

Aquaculture Licensing Guide

Department of Fisheries, Forestry and Agriculture
Aquaculture Development Division

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Information contained in this document is subject to change.

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1. **Introduction**

The Department of Fisheries, Forestry and Agriculture (FFA) acts as the one-stop shop for aquaculture licensing for the province of Newfoundland and Labrador (NL). The process of obtaining an aquaculture licence is designed to provide an extensive review process that focuses on assessing an applicant’s ability to farm responsibly and meet regulatory requirements. FFA has prepared this Aquaculture Licensing Guide to serve as a reference tool in assisting proponents in the preparation of an aquaculture licence application submission. It also outlines the applicants’ responsibilities in ensuring applications are submitted in accordance with FFA’s regulatory requirements. Updated versions of this guide will be available on the FFA website under the Aquaculture Licensing section. All application information collected may be subject to the Access to Information and Protection of Privacy Act, 2015 (ATIPPA, 2015).

2. **Background**

In order to conduct aquaculture in NL, an aquaculture licence is required as per FFA’s [Aquaculture Act](#). As the lead in the administration of the aquaculture licensing program, FFA coordinates application submission reviews with applicable provincial and federal regulators. The purpose of this guide is to inform the applicant of the information requirements and the process involved with respect to obtaining an aquaculture licence. In Figure 1: The Aquaculture Licensing Process, the key stages of obtaining an aquaculture licence are identified.

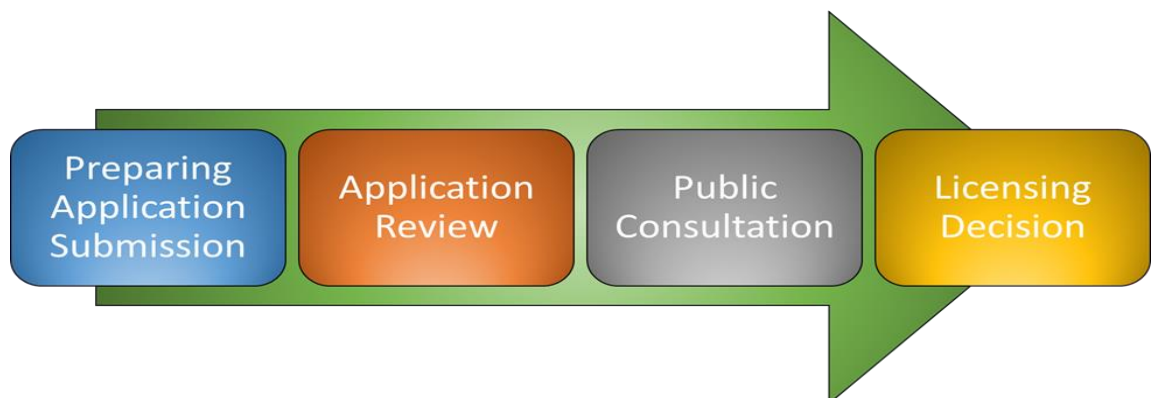


Figure 1: The Aquaculture Licensing Process

This guide is for information only and is not a substitute for the **Aquaculture Act** and regulations or other jurisdictional legislative requirements. In the event of an inconsistency between this document and legislation, legislation will always prevail. It is the responsibility of the proponent to review the requirements outlined in the [Aquaculture Policy and Procedures Manual](#), as well as other materials that are in relation to the proposed development, to understand FFA's and other jurisdictional requirements. To ensure that regulators with jurisdictional responsibilities have the information required to inform the review of the proposed development, applicants must include all information as prescribed by the regulator in the application submission. Submissions that are deemed incomplete will not be accepted by FFA.

There are two classifications of licences: commercial and non-commercial. Requirements for each class of licence may differ during the application and annual reporting process.

There are also various types of developments for which an applicant may seek approval:

- New Sites;
- Site Boundary Amendment: increase in a licensed site size/area;
- Species Add-on: addition of a species to an existing licence;
- Change of Ownership; and
- Other types of developments that may be deemed applicable by FFA.

