Mapping the Aquaculture Engagement and Aquaculture Literacy Landscape

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  A list of people consulted as part of this project is provided in Appendix 8.
- The Project Review Group (see Appendix 11) who provided guidance throughout the project.
- The Blue Economy Cooperative Research Centre (CRC) for their in-kind support of the project.

Abbreviations

AAC	Aquaculture Advisory Committee of Seafood Industry Australia
AALI	Australian Aquaculture Literacy Initiative
ABARES	Australian Bureau of Agricultural and Resource Economics and Sciences
ASC	Aquaculture Stewardship Council (standards and certification)
BAP	Best Aquaculture Practices (standards and certification)
CRC	Cooperative Research Centre
CRCNA	Cooperative Research Centre for Developing Northern Australia
CSIRO	Commonwealth Scientific and Industrial Research Organisation
FRDC	Fisheries Research & Development Corporation
GVP	Gross Value Product
IMAS	Institute of Marine and Antarctic Studies, University of Tasmania
MSC	Marine Stewardship Council (standards and certification)
MLA	Meat & Livestock Australia
NGO	Non-government organisation
NOAA	U.S. Department of Commerce National Ocean and Atmospheric Administration
PIEFA	Primary Industries Education Foundation Australia
R&D	Research and development
SIA	Seafood Industry Australia

List of key terms used

The following definitions should be considered in reading this report.

- Aquaculture literacy - refers to a community's familiarity with information about aquaculture and related environmental, economic, and social topics. (U.S. Department of Commerce National Ocean and Atmospheric Administration (NOAA) Fisheries, source: *https://www.fisheries.noaa.gov/national/aquaculture/aquaculture-literacy-noaa.*
- Communication - is the process of delivering information or a message to stakeholders. It is typically a one-way process.
- Engagement - is the process of developing a conversation or relationship with stakeholders. It typically involves two-way communication.
- Environmental performance - relates to the aquaculture industry's achievements, initiatives and challenges being addressed regarding the environment. It includes managing and reducing impact on the environment, the marine ecosystem, wildlife etc. Although this is a component of sustainability performance, it has been described separately because of its the importance to the aquaculture industry.
- Motivators - or key motivators are defined as the issues, objectives or areas of action or performance* which are important to an organisation/business, and which are being communicating to the stakeholders, either explicitly or implicitly. *Performance includes achievements, initiatives and/or challenges being addressed, which are relevant to the motivator category.
- Sustainability performance - relates to the aquaculture industry's achievements, initiatives and challenges being addressed in this area. It includes producing a sustainable protein source, ethical farming practices, meeting industry standards/best practice, input and waste management, managing natural disasters, climate change impacts etc.
- Stakeholders - Broadly, aquaculture industry stakeholders include all levels of government; representative bodies at sectoral, local, state and national level; local communities and the broader Australian community; seafood consumers; investors; allied suppliers (input) and service businesses; international trading partners; current and future workforce etc.

  For the purposes of this project, the main stakeholder groups investigated and/or consulted included:

  - Key/leading commercial businesses in each sector including production businesses and key supply chain partners e.g. feed companies, wholesalers, exporters, retailers.
  - State-based advocacy organisations, committees, and special interest groups.
  - Sector/species-based advocacy organisations, committees, and special interest groups.
  - Other representative groups.
  - Research organisations, international agencies, and NGO's.
  - State and federal government agencies relevant to aquaculture
  - Other service providers.

  The project scope did not provide for consultation with local community groups, seafood consumers or the broader Australian community.

A full list of key terms used is provided in Appendix 10.

Executive Summary

Aquaculture is one of the fastest growing agrifood areas globally and is key to ensure food security for a growing world population. Australia's aquaculture industry has a critical role to play in realising this ambition, having surpassed wild catch levels and expected to reached A$2.29B GVP (2022-23). The industry is also poised to expand, drawing on innovation, a highly skilled workforce, research and growing consumer demand. It is also increasingly responsive to global trends, like investor and retailer sustainability expectations, decarbonisation roadmaps, zero harm welfare frameworks, and the increased community and interest group scrutiny on local impact of food systems.

However, communicating the potential of the industry and its products is often challenging, as key stakeholder groups sometimes have limited understanding of Australian aquaculture operations, the industry's direction, and its benefits. This is compounded by the diversity of the industry and its stakeholders and regulators, and the absence of effective structures to educate and support knowledge sharing. Hence, understanding the current stakeholder and engagement landscape of the Australian aquaculture industry is seen as an essential step in developing effective industry outreach and communication initiatives to build aquaculture literacy across the stakeholder spectrum.

This project was undertaken by Seafood Industry Australia (SIA) with the support of the P2P Business Solutions, an independent consultancy, and the Blue Economy Cooperative Research Centre (CRC). The project was also supported by a Project Review Group comprised of representatives from across the industry.

As a starting point, desktop research was undertaken to map the current stakeholder and engagement landscape of the Australian aquaculture industry. This provided insight into how organisations in different sectors of the industry from across Australia currently communicate with their stakeholders, who their key stakeholders are, and the main topics being communicated. Initiatives of other international aquaculture sectors and Australian primary industries were also investigated to understand the approaches they have adopted for their industry outreach, communication and engagement programs.

Consultation was then undertaken with industry through an online survey, interviews, and mini-roundtables. The aim of the online survey was to collect insights from a broad range of industry stakeholders, whilst the interviews and mini-roundtables were more targeted and provided the opportunity to explore industry needs, priorities, issues, challenges, and opportunities in relation to outreach, communication and engagement in more detail.

With this information the Australian aquaculture industry is now equipped to build a robust, enduring, and targeted Australian Aquaculture Literacy Initiative (AALI) focused on outreach and communication for the collective industry, which will build aquaculture literacy across all stakeholder groups.

The project commenced in October 2022 and was completed in June 2023.

Background

In 2021, Seafood Industry Australia's (SIA) formed the Aquaculture Advisory Committee (AAC) to set a united industry vision and shared strategic direction to ensure Australia's aquaculture sectors move forward together.

To help guide the development of the industry over the coming years, the AAC developed an Action Plan. The Plan identified that "*The aquaculture industry has difficulty clearly communicating its value to external stakeholders, with a lack of awareness on industry priorities, its contribution to society, and effective structures to support knowledge sharing*." The Plan's stated aim is that "*In the future… the Australian aquaculture industry is equipped to effectively communicate their purpose and contribution to the goals of government, consumers, and the wider community.*" One of the Action Plan priorities is to strengthen outreach and communication and ultimately build aquaculture literacy with stakeholders.

Despite the increasing demand for aquaculture product, the industry remains vulnerable as it is challenged to effectively communicate the benefits of its production systems, products and resulting economic, social, and environmental outcomes. This is, in part, due to the diversity of sectors, businesses, production systems and production locations that comprise the industry. This diversity makes it difficult to lead a coordinated and consistent internal message within the industry, as well as to coordinate responses to issues and topics important to external stakeholders. Compounding this challenge is low of level public understanding of Australian aquaculture industry; the prevalence of information about the industry that is out of date, inaccurate, incomplete, or resulting from deliberate misinformation campaigns; and the absence of effective structures/platforms to support knowledge sharing and bring the industry sectors together.

Objective

The objective of this project is to understand the current stakeholder and engagement landscape of the Australian aquaculture industry to inform the development of an aquaculture outreach and communication program, with the aim to build aquaculture and sustainable seafood literacy across the stakeholder spectrum.

Methodology

To understand the current stakeholder and engagement landscape of the Australian aquaculture industry, the following broad approach was adopted.

- Developing detailed stakeholder maps for the Australia aquaculture sector.
- Understanding how each sector is currently communicating with their stakeholders.
- Understanding stakeholder motivators/sets of interest.
- Understanding who needs to be engaged.
- Identifying key topics of interest and how these might be delivered.

A more detailed methodology is provided in the full report.

Results/Key Findings

A summary of the key findings from the project are as follows:

- The Australian aquaculture industry is diverse, and its complexity means that the story of Australian aquaculture is fragmented and the opportunity to build aquaculture literacy and trust in the industry is currently diminished.
- Many stakeholders who participated in the consultation believed that the Australian aquaculture industry could and should be telling its story better through improved outreach, communication and engagement.
- The key motivators identified to be communicated are environmental performance, sustainability performance, product attributes, and industry compliance and governance.
- There is strong support for a broad Australian Aquaculture Literacy Initiative (AALI) that focusses on the industry as a collective and helps inform and educate stakeholders about the industry. The Initiative should include:
    - An Aquaculture Literacy Outreach, Communication and Engagement Plan (Plan) so that the Initiative can deliver the maximum impact with limited resources. The Plan should also incorporate an integrated content development framework for the initiative to guide effort and investment.
    - An Australian Aquaculture Outreach and Communication Platform (Platform), with appropriate content and resources (communication assets)
    - Other supporting resources and activities, such as training and support for sectoral and other representative bodies and businesses seeking to build aquaculture literacy.
- The Platform should be developed as a ‘hub and spoke’ model which recognises the significant role and responsibilities that sectoral and other representative bodies, FRDC, governments etc. have in the industry; and harnesses their expertise, resources and investments that have been made over time.

- While all communication asset types tested likely have a place on the Platform, their inclusion would be dependent on the messaging, target audience, communication channels and resourcing available.
- The development of a business case is important to understand the options, potential costs and funding sources related to the development and management of the Plan and Platform, including communication assets, and other supporting resources and activities.
- Investment in resources to build aquaculture literacy in schools and the next generations was considered important by many stakeholders who participated in the consultation.
- Providing assurance and trust to the information within assets needs to be front of mind.

Implications for relevant stakeholders

The findings of the project provide a clearer understanding of the current stakeholder and engagement landscape of the Australian aquaculture industry. The project's recommendations provide a roadmap for the industry to build an effective aquaculture outreach, communication and engagment program and share accurate information, which will assist in building aquaculture literacy across the stakeholder spectrum. It will be of value to all stakeholders in the industry.

Recommendations

The project has provided an understanding of the stakeholder and engagement landscape and requirements of the Australian aquaculture industry in regard to an aquaculture outreach and communication program to support aquaculture literacy. Based on the findings, it is recommended that:

1. An Australian Aquaculture Literacy Initiative (AALI) is supported.

It is recommended that industry and key stakeholders invest in an AALI, which incorporates an Aquaculture Literacy Outreach, Communication and Engagement Plan (Plan) and an Australian Aquaculture Outreach and Communication Platform (Platform) with appropriate content and resources (communication assets), and other supporting resources and activities.

It is recommended that the industry and key stakeholders invest in an AALI, which incorporates with appropriate content and resources (communication assets), and other supporting resources and activities.

2. An Aquaculture Literacy Outreach, Communication and Engagement Plan (Plan) is developed and executed.

It is recommended that a Plan is developed and maintained. It should outline key messaging, target stakeholder groups, communication channels and required assets. It should recognise the intended scope and capacity of the Platform to be developed (see Recommendation 3) and incorporate a content development framework so there is a strategic and staged approach to the development of resources, in line with the Plan and available funding. The AALI should seek to partner broadly with suitable service providers to supply or develop suitable content and resources for distribution.

3. An Australian Aquaculture Outreach and Communication Platform (Platform) with appropriate content and resources (communication assets) is developed and deployed.

It is recommended that the Platform is 'hub and spoke' web-based platform where the 'hub' provides a place to present and share information about the collective Australian aquaculture industry and the 'spokes' are the linkages to the websites of key sectoral and other representative bodies, FRDC, government agencies and other resources, including communication and school curriculum assets.

4. Investment is considered in other supporting resources and activities.

It is recommended the industry considers investment in resources and activities, such as training, supporting sectoral and other representative bodies and businesses extending aquaculture literacy, a technical talent pool database, and online library as funding becomes available

5. **Advice is received with respect to Indigenous engagement and inclusion.**

   The SIA AAC should take advice from Indigenous representatives on inclusion in the AALI and relevant content, as well as navigating engagement with Indigenous enterprises, historical and cultural matters, nature, use of land and sea resources, and opportunities to build sustainable communities.

   To support Indigenous engagement, the SIA AAC may consider the addition of a cultural navigator who can, amongst other roles, work with the AAC on inclusion of Indigenous aspirations within the AALI.

6. **Investment is made to develop industry data.**

   It is recommended that the SIA AAC reviews the key data required to report on industry performance and determine how reliable data can be obtained and reported.

7. **A business case for the AALI is completed.**

   It is recommended that a business case is completed to identify options and associated costs (in the short and medium-long term) related to development, management and maintenance of the Plan and Platform, delivery of training, and the collation and maintenance of other resources and activities including the collation and maintenance of a technical talent pool database, online library and industry data. The business case also needs to address funding sources and key partnership.

   Upon acceptance of a suitable business case for the AALI, that it is implemented.

8. **There is strong governance in place for the AALI.**

   It is recommended that:

   - The custodianship and ownership of the AALI and Platform lies with SIA; and a Literacy Advisory Sub-Committee under SIA's AAC is established to provide advice on the development and on-going delivery and evaluation of the Initiative.
   - The Literacy Advisory Sub-Committee develops clear objectives for the AALI.
   - Key stakeholders are asked to partner with the AALI, so there is a formal mechanism to identify, engage and consult on the AALI.

9. **Investment is made in school curriculum content to showcase Australian aquaculture.**

   It is recommended that there is continued investment in the development of school curriculum content and aligned education materials, as well as investment in educator engagement strategies to improve uptake and translation of materials, so there is greater impact.

For more details on recommendations please see Recommendations section in full report.

Keywords

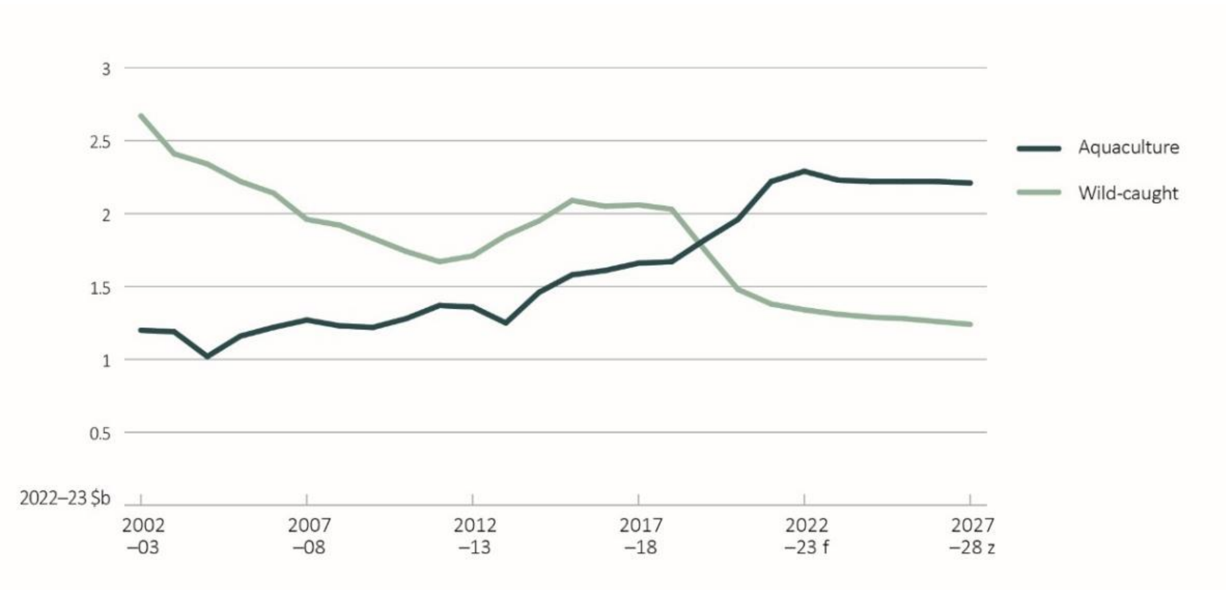
Aquaculture, stakeholder engagement, literacy, abalone, barramundi, king fish, mussels, oysters, prawns, salmon, trout, tuna, seaweed, sea cucumber, pearls.

Introduction

In 2017, the Australian Government released the 'National Aquaculture Strategy' (Department of Agriculture and Water Resources, 2017) recognising that "*With the support of Australian and state and NT governments, the Australian aquaculture industry could provide significant economic returns to Australia by helping meet growing demand for seafood nationally and internationally*". It sets out a goal to increase the value of the Australian aquaculture from $1 billion (2013-2014) to $2 billion a year by 2027. To achieve this goal, one of the development priorities is "*Improving public perception and understanding of Australian aquaculture as a sustainable industry producing safe and healthy products*". [1]

In 2023, ABARES forecast the GVP of aquaculture would increase by 11% to $2.29 billion in 2022–23, driven by higher production values of salmonids, tuna, abalone, and prawns, and stabilise over the medium term, easing to $2.21 billion in real terms by 2027–28 [2]. See Figure 1.

Figure 1: Australian aquaculture and wild-caught fisheries, GVP by sector, 2002-03 to 2027-28



Source: ABARES (2023)

With this increase in real value, the aquaculture industry is also increasing its proportional share of fisheries and aquaculture production volume and GVP to a forecast 64% of GVP in 2027/28 (see Figure 2 below).[3]

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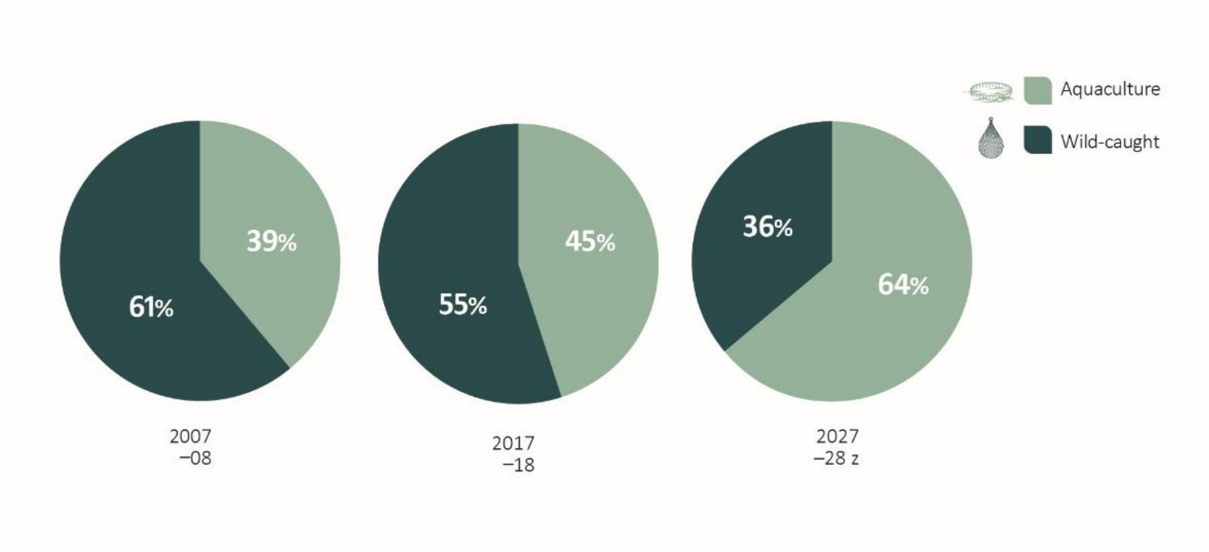
[1] Department of Agriculture and Water Resources 2017, National Aquaculture Strategy, Canberra, August. CC BY 4.0.

[2] Curtotti, R, Dylewski, Cao, A and M, Tuynman H 2023, Australian fisheries and aquaculture outlook to 2027−28, ABARES research report, Canberra, March, DOI: https://doi.org/10.25814/vzbj-nw33. CC BY 4.0.

[3] Curtotti, R, Dylewski, Cao, A and M, Tuynman H 2023, Australian fisheries and aquaculture outlook to 2027−28, ABARES research report, Canberra, March, DOI: https://doi.org/10.25814/vzbj-nw33. CC BY 4.0.

