# Comparative Analysis of Five Aquaculture Regulatory Frameworks in Canada 

Prepared by East Coast Environmental Law
For the Doelle- Lahey Panel
Independent Aquaculture Regulatory Review for Nova Scotia

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## East Coast Environmental Law

East Coast Environmental Law (ECELAW) is a non-profit organization with charitable status. Our overarching objective is to provide public interest environmental law assistance for Atlantic Canadians. To reach this objective, ECELAW is working towards the goal highlighted in its vision statement: ECELAW envisions a future where innovative and effective environmental laws and the fair application of those laws, provide Atlantic Canadians with a clean, healthy environment, which will make a positive contribution to the quality of life of its present and future inhabitants and visitors.

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### 1.0 Introduction

On May 1, 2013 the former Minister of Fisheries and Aquaculture announced a review of the regulatory framework for aquaculture in Nova Scotia. The Minister appointed a two-person independent panel to carry out an extensive public consultation process and information gathering exercise leading to a proposal for an innovative aquaculture regulatory framework.

The following Report, prepared by staff of East Coast Environment Law, was commissioned by the Panel to gain insight into the regulatory approaches to aquaculture in four Canadian jurisdictions, New Brunswick, Prince Edward Island, Newfoundland and Labrador and British Columbia, and to compare key elements of those regulatory frameworks to the current approach in Nova Scotia. Ultimately the Report strives to identify regulatory provisions and approaches from each of the jurisdictions that may serve the Panel as they seek to develop a world-class regulatory framework for aquaculture in Nova Scotia.

### 1.1 Terms of Reference

The report will include a comparative analysis of current regulatory approaches for aquaculture in the provinces of British Columbia, New Brunswick, Prince Edward Island, Newfoundland and Labrador and Nova Scotia. Drawing from the analysis the report will identify some of the most effective elements of the various regulatory approaches and how they might be applied to aquaculture regulation in Nova Scotia.

In this context the report will consider the following:

- Overarching principles;
- Approaches to planning and management of aquaculture projects to facilitate consistent and predictable regulation;
- Role of and approach to environmental impact assessment in decision-making;
- Role of research and science in decision-making and ongoing evaluation;
- Role of communities, stakeholders and the broader public in decision-making;
- Availability and transparency of information;
- Regulatory tools to provide assessment, management, monitoring and compliance;
- Administrative tools to facilitate procedural rights, such as rights to information, right of appeal, right of investigation, etc.
- Regulatory tools designed and implemented to support industry competitiveness.

The Report will highlight regulatory tools and approaches that are unique to Nova Scotia.

### 1.2 Research Approach

To conduct the research for this report we identified, reviewed and analyzed key provincial statutes and regulations in each of the five jurisdictions where those statutes regulate aquaculture activity in the province. This included provincial aquaculture statutes in Nova Scotia, Newfoundland and Labrador and New Brunswick as well as the federal Fisheries Act and related regulations for Prince Edward Island and British Columbia.

To address the questions related to access to information and transparency, we reviewed freedom of information statutes for each of the five provinces. To address the questions related to environmental impact assessment and general environmental protection, we reviewed omnibus
environmental statutes in each province.
To facilitate the comparative analysis, we designed a common list of 14 areas for consideration.

1. Purpose of the regulating statute and definition of 'aquaculture'
2. Overarching principles for regulation
3. Regulatory tools used to manage aquaculture operations:

- Prohibitions
- Licence and lease requirements
- Terms and conditions
- Controlled areas
- Required actions

4. Regulatory tools used to asses proposed aquaculture operations:

- Application process
- Submission of information

5. Role of research and science in assessment and decision-making
6. Role of environmental impact assessment in decision-making
7. Regulatory tools used to monitor aquaculture operations:

- Display of information
- Maintaining books, records, etc.
- Reporting requirements

8. Regulatory tools used to facilitate compliance with aquaculture regulations:

- Suspension, revocation, cancellation
- Inspection
- Directives and other actions
- Offences and penalties

9. Regulatory tools used to facilitate public right of access to information and transparency
10. Regulatory tools that provide a right of appeal
11. Regulatory tools that provide a third party right of investigation
12. Administrative tools used to achieve any of the above
13. Regulatory programs that support industry
14. Additional regulatory requirements (under other provincial statutes) for environmental protection

The 14 items were incorporated in to excel spreadsheets and cross-referenced with regulatory provision that addressed each item in each jurisdiction. There is an excel spreadsheet for each jurisdiction attached to the Report as Appendices A to E.

We analyzed these provisions and the regulatory frameworks for each province, leading to general questions on the nature of the framework and specific questions or areas of confusion in the regulatory frameworks in each province. We used this information to design a series of questions for regulators in each of the jurisdictions and conducted interviews by email and telephone. Responses to the interviews were mixed. We received responses from government representatives in each jurisdiction but only obtained detailed information from Prince Edward Island and New Brunswick.

As an addition to our research we engaged an ECELAW volunteer to conduct interviews with three parties who, as a result of concerns raised, have engaged with the aquaculture regulatory process in Nova Scotia. Our goal was to better understand how the current regulatory framework is implemented in the province and in particular how it responds to concerns raised by local citizens.

### 1.3 Key Findings

Three of the provinces, Nova Scotia, Newfoundland and Labrador and New Brunswick have a predominantly provincially controlled approach to aquaculture regulation with each province having a statute dedicated to the regulation of aquaculture. Two of the provinces, Prince Edward Island and British Columbia have a predominantly federally controlled approach to aquaculture regulation, with the federal Fisheries Act serving as the primary legislative framework.

Of the 14 areas considered in our research there was very little information available regarding the role of research and science in assessment and decision-making or regulatory programs that support industry competitiveness. Of the remaining 12 areas considered we found no significant variance amoung the five jurisdictions in the tools used to manage and assess aquaculture operations, the role of environmental impact assessment, or the tools used to monitor operations and facilitate compliance.

The comparative analysis revealed several common elements for all regulatory frameworks in the management and assessment of aquaculture, including the role of a licence and lease as the primary management approach, the reliance on terms and conditions to set out the management framework and Ministerial discretion in decision-making. Further the analysis revealed the use of site marking, record maintenance and reporting as common regulatory practices for monitoring. Broad inspection approaches and regulatory authority to suspend and cancel licences and leases are commonly used in all five jurisdictions to achieve compliance.

Procedural rights, such as access to information, right to appeal a decision and right to request an investigation are not particularly robust in any of the regulatory frameworks studied. Public consultation or community engagement in decision-making is not a key element in any of the regulatory approaches, and when such an opportunity is identified in the legislation it is at the discretion of the Minister. There were a couple of unique provisions identified that support procedural rights such as the whistle blower protection provisions in the NS statute and the innovative approach to information access in the NB statute.

Overall we did not identify any outstanding or innovative approaches to aquaculture regulation in Canada. We have detailed the comparative analysis, recommended approaches and some interesting provisions in section 7.0 of the Report. There are a few general recommendations that we have developed based on the research undertaken. These recommendations may go beyond our mandate but we offer them for general consideration:

- Maintain a purpose section but seek better balance amoung the key aspects of aquaculture management.
- Continue with the licencing and lease approach allowing the regulatory authority some flexibility in identifying appropriate terms and conditions, but require standard terms and conditions in the regulatory framework, including mandatory research and reporting requirements.
- Enhance transparency and access to information provisions.
- Reduce ministerial discretion in the area of public consultation and community engagement.
- Enhance procedural rights for citizens, including a right to appeal a decision to an independent third party, the right to reasons for decisions upon request, the right to initiate a third party investigation.


### 2.0 Nova Scotia

### 2.1 Regulatory Framework - Overview

In Nova Scotia the provincial Minister of Fisheries and Aquaculture has the primary regulatory authority to manage aquaculture in the province. The authority is provided through the Fisheries and Coastal Resources Act. Although the federal government is actively involved in aquaculture development in Nova Scotia through a series of agreements and protocols the provincial regulatory role is comprehensive.

The Fisheries and Coastal Resources Act (FCRA) was passed in 1996 in an effort to consolidate and revise the law respecting the fishery and to promote and implement programs that will sustain and improve the fishery, including aquaculture. ${ }^{1}$ Under the FCRA the Minister of Fisheries and Aquaculture is responsible for aquaculture projects and the general supervision and management of the Fisheries and Coastal Resources Act. ${ }^{2}$ The Minister of Fisheries and Aquaculture is the primary regulator and the key promoter of the aquaculture industry in the province.

The Nova Scotia Environment Act (NSEA) provides for the protection and management of the environment in the province. The mandate of the NSEA is broad and includes prohibiting the unapproved release of any substance into the environment that may cause an adverse effect. ${ }^{3}$ To this end, the NSEA has a role to play in any activity that may have an adverse effect on the environment, including aquaculture.

The purpose of the Freedom of Information and Protection of Privacy Act (FOIPOPA) is to ensure that public bodies are fully accountable to the public by providing reasonable access to records and information in the possession of a public body. The FOIPOPA is relevant to the aquaculture regulatory framework in that is provides public access to information that may not be made available to the public on a routine basis.

### 2.2 Overarching Principles

The overarching principles of the Fisheries and Coastal Resources Act (FCRA) are embodied in the purpose section of the Act. The purpose section includes references to improving development of the industry, sustaining the industry and assisting in the increase of production. The purpose section also seeks to 'foster community involvement in the management of coastal resources' but does not include a statement about the need to sustain or protect the communities or the environment.

### 2.3 Management Approach for Aquaculture Operations

Aquaculture in Nova Scotia is defined as 'the farming for commercial purposes of aquatic plants and animals over which the Minister exercises control but does not include raising or breeding in tanks, nets, pens or cages of aquatic plants and animals either as aquarium species, in laboratory experiments or by individuals on their own property as food for their own use. ${ }^{34}$

[^0]Section 44 of the FCRA prohibits operation of an aquaculture site without a license. ${ }^{5}$ If the site is on Crown land, an aquaculture lease is also required. The decision to issue or reject an aquaculture license or lease in Nova Scotia is with the Minister of Fisheries and Aquaculture. The Minister has broad discretion to reject an application or to issue a license or lease, with or without conditions. Section 52 of the FCRA requires an aquaculture lease to be subject to specific conditions.

