

# **Nova Scotia Department of Fisheries and Aquaculture**

## Regulatory Review: Final Report and Recommendations

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DAVIS PIER

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# Acknowledgements

The Department of Fisheries and Aquaculture retained Davis Pier Consulting (Davis Pier) to facilitate a comprehensive review of Nova Scotia’s aquaculture regulations - the first review following the implementation of the 2015 framework.

At the direction of the Minister of the Department of Fisheries and Aquaculture and guidance of the Nova Scotia Aquaculture Regulatory Advisory Committee, this inaugural regulatory review was intentional in engaging many perspectives to learn about how the regulatory framework could be improved.

As facilitators of the review, Davis Pier would like to thank the citizens and organizations who shared their experiences, knowledge, and offered suggestions about regulatory improvements to support a sustainable, responsive, and prosperous sector.

Davis Pier would also like to acknowledge the valuable time and contributions made by the Nova Scotia Aquaculture Regulatory Advisory Committee (NSARAC) throughout the regulatory review process. The advice and insights provided by NSARAC members was foundational to the review design and instrumental to informing the recommendations.

# Executive Summary

In response to the Doelle-Lahey Panel (the Panel) recommendations, in 2015 a new aquaculture regulatory framework was implemented, and the Nova Scotia Aquaculture Regulatory Advisory Committee (NSARAC) established. With guidance and advice from the NSARAC, the Panel recommended the Department of Fisheries and Aquaculture conduct a review of the regulations every 5-years and make recommendations to the Minister of Fisheries and Aquaculture for continuous improvement.

The Department of Fisheries and Aquaculture retained Davis Pier Consulting (Davis Pier) to facilitate a comprehensive review of Nova Scotia's aquaculture regulations - the first following the implementation of the 2015 framework.

A three-phase project approach was undertaken by Davis Pier to complete the regulatory review: [1] research; [2] engagement; and [3] recommendations. The **research** phase focused on the governing legislation and regulations to understand Nova Scotia's aquaculture regulatory framework. The **engagement** phase was a critical part of review process to understand a variety of stakeholder experiences, concerns, and perceptions about the current aquaculture practices and implementation of Nova Scotia's aquaculture regulatory framework. We heard from 988 public respondents and met with 43 stakeholders representing the aquaculture industry, fish harvesters, environmental and community organizations, municipalities, and academia. In the **recommendations** phase, Davis Pier conducted a series of workshops with NSARAC to facilitate the consolidation, analysis and synthesis of the information collected during both the research phase and the engagement phase to make recommendations to the Minister of Department of Fisheries and Aquaculture for regulatory improvement.

A perspective shared through the public survey respondents and engagements with stakeholders, was that the **current regulations are a good start** and that they support continuous improvement of the implementation of the regulations.

We heard from public survey respondents and stakeholder engaged that:

- **a "one size fits all" approach to regulation has created disparities within the sector.**
- **information about the sector and the regulations are not being made available and not easy to access by the public.**
- **people want inclusive and meaningful engagement from industry and government when it comes to aquaculture.**

The experiences, concerns, and perceptions we gathered from the stakeholder engagements and public survey responses were used as the foundation to conduct a comprehensive technical analysis and regulatory mapping process. Three themes emerged from the technical review - **Regulatory Rightsizing, Transparency, and Public Participation.**

Following the completion of regulatory mapping, options were developed by Davis Pier and informed by engagement insights, NSARAC input, jurisdictional findings, and Department staff. A series of workshop sessions were held with NSARAC members to assess the potential options available to address the identified issues through the engagement phase and provide feedback to inform the recommendations.

The review process resulted in **15 key recommendations** that are categorized within the three themes, as follows:

### **Regulatory Rightsizing**

1. Increase efficiencies and effectiveness, and reduce regulatory burden and redundancies in the application, application review, and decision-making process.
2. Assess the regulatory reporting procedures and requirements to find efficiencies, based on the scale and type of the aquaculture operation.
3. Integrate regional level cumulative and long-term environmental impacts into the regulatory framework.
4. Embed operator compliance history explicitly in the regulatory decision-making processes.
5. Change the Option to Lease to be valid for one (1) year from the date of issuance, with ability to extend for 6 months.
6. Conduct a jurisdictional review to align Nova Scotia's fee structure.
7. Develop separate species-specific guidelines for traceability of finfish.
8. Amend regulations for noise, light and noxious smells on the Farm Management Plan to better define and include industry best practices.
9. Harmonize the Federal and Provincial Benthic Monitoring Programs.
10. Conduct a scientific review to determine requirement for water quality monitoring.

### **Transparency**

11. Increase information available and accessible to the public about the regulatory framework, licensing, and decision-making processes.
12. Increase information available and accessible to support operators with the regulatory framework, licensing, and decision-making processes.
13. Increase frequency of release of information about the sector and regulatory activities.

### **Public Participation**

14. Review and determine effective approach and supports to enable meaningful public input in the Aquaculture Review Board process.
15. Increase public input in the scoping phase of the application process.

Throughout the engagement phase, stakeholders identified issues that do not have a regulatory solutions pathway, including the **capacity of government** to effectively oversee and hold operators accountable through their monitoring, compliance, and enforcement role; the long-term prosperity of the sector relies on **government playing an active role in promoting the sector**; and long-term sustainability requires **investment in sector research, innovation, and adoption of leading practices**. In response to these non-regulatory issues, the NSARAC

identified 2 additional recommendations to support the implementation of regulatory improvements and sustainability and prosperity of the aquaculture sector, as follows:

16. Increase government resources to effectively implement, monitor, and enforce regulatory improvements.
17. Increase funding for small to medium size operators to enable growth and innovation in the sector.

*The purpose of this final report is to provide a comprehensive overview of the review findings, analysis, and recommendations to improve Nova Scotia's Aquaculture Regulatory Framework. The enclosed recommendations have been agreed to by the NSARAC and submitted to the Minister of the Nova Scotia Department of Fisheries and Aquaculture for further consideration.*

# 1 Project Context

In 2013, the then government announced an independent panel, led by Meinhard Doelle and William Lahey, commonly referred to as the Doelle-Lahey Panel (the Panel), to review aquaculture regulations, and develop a new regulatory framework for aquaculture in Nova Scotia.

Following an 18-month process, during which numerous consultations were completed, the Panel's core conclusion was that a fundamental overhaul of the regulation of aquaculture in Nova Scotia was required<sup>1</sup>. The Panel stated that the regulatory overhaul should be guided by the idea that "aquaculture that integrates economic prosperity, social well-being and environmental sustainability is one that is low impact *and* high-value."<sup>2</sup>

In 2015, a new aquaculture regulatory framework was implemented.

Another key recommendation of the Panel was to create a regulatory advisory committee made up of representatives from the Mi'kmaq and the following interests: municipalities, aquaculture industry, fishing industry, coastal communities, environmental and conservation organizations, and economic development and tourism interests.

The Nova Scotia Aquaculture Regulatory Advisory Committee (NSARAC) was created by Government in 2015 with a mandate that includes "advise and provide recommendations to Nova Scotia Minister of Fisheries and Aquaculture with respect to aquaculture regulation to ensure a sustainable, responsive, and prosperous industry." A key outcome of the Committee is "a comprehensive review of the aquaculture regulatory framework at five year increments."<sup>3</sup>

In February 2022, the Department of Fisheries and Aquaculture retained Davis Pier to facilitate a comprehensive review of Nova Scotia's aquaculture regulations - the first following the implementation of the 2015 framework.

