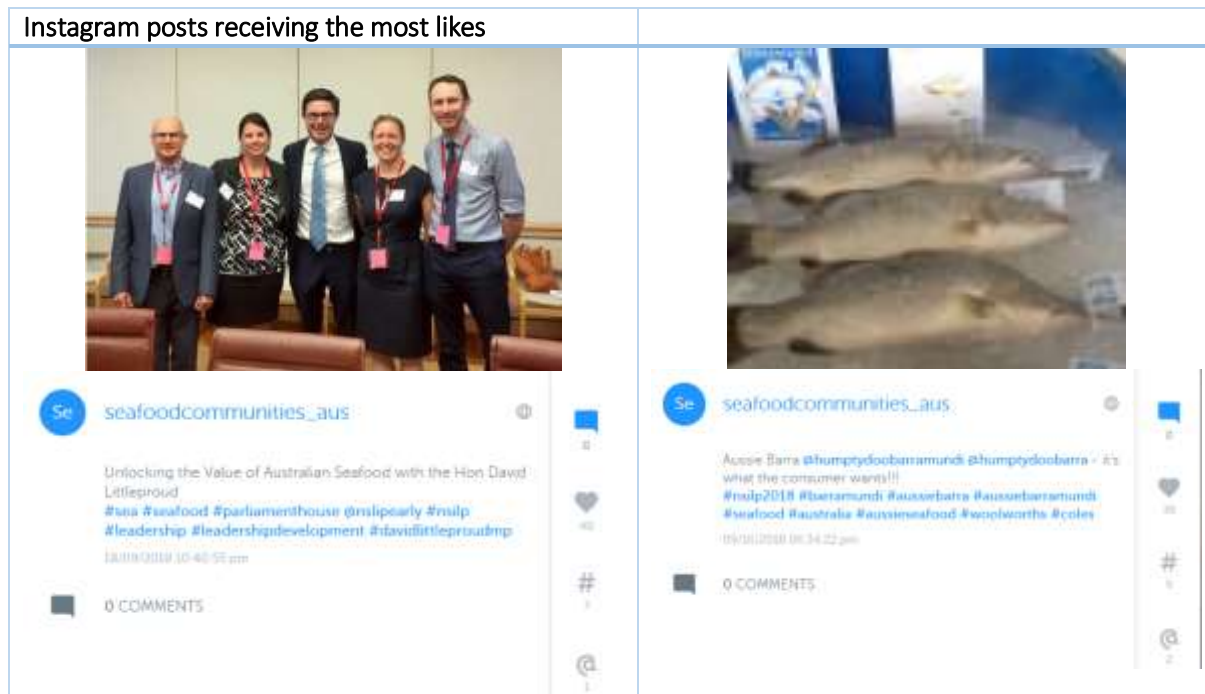


Figure 2 Post distribution seafoodcommunities_au 27th August 2018 – 10 December 2018 (Iconosquare.com)

The post which received the most likes was an image taken with the Honourable David Littleproud, Minister for Agriculture and Water Resources titled 'Unlocked the value of Australian seafood'. The next most liked images were of seafood product labelled 'Aussie Barra - What the consumer wants'; 'Tagged Southern Rock Lobster – quota management rely on community and fisher reporting ensuring the fishery long-term sustainability'; and a sunset image of fishing boats labelled 'Pristine environment for a community to flourish in Tasmania'. See Figure 3.