For a new licence the Minister is required by the Act to consult with other government departments prior to making a decision. ${ }^{6}$ The Minister may also refer the application to a public hearing or reject the application.

The decision to allow or reject an application to vary or amend a licence is at the discretion of the Minister who can do so at any time as may be reasonably necessary. ${ }^{7}$ Section 59(2) of the FCRA provides the Minister with the discretion to treat the amendment as a new application where in his or her opinion there will be a detrimental impact on other uses of marine resources.

### 2.4 Assessment of Proposed Aquaculture Operations

An application for an aquaculture license must include the information required by the Minister. ${ }^{8}$

Currently the Minister requires a completed application form, a development plan and environmental baseline/background information. Baseline information includes an underwater video, current meter analysis and sediment analysis. After an application for a license has been made, provincial staff will review the application, conduct a technical review and a network review. The technical review, done by the Nova Scotia Department of Fisheries and Aquaculture, looks at the technical, biological, environmental and financial feasibility of the project. Several provincial and federal departments concurrently perform the network review. ${ }^{9}$

The Minister makes the decision to approve or reject the application. Should the application receive approval, the Minister may impose certain conditions of license. ${ }^{10}$

Inland applications that have $25000 \mathrm{~m}^{3}$ holding capacity or greater will require an approval under the Environment Act. Any watercourse alteration, including removal of material, diversion or installation of equipment requires an approval under the Environment Act. ${ }^{11}$

### 2.4.1 Environmental Impact Assessment

The FCRA does not require proposed aquaculture operations to submit to an environmental impact assessment (EIA). The Nova Scotia Environment Act and Environmental Assessment Regulations do not include aquaculture operations in the list of undertakings that require an environmental impact

[^1]assessment. There are no aquaculture projects listed in the list of projects for which an EIA has been completed or under review between 2000 and 2014. ${ }^{12}$

### 2.5 Role of and Opportunities for Citizen Engagement

The purpose section of the FCRA includes a broad commitment to 'foster community involvement in the management of coastal resources. ${ }^{13}$ Although the Minister is required by the Act to consult with other government departments prior to licensing an aquaculture operation, he or she is not required to consult with the public, including those who may be directly affected by the issuance of the license. The decision to consult is at the discretion of the Minister. Section 48 of the FCRA states that the Minister may 'refer the application to a public hearing.' ${ }^{14}$ If the Minister calls a public hearing he or she is required to publish notice of the hearing. ${ }^{15}$ The Minister must make a decision to issue or reject the application following the hearing, but the Minister is not required by the Act to consider the information received during the public hearing. ${ }^{16}$

Concerned citizens have no guaranteed means of having their voices heard prior to or during the licensing of a new aquaculture site. Nor, do they have any means of ensuring their concerns, when raised, are given serious consideration.

### 2.5.1 Access to Information

Section 8 of the FCRA provides the Minister with the authority to establish a public registry. The creation of the public registry is at the Minister's discretion, however, once the registry is in place the Minister is required to ensure public access to the information and documents contained in the registry.

Section 5 of the provincial Freedom of Information and Protection of Privacy Act gives members of the public a right of access to any record in the custody of a public body, with certain exceptions.

### 2.5.2 Procedural Rights

Section 118 of the FCRA establishes the conditions for a right to appeal a decision made by an employee of the Department in accordance with the FCRA to the Minister of Fisheries and Aquaculture. Only a 'person aggrieved' by the decision has a right of appeal. The term 'person aggrieved' is not defined in the Act. The term 'decision' is not defined in the Act.

Section 119 establishes the conditions for a right of appeal of a decision of the Minister to the Supreme Court of Nova Scotia. Once again, only a 'person aggrieved' can appeal a decision and it must be within 30 days of the decision. In a 2012 appeal under section 119 of the FCRA, the Supreme Court of Nova Scotia deemed property owners living near an aquaculture site were 'aggrieved persons' under the Act. ${ }^{17}$

Section 99 provides whistle-blower protection to an employee who reports an act or omission that contravenes the Act or Regulations.

[^2]
### 2.6 Monitoring and Compliance of Aquaculture Operations

The licence holder is required by the Aquaculture License and Lease Regulations to mark all corners of the leased site with yellow buoys, mark all corners of the leased bottom with cement block and display the license and lease number at one corner. Experience by local property owners has identified significant discretion on the part of inspection staff on the marking requirements.

The licensee is required by the Regulations to maintain records, including records on the presence of any diseases, medications, treatments etc. The records must be made available to the Registrar of Aquaculture or an inspector upon request. ${ }^{18}$ It is a mandatory condition of any lease, that the leaseholder submit an annual report to the Minister stating any information the Minister requires concerning the lessee's use or the productivity of the leased area. ${ }^{19}$

A licensee is not required by the FCRA or Regulations to report escapes of fish from the aquaculture site or the presence of disease, disease agents, parasites, toxins or contaminants at the licensee's aquaculture site.

In 2003, the province established an Environmental Management Program (EMP) for marine aquaculture and incorporated a requirement for data collection in the license conditions under sections 48 and 50 of the Fisheries and Coastal Resources Act. The EMP is not required by the Fisheries and Coastal Resources Act but rather is a policy framework that is incorporated into license conditions.

To ensure compliance under the FCRA the Minister has broad discretion to terminate a lease or license, or issue a Ministerial Order where there is non-compliance with the Act, the Regulations or terms or conditions of the license or lease. ${ }^{20}$

The FCRA authorizes inspections and provides inspectors with the powers of peace officers. ${ }^{21}$ Inspectors have the power to enter, inspect, take samples, seize property etc. Any owner or person found in the place being inspected must provide all reasonable assistance and furnish information as requested to the inspector. ${ }^{22}$

The FCRA includes a comprehensive offence and penalty scheme, including director's liability and monetary benefit provisions. ${ }^{23}$

### 2.7 Regulatory Tools to Support Industry Competitiveness

Section 21 of the FCRA gives the Minister authority to undertake projects to support and encourage the aquaculture industry including providing financial or technical assistance to those engaged in aquaculture or undertaking research and development related to aquaculture.

[^3]
### 3.0 New Brunswick

### 3.1 Regulatory Framework - Overview

The provincial Minister of Agriculture, Aquaculture and Fisheries has the primary regulatory authority to manage aquaculture in New Brunswick. That authority is provided through the Aquaculture Act ${ }^{24}$ and General Regulation. ${ }^{25}$

Although the federal government is actively involved in aquaculture development in New Brunswick through a series of agreements and protocols including the Canada-New Brunswick Memorandum of Understanding on Aquaculture Development, the provincial regulatory role is comprehensive.

The current version of the Aquaculture Act was passed in 2011 and provides a fairly comprehensive approach to aquaculture management in New Brunswick. ${ }^{26}$ Under the Aquaculture Act the Minister of Agriculture, Aquaculture and Fisheries is the primary regulator and the key promoter of the aquaculture industry in the province.

The Clean Environment Act, Clean Water Act and Clean Air Act serve as the regulatory framework for the protection and management of the environment in New Brunswick. Given the nature of aquaculture activities, the Water Quality Regulation (Clean Environment Act) and the Watercourse Alteration Regulation (Clean Water $A c t$ ) are both considered in the context of licensing of inland aquaculture operations. All three of the 'Clean' statutes prohibit the release of a contaminant into environment.

The purposes of the Right to Information and Protection of Privacy Act include allowing any person a right of access to records in the custody of public bodies. The Right to Information and Protection of Privacy Act enables members of the public to access aquaculture information that may not be made available on a routine basis.

### 3.2 Overarching Principles

The Aquaculture $A c t$ does not include a purpose section to provide guidance or overarching principles for aquaculture regulation in New Brunswick. Aquaculture regulation in New Brunswick is however, guided by two key policies: The Bay of Fundy Marine Aquaculture Site Allocation Policy and the Marine Aquaculture Site Allocation Policy for East Coast of New Brunswick. ${ }^{27}$

Both of the policies have the primary objective of promoting the orderly development of aquaculture while taking the environmental, economic, and social aspects into account. ${ }^{28}$ The policies further identify three goals to achieve the objective:

- The establishment of management plans for bays in which aquaculture is recognized as a legitimate user of marine spaces on an equitable basis.
- The establishment, adoption, and enforcement of standards governing culture practices.
- A fair, diligent, and transparent process for processing aquaculture site applications.

[^4]
### 3.3 Management Approach for Aquaculture Operations

Section 1 of the Aquaculture Act defines aquaculture as the cultivation of aquatic plants and animals, but does not include the cultivation of aquatic plants and animals in a laboratory for experimental purposes or in an aquarium.

Section 6 of the Aquaculture Act prohibits any person from carrying on an aquaculture operation unless they have a licence. Applications are required under the Aquaculture $A c t$ for an aquaculture lease, aquaculture occupation permit, or an aquaculture licence for an aquaculture site.

The decision to issue a license, renew or amend a licence is with a Registrar appointed by the Minister under section 45 of the Act. The decision to issue or refuse to issue a license is at the discretion of the Registrar. Section 11 of the General Regulation identifies four circumstances where the Registrar may refuse a license, including conflict with other fishery activities or creation of unacceptable environmental risks.

The way in which licence terms and conditions can be imposed is addressed in the Aquaculture Act. Section 15 of the Act identifies four means by which terms and conditions for a licence may be established: in accordance with the regulations; imposed by the Registrar in relation to an Aquaculture Bay Management Area (section 5); imposed by the Registrar (section 13, see below); or imposed the Minister (section 14, see below).

Section 13 of the Aquaculture Act includes a list of additional terms and conditions the Registrar may, at his or her discretion, include in a new, renewed or amended licence. Such terms and conditions may include, adherence to an aquaculture site development plan or measures to be taken to minimize the risk of environmental degradation. ${ }^{29}$ Section 14 of the Act allows the Minister to establish terms and conditions relating to the year class and fallow period.