The purpose of this final report is to provide a comprehensive overview of the review findings and recommendations to improve the aquaculture regulatory framework. The enclosed recommendations have been informed by engagement insights, NSARAC advice, and Department staff and prepared for submission by NSARAC to the Minister of the Nova Scotia Department of Fisheries and Aquaculture for further consideration.

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<sup>1</sup> Doelle, Meinhard and Lahey, William, 'A New Regulatory Framework for Low-Impact/High-Value Aquaculture in Nova Scotia,' 2014 Dalhousie University Schulich School of Law, page vii.

<sup>2</sup> *Ibid.*

<sup>3</sup> Nova Scotia Government . (2015). Nova Scotia Aquaculture Regulatory Advisory Committee, [https://novascotia.ca/fish/aquaculture/laws-regs/docs/Regulatory\\_Advisory\\_Comm\\_TOR\\_Aug13-15\\_.pdf](https://novascotia.ca/fish/aquaculture/laws-regs/docs/Regulatory_Advisory_Comm_TOR_Aug13-15_.pdf)

## 1.1 Objectives & Approach

The Nova Scotia Department of Fisheries and Aquaculture procured Davis Pier to facilitate a comprehensive review of Nova Scotia's aquaculture regulations.

The objectives of Davis Pier's engagement as set out by the Department were as follows:

- Work with the NSARAC to inform the review process and recommendations.
- Engage with parties including, but not limited to government network partners (provincial and federal); aquaculture industry operators, commercial fishers, community interest groups, environmental groups, and the Mi'kmaq, to identify regulatory topics and issues.
- Engage with the public through a public input forum to capture experiences, concerns, and perceptions of the regulatory framework.
- Conduct national and international cross-jurisdictional research and analysis of a variety of aquaculture regulatory frameworks to determine best practices for Nova Scotia.
- Submit a final report summarizing all completed deliverables, consultation summaries, and recommendations.

In response to the project objectives set by the Department, Davis Pier designed a project approach that focused on three key elements: [1] research; [2] engagement; and [3] recommendations.

The **research** phase of work focused on the governing legislation and regulations, and via a thorough technical review was designed to help the Davis Pier team understand the current regulatory framework for aquaculture in Nova Scotia. Secondary sources, including the Doelle-Lahey Report were reviewed in detail to provide additional context and information regarding the current regulatory framework and approach.

The **engagement** phase of work was directed at engaging those who know the sector best: the Department; NSARAC; Operators; Environmental and Community groups; and Researchers. As well as the public to identify the public's experiences, concerns, and perceptions of the regulatory framework. The purpose of this phase was to develop a strong understanding of current aquaculture practices in Nova Scotia, allowing for meaningful consultation and discussion about opportunities for improvements to the existing regulatory framework.

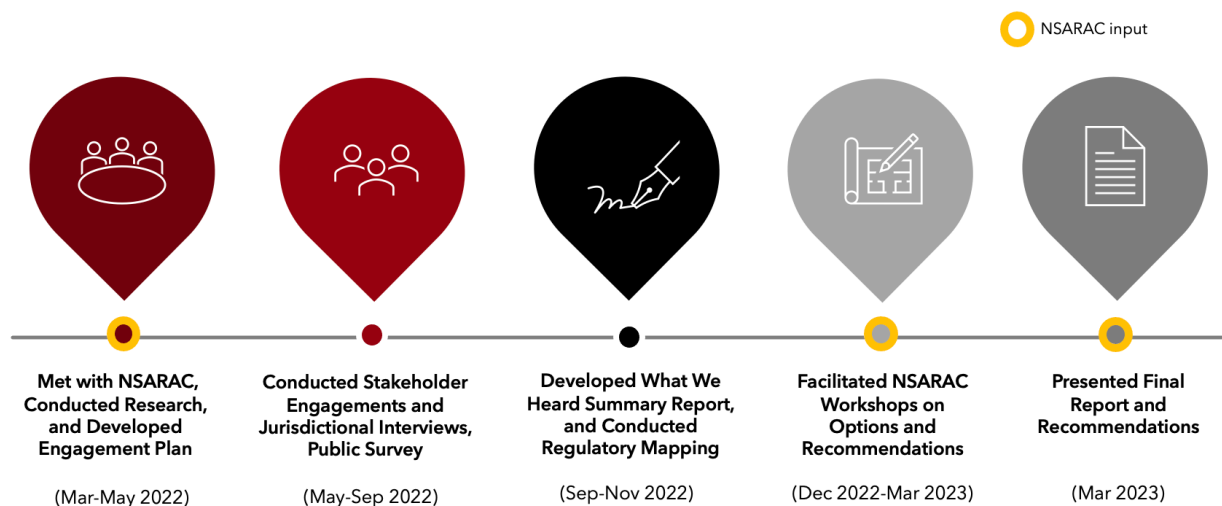
The **recommendations** phase of work was designed to facilitate the consolidation, analysis and synthesis of the information collected during both the research phase and the engagement phase that informed the development of recommendations to improve the regulatory framework.

Neither Davis Pier's work, nor this report are meant to:



- Provide a scorecard or assessment on implementation of the recommendations made in the Final Report of the Independent Aquaculture Regulatory Review for Nova Scotia (i.e., the Doelle-Lahey Report).
- Assess the viability of or advocate for a particular form of aquaculture operation.

The graphic below provides an overview of the process steps and timeline to complete the regulatory review. The NSARAC was engaged throughout the process to advice on the approach and recommendations.



In the initial step of the review, Davis Pier met with the NSARAC to gather feedback on the scope and approach of the regulatory review. Directed by the Department, with advice from NSARAC, the review process used the 14 regulatory framework components list below.

### Aquaculture License And Lease Regulations

#### Application Process

- Public Participation
- Documentation
- Transparency
- Decision Maker
- Reviewers
- Decision Factors

#### Administration

- License and lease tenure
- Fees and Bonds
- Terms and Conditions

### Aquaculture Management Regulations

- Farm Management Plans
- Aquatic Animal Health
- Environmental Monitoring
- Farm Operations
- Containment Management

These 14 regulatory framework components were used to frame stakeholder engagement discussions and interviews, and public input survey questions, analyze engagement findings, map areas of potential regulatory improvement, and develop options and recommendations.

## 2 Research

The research phase was used to help the Davis Pier team gather information and understand the aquaculture regulatory framework in Nova Scotia. One of the objectives of the research phase was to identify existing barriers to creating a low-impact, high-value aquaculture sector.

The primary component of the research phase was a technical legislative and regulatory review. The technical review was designed to assist the team in developing a comprehensive understanding of the legislative and regulatory framework that govern aquaculture operations in Nova Scotia.

During the research phase a comprehensive review of the following legislation and regulations was completed:

- The *Fisheries and Coastal Resources Act*, SNS 1996, c.25, s.1.
- The Aquaculture Management Regulations, NS Reg. 118/2019
- The Aquaculture Licence and Lease Regulations, NS Reg. 186/2019

The *Fisheries and Coastal Resources Act* was reviewed in depth, to better understand the scale and scope of legislative changes that took place in 2015 following the Department's receipt of the Doelle-Lahey Report. The Aquaculture Management Regulations and the Aquaculture Licence and Lease Regulations (the Regulations) were reviewed for amendments, editorial notes, and corrections, and repealed or superseded provisions.