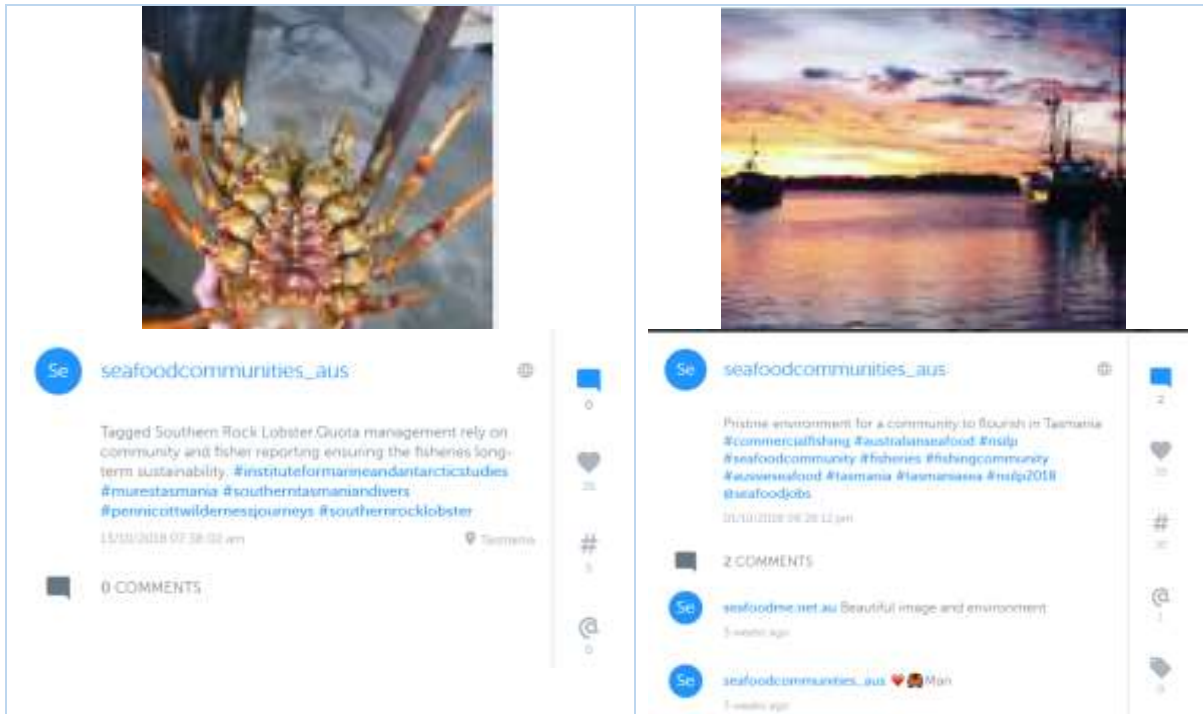


Figure 3: Most liked posts seafoodcommunities_au 27th August 2018 – 10th December 2018 (Iconosquare.com)

Comments

Instagram comments are from followers responding to particular posts. Most comments received were in relation to the aesthetics of the image of catch to a recreational fisher and responses using emoji's including 'hearts' and 'thumbs up'. A total of 39 comments were received for the 48 posts. The post which received the most comments was an image of a barramundi caught during a fishing charter 'important for tourism and the economy', followed by an image of the Tamar River in Tasmania with responses commenting on the beauty around the Australian Maritime College.

Two comments received were specific to the industry, one in relation to an image of the Gold Coast Fishermen's Coop sign 'Wonderful part of the Gold Coast. Visitors just love buying direct from fishermen and locals know how lucky they are' and the other to an image showing country of origin labelling 'That's right, all consumers have a right to know where their seafood comes from' (Figure 4).