If the license is a commercial licence for Atlantic salmon raised in a marine cage, detailed terms and conditions are listed in section 12.1 of the General Regulation.

The decision to issue a lease is at the discretion of the Minister. Following application the Minister may issue an aquaculture lease or occupation permit and the Minister has the discretion to make the lease subject to terms, covenants and conditions. ${ }^{30}$

### 3.4 Assessment of Proposed Aquaculture Operations

An application for an aquaculture license must include a completed application form, a site development plan (unless it is a private aquaculture license) and any other information required by the Registrar. ${ }^{31}$

The province of New Brunswick has two application streams for aquaculture: inland applications, and marine applications. Within each of these streams three license-types exist: private aquaculture licence, commercial aquaculture license, and institutional aquaculture licence. ${ }^{32}$

[^5]Inland applications that have greater than 1000 kg holding capacity will require an approval under the Water Quality Regulation (Clean Environment Act). A watercourse alteration permit under the Clean $W$ ater $A c t$ will be required where there is work within 30 m of a watercourse or discharge to a watercourse. ${ }^{33}$

The marine application process includes three types of authorizations: Licence, Lease or Occupation Permit. Within each of those are several categories:

Licence:
New Licence:
Bottom culture
Off-bottom culture
Suspended culture
Modifications to an existing licence
Species
Culture method

Lease
New lease for a new site
New lease for a vacant lot
Alteration to boundaries of land under an existing aquaculture lease

## Occupation Permit

New occupation permit
Alteration to boundaries of land under an existing aquaculture occupation permit
All aquaculture applications (inland and marine) are submitted to the provincial Registrar. The application is reviewed through a federal/provincial interagency review. The provincial departments of Natural Resources and Environment are included on the interagency review team. The decision to issue the licence or not is rendered by the Registrar. The decision to issue a lease for new sites or boundary amendments is rendered by the Minister. ${ }^{34}$

### 3.4.1 Environmental Impact Assessment

The Aquaculture Act and General Regulation do not include any provision to require an environmental impact assessment of proposed aquaculture operations.

Aquaculture proposed for freshwater may be subject to registration and screening under the Clean Environment Act, Environmental Assessment Regulation. Schedule A of the Environmental Assessment Regulation provides a list of undertakings that require registration. Aquaculture is not identified in Schedule A, however registration may be triggered by water withdrawal, wastewater treatment, introduction of a non-native species, or by the presence of rare, unique or endangered

[^6]environmental features that may be affected by the project. ${ }^{35}$ There are eight aquaculture related projects on the Record of EIA Registrations and Determination between 2000 and 2014. ${ }^{36}$

### 3.5 Role of and Opportunities for Citizen Engagement

Sections 33 and 34 of the Aquaculture Act require an applicant for a lease or occupation permit to provide 'public notice' in accordance with the regulations. The Marine Aquaculture Application Guide states that all applications to lease a marine aquaculture site, amend a site's boundaries and occupation permits are open for public comment. The applicant is responsible to inform members of the public. The Guide further states that landowners within 100 metres of the proposed site are informed via letter from the Department of Agriculture, Aquaculture and Fisheries. ${ }^{37}$

There are no provisions in the Act or Regulations that require public engagement in the context of a licence application, however, section 42 of the Act gives the Minister complete discretion in determining if, when and how public consultations will take place.

The Minister shall undertake such public consultation in relation to aquaculture as the Minister considers appropriate or as is required by or in accordance with the regulations.

### 3.5.1 Access to Information

There is no provision in the Aquaculture Act or General Regulation for a public registry of information.

Section 4 of the New Brunswick Right to Information and Protection of Privacy Act provides access to all records in the custody of or under the control of a public body with some exceptions.

Section 38 of the Aquaculture Act specifically states that information; books, records, accounts and documents obtained under the Act are 'confidential.' Such information may be disclosed for specific purposes including the administration and enforcement of the Act, in publications and programs in relation to aquaculture if the disclosure does not identify the person to whom the information relates, to any person when necessary to prevent or combat disease or to maintain genetic standards, to any person in the course of consultation, public or otherwise, undertaken in relation to any application under the Act.

It appears that section 38 generally limits public access to information that may otherwise be made available via the Right to Information and Protection of Privacy Act. The section specifically states that it overrides an inconsistency or conflict with the Right to Information and Protection of Privacy Act. At the same, time section 38 may broaden access in the context of a consultation in relation to an application made under the Aquaculture Act by providing explicit authority to release information that would otherwise be considered confidential.

[^7]
### 3.5.2 Procedural Rights

The Aquaculture Act and General Regulation do not provide any procedural rights such as a right to a third-party investigation to members of the public.

Regarding a right to appeal, the Registrar's decision may be appealed to the Minister of Agriculture and Aquaculture within 30 days of receipt of the Registrar's written decision. The right to appeal is only available to a licensee or an applicant for an aquaculture license. ${ }^{38}$

A decision of the Minister is final, except on the grounds of excess jurisdiction or denial of natural justice. ${ }^{39}$

### 3.6 Monitoring and Compliance of Aquaculture Operations

The Aquaculture Act and General Regulation include requirements to display licence numbers, maintain books and records and submit annual reports. ${ }^{40}$ All licensees are provided with a sign containing the license number, however, the sign is only posted where the Registrar considers it necessary. ${ }^{41}$

The General Regulation requires written approval from the Minister to move live finfish unless a fish health diagnostic service approved by the Minister is engaged to collect samples. ${ }^{42}$

The Act and Regulation require reporting of any escapes of fish from the aquaculture site, any breach of containment, and the presence of disease, disease agents, parasites, toxins or contaminants at the licensee's aquaculture site. ${ }^{43}$ The Minister has the authority under section 26 of the Aquaculture Act to issue directions to a licence holder where he or she is satisfied on reasonable grounds that disease, disease agents, parasites, toxins or contaminants are present at a licensee's aquaculture site.

The provincial Department of Environment has an environmental monitoring program in place for marine sites in the Bay of Fundy.

The Aquaculture Act includes inspection provisions and provides inspectors with broad authority to carry out inspections.

An aquaculture licence can be suspended or revoked by the Registrar. A lease or occupation permit can be cancelled by the Minister. ${ }^{44}$ Failure to comply with any provision of the Act, regulations or term or condition of a licence is an offence under the Act. If anyone is convicted of any offence under the Aquaculture Act or the Regulations they are not eligible to apply for an aquaculture licence for a three-year period.

[^8]
### 3.7 Regulatory Tools to Support Industry Competitiveness

The Minister of Agriculture, Aquaculture and Fisheries is responsible for the Fisheries and Aquaculture Development Act. Section 3 of the Act provides the Minister, with the approval of the LGIC, the authority and discretion to provide financial assistance to aid and encourage the establishment or development of aquaculture in the Province. The Act further establishes the New Brunswick Fisheries and Aquaculture Development Board. The Board is primarily tasked with reviewing industry applications for financial assistance and not with facilitating industry competitiveness.

### 4.0 Newfoundland and Labrador

### 4.1 Regulatory Framework - Overview

The provincial Minister of Fisheries and Aquaculture has the primary regulatory authority to manage aquaculture in Newfoundland and Labrador. The authority is provided through the Aquaculture Act and Aquaculture Regulations. The Aquaculture Act was originally drafted in 1988 in response to a Memorandum of Understanding signed by the federal Department of Fisheries and Oceans and the provincial Department of Fisheries and Aquaculture. The Aquaculture Act was substantially amended in 2012 to establish measures for restoration of aquaculture sites and provide inspectors with more expansive powers. ${ }^{45}$

In Newfoundland and Labrador the provincial Department of Fisheries and Aquaculture is responsible for aquaculture licensing, inspections, enforcement, development and extension services. The federal Department of Fisheries and Oceans is responsible for habitat protection. Shared responsibilities include environmental protection, aquaculture science, site inspection and fish health. ${ }^{46}$ The provincial government held public consultations in late 2013 to inform the government's aquaculture strategic plan. ${ }^{47}$

The Newfoundland and Labrador Environmental Protection Act provides for the protection and management of the environment in the province. The Environmental Protection Act is very similar to the Nova Scotia Environment Act including the broad prohibition against unauthorized release of a substance that may cause an adverse effect. To that end, the Act has a role to play in any activity, including aquaculture that may adversely effect the environment.

The purposes of the Access to Information and Protection of Privacy Act includes, '...to make public bodies more accountable to the public and to protect personal privacy by...giving the public a right of access to records.' ${ }^{\prime} 8$ The application of this law is relevant to the aquaculture regulatory framework in that is provides public access to information that may not be made available to the public on a routine basis.

[^9]
### 4.2 Overarching Principles

The overarching principles of aquaculture regulation in Newfoundland and Labrador are embodied in the purpose section of the Aquaculture Act. Section 3 includes four purposes to govern the administration of the Act.

- promote, in consultation with the private sector, the prudent and orderly development of a aquaculture industry;
- secure the property rights of those carrying on aquaculture;
- minimize conflicts with competing interests and uses; and
- help in consultative and co-operative decision making within the province and between the government of the province and the Government of Canada.

The purpose section specifically mentions minimizing conflicts with competing interests and uses but does not include any reference to sustainability, environmental protection, transparency, or community-based decision-making.

### 4.3 Management Approach for Aquaculture Operations

Section 2 of the Aquaculture Act defines aquaculture as the ' $\ldots$.farming of fish, molluscs, crustaceans, aquatic plants and other aquatic organisms with an intervention in the rearing process to enhance production by activities such as regular stocking, feeding, and protection from predation, and includes fallowing and processes to mitigate environmental degradation and the placement of necessary gear and equipment, and the stocking of fish by private facilities for the purpose of fishing by customers.'