Following the completion of the legislative and regulatory review, the Davis Pier team conducted a secondary-source review. The secondary-source review involved existing materials, reports, and sector data, including a detailed review of the final report of the Independent Aquaculture Regulatory Review, "*A New Regulatory Framework for Low-Impact/High-Value Aquaculture in Nova Scotia*," otherwise known as the Doelle-Lahey Report.

A jurisdictional scan was undertaken and in collaboration with the Department and NSARAC priority jurisdictions to engage were identified.

Collectively, the research steps allowed the team to understand Nova Scotia's legislative and regulatory framework for aquaculture operations while also informing the development of engagement guides, interview questions, and surveys for the engagements to come.

# 3 Engagement

The focus of the engagement phase was to understand the various perspectives of the diverse groups at the center of the regulatory reform and to gather insights that could be used to guide future recommendations for regulatory improvements.

The team took a contextual inquiry approach, which enabled Davis Pier to conduct research through in-depth observations, interviews, surveys, and focus groups to gain a robust understanding of systemic challenges and opportunities to consider in developing recommendations for regulatory improvements.

Specific and targeted engagement strategies that supported the involvement of individuals, interest groups, and Mi'kmaq communities, were developed as part of the consultation plan. This included direct and early outreach to specific groups to help inform how engagement could be facilitated to encourage involvement. Approaches were tailored to each audience to ensure all participants were engaged in an inclusive and culturally appropriate manner.

Insights gathering via engagements took three primary approaches:

1	<b>Engagements</b> - with key groups (identified by the Department and NSARAC) to understand their experiences, concerns, and perceptions into the aquaculture regulatory framework.
2	<b>Public Input Survey</b> - a short-form open-ended survey designed to engage the public at large in the regulatory review process.
3	<b>Jurisdictional Interviews</b> - meetings with representatives from other jurisdictions to better understand alternative regulatory frameworks, and to assess potential regulatory pathways for stakeholder identified issues.

A summary of “What We Heard” from stakeholder engagements and public input survey respondents, has been made available publicly on the Department website <https://novascotia.ca/fish/aquaculture/laws-regs/docs/regulatory-review-what-we-heard-summary-report.pdf>.

## 3.1 Engagements

Engagements with key organizations and individuals (as identified by the Department and NSARAC) to understand their experiences, concerns, and perceptions about the aquaculture regulatory framework formed the bulk of the engagement process and insights gathering work that was completed during the engagement phase.

A list of stakeholders was prepared with input from the Department and NSARAC members. Engagements were structured as in-person or online meetings which followed a theme-based discussion guide (see Appendix A). Participants were given the option of providing written responses in addition to verbal responses provided during the interviews.

As the team conducted engagements, the breadth of suggestions was prioritized based on alignment with the scope of the review. This required careful management of expectations as not every issue raised was in scope. Best efforts were made to incorporate as much of the feedback as was reasonably possible.

The following engagements were completed:



The insights gathered through engagements were foundational to inform the recommendations in this report. Participants came prepared to share their thoughts and suggestions to identify key issues and opportunities for improvement related to the Aquaculture Regulatory Framework and the sector.

### **Mi'kmaq Engagement and Request for Consultation**

Invitations were sent to 16 Indigenous communities and organizations to meet with Davis Pier to provide their insights on the current regulatory framework. The KMKNO requested engagement under the *Terms of Reference for a Mi'kmaq-Nova Scotia-Canada Consultation Process* (TOR). The Department has committed to initiate consultations with the Mi'kmaq of Nova Scotia on the regulatory amendments.

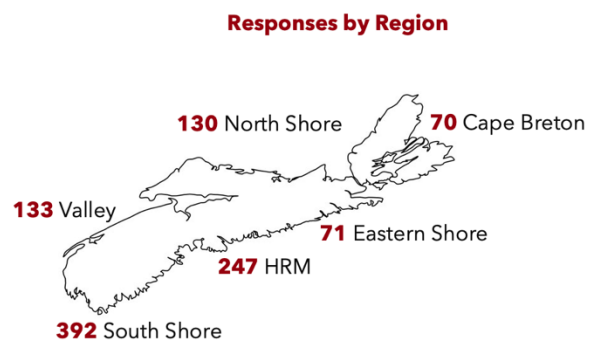
## 3.2 Public Input Survey

An online public consultation survey was developed and made available by the Department via a link on the Departments website. The public consultation survey was open for comment for four weeks. The online public input survey was developed in consultation with the Department and consisted of key demographic questions and open-ended questions designed to captures the public’s experiences, concerns, and perceptions of the regulatory framework (see Appendix A).

The majority of respondents identified as residents of Nova Scotia. A third of respondents expressed an association or interest in aquaculture through community or environmental groups. From a regional level, two-thirds of respondents were from the South Shore and Halifax Regional Municipality.



Association or Interest in Aquaculture	Total
Academia	63
Aquaculture Industry	50
Community Group	169
Environmental Group	145
Fishing Industry	97
Mi'kmaq Community	21
Municipal	69



Mostly all who responded were **familiar** or **somewhat familiar** with the aquaculture sector and the regulations.

The survey respondents offered important insights to gain a sense of public experiences, concerns, and perceptions about the Aquaculture Regulatory Framework.

## 3.3 Jurisdictional Interviews

Informed by the key insights from engagements and public input survey responses, the Davis Pier team conducted analysis to identify the leading aquaculture regulatory models in other jurisdictions in Canada and internationally. In addition, the Davis Pier team sought input from stakeholders, the NSARAC, and the Department on leading jurisdictions to engage. Of the jurisdictions identified for engagement, Davis Pier was able to complete interviews with the Federal Department of Fisheries and Oceans, Newfoundland Department of Fisheries, Forestry and Agriculture, and New Brunswick Department of Agriculture, Aquaculture and Fisheries. Other jurisdictions were identified and contacted but did not respond to the request for engagement, including Prince Edward Island, British Columbia, Norway, and Scotland.

Informed by the public and stakeholder experiences, concerns, and perceptions shared about the aquaculture sector in Nova Scotia, specific attention was given to jurisdictions that have high levels of public acceptance of aquaculture. Jurisdictional interviews were conducted to explore similar issues and how they have addressed them. The learnings from these jurisdictional interviews helped inform the recommendations.

A summary of jurisdictional interview findings can be found in Appendix B.

## 4 Technical Review

The technical review analyzed the engagements and public input and produced options for consideration for potential areas of improvements in the regulatory framework. Analysis was completed to link the identified issues to the regulatory framework, which led to themes of recommendations for considerations.

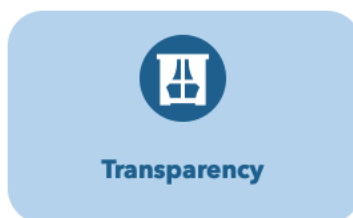
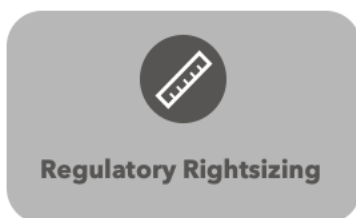
### 4.1 Regulatory Mapping

Insights and information gathered during the engagement phase were mapped to the legislation and regulations to identify potential areas for improvement. The regulatory mapping process was directed at developing a line-of-sight mapping that connected engagement experiences, concerns, and perceptions to the legislation and regulations. The regulatory mapping process revealed key themes and core insights that were used to guide options mapping and recommendations creation.

