

Nova Scotia Aquaculture Regulatory Framework for Sustainable Growth



Presentation to the Municipality of Chester
February 06, 2020

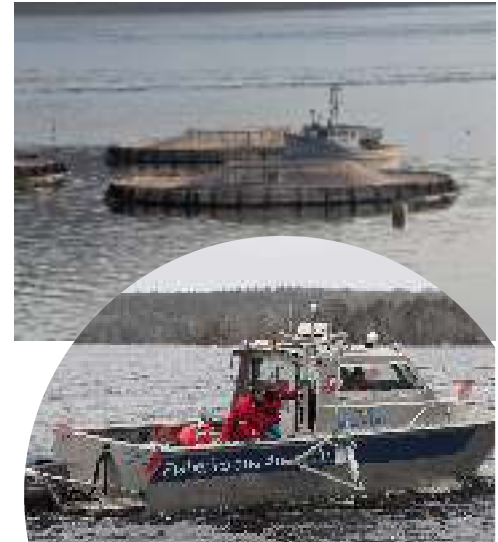
Why should we develop Aquaculture?

- ▶ Diversifies the seafood industry
- ▶ Creates economic opportunities in rural NS that can last for generations
- ▶ Meets a global demand for sustainable protein and maintains food security.



Regulatory Framework

- ▶ The Province is the lead regulator of the aquaculture industry and maintains authority to license aquaculture activities through the Fisheries and Coastal Resources Act.
- ▶ A modern regulatory framework built on recommendations from an independent panel and broad stakeholder support.
- ▶ The department has significant resources to support operations, and industry research and development.



Regulatory Framework

- ▶ Improved regulations have created among the most robust approaches to aquaculture management worldwide, ensuring Nova Scotia's aquaculture industry grows in a responsible and sustainable way.
 - Out-come driven to provide flexibility in practices to meet regulatory compliance
 - Rooted in science to help protect the environment, other fisheries and protected habit areas
 - Transparent and involves consideration of other users, and stakeholder and public input
 - Encourages new applications and full utilization of exiting sites
 - Allows for continuous improvement of regulations
 - Separates compliance and enforcement under the Department of Environment



Regulatory Framework

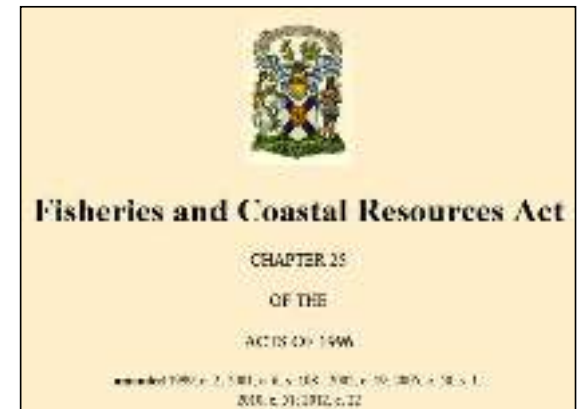
► Two-streams for aquaculture applications:

1. Adjudicative Decisions

- Used for new marine applications, expansions to existing marine sites and for adding finfish to sites not currently approved to grow finfish
- Decisions made by an independent Aquaculture Review Board after a public hearing and stakeholder involvement
- Only jurisdiction in Canada to use this decision-making approach

2. Administrative Decisions

- Used for lease and licence renewals, assignments, amendments and new land-based applications
- Decisions made after a public comment period and final decisions being posted on the Department's website
- Authority to reassign or revoke a licence and/or lease for several reasons including regulatory non-compliance



Accountability

- ▶ Only Canadian jurisdiction to have standing committees to advise the Department, and continually work to improving regulation and management of the aquaculture industry.

Nova Scotia Aquaculture Regulatory Advisory Committee

- ▶ 14-member advisory committee
- ▶ Co-chaired by Chief Terrance Paul, Membertou First Nation and Fisheries and Aquaculture Minister Keith Colwell
- ▶ Includes representatives from community, First Nations, industry and municipal government
- ▶ Provides advice on regulating aquaculture in Nova Scotia
- ▶ Reviews proposed regulatory framework changes

Nova Scotia Aquaculture Science Committee

- ▶ 5-member committee
- ▶ Identifies relevant issues that could be addressed through regulation and policy, and gives recommendations on scientific aspects of regulating aquaculture development

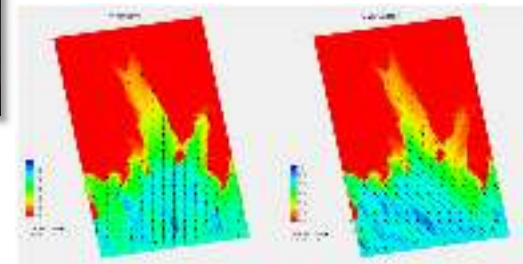


Farm Management Plan (FMP)

- ▶ First Canadian jurisdiction to implement Farm Management Plans as a risk-based, adaptive approach to aquaculture management.
- ▶ Requirements are set out in the Aquaculture Management Regulations.