Figure 2: Aquaculture share of total Australian fisheries and aquaculture GVP, 2007–08, 2017–18 and 2027–28



Note: in 2022–23 Australian dollars. z = ABARES projection.
Source: ABARES (2023)

Although growth of the industry has been largely driven by a rise in salmonid production, in recent years, the range of species produced has also increased – with greater emphasis on prawns, abalone, oysters and finfish varieties, including barramundi and kingfish.

Despite the increasing demand for aquaculture product, the industry remains vulnerable as it is challenged to effectively communicate the benefits of its production systems, products and resulting economic, social, and environmental outcomes. This is, in part, due to the diversity of sectors, businesses, production systems and production locations that comprise the industry.

The challenge in communicating a collective narrative is amplified by many individual voices in the industry and a multitude of state and species-based representative organisations, committees, and special interest groups. This makes it difficult to lead a coordinated and consistent internal message within the industry, as well as to coordinate responses to issues and topics important to external stakeholders. The impact can mean there are mixed or incoherent messaging to seafood consumers, local community groups living or operating adjacent to farms, supply chain partners, non-government organisations, researchers, policy makers, international agencies, and local, state and federal government agencies.

Other contributing factors which compound the challenge include:

- The low level of public understanding of Australian aquaculture and the industry's direction and benefits (low aquaculture literacy).
- The prevalence of information which is out of date, inaccurate, incomplete, from other countries or resulting from deliberate misinformation campaigns.
- The absence of effective structures and platforms to support knowledge sharing and bring the industry sectors together for united outreach or to collectively communicate the value proposition of industry and key messages in a way which resonates, or results in a change of behaviour (trust) with key stakeholders.
- The inconsistency of government legislation, regulations, policy, governance, platforms or programs across jurisdictions and sectors which creates an uneven playing field and in some cases a conflict, not a collaborative foundation, for the industry.

In 2021, SIA formed the Aquaculture Advisory Committee (AAC) to set a united industry vision and shared strategic direction to ensure Australia's aquaculture sectors move forward together.

To help guide the development of the industry over the coming years, the AAC developed an Action Plan. The Plan identified that "*The aquaculture industry has difficulty clearly communicating its value to external stakeholders, with a lack of awareness on industry priorities, its contribution to society, and effective structures to support knowledge sharing".* The Plan's stated aim is that "*In the future… the Australian aquaculture industry is equipped to effectively communicate their purpose and contribution to the goals of government, consumers, and the wider community.*"

One of the Action Plan priorities is to strengthen outreach and communication and ultimately build aquaculture literacy with stakeholders. For the purposes of this project, the definition of 'aquaculture literacy' being used is that developed by the U.S. Department of Commerce National Ocean and Atmospheric Administration (NOAA) Fisheries (USA) which defines aquaculture literacy as "a community's familiarity with information about aquaculture and related environmental, economic, and social topics". It also recognises that "enhancing aquaculture literacy helps community members, both individually and collectively, to confidently participate in discussions about aquaculture. This knowledge transfer is key to communities understanding the challenges and opportunities of seafood farming." [4]

To strengthen outreach and communication, it is important to understand the stakeholder and engagement landscape, and the needs of business, representative groups, and other stakeholders. This information will underpin the establishment of a trusted aquaculture outreach and communication platform for the Australian aquaculture industry, ultimately providing an enduring way to share accurate information whilst building aquaculture and sustainable seafood literacy.

[4] Source: *https://www.fisheries.noaa.gov/national/aquaculture/aquaculture-literacy-noaa*

Objectives

The objective of this project is to understand the current stakeholder and engagement landscape of the Australian aquaculture industry to inform the development of an aquaculture outreach and communication program, with the aim to build aquaculture and sustainable seafood literacy across the stakeholder spectrum.

Method

To understand the current stakeholder and engagement landscape of the Australian aquaculture industry, the following broad approach was adopted.

- Developing detailed stakeholder maps for the Australia aquaculture sector.
- Understanding how each sector is currently communicating with their stakeholders.
- Understanding stakeholder motivators/sets of interest.
- Understanding who needs to be engaged.
- Identifying key topics of interest and how these might be delivered.

Specifically, the following methodology (Steps 1-8) was followed:

1. Develop stakeholder map (database).
2. Identify key motivators, current messaging/topics of interest and misinformation.
3. Develop Industry Brief for consultation.
4. Consult with key stakeholders (online survey).
5. Consult with key stakeholders (one-to-one consultation).
6. Consult with key stakeholders (roundtables x 3).
7. Analyse data.
8. Report - develop draft report, review, and submit final report.

Details of each step are provided below.

<u>Step 1: Develop stakeholder map (database)</u>

Through desktop research, key stakeholders across the Australian aquaculture industry were identified. The main stakeholder groups targeted are identified in step 1a. below. From this group, a smaller group of 101 stakeholders that were representative of the industry were selected.

The stakeholders in this smaller group were categorised/described as outlined below (see step 1b.), and investigated to understand their outreach and communication activities, and preferred media types and communication channels (step 1c and 1d.).

a. Identify:
    - Key/leading commercial businesses in each sector including key supply chain partners e.g. feed companies, wholesalers, exporters, retailers.
    - State-based advocacy organisations, committees, and special interest groups.
    - Sector/species-based advocacy organisations, committees, and special interest groups.
    - Other representative groups.
    - Research organisations, international agencies, and NGO’s.
    - Relevant local, state, and federal government agencies
    - Other service providers.

b. Categorise/describe the targeted 101 stakeholders by:
    - Product category (abalone, barramundi, king fish, mussels, oyster, prawn, salmon, seaweed/algae, tuna, other).
    - Product (detailed including 'other' category).
    - Entity type (government, commercial production, consultancy, labour/training, national peak industry body, non-profit, state peak industry body, service provider, retail, university/research).
    - Orientation, (aquaculture, aquaculture & wild caught, retail).
    - State/Territory in which entity is based.
    - Geography (geography serviced including international, national, state).

c. Identify, describe outreach and communication activity for each in relation to:
    - Key contact/s for each stakeholder.
    - Communication platforms, websites and social media channels (publicly available).
    - Any regular newsletters, other media, or communications that stakeholders regularly produce.
    - Any key affiliations or memberships that stakeholders may have with other stakeholders or industry bodies.

d. Analyse the data to identify the preferred media types and communication channels used by the different stakeholder entity types.

Step 2: Identify key motivators, current messaging/topics of interest

Through desktop research and information from Step 1, the key motivators/sets of interests, (current messaging) for each entity (business or organisation) were identified. This information was collected from the targeted stakeholder websites and social media channels, the entity's and other newsletters, press releases, advertising and other communications.

Data collected was analysed by sector, motivator, sub-motivator, prominence (using a star rating system), and how the motivator was communicated (positive, negative, neutral).

Step 3: Develop Industry Brief for consultation

A short Industry Brief outlining the context and intent of this project, a summary of desktop findings, and an outreach and communication strawman document were developed to be used in conjunction with the consultation process.

In developing the strawman document, outreach and communication platforms, communication assets and capacity building initiatives used by aquaculture industries in other countries and by other Australian primary industries were reviewed. This included NOAA, the Global Salmon Initiative, the Australian dairy industry, and the Australian red meat industry. This information is presented in visual format in the strawman document.

Step 4: Consult with key stakeholders (online survey)

Informed by Steps 1 - 3, an online survey was developed to gather information from a broader range of industry stakeholders. Its purpose was to develop a better understanding of outreach and communication activities, media types and channels used, target stakeholder groups (for messaging), key motivators, current messaging/topics of interest being communicated, identify gaps in knowledge and areas of misinformation in relation to the industry. It also provided the opportunity to test possible communication assets that might be of value for the industry and the key topics to be addressed.

Online survey

The survey was distributed broadly and to all identified stakeholders identified in Step 1. Due to the broad range of stakeholders engaged with the aquaculture industry, the questions were tailored according to the respondent's organisation profile and industry sector. A list of organisation profile and industry sector options are provided in Table 1 below.

The online survey was tested with a small group of stakeholders before the wider sector was asked to participate.

Table 1: Online survey - list of organisation profile and industry sector options

List of organisation profile options	List of industry sectors
• Industry/community representation • Government • Aquaculture production business • Feed manufacturing • Research • Seafood wholesale, food service and/or retail services • Other products or services to the aquaculture industry • Other (please specify)	• Abalone • Barramundi • King Fish • Mussels • Oysters • Prawns • Salmon and/or Trout • Tuna • Seaweed/Algae • Other

A complete list of online survey questions is provided in Appendix 5.

Step 5: Consult with key stakeholders (one-to-one consultation)

Informed by Steps 1- 4, a suitable questionnaire was developed to provide the basis for one-to-one consultation. The intent of this step was to develop a deeper and more nuanced understanding of their key motivators, current messaging/topics of interest being communicated, media types and channels used, target stakeholder groups (for messaging), and identify gaps in knowledge and areas of misinformation in relation to the industry. It also provided the opportunity to test the value of an industry outreach and communication platform and assets, key topics to be addressed and better understand the engagement activities being employed by representative groups and businesses.

Initially 16 individuals were identified to participate. These individuals were specifically targeted because of their role in industry and to ensure there was a cross-section of industry interviewed (different sectors, different entity type and size of entity, different locations). As some individuals were unable to participate in roundtable events, the number of stakeholders interviewed increased to a total of 23 people from 21 organisations. The list of participants is provided in Appendix 8.

A summary of the approach and the indicative selection of questions for one-to-one consultation questions is provided in Appendix 6.

Step 6: Consult with key stakeholders (roundtables x 3)

Three (3) online roundtables (approximately 2 hours in duration) were conducted to engage a broader cross section of industry stakeholders in more in-depth discussions about aquaculture literacy and outreach and communication, and to promote cross-sector discussion and understanding. The discussions covered challenges, opportunities and possible industry approaches to increase stakeholder engagement and literacy outcomes.

It was expected that each roundtable would have approximately 12 participants, however only 6 people participated in the first roundtable. In reviewing the first roundtable, it was felt that 6-8 people was probably the ideal number to participate in a 2-hour roundtable, as this provided the opportunity for all to provide commentary. Hence, it was decided to retain these levels for the subsequent roundtables.

The agenda and indicative questions for the roundtables is provided in Appendix 7. The list of participants is provided in Appendix 8.

Step 7: Analyse data

All data collected in Steps 1-6 was reviewed and analysed.

Step 8: Report - Develop draft report, review and submit final report

A draft report based was written and reviewed before a final report was submitted to Fisheries Research and Development Corporation (FRDC)

A Project Review Group (PRG) was convened to provide strategic advice throughout the project and review findings (see Appendix 11).

Results

Industry stakeholders, outreach and communication, and motivators (Steps 1 & 2)

Industry stakeholders, outreach and communication

Utilising stakeholder information from SIA and findings from desktop research, 101 key stakeholder businesses, representative groups and government agencies were selected for further investigation (Step 1a) (list provided in Appendix 2). These were then categorised and described as indicated in Step 1b.

This group of 'selected stakeholders' provided a representative cross-section of the aquaculture industry and included commercial production businesses, retailers, national and state peak bodies, service providers to industry (feed companies, consultants, labour and training organisations, and other service providers), Universities and research organisations, and the Australian and state governments. In the stakeholder selection process, consideration was also given to ensure different industry sectors (species types), as well as organisations/businesses from different locations and of different sizes were represented.

Table 2 below, shows the number of selected stakeholders which were investigated in each stakeholder group.

Table 2: Breakdown of 'selected' stakeholders according to stakeholder entity type

Stakeholder entity type	Number of 'selected stakeholders' by entity type
Commercial production	38
State peak body	14
University/research	11
State Government	10
National peak body	8
Service provider	5
Consultancy	4
Retail business	4
Labour/Training	3
Federal Government	3
Other Non-Profit	1
Total	**101**

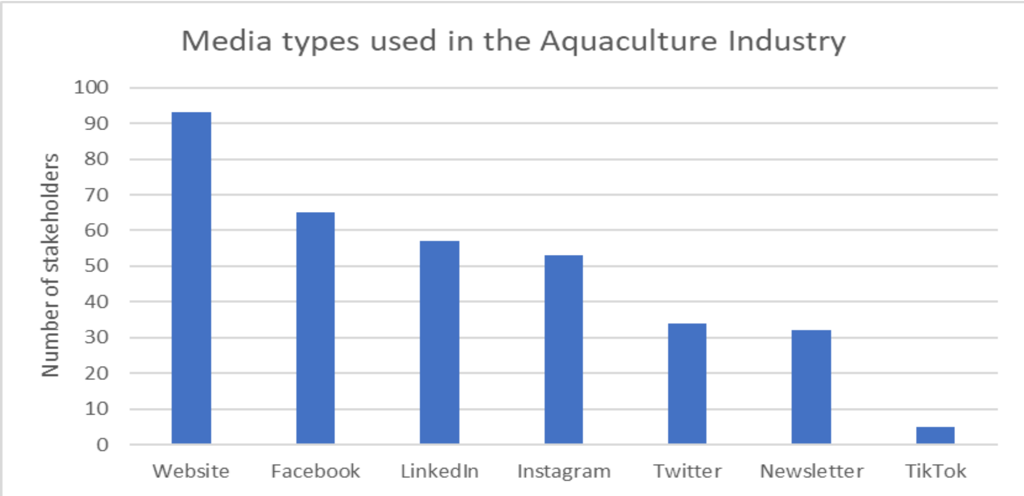
The outreach and communication activity (publicly available) and affiliations of each of these 101 entities were described, as indicated in Step 1c.

Specifically, for each of the key stakeholders identified, the following data was collected:

- Online presence (website).
- Social media presence (Facebook, LinkedIn, Twitter, Instagram, TikTok).
- Presence of other media (newsletters, press releases etc.).

It was found that 92% of the key stakeholders had websites, making websites the most prevalent communication channel across the stakeholder group (see Figure 3).

Figure 3: Online media types, including social media, used by selected stakeholders

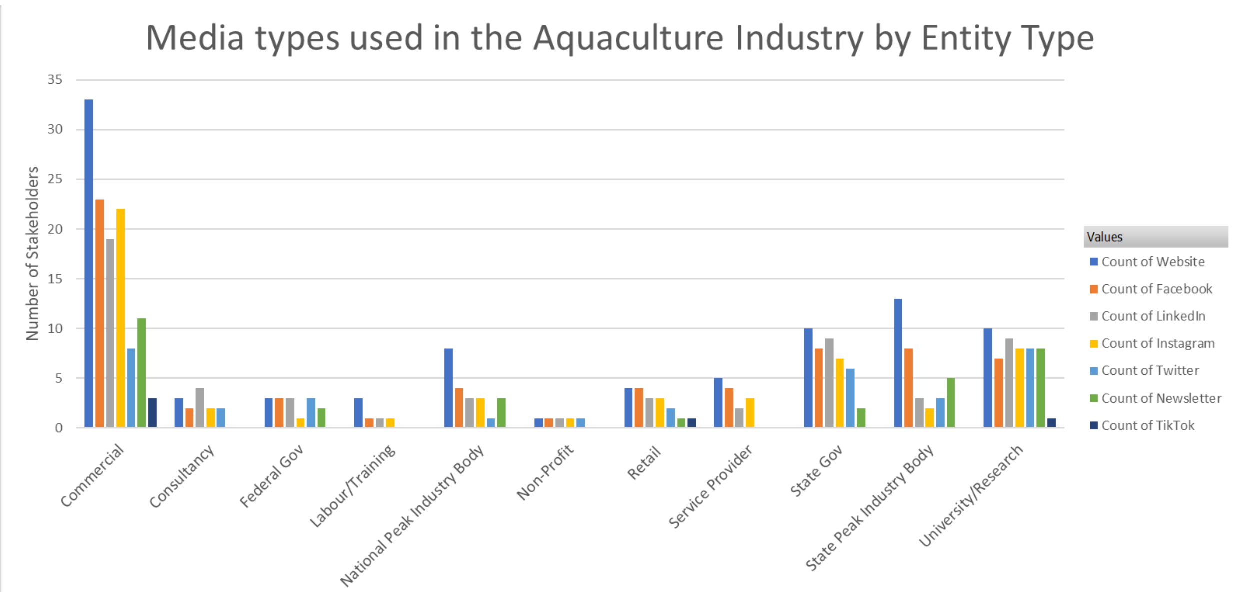


A summary of results by entity type showed that:

- Websites were found to be the most popular online communication channel used across all entity types excluding consultancies, where LinkedIn was shown to be the preferred channel.
- Facebook was the most popular social media platform utilised by the industry with 64% of stakeholders using the platform. This was followed by LinkedIn, Instagram, Twitter and TikTok with only 5% of stakeholders with an active account.
- 32% of stakeholders published a newsletter. The frequency of distribution of newsletters varied between stakeholders.

These results are shown in Figure 4 below.

Figure 4: Types and frequency of media types used by different stakeholder entity groups



The main target groups that the selected stakeholders are communicate with, were identified as:

- Members (for representative organisations only).
- Local community (including citizens and other local business).
- Community – Australia, International.
- Government – local, state, Australian.
- Traditional owners.
- Investors (for commercial companies only).
- Suppliers of seafood products (for commercial companies only).
- Customers – local/Australia/international (for commercial companies only).
- Aquaculture production businesses.
- Supply chain businesses.
- Research organisations.
- Businesses providing products and services to the aquaculture industry.
- Consumers – Australia, International.
- Schools and education providers.
- Stakeholders with an interest in aquatic animal health, marine pest management, including intergovernmental organisations, peak bodies, foreign governments etc.
- Influencers and educators (with a focus on food, including recipes and food provenance) *(Note: this target group was added after the consultation phase of the project).*

<u>Motivators</u>

The key motivators being communicated through public communication channels by the 101 selected stakeholders were investigated and assessed.

For the purposes of this project, 'key motivators' are defined as the issues, objectives or areas of action or performance* which are important to an organisation/business, and which are being communicating to the stakeholders, either explicitly or implicitly. *Performance includes achievements, initiatives and/or challenges being addressed, which are relevant to the motivator category.

The key motivators categories identified include:

- Sustainability performance.
- Environment performance.
- Workplace health and safety performance.
- People development and retention performance.
- Industry compliance and governance performance.
- Adoption of innovation and technology performance.
- Animal welfare performance.
- Community performance.
- Customer benefits.
- Product attributes.
- Economic benefits.

Each of the motivator categories identified above consisted of several sub-categories, which were also identified during the desktop research. Details of subcategories are provided in Appendix 3.

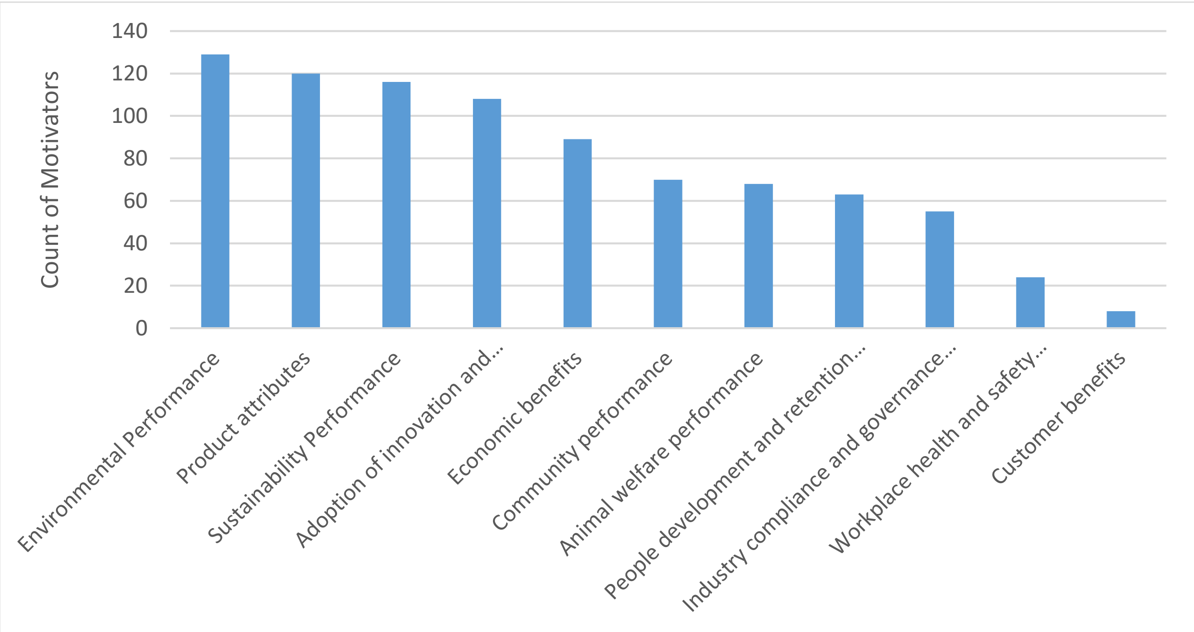
An assessment was undertaken to determine the number of times these motivators were mentioned or referenced in communication over the previous 12-month period (Nov 2021 – Nov 2022). The top four (4) motivator categories across all selected stakeholders were environmental performance (129 mentions), product attributes (120 mentions), sustainability performance (116 mentions) and adoption of innovation and technology (108 mentions).