The mapping process utilized 14 regulatory framework components (see Section 1.1) to categorize issues and insights raised during the engagement process. Issues and insights were categorized by group (e.g., Operator, Environmental/Community Groups, and Researchers) and were mapped to applicable legislative or regulatory provisions. For each issue or insight that was mapped to legislation or regulations, an options pathway was identified. As a result of this analysis, key themes emerged and were mapped to current regulations (see Appendix C).

### 4.2 Key Themes

Incorporating information and experiences, concerns, and perceptions from the insights gathering phase of the project (i.e., engagements, public input survey, jurisdictional interviews, and regulatory mapping process) were synthesized into three (3) core themes.



## 4.2.1 Regulatory Rightsizing

The core challenge identified in the Regulatory Rightsizing theme was that the uniformity of the regulatory framework (i.e., one size fits all approach) has created potential disparities in the sector. There is a need for different regulatory processes based on the sub-sector, risk level and scale of the operation. There are also concerns that the current engagement and consultation processes are not meeting the needs for meaningful public involvement in the regulatory decision-making processes. Additionally, stakeholders felt the regulations need to address the environment concerns in a more substantive way to ensure sector sustainability.

### Key Insights

- Smaller operators experience capacity constraints operating within the existing regulatory framework.
- The regulatory overhead is restrictive for new operators, presenting significant barriers to entry into the sector.
- The risk level of the operator should be considered in the regulatory framework.

These matter because:

- For effective decision-making to take place, there needs to be regulatory rightsizing to fit the needs of the subsectors and the public.
- The regulatory framework needs to provide more navigable avenues for effective economic growth to allow operators to grow their business with sustainability in mind.
- The regulations need to provide appropriate mechanisms for the public to engage in the regulatory framework and decision-making processes.

## 4.2.2 Transparency

Stakeholders want access to more information throughout the application, application review and decision-making process. Stakeholders expressed concerns about how decisions are made and shared, what, how, and when information is made available, and how monitoring and compliance is occurring. The concern about the lack of available data and access to information has led to different interpretation and eroded trust and confidence in the regulatory framework, process, and government oversight. Operators desire more information about the regulations regarding oversight, process, and approvals. Community and environmental organizations want more clarity on regulations and decision-making processes.

There are concerns and perceptions that information about the sector and the regulations is not being made available to the public. Engaged participants identified the following information gaps related to the following regulatory processes:

- Fish health and surveillance
- Escape and disease reporting
- Environmental Monitoring
- Application and decision-making information
- Regulatory compliance and enforcement
- Farm Management Plans
- Public engagement processes
- Application processes, decisions, and information.
- Leasing processes, decisions, and information.

#### **Key Insights**

- There are perceived issues with information management and a lack of sharing of important data.
- The department needs to provide clarity on their goals and visions for the sector.
- Information that is shared is unclear and ambiguous to the public.

These matter because:

- Transparency will continue to be a public issue if the public is not clearly informed in a meaningful way about information pertaining to the sector and the regulations.
- Operators need clarity on the purpose of regulatory requirements and need to be kept apprised of the status of their applications to make business decisions.

### **4.2.3 Public Participation**

The public respondents and stakeholders identified a lack of inclusion and meaningful engagement of the public as a key contributor to the misinformation, mistrust, reduced confidence, and limited social license of the sector.

The public continues to feel engagement mechanisms are not meeting expectations, despite operators meeting the regulatory requirements for their applications. The processes for engagement require a large investment of time for both the operators and the public. The community liaison groups have not met the needs of the communities who are engaged. The



pilot Aquaculture Development Areas are perceived as a step in the right direction to better serve the surrounding community with information in an effective way.

### **Key Insights**

- Desire for meaningful public engagement and consultation in the application and decision-making processes.
- Adjudicative decision-making process are too formal, complex, and inaccessible without legal representation.

These matters because:

- The public will continue to build their own perceptions of the sector and the regulations if they are not meaningfully engaged.
- Operators have complied with the requirements that have been asked of them for applications process but are still struggling to meet the public requirements.

# 5 Recommendations

Following the completion of regulatory mapping, the Davis Pier team developed options to address both the regulatory and non-regulatory issues identified.

Options were developed by Davis Pier and informed by engagement insights, NSARAC input, jurisdictional findings, and Department staff, and were:

- Designed to offer a clear pathway to a regulatory solution.
- Designed to integrate policy and communications components that could be implemented by the Department if regulatory or legislative change could not be achieved.
- Targeted to address the issues identified by the public that could not be remedied by amendments to the regulations or the Act (e.g., improving navigability of the DFA website)
- Intended to improve communication and information sharing for both the sector and the public to increase sector awareness and regulatory/legislative knowledge that may lead to increased social license.

Members of the NSARAC were invited to participate in two (2) working sessions hosted on December 9 and 15, 2022. The purpose of the sessions was to gather input from the NSARAC on the issues identified during the engagement process, and to assess the potential options available to address the identified issues. The issues presented to the NSARAC for discussion and input during the working sessions represented a synthesis of the concerns raised during the engagement process as time constraints did not allow for the NSARAC members to individually address the 150+ issues identified. Following the working sessions, the options were revisited and revised based on the feedback and inputs provided by the NSARAC and the Department.

The recommendations were developed using the three synthesized themes: **Regulatory Rightsizing**, **Transparency**, and **Public Participation**. Each recommendation is supported by a summary of identified issues, the rationale for the recommendations and suggested for the Department. Draft recommendations were presented to the NSARAC for review and feedback through a series of workshops sessions, followed by a meeting for the NSARAC to present the final report and recommendations to the Minister of Fisheries and Aquaculture.

## Theme 1: Regulatory Rightsizing



We heard that a “one size fits all” approach to regulation has created disparities within the sector.

**RECOMMENDATION 1 – Increase efficiencies and effectiveness, and reduce regulatory burden and redundancies in the application, application review, and decision-making process.**

When examining the application, application review, and decision-making processes operators identified timeliness and efficiency as their main areas of concern. The lengthy timelines between the regulatory phases, combined with the extensive application and documentation requirements were seen as impediments to sector entry and the economic viability of proposed operations. Operators expressed the uniform application of regulatory processes to all sub-sectors as undermining stakeholder confidence in regulators, and negatively impacting the economic growth of the sector.

*Suggested actions:*

- *Differentiate types of applications and streamline application process based on risk criteria (e.g., by subsector, farm size, production changes).*
- *Review service delivery standards for the Department and network partner, that results in the streamlining of the applications and renewals process.*
- *Support small to medium operators in ways that facilitate growth of the sector (e.g., expedite application approvals, shellfish and marine plant roadmap, operational funding, etc.)*
- *Develop internal information management processes and systems to improve efficiencies and reduce redundancies for applicants.*
- *Amend the regulations to allow marine boundary amendments that do not result in production increases to go through the administrative decision-making process.*
- *Review how the Aquaculture Review Board takes socio-economic and environmental impacts into consideration in its decision-making.*

**RECOMMENDATION 2 - Assess the regulatory reporting procedures and requirements to find efficiencies, based on the scale and type of the aquaculture operation.**

When reviewing the regulatory reporting procedures and requirements, operators identified the regulatory overhead of reporting as burdensome and reporting processes as an area of concern and duplicative. Operators expressed that reporting procedures and requirements create significant capacity constraints, especially for smaller operators.