Applications must demonstrate how the proposed development will be operated in a responsible, orderly, and sustainable manner by providing specifics in the following key areas:

- Development and Production Plan
- Site Suitability
- Sustainability of Wild Salmon, where applicable
- Economic Development and Benefits
- Applicant's financial and technical capabilities
- Mitigative measures and management strategies with respect to environmental, aquatic animal health, incident management, and site restoration elements
- Public notice and right to navigation

It is understood that specifics such as development and production information is a projection and based upon the information available at the time of the application

submission. As a result of operational performance outcomes at the site, development and production figures initially anticipated may change.

Preparing an aquaculture licence application and the process that follows upon submission will take a considerable amount of time. It is important for applicants to take this into consideration when setting realistic goals for effective business planning purposes. To improve the efficiency of the application process, applicants are encouraged to avail of FFA extension services during the preparation of aquaculture licence application submissions.

3. Preparing an Application Submission

3.1 Application for Aquaculture and Schedules

Proponents are required to submit a completed Application for Aquaculture to FFA (Appendix 1). This general application form is designed to be applicable to all types of aquaculture developments. In addition to this form, proponents must also include the associated schedule (Appendix 2) applicable to the development. Table 1 identifies which Schedule is required based on the type of development.

Table 1: List of Schedules

Type of Operation	Schedule
Finfish Cage Culture	A
Shellfish	B
Land-Based	C
Fish-out Pond	D
Cod	E
Cleanerfish Species Add-on	F
Closed/Semi-Closed Containment System	G

Each schedule captures technical and site-specific criteria for different types of aquaculture operations. Additional schedules may be developed by FFA to support other developments as the aquaculture industry evolves.

3.2 Technical and Financial Capability, Business Plan, and Management Plans

To demonstrate technical and financial capabilities in operating a site, applicants are required to include or have approved and on file with FFA a business plan, as well as a suite of management plans: environmental and waste management, aquatic animal health, biosecurity, incident management, and depending on the type operation, a site restoration plan.

Applicants must also provide information required by other regulators, in accordance with policies and legislation, in order for those regulators to fulfill jurisdictional duties in advising FFA on the proposed development.

3.3 Site Layout Diagrams and Maps

Depending on the type of operation and development being proposed, site layout diagrams and maps are required by FFA and Transport Canada (TC). Site layout diagrams and maps are to be done to scale and depict a plan view (top down), profile view (cross section), depth profile where applicable, gear arrangement and location of all aquaculture facilities and structures to be utilized as part of the operation. Applicants are to ensure that any specific criteria noted in the schedules to be included in the site diagrams and maps is completed.

3.4 Consultation Report

In an effort to minimize resource user conflict, applicants seeking approval for a new site or a site boundary amendment to a licensed site are required to conduct consultations with relevant local stakeholders and other user groups that may be impacted by the proposed development. It is the applicant's responsibility to identify resource user groups within the vicinity of the proposed development, conduct the consultations and address concerns raised. Results of consultations are to be outlined in a Consultation Report (Appendix 3).

3.5 Land Tenure

Applicants are required to have title to the proposed site location before being considered for an aquaculture licence. Applicants are to provide proof of title or applications to access crown (<https://www.gov.nl.ca/ffa/lands/applications/>) or federal lands with an application submission.

3.6 Application Fees

Associated application fees (Appendix 4) are required to be submitted with an application. Applicants must be in good financial standing with the Government of NL, and if a registered company, be in good standing with Registry of Companies of NL (Registry) in order to be considered.

3.7 Submission

Application packages including all required components are to be submitted to aquaculturelicensing@gov.nl.ca. The application and associated documents are to be in a legible format. If assistance is required, please contact FFA at (709) 292-4100.

4. **Application Review**

Applications are subjected to an extensive review process. An Initial Assessment will be conducted by FFA staff followed by an external review by which departments and agencies with jurisdictional responsibilities will assess the proposed development in accordance with regulatory requirements. FFA will disclose application information to the applicable jurisdictions to aid in the assessment of the proposed development. Personal information will be protected in accordance with privacy requirements.