The total count of motivator categories communicated by selected stakeholders is shown in Table 3 below and the corresponding graph is provided in Figure 5.

Table 3: Count of motivator categories communicated by selected stakeholders.

Motivator category	Count of Motivators
Environmental performance	129
Product attributes	120
Sustainability performance	116
Adoption of innovation and technology performance	108
Economic benefits	89
Community performance	70
Animal welfare performance	68
People development and retention performance	63
Industry compliance and governance performance	55
Workplace health and safety performance	24
Customer benefits	8

Figure 5: Count of motivator categories communicated by selected stakeholders



The number of times each sub-category in the top four motivator categories was mentioned is listed in Table 4 below. There is overlap in some of these sub-categories however the data provides more nuance as to the key topics that selected stakeholders are communicating about different motivator sets.

Table 4: Count of sub-motivators for the top 4 identified motivator categories

Motivator category – sub-motivator	Count of sub-motivators
Environmental Performance	
Impact on marine ecosystems	49
Impact on the environment	35
Water quality	25
Negative impacts of environmental contamination on the industry e.g. oil drilling, litter	6
Impact on wildlife	6
Impact on shared waterways	4
Use of fresh water in production systems	4
Product attributes	
Quality	44
Nutritional value	26
Food safety	19
Provenance and traceability	13
Australian/local	13
Country of Origin labelling	3
Availability	2
Sustainability Performance	
Sustainable protein source	34
Climate change impacts	25
Waste management	15
Ethical farming practices	12
Feed sources (use of sustainable feed sources)	11
Impact of or managing natural disasters including floods	9
Responsible packaging	7
Industry standards/best practice	3
Adoption of innovation and technology performance	
Science and Research	45
Investment and adoption	35
New infrastructure	10
Supply chain productivity	9
Novel feed ingredients	5
Improved quality and productivity through breeding	4

Analysis was undertaken to determine if there were different motivators for different stakeholder entity types. The top five motivator categories for different key entity types (commercial production businesses, state peak industry body, national peak industry body, University/research, and state government) are identified in Table 5 below.

Table 5: Top 5 motivator subcategories identified by the key entity types

Entity type/Motivator category – Sub-motivators	
Commercial production businesses	
1.	Product attributes - Quality
2.	Environmental Performance - Impact on the environment
3.	Sustainability Performance - Sustainable protein source
4.	Environmental Performance - Impact on marine ecosystems
5.	Environmental Performance - Water quality
State Peak Industry Body	
1.	Environmental Performance - Impact on marine ecosystems
2.	Economic benefits-Economic impact (local, State, export)
3.	Sustainability Performance - Sustainable protein source
4.	Product attributes - Nutritional value
5.	Adoption of innovation and technology performance - Science and Research
National Peak Industry Body	
1.	Adoption of innovation and technology performance - Science and Research
2.	Environmental Performance - Impact on the environment
3.	Product attributes - Quality
4.	Product attributes - Nutritional value
5.	Sustainability Performance - Sustainable protein source
University/Research	
1.	Adoption of innovation and technology performance - Science and Research
2.	Sustainability Performance - Climate change impacts
3.	Animal welfare performance - Animal health and welfare
4.	People development and retention performance - Training and skills development
5.	People development and retention performance - Workplace diversity and inclusion
State Government	
1.	Industry compliance and governance performance - Legislation, regulations and standards
2.	Environmental Performance - Impact on marine ecosystems
3.	Adoption of innovation and technology performance - Science and Research
4.	Animal welfare performance - Biosecurity
5.	Adoption of innovation and technology performance - Investment and adoption

To gain some further insights, an attempt was made to classify the prominence or importance of different motivators to the selected stakeholders. A star rating scale and the full list of motivators and sub-categories provided in Appendix 3 was used as the basis for assessment. The star rating scale used was as follows:

4 = very/extremely prominent in communication

3 = listed as a key/priority issue for organisation

2 = listed as issue for organisation

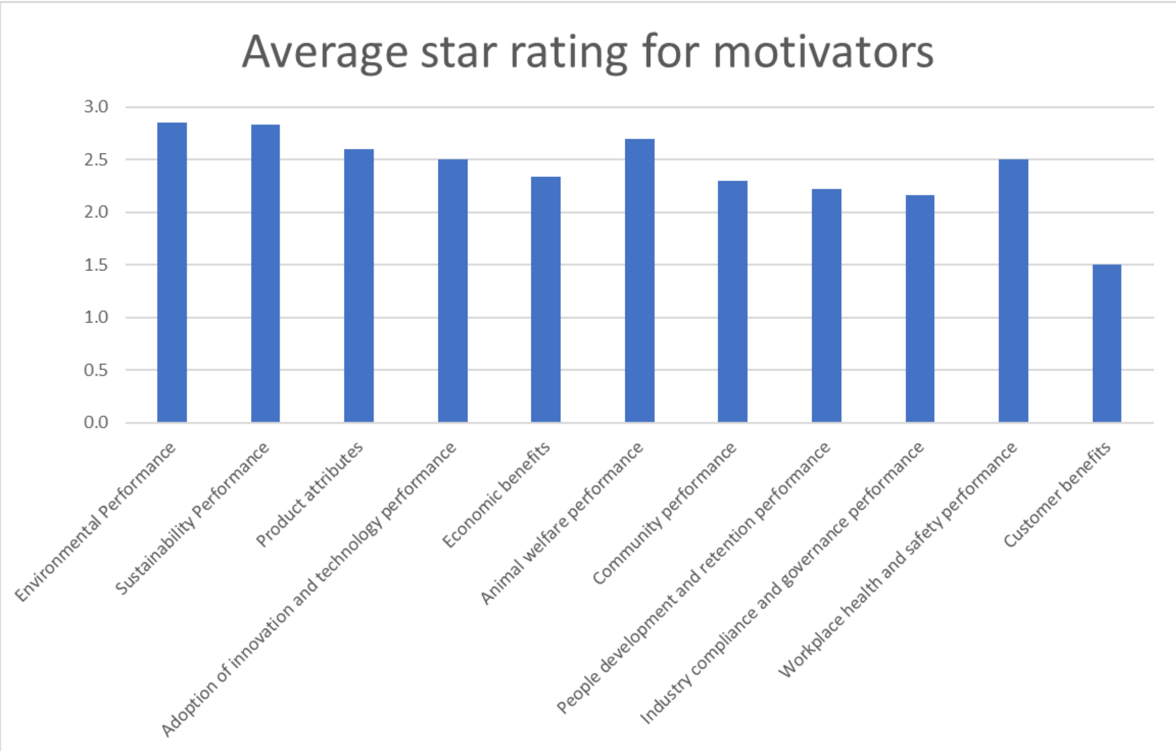
1 = some tangible reference to the issue.

These ratings where then averaged to determine the prominence or described importance of each motivator. This assessment showed that the most prominent or important motivators being communicated were environment, sustainability, and animal welfare performance, followed by product attributes. This is shown in Figure 6 below.

It should be noted that although the 'customer benefits' motivator rating is lower, there was cross-over with the 'product attributes' motivator category, which rated higher.

The way motivators were communicated was also assessed. The significant majority (96%) were communicated as a positive message. Only 3% were communicated negatively.

Figure 6: Average star rating for each motivator across the selected stakeholders based on key categories identified.



Key
Vertical axis = star rating (see below), Horizontal axis = Motivator category (as shown on graph)
Star rating key = (4) very/extremely prominent, (3) listed as a key/priority issue for organisation, (2) listed as issue for organisation, (1) some tangible reference to the issue

Develop industry brief (Steps 3)

The following documents were developed and used to inform and provide context for the online survey, one-on-one consultation, and/or roundtables.

- Description of Project (Appendix 1)
- List of Motivators (Appendix 3)
- Strawman – (Appendix 4) - provided as separate attachment.

To inform the industry brief, online survey and consultation process, desktop research was undertaken to gain a greater understanding of several areas including aquaculture literacy in Australia, approaches to gaining and maintaining social licence, and approaches and tools to improve outreach and engagement. A summary of findings is provided below.

Many of the stakeholders interviewed indicated that there was a low level of community literacy in regard to Australian aquaculture. This is largely based on anecdotal evidence and the personal experiences of the individuals interviewed, all who had a deep and well-considered position on the industry and its stakeholders. There were no identifiable industry level data or reports, however there were reports identified from the Tasmanian salmon sector [5]. Insights could be taken from this research; however a cautionary approach is suggested in overlaying the findings to other sectors and regions given the unique and challenging circumstances around the development of the Tasmanian salmon industry.

Investigation into 'social licence' or 'societal support' highlighted the following research and projects:

- '*Determinants of socially-supported wild-catch fisheries and aquaculture in Australia*' (FRDC report: 2017 – 158) [6] states that "to secure the future of the Australian wild-catch fisheries and aquaculture industry, it is increasingly clear that, alongside effective and responsible management and production, building and maintaining societal support is vital". This report provides a definition of societal support: "Societal support is a state of acceptance, approval or assistance for fisheries and aquaculture activities granted by stakeholder groups. It is located on a gradient from a low to high level of support. More specifically, societal support:
    - Is rooted in the beliefs, perceptions and opinions of stakeholders about a fishery or aquaculture activity. Stakeholders are those who are impacted by, or who can impact a fishery or aquaculture activity.
    - Is perceived differently by different stakeholder groups, and different stakeholder groups can grant different levels of support for a fishery or aquaculture activity
    - Is not necessarily consistent across geographical scales, and the level of societal support for a fishery or aquaculture activity may differ at local, regional and national scales
    - Is dynamic and changes over time as beliefs, perceptions and opinions are subject to change as new information is acquired. Societal support can be slow to gain but lost quickly
    - Is determined by the context that surrounds the fishery or aquaculture activity and the external circumstances at the time
    - Is determined by the behaviours, practices and actions of the people within the fishery or aquaculture operation while fishing or farming
    - Is determined by the building of trusting relationships and meaningful engagement with stakeholder groups

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[5] Community Sentiment Survey and Tracking Reports based available https://salmontasmania.au/news/

[6] Alexander, K.A. and Abernathy, K.E. Kirsten E. 2019. *Determinants of socially-supported wild-catch fisheries and aquaculture in Australia*. FRDC Project No 2017-158. Australia.

- Is determined by the ability of the people within the fishery or aquaculture operation to have influence with stakeholder groups.”

The research also identified 16 determining factors (determinants) that affect the level of societal support relevant for the seafood industry, comprising aspects which (for the fishing or aquaculture activity) can be imposed by external actors, can be related to internally-held values, or can be based on behaviours, capacity and actions undertaken by the operation. In addition it also provided a case study about Humpty Doo Barramundi (pp.45-51) and how they have addressed social licence through the framework of these determinants, highlighting how communication and engagement has been critical in their success.

- A national longitudinal study (2019-2021) looking at community trust in Australia’s rural industries, which was commissioned by AgriFutures.[7], reported that the extent to which rural industries were considered to manage their environmental performance effectively and the extent to which they were seen to be responsive to community concerns, the more community members trusted rural industries. Industry responsiveness required that rural industries “listen to and respect community opinions” and “are prepared to change their behaviour in response to community concerns. When industries listen to concerns and respond appropriately, in ways that demonstrate they have heard these concerns, deeper community trust results”. The 2022 report summary concludes “developing trusting community relationships allows rural industries to approach challenging issues with confidence. Addressing challenging issues requires rural industries to embrace a level of vulnerability. However, broadening and deepening these conversations is a clear demonstration of industry responsiveness, a key, enduring driver of community trust in rural industries.” [8]
- ‘Methods to profile and connect the provenance of wild caught prawn fisheries and their values to the community’ (FRDC report: 2018-172)[9], is a report that has looked at best practice community engagement activities for the wild prawn sector. The project developed a suite of online engagement tools which blended both ‘inform’ communications methods with engagement/interaction methods and developed a sustained level of traffic through the Australian Wild Prawn website (https://www.australianwildprawns.com.au/). This report can provide learnings, insights and potential guidance for the development of an outreach, communication and engagement plan for the Australian aquaculture industry.
- Research undertaken by Corrine Condie, has analysed the conflict in the Tasmanian salmon industry. It assessed the status of the salmon industry’s social licence over time, the conditions that prevailed to trigger the decline in social licence and the application of a social influence model to understand drivers of conflict, test strategies to reduce conflict and to provide an early warning system. The research shows the need for nuanced and directed information, rather than broadcast information (C. Condie, personal communication, 2023. PhD thesis not yet published).

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[7] Voconiq. 2022. *Community Trust in Australia’s Rural Industries: Year Three National Survey.* AgriFutures Australia. Australia Voconiq, Australia. https://agrifutures.com.au/wp-content/uploads/2022/12/FINAL_Yr3_Insights_report-1.pdf

[8] https://agrifutures.com.au/wp-content/uploads/2022/12/SEP22036-002-YR3-Research-Summary-Mk5.pdf

[9] “Methods to profile and connect the provenance of wild caught prawn fisheries and their values to the community, for Australian Council of Prawn Fisheries and FRDC; May 2022.

- Research into social licence in the New Zealand aquaculture [10,11] industry which highlights the need for a relational basis for 'social licence to operate' strategies to be effective.
- 'License to engage: Gaining and retaining your social license in the seafood industry. A Handbook of available knowledge and tools for effective seafood industry engagement with communities' (FRDC report: 2015-300).[12] This report provides the steps to guide planning and undertaking effective engagement; and a process to support individual seafood business operators and sector associations find shared values and messages and use these shared values and messages in engagement activities with community groups and the Australian public.

The above research indicates a need for a mix of outreach, communication and engagement strategies to achieve the best industry outcomes and/or provides some practical tools to address this need.

Consultation – Online survey (Step 4)

As outlined in the Method section, questions were allocated based on the respondent's organisation profile and the sectors in which they operated.

In total there were 63 respondents to the online survey. A summary of the profile of respondents and their responses is as follows:

- Respondents were based across all states and the Northern Territory, and from across a broad range of aquaculture sectors (all species types listed in Table 1 on page 6 plus other finfish, tropical rock lobster and pearls).
- 50% of respondents worked across both wild caught and aquaculture, whilst 48% identified with the aquaculture sector only (2% were wild caught only and their data was not recorded).
- Respondents indicated they worked in aquaculture production (38%), industry/community representation (13%), research (8%), government (6%) and the remainder from other roles in the industry including wholesaling, retailing, feed manufacturing etc.
- Production businesses predominantly sold to markets within their State (59%) and Interstate (55%). Only 32% supplied export markets. The main supply chains accessed included direct to large supermarket retailer (55%), interstate wholesaler (55%), in-State wholesaler (45%) and direct to local retailer (45%).

Similar to the desktop findings, across the industry, preferred media types included websites (69%), Facebook (69%), followed by Instagram (47%), LinkedIn (47%) and Twitter (16%).

When the results were analysed against stakeholder entity type, it showed that production businesses were using Facebook and Instagram as their preferred communication platforms, whereas industry/community representation organisations, were predominantly using websites and Facebook. Care should be taken in interpreting the results as there are only limited numbers of

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[10] Quigley, R. and Baines J., 2014. *How to improve your social licence to operate - A New Zealand Industry Perspective*. MPI Information Paper No: 2014/05 Prepared for Aquaculture Unit, Ministry for Primary Industries. https://www.mpi.govt.nz/dmsdocument/3995-How-to-improve-your-social-licence-to-operate-a-New-Zealand-Industry-Perspective

[11] Baines, J. and Edwards, P., 2018. *The role of relationships in achieving and maintaining a social licence in the New Zealand aquaculture sector,* Aquaculture, Volume 485,2018, Pages 140-146. https://www.sciencedirect.com/science/article/pii/S0044848617314655

[12] Ogier, Emily M. and Brooks, Kate. 2016. *License to engage: Gaining and retaining your social license in the seafood industry. A Handbook of available knowledge and tools for effective seafood industry engagement with communities.* Fisheries Research and Development Corporation (2015-300), Institute for Marine & Antarctic Studies (UTAS) and KalAnalysis, Hobart.

respondents in some groups, especially in the 'industry/community representation' stakeholder group (9 respondents).

A summary of the results is shown below in Figure 7 below.

Respondents were questioned about the most common questions or information that customers/the public ask about production methods or products. The responses can be summarised as:

- Production: How is your product grown? How long does it take to grow? How much do you grow? What do you feed and how do you feed them? What do they eat? How do you harvest? How big is your operation? How does weather impact?
- Sustainability – Is it sustainable? Are chemicals used?
- Environmental impact of production: What is the impact on the environment? How do you deal with waste?
- Food safety: Do you use antibiotics? Do you use hormones? Is there any contamination e.g. heavy metals?
- Supply: Where can I buy the product? Is it local? When is it available? Are you open to the public? What is the price?
- Product /usage questions: Should I buy wild catch or farmed product? How do I use/prepare the product? Does product from different regions taste different. Questions about nutritional information.

Respondents were also asked about the most common misconceptions customers/the public convey about your production methods or product. The responses can be summarised as:

- Sustainability: that production is not sustainable, wild caught is better than farmed.
- Environmental impact: that production is detrimental to the environment and causes pollution in waterways.
- Regulation: that salmon farming in Tasmania is not regulated.
- Product/usage: that wild caught is better than farmed, how product should be handled (oysters).
- Production/supply: there were also general misconceptions about different production systems (land vs marine), how product should be handled post-harvest, and seasonality of product.

Respondents indicated the key stakeholder groups communicated with included:

- Government – state/Australian Government (all stakeholder entities group).
- Local community (all stakeholder entities group).
- Research organisations (all stakeholder entities group).
- Members including aquaculture businesses and other (for industry/community representation group).
- Customers (for aquaculture production businesses group).
- Consumers (for aquaculture production businesses group).
- Investors (for aquaculture production businesses group).

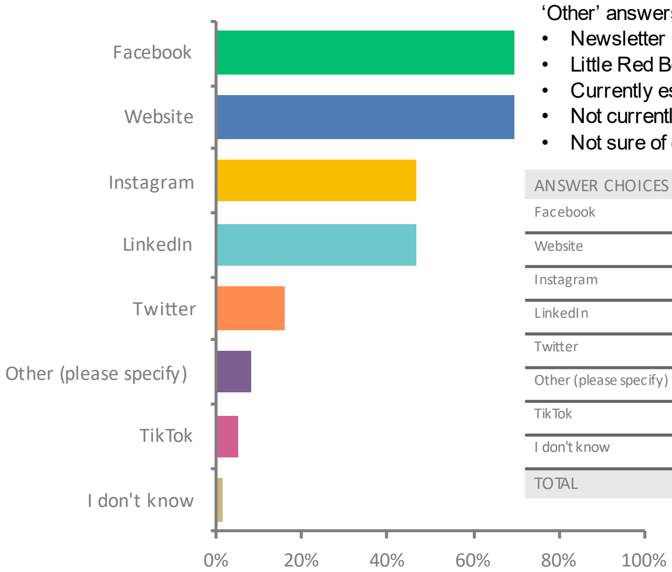
Respondents indicated that the main way they communicated with stakeholders was through website (76%), meetings (69%), social media (57%) and targeted emails (53%). This is shown in Figure 8 below.