*Suggested actions:*

- *Implement revised Farm Management Plan templates to incorporate requirements, and related guidance most suitability for the scale and type of operation.*
- *Develop and implement reporting requirements and mechanisms for efficiency, e.g., establishing an online portal for regulatory reporting.*

**RECOMMENDATION 3 – Integrate cumulative and long-term environmental impacts beyond the site level into the regulatory framework.**

When examining the regulatory framework, including requirements, processes, and decision-making, cumulative and long-term environmental impacts were identified as areas of concern. It was raised that cumulative and long-term environmental impacts were not adequately addressed by the regulatory framework, or directly assessed during decision-making processes.

*Suggested actions:*

- *Increase government focus on sector sustainability by funding research directed at long-term and cumulative environmental impacts (e.g., carrying capacity, nutrient loading, etc.).*
- *Request the Aquaculture Science Advisory Committee to assess the adequacy of the current application review process in addressing cumulative and long-term environmental impacts by sub-sector, siting assessment criteria, and modelling thresholds.*
- *Amend the regulatory framework and application documents to reflect cumulative and long-term environmental impacts by sub-sector.*
- *Invest in internal information management processes and systems that considers analysis beyond the site level in application decisions.*

**RECOMMENDATION 4 - Embed operator’s compliance history explicitly in the regulatory decision-making processes.**

When examining regulatory requirements, processes, and decision-making, it was identified that operator’s compliance history was of significant concern. Operator compliance history is viewed as a material decision-making factor that should have clear consideration in the application, review, renewal, and decision-making processes as they are operating in public waters.

*Suggested action:*

- *Review other regulated industries that use public resources to compare operator compliance standards, specifically as it relates to decision-making processes and amend regulations in alignment with best practices.*
- *Ensure operator compliance history is explicitly stated in the regulation.*

**RECOMMENDATION 5 - Change the Option to Lease to be valid for one (1) year from the date of issuance, with ability to extend for 6 months.**

When reviewing the regulatory framework, including requirements, processes, and decision-making operators identified that the time for an option to lease is too short. The current 6-

month period was not sufficient to allow proper scoping and investigation of potential aquaculture sites. Operators expressed that they want an option to lease to be valid for a one (1) year from the date of issuance and should be able to be extended if necessary to provide operators the appropriate opportunity to explore potential locations and conduct research.

**RECOMMENDATION 6 – Conduct a jurisdictional review to align Nova Scotia’s fee structure.**

When reviewing the regulatory framework, it was identified that the fee structures that are currently in place were an area of concern. Fee structures should be aligned with global standards and require a fulsome review to understand if they are meeting the mark, and adequately address the use of a public resource for the purposes of private business.

*Suggested action:*

- *Assess and align Nova Scotia’s fee structures compared to the global standards.*

**RECOMMENDATION 7- Develop separate species-specific guidelines for traceability of finfish.**

There were identified concerns related to traceability and containment management of finfish. It is perceived that containment management issues were widespread, that escapes occurred frequently, and that available data was unreliable.

*Suggested action:*

- *Engage the Traceability Committee to develop sector specific guidance documents and policy that clarify the requirements of the traceability provisions of finfish.*
- *Review thresholds, standards and establish a mechanism for the routine release and available for stakeholders to access information related to Containment Breach Notices and Audits of finfish.*

**RECOMMENDATION 8 - Amend regulations for noise, light and noxious smells on the Farm Management Plan to better define and include industry best practices.**

When reviewing the regulatory framework, including requirements, processes, and decision-making it was identified that Farm Management Plans were an area of concern. Stakeholder expressed concern that the Farm Management Plan requirements were deficient in managing noise, light and noxious smells from operations.

*Suggested action:*

- *Better define and amend Farm Management Plans requirements to include industry best practices relating to noise, light and noxious smells.*
- *Improve coordination between operators and the Department to provide timely and consistent responses to public complaints for monitoring actions taken towards resolution.*

## **RECOMMENDATION 9 - Harmonize the Federal and Provincial Benthic Monitoring Programs.**

When reviewing the regulatory framework and processes, operators identified that the provincial Benthic Monitoring program requirements differ from those of the federal program. Operators perceived these differences as creating administrative inefficiencies and increasing regulatory burden.

*Suggested action:*

- *Conduct an analysis to determine the respective benefits and risks of harmonizing the Federal and Provincial Benthic Monitoring programs; and request the Aquaculture Science Advisory Committee review to make recommendations to the Department.*
- *Publish information about the benefits and risks analysis, recommendations, and decision.*
- *Unify monitoring and reporting of the Benthic Monitoring Programs.*

## **RECOMMENDATION 10 - Conduct a scientific review to determine requirement for water quality monitoring.**

When reviewing the regulatory framework and processes, community/environmental organizations identified that water quality testing and monitoring were areas of concern. Stakeholders expressed that they did not understand how water quality for the areas surrounding aquaculture operations were tested or monitored and believe this to be of significant environmental concerns.

*Suggested action:*

- *Define requirements for water quality monitoring (i.e., nitrogen levels) and request review and validation by the Aquaculture Science Advisory Committee.*
- *Coordinate provincial/federal implementation of service standards for water quality testing and reporting near existing and prospective aquaculture sites.*

## **Theme 2: Transparency**



**We heard that information about the sector and the regulations are not being made available and not easy to access by the public.**

**RECOMMENDATION 11 – Increase information available and accessible to the public about the regulatory framework, licensing, and decision-making processes.**

The need for more information about the regulatory framework, including the licensing, decision-making, and processes was identified as a current gap by public survey respondents. Those engaged identified that current information is difficult to access and insufficient information is available about sector operations and impacts. Those engaged expressed that the Department website is difficult to navigate and to find information about regulatory processes, applications, and decisions.

*Suggested action:*

- *Establish an online public registry with information specific to each aquaculture site to include but not limited to, status of the site, operator terms and conditions, required data, information, and reports.*
- *Develop plain language public information that is easy to access and navigate through the Department website.*
- *Develop multiple channels to proactively provide information and notification to the public throughout licence and lease decision-making processes, for example:*
  - *Create a listserv that automatically emails subscribers of notifications.*
  - *Post information in community centers bulletin boards.*
  - *Notify landowners and fishing associations to nearby aquaculture sites about applications.*
- *Develop an online submission form for public comment on administrative applications.*

#### **RECOMMENDATION 12 – Increase information available and accessible to support operators with the regulatory framework, licensing, and decision-making processes.**

The need for more information about the regulatory framework, including the licensing, decision-making, and processes was identified as a challenge for operators. Operators desire more information about the regulations regarding oversight, process, and approvals.

*Suggested action:*

- *Make available a detailed checklist of application process steps, that is easy to navigate and provides timely updates to applicants.*

#### **RECOMMENDATION 13 – Increase frequency of information released about the sector and regulatory activities.**

Those engaged identified that communication about regulatory activity is an area of concern. Increased communication and access to information is essential to transparency and a cornerstone of social licence. Numerous individuals identified regulatory information, including that relating to current applications, as being difficult to find or inaccessible to the public.