4.1 **Initial Assessment**

FFA staff will consider the following when assessing a proposed development:

- Site-specific data to ensure it is in alignment for the region and capable of supporting the proposed species for that area.
- Compliance with existing departmental legislation, policy and management plans.
- Ensure the Environmental and Waste Management Plan provided by applicants are in accordance with [Environmental and Waste Management Guidance](#) and regulatory requirements.
- Where applicable, ensure aquatic animal health and site restoration plans are in accordance with departmental requirements.
- Ensure incident management plan is in accordance with departmental requirements
- Ensure type, size and amount of gear is appropriate for the proposed farming activity and that all gear fits within site footprint, with adequate mooring scope.
- Ensure site drawings are provided and in accordance with requirements.
- Ensure production plans are achievable given industry standard production parameters in NL.
- Ensure the Production Plan is in accordance with applicable management plans: Code of Containment for the Culture of Salmonids in NL, Bay Management Areas Agreement and the Trout Overwinter Management Plan.
- Ensure stocking densities are appropriate to ensure species welfare and sustainable growing conditions.
- Ensure the business plan is based on technically sound aquaculture practices and that all capital costs and biological assumptions are within industry norms.

- Ensure information in the aquaculture application aligns with the crown lands lease application, where applicable.
- Any other aspect of the proposed operation that will inform review.

4.2 External Review

FFA will engage those regulators having jurisdictional responsibilities over the proposed development. Regulators that may be consulted are listed below in Table 2. It is important to note that this is not a complete list. Depending on the proposed development, FFA may deem it necessary to engage other regulators to inform review.

Table 2: List of Regulators Engaged in Application Review

Provincial Regulators		
Department	Applicable Legislation	Response
FFA	<ul style="list-style-type: none"> • Lands Act • Fish Inspection Act (Fish Inspection Administration Regulations, Fish Inspection Operations Regulations) • Aquaculture Act 	<ul style="list-style-type: none"> • Licence to Occupy • Lease • Notice of Assignment and Consent
Environment and Climate Change	<ul style="list-style-type: none"> • Water Resources Act • Environmental Protection Act (Environmental Assessment Regulations) 	<ul style="list-style-type: none"> • Water Use Licence • Permit to Alter Body of Water • Permit for constructing a non-domestic well
Municipal and Provincial Affairs	<ul style="list-style-type: none"> • Urban and Rural Planning Act 	<ul style="list-style-type: none"> • Recommendation
Tourism Arts Culture and Recreation	<ul style="list-style-type: none"> • Historic Resources Act 	<ul style="list-style-type: none"> • Recommendation
Federal Regulators		
Department	Legislation	Response
Fisheries and Oceans Canada	<ul style="list-style-type: none"> • Fisheries Act (Aquaculture Activities Regulations, Aquatic Invasive Species, Species at Risk, Oceans Act) 	<ul style="list-style-type: none"> • Recommendation
TC	<ul style="list-style-type: none"> • Canadian Navigable Waters Act 	<ul style="list-style-type: none"> • NPP approval document
Environment and Climate Control Canada	<ul style="list-style-type: none"> • Canadian Water Act • Environmental Protection Act 	<ul style="list-style-type: none"> • Recommendation

5. **Public Consultation**

To ensure other resource users and members of the general public have an opportunity to provide comments on a proposed development, applicants are required to conduct a public consultation in accordance with FFA aquaculture policy AP 5 Public Consultation. This consultation effort is separate from the stakeholder consultations conducted in the preparation of the Consultation Report.

6. **Licensing Decision**

Once the application assessment is completed by FFA and all agencies involved, the proposed development, referral responses and public consultation results are reviewed by FFA's Aquaculture Licensing Committee (ALC). Those applicants that are in arrears with the provincial government, or not in good standing with the Registry, will not be considered for licensing.

The ALC provides the Minister with a recommendation on whether the application should be approved, rejected or approved in principle. The Minister will render a decision on the proposed development. If approved, an aquaculture licence containing a suite of terms and conditions is issued. The aquaculture licence, as well as associated formal approvals, will be provided to the proponent. Should the application be rejected, the applicant has the option to appeal the decision in accordance with FFA aquaculture policy AP 45 Appeals Process.

For more information

If you would like further information, please contact the Aquaculture Development Division at (709) 292-4100 or by email at aquaculturelicensing@gov.nl.ca.