Figure 7: Media types used by 'all stakeholder entities' (all respondents), 'production business' group and 'industry/community representation' group.

Media: Overall

Q9: Does your business maintain the following media platforms? (tick all that are applicable)

Answered: 62 Skipped: 6

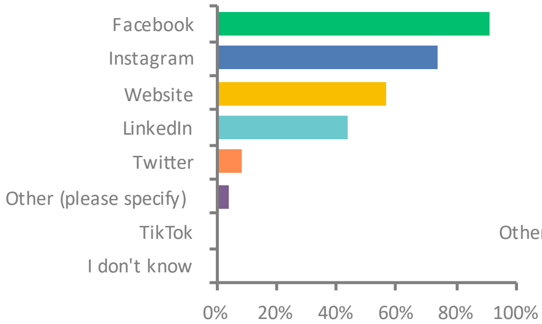


'Other' answers:

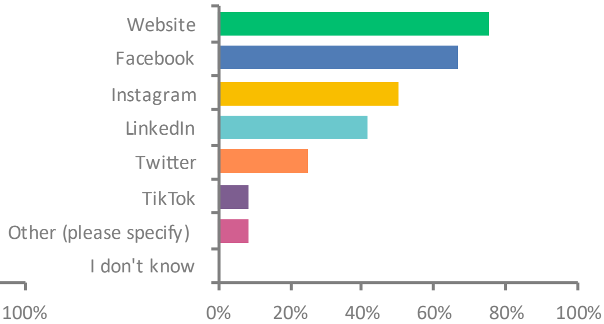
- Newsletter
- Little Red Book (Chinese social media) & YouTube
- Currently establishing LinkedIn account
- Not currently
- Not sure of others

ANSWER CHOICES	RESPONSES	
Facebook	69.35%	43
Website	69.35%	43
Instagram	46.77%	29
LinkedIn	46.77%	29
Twitter	16.13%	10
Other (please specify)	8.06%	5
TikTok	4.84%	3
I don't know	1.61%	1
TOTAL		163

Filtered by Aquaculture Production Respondents only



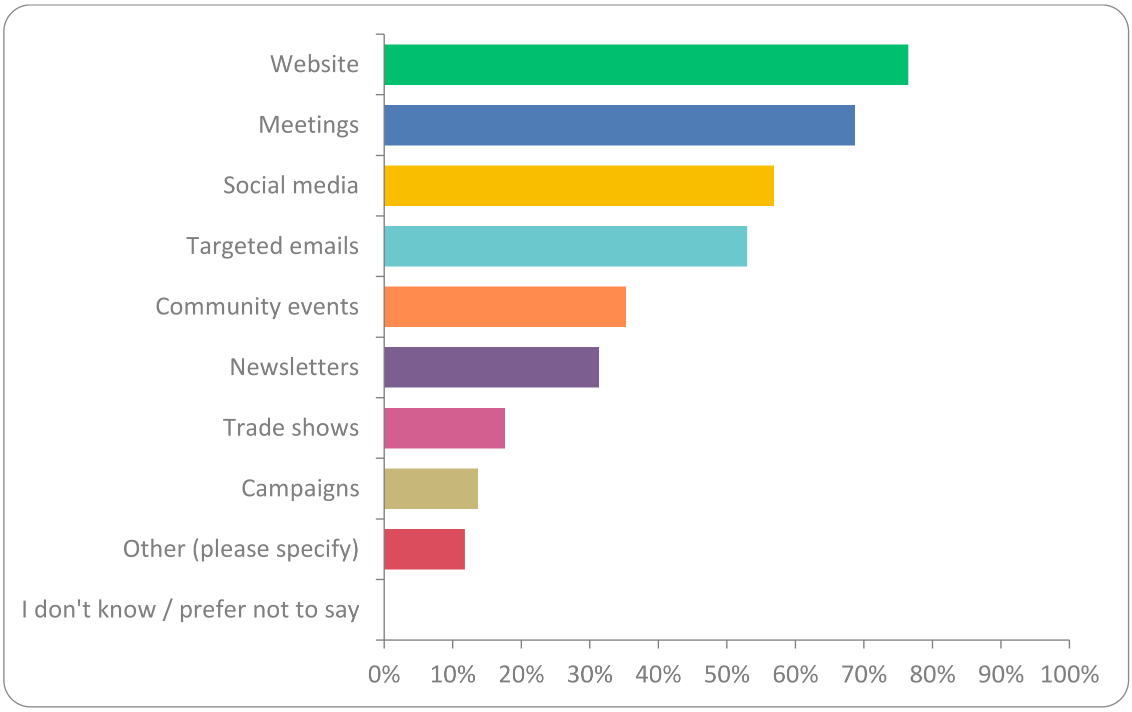
Filtered by Industry / Community Representation Respondents only



ANSWER CHOICES	RESPONSES	
Facebook	91.30%	21
Instagram	73.91%	17
Website	56.52%	13
LinkedIn	43.48%	10
Twitter	8.70%	2
Other (please specify)	4.35%	1
TikTok	0%	0
I don't know	0%	0
TOTAL		64

ANSWER CHOICES	RESPONSES	
Website	75.00%	9
Facebook	66.67%	8
Instagram	50.0%	6
LinkedIn	41.67%	5
Twitter	25.00%	3
TikTok	8.33%	1
Other (please specify)	8.33%	1
I don't know	0%	0
TOTAL		33

Figure 8: The main ways that organisations/businesses communicate key topics to the stakeholder groups (all stakeholder entity types)



There is some nuance when these results are filtered by different stakeholder entity types, however websites are the most common media type used. 'Meetings' feature in the top 3 most common ways that key topics are communicated to target stakeholder groups for the 'all stakeholder entities', 'aquaculture production businesses' and 'industry/community representation' groups. 'Aquaculture production businesses' use social media platforms (71%) more than 'all stakeholders' groups (57%) and the 'industry/community representation' group (54%).

Respondents indicated they gathered material from a range of sources for developing content for newsletters, websites, social media etc. Sources included for research projects, scientific publications, own staff/community, own activities, direct communication with key stakeholders, peak bodies, international bodies other newsletters. FRDC was seen as a key source of information, as was mainstream news and SIA publications/website.

The main barriers identified by respondents when communicating with stakeholders, can be summarised as follows:

- Lack of time and resources available - including people and financial resources available for planning and execution (including website upgrades, targeted messaging, social media management, attending meetings, organising/attending community events). The lack of resources available to small businesses and associations was highlighted.
- Achieving cut-through/maintaining engagement relevancy and value; the need for communication and engagement to be targeted, efficient, with appropriate reach; often wide array of stakeholder groups that require different messaging; information needs to be delivered through the right medium at the right time, balancing amount versus value of information.
- Value of information – sporadic nature of research to report, lack of timely and relevant data/industry statistics to share.

- Credibility – positioning of business/organisation - being understood as to “what we do”; being seen as a credible source of information.
- Language and cultural barriers – limit effectiveness of communication, sometimes dealing with people where English is their second language, challenging to communicate complex/technical issues.

The types of communication assets or initiatives that respondents indicated would be most valuable were (in order of preference).

- Fact Sheets (64%).
- Training – stakeholder engagement (57%), communication (55%) and advocacy (43%) (including media training, social media training).
- Social media tiles (41%).
- Videos (41%).

The top 3 answers were consistent for the ‘all stakeholder entities’, ‘aquaculture production businesses’ and ‘industry/community representation’ groups.

Other useful comments/requests made in relations to this topic included the need for education material for schools; and the desire to have shared resources and materials, and cooperative use of communication channels on issues of mutual benefit.

The most important topics identified by respondents for the aquaculture industry to better communicate to its stakeholders, in order of priority are:

- Sustainability performance
- Environmental performance
- Industry compliance and governance performance, and
- Product attributes.

Sustainability and environmental performance appeared in the top 3 most important topics for the ‘all stakeholder entities’, ‘aquaculture production businesses’ and ‘industry/community representation’ groups.

The ‘industry/community representation’ group flagged ‘adoption of innovation and technology’ and ‘people development and retention’ as key topics to be communicated to their stakeholders.

The survey results provided further clarity on the most important topics respondents thought needed to be communicated with stakeholders. These are summarised in the Table 6 below.

Other key topics highlighted through the online survey include (summarised):

- The need to educate and promote the seafood/aquaculture industry through schools.
- Better engagement with retailers and government to advance the industry.
- Traditional owner engagement.
- Biosecurity preparedness (producers and public).

Table 6: Main topics and related sub-topics to be communicated as identified by survey respondents.

Topic	Top three sub-topics identified by respondents
Sustainability performance	• Industry standards/best practice (61%) • Local environmental impacts (59%) • Ethical farming practices (44%) • Sustainable protein source (44%)
Environmental performance	• Impact on environment including marine ecosystems (85%). • Water quality (57%) • Impact on shared waterways (46%)
Industry compliance and governance	• Industry standards/best practice (72%) • Legislation, regulations and standards and compliance obligations (54%) • Corporate responsibilities including voluntary accountability, public transparency and reporting (43%)
Product attributes	• Quality (60%) • Australian/local (57%) • Nutritional value (36%)
Adoption of innovation and technology	• Science and research (62%) • Production environment innovations including new infrastructure and systems (47%) • Investment and adoption (43%)
People development and retention'	• Training and skills development (83%) • Attraction and retention (68%) • Workplace diversity and inclusion (43%)

Consultation – One-to-one consultation (Step 5)

In total, 23 representatives from 21 organisations were interviewed as part of the one-to-one consultation process. A list of people, and their respective organisations, who participated in the consultation and roundtables is provided in Appendix 8.

Organisations were categorised as follows:

- Commercial businesses, including aquaculture production businesses, feed manufacturers, and other commercial products and services (not including research services or wholesaling / retailing services).
- Representative groups including industry representative bodies – national, state, local sectoral bodies etc.
- Seafood wholesaling, retailing etc.
- Research organisations, including government research agencies, universities, and private research providers.
- Government – other (all levels).

Qualifying questions were asked to understand the business/organisation profile, the sector/s in which it operates, key stakeholders, available communication resources, approach to communications, key messaging, affiliations, and accreditations. The interviewees were also asked about their role in the business/organisation to understand the lens through which they approached issues.

A list of indicative questions asked to interviewees is provided in Appendix 6. The consultation was conducted in an open conversational style, and not all questions were asked to each stakeholder. This provided the opportunity with limited time, to explore areas of relevance or interest or identified issues and solutions specific to the interviewee in more detail.

Summary of findings

The following is a summary of feedback from those interviewed, on the specific questions or topics outlined.

1. *What are the main barriers to achieving effective communication/engagement and trust with your stakeholders?*

    - Poor aquaculture/marine/seafood literacy.
    - Lack of resources available to smaller industries and businesses to implement an effective communication and engagement programs to address aquaculture literacy, improve engagement and build trust.
    - Industry information is often not easily accessible – not available, too hard to find (siloed/ fragmented) or too technical.
    - Responding effectively to stakeholder concerns/knowing how to respond.
    - Hard to get message to retailers and consumers (low engagement).
    - Competing imports can be poor quality and is a distraction when promoting the Australian sector.
    - Too much focus on wild catch/consumers default position is preference for wild caught product.

2. *Do you believe that the Australian aquaculture industry tells its story well? If so, if not, why do you say this?*

    Those consulted believed the industry could do a better job in telling its story, however they recognised that it is getting better and how difficult it is to reach, engage and educate stakeholder groups, especially the public.

    Others general comments included:

    - It is difficult to see what Australian aquaculture does – it does not have a significant presence as an industry.
    - There is not a lot of external messaging about Australian aquaculture.
    - "We need to explain what we do, why we do it and how we do it".
    - There needs to be a common language across the industry.
    - The industry is not driving messaging about benefits of aquaculture - consumers have no reason to move from "I only eat wild caught".
    - There is a strong bias, particularly in older demographics, that wild caught is better.
    - It's not about promoting farmed over wild caught, but letting people know aquaculture is the future and why, and it doesn't mean that product quality or value is diminished, especially if it is Australian produced.
    - There is a need to engage retailers, to help extend the messaging.
    - Many consumers don't understand seafood (flavour and texture profiles etc.) and how to cook it (need simple messaging in this area as well, so they have confidence).
    - There is a need to promote quality of product, especially to export customers/international consumers (underpinned by regulations, food safety, traceability)
    - The industry has a good story to tell around environment, sustainability, and effective land-based production systems.

3. *What are the opportunities/risks being mitigated? (answers are framed as opportunities)*

    - There is a need to have a more informed discussion about aquaculture to help build social license.
    - There is an opportunity to tell the overarching story of aquaculture.
    - "Need to normalise what we do" (in reference to other food production systems).

- Some individual sectors and individual businesses could be telling their story better. As a result, they are missing opportunities to build demand for their product.
- Build momentum and get more industry people involved and engaged. (Although there is recognition that it is difficult to harness the collective especially for less well-resourced associations and businesses).
- Messaging needs to be framed positively (as the red meat industry has done with their Good Meat website).
- To present the industry's sustainability credentials and a roadmap to carbon neutral (as the red meat industry has done with their CN30 Roadmap[13]).
- "If you want to help protect the planet – select fish more often as your protein source - farmed or wild."
- Need to leverage other networks e.g., influencers and educators (these groups need to be included as key stakeholder groups).
- To be able to respond to criticism appropriately.
- Seaweed – tell the Australian innovation story.

4. *What do you wish industry would explain? What do you want to see industry communicate?*

- "What the industry does, why we do it and how we do it."
- The benefits of aquaculture production – especially low environmental footprint, sustainable protein source etc. "The industry does not really lean into this advantage."
- The standards that production businesses need to meet (regulatory and voluntary, different certification standards etc.).
- Information about aquaculture products.
- Tell the whole supply chain story with a lens on sustainability, and traceability.
- Why people should work in the industry (to help promote the industry as a career option).

5. *What questions do you get asked by friends and family about the industry? Are you able to answer these well? What resources would help?*

Many of those interviewed, whether from the salmon industry or Tasmania or not, said that they were mainly asked about Australian salmon production and product, including:

- Should I buy farmed salmon from Tasmania?
- Is the product safe to eat? Do they dye the flesh?
- Are concerns related to the environment, animal welfare etc. valid?
- What is the impact on the environment?
- Why do you work in the industry?
- What is in the feed used for fish?
- Are antibiotics used?

Several people interviewed indicated that these questions were driven and amplified by concerns raised in the book *'Toxic: The Rotting Underbelly of the Tasmanian Salmon* Industry' by Richard Flanagan (2021) and through negative and often-sensationalist communication on social media.

Other questions asked:

- What fish should I eat? (from a health, sustainability and/or environmentally friendly perspective)
- What is the stocking density? (animal welfare)
- How do they grow seaweed?

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[13] Refer https://www.mla.com.au/globalassets/mla-corporate/research-and-development/program-areas/environment-and-sustainability/2689-mla-cn30-roadmap_d3.pdf

Interviewees indicated they can answer these questions sufficiently, but it would be good to have a place (e.g., a website) where they could direct people to access further information and to address their curiosity. Again, from the answers received, it was re-enforced by those interviewed, that the messaging should be simple.

6. *What are the main areas of misinformation that you find?*

- Mostly around salmon production, i.e., it is not safe to eat, the flesh is dyed, the feed source is not sustainable, severity of environmental impacts etc.
- Many people don't know that Australian salmon or prawns are farmed.
- When people think about 'farmed' fish, they often think it is from Asia (this was in the context that people think that farmed product from Asia is of inferior quality).

7. *Are any other topics/issues that should be added to the provided Motivator List?*

Interviewees indicated that the list of motivators was comprehensive and covered the topics they would include on the list. Only one suggestion was received – that 'taste/flavour' could be added to produce attributes category.

8. *What are the highest priority areas/highest risk areas for your organisation/business?*

- [Opportunity] To focus on social license and matters that are of community concern. This requires good community engagement, developing an understanding of what we do and how we do it and extends beyond economic benefit.
- [Opportunity] To focus on relationship with (state) government and educate key government staff on industry practices, benefits, and the impact of regulatory burden etc., so that economic and other benefit can flow (investors moving to other jurisdictions).
- [Opportunity] To engage and build stronger relationships with Traditional Owners and identify opportunities to work together.
- [Risk] The concerns and diminished social licence around salmon production in Australia is a risk to other sectors in the aquaculture industry.

9. *What resources would help you/your business in telling your story or the industry in telling its story?*

Australian aquaculture outreach and communication platform

- There was very strong agreement from all interviewees that an outreach and communication platform would be of value to the industry and industry stakeholders.
- "It would be good to have larger platform; so that resources could be brought together".
- The effort should be focused on the collective aquaculture industry, and sectoral and state representation should be retained by the respective representative organisations.
- "People want a one-stop shop" for information, they don't want to have to go to different (unlinked) sites (for clarification, linkages from a main site were considered acceptable).
- "Information on a site needs to be balanced, informative and transparent".
- The platform could be a source of material to educate influencers and educators.
- Ensure that seaweed (and climate solutions), pearls and other non-food farmed aquaculture species are represented.

The examples used in the strawman document were well received. It was recognised the was significant investment in these sites. Features that were commented on included: the ease to navigate, downloadable infographics, and access to resources for schools.

There was also comment on the need for caution in regard to how such an initiative might be resourced and maintained, noting that the aquaculture industry had limited resources and, as a lot of outreach and communication activities were undertaken at the sector, state, local level or through commercial businesses (especially in the salmon sector), it was important to complement the existing efforts and resourcing rather than 're-inventing the wheel'.

Other assets

All assets listed in the strawman document were considered to be of value, this included:

- Fact sheets/deep dive fact sheets.
- Videos.
- Podcasts.
- FAQs/messaging.
- Social media tiles and support.
- Infographics, animations, and videos.
- Campaign banks.
- Image banks/Insta-decks.
- Online library.

One example used to test the suitability of communication assets was the booklet produced by the NZ Aquaculture Industry, "Aquaculture for New Zealand: A Sector Overview with Key Facts and Statistics for 2022" [14]. This type of asset was well received and there was consensus that a similar type of asset for the Australian industry would be of value and a good starting point to educate stakeholders about industry, its diversity and value. Additionally, it was noted a simple one-page summary infographic providing an overview of the industry would also be of value.

It was recognised that the suitability of the asset would be determined by the target audience and messaging being delivered; and the available resources (funding) to develop assets.

Comments on messaging/assets

There was consistent feedback that:

- Messaging should be simple and short e.g., use of infographics, simple fact sheets.
- Social media is important.
- Information needed to be from a trusted source and should be framed in the positive.
- It's not just about science, it's about communicating it effectively.
- Stakeholder concerns need to be addressed, not avoided, and provide transparency.
- Care needs to be taken in managing messaging between wild caught and aquaculture (best to focus on eating Australian caught or farmed, rather than competing messages).

Other comments included:

- Using consumer-focused media, recipe sites, cooking educators etc. could be a good way to extend the messaging and develop aquaculture literacy.
- The industry needs to work towards a common language in its communication.
- It's important to 'humanise' communication and be 'real'.
- "Stop apologising" - most Australian consumers take it as given that if it is Australian produced seafood, then it meets acceptable standards related to sustainability, environmental management, animal welfare, OHS etc.
- Be careful of greenwashing.

*Other initiatives supported**,** included:*

<u>*Technical talent pool database with details of technical experts*</u>

The feedback was this type of resource would be of value if it was suitably resourced and content was about experts was sufficiently detailed and regularly updated and maintained. Some stakeholders indicated they had a similar in-house database they would be willing to share for the benefit of the broader industry. It was suggested that

[14] From Aquaculture New Zealand website (May 2023) - https://drive.google.com/file/d/1-Emyq4uIIt1qYcpyw10ZGu2a-xeFdJGr/view

the database might sit with either SIA or FRDC and that appropriate governance, including access rights, needed to be considered. The latter was highlighted, because some indicated that if the database was freely available, it might be a deter some valued scientists or other experts from participating.