*Suggested actions:*

- *Develop a clear definition of what is meant by “Business Interest” with the goal to maximize information availability, while protecting the operator’s confidential business information.*
- *Determine the type and frequency of information to release about the sector and regulatory activities, including but not limited to:*
  - *Aquatic animal health*
  - *Escape and disease reporting*
  - *Farm Management Plans*
  - *Public engagement processes*
  - *Water quality and Benthic monitoring*

## Theme 3: Public Participation



**We heard that people want inclusive and meaningful engagement from industry and government when it comes to aquaculture.**

### **RECOMMENDATION 14 – Review and determine effective approach and supports to enable meaningful public input in the Aquaculture Review Board process.**

Operators, community/environmental groups, and members of the public identified that the level of public input in the adjudicative hearing process as an area of concern. Those engaged expressed that they did not understand how intervenors were selected, how pre-hearing submissions were assessed, or how evidence was weighed in Aquaculture Review Board decisions. Stakeholders had concerns about the current regulatory components that govern public input to be both unclear and unduly restrictive.

*Suggested actions:*

- *Review other adjudicative board practices to determine effective approach and supports to enable meaningful public input in the Aquaculture Review Board process.*
- *Consider the addition of Aquaculture Review Board member(s) who has expertise in environmental impact assessment to improve confidence in the decision-making process.*
- *Remove the time limit for public input, allowing the Aquaculture Review Board to exercise their discretion.*



## **RECOMMENDATION 15 - Increase public input in the scoping phase of the application process.**

Community/environmental groups, and members of the public identified the level of public input in the scoping phase of the application process as being an area of concern. The current regulatory framework requires proponents to hold one (1) public information meeting during the scoping phase held in the community closest to the site of the proposed operation. Many felt scoping meetings are one-way exchanges of information, rather than opportunities for actual engagement and feedback. It was expressed that the requirement for one (1) public information meeting is insufficient and there is a desire for more opportunities for engagement with proponents before applications were submitted to the Department.

*Suggested actions:*

- *Review similar committees (e.g., fisheries and municipal meetings) to gather advice and input on effective approaches and mechanisms for public engagement and consultation.*
- *Build effective approaches for meaningful public engagement and consultation that will lead to information sharing between proponents and the public and/or community at the scoping phase, including consideration of:*
  - *Departmental oversight of the Scoping Plan*
  - *Develop alternatives to how information is shared with the public and received by the proponent and update the Proponent's Guide to Scoping*
  - *Departmental representation involvement during public consultation process*
  - *Community level consultation processes*
  - *A professional facilitator to support and improve community engagements*
  - *Holding regular community updates on business activities in the local areas*

## **Other Considerations**

Throughout the engagement phase of this review, issues were identified that do not have a regulatory solutions pathway. The NSARAC identified the following additional recommendations to support the implementation of regulatory improvements and sustainability and prosperity of the aquaculture sector.

## **RECOMMENDATION 16 - Increase government resources to effectively implement, monitor, and enforce regulatory improvements.**

Those engaged perceived a lack of **capacity within government** to effectively oversee and hold operators accountable through their monitoring, compliance, and enforcement role.

Operators see a lack of capacity from the government to keep up with the sector regulatory process. Community and environmental organizations expressed concerns about monitoring of boundary infringements, abandoned operational equipment and waste. Many interested

parties expressed the need for sufficient capacity to regularly monitor compliance of aquaculture activities in public waters and act in a timely manner to enforce the regulations in circumstances of non-compliance.

**RECOMMENDATION 17 - Increase funding for small to medium size operators to enable growth and innovation in the sector.**

Long-term **prosperity of the sector** relies on government playing an active role in promoting the sector. Operators do not see the government acting as a promoter of the aquaculture sector as an economic benefit for Nova Scotia.

Regulatory burden and lag-time for new applicants have resulted in barriers to entry into the sector. Those engaged shared examples of individuals wanting to start a small aquaculture business in Nova Scotia and had to pursue other career opportunities due to delays in the application process.

Small to medium size operators experience barriers to growth due to regulatory burden, lack of investment and maturation of sub-sectors. Delays in application approvals of leases and licences, has limited their ability to grow their business to meet local, national, and international market demand for product.

Long-term sustainability of the sector requires **investment in research and innovation**, and support for the adoption of leading practices. Operators require access to more research and innovation to help their business contribute to the sustainability of sector, and support for the adoption of leading environmental and sustainability practices.

Operators would like to see the establishment of hatcheries and extension services to provide long-term stability as the sector adapts to ecosystem changes. Community and environmental organizations would like more focus on research related to long-term environmental sustainability and viability of the sector as a result of climate change.

# 6 Closing Statement

This review demonstrates a commitment by the Department of Fisheries and Aquaculture to the continuous improvement of the aquaculture regulatory framework. The findings and recommendations outlined in this report are reflective of the valuable time and perspectives shared on areas for regulatory improvement.

Many participants shared that the regulatory framework is a good start, however there is more work to be done. While the recommendations identified in this report do not prescribe a roadmap forward, they do suggest next steps for incremental change along the journey of continuous improvement to strengthen the regulations. We would like to acknowledge that regulatory and policy change takes time, as the Department of Fisheries and Aquaculture must conduct further analysis to consider the implications of these possible improvements.

As advice to the Minister of Fisheries and Aquaculture, our hope is that this report highlights priority areas of focus for the Department to drive forward regulatory changes and strengthen the implementation of them in ways that ensure a sustainable, responsive, and prosperous aquaculture sector in Nova Scotia.

# Appendix A: Data Collection Tools

## Stakeholder Engagement Discussion Guide

### Section 1: Organizational Context

- Tell us about your organization and its relationship with NSDFA?
- What role does your organization play in the Aquaculture sector?
- What impact does Aquaculture have in your community?
- What is your organization's interest or investment in the sub-sectors of Aquaculture?

### Section 2: Sector Context

- What strengths exist that will enable the Aquaculture sector to grow?
- What gaps or challenges continue to be barriers to progress in the Aquaculture sector?

### Section 3: Regulatory Components

- Do you believe Nova Scotia's Aquaculture Regulatory Framework supports a sustainable, responsive, and prosperous industry?
- What are your thoughts on the regulations in regard to the sub-sectors of Aquaculture?
- What regulatory components are working well? Explain and provide examples.
- What regulator components could be improved? Explain and provide examples.
- Can you suggest regulatory components from other jurisdictions that could be considered in NS?
- How could information sharing, and transparency be improved for the public regarding the regulatory components?
- How could public participation be improved in the regulatory framework?
- What conditions need to be in place for the public to have confidence in the regulatory framework for aquaculture in NS?
- What role could social license play in the regulation of aquaculture in NS?

### Section 4: Closing

- Is there anything else you would like to share/suggest in closing?

## Public Input Survey Question Set

- 1) What factors are important to you in how aquaculture is regulated in Nova Scotia?
- 2) What aspects of Nova Scotia's current aquaculture regulatory framework are working well, and why?
- 3) Where do you see a need for improvement in Nova Scotia's aquaculture regulations, and why?
- 4) Is the information the government provides on aquaculture and the aquaculture regulations sufficient and accessible to you?
- 5) The aquaculture regulations support the sustainable development of the industry. Are there additional measures needed to ensure the sustainability of the industry?
- 6) Do you have any other comments to share to inform the review?