Key Areas include:

- ▶ Fish Health Management
 - ▶ Environmental Monitoring
 - ▶ Farm Operations
 - ▶ Containment Management
- ▶ FMPs are prepared and submitted by an operator for approval prior to initial stocking of a site and are reviewed by the department upon request.



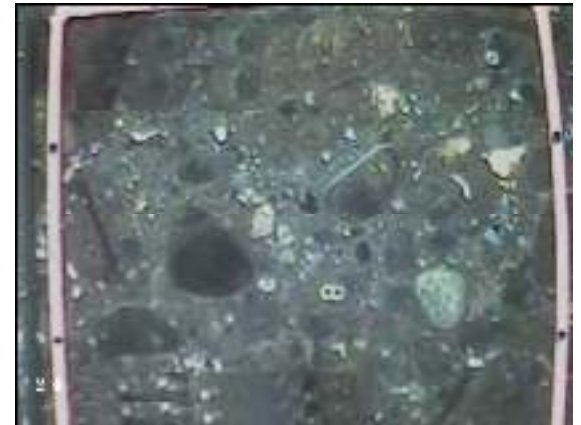
Aquatic Animal Health

- ▶ Helps maintain and monitor aquatic animal health within the aquaculture industry, supporting animal welfare
- ▶ Aquatic Animal Health Laboratory located in Truro
- ▶ Prevents, diagnoses and treats aquatic animals when necessary:
 - ▶ Husbandry and welfare
 - ▶ Veterinary Care
 - ▶ Disease Surveillance
 - ▶ Biosecurity
 - ▶ Sea Lice Management
 - ▶ General Emergency Measures
 - ▶ Record Keeping
 - ▶ Treatment coordination / Fallow periods / communication protocols
 - ▶ Pathogens of concern / breaches / mortality events
 - ▶ Audits
- ▶ Aquatic Animal Health Program requirements are defined through the Aquaculture Management Regulations.
 - ▶ Mandatory reporting of knowledge or suspicion of disease or mortality
 - ▶ Mandatory reporting of products used for treatments
 - ▶ Authority to issue quarantine orders and/or slaughter, destruction or disposal orders



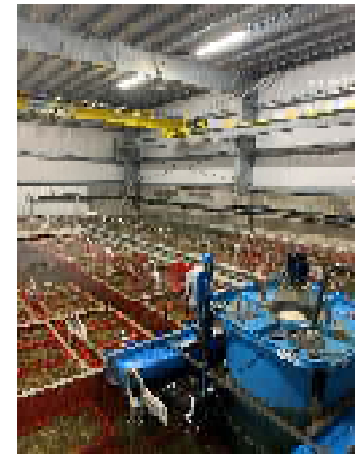
Environmental Monitoring Program

- ▶ Continuous and ongoing means to assess interactions between aquaculture leases and their surrounding marine environment.
 - Requires mandatory stocking level approval for all licensed-sites
 - Gives authority to require mitigation and remediation measures of a site that has not maintainedoxic conditions
- ▶ Annual monitoring of all marine finfish leases and large shellfish site
 - Intermittent monitoring of other shellfish, and assortment of inactive or fallow sites



Farm Operations

- ▶ Ensures the responsible operation of an aquaculture site
- ▶ Includes information and procedures that are consistent with industry best practices
 - Storage and disposal of feed, fuel, lubricants and chemicals
 - Removal and disposal of accumulated refuse and decommissioned farm supplies and equipment
 - Retrieval of gear or debris that has broken loose from aquaculture site
 - Interaction with wildlife
 - Maintaining sites in good order
 - Noise



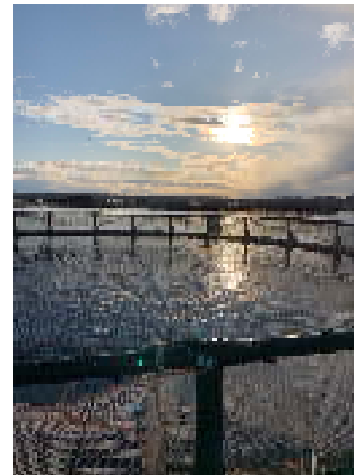
Containment Management

- ▶ World-class containment management program with requirements set out in the Aquaculture Management Regulations
 - Mandatory requirement to report confirmed or suspected containment breach
 - Only jurisdiction in Atlantic Canada to require engineering approval for the design of containment management structures
 - Only Canadian jurisdiction to require a finfish marking program to identify escaped fish for traceability back to an operator
 - Only Canadian jurisdiction to require third-party audits of containment breaches



Compliance & Enforcement Model

- ▶ Separates aquaculture development from enforcement
 - Aquaculture compliance and enforcement is the responsibility of the Department of Environment
 - Over 55 trained and well-equipped Conservation Officers for aquaculture enforcement
 - Summary offence ticket regulations



Discussion

novascotia.ca/fish/aquaculture