Training programs

The interest in communications, media, social media, stakeholder engagement, and advocacy, including a potential Industry Ambassador Program, based on Meat & Livestock Australia's (MLA) Ambassadors for the Red Meat Industry Program, was tested.

There was mixed feedback on the value of training programs. On balance, the professional communicators that were interviewed, believed there was a high need for this training. However, representatives of larger companies indicated already had suitably qualified people or access to resources to fulfil this need. Some less well-resourced associations and businesses indicated they did not have a need, because they undertook limited communication activities. In some cases, it was indicated that outreach and communication was given a lower priority than other business activities as the skills base did not exist in the organisation or there was not sufficient time or resources to dedicate to the activity.

It was noted that a previous training initiative, FRDC Project No 2019-022: Digital Literacy for Queensland Commercial Fishers – Stage 1 Improving Business Efficiencies [15] was not well attended in-person. This was due to a range of reasons, not necessarily directly related to the project, however it does highlight that demand for training and suitable delivery mechanisms should be tested before further investment is made.

An earlier funded FRDC project (FRDC project 2015-300: License to engage: Gaining and retaining your social license in the seafood industry. A Handbook of available knowledge and tools for effective seafood industry engagement with communities) was also referenced as providing practical approaches to communications and stakeholder engagement for businesses in the industry. [16]

The Australian Prawn Farmers Association (AFPA) provided information about a digital skills hub for training they have developed for their sector in collaboration with Central Queensland University. The content, which facilitates peer-to-peer learning, aims to provide practical guidance and training on a range of activities involved in the production of farmed prawns and other species. The platform has been built so it can be further developed for other sectors, should there be demand.

It was noted that there may be potential to integrate communications, media, social media and advocacy training into the National Seafood Industry Leadership Program (NSILP) or the Women In Seafood program or provide these as additional modules. Members of these programs were considered to be ideal candidates for an Industry Ambassador Program. This idea was not tested with the owners of these programs.

[15] Gallagher, J. Freeman, J. Johnston, H. Mantilla, E., Honey & Fox Pty Ltd, 2022, *Digital Literacy for Queensland Commercial Fishers – Stage 1 Improving Business Efficiencies*, Brisbane, July. CC BY 3.0

[16] Ogier, Emily M. and Brooks, Kate. 2016 License to engage: Gaining and retaining your social license in the seafood industry. A Handbook of available knowledge and tools for effective seafood industry engagement with communities. Fisheries Research and Development Corporation (2015-300), Institute for Marine & Antarctic Studies (UTAS) and KalAnalysis, Hobart.

Schools-focused educational resources

There was very strong support for investment in the development of educational resources to integrate with the school curriculum to showcase the Australian aquaculture industry.

Comments included:

- Content needs to highlight what the industry does, why, the benefits of the industry (especially sustainability benefits), and career opportunities and pathways.
- It needs to be well resourced, so the material provided is relevant, engaging, and current.
- Ideally students in the early and mid-years of schooling should be targeted.
- School focused initiatives need to be promoted and supported, because teachers are time and resource poor. It was suggested the Australian cotton industry could be seen as an exemplar in this space. The cotton industry provides a comprehensive range of resources mapped to the school curriculum across a range of disciplines, employs a dedicated Education Coordinator [17] who works with schools and teachers to promote and support activities. A good summary of this work is provided here: https://www.youtube.com/watch?v=81zcbv8YxqU
- Businesses in the industry, engaged in hosting visits and other activities, need to be well supported so they can help deliver engaging experiences and enduring outcomes.

Mini-grants concept

The idea of mini-grants was based on the program that NOAA Fisheries promoted to support aquaculture outreach and literacy. The example used was mini-grants provided to aquariums - this idea was discussed more broadly with interviewees.

Feedback was as follows:

- Some financial assistance could be helpful for associations or businesses that lacked the resources but wanted to build aquaculture literacy in their community and which would also provide benefit to the wider industry. This might be through displays at local shows, permanent local displays, or activities for schools (aligned to industry/Primary Industries Education Foundation Australia (PIEFA) approved school curriculum activities).
- If funded by FRDC, this might be a co-investment competitive model, as used by some other Research & Development Corporations for marketing purposes.

10. *Leadership of an Australian aquaculture literacy initiative*

Overwhelmingly, the SIA, through their Aquaculture Advisory Committee, is seen as the most appropriate organisation to take leadership of this initiative. Interviewees noted SIA's existing industry leadership and advocacy role, national focus, existing relationships with sectoral organisations and businesses, and understanding of commercial sensitivities, as the key reasons.

Alternate organisations were canvassed, however for a range of reasons, these were considered not to be appropriate. Organisations that could be valuable partners and contributors to a literacy initiative were suggested, including FRDC, Blue Economy CRC, Cooperative Research Centre for Developing Northern Australia (CRCNA), OceanWatch, CSIRO, other state government research agencies, universities, retailers and private sector service providers.

[17] https://cottonaustralia.com.au/assets/general/Media/Media-Releases/2021/Media-Release-Cotton-Australia-Education-Kit-Launched.pdf

Consultation – Roundtables (Step 6)

Three online roundtables were held on the following dates 23 March 2023, 17 April 2023 and 20 April 2023. Each roundtable had 6 - 7 invited participants plus the project team. The participants included representatives from production businesses, representative groups, feed companies, and research organisations from across Australia. Their roles covered management, technical, research, extension, and communications.

The approach and questions asked for each roundtable is provided in Appendix 7.

It was noted there was good interaction between participants in the roundtables, and because of these events and one-to-one consultation, new relationships between the participants have developed outside of the project, where areas of common interest were identified.

The key findings/comments for the roundtable events are summarised below.

Question 1: When you talk to friends and family what are the main questions that they ask you about your industry, how it operates and/or the product that is produced?

Answers to this question included:

- Often questions were about salmon production and environmental management, sustainability, animal welfare and food safety issues (people ask about issues raised in the book '*Toxic'.*[18]*)*
- How do you feel about working in the (salmon) industry? How are you coping with negative press?
- Are there any jobs in the industry?
- How is aquaculture different to wild catch? Is it better to eat wild caught or farmed?
- Can I buy wild-caught salmon in Australia?
- How do you grow them? What do you feed them? (questions cover the complete lifecycle)
- Are the fish happy? Are they treated well?
- Is aquaculture bad for the environment? Is the product grown sustainably?
- Is land-based production better for the environment than marine based production?
- Is the industry regulated?
- Is the industry expanding? What will that mean?
- How safe is the product to eat? (food safety and disease)
- Do you use antibiotics? Do they use food colouring?
- Why is Australian seafood so expensive?
- What's wrong with the imported seafood?
- How long does it take to grow an oyster? Where do you get the best oysters?
- Are oysters adversely affected by salmon farms nearby? Are they trying to put more oyster farms in? (often related to encroachment on community waters).
- Is sea cucumber a food? (lack of awareness about the product).
- How does sea-ranching affect wild stocks? (sea cucumber).
- Do you really farm abalone? What do they eat? Aren't they from the wild? How do you cook them?

Aquaculture industry Issues

Roundtable participants identified that there was a lack of understanding about:

- Aquaculture, what it is and what is involved for different sectors.
- How many products come from aquaculture. Lack of understanding that aquaculture is a major supplier of seafood and that it helps take the pressure of wild stocks/commercial fisheries.

[18] *'Toxic: The Rotting Underbelly of the Tasmanian Salmon* Industry' by Richard Flanagan (2021)

- The amount of research that goes into the industry to make it productive and sustainable and why research is important.
- The complexity of aquaculture production systems, the technology investment etc.
- Biosecurity.
- Regulations/compliance requirements (especially regarding sustainability, environment, and animal welfare) that underpin the industry's production and the measures that companies employ to meet these requirements.
- The requirements and cost to obtain and develop leases for production.
- Feed sources and the importance of feed conversion efficiency and sustainability.

Engagement

Several of the roundtable participants spoke about the following issues:

- Difficulty in engaging with people generally and target stakeholder groups to help educate and inform them about what the industry does.
- A core group of people that are anti-aquaculture and are not interested in the science and will not be swayed in their opinion about the performance or benefits of the industry.
- How there is a lot of misinformation, often deliberate, and it is difficult to counter this, especially when it is sensationalist.
- The lack of trust in the research because different sources of information, including government and research organisations and their scientists, are not seen as impartial.

Salmon industry issues

Key feedback and discussions can be summarised as follows:

The challenging situation that has developed around the Tasmania salmon industry was acknowledged. Although there is significant investment by industry and the main production businesses in communication and stakeholder/community engagement it was felt that many in the community don't know who and what they can trust. The book '*Toxic'* [19] raised a lot of issues and "shaped myths into facts". It was suggested that some people want answers and would like a trusted independent middle player they can talk to, to understand if the industry is responsible or not, if the product is safe, and if it is produced in an environmentally sustainable way.

Roundtable participants from outside the Tasmania salmon sector recognised its value to the aquaculture industry. However, at the same time, some participants flagged concerns about the negative commentary around the sector and the ripple effect this has on the broader industry. Discussions highlighted that the experiences of the salmon sector are often seen as a cautionary tale, and as a result participants have modified their approach to communication, stakeholder engagement and building and maintaining social license with their community.

Additionally, there is recognition that if any business or sector of the industry has any issue regarding trust or social license, it can impact the whole industry.

Question 2: What are the key areas of potential concern that you have in your business/industry that are not well understood and which have the potential to impact the community's or the consumers' trust in your industry (and its social license to operate)?

- A general low level of knowledge about aquaculture production. There is a need to be more proactive and consistent in educating stakeholders and improving aquaculture literacy, so issues can be addressed through 'informed' debate.

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[19] '*Toxic: The Rotting Underbelly of the Tasmanian Salmon* Industry' by Richard Flanagan (2021).

- Ensuring sustainability and environmental performance of the industry – being able to address issues like feed composition and conversion, managing impact on the environment including water quality (especially in highly sensitive environmental areas), management of pollution/debris etc.
- Biosecurity – movement control zones and disease management.
- Meeting community acceptable ethical and animal welfare standards including slaughter methods (challenges and ongoing improvements) and need for approvals related to research.
- Lack of alignment/united position between industry players.
- How much transparency is required? (challenging when there is a low level of aquaculture and marine literacy as information can be misinterpreted).
- The extent of misinformation that is spread about the industry (many examples provided, but most relate to environmental issues, sustainability, and product quality) and how to manage this effectively. It is very difficult once trust is lost.

Question 3: Is there a value in an external facing Australian aquaculture outreach and communication platform?

The findings/comments from participants are:

<u>Australian Aquaculture Outreach and Communication Platform (Platform)</u>

- There was strong support for an external facing Australian aquaculture outreach and communication platform (examples of NOAA, Good Meat and Dairy Matters were well received).
- It was suggested the Platform should aim to provide focus and a reference point and extend the reach of the industry. It should highlight information about the collective aquaculture industry. As the industry is so diverse, it should link to each sector (hub and spoke model).
- The different sectors of the industry need to feel they have representation and some ownership of such an initiative. This includes non-food aquaculture sectors, inland aquaculture and smaller sectors. Industry groups and businesses need to engage and support.
- Many of the sectors already have representative industry groups with a web presence and a range of information available through these sites. Hence, it was important to recognise this existing investment and not try to duplicate this effort.
- The industry, as a collective, has a great story to tell and needs to be more proactive in promoting its value and benefits.
- ‘Aquaculture 101’ education is an important place to start and could be a feature of the Platform – What is aquaculture? Why is it important? What sectors make up the industry? What are the different production methods (land, marine etc.)? etc.
- SIA is currently developing an online recruitment platform with the aim to recruit and retain more people in the seafood industry. This can potentially be part of or aligned with the Platform.
- It is essential that all information on the Platform is from a reputable source (research organisation, peer reviewed science etc.) and can be defended.

<u>Platform content</u>

- It is important to keep messaging simple, ensuring that there is not too much information, as it can become too confusing. Concept of cascading information (simple messaging linked to more detailed layers of information) is a good idea.
- Communication asset types – graphics/infographics, social media tiles, newsletters, video, animations, podcasts etc. All asset types were recognised as having a place, depending on the target audience and resources available, however the overriding message was to ‘keep it simple and short’. Hence infographics, social media tiles, short videos, and simple fact sheets

were preferred over long form communications. These could then be shared more easily on social media.

- People relate to images and hearing stories of people.

Engagement and dissemination of information

- Industry groups and businesses need access to shared resources (infographics, videos etc.) they can leverage and use to support aquaculture literacy. There may need to be some control around access to some materials, however, with the aim to educate and build literacy, ideally material should be publicly available, and easy to access and disseminate.
- Some large businesses have their own messaging so may choose not to participate in industry initiatives for own reasons (this might introduce challenges but shouldn't be seen as a deterrent).
- A platform is just a website, not an engagement resource. The key thing needed is engagement. It is important to think about how this can be achieved and what resources are required. How will engagement occur internally and externally?
- The initiative needs to be promoted and engagement supported internally (within the industry, its sector organisations and businesses and with their staff).
- The public and consumers often engage with the sector seeking information about seafood and its usage. Key pathways include people looking for recipes or looking for environmental information. How can this be leveraged?
- If developing resources for schools, focused and resourced engagement is very important to ensure there is an effective translation pathway.

Governance

- Questions regarding governance were raised, including 'What will the messaging be?', 'How will it be agreed?', 'How will you access resources', 'Who would host it?', and 'How will it be funded?'. See further comments below in Question 5.

Question 4: How valuable would access to the following initiatives and other resources be?

Training programs, including Aquaculture Ambassador Program, communication and media training

Aquaculture Industry Ambassador Program

There was qualified support for this type of program, noting aspects of the content delivered through MLA's Ambassador for the Red Meat Industry Program [20] were appealing. However, further information was needed about the objectives, possible course content, likelihood of uptake and industry engagement, and the benefits to industry.

A suggestion was tested - that elements of the Ambassador Program could be included as part of the National Seafood Industry Leadership Program (NSILP). The NSILP is a highly regarded course noting there was consistent feedback from several participants in the roundtables that had completed the NSILP about the high value of this program, however some participants thought that it might be better to keep any new initiatives separate.

Communications, media, social media and other training

- There was a mixed response regarding the need for communications and media training. Some participants indicated that media training would be good, as they would like to improve their skills or they had people in their team who could be upskilled.
- Participants were not sure what the level of uptake would be.

[20] https://www.mla.com.au/marketing-beef-and-lamb/mla-ambassadors-for-the-red-meat-industry-program/

- Participants did not indicate a high demand for social media training. Some industry groups indicated that they already outsource this requirement.
- It was raised that Indigenous enterprises have a great story to tell but need support and training in how they could do this effectively.
- Training scientists in communication and media skills is important, so they have the capability and confidence to participate in educating stakeholders.
- It was raised that some sectoral groups and other representative groups need support with crisis planning. Only some groups indicated they have suitable crisis plans in place.

<u>Support to improve engagement at events to help extend aquaculture literacy i.e. improved user experience, experiential learning activities.</u>

- Events, such as shows and other community gatherings, are seen a useful way to promote the industry, combat negative images of industry, and correct misinformation.
- Engagement at events should use a participatory experiential approach. It would be good to see more use of augmented or virtual reality, be able to talk to the scientists, and have activities for children and adults to do. This needs to be resourced appropriately.
- There is a need to promote the industry and develop aquaculture literacy through experiences – not just dining experience but also through aquaculture tourism e.g. swimming with tuna in South Australia. Increasingly, the tourism industry is creating destination points around food and agriculture that can potentially be leveraged.
- It's not so much about the money, but the lack of people who are able, skilled and willing to participate events and shows.

<u>Access to a technical talent pool database</u>

- A database of technical experts available to industry would be useful.
- Food safety technical experts should be added to list.
- Some participants indicated they are prepared to share their own lists as a starting point.
- Identification of independent experts that were willing to speak publicly about their research or share their knowledge about the industry would be valuable. It was noted there is a real reluctance for experts to do this as they did not want to become targets for different interest groups.
- It is also important that technical experts have the skills to be able communicate effectively. Often scientists are not trained in this area. Some thought should be given to addressing this skills gap.

<u>Library (online)</u>

- There was good support for the Platform to host a library of topical research papers, articles industry presentations etc. This was considered of value but would need to be well curated.
- It was suggested that a library should complement, rather than compete with or duplicate other services such FRDC research report database or Intrafish.com.

<u>Industry booklet – Facts and Statistics (as one of the communication assets)</u>

There was strong support for a resource like the '*Aquaculture for New Zealand: A sector overview with key facts and statistics for 2022*' booklet. However, there was a realisation that it would be a challenge to easily source the equivalent level of information (industry data) that was available in the New Zealand booklet.

Question 5: If there is a Platform who could/should manage it? How could it be funded?

<u>Platform management</u>

- SIA was seen as the most likely organisation to lead and manage such a Platform, because of their role, respected position, stability and long-term future with the industry.

- It was noted that SIA is not independent, however there were limited options. Suggestion such as Government, FRDC or other NGOs were offered. Although these organisations would be recognised as respected and independent intermediaries, the limitation of these organisations (and potential willingness or capacity to take on such a responsibility, although not tested) was also recognised. Hence, they were not considered suitable, however, they were viewed as essential partners, supporters, or service providers for the Platform.
- SIA should lead/manage the 'hub' and overarching information and messaging, but the sectors should manage their own information and messaging.
- The sectors or other stakeholders that make up the 'spokes' and which have limited resources could benefit from additional support to bring their online presence up-to-date and integrate with the 'hub'. This was also recognised as a way to accelerate a common language and narrative across the industry. From a practical perspective, simple things, such a use of common templates for websites and information, were also seen as valuable.
- Clear process and policies around governance of the Platform are seen as essential. This will help ensure that the Platform is managed effectively and there is appropriate engagement, consultation, expectation-setting and sign-off, so industry stakeholders have confidence and are enthusiastic to engage.

<u>Resourcing and funding</u>

The following comments were offered by roundtable participants:

- Developing a Platform that was professional and engaging required significant resources (as evidenced by the quality of the Good Meat and Dairy Matters websites and resources).
- Enduring funding is required for ongoing development and maintenance.
- It is essential to have a good understanding of what costs may be involved and where the industry may be able to access these funds.
- SIA and larger representative bodies could be financial contributors.
- FRDC could assist in funding, as the objective of the organisation is to invests in R&D and extension to benefit the industry and broader community.
- There was also an argument that aquaculture literacy should be extended to include fisheries and marine literacy.
- The Australian Government and state governments may also support development of an industry Platform, if it delivers outcomes that support their respective plans for the development of the industry.
- Sponsorship or direct contribution from commercial companies is probably not ideal, as this could compromise the perceived integrity of the information supplied through the Platform.
- Other parties, such as different CRCs that are engaged with the industry, may be able to support development in the short to medium term.

<u>Other issues</u>

The importance of education through schools was consistently raised in roundtables. Participants noted that this was a way to provide students with an insight into the industry and, using facts and information, to build trust with their community.

Discussion

The information developed as part of this project is intended to be used to strengthen industry outreach, communication and engagement and ultimately build aquaculture literacy across the stakeholder spectrum.

Through the project, a detailed stakeholder map of a representative cross section of the Australian aquaculture industry was developed. This has provided an understanding of the media types and communication channels used by the industry. The main media types used by the selected stakeholders investigated in the desktop research were websites, Facebook, LinkedIn, and Instagram. This was consistent with the findings of the online survey results.

Respondents to the online survey confirmed a broad range of stakeholder groups were targeted for communication and engagement. Interestingly, production businesses indicated the main stakeholder group they communicate with is 'state government'.

Eleven key motivator categories were identified through desktop research, with environmental performance, sustainability performance and product attributes identified as the most communicated. These results were consistent with the findings of the online survey and other consultation. In the online survey, 'industry compliance and governance' also featured in the top four (4) topics to be communicated to stakeholders.