Instagram posts receiving the most comments	

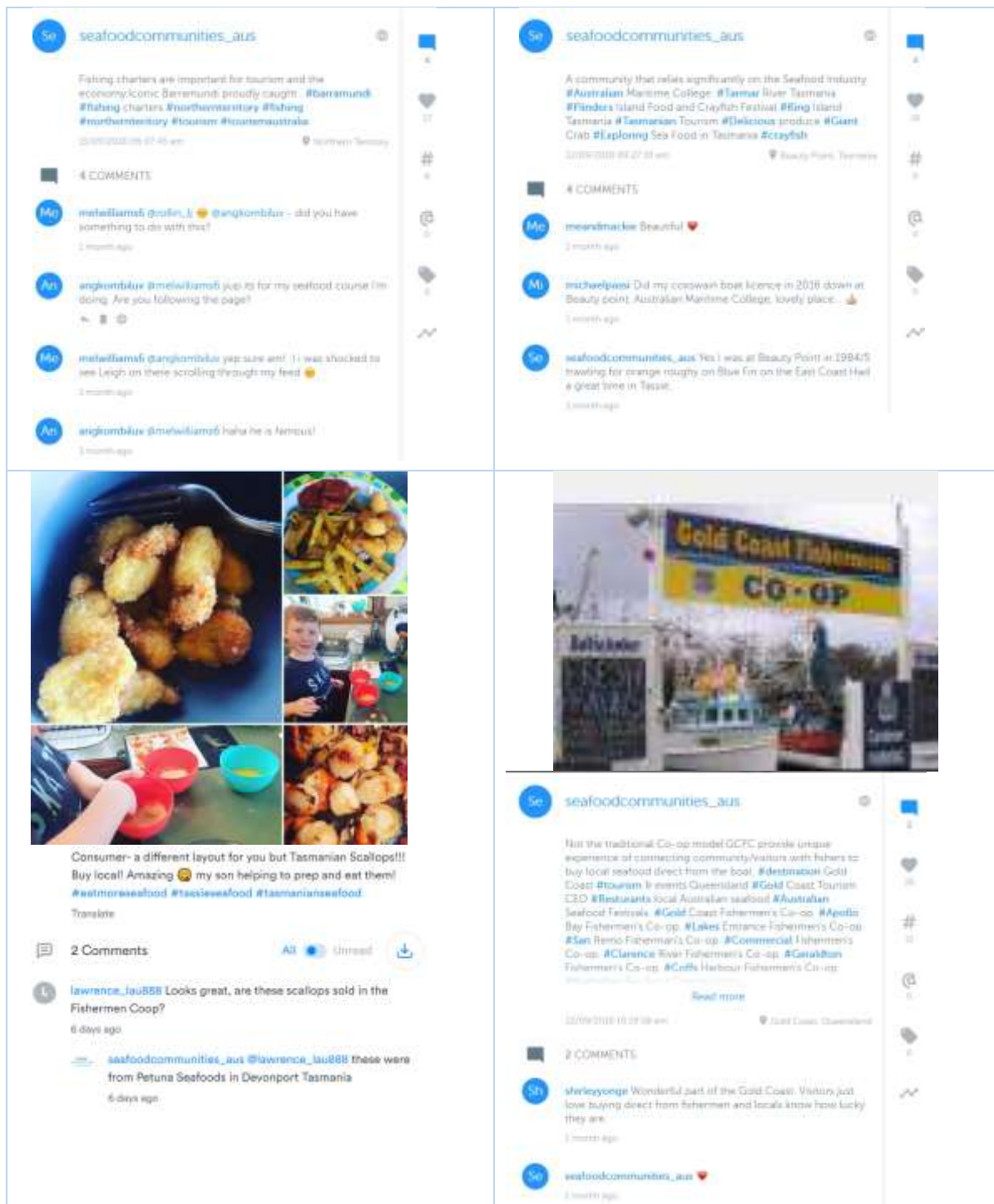


Figure 4 Instagram posts receiving the most comments

Instagram engagement

Instagram engagement is calculated on the number of likes, comments and saves received and an average number created by dividing by the number of followers at the time of the post. The very large Instagram engagement