The planning and management of aquaculture in Newfoundland and Labrador is regulated via licence through the Minister of Fisheries and Aquaculture. Section 4 of the Aquaculture Act prohibits any person from carrying on an aquaculture operation unless they have a licence.

The Minister will not grant an aquaculture licence unless the proposed licensee can demonstrate they own, lease or otherwise have right to occupy the land where the operation will occur. The Minister has the authority to refuse an application for an aquaculture licence if it is the Minister's opinion that it is in the public interest to do so. ${ }^{49}$

The decision to issue an aquaculture licence in Newfoundland and Labrador is at the discretion of the Minister of Fisheries and Aquaculture. The licence must contain terms and conditions relating to access to a site, optimal resource utilization, health and safety and the environment. ${ }^{50}$ The licence may include additional terms and conditions at the discretion of the Minister, including requiring a plan relating to health, safety and environmental matters and resource utilization and sustainable development. ${ }^{51}$ The licence must also specify any other terms or conditions that the Minister determines to be necessary for the conduct of aquaculture at the proposed site. ${ }^{52}$

Leases for aquaculture purposes are granted in accordance with the provincial Lands Act. ${ }^{53}$ Section 3 of the Lands Act provides the Minister of Environment and Conservation the authority to lease an area of Crown land subject to terms and conditions. Section 6 of the Lands Act provides the Minister

[^10]the authority to issue a licence for occupancy of an area of Crown land. The definition of 'lands' includes lands covered by water. ${ }^{54}$

### 4.4 Assessment of Proposed Aquaculture Operations

An application for an aquaculture license must include information on the site and species intended to be cultivated. The Minister determines the type and extent of the information required. Currently the Minister requires all new applicants to:

- Obtain two sets of 1:50,000 "National Topographical" maps indicating site location and layout.
- Identify the species and strain, and the type of operation.
- Submit an acceptable Business Plan (for commercial licenses).
- Submit specific site information.
- Disclose environmental concerns and/or conflicts.
- Submit Crown lands application for land leasing.
- Submit a Production and Harvesting Plan for the next 5 years.
- Assess the site for water quality. ${ }^{55}$


### 4.4.1 Environmental Impact Assessment

Many aquaculture activities, including the construction of shore based facilities or permanent marine trap or weir fisheries must be registered as undertakings for the purposes of environmental impact assessment under the Environmental Protection Act.

Environmental Assessment Regulations, section 29:
An undertaking that will be engaged in farm raising fish or shellfish where that undertaking will intervene in the rearing process to enhance production by keeping the animals in captivity, stocking and feeding the animals and protecting the animals from predators including (a) fish or shellfish farming in salt water or fresh water; and (b) fish or shellfish breeding and propagating or hatchery services, where the undertaking will include the construction of shore based facilities other than wharves and storage buildings and (c) permanent marine trap or weir fisheries shall be registered.

Section 8 of the Aquaculture Act requires all introductions, transfers or transports of live aquatic plants or animals to be approved by the Minister. Section 8 prohibits the Minister of Fisheries and Aquaculture from approving the introduction into or transfer to a body of water or aquaculture facility in the province of a species or strain of aquatic plants or animals not already present unless the impact of that introduction or transfer has been assessed in accordance with the Part X of the Environmental Protection Act, or the Minister of the Environment has determined that no risk is posed to the environment.

Most proposed aquaculture operations are considered an undertaking that must be registered under the Environmental Assessment Regulations. The environmental assessment process includes communication to the public with a comment period upon registration. The decision to release an undertaking following registration or to require an environmental preview report or environmental

[^11]impact assessment is at the discretion of the Minister of Environment. Opportunities for public input exist for both processes.

### 4.5 Role of and Opportunities the Citizen Engagement

Although the purpose section of the Aquaculture Act provides an overall principle of consultation with the private sector and government, there is no indication that the principle extends to communities or the general public.

The Minister has the authority in section $11.2(\mathrm{t})$ of the Act to make regulations ' $\ldots$. prescribing procedures by which the neighbouring land owners, municipalities, other affected or interested persons and the general public may participate in helping the minister in his or her decision whether to grant an aquaculture licence, and if so on what terms or conditions, including the manner in which the applicant, the minister or a designate or others are to meet with, provide information to and record the opinions, concerns and questions of those participating.' The Minister has not yet created these regulations.

### 4.5.1 Access to Information

Section 9 of the Aquaculture Act enables the Minister to designate a Registrar of Aquaculture to maintain records of aquaculture licences, leases, environmental reports and other documents. The records, other than information prescribed as confidential, must be made available to the public, for a fee, during office hours. Confidential information is defined in section 5 of the Aquaculture Regulations and relates to unique trade practices or technology and financial information. The licensee must request a designation of confidentiality. ${ }^{56}$

The Access to Information and Protection of Privacy Act provides members of the public with a right of access to records in the custody or under the control of a public body, with specific exceptions. ${ }^{57}$

### 4.5.2 Procedural Rights

There are no provisions in the Aquaculture Act or Regulations to enable an appeal of any decision whether made by an administrator or the Minister. Further there are no opportunities for a citizen to initiate an investigation or influence decision-making.

### 4.6 Monitoring and Compliance of Aquaculture Operations

The Aquaculture Regulations require all aquaculture sites, covered in water, to be identified by yellow corner buoys with each buoy marked with the name, licence number and Crown lease or licence number (Lands Act)..$^{58}$

A licensee is required by the Aquaculture Act to immediately report any outbreak, which includes one or more individual plants or animals infected by a pathogen. ${ }^{59}$

The Aquaculture Act does not require a licensee to maintain books and records but does provide the Minister with the authority to require records to be kept and information and documents to be provided where the minister considers advisable, as a term or condition of a licence. ${ }^{60}$

[^12]To ensure compliance with the Aquaculture Act the Minister has broad authority to suspend an aquaculture licence for breach of a term or condition of the licence, the Act or regulations, including failure to follow a direction given by an aquaculture inspector. The Minister may also issue directives. Cancellation of a licence may follow a suspension if the issue has not been corrected, for repeated breaches or where the licensee does not own or hold a lease or right of occupancy for the site. ${ }^{61}$

The Aquaculture Act authorizes inspections and provides aquaculture inspectors with broad and detailed powers to enter, inspect, seize and detain items. Inspectors can provide direction to a licensee or other person responsible for aquaculture gear or facilities. ${ }^{62}$ The Minister has the authority to designate aquaculture inspectors as peace officers. ${ }^{63}$

It is an offence to violate a provision of a term or condition of a licence, the Act, regulations or an approval issued by the Minister (for transfer of aquatic species, section 8) or a directive issued by an inspector or the Minister. The Act allows for traditional fines and jail sentences as well as administrative penalties.

### 4.7 Regulatory Tools to Support Industry Competitiveness

We were unable to identify any regulatory tools to support industry competitiveness in Newfoundland and Labrador.

### 5.0 Prince Edward Island

### 5.1 Regulatory Framework - Overview

The Province of Prince Edwards Island does not have a provincially based regulatory framework for aquaculture. Shellfish is the dominant industry on PEI; there are only five finfish operations and all are land based. ${ }^{64}$

The federal Minister of Fisheries and Oceans has the primary regulatory authority to manage aquaculture on Prince Edward Island (PEI). The Minister's authority is exercised through section 7 of the federal Fisheries Act.

The Environmental Protection Act provides the legislative basis for the protection and management of the environment on PEI. The Act prohibits the discharge of a contaminant into the environment without written permission and therefore has application to certain aquaculture activities. ${ }^{65}$

The purposes of the provincial Freedom of Information and Protection of Privacy Act are to make government more open and accountable to the citizens of Prince Edward Island and to insure that the personal information held by government is protected. This statute is the primary means by which members of the public can access aquaculture information that may not be made available to the public on a routine basis.

[^13]
### 5.2 Overarching Principles

Since the first agreement in 1928, jurisdiction over aquaculture leasing on PEI sits with the federal Minister of Fisheries and Oceans. Aquaculture is managed by the PEI Aquaculture Division of Fisheries \& Oceans Canada and conducted in accordance with the PEI Aquaculture Leasing Policy. The Policy states that Fisheries and Oceans Canada, Province of Prince Edward Island and the industry are committed to the development of the Prince Edward Island aquaculture industry, and consider it a priority for economic and sustainable development. The Policy further emphasizes coexistence with other stakeholders and development that is consistent with public health and safety, marine navigation and the environment. ${ }^{66}$

### 5.3 Management Approach for Aquaculture Operations

Aquaculture on PEI is primarily managed via a lease contract issued in accordance with an agreement between the federal and provincial governments and section 7 of the Fisheries Act. Section 7 of the Fisheries Act provides the Minister with the absolute discretion to issue a lease or licence for fishing wherever an exclusive right does not already exist.

Fisheries Act, 7(1)
Subject to subsection (2), the Minister may, in his absolute discretion, wherever the exclusive right of fishing does not already exist by law, issue or authorize to be issued leases and licences for fisheries or fishing, wherever situated or carried on.

The federal Fisheries Act does not include a definition of 'aquaculture'; however section 1(a) of the provincial Fisheries Act defines 'aquaculture' as the culture and husbandry of aquatic flora or fauna. The provincial Fisheries Act does not play a significant role in the management of aquaculture on PEI.

Unlike British Columbia, there are no regulations issued under the federal Fisheries Act to regulate aquaculture on PEI. The PEI Aquaculture Leasing Policy, issued by DFO, the government of PEI and industry partners provides the foundation for aquaculture management on PEI.