As part of the project, the suitability of a range of communication assets were tested through an online survey and consultation (interviews and roundtables). These assets included fact sheets, detailed facts sheets, social media tiles, image banks, campaign banks, message banks and podcasts etc. The feedback was that all assets likely have a place, however selection of the best asset type/s is dependent on the messaging, target audience, communication channels and the resourcing available to develop assets.

Consistent feedback from the consultation with the key stakeholders was that messaging should be simple and the preference was for communication assets such as infographics, social media tiles, animations and short videos, i.e., short messaging format assets that could easily be shared. There was also recognition that often a significant amount of research underpins simple messages or claims and that referencing this was important to provide credibility and meet the needs of those who sought further information. Hence, the use of 'cascading messaging and information' was tested. This is where simple messaging is linked to layers of more detailed or technical information on a topic, where appropriate. For example, a simple infographic might highlight that if further information was required, there was an opportunity to click through to a short fact sheet or video, then a more detailed fact sheet or podcast, and then relevant research papers. This approach was supported.

The online survey results indicated that production businesses would value fact sheets the most. The explanation for this may be that they require a greater level of detail to successfully communicate information to their key stakeholder group, which was identified as state government.

These findings reinforce the need to consider the messaging and target stakeholder groups when deciding on what communication asset types should be developed for different communication channels. Ideally an integrated aquaculture literacy outreach, communication and engagement plan and content development framework (detailing messaging, target stakeholders, media types/communication channels and preferred assets), should be developed so there is consistency and a planned approach to communication and asset creation.

The research indicated that a booklet which presented key facts about the industry and its sectors, which was updated annually, would be of value. In an attempt to identify suitable consistent data sets across the sectors that were of value in developing such a booklet, it was noted there were significant gaps in publicly available data about industry performance. Further work is needed to determine the the key data that is required to report on industry performance. This would entail reviewing existing industry and sectoral data and identifying what data would be of value in reporting, data gaps and mechanisms to collect reliable data. Initially this may include annual reporting, by sector, of the number of production businesses and employees, volume and value of production, domestic and export market supply and value, and list of export markets. Access to improved data also provides other benefits for the industry, in terms of monitoring performance.

Through consultation it was evident there was a need and strong support for more investment in outreach, communication and engagement to support improved aquaculture literacy. The majority of those consulted saw benefit in the industry working and presenting itself collectively, whilst empowering the sectors and other representative groups and businesses to take lead roles in the activities. It was recognised that stakeholder and community engagement was complex and nuanced and often the responsibility lay with sectoral, state or local groups rather than the collective aquaculture industry. In the case of community engagement activities, the pre-existing and integrated relationships between the sector, local representative groups, business and the community were seen as a key factor in achieving positive outcomes. Although, the additional benefits which a collective aquaculture industry approach could bring, such as additional resources, reframing the position of the sector, training and other capacity development, were also recognised and valued.

The identified need and support for stronger outreach and communication at an industry level could be delivered through an industry initiative, the Australian Aquaculture Literacy Initiative (AALI). This would incorporate a Platform and other supporting resources and activities to help sectoral and other representative groups and business develop more effective communication and engagement strategies and the capacity to deliver these. The idea is that the Platform is a ‘hub’ to present and share information about the Australian aquaculture industry, as a collective whilst also providing linkages (spokes) to websites of key industry stakeholders and other assets. Whereby, the key industry stakeholders include key sectoral and other representative bodies, FRDC, and relevant government agencies. Other assets hosted on the Platform could include communication assets, an online library, school curriculum content, and initiatives such as the training and the recruitment platform which FRDC and SIA are currently developing. This approach recognises the significant role and responsibilities that sectoral and other representative bodies, FRDC, and governments have in the industry and harnesses their expertise, resources and investments that have been made over time. It also provides a catalyst to develop a common language across the industry which will support improved aquaculture literacy and engagement. A concept diagram of the proposed Platform is provided in Appendix 9.

Currently there is no equivalent or effective mechanism to bring collective industry information together. Hence the Platform will be relevant to both internal industry stakeholders (government, service providers, supply chain partners, investors etc.) and external stakeholders (potential employees, education providers and students, consumers, community and the general public).

Learnings can be drawn from the industry sectors that have outreach, communication and engagement strategies in place, including the Tasmanian salmon industry, and the Australian barramundi and farmed prawn sectors. Examples from other sectors are also valuable, including the wild caught prawn sector [21] (see page 16), other examples highlighted in the research (see pages 15-17), international aquaculture industries and other Australian primary industries that have developed outreach and communication platforms, communication assets and capacity building initiatives. This includes NOAA, the Global Salmon Initiative, the Australian dairy industry, and the Australian red meat industry, which were used as examples in the consultation process. Unfortunately it was not possible to obtain evaluations of these initiatives, within the timeframe of this project. However the

[21] “Methods to profile and connect the provenance of wild caught prawn fisheries and their values to the community, for Australian Council of Prawn Fisheries and FRDC; May 2022.

continue investment in these Platforms, especially in the Australian context, should be seen as an indicator that they are serving the purpose of the industry. Further investigation is needed, and positive evaluations would provide added strength to a business case for the AALI (see Recommendations).

As the development of Platform infrastructure and content will be dependent on limited resources, good planning is essential. A staged approach, supported by an aquaculture literacy outreach, communication and engagement plan (Plan) and a content development framework will ensure an integrated approach. This approach also provides the opportunity to test the Plan and its effectiveness and make modifications as the initiative proceeds to ensure there is value for the industry.

The costs associated with the development of a Platform and appropriate content can be substantial. It is evident that significant investments have been made in the development and ongoing maintenance of the other platforms investigated. It is therefore imperative the industry understands the investment that is required in the short term and over the medium-long term to support such an initiative. This not only includes the development and maintenance of the Platform and content, but also the ongoing cost of management, governance, and internal/external engagement.

Oversight of the Platform was raised as a key issue for consideration in the consultation. A suitable governance framework was seen as essential so there was a well-considered whole-of-industry supported approach, alignment of content and messaging with stated objectives and values, and appropriate metrics in place. Through this process, ongoing participation of Indigenous stakeholders was also seen as essential to ensure there was a mechanism to foster engagement and shared benefit in developing aquaculture literacy.

The online survey results showed that there was an interest in training in stakeholder engagement, communications (including media training and social media skills development), and advocacy. This interest was further tested through the interview and roundtable consultation. The feedback from this consultation was mixed as to what was required (content), the value of training, and if industry would engage and invest. Given the conflicting feedback, it would be advised, as a first step, to undertake a targeted training needs assessment to determine the specific needs of industry stakeholders, barriers to uptake and likely participation; and an audit of available training courses and materials that may meet industry needs.

Funding to support industry groups or businesses, to extend aquaculture literacy at a local level or to a specific stakeholder group, was considered of value by those that participated in the consultation. The concept of mini-grants to support such activities was considered a good idea, however there are also other ways that these groups can be supported. This may include access to ideas (best practice approach, case studies etc.) and resources including template materials and access to people who can assist. In several cases, industry and businesses said it was not so much about the money but being able to access guidance.

Ideally a business case should be developed for the AALI to understand potential options, costs and funding sources to develop and deliver the proposed Plan and Platform including other resources and activities, such as training. Innovative approaches and different partnerships may be required to source the necessary funding, deliver impactful outcomes and drive improvement in aquaculture literacy.

Investment in resources to build aquaculture literacy in schools was considered important by many stakeholders who participated in the consultation. This includes development of curriculum content and aligned education materials, and investment in educator engagement strategies to improve uptake and translation of materials, so there is greater impact. The primary vehicle for this engagement is currently through Primary Industry Education Foundation Australia's (PIEFA's)

Primezone platform [22]. Several key industry stakeholders engaged in this project were unaware of PIEFA and the Primezone platform, which indicates the need to educate industry stakeholders and leverage this initiative. FRDC are currently completing a project to understand the current level of engagement, barriers and opportunities to position fishing and aquaculture with students and educators. (FRDC Project 2022-073: Attracting the next generation – Primary Industries Education Foundation Australia Membership 2022-2023). The findings of this project should be considered to inform future investment in this area.

The limitations of industry literacy improvement initiatives are recognised, including the challenges to engage beyond motivated stakeholders. Target audiences need to be predisposed to hearing or accepting the messaging. It is also recognised, as indicated in the consultation, that there are often stakeholders or sectors of the community who are unwilling to engage or accept any communication. However the consultation also shows that there are community members who are interested in educating themselves and knowing more about where and how their food, and specifically aquaculture product, is produced and by whom. However, at present, there is no authoritative focal point to which industry stakeholders and community members can be directed. The recommendations of this project attempt to address this deficiency through a considered and enduring industry initiative. This project is seen as the first step in developing aquaculture literacy across the stakeholder spectrum.

[22] More details on PIEFA and the Primezone platform are available at https://www.piefa.edu.au/ and https://www.primezone.edu.au/).

Conclusion

The objective of this project is to understand the current stakeholder and engagement landscape of the Australian aquaculture industry to inform the development of an aquaculture outreach and communication program, with the aim to build aquaculture and sustainable seafood literacy across the stakeholder spectrum.

The key findings from the project are as follows:

- The Australian aquaculture industry is diverse, encompassing a wide array of production businesses; sectoral, state, and local representative groups; government; research organisations; NGOs, supply chain businesses and other service providers from across Australia. As a result there are many motivators being communicated to a broad range of stakeholders, including internal industry stakeholders, the community, customers and consumers, through a range of media types and channels. This complexity means that the story of Australian aquaculture is fragmented and the opportunity to build aquaculture literacy and trust in the industry is currently diminished.
- Many stakeholders who participated in the consultation believed that the Australian aquaculture industry could and should be telling its story better through improved outreach, communication and engagement. They also recognised the challenges of bringing the industry together to achieve this outcome.
- The key motivators identified to be communicated are environmental performance, sustainability performance, product attributes, and industry compliance and governance.
- There is strong support for a broad Australian Aquaculture Literacy Initiative (AALI) that focusses on the industry as a collective and helps inform and educate stakeholders about the industry. This initiative should include:
    - An Aquaculture Literacy Outreach, Communication and Engagement Plan (Plan) so that the Initiative can deliver the maximum impact with limited resources. The Plan should also incorporate an integrated content development framework for the initiative to guide effort and investment.
    - An Australian Aquaculture Outreach and Communication Platform (Platform), with appropriate content and resources (communication assets), and
    - Other supporting resources and activities. This potentially includes communication, stakeholder engagement and advocacy training for industry stakeholders; support for industry groups or businesses seeking to extend aquaculture literacy; the development of a technical talent pool database; and an online resource library (as part of the Platform) to support to support industry outreach and communication.
- The Platform should be developed as a 'hub and spoke' model which recognises the significant role and responsibilities that sectoral and other representative bodies, FRDC, governments etc. have in the industry; and harnesses their expertise, resources and investments that have been made over time.
- While all communication asset types tested likely have a place on the Platform, their inclusion would be dependent on the messaging, target audience, communication channels and resourcing available.
- There are gaps in publicly available industry data. Addressing this will assist the industry in educating stakeholders about the performance of the industry.
- The development of a business case is important to understand the options, potential costs and funding sources related to the development and management of the Plan and Platform, including communication assets, and other supporting resources and activities. Key partnerships should also be addressed in the business case.

- Investment in resources to build aquaculture literacy in schools and the next generations was considered important by many stakeholders who participated in the consultation. This includes development of curriculum content and aligned education materials and investment in educator engagement strategies to improve uptake and translation of materials, so there is greater impact.
- Providing assurance and trust to the information within assets needs to be front of mind.

As a result of this project and its findings, there is now a clearer understanding of the current stakeholder and engagement landscape of the Australian aquaculture industry. The project's recommendations provide a roadmap for the industry to build an aquaculture outreach, communication and engagement program, which will assist in building aquaculture literacy across the stakeholder spectrum.

Implications

The findings of the project provide a clearer understanding of the current stakeholder and engagement landscape of the Australian aquaculture industry. The project's recommendations provide a roadmap for the aquaculture industry to build an effective outreach, communication and engagement program and share accurate information, which will assist in building aquaculture literacy across the stakeholder spectrum. It will be of value to all stakeholders in the industry.

Recommendations

The project has provided an understanding of the stakeholder and engagement landscape and requirements of the Australian aquaculture industry in regard to an aquaculture industry outreach and communication program to support aquaculture literacy. Based on the findings it is recommended that:

1. **An Australian Aquaculture Literacy Initiative (AALI) is supported.**

   It is recommended that the industry and key stakeholders invest in an AALI, which incorporates Aquaculture Literacy Outreach, Communication and Engagement Plan (Plan) and an Australian Aquaculture Outreach and Communication Platform (Platform) with appropriate content and resources (communication assets), and other supporting resources and activities.

2. **An Aquaculture Literacy Outreach, Communication and Engagement Plan (Plan) is developed and executed** *(Assumption: Other dependent recommendations are supported).*

   It is recommended that a Plan is developed and maintained. It should:

   - Outline key messaging, target stakeholder groups, communication channels and required assets.
   - Recognise the intended scope and capacity of the Platform to be developed (see Recommendation 3).
   - Incorporate a content development framework so there is a strategic and staged approach to the development of resources, in line with the Plan and available funding.
   - Consider branding of the AALI.

   Specifically in regard to content and resource development, it is recommended that:

   - Content and/or supporting resources are developed in line with the findings of this report as to the industry's priority motivators, and the objectives and advice of the Literacy Advisory Sub-Committee.
   - Content and/or supporting resources are developed with a 'cascading' principle in mind. The initial messaging should be high level, simple, and easily deployable. This approach initially lends itself to the development of assets such as infographics, social media tiles, campaign banks, etc. that can be easily utilised by industry partners.
   - Content used on the site is factual and from credible and reputable sources. If scientific literature is cited, ideally, it should be from a peer-reviewed publication.
   - Any content developed needs to consider impact (and leverage) on broader stakeholder groups including consumers, community, customers, current and potential labour force, education/student groups, government, media etc.
   - That the AALI partners broadly with suitable service providers to supply or develop suitable content and resources for distribution.

3. **An Australian Aquaculture Outreach and Communication Platform (Platform) with appropriate content and resources (communication assets) is developed and deployed.** *(Assumption: Other dependent recommendations are supported).*

   It is recommended that:

- The Platform is 'hub and spoke' web-based platform where the 'hub' provides a place to present and share information about the collective Australian aquaculture industry. The 'spokes' are the linkages to the websites of key sectoral and other representative bodies, FRDC and government agencies and includes other resources, such as communication and school curriculum assets.

- The Platform could either be a standalone platform linked to the SIA website or a dedicated area within the SIA website.

4. **Investment is considered in other supporting resources and activities.**

   It is recommended the industry considers investment in the following resources and activities, as funding becomes available:

   - Training for industry stakeholders which address skills gaps in communications (including media training and social media skills development), stakeholder engagement and advocacy. This should be dependent on findings from a targeted industry training needs assessment and, where possible, utilise available training courses and materials.
   - A technical talent pool database with details of technical experts who are available to industry stakeholders to support aquaculture literacy and stakeholder engagement activities.
   - A library of topical research papers, articles industry presentations etc., to be hosted on the Platform.

   The industry should also seek support of sectoral and other representative bodies and businesses in building engaging experiences for their stakeholders to foster improved aquaculture literacy and which benefits the wider industry.

5. **Advice is received with respect to Indigenous engagement and inclusion.**

   The SIA AAC should take advice from Indigenous representatives on inclusion in the AALI and relevant content, as well as navigating engagement with Indigenous enterprises, historical and cultural matters, nature, use of land and sea resources, and opportunities to build sustainable communities.

   To support Indigenous engagement, the SIA AAC may consider the addition of a cultural navigator who can, amongst other roles, work with the AAC on inclusion of Indigenous aspirations within the AALI.

6. **Investment is made to develop industry data.**

   It is recommended that the SIA AAC reviews the key data required to report on industry performance. This would entail reviewing existing industry and sectoral data and identifying what data would be of value in reporting, data gaps and mechanisms to collect and report reliable data.

7. **A business case for the AALI is completed.**

   It is recommended that a business case is completed to identify options and associated costs (in the short and medium-long term) related to:

   - The development and execution of the Plan.
   - The development, integration, hosting, management, and maintenance of the Platform, including:
     - The development of Platform infrastructure (website, including expert database, library etc.).
     - The development of required content (communication assets).
     - The development of a change management program focused on internal industry stakeholders to support uptake and utilisation of the Platform.
     - Promotion of the site and its content to external industry stakeholders.
     - Management, maintenance, and governance.
   - Delivery of training to support stakeholder engagement and communication initiatives.
   - The collation and maintenance of other resources and activities including of collation and maintenance of a technical talent pool database and online library.

- The collection, collation and reporting of industry data.

Sources of funding and key partnerships which will enhance impact also need to be addressed in the business case.

Upon acceptance of a suitable business case for the AALI, that it is implemented.

8. **There is strong governance in place for the AALI.**

   It is recommended:

   - The custodianship and ownership of the AALI and the Platform lies with SIA.
   - A Literacy Advisory Sub-Committee is established under the SIA AAC to provide advice on the development and on-going delivery of the Initiative. The Sub-Committee should include representatives of SIA AAC, FRDC, major sectoral and other representative groups, Indigenous representation (through SIA or FRDC) and other appropriate stakeholders as needed.
   - The Literacy Advisory Sub-Committee develops clear objectives for the AALI, which guide its development and becomes the basis for evaluation; and clear guidelines as to the source of content and use of resources developed as part of the AALI.
   - Industry sector, state and local representative groups; commercial businesses, government, research organisations and other relevant industry stakeholders are asked to partner with the AALI, so that there is a formal mechanism to identify, engage and consult with interested industry stakeholders in relation to the Initiative and the use and development of resources.

9. **Investment is made in school curriculum content to showcase Australian aquaculture.**

   It is recommended that there is continued investment in the development of school curriculum content and aligned education materials, as well as investment in educator engagement strategies to improve uptake and translation of materials, so there is greater impact.

Extension and adoption

A summary of the draft findings and recommendations of the project were shared with Seafood Industry Australia's Aquaculture Advisory Committee on 7th June 2023.

Appendices

The following appendices are attached or are provided as separate documents:

1: Project overview

2: List of organisations investigated (desktop research)

3: Industry motivators list

4: Strawman document (provided as a separate attachment)

5: Online survey questions

6: One to one consultation questions

7: Approach and questions for roundtables

8: Consultation participants – interviews and roundtables

9: Australian Aquaculture Outreach and Communication Platform concept

10: List of key terms used

11: Project Team and Project Review Group.

Appendix 1: Project overview

Mapping the aquaculture engagement and aquaculture literacy landscape

Seafood Industry Australia (SIA), the national peak-body representing the Australian seafood industry across the wild-caught, aquaculture, and post-harvest sectors, has been funded by the Fisheries Research & Development Corporation (Project number: 2022-05) to undertake a project to understand the aquaculture engagement and literacy landscape.

The information gathered as part of this project will be used to inform activities designed to strengthen the outreach, communications platforms, and other external engagement from the Australian aquaculture industry to stakeholders.

By building aquaculture literacy across the stakeholder spectrum, the Australian aquaculture industry will be better equipped to communicate their purpose and contribution to the goals of government, consumers, and the wider community.

In late 2021, SIA formed the Aquaculture Advisory Committee (AAC) for the purpose of creating a united vision for the industry and a shared strategic direction to ensure Australia's aquaculture sectors move forward together. One of the priorities identified by the AAC's Action Plan was the need to strengthen outreach and associated communication, external engagement and ultimately build aquaculture literacy for stakeholders.

Context

The ability to produce healthy foods whilst protecting the global ecosystems is more important than ever. Not discounting the value and importance of wild fisheries, aquaculture, and specifically Australian aquaculture, has a key role to play in offering consumers and other key stakeholders a healthy, scalable "net-neutral carbon" protein offering, produced in resource-efficient production systems.

Apart from the health, nutrition and sustainability aspects, Australian aquaculture also supports the regional and remote communities in which they operate, boosts the national economy, provides food to feed a growing population, and supports a healthier planet.