rate shortly after the account was created was most probably due to the account being brand new and receiving a significant amount of attention from the creators. Without this initial 'spike' the average engagement rate is just over 17% (Figure 5).

Instagram Average engagement rate history ?

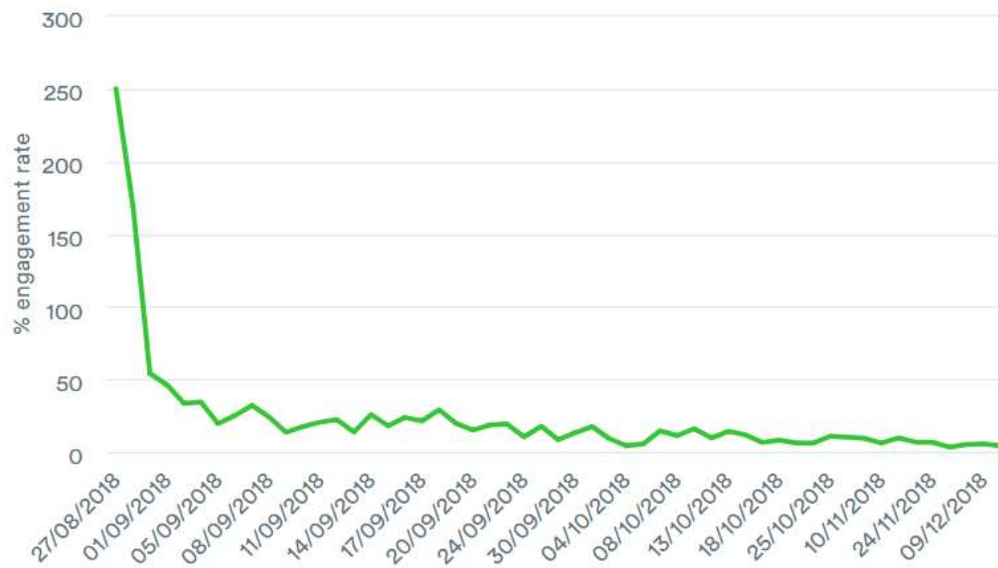
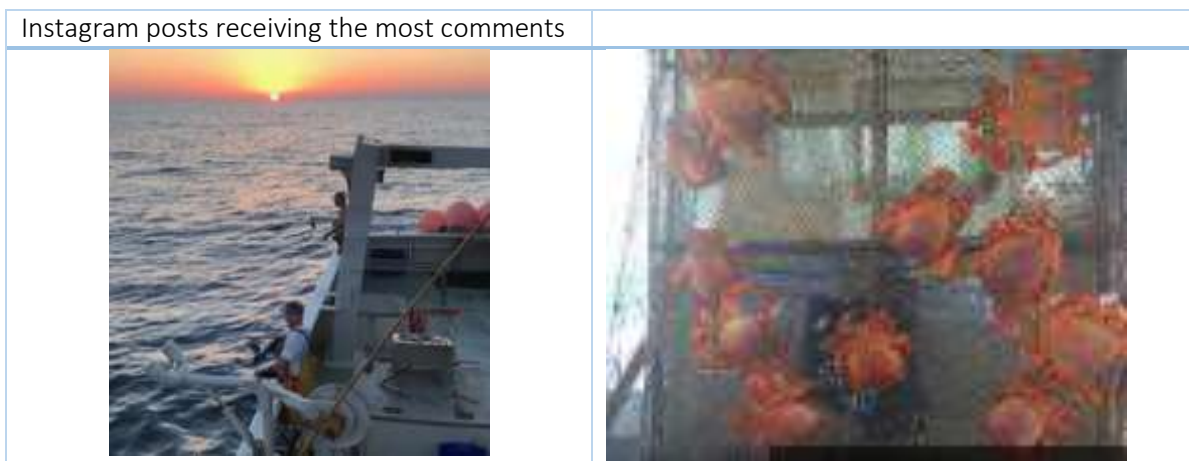