The standard PEI aquaculture lease provides the leaseholder with ownership of the molluscan species within the lease boundaries and use of the seabed or water column to cultivate the approved species, subject to certain terms and conditions. The regulatory/policy framework contemplates two lease types and one license.
(1) Bottom Culture Lease: A bottom culture lease is for the use of the bottom to cultivate the molluscan species described in the lease contract.
(2) Water Column Lease: A water column lease is a bottom lease with permission to use the water column to grow molluscan species as outlined in the lease contract. This lease type requires a site development plan and approval under the Navigable Waters Protection Act.
(3) Spat Collection Licenses: The collection of spat is considered as a fishery under the Fisheries Act and the Molluscan Spat Collection Operational Policy and requires the issuance of a spat collection license for certain on-lease activities and for all off-lease operations. ${ }^{67}$

[^14]In 1987 PEI established the PEI Aquaculture Zoning System. Similar to a land zoning system, aquaculture zoning was developed to respond to rapid growth of the industry, pressure on inland waters and potential conflicts. The PEI Aquaculture Zoning System is a key element in the decision making process for shellfish aquaculture lease applications. ${ }^{68}$

### 5.4 Assessment of Proposed Aquaculture Operations

All applications for an aquaculture lease on Prince Edward Island must be submitted to the PEI Aquaculture Division of DFO. Applications must include the form (including name, location of site, site dimensions); a digital map from the PEI Aquaculture Division showing location of site; and a site development plan showing the proposed site and utilization at full production. ${ }^{69}$

Applications for aquaculture leases that pass the initial screening process move to the site evaluation process by the PEI Aquaculture Division. The requested lease site will be located and data collected on characteristics and activities in the area. Site evaluation criteria to be used in the process are outlined in Appendix 6 of the Aquaculture Leasing Policy.

Appendix 4 of the Policy includes an Adaptive Management framework intended to establish a framework by which to enhance ecosystem integrity and promote sustainable shellfish aquaculture. The framework includes identifying monitoring and research needs, reviewing monitoring and research activities and recommending direction and implementation of required environmental management actions. The Adaptive Management Committee is mandated to meet a minimum of twice each year. ${ }^{70}$

Lease operations on PEI go through a series of phases. The first five years of the lease is the developmental phase during which the potential aquaculturalist will assess the biological and environmental aspects for a proposed site prior to entering full-scale commercial operations. It also allows the PEI Aquaculture Division time to assess the performance of the lessee. ${ }^{71}$

If the aquaculturalist is successful in developing the site in accordance with the site development plan and meets the obligations as outlined in the lease contract, the lease will be considered to be in the commercial phase. ${ }^{72}$

### 5.4.1 Environmental Impact Assessment

Section 9 of the provincial Environmental Protection Act requires the filing of a written proposal for all 'undertakings' and approval by the Minister of Environment prior to commencement. Aquaculture operations are included on the list of 'common undertakings'. ${ }^{73}$ Public consultation is required by the PEI Environmental Impact Assessment (EIA) Guidelines (2010). The federal government does not conduct EIA on these sites before issuing a lease.

The EIA requirements apply to inland sites only. On PEI all finfish sites are inland. All shellfish sites are marine-based, regulated by the federal Minister of Fisheries and not subject to provincial EIA.

[^15]
### 5.5 Role of and Opportunities the Citizen Engagement

During the design and development of the PEI Aquaculture Zoning System in the mid-1980s public consultations were held to consider issues such as recreational use; commercial operations on the water (i.e. shipping, recreational enterprises); wildlife sanctuaries; provincial and Federal parks; commercial fisheries and other related marine activities as well as legal issues such as landowner (riparian) rights; the right to navigation; environment legislation and aboriginal rights. ${ }^{74}$

The PEI Aquaculture Leasing Referral Committee regularly reviews all of the areas zoned for aquaculture. The committee can engage individuals with expertise from other government departments or disciplines for advice and relies upon representation from the PEI Aquaculture Alliance; however there is no specific mention of public or community consultation during the review. ${ }^{75}$

### 5.5.1 Access to Information

The regulatory framework for aquaculture on PEI does not include a registry of information or mandated public or community consultation.

The Freedom of Information and Protection of Privacy Act provides members of the public with a right of access to any record in the custody or under the control of a public body, with the exception of confidential information. ${ }^{76}$

### 5.5.2 Procedural Rights

The PEI Aquaculture Leasing Appeals Panel considers appeals arising from specific complaints, including appeals of decisions regarding spat collection. Appeals will be accepted only from clients who are appealing a decision that directly involves their application or lease. ${ }^{77}$ There is no right of appeal for third parties.

### 5.6 Monitoring and Compliance of Aquaculture Operations

The lease agreement requires the leaseholder to mark the lease site as outlined in the lease contract and/or Navigable Waters Protection permit. ${ }^{78}$ Corner markers outlining the boundaries of the lease must be permanently fixed to the lease bottom in accordance with the PEI Bottom Lease Marking Policy. ${ }^{79}$

The leaseholder is required to submit an "Annual Lease Report" each year.
The federal Fisheries Act provides DFO staff with the authority to enter and inspect any leased area at any time.

Leases are subject to periodic review to ensure compliance with terms and conditions of the lease contract and that the lease is being utilized as per the site development plan. The PEI Aquaculture

74 Supra at note 64 at 7.
${ }^{75}$ Supra at note 64 at 9.
${ }^{76}$ Freedom of Information and Protection of Privacy Act, RSPEI 1988, c F-15.01, s. 6.
${ }^{77}$ Supra at note 64 at 35.
${ }^{78}$ Supra at note 64 at 6.
${ }^{79}$ Supra at note 64 at 14.

Division may cancel a lease where the lessee failed to develop the lease as per the site development plan or in the absence of a site development plan, failed to remain within the assigned boundaries of the lease, moved corner markers or failed to properly mark the lease site, or failed to provide the annual lease report. ${ }^{80}$

### 5.7 Regulatory Tools to Support Industry Competitiveness

We did not locate any regulatory programs to support industry competitiveness for aquaculture, however, section 6 of the provincial Fisheries Act enables the Minister of Fisheries to authorize any action or invoke any measure to encourage the maintenance and development of the resources of the fishery.

### 6.0 British Columbia

### 6.1 Regulatory Framework - Overview

In 2009, the British Columbia Supreme Court (BCSC) found that aquaculture in that province is a 'fishery' and therefore within the full authority of the federal government to regulate ("Morton Decision'"). ${ }^{81}$ As a result of this decision, licensing of aquaculture in British Columbia (BC) is governed by the Pacific Aquaculture Regulations under the federal Fisheries Act.

### 6.2 Overarching Principles

The federal Fisheries Act and the Pacific Aquaculture Regulations do not include a purpose section to provide guidance on the overarching regulatory principles for management of aquaculture in BC .

Following the Morton Decision the Department of Fisheries and Oceans published the Federal British Columbia Aquaculture Regulation \& Strategic Action Plan Initiative (2009). In this document the federal government stated that the general approach to federal regulation of aquaculture in BC would be guided by seven principles, including

- Consistency with the Fisheries Act mandate to support the protection of fish and fish habitat, the proper management and control of fisheries including aquaculture, and pollution prevention;
- Demonstrating transparency effectiveness, and efficiency in regulation; and
- Engagement of industry, First Nations and other aboriginal groups, governments and other stakeholders in the design of the new regulation.


### 6.3 Management Approach for Aquaculture Operations

Section 1 of the Pacific Aquaculture Regulations defines aquaculture as 'the cultivation of fish.' The term 'fish' is broadly defined in the Fisheries Act to include, '...parts of fish,

[^16]shellfish, crustaceans, marine animals and any parts of shellfish, crustaceans or marine animals, and the eggs, sperm, spawn, larvae, spat and juvenile stages of fish, shellfish, crustaceans and marine animals. ${ }^{82}$

Section 7 of the Pacific Aquaculture Regulations prohibit any person from engaging in aquaculture or prescribed activities except under the authority of an aquaculture licence. The federal Minister of Fisheries and Oceans is granted the authority to issue a licence. ${ }^{83}$

Section 22 of the Fishery General Regulations provide the Minister with a long list of areas that he or she may draw upon to establish licence terms and conditions, however many of these may not be relevant to aquaculture.

Section 4 of the Pacific Aquaculture Regulations provides the Minister with several additional areas where the Minister may in his or her discretion establish terms and conditions, including:

- Species and quantities of fish that are permitted to be cultivated;
- The waters in which aquaculture is permitted,
- Fish feed permitted to be used in aquaculture,
- The harvesting of fish in the aquaculture facility,
- Measures to control and monitor pathogens and pests,
- Measures to monitor environmental impact, etc.

The decision to add terms and conditions to a licence and the extent of those terms and conditions is at the discretion of the Minister.

The provincial Minister of Forests, Lands and Natural Resources has the authority under the Land Act to issue an aquatic crown land lease for waters within the jurisdiction of the province.

Section 6 of the provincial Environmental Management Act prohibits the introduction of waste into the environment without an approval. The Land-Based Finfish Waste Control Regulations exempt the discharge of wastes from a land-based finfish facility if the owner (a) submits a per-operational report (section 3), (b) registers under section 4 of the regulation, and (c) complies with the requirements set out in the regulation.

### 6.4 Assessment of Proposed Aquaculture Operations

The Pacific Aquaculture Regulations do not include an application process or details on information that must be submitted.

Fisheries and Oceans Canada, Transport Canada and the Province of British Columbia have a single harmonized aquaculture application. Application forms for new sites, or amendments to existing sites for freshwater, shellfish or marine finfish aquaculture operations are available through FrontCounterBC. The harmonized approach collects information required under the Pacific Aquaculture Regulations, Navigable Waters Protection Act and provincial authorization Land Act..$^{84}$

Section 4 of the Land-Based Finfish Waste Control Regulation under the provincial Environmental Management Act require specific information to be submitted to the Department before a land-based finfish facility is constructed. The required information includes:

[^17]- All water courses, nearby wells, water intake and effluent discharge locations,
- The annual finfish production rate in kilograms,
- The maximum daily amount of effluent in cubic metres to be discharged by the land-based finfish facility into the receiving waters,
- The dilution ratio, and the number printed on the aquaculture licence issued by the minister charged with the administration of the Fisheries Act.


### 6.4.1 Environmental Impact Assessment

Section 4 of the Pacific Aquaculture Regulations enable the Minister to specify licence conditions to monitor the environmental impact of the aquaculture facility's operation; however the Regulations do not require environmental impact assessment for proposed sites.