Communicating the potential of the industry and its products is often challenging, as key stakeholder groups sometimes have limited understanding of Australian aquaculture, the industry's direction, and its benefits. Furthermore, the information readily available is often out of date, inaccurate, incomplete, misleading, or not produced by a trustworthy source.

The challenges in communicating a collective industry narrative and offering value to external stakeholders can often be due to a range of factors, including the complexity of the industry, absence of coordinated government outreach programs, policies, and platforms, a lack of stakeholder awareness on industry priorities and contribution to society, and the absence of effective structures to educate and support knowledge sharing.

As a result, it can be difficult to develop and implement a coordinated and consistent industry message, and to coordinate responses to stakeholders on issues and topics of importance. The outcome can be that mixed or incoherent messages are provided to seafood consumers, local community groups, supply chain partners, NGOs, researchers, policy makers, international agencies, and local, state, and federal government agencies.

Providing the right resources and an enduring mechanism to share key messages and accurate information in a way that resonates, or results in a change of behaviour (trust) with key stakeholders is seen as critical for development of the Australia aquaculture industry.

Project details

To map the aquaculture engagement and literacy landscape the project will:

- Develop detailed stakeholder maps for the Australia aquaculture industry;
- Investigate how the main stakeholder groups in the industry are currently communicating with their stakeholders, including the current topics and messages
- Identify the key motivators e.g., issues and interests from stakeholder inquiries;
- Identify who needs to be engaged through outreach and communications programs
- Provide recommendations, based on evidence and feedback, in which the industry might invest to support improved literacy and engagement including:
    - Suitable outreach and communications platforms.
    - Key messaging and information that needs to be communicated.
    - Communications materials/tools and activities, including fact sheets, deep dive fact sheets, FAQs, videos, podcasts, an aquaculture reference library, and other development and training initiatives.

The data to inform recommendations will be collected through desktop research, an online survey, interviews, and mini roundtables.

SIA is being assisted to deliver this project by P2P Business Solutions, an independent consultancy business, and the Blue Economy CRC. The project is also supported by a Project Reference Group comprised of representatives from across the industry. The project commenced in October 2022 and will be completed by mid-2023.

Appendix 2: List of organisations investigated (desktop research)

The following organisations and businesses were investigated as part of the process to develop stakeholder maps and identify key motivators.

Abalone Association NSW Abalone Council Australia Abalone Council Victoria Abalone Industry Association of SA Abalone Industry Association of WA ABTAS Marketing Angel Seafood Animal Health Australia Aqua Association Inc Aquaculture Development and Veterinary Services Aquafeeds Australia AusNorth Trading Pty Ltd Austrade Australian Abalone Growers Association Australian Barramundi Farmers Association Australian Fishing Enterprises Australian Maritime Safety Authority Australian Prawn Farmers Association Australian Prawn Farms Pty Ltd Australian Southern Bluefin Tuna Industry Association BDO EconSearch Biomar Pty Ltd Blue Economy CRC Blue Harvest Blue Water Oysters Bowen Springs Pastoral BST Oyster Supplies Pty Ltd CH4 Global Clean Seas Seafood Ltd Coral Coast Barramundi Farm CSIRO De Bruyn's Transport Department of Agriculture and Fisheries, Queensland Department of Agriculture, Fisheries and Forestry Department of Jobs, Precincts and Regions, Victoria Department of Natural Resources and Environment Tasmania Department of Primary Industries and Regional Development WA Department of Regional NSW DigsFish Services Pty Ltd Dinko Tuna Farmers ENVision Environmental Consulting Eyre Peninsula Seafood Eyrewoolf Abalone Fisheries Research and Development Corporation (FRDC) Fishtales, Flinders Oyster Company Gold Coast Tiger Prawns Green Camel, Harvest Road Humpty Doo Barramundi Pty Ltd Huon Aquaculture Kin Premium Australian Seafood	LOTIC Consulting Mainstream Aquaculture Marine Stewardship Council Melbourne Seafood Centre Melivan Pty Ltd Murray Cod Australia (Aquna) Nautilus Collaboration Northern Territory Government Northern Territory Seafood Council Inc. NSW Department of Primary Industries NSW Fishing Industry Training Committee Ltd NSW Oysters NT Marine Facility Ocean Road Ornatas Pty Ltd Oysters Australia Oysters South Australia Oysters Tasmania (Tasmanian Oyster Research Council Ltd) Panaquatic Health Solutions Pty Ltd Pearl Seafood Exports Petuna Phycohealth Seaweed Science PIRSA Pristine Oyster Farm Queensland Seafood Industry Association Ridley Agriproducts Pty Ltd Rocky Point Aquaculture Safe Food Production Queensland Sativus, Sea Forest Seafarms Seafood Industry Victoria SeaGen Aquaculture SeaPerfect Pty Ltd Seafood Industry Australia Skretting Australia Spring Creek Barramundi Stehr Group Sydney Fish Market Tasmanian Abalone Council Tasmanian Salmonid Growers Association Tasmanian Seafood Industry Council Tasmanian Seafoods Group Tassal The Aquaculture Council of WA The Australia Institute Tasmania UTAS Victorian Fisheries Authority (VFA) Woodshield Yumbah Aquaculture Ltd

Appendix 3: Industry motivators list

List of motivators developed from desktop research undertaken as part of Step 3 (Methodology). These are not presented in any order.

Industry Motivators List (from desktop research)
Where the word "performance" is used it means "achievements, initiatives and/or challenges being addressed" which are relevant to the category.
Sustainability performance
Ethical farming practices Industry standards/best practice Sustainable protein source Impact of or managing natural disasters including floods Climate change impacts Responsible packaging Feed sources (use of sustainable feed sources) Waste management
Environmental performance
Impact on the environment Impact on marine ecosystems Impact on shared waterways Impact on wildlife Use of fresh water in production systems Water quality Negative impacts of environmental contamination e.g., oil drilling, litter on the industry
Workplace health and safety performance
Workplace health and safety (including diver safety) Supporting mental health
People development and retention performance
Attraction and retention Training & skills development Workplace diversity & inclusion Hire mapping Team Engagement
Industry compliance and governance performance
Industry standards/best practice Legislation, regulations & standards Compliance obligations Accountability, public transparency and reporting Corporate responsibility Industry governance Industry leadership Industry engagement Industry advocacy
Adoption of innovation and technology performance
Investment and adoption Science and research Supply chain productivity New infrastructure Improved quality and productivity through breeding Novel feed ingredients

Animal welfare performance
Ethical farming practices Animal health and welfare Biosecurity Production density Feed quality Water quality
Community performance
Community growth and benefits Community education Community engagement initiatives Industry collaborations
Customer benefits
Fresh sustainable safe food Nutritional value Affordability Convenience
Product attributes
Quality Food safety Nutritional value Australian/local Country of Origin labelling Availability Provenance and Traceability
Economic benefits
Economic impact (local, State, export) Job creation (direct and indirect) Trade figures and trends (including domestic and international trade) Markets and prices Market access and tariffs Marketing of product, including domestic and international marketing initiatives Business profitability

Note: these motivators were used in the online survey. In some case in the online survey, they may have been merged or presented as a group, for the sake of brevity, context or relevance.

Appendix 4: Strawman document

The strawman document is provided as a separate document.

It was developed to share with participants involved in interviews and mini-roundtables and provided the basis for discussions about an industry literacy initiative and outreach, communication and engagement program.

Appendix 5: Online survey questions

Below is the list of questions asked in the online survey. Note, that different stakeholder groups, as identified in Question 12, were asked different questions in section 2 of the survey. The different questions for each stakeholder group are indicated by text (heading) and are colour coded.

Qu.#	Question	Answer type/options
Q 1-12 FOR ALL RESPONDENTS		
1	Your Full Name	Open-Ended Response
2	Email	Open-Ended Response
3	Role in organisation	Open-Ended Response
4	Name of Organisation/Business	Open-Ended Response
5	Business Contact address	Open-Ended Response
6	State	- Queensland - New South Wales - Tasmania - South Australia - Western Australia - Australian Capital Territory - Northern Territory
7	Postcode	Open-Ended Response
8	Best business contact number	Open-Ended Response
9	Does your business maintain the following media platforms? (tick all that are applicable)	- Facebook - Twitter - Instagram - TikTok - LinkedIn - Website - I don't know - Other (please specify)
10	Which aquaculture sectors does your organisation/business represent, interact or engage with, provide products or services to, or sell product on behalf of? (tick all that are applicable)	- Abalone - Barramundi - King Fish - Mussels - Oysters - Prawns - Salmon and/or Trout - Tuna - Seaweed/Algae - I don't know/prefer not to say - Other (please specify)
11	What type of production is your organisation/business involved in or affiliated with or providing services to?	- Aquaculture only (production, products or services) - Aquaculture and wild caught (production, products or services) - Wild caught only (production, products or services) - **(WILD CAUGHT ONLY – EXIT SURVEY)**
12	Please tick which sector best describes what your organisation does (choose one only)	Industry/community representation Government Aquaculture production (including seaweed, algae etc.) Feed manufacturing Research Seafood wholesale, food service and/or retail services Other products or services to the aquaculture industry Other (please specify)

Q 13-16 FOR "INDUSTRY/COMMUNITY REPRESENTATION" RESPONDENTS ONLY		
13	At what level does your organisation focus its representation? (tick all that are applicable)	- Local - State - National - Other (please specify)
14	Please provide a brief description of what your organisation does?	Open-Ended Response
15	Is your organisation a member of or formally affiliated with a state, national or a larger representative group which provides guidance, support, governance, or advocacy services in relation to aquaculture industry issues or activities?	Yes No I don't know/prefer not to say
16	If yes to the above question, please provide details of organisations you are affiliated with	Open-Ended Response
Q 17-19 FOR "GOVERNMENT" RESPONDENTS ONLY		
17	Which level of government is most applicable to your situation?	- Local - State - National - Other (please specify)
18	Are you personally involved in any of the following activities in your role? (indicate most applicable only)	- Policy development - Economic development - Community engagement - Research - Compliance - Prefer not to say - Other (please specify)
19	Please provide a brief description of the services, support or coordination that your specific work area provides	Open-Ended Response
Q 20-23 FOR "AQUACULTURE PRODUCTION (INCLUDING SEAWEED, ALGAE ETC." RESPONDENTS ONLY		
20	Where is the product you produce mainly sold (tick all that are applicable)	- Local market - Within your state - Interstate - Export markets - I don't know/prefer not to say - Other (please specify)
21	What supply chains does your business use to sell product? (tick all that are applicable)	- Direct to local retailer - Direct to food service (e.g. restaurants, cafes etc.) - Direct to large supermarket retailer - To wholesaler (within your State) - To interstate wholesaler - To export customers - To processor - I don't know/prefer not to say - Other (please specify)
22	What are the most common questions or information that your customers/ the public seek from you about your product or production methods?	Open-Ended Response
23	What are the most common misconceptions that your customers/ the public convey to you about your product or production methods?	Open-Ended Response

Q 24 FOR "FEED MANUFACTURING" RESPONDENTS ONLY		
24	What geographic areas does your business service? (tick all that are applicable)	Local State National International I don't know/prefer not to say
Q 25- 26 FOR "RESEARCH" RESPONDENTS ONLY		
25	Which aquaculture industries do you primarily work with? (tick all that are applicable)	- Abalone - Barramundi - King Fish - Mussels - Oysters - Prawns - Salmon and/or Trout - Tuna - Seaweed/Algae - I don't know/prefer not to say - Other (please specify)
26	Where does the research your organisation conducts mainly have application? (tick all that are applicable)	- Locally - State-wide - Nationally - Internationally - I don't know/prefer not to say
Q 25-26 FOR "RESEARCH " RESPONDENTS ONLY		
27	Please provide a brief description of your organisation/business and the type of products and/or services provided to or on behalf of the aquaculture industry	Open-Ended Response
28	What geographic area does your business service? (tick all that are applicable)	- Local - State - National - International - I don't know/prefer not to say
REMAINDER OF QUESTIONS - ALL RESPONDENTS		
29	Who do you consider to be the main stakeholder groups that your organisation / business needs to communicate with? (please select up to 5)	- Your members - aquaculture businesses and/or wild caught businesses (for representative organisations only) - Your members – other (for representative organisations only) - Your local community (including citizens and other local business) - The Australian community - The International community - Local government - State government - Australian Government - Your investors (for commercial companies only) - Your suppliers of seafood products (for commercial companies only) - Your customers – local/Australia (for commercial companies only) - Your customers – international (for commercial companies only) - Aquaculture production businesses - Supply chain businesses - Research organisations

		- Businesses providing products and services to the aquaculture industry - Consumers – Australia - Consumers – International - I don't know/prefer not to say - Other (please specify)
30	What are the main ways that your organisation/business communicates key topics to the stakeholder groups indicated above? (tick all that are applicable)	- Newsletters - Website - Social media - Targeted emails - Meetings - Community events - Trade shows - Campaigns - I don't know/prefer not to say - Other (please specify)
31	Where does your organisation/ business source information for newsletters, website, social media etc? (tick all that are applicable)	- Intrafish - Mainstream News - FRDC Publications - SIA Publications and Website - Other Company Websites - ASC/MSC/BAP/GlobalGAP - Technical Support - I don't know/prefer not to say - Other (please specify)
32	What level of priority does your organisation/business place on communication with stakeholders?	- High - Medium - Low - I don't know/prefer not to say
33	What are the main barriers you or your organisation/business faces when communicating with key stakeholders? Please provide detail.	Open-Ended Response
34	How would you describe your organisation's/business's approach to communications on key topics and issues?	- Prolific and well resourced (e.g. there is a communications plan in place, dedicated communications staff/resource and multiple channels to reach different stakeholder groups) - Adequate – meeting the immediate needs of our key stakeholder groups, send out semi-regular communications via newletter or social media - Limited: limited communication, due to limited resources/time to create content or lack of systems or not a priority for the organisation/business - I don't know/prefer not to say - Other (please specify)
35	In your opinion, should your organisation/business aim to communicate with stakeholders more regularly on key topics and issues?	- Yes - No - I don't know/prefer not to say
36	Would your organisation/business benefit from having access to communications and advocacy training and other communications tools (fact sheets/videos/podcasts/campaigns) that provide detail about specific topics	- Yes - No - I don't know

	that you could share via your website, social media, email etc.	
37	If yes, what type of communications assets would be of most value to your organisation. Please tick all applicable.	- Fact sheets - Social media tiles - Campaign banks - Message banks (inc. FAQs) - Image banks - Podcasts - Videos - Talent pool of technical experts - Training sessions - engagement - Training sessions - advocacy - Training sessions - communications - I don't know/prefer not to say - Other (please specify)
38	In your opinion, what are the most important topics for your aquaculture sector to better communicate to its stakeholders? Please rank from "1" to "11". "1" being the most important to "11" being the least important. The easiest way to complete this question on desktop is to use the drag & drop function. Do this by clicking on the horizontal lines adjacent to the topic and then drag & drop your preferences into your preferred order. If you are using a mobile, the easiest way to complete this question is to use the numbering function. Notes: Aquaculture industry stakeholders include all levels of government, local communities and the broader Australian community, seafood consumers, investors, international trading partners, current and future workforce etc. By "performance" we mean, the aquaculture industry's achievements, initiatives and challenges being addressed.	- Sustainability performance (including producing a sustainable protein source, ethical farming practices, meeting industry standards/best practice, input and waste management, managing natural disasters, climate change impacts etc.) - Environmental performance (including managing and reducing impact on the environment, the marine ecosystem, wildlife etc.) - Animal welfare performance (including animal health and welfare, ethical farming practices, feed and water quality, biosecurity) - Adoption of Innovation and technology performance (including investment, research, productivity gains, improved sustainability and environment outcomes etc.) - Community performance (including community outreach, development, education and engagement etc.) - Product attributes (including quality, nutritional, Australian, sustainable protein source, high food safety, provenance, traceability etc.) - Consumer benefits (including affordability, fresh sustainable safe food, convenience, nutritional value etc.) - Economic performance (including economic benefits and impact, direct and indirect job creation, trade etc.) - People development and retention performance (including attraction and retention, training and skills development, diversity etc.) - Industry compliance and governance performance (including industry standards/best practice; regulations & standards, and industry governance, leadership, engagement and advocacy etc.) - Workplace health and safety performance (including supporting mental health, physical safety standards etc.)
39	In communicating sustainability performance to your sector's stakeholders, please indicate what you believe are the most important areas to covered. Please tick up to 3 areas.	- Ethical farming practices - Industry standards/best practice - Sustainable protein source - Impact of and managing natural disasters (including floods) - Local environmental impacts - Responsible packaging

		- Feed sources (use of sustainable feed sources) - Waste management - Other important areas or comments
40	In communicating environmental performance to your sector's stakeholders, please indicate what you believe are the most important areas to covered. Please tick up to 3 areas.	- Impact on the environment including marine ecosystems - Impact on shared waterways - Impact on wildlife - Use of fresh water in production systems - Water quality - Negative impacts of environmental contamination (e.g. oil drilling, litter) on the industry - Nature positive solutions harnessed - Other important areas or comments
41	In communicating animal welfare performance to your sector's stakeholders, please indicate what you believe are the most important areas to covered. Please tick up to 3 areas.	- Ethical farming practices - Animal health and welfare - Biosecurity - Production density - Feed quality - Water quality - Benchmarking (including no harm principle i.e. Business Benchmark on Farm Animal Welfare (BBFAW) and welfare focused accreditations i.e. RSPCA) - Other important areas or comments
42	In communicating adoption of innovation and technology performance to your sector's stakeholders, please indicate what you believe are the most important areas to covered. Please tick up to 3 areas.	- Investment and adoption - Science and research - Production environment innovations including new infrastructure and systems etc. - Feed innovation including novel ingredients - Improved quality and productivity through breeding - Species diversification - Supply chain and packaging innovation - Decarbonisation - Governance and ethics & integrity - Other important areas or comments
43	In communicating community performance to your sector's stakeholders, please indicate what you believe are the most important areas to covered. Please tick up to 3 areas.	- Community growth and benefits - Community education - Community engagement initiatives - Industry collaborations - Indirect jobs and supporting business services - Donations and sponsorships - Other important areas or comments
44	In communicating product attributes to your sector's stakeholders, please indicate what you believe are the most important areas to covered. Please tick up to 3.	- Quality - Food safety - Nutritional value - Australian/local - Country of origin labelling - Availability - Traceability - Other important areas or comments
45	In communicating consumer benefits to your sector's stakeholders, please indicate what you believe are the most important areas to covered. Please tick up to 3 areas.	- Fresh sustainable safe food - Affordability - Nutritional value - Availability - Convenience - Eco-efficient footprint

		- Other important areas or comments
46	In communicating economic performance to your sector's stakeholders, please indicate what you believe are the most important areas to covered. Please tick up to 3 areas.	- Economic impact (local, state, export) - Job creation (direct and indirect) - Trade statistics - domestic and international (including markets, prices, volumes and trends) - Market access and tariffs - Marketing of product, including domestic and international marketing initiatives - Business profitability - Maintaining the industry's sovereign capability to competitively produce farmed seafood products - Other important areas or comments
47	In communicating people development and retention performance to your sector's stakeholders, please indicate what you believe are the most important areas to covered. Please tick up to 3 areas.	- Attraction and retention - Training and skills development - Workplace diversity and inclusion - Team engagement - Career progression - Workplace relations - Safety - Other important areas or comments
48	In communicating industry compliance and governance performance to your sector's stakeholders, please indicate what you believe are the most important areas to covered. Please tick up to 3 areas.	- Industry standards/best practice - Legislation, regulations & standards and compliance obligations - Required accountability, public transparency and reporting - Corporate responsibility including voluntary (above the line) accountability, public transparency and reporting - Industry governance and leadership - Industry engagement and advocacy - Safety record - Other important areas or comments
49	In communicating workplace health and safety performance to your sector's stakeholders, please indicate what you believe are the most important areas to covered. Please tick up to 3 areas.	- Workplace health and safety (including diver safety) - Status of lead and lag safety indicators - Supporting mental health - Other important areas or comments
50	Are there any other topics that are not included above that need to flagged as being important for your aquaculture sector or the broader aquaculture industry? If so, please list and describe the problem or what the solution looks like.	Open-Ended Response
51	SIA would like to retain or update your contact information within our contact database system so that we may be able to contact you in the future in relation to this project or other activities we are undertaking. Do you agree?	- Yes - No

Appendix 6: One to one consultation questions

The following is an outline of the process for the one-on-one interviews conducted and a list of key questions. Consultations were conducted in a conversational format and not all questions were asked to each stakeholder. This provided the opportunity with limited time, to explore areas of relevance or interest or identified issues and solutions specific to the individual stakeholder in more detail.