# Appendix B: Jurisdictional Interviews

In advance of jurisdictional interviews supporting documents were prepared to guide discussions. The supporting documents outlined Davis Pier’s role in the regulatory review, the objectives of the review process, and provided a mapping of key regulatory issues that were raised by groups (i.e., operators, operator associations, community groups, environmental groups, and researchers) during the engagement process. For each regulatory issue that was identified detailed contextual information, including legislative and regulatory mapping information, was provided.

Jurisdictions were asked for specific comment on the following 14 regulatory issues/themes:

No.	Issues/Theme Description
1	Regulatory Rightsizing
2	Application Review
3	Public Participation in Administrative Stream
4	Public Participation in Adjudicative Stream
5	Decision-making Factors
6	Licence and Lease Tenure
7	Licence and Lease Renewal
8	Licence and Lease Changes
9	Licence and Lease Fees
10	Farm Management Plan Access
11	Reporting on Environmental Conditions
12	Addressing Noise, Light Pollution and Smell
13	Reporting Escapes
14	Reporting on Disease Occurrences, Morbidity, and Die-Offs

## The Department of Fisheries and Oceans

Jurisdiction over aquaculture in Canada is complicated and varies from region to region. The Federal Department of Fisheries and Oceans shares jurisdiction over aquaculture with the Provinces, except in British Columbia and PEI. Fisheries and Oceans acknowledges that the Provinces have done some work to streamline themselves, but more work could be done to standardize jurisdiction and regulation across the country.

Some of the ways that the Department of Fisheries and Oceans are involved in aquaculture regulation are:

- The development of The National Code on Transfer of Aquatic Organisms which establishes a decision-making framework and national process for managing ecological, genetic, and disease risks.
- The development of the Framework for Aquaculture Risk Management, which is currently out for comment with the provinces.
- The issuance and administration of Stocking Licenses which are provided pursuant to the Fisheries General Regulations and are what allow for the stocking of aquaculture sites.
- Environmental testing conducted in concert with Canadian Food Inspection Agency to ensure the safety of shellfish being harvested.
- Working closely with the Provinces to ensure that the Department is addressing provincial scientific priorities for research.

## **New Brunswick**

New Brunswick has an established and mature aquaculture industry. There are two separate and distinct aquaculture industries in New Brunswick - oyster farming in the bays of the East Coast, and finfish farming in the bays of the Fundy Isles. New Brunswick considers Atlantic Salmon farming to be mature as all suitable areas for salmon farming are already in use. The salmon farming industry in New Brunswick is presently dominated by two operators who operate on a global scale. Due to the established nature of New Brunswick's fin-fish industry the majority of New Brunswick's aquaculture applications are related to boundary amendments for existing sites or shellfish operations. Jurisdictional contacts indicated that New Brunswick sees little space for additional finfish operations as many waters have become too warm for salmon farming, and that the future of its aquaculture industry is in land-based operations.

New Brunswick recently underwent a legislative and regulatory review. As a result, the regulations were revised, and new regulations became effective July 1, 2022. Due to the recency of the regulatory changes in New Brunswick, jurisdictional contacts were not able to comment on the effectiveness of the changes and were limited to providing contextual information about why the changes had been made. Of note, New Brunswick has an exclusively administrative aquaculture regime. There is no form of adjudicative application or process available to Operators.

Some of the changes resulting from New Brunswick's legislative and regulatory review are:

- A shift in decision-making responsibility, downward from the Minister to the Registrar and the Chief Veterinary Officer.
- An expansion of responsibility and powers for the Chief Veterinary Officer who now has exclusive authority over depopulation, diseases, and outbreaks.
- A significant increase in licence and lease fees to accord with other Canadian and international jurisdictions.

- A shift information sharing, allowing the Registrar and the Department to make Operator information publicly available, which was expressly forbidden under the old regulations.
- Enhanced enforcement measures relating to site remediation which allow the Registrar to file a certificate of costs with the Court that can then be enforced as a Judgement (e.g., registered against property, used to place a lien on Operator assets).
- Adoption of Nova Scotia's Farm Management Plan system.

## **Newfoundland**

Newfoundland is undergoing a similar regulatory review process currently and are expected to make changes to their regulatory framework to support a regulatory modernization approach. The current regulatory framework represents the time and place of its creation, specifically when the respective roles of the province and the federal government were still being established.

The current licensing and decision-making processes are currently kept within the department as it streamlines the decision-making process and allows stakeholders to be provided with clear timelines for engagement. The decision-makers for the process are internal to the government and are a part of a board who provide the recommendation to the Minister once all stakeholders have been engaged and environmental analysis is completed. Public engagement in this process is completed primarily at the local level to support the operator through the process and to allow the communities to provide comment.

Newfoundland is not considering creating different application or decision-making streams or adopting a review board process as part of its regulatory modernization. There are concerns that the review board model has the potential to lead to inefficiencies, delays, and could be subject to undue influence from tertiary but interested parties (e.g., the public, Government, etc.).

Like Nova Scotia, Newfoundland doesn't make Farm Plans publicly available. However, the Access to Information Process in Newfoundland is such that Farm Plans are eligible for disclosure if a request is made. Unlike Nova Scotia, the management plans for the operators are kept on record at the provincial department rather than being held solely in the hands of operators.

# Appendix C: Regulatory Mapping Process

The mapping process utilized 14 regulatory framework components to categorize issues and insights raised by stakeholders during the engagement process. The regulatory framework components used in the mapping exercise were as follows:

## Aquaculture License And Lease Regulations

### Application Process

- Public Participation
- Documentation
- Transparency
- Decision Maker
- Reviewers
- Decision Factors

### Administration

- License and lease tenure
- Fees and Bonds
- Terms and Conditions

## Aquaculture Management Regulations

- Farm Management Plans
- Aquatic Animal Health
- Environmental Monitoring
- Farm Operations
- Containment Management

Experiences, concerns, and perceptions were mapped to regulatory framework components using the following structure to create the line-of-sight mapping reference:

Framework Section	Framework Component	Stakeholder Group	Stakeholder Group	Addressed in Current Framework	Reg. Mapping	Option Pathway	Theme
Application Process / Administration / Management / Operations	See above components.	Insight or Issue identified by Stakeholder	Operator / Environment or Community / Researchers	Yes /No	Legislative or Regulatory Reference	Yes/No/Other	Regulatory Rightsizing / Transparency / Public Participation

Issues and insights were categorized by stakeholder group (e.g., Operator, Environmental /Community Groups, and Researchers) and were mapped to applicable legislative or regulatory provisions. For each issue or insight that was mapped to legislation or regulations, an options pathway was identified.

Potential options pathways were identified as follows:

- A clear regulatory pathway forward exists.
- No clear regulatory pathway exists.
- A possible pathway exists through policy/process or communications.

The 9 key themes were mapped to the following regulations.



## 1. A Good Start

Stakeholders see the regulations as a good start and a foundation for continuous improvement. Operators see the value of the regulations to support a sustainable sector. There are concerns raised about the lack of consistency and applicability across all subsectors of Aquaculture. Community and environmental organizations believe there is potential for Environmental Impact Assessments to be used by other Provincial and Federal Government Departments that could benefit the regulations. Researchers see the improvements to the sector as a direct result of the implementation of the regulatory framework.