Section 78 of the provincial Environmental Management Act gives the Minister of Environment the discretion to require an environmental impact assessment of a project that will have a detrimental environmental impact and the environmental impact cannot be assessed from the information available to the Minister.

### 6.5 Role of and Opportunities for Citizen Engagement

There are no opportunities for community or citizen engagement in aquaculture development provided in the Fisheries Act, the Pacific Aquaculture Regulation or the relevant provincial legislation.

### 6.5.1 Access to Information

The provincial Freedom of Information and Protection of Privacy Act provides access to all records in the custody or under control of a public body with specific exceptions.

The federal Access to Information and Protection of Privacy Act provides every Canadian citizen and permanent resident with a right of access to any record under the control of a government institution, with specific exceptions.

### 6.5.2 Procedural Rights

There are no provisions in the Fisheries Act or the Pacific Aquaculture Regulations to allow an appeal of a decision of the Minister. Further there are no opportunities for a citizen to initiate an investigation or influence decision-making.

### 6.6 Monitoring and Compliance of Aquaculture Operations

The Pacific Aquaculture Regulations require a licence holder to keep their licence and produce it for fishery officers or guardians, however the Regulation does not require the licence to be displayed or the leased area to be marked. ${ }^{85}$

The Minister has the discretion to establish terms and conditions in a licence regarding the records that must be kept and the times at which records must be produced. The Regulations do not require annual or incident reporting.

Enforcement and compliance for the Pacific Aquaculture Regulations is addressed in the federal Fisheries Act. Section 9 of the Act gives the Minister the authority to suspend or cancel any lease or

[^18]licence issued under the Act, if the operations under the lease or licence are not conducted in conformity with its provisions.

The Fisheries Act includes extensive powers to fishery officers and fishery guardians to enter and inspect. ${ }^{86}$ It is an offence to contravene the Act or regulations. The Fisheries Act specifically provides the court authority to suspend or cancel a lease or licence and prohibit the holder of the lease or licence from applying for any new lease or licence under the Act where that person is convicted of an offence under the Act in respect of any matter relating to any operations under such lease or licence. ${ }^{87}$

### 6.7 Regulatory Tools to Support Industry Competitiveness

Although aquaculture in BC has received significant financial support from the federal government since the Morton decision in 2009, there are no specific provincial or federal regulatory tools in place to support industry competitiveness. For example, In July 2009 six projects designed to enhance the production capacity and environmental performance of the aquaculture industry in BC received $\$ 938$, 150 from the federal government through the Aquaculture Innovation and Market Access Program. In October 2012, the federal government invested $\$ 1.25$ million to support three finfish and eight shellfish aquaculture projects in BC to improve the competitiveness of the Canadian aquaculture industry and encourage the development of innovative technologies and management techniques. ${ }^{88}$

### 7.0 Comparative Analysis and Recommended Approach

### 7.1 Regulatory Framework - Overview

Nova Scotia (NS), New Brunswick (NB) and Newfoundland and Labrador (NFLD) have relatively comparable provincial regulatory frameworks for aquaculture management. The province of Prince Edward Island (PEI) relies almost exclusively on section 7 of the federal Fisheries Act for aquaculture regulation. There is no regulatory detail in this approach but rather an almost complete reliance on policy and agreement. The province of British Columbia (BC) is almost exclusively federally regulated, following the Morton Decision, with some detail provided in the Pacific Aquaculture Regulations.

## Recommended Approach:

Putting jurisdictional questions aside, the provincial regulatory frameworks (NS, NB, NFLD) are more comprehensive, less cumbersome and easier to follow then the federal regulatory frameworks (PEI, BC).

### 7.2 Overarching Principles

None of the jurisdictions studied included clear regulatory principles for aquaculture management. Two of the statutes considered, the NS Fisheries and Coastal Resources Act and the NFLD Aquaculture Act include a purpose section. The purpose sections in both statutes weigh heavily in favour of industry support and promotion with a hint toward consultation and community engagement. A

[^19]strong and well-balanced purpose section can play an important role in the interpretation of the statute.

## Recommended Approach:

If NS is to continue with a statute that both regulates and promotes aquaculture, the purpose section of the Act should strive to balance industry competitiveness and promotion with the key elements of a strong and transparent regulatory system.

Interesting Provisions (Purpose Sections):

| Province | Provision |
| :--- | :--- |
| NS | The purpose of this Act is to (c) service, develop and optimize the harvesting and <br> processing segments of the fishing and aquaculture industries for the betterment of <br> coastal communities and the Province as a whole; (f) foster community involvement in <br> the management of coastal resources (Fisheries and Coastal Resources Act, s.2) |
| NFLD | The purpose of this Act is to govern the conduct of aquaculture in the province in order <br> to (c) minimize conflicts with competing interests and uses; and (d) help in consultative <br> and co-operative decision making within the province and between the government of <br> the province and the Government of Canada (Aquaculture Act, s.3). |

### 7.3 Management Approach for Aquaculture Operations

The most common approach to management of aquaculture is via lease and licence. NS, NB and PEI issue aquaculture leases and licences under one statute, while BC and NFLD rely on a separate provincial statute for aquaculture leases within provincial jurisdiction.

Leases and licences are issued by the Minister responsible for aquaculture in the province, with the exception of NB where a Registrar (designated by the Minister) is responsible for issuing a licence. In all cases the party issuing the licence or lease has extensive discretion. The extent of the discretion varies.

In NS the Minister has almost complete discretion in accepting or rejecting a licence application and extensive discretion in dictating the terms and conditions of the licence.

In NB the Registrar is guided by the Regulations regarding the circumstance for rejecting a licence application and in the terms and conditions to apply, however the final decision is with the Registrar.

In NFLD the Minister is guided in decision-making by the Act and Regulation and is required to include specific terms and conditions such as those relating to health, safety and environmental matters in any licence.

In BC The Pacific Aquaculture Regulations include a long list of terms and conditions that the Minister may include in a licence but the decision to issue the licence and the decision to include terms and conditions is at the discretion of the Minister.

## Recommended Approach:

The extensive ministerial discretion in licencing and lease decisions needs to be balanced by specific regulatory tools that will ensure consistency, transparency and accountability. Allowing the decisionmaker the discretion necessary to respond to change and unforeseen circumstances is valuable and
can be balanced by provisions that seek to:

- Guide the decision-maker regarding circumstances where rejection of a lease or licence application may be appropriate.
- Require the decision-maker to consult with parties and consider information prior to making a decision.
- Require the decision-maker to include reasoning for accepting or rejecting an application and to make the decision and reasoning public.
- Require the decision-maker to comment on and provide rationale for specific aspects of the decision.

Regarding terms and conditions to be included in a lease or licence, the jurisdictions studied for this Report vary on the extent of guidance provided to the decision-maker but, with the exception of Atlantic Salmon in NB, consistently give the decision maker extensive discretion to determine which terms and conditions to include. To remove some of this discretion, a standard list of areas that require terms and conditions should be included in regulation. This approach will provide more consistency and greater accountability in decision-making.

## Interesting Provisions:

| Province | Provision |
| :--- | :--- |
| NS | Before making a decision with respect to the application, the Minister (a) shall consult <br> with (i) the Department of Agriculture and Marketing, the Department of the <br> Environment, the Department of Housing and Municipal Affairs and the Department of <br> Natural Resources, and (ii) any boards, agencies and commissions as may be prescribed; <br> and... (Fisheries and Coastal Resources Act, s.47) |
| NB | ...the Registrar may refuse to issue, renew or amend an aquaculture licence where the <br> applicant has been convicted of an offence under the Act or regulations within three <br> years before or after the date of the application for the aquaculture licence, (b) it would, <br> in the opinion of the Registrar, cause undue conflict with other fishery activities <br> permitted under federal or provincial laws, or with ecologically and environmentally <br> sensitive areas, (c) it would result in conflict with other resource users, or (d) it would, in <br> the opinion of the Registrar, create unacceptable environmental risks (Aquaculture <br> Regulations, s.11). <br> Includes a list of terms and conditions the Registrar may include in the licence such as <br> adherence to a site development plan (Aquaculture Act, s.13). <br> Detailed mandatory terms and conditions for a commercial licence for Atlantic salmon in <br> a marine cage (Aquaculture Regulations, s.12.1). |
| NFLD | An aquaculture licence shall (e) contain terms and conditions relating to access to a site, <br> optimal resource utilization, health and safety and the environment (Aquaculture Act, s. <br> 4(4)) |
| PEI | PEI Aquaculture Zoning System (PEI Aquaculture Leasing Policy) |
| BC | For the proper management and control of fisheries and the conservation and protection <br> of fish, the Minister may specify, in addition to the conditions respecting the matters set <br> out in subsection 22(1) of the Fishery (General) Regulations, conditions in an aquaculture <br> licence respecting any of the following matters: items (a) to (p) (Pacific Aquaculture <br> Regulation, s.4). |

### 7.4 Assessment of Proposed Aquaculture Operations

Assessments are completed by way of application to the decision-maker (generally the Minister). In all jurisdictions the decision-maker has extensive discretion to decide what will be included in the application and assessment process. This provides flexibility in the regulatory framework and enables the decision-maker to quickly adapt when there is new information, research or technology to be considered. However, it fails to ensure consistency in the in the application process. It also makes it difficult for applicants and citizens to ensure accountability for even the most basic elements of the application process.

## Recommended Approach:

The application and assessment process should be defined by way of regulation with standard elements such as baseline research included. The application process should be flexible by allowing the decision-maker to require additional information, research, etc., by way of policy.