ACRONYM LISTING

ALC	Aquaculture Licensing Committee
FFA	Department of Fisheries, Forestry and Agriculture
NL	Newfoundland and Labrador
Registry	Registry of Companies
TC	Transport Canada

Policy and Guidance Reference

- Aquaculture Policy and Procedures Manual:
<https://www.gov.nl.ca/ffa/files/licensing-pdf-aquaculture-policy-procedures-manual.pdf>
- Environmental and Waste Management Guidance:
<https://www.gov.nl.ca/ffa/files/DOC-2022-00210-Aquaculture-application-guidance-document-Environmental-and-Waste-Management-Plan-Guidelines-2022.pdf>
- Aquaculture Operator Incident Reporting Guidelines:
<https://www.gov.nl.ca/ffa/files/21055-Aquaculture-Incident-Reporting-March-25.pdf>
- Aquatic Animal Health Division Viral Management of Infectious Salmon Anaemia virus (ISAv) Contingency Plan Guidelines: <https://www.gov.nl.ca/ffa/files/Viral-Management-of-ISAv-Contingency-Plan-Guidelines-for-Newfoundland-and-Labrador.pdf>
- Newfoundland and Labrador Biosecurity Audit Plan – Aquatic Animal Health Division Guidelines: <https://www.gov.nl.ca/ffa/files/Aquatic-Animal-Health-Division-Biosecurity-Audit-Plan-September-2020.pdf>
- NL Sea Lice Integrated Pest Management Plan:
<https://www.gov.nl.ca/ffa/files/Newfoundland-and-Labrador-Sea-Lice-Integrated-Pest-Management-Plan.pdf>
- Newfoundland and Labrador Aquatic Animal Reportable and Notifiable Diseases:
<https://www.gov.nl.ca/ffa/files/Newfoundland-and-Labrador-Aquatic-Animal-Reportable-and-Notifiable-Diseases-September-2020.pdf>
- Newfoundland and Labrador Cleaner Fish Surveillance Plan:
<https://www.gov.nl.ca/ffa/files/Newfoundland-and-Labrador-Fisheries-Forestry-and-Agriculture-Cleaner-Fish-Surveillance-Plan.pdf>

- Salmonid Code of Containment for the Culture of Salmonids in Newfoundland and Labrador: <https://www.gov.nl.ca/ffa/files/DOC-2021-01446-Salmonid-Code-of-Containment-Updated-July-2021.pdf>
- AAR Monitoring Standard: <https://www.dfo-mpo.gc.ca/aquaculture/management-gestion/doc/AAR-Monitoring-Standard-2018-eng.pdf>
- AAR Guidance Document: <https://www.dfo-mpo.gc.ca/aquaculture/management-gestion/aar-raa-gd-eng.htm>

APPENDIX 1
Application for Aquaculture



The Department of Fisheries, Forestry and Agriculture is committed to protecting personal information, which is being collected in accordance with section 61(c) of the Access to Information and Protection of Privacy Act, 2015 (ATIPPA, 2015) and will be used to assess this Aquaculture Licence Application. It will not be used for any other purposes unless authorized under ATIPPA, 2015.

For Department Use Only				
Receipt Number	Receipt Date	Receipt Amount	Date Application Received	Application Number

Part 1 - Applicant Information

In this section, please provide business information only.

Company Name: _____

Newfoundland and Labrador Company Registration Number: _____

Type of Business: Individual Partnership Company Date Incorporated: _____

Address: _____ City/Town: _____

Province: _____ Country: _____ Postal Code: _____

Phone #'s: Business: _____ Cell: _____ Fax: _____

Principal Contact: _____ Title: _____

E-mail Address: _____

For Companies and Partnerships, include a separate list of owners showing names, addresses and percentage of ownership.

Part 2 – Application Information

1. Type of Licence: Commercial Non-Commercial

2. Type of application (check one):
- New site
 - Site expansion (Indicate current aquaculture licence number) _____
 - Species Add-on
 - Ownership Transition (Indicate current aquaculture licence number and licensee name):

3. Type of Operation:
- Finfish Shellfish Marine Plants Fish-out Pond Cod Operations
 - Other _____

 - Land-based
 - Water: Freshwater Saltwater
 - Facility: Hatchery Nursery Aquaponics
 - Other: _____

 - Marine
 - Cage Culture Suspended Culture Bottom Culture Closed/Semi-Closed Containment
 - Other: _____

Part 3 – Species Information

1. Species to be Cultured: _____
2. Strain (if applicable): _____
3. Diploid Triploid Non-applicable Other (explain) _____
4. Source of animals/marine plants:
 - a) Applicants own broodstock: Yes No
 - b) If yes, location of hatchery: _____
 - c) If no, please provide the following information for the supplier(s) of the animals/marine plants:
 - Company/Individual: _____
 - Address: _____
 - Origin/Location of the Source: _____
 - Phone #: _____ Contact Person: _____

Part 4 – Site Information

Include site drawings that are in accordance with departmental and Transport Canada requirements. Site drawings must depict the exact location of the site, provide layout details, indicate depth profile (where applicable) and identify infrastructure required for the operation.