Figure 5 Average engagement history seafoodcommunities_au 27th August 2018 – 10th December 2018 (Iconosquare.com)

Posts which received the highest engagement not only received likes but comments and shares also. One image related to fishing in a pristine environment another highlighting a fishing method that has no bycatch – ‘undersized are released ... and no damage to seabed’. The next image shows consumers experiencing seafood close-up and a trawler in rough seas (Figure 6).



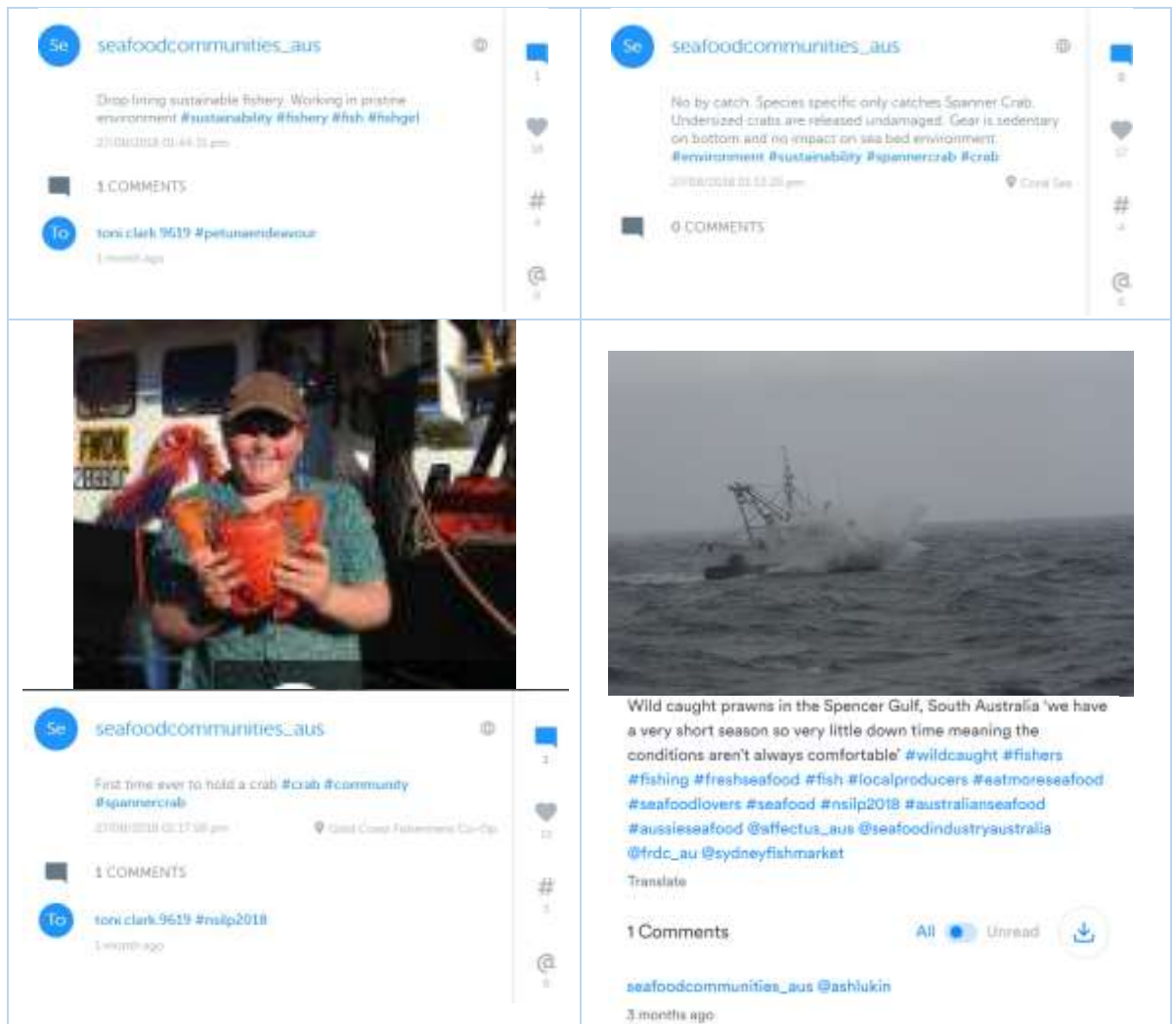


Figure 6: seafoodcommunities_au - posts receiving the most likes, comments, and shares overall 27th August 2018 – 19th December 2018 (Iconosquare.com)

The term 'reach' refers to the number of times users saw a post or story, impressions shows how many times a post was seen. For example if one user has seen a post 3 times this would equate to 1 reach and 3 impressions. The average reach for the 59 posts up until the 10th December 2018 from seafoodcommunities_au is 45.9 people.

The post that had the highest reach (total of 171) was posted on the 20th October 2018 and features a female working on a boat– 'maintenance is a priority before season opens on 1st November' (Figure 7).

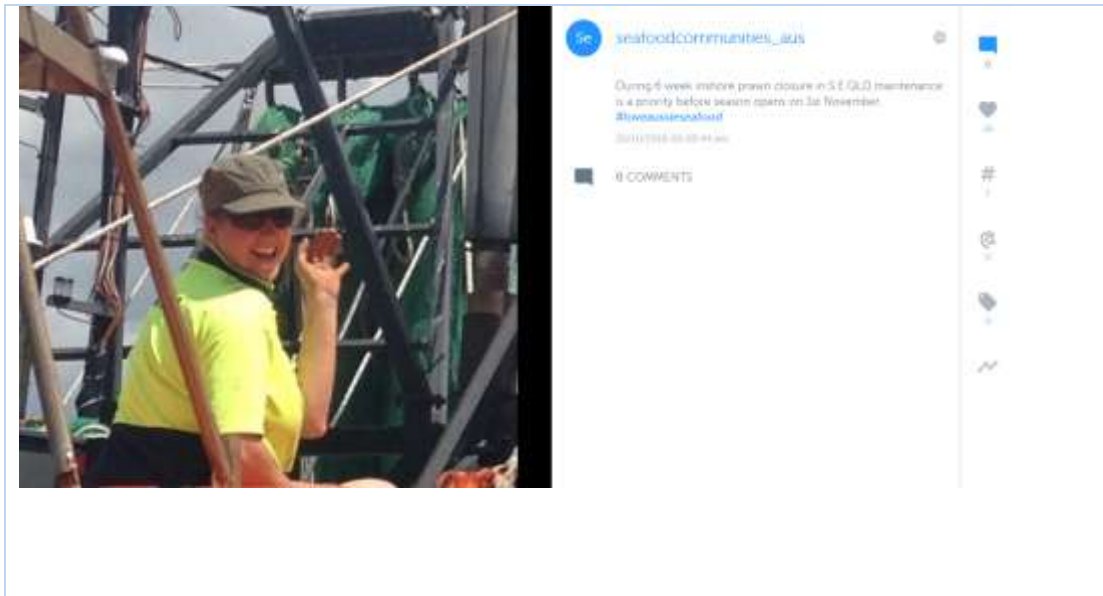


Figure 7 Instagram post with the highest reach