Interesting Provisions:

| Province | Provision |
| :--- | :--- |
| NB | A person who is applying for an aquaculture licence shall provide the Registrar with (b) <br> subject to subsection (4), a site development plan in relation to a proposed aquaculture <br> site (Aquaculture Regulation, s. 6(3)) |
| PEI | Application process includes an adaptive management framework (Appendix 4 PEI <br> Aquaculture Leasing Policy). |

### 7.4.1 Environmental Impact Assessment

None of the aquaculture statutes considered for this Report include environmental impact assessment (EIA) as part of the assessment process for an aquaculture licence or lease. In three of the jurisdictions, NB, NFLD and PEI, a proposed aquaculture operation or activities associated with the operation may trigger an EIA under provincial environmental legislation. NFLD includes the most comprehensive EIA triggers.

## Recommended Approach:

Until recently many proposed aquaculture operations were the subject of an EIA screening under the Canadian Environmental Assessment Act (CEAA). A review of provincial government websites and related literature indicated a fairly heavy reliance by provincial regulators on the CEAA screening to identify potentially significant environmental impacts and to engage members of the public. The amendments to the CEAA have eliminated the screening process for aquaculture operations and the provinces have not stepped in to fill the gap.

| Province | Provision |
| :--- | :--- |
| NFLD | An undertaking that will be engaged in farm raising fish or shellfish where that <br> undertaking will intervene in the rearing process to enhance production by keeping the <br> animals in captivity, stocking and feeding the animals and protecting the animals from |


|  | predators including (a) fish or shellfish farming in salt water or fresh water; and (b) fish <br> or shellfish breeding and propagating or hatchery services, where the undertaking will <br> include the construction of shore based facilities other than wharves and storage <br> buildings and (c) permanent marine trap or weir fisheries, shall be registered <br> (Environmental Assessment Regulations, 2003 s.29). |
| :--- | :--- |
| NFLD | The minister shall not approve the introduction into or transfer to a body of water or <br> aquaculture facility in the province of a species or strain of aquatic plants or animals not <br> present in that body of water or that aquaculture facility unless the impact of that <br> introduction or transfer has been assessed in accordance with the Part X of the <br> Environmental Protection Act, whether or not that introduction or transfer is an activity of <br> the type otherwise requiring assessment under that Act (Aquaculture Act, s.8(3). |

### 7.5 Role of and Opportunities for Citizen Engagement

None of the jurisdictions considered for this Report include mandatory public consultation or citizen engagement as part of the aquaculture licence application process. Public notice is required for lease applications in NB and the Ministers responsible in NS and NB may undertake public consultation.

## Recommended Approach:

Given the potential for environmental and community impacts associated with aquaculture activities, mandated public consultation and community engagement for proposed aquaculture operations should be a government priority. The failure of governments to include these processes in legislation demonstrates a significant lack of balance in the approach to aquaculture development, management and regulation.

Government should engage in ongoing public consultation on the direction and development of the aquaculture industry in Nova Scotia. Research and information on environmental impacts, technological change, government financial support and other broad industry-related issues should be made available to the public. Community engagement should take place as part of the early stages of every aquaculture application and should be coordinated by an independent third party rather than government or industry.

### 7.5.1 Access to Information

All of the jurisdictions have standard freedom of information legislation in place to allow a public right of access to government held records and information, with certain limitations. Only NS includes authority for the Minister to establish a public registry specifically for aquaculture-related information. In NB the provincial Aquaculture Act attempts to limit the public right of access in the Right to Information and Protection of Privacy Act by stating that all documents obtained under the Aquaculture Act are 'confidential.' The Aquaculture Act and Regulations in NFLD attempt to expand the public right of access by restricting what documents can be deemed confidential.

## Recommended Approach:

Given the interest in aquaculture operations, the extensive amount information that may be associated with an operation or proposed operation and the value of transparency, members of the public should have a right to access this information. Nova Scotia has taken a positive first step by incorporating a public registry into the law. However, the current registry is not effective. To make the registry effective it should be mandatory, include all records and information related to
aquaculture applications and sites, require records and information to be made available to the public, protect confidential information but restrict the information that can be considered confidential (similar to NFLD).

Interesting Provisions:

| Province | Provision |
| :--- | :--- |
| NS | The Minister may establish a public registry containing...(Fisheries and Coastal Resourres <br> Act, s.8) |
| NFLD | After completing the consultation referred to in clause 47(a) and after receiving a <br> recommendation, if any, from a regional aquaculture development advisory committee <br> pursuant to clause 47(b), the Minister may (c) refer the application to a public hearing; <br> or (Fisheries and Coastal Resources Act, s. 48) |
| The registrar shall keep copies and records of aquaculture licences, leases of land <br> granted for aquaculture purposes under the Lands Act, environmental preview reports <br> and environmental impact statements prepared under the Part X of the Environmental <br> Protection Act and other documents that the minister may direct or that may be <br> prescribed (Aquaculture Act, s.9(2)). <br> The records kept by the registrar under subsection (2) shall be open for inspection by <br> members of the public during office hours upon payment of a prescribed fee <br> (Aquaculture Act, s. 9(3)). <br> Notwithstanding subsection (3), information prescribed as confidential shall not be <br> available to the public (Aquaculture Act, s. 9(4)). |  |
| The Registrar of Aquaculture shall regard as confidential and refuse access to members <br> of the public to information which (a) describes unique trade practices or technology <br> used by a licensee, unless those trade practices or technology are protected by patent, <br> copyright or industrial design; or (b) describes information concerning the financial <br> backing, obligations or performance of an aquaculture facility or an aquaculture <br> enterprise (Aquaculture Regulations, s. 5(1)). <br> The Registrar of Aquaculture shall only regard information as confidential and refuse <br> access to members of the public to that information if a request for a designation of <br> confidentiality is made in writing by the licensee with the submission of the information <br> (Aquaculture Regulations, s. 5(2)). <br> The Registrar of Aquaculture shall only regard information concerning unique trade <br> practices or technology as confidential for 3 consecutive calendar years (Aquaculture <br> Regulations, s. 5(3)). |  |

### 7.5.2 Procedural Rights

The right to appeal a decision by a regulator or the Minister is virtually the only procedural right provided in any of the jurisdictions considered. ${ }^{89}$ There is one exception in NS where the FCRA includes 'whistle blower protection' for employees in the aquaculture sector. NS and NB are the only jurisdictions that articulate an appeal process in aquaculture legislation. The appeal process in NS is significantly broader than the process offered in NB. In NB an applicant or licensee a decision can appeal a decision made by a Registrar to the Minister. Decisions of the Minister are final.

[^20]The approach in NS allows an aggrieved person to appeal a decision of a staff member to the Minister or of the Minister to the NS Supreme Court.

## Recommended Approach:

The regulatory framework for aquaculture in Nova Scotia should continue to provide a right of appeal for aggrieved persons and should broadly define 'aggrieved person.' Other procedural rights, such as the right to request a review of a decision and the right to have concerns reviewed by an independent third party should be considered for incorporation into the legislation.

Interesting Provisions:

| Province | Provision |
| :--- | :--- |
| NS | No employer shall (a) dismiss or threaten to dismiss an employee; (b) discipline or <br> suspend an employee; (c) impose a penalty on an employee; or (d) intimidate or coerce <br> an employee, because the employee has reported or proposes to report to any person <br> an act or omission that contravenes, or that the employee has reasonable grounds to <br> believe may contravene, this Act or the regulations (Fisheries and Coastal Resources Act, s. <br> $99)$. |
| NS | A person who is aggrieved by a decision or order of an employee of the Department <br> may, within thirty days of the date of the decision or order, appeal to the Minister by <br> notice in writing, stating concisely the reasons for the appeal (Fisheries and Coastal <br> Resources Act, s. 118). <br> A person aggrieved by a decision of the Minister may, within thirty days of the <br> decision, appeal on a question of law or on a question of fact, or on a question of law <br> and fact, to a judge of the Supreme Court of Nova Scotia and the decision of that <br> court is final and binding on the Minister and the appellant, and the Minister and the <br> appellant shall take such action as may be necessary to implement the decision <br> (Fisheries and Coastal Resources Act, s. 119). |

### 7.6 Monitoring and Compliance of Aquaculture Operations

Site identification, licence display, maintaining records and reporting to the regulator are the basic elements of every monitoring and compliance program. All of the jurisdictions considered had some means in place to address these items. However, not all approaches were found in regulation, some of the jurisdictions left the decision to require these items to terms and conditions designed at the discretion of the Minister.

Reporting escapes, breach of containment or presence of disease at an aquaculture site are required by law in NB and NFLD, required by lease agreement on PEI and required only by licence terms and conditions in NS and BC (at the discretion of the Minister).

## Recommended Approach:

The key requirements to mark a site, display a lease and licence number, maintain records and submit reports should be included in legislation. Escapes, breach of containment and presence of disease at a site should be reported immediately and the information should be made available to the public. Failure to comply with these requirements should result in a fine and third parties who report failures should be informed of actions taken by the regulator.

Interesting Provisions:

| Province | Provision |
| :--- | :--- |
| NB | A licensee shall immediately report to the Minister or to an inspector the presence of <br> disease, disease agents, parasites, toxins or contaminants at the licensee's aquaculture site <br> (Aquaculture Act, s. 25). |
| NB | It is a term and condition of an aquaculture licence that the licensee shall notify the <br> Registrar of a breach of containment immediately after becoming aware of the breach. <br> The licensee shall submit to the Registrar a breach of containment report within 24 <br> hours after becoming aware of a breach of containment, a breach of containment <br> management plan within 48 hours after becoming aware of a breach of containment, <br> and a breach of containment final report within 14 days after the completion of <br> mitigation measures to address a breach of containment (Aquaculture Regulation, s. <br> 14.1). |

In all of the jurisdictions, inspectors have broad and detailed powers to enter and inspect. In NS and NB the Minister has the power to issue directions or an order. In NFLD inspectors have the authority to issue directions. In all of the jurisdictions the regulatory authority (Minister or Registrar) has relatively broad discretion to suspend, cancel or revoke a licence or lease issued by that authority. Generally the authority exists when there is non-compliance with the Act, regulations or terms or conditions of the lease or licence.

Offence provisions are generally well established. NFLD is the only jurisdiction with an administrative penalty scheme in place.