1. Proposed Location: _____
Map Reference Coordinates (Measured at center point of site in decimal degrees):
Example: 56 °30' 30" would be written as 56.508 °
Latitude _____ ° Longitude _____ °
2. Size of site in hectares (if this application is for an expansion to an existing site, please include **ONLY** the hectares for the new water): (1 hectare (ha) = 100 metres (m) x 100 metres (m)) _____
3. Dimension of Site (if this application is for an expansion to an existing site, please include **ONLY** the dimensions for the new water): _____ m x _____ m.
4. Type of Land Tenure: Crown Land Private Other _____
5. Nearest Community: _____
6. Nearest Aquaculture Site: _____ Distance (m) _____ Species _____
7. Indicate the Canadian Shellfish Sanitation Program status (shellfish only) of the site location being proposed.

8. Does this site require onshore/nearshore facilities to be constructed? Yes No
 - a) If yes, a separate Crown Lands Lease Application will be required in the case of crown land.
 - b) Please describe the type of construction and its purpose. Identify the location of the facilities on a map. _____

Part 5 – Schedules, Plans and Reporting

Applications must include the associated Schedule for the proposed development: see Table 1. The Department of Fisheries, Forestry and Agriculture reserves the right to request additional information that may not be prescribed in any given Schedule. In accordance with the Aquaculture Policy and Procedures Manual (<https://www.gov.nl.ca/ffa/files/licensing-pdf-aquaculture-policy-procedures-manual.pdf>), various plans and reports are required. Each Schedule identifies the plans and reports that are to be included in an

application package. Guidance material is available to assist applicants in completing applications. For further information, please contact the department.

Table 1

Type of Operation	Schedule Required
Finfish Cage Culture	A
Shellfish	B
Land-Based	C
Fish-out Pond	D
Cod	E
Cleanerfish Species Add-on	F
Closed/Semi-Closed Containment System	G

Part 6 – Application Attestation, Declaration and Consent

Complete and accurate information is important to avoid delays in processing applications. Please review and confirm the following (all boxes must be checked).

- All sections of this form have been completed.
- For Companies and Partnerships, include a separate list of owners showing names, addresses and percentage of ownership.
- Crown Lands application is included.
- Proof of ownership, if private land, is included.
- All applicable plans and reports are included, or on-file with the department.
- All applicable plans and reports included contain the most current and up-to-date information.
- Site drawings in accordance with departmental and Transport Canada requirements are included.
- Application and other applicable fees have been paid, as per the Aquaculture Policy and Procedures Manual.
- Proof of technical capability is included.
- Proof of financial capability is included.

I/We accept and understand that (all boxes must be checked):

- Fees submitted are non-refundable.
- Applications must be fully completed, and all fees submitted.
- All costs incurred in scoping a site and preparing the application is the responsibility of the applicant.
- The principal contact will be used for all communication and correspondence.
- The site is not to be occupied until an aquaculture licence has been issued.
- Applicants must be in good financial standing with the Government of Newfoundland and Labrador.
- Applicants, where applicable, must be in good standing with the Registry of Companies.
- Missing or incomplete information may lead to a delay in processing this application.

- As part of the processing of the application, the Department of Fisheries, Forestry and Agriculture will disclose the application as well as applicable application components included to other government bodies (provincial and federal). Governing bodies that may be engaged in the review are listed below as follows:
 - Department of Environment and Climate Change – Water Resources Management Division – under Sections 14 and 48 of the Water Resources Act SNL 2002 cW-4.01, either, Marine Aquaculture Water Use Licence/Permit for marine sites, or, Water Use License and Permit for freshwater sites. The need for environmental assessment or other related requirement(s) under the Environmental Protection Act SNL 2002 cE-14.2 will be determined as necessary. Department of Fisheries, Forestry and Agriculture (Newfoundland and Labrador) - Crown Lands Branch – approval under the Lands Act.
 - Transport Canada – approval under the Canadian Navigable Waters Act.
 - Department of Fisheries, Forestry and Agriculture (Newfoundland and Labrador) – approval for aquaculture licence under the Aquaculture Act.
 - Fisheries and Oceans Canada.
 - Other Departments/Agencies, where applicable.