Insights	Regulatory Mapping <sup>3</sup>
Continuous improvement of the regulations is needed to support: <ul style="list-style-type: none"> <li>· Enforcement and monitoring</li> <li>· Farm Management Plans</li> <li>· Environmental Impact Assessments</li> </ul>	s. 2, Act ss. 82-117, Act ss. 5-21, Reg. 118/2019 ss. 30-32, Reg. 118/2019

## 2. Regulatory Rightsizing

The regulatory framework is applied uniformly across all aquaculture operator types, regardless of risk level. Operators suggested that the regulations need to be assess based on risk level of the operations. Many ecological and community organizations emphasized the need to adopt stronger EIA practices to capture baseline data for the natural ecosystem before, during, and after aquaculture operations.

Insights	Regulatory Mapping
Smaller operators experience capacity constraints operating within the existing regulatory framework.	ss. 43-64, Act s. 3, Reg. 186/2019
Long wait-times for approvals in both the administrative and adjudicative process is a significant impediment for lower-risk operations.	ss. 4-11A, Reg. 186/2019 ss. 11B-16, Reg. 186/2019 ss. 17-37, Reg. 186/2019 ss. 38-42, Reg. 186/2019
The regulatory overhead is restrictive for new operators, presenting significant barriers to entry into the sector.	

## 3. Public Participation

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<sup>3</sup> Act - Refers to Fisheries and Coastal Resources Act, SNS 1996, c.25, s.1.  
 Reg 118/2019 - Refers to Aquaculture Management Regulations, NS Reg. 118/2019  
 Reg 186/2019 - Refers to Aquaculture Licence and Lease Regulations, NS Reg. 186/2019

The lack of inclusion and meaningful engagement of the public is a key contributor to the misinformation, mistrust, and reduced confidence, and ultimately barriers to social license. Operators expressed that they are complying with the requirements of the regulations for public participation. Community and environmental organizations expressed the need for two-way communication channels, lead time for information sharing and flexibility in the processes. Researchers acknowledge that there is a lack of public trust regarding the sector.

Insights	Regulatory Mapping
There is desire for improvement in:	s. 2, Act
<ul style="list-style-type: none"> <li>· Information Sharing</li> </ul>	s. 43A(e), Act
<ul style="list-style-type: none"> <li>· Public Awareness</li> </ul>	s. 51, Act
<ul style="list-style-type: none"> <li>· Meaningful</li> </ul>	s. 2, Reg. 186/2019
<ul style="list-style-type: none"> <li>· Consultation</li> </ul>	s. 3, Reg. 186/2019
The Aquaculture Development Areas are an opportunity to set the conditions for operators to work towards social license.	ss. 9-10, Reg. 186/2019
	s. 12, Reg. 186/2019
	ss. 19-20, Reg. 186/2019
	s. 23, Reg. 186/2019
	s. 32, Reg. 186/2019
	s. 41, Reg. 186/2019
	ss. 67-70, Reg. 186/2019

#### 4. Decision Making Process

The decision-making processes are exclusive, overwhelming, and burdensome. Operators expressed concern over the time commitment to the approval processes. Community members expressed barriers to participating in hearings. If they are eligible to participate the process requires significant investment. ARB timelines present challenges - 15 days to set a date for a hearing, hold the hearing within 60 days and make decisions within 90 days.

Insights	Regulatory Mapping
For the public and operators to effectively participate in ARB hearings, they need legal counsel to represent them.	s. 49, Act
The cost and time commitment required to participate in the process is burdensome and creates disparities across the operators.	ss. 11B-16, Reg. 186/2019
	s. 19-20, Reg. 186/2019
	ss. 17-37, Reg. 186/2019

#### 5. Transparency

The lack of available data and access to information has led to different interpretation and eroded trust and confidence of stakeholders in the regulatory framework, process, and government oversight. Operators desire more information about the regulations regarding oversight, process, and approvals. Community and environmental organizations want more clarity on regulations and decision-making processes.

Insights	Regulatory Mapping
<p>There needs to be increased transparency for:</p> <ul style="list-style-type: none"> <li>· Application process for new and existing operators</li> <li>· Scheduling and notification of public consultations</li> <li>· Enforcement and monitoring processes</li> <li>· Reporting process for violations</li> <li>· Farm Management Plans purpose and use</li> </ul>	<p>ss. 82-117, <i>Act</i>            ss. 4-11A, Reg. 186/2019            ss. 5-21, Reg. 118/2019            ss. 37-39, Reg. 118/2019            ss. 40-41A, Reg. 118/2019</p>

## 6. Consistency and Responsiveness

There is a lack of consistency in monitoring of operators and experiences, concerns, and perceptions that some operators are held to a different standard across the sector. The lag-time in the decision-making processes within the administrative and adjudicative processes has limited potential growth across the sector. Applicants have had to wait for approvals of leases. Most can't afford to wait and decide to pursue other opportunities. Community and environmental organizations are concerned over the lack of responsiveness of the department and the regulatory processes.

Insights	Regulatory Mapping
<p>The time it takes to attain a license or lease is not tenable for some small operators. It can take years to get a lease/license, and years to produce product for market (e.g., oysters).</p>	<p>s. 49, <i>Act</i>            s. 54A, <i>Act</i>            ss. 11B-16, Reg. 186/2019            ss. 17-37, Reg. 186/2019            ss. 38-42, Reg. 186/2019            ss. 71-73, Reg. 186/2019</p>

## 7. Capacity

Stakeholders perceive a lack of capacity within government to oversee and to effectively hold operators accountable through enforcement and monitoring. Operators see a lack of capacity from the government to keep up with the sector needs in the regulatory process. Community and environmental organizations expressed concerns about monitoring of boundary infringements, abandoned operation equipment and waste to the department.

Insights	Regulatory Mapping
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Enforcement and monitoring needs sufficient capacity to ensure the sector is operating within regulatory requirements.

ss. 82-117, Act

Small operators have a lack of capacity to comply with the regulatory requirements.

## 8. Prosperity

Proponents of the sector understand the dual role DFA plays in providing regulatory oversight and promoting the sector; however, highlight the gap and opportunity to strengthen government's promotional role. Specifically, to promote and consistently communicate a narrative that builds confidence in the regulations and amplifies the socio-economic benefits of Aquaculture sector. Operators are concerned that government is not effectively promoting the sector. Community and environmental organizations identified the need to validate what is meant by "sustainability" from a high-value, low-impact environmental point of view.

### Insights

### Regulatory Mapping

There are regulatory gaps between provincial and federal legislation.

s. 2, Act

Opportunity for municipal governments to support Aquaculture on a local economic level.

s. 3, Act

s. 2, Reg. 118/2019

s. 2, Reg. 186/2019

There is a need for defining terms like "progress", "prosperous" and "sustainable". These terms have different meanings to different stakeholders.

## 9. Innovation

Long-term sustainability of the sector require investment in research, innovation, and adoption of leading practices. Support for the adoption of leading-edge environmental and sustainability practices. Operators would like to see the establishment of Hatcheries to help enable a sustainable sector. Community and environmental organizations would like to see the growth of research and development regarding environmental and sustainability needs around climate change.

### Insights

### Regulatory Mapping

Some suggested initiatives include:

- Establishment of hatcheries
- Investment in research and development
- Researching the viability of land-based farms

s. 2, Act

ss. 20-23, Act

No line of site to Regs.