Interesting Provisions:

| Province | Provision |
| :--- | :--- |
| NFLD | Where the minister is of the opinion that a person has committed, as specified by <br> regulation, a contravention of this Act or the regulations for which an administrative <br> penalty applies, the minister or a person authorized by the minister may, in writing, <br> notify that person that he or she is to pay to the government of the province an <br> administrative penalty in the amount set out in the notice for each contravention <br> (Aquaculture Act, s.16). |

### 7.7 Regulatory Tools to Support Industry Competitiveness

Several of the jurisdictions had authorities in place to enable the responsible Minister to enter agreements and provide financial programs to support industry, however, we did not find any innovative regulatory programs in place to support industry competitiveness.

Comparative Analysis of Five Aquaculture Regulatory Frameworks in Canada was authored by Lisa J. Mitchell, M.E.S., LL.B. with research completed by Bryson McDonald.

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[^0]:    ${ }^{1}$ Fisheries and Coastal Resources Act, SNS 1996, c. 25, s. 2.
    ${ }^{2}$ Ibid at s.5.
    ${ }^{3}$ Environment Act, SNS 1994-95, c. 1, s. 67.
    ${ }^{4}$ Supra at note 1, s. 3

[^1]:    ${ }^{5}$ Supra at note 1; see also Aquaculture License and Lease Regulations, NS Reg 15/2000
    ${ }^{6}$ Supra at note 1, s.47.
    ${ }^{7}$ Supra at note 1, s. 51 (2).
    ${ }^{8}$ Supra at note 1, s. 46
    ${ }^{9}$ Overview of Aquaculture Licensing \& Leasing Process in Nova Scotia, http://novascotia.ca/fish/documents/aquaculture-sites/jordanbay-
    stmarys/Aquaculture_Application_process.pdf
    ${ }^{10}$ Supra at note 1, s. 48
    ${ }^{11}$ Activities Designation Regulations, N.S. Reg. 47/95, s.5.

[^2]:    ${ }^{12}$ Nova Scotia Environment, Environmental Assessment Projects, http://www.novascotia.ca/nse/ea/projects.asp
    ${ }^{13}$ Supra note at 1, s. 2 (f).
    ${ }^{14}$ Supra note at 1,s. 48.
    ${ }^{15}$ Supra note at 1, s.49.
    ${ }^{16}$ Supra note at 1, s.50.
    ${ }^{17}$ Specter v. Nova Scotia (Minister of Fisheries and Aquaculture) et al. 2012 NSSC 40.

[^3]:    ${ }^{18}$ Aquaculture License and Lease Regulations, N.S. Reg. 15/2000, s. 6
    ${ }^{19}$ Supra note at 1, s.52(c).
    ${ }^{20}$ Supra note at 1, ss.51, 52.
    ${ }^{21}$ Supra note at 1, s.82.
    ${ }^{22}$ Supra note at 1, ss.84-88.
    ${ }^{23}$ Supra note at 1, ss.110-116.

[^4]:    ${ }^{24}$ Aquaculture Act, R.S.N.B. 2011, c. 112.
    ${ }^{25}$ New Brunswick Regulation 91-158 under the Aquaculture Act, R.S.N.B. 2011, c. 112.
    ${ }^{26}$ In personal communications with staff of the NB Department of Fisheries and Aquaculture a potential update of the Aquaculture Act in the summer of 2014 was mentioned.
    ${ }^{27}$ Shellfish aquaculture is the mainstay of New Brunswick's east coast marine aquaculture industry.
    ${ }^{28}$ Marine Aquaculture Site Allocation Policy for the East Coast of New Brunswick, Province of New Brunswick.

[^5]:    29 Supra at note 24, s. 13 (1).
    ${ }^{30}$ Supra at note 24, ss. 33 and 34.
    ${ }^{31}$ Supra at note 25, s. 6 (3).
    ${ }^{32}$ Aquaculture in NB is divided into three geographic zones, Bay of Fundy, East Coast (Bay of Chaleur) and Inland Fishery (freshwater). The length of licenses and leases is different for each zone.

[^6]:    ${ }^{33}$ Inland Aquaculture Licence Application Guide, Department of Agriculture and Aquaculture, Province of New Brunswick, August 2009.
    ${ }^{34}$ Application Guide, Marine Aquaculture (East Coast), Province of New Brunswick, Department of Agriculture, Aquaculture and Fisheries, October 2011.

[^7]:    ${ }^{35}$ Additional Information Requirements for Aquaculture Facilities, Province of New Brunswick, http://www2.gnb.ca/content/dam/gnb/Departments/env/pdf/EIA-
    EIE/SectorGuidelines/AquacultureFacilities.pdf
    ${ }^{36}$ Record of EIA Registrations and Determinations, Province of New Brunswick, http://www2.gnb.ca/content/dam/gnb/Departments/env/pdf/EIA-EIE/RegistrationsEngegistrements/EIA.pdf
    ${ }^{37}$ Supra at note 34.

[^8]:    ${ }^{38}$ Supra at note 24, s. 37(1).
    ${ }^{39}$ Supra at note 24, s. 37(2).
    ${ }^{40}$ Supra at note 24, s. 23.
    ${ }^{41}$ Supra at note 24, s. 19 and General Regulation, s. 12.
    ${ }^{42}$ Supra at note 25 , ss. 16 to 18 . Personal communication with staff of DFA indicated that similar requirements are being developed for shellfish.
    ${ }^{43}$ Supra at note 24, s. 25, General Regulation, s. 14.1.
    ${ }^{44}$ Aquaculture Act, RSNL 1990, c A-13, ss. 29 and 36.

[^9]:    ${ }^{45}$ http://www.fishaq.gov.nl.ca/aquaculture/Info\%20Sheet\%20-\%20The\%20Aquaculture $\%$ 20Act $\% 20$ (3).pdf
    ${ }^{46}$ http://www.fishaq.gov.nl.ca/department/index.html
    ${ }^{47}$ The government of Newfoundland and Labrador has engaged in development of a new aquaculture strategic plan entitled Visions 2018 Sustainable Aquaculture Development. As part of this process they conducted aquaculture consultations in 2013. See 'What we Heard' at http://www.fishaq.gov.nl.ca/publications/whatweheard.pdf
    ${ }^{48}$ Access to Information and Protection of Privacy Act, SNL 2002, c. A-1.1, s. 3.

[^10]:    ${ }^{49}$ Supra at note 44, s. 4(7.1).
    ${ }^{50}$ Supra at note 44, s. 4(4)(e).
    ${ }^{51}$ Supra at note 44, s. 4(6).
    ${ }_{52}$ Supra at note 44, s. 4.
    ${ }^{53}$ Supra at note 44, s. 9.

[^11]:    ${ }^{54}$ Lands Act, SNL 1991, c. 36, s. 2.
    ${ }^{55} \mathrm{http}$ ://www.fishaq.gov.nl.ca/licensing/aquaculture.html

[^12]:    ${ }^{56}$ Aquaculture Regulations, Newfoundland and Labrador Regulation 1139/96, s. 5.
    ${ }^{57}$ Supra at note 48, s. 7.
    ${ }^{58}$ Supra at note 54, s. 4.
    ${ }^{59}$ Supra at note 44, s. 7.

[^13]:    ${ }^{60}$ Supra at note 44, s. 4(6)
    ${ }^{61}$ Supra at note 44, ss. 4(11) to 4(15), 6(7).
    ${ }^{62}$ Supra at note 44, s. 6.
    ${ }^{63}$ Supra at note 44, s. 6.2.
    ${ }^{64}$ Personal communication with DFO staff.
    ${ }^{65}$ Environmental Protection Act, RSPEI 1988, c. E-9, s. 20

[^14]:    ${ }^{66}$ Prince Edward Island Aquaculture Leasing Policy, PEI Aquaculture Leasing Management Board A partnership of Fisheries and Oceans Canada, the Province of Prince Edward Island \& Industry Partners, June 2011, at 3.
    ${ }^{67}$ Ibid at 6.

[^15]:    ${ }^{68}$ Ibid at 9.
    ${ }^{69}$ Ibid at 16.
    ${ }^{70}$ Ibid at 45.
    ${ }^{71}$ Ibid at 12.
    ${ }^{72}$ Ibid at 12.
    ${ }^{73}$ Supra at note 63, s. 9 .

[^16]:    ${ }^{80}$ Supra at note 64 at 13, 14, 31. See also Fisheries Act, RSC 1985, c F-14, s. 9.
    ${ }^{81}$ Morton v British Columbia (Agriculture and Lands), 2010 BCSC 299. In this case, the BCSC determined that the regulation of certain aquaculture practices is outside (ultra vires) the Provincial Crown's authority, and as such, that the licensing of salmon farms is a federal rather than a provincial responsibility. The case has been appealed by Marine Harvest Canada. The company is seeking clarification on whether domesticated salmon raised in net pens are a public resource or owned by the company (Farmed salmon giant appeals court ruling that bands industry jurisdiction to Ottawa, Vancouver Sun, March 9, 2009).

[^17]:    ${ }^{82}$ Fisheries Act, RSC 1985, c F-14, s. 2.
    ${ }^{83}$ Ibid at s. 3.
    ${ }^{84}$ See http://www.pac.dfo-mpo.gc.ca/aquaculture/licence-permits/index-eng.html

[^18]:    ${ }^{85}$ Pacific Aquaculture Regulations, SOR/2010-270, s. 6

[^19]:    86 Supra at note 82, s. 49.
    ${ }^{87}$ Supra at note 82, s. 79.1.
    ${ }^{88} \mathrm{http}: / /$ www.newswire.ca/en/story/472779/minister-shea-announces-new-investment-to-support-innovative-aquaculture-projects-in-b-c
    http://www.dfo-mpo.gc.ca/media/npress-communique/2012/np-pr17-eng.htm

[^20]:    ${ }^{89}$ Other procedural rights may include the right to comment, the right to request a review, the right to request an investigation, the right to receive reasons, the right to have concerns considered or reviewed by an independent third party.