<table>
<tr><td>Interview Approach</td><td></td></tr>
<tr><td>Requirement</td><td>From this consultation, determine/ dentify the organisation’s/business’s:
Profile
Comms & stakeholder engagement capacity
Affiliations (membership and accreditation bodies)
Key stakeholders
What are the key messages/“story” they are trying to convey.
How well resourced are they?
Key priorities (motivator list)/risks
What resources would be of value (strawman presentation)
Areas of risk for business</td></tr>
<tr><td>Approach</td><td>Agree parties to be interviewed (SIA to advise)
Agree who to be involved in interviews.
Send in advance to interviewees: Project summary document (updated appropriately), motivator list and strawman presentation in advance.
Prefer Zoom so material can be shared.
Interviews March – May 2023</td></tr>
<tr><td>Overall Preamble</td><td>SIA with the support of P2P Business Solutions and the Blue Economy CRC have been contracted to undertake an FRDC project to:
Identify and describe key stakeholders, key motivators (issues and interests), current messaging and topics of communication (desktop) across the Australian aquaculture sector.
Consult with industry and business stakeholders, such as your organisation/ business in regard to your challenges and how you could be supported to communicate more effectively with your key stakeholders.
Analyse collected data and based on evidence and feedback, provide recommendations on outreach and communication platforms and other activities to support the industry and its sectors to deliver improved aquaculture literacy and stakeholder engagement.
The report will recommend approaches and key communications tools, in which the sector might invest. This may include fact sheets, deep dive fact sheets, FAQs, videos, podcasts and an aquaculture reference library – and related topics specific to each media type.
Your business/organisation has been identified as a key stakeholder/potential stakeholder and as a result we would like to have a discussion with you about this topic in relation to your business/industry/research.

The following background resource, are provided to support the discussion:
Project summary document
List of motivators
Strawman presentation.</td></tr>
</table>

<u>Stakeholder groups</u>

• Commercial businesses including:
    o Aquaculture production businesses,
    o feed manufacturers,
    o other commercial products and services (not including research services or wholesaling/ retailing services)
• Representative Groups - Industry – National, State, local sectoral bodies etc.
• Seafood wholesaling, retailing etc.
• Research Organisations including:

- Government research agencies
- Private research providers
- Government – all levels.

<u>Questions</u>

1. Tell me about your business/organisation (to understand profile)
2. What sectors are you in? (refer species list)
3. What is your role in the business, (to understand perspective)
4. What internal and external communications/stakeholder engagement resources do you have available in the business? (staff/contractors)
5. What representative organisations/accreditation bodies are you affiliated with?
6. Who do you consider are the main stakeholders of your business/organisation? <u>or</u> In communicating "your story"/key messages/research, who do you consider to be your key stakeholders?
7. What is "the story"/key messages you are telling? <u>or</u> What is "the story"/key messages the industry needs to be telling?
8. What are the opportunities/risks being mitigated?
9. Do you consider that you/your organisation do this well? i.e. well-resourced comms/budget etc., proactive, community engagement, website and socials etc.?
10. Do you believe that the Australian aquaculture industry tells its story well? If so, if not, why do you say this?
11. What do you wish industry would explain? What do you want to see industry communicate?
12. What are the main barriers to achieving effective communication/engagement and trust with your stakeholders?
13. Looking through another lens: What questions do you get asked by friends and family about the industry? Are you able to answer these well? What resources would help?
14. What are the main areas of misinformation that you find?
15. The aim of this project is to recommend resources that the industry would use, so there is a common messaging/story, language etc. These are the main issues/messages/motivators) that were highlighted through desktop research (use desktop research list) Do you agree with this list (motivator list) – are there any other topics/issues that should be added to this?
16. What are the highest priority areas/highest risk areas for your organisation/business?
17. What resources would help you/your organisation in telling your story/getting the message out? (reference strawman and assets list).
18. What resources do you believe would help the industry in telling the story? (reference strawman and assets list).
19. If we talk about "aquaculture literacy" as the community's familiarity with information about aquaculture and related topics (environmental, economic, social), what role do you see that you play in this?
20. What do see as the role of SIA in support Aquaculture literacy?
21. What do you see as the role of others in supporting Aquaculture literacy?
22. Are there any other issues you would like to add to the discussion?

Appendix 7: Approach and questions for roundtables

Agenda for roundtable

- Introduction to roundtable
- About the project
- Introductions (participants)
- Findings to date (desktop research findings)
- Challenges, knowledge gaps, misinformation
- What are the opportunities and the resources required?
- Close

- Time: 2.25 hours

Pre-reading

- Agenda
- List of motivators
- Strawman

Questions

Challenges, knowledge gaps, misinformation

Q 1:	When you talk to friends and family what are the main questions that they ask you about your industry, how it operates and/or the product that is produced? And what are the common misperceptions about the industry? *(Objective – to understand what are the common issues that need clarification/more explanation to promote aquaculture literacy)*
Q 2:	What are the key areas of potential concern that you have in your business/industry that are not well understood and which have the potential to impact the community's or the consumers' trust in your industry (and its social license to operate)? *(Objective – to understand what are the community issues that need clarification/more explanation to underpin social license)*

What are the opportunities and the resources required?

Context: Thinking about the motivators that have been identified, and the discussion that we have had to date, how, as an aquaculture industry, do we better engage with industry stakeholders to improve their understanding of the aquaculture industry (to build trust)? What are the opportunities? What resources are required?

Q 3	Is there a value in an external facing Aquaculture outreach and communication platform, similar to examples from NOAA/Dairy/MLA? How would this look for Australian aquaculture? E.g. Aquaculture 101 (for each sector), cascading information (simple to the detailed), required communication assets (graphics/ infographics, newsletters, video, podcasts, library etc.), should there be scope to report industry performance/sustainability disclosure?
Q 4	How valuable would access to the following initiatives and other resources be? - Access to technical experts (database) - Aquaculture Ambassador Program (as part of the leadership program or separate? harness alumni of leadership program?) - Other training programs? Communications/media training, how to train your talent pool? - What about support to participate in events (to improve aquaculture literacy)? (improved user experience/experiential learning activities)

Hosting and funding

Context: Across the industry, there is a complex ecosystem of commercial businesses, and organisations from government, universities to national sector peak bodies and state bodies (multi-sectoral or sector specific etc) and a range of services providers (feed co., researchers, consultants etc.). In all cases these businesses and organisations have a role in building aquaculture literacy. In some cases they may also be the target groups e.g. government. This project is about supporting the "whole industry" both in terms of ensuring "the industry is equipped effectively to communicate their purpose and contribution to the goals of government, consumers and the wider community".

Q 5	The SIA Aquaculture Committee has been a driver in this project and there seems to be a high level of interest and support to develop resources to support this activity across the industry. So it would be interesting to understand: - If there is a platform e.g. like "Good Meat" who could/should host it? - How could this be funded? Noting the requirement for enduring funding.

Appendix 8: Consultation participants – interviews and roundtables

Below is the list of people consulted through interviews or roundtables to inform the findings of this project.

NAME	COMPANY/ORGANISATION	TITLE
Ryan Stallard	Skretting Australia	Sustainability and Communications Officer
Jess Tale	Mainstream Aquaculture Group Pty Ltd	Head of Sales & Marketing
Tarun Richards	Humpty Doo Barramundi	Head of Business Services
Mat Kertesz	Department of Agriculture, Fisheries and Forestry	Aquaculture ????
Kim Hooper	Australian Prawn Farmers Association	Executive Officer
Alex Stollznow	Sydney Fish Market Pty Ltd.	Tour Guide
Dr Heidi Mumme	MI-Fish Consulting	Director
Matt Collishaw	Clean Seas Seafood Limited	Marketing Manager
Jude Tyzack	Harvest Road	Community Engagement Manager
Lynlee Lowe	Oysters South Australia	Executive Officer
Steven Gill	Maxima Opportunity Group	General Manager
Tony Eyres	Future Feed	General Manager, Business Development and Partnerships
Shannon Moore	Gold Coast Marine Aquaculture	Operations Manager
Corrine Condie	Institute of Marine & Antarctic Studies, University of Tasmania	PhD student
Dianne Maynard	Department of Natural Resources and Environment Tasmania	Specialist Advisor (Emerging Marine Industries)
Laura Fatovich	Department of Natural Resources and Environment Tasmania	Marine Industries Engagement Specialist
Stephanie Margrain	Sydney Fish Market Pty Ltd.	Communications Manager
Jayne Gallagher	Honey & Fox Pty Ltd	Chief Executive Officer
Delahay Miller	Formerly, Indigenous Land & Sea Corporation	Formerly, Senior Policy Advisor
Jacquie Ray	TimminsRay	Managing Director
Caroline Hounsell	Tassal Group	Head of Responsible Business
David Whyte	BioMar Pty Ltd	Managing Director
Erica Maginnis	Sea Forest Ltd	Head of People and Culture
Dr Laura Stoltenberg	OceanWatch Australia	Program Manager - Aquaculture
Dr Tracey Bradley	Agriculture Victoria	Principal Veterinary Officer, Aquatic Animal Health
Nick Savva	Australian Abalone Growers Association	Executive Officer
Dr Sarah Berry	CSIRO	Postdoctoral Fellow, Agriculture & Food
Kristy Harrison	Huon Aquaculture Company Pty Ltd	Community Relations Advisor
Dr Jennifer Blair	Ornatas Pty Ltd	Hatchery and Research & Development Manager, Ornatas
Natalie Dowsett	SafeFish	Executive Officer
Dr Nicole McDonald	CQUniversity Australia	Senior Research Officer – Agri-tech Education and Innovation
Dr Luke Dutney	Department of Agriculture and Fisheries Queensland	Senior Extension Officer - Aquaculture
Matt Barrenger	Salmon Tasmania	Technical Director

Duncan Leadbitter	Aquaculture Stewardship Council (Australia)	Market Development Manager Australia and New Zealand
Jo-anne Rusco	Australian Barramundi Farmers Association	Chief Executive Officer
Frances Huddlestone	Oysters Tasmania	Industry Development Officer
Michael Gilby	Victorian Fisheries Authority	Aboriginal Projects and Stakeholder Engagement
Stuart Harris	Salmon Tasmania	Communications Director
David Wood	Yumbah Aquaculture Limited	Chief Executive Officer
Nicole Anderson	Paspaley Pearling Company	R&D Manager - Pearl Production
Anton Krsinich	Tasmanian Seafoods Group	Head of Sea Cucumber and Aquaculture

Appendix 9: Australian Aquaculture Outreach and Communication Platform concept

Below are concept diagrams for the Australian Aquaculture Industry Platform home page (Figure 1) and sector landing pages (Figure 2).

Figure 1: Concept home page for Australian Aquaculture Industry Platform

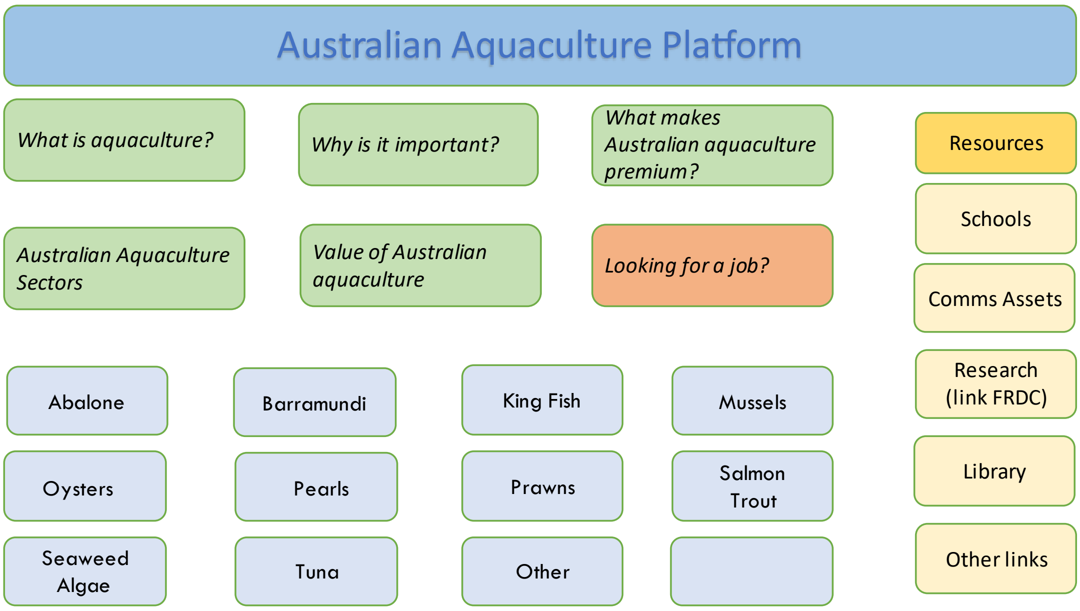
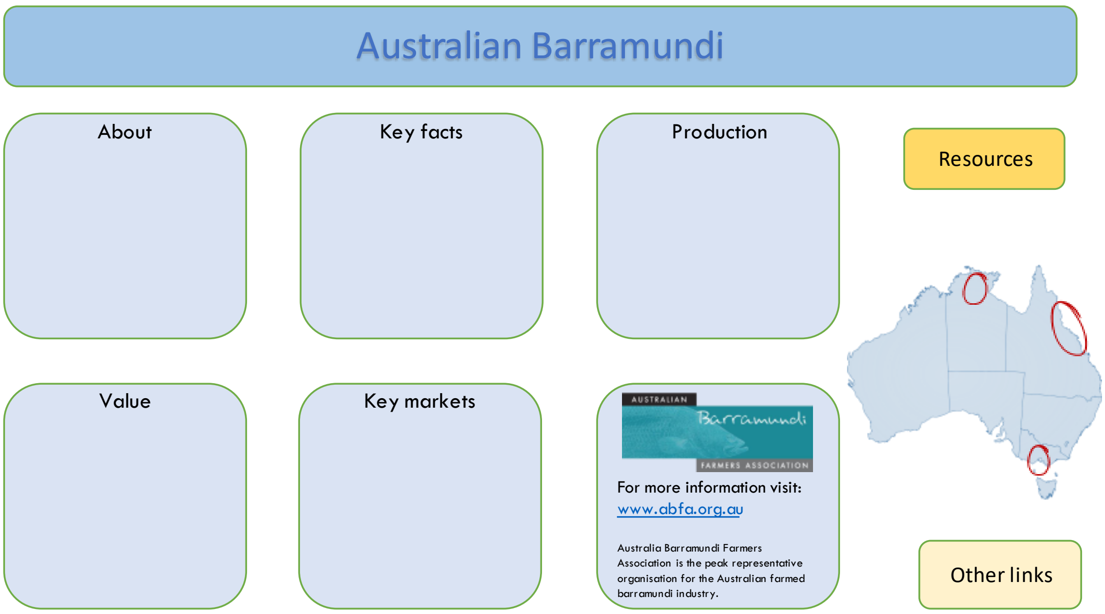


Figure 2: Concept example of landing page for each of the sectors
(Barramundi used as example)



Appendix 10: List of key terms used

The following definitions should be considered in reading this report.

- Adoption of Innovation and technology performance - relates to the aquaculture industry's achievements, initiatives and challenges being addressed in this area. It includes investment, research, productivity gains, improved sustainability and environment outcomes etc.
- Animal welfare performance - relates to the aquaculture industry's achievements, initiatives and challenges being addressed in regard to animal health and welfare, ethical farming practices, feed and water quality, biosecurity. Although this is a component of sustainability performance, it has been described separately because of its the importance to the aquaculture industry.
- Aquaculture literacy - refers to a community's familiarity with information about aquaculture and related environmental, economic, and social topics. (U.S. Department of Commerce National Ocean and Atmospheric Administration (NOAA) Fisheries), source: https://www.fisheries.noaa.gov/national/aquaculture/aquaculture-literacy-noaa.
- Communication - is the process of delivering information or a message to stakeholders. It is typically a one-way process.
- Community performance - relates to the aquaculture industry's achievements, initiatives and challenges being addressed regarding community outreach, development, education and engagement etc.
- Consumer benefits – relates to attributes such as affordability, fresh sustainable safe food, convenience, nutritional value etc.
- Engagement - is the process of developing a conversation or relationship with stakeholders. It typically involves two-way communication.
- Economic benefits include contribution (revenue) and impact, direct and indirect job creation, trade etc. Although this is a component of sustainability performance, it has been described separately because of its the importance to the aquaculture industry.
- Environmental performance - relates to the aquaculture industry's achievements, initiatives and challenges being addressed regarding the environment. It includes managing and reducing impact on the environment, the marine ecosystem, wildlife etc. Although this is a component of sustainability performance, it has been described separately because of its the importance to the aquaculture industry.
- Industry compliance and governance performance - relates to the aquaculture industry's achievements, initiatives and challenges being addressed regarding this area. It includes in industry standards/best practice, regulations & standards, industry governance, leadership, engagement, and advocacy etc.
- Motivators – or 'key motivators' are defined as the issues, objectives or areas of action or performance* which are important to an organisation/business, and which are being communicating to the stakeholders, either explicitly or implicitly. *Performance includes achievements, initiatives and/or challenges being addressed, which are relevant to the motivator category.
- People develop and retention performance - relates to the aquaculture industry's achievements, initiatives and challenges being addressed in this area. It includes attraction and retention, training and skills development, diversity etc. Although this is a component of sustainability performance, it has been described separately because of its the importance to the aquaculture industry.
- Product attributes - relates to the product attributes such as quality, nutritional value, Australian, sustainable protein source, high food safety, provenance, traceability etc.
- Sustainability performance - relates to the aquaculture industry's achievements, initiatives and challenges being addressed in this area. It includes producing a sustainable protein source, ethical farming practices, meeting industry standards/best practice, input and waste management, managing natural disasters, climate change impacts etc.
- Stakeholders – Broadly, aquaculture industry stakeholders include all levels of government; representative bodies at sectoral, local, state and national level; local communities and the broader

Australian community; seafood consumers; investors; allied supply (input) and service businesses; international trading partners; current and future workforce etc.

For the purposes of this project, the main stakeholder groups investigated and/or consulted included:

- Key/ leading commercial businesses in each sector including key supply chain partners e.g. feed companies, wholesalers, exporters, retailers.
- State-based advocacy organisations, committees, and special interest groups.
- Sector/species-based advocacy organisations, committees, and special interest groups.
- Other representative groups.
- Research organisations, international agencies, and NGO's.
- Relevant state and federal government agencies.
- Other service providers.

The project scope did not provide for consultation with local community groups, seafood consumers or the broader Australian community.

- Workplace health and safety performance - relates to the aquaculture industry's achievements, initiatives and challenges being addressed in this area. It includes supporting mental health, physical safety standards etc. Although this is a component of sustainability performance, it has been described separately because of its the importance to the aquaculture industry.

Appendix 11: Project Team and Project Review Group

Project Team

Julie Petty – Seafood Industry Australia (project lead)

Jenny Margetts – P2P Business Solutions (research lead)

Stephanie Mackillop – P2P Business Solutions (research and project support)

Angela Williamson - Blue Economy CRC (formal advisory role through project design and delivery)

Project Review Group

Pene Snashall - Huon Aquaculture Company Pty Ltd (part only)

Kristy Harrison – Huon Aquaculture Company Pty Ltd (part only)

David Wood – Yumbah Aquaculture Limited

Andy Meyer – Oysters Australia

+ the Project Team above.