I/We further state: (all boxes must be checked)

- The information provided on this application does not release the applicant from obtaining the necessary approvals from any other Department, Agency or other entity having jurisdiction in relation to the site or activities occurring at that location.
- I/We certify that the information contained in this application and the attached documents are true and correct in all respects.
- I/We hereby authorize the Department of Fisheries, Forestry and Agriculture to obtain information concerning my/our financial affairs in relation to this application from the parties noted.

Date

Signature and Title of applicant
(Corporations must affix corporate seal)

Complete applications and documents included are to be submitted to aquaculturelicensing@gov.nl.ca

If you have any questions, please contact the department at (709) 292-4100.

APPENDIX 2
Schedules

Schedule A: Finfish Cage Culture Operations

Part 1: Plans and Reporting

As part of a complete application package, various plans and reports are required to be included with a proposal. Table 1 identifies the plans and reports that applicants are required to provide depending on the type of development. Applicants are encouraged to consult an Aquaculture Development Officer when preparing application packages.

Table 1

Type of Development	Plans and Reports Required
New/Site Boundary Amendment	<ul style="list-style-type: none"> ○ Baseline Survey Report ○ Business Plan (Commercial) ○ Consultation Report ○ Environmental and Waste Management Plan ○ Fish Health Management Plan (includes Biosecurity and Integrated Pest Management Plan) ○ Incident Management System Plan ○ Production Plan ○ Site Restoration Plan ○ Project Plan (Non-Commercial)
Species Add-on	<ul style="list-style-type: none"> ○ Business Plan (Commercial) if existing plan does not accommodate the proposed add-on ○ Project Plan (Non-Commercial) ○ Production Plan ○ Updated Management Plans
Change of Ownership	<ul style="list-style-type: none"> ○ Business Plan (Commercial) if existing plan does not accommodate the transition ○ Project Plan (Non-Commercial) ○ Production Plan ○ Updated Management Plans

Part 2: Development / Production Plan

In Table 2, record the following information:

1. From start-up to full operation, in Table 2 indicate:
 - a) the estimated month and year stock will be introduced;
 - b) the expected number of smolt/fingerlings/fry to be stocked
 - c) the grow-out period;
 - d) the average individual fish weight at the start and the end of grow-out;
 - e) the expected losses over grow-out period; and
 - f) the final production quantity at the end of growth period.

Table 2

Year/ Month	Stocking Number	Growth Period (months)	Avg. Start Weight (kg)	Avg. Final Weight (kg)	Expected Losses (%)	Expected Production (kg)

Example

2021/05	1,000,000	28	0.25 kg	5.95 kg	10%	5,652,500 kg
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2. Indicate the expected maximum stocking (rearing) density. _____ kg/m³
3. Indicate if broodstock will be reared. Yes No
 - a) If yes, state approximate number and weight _____ kg.
4. If broodstock are stripped, where will egg incubation occur? _____
5. In what year do you anticipate to reach peak production? _____
6. Indicate anticipated harvest for this site at peak production. _____ kg.
7. In Table 3, indicate the number and type of net cages proposed for each year.

Table 3

Year/Month	Type of Cage and Mesh Size	Net Length	Number of Cages	Holding Capacity (cubic meters, m ³)

Example:

2021/05	140 m HDPE Circular Cages 36 mm HDPE 3.1 mm	20	10	390,000 m ³
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8. Specify the type of feed to be used (e.g. moist, dry, silage based, other).

9. Describe the method of feed administration (e.g. by hand, auto feeders, etc.).

10. In Table 4, provide the feed schedule for the entire growth cycle. Include planned amounts to be used.

Table 4

Year/Month	Species Biomass (kg)	Monthly Feed Amount (kg)

11. What is the annual feed consumption? _____ kg
12. Describe in detail, the methods that will be adopted to minimize excess feed such as the use of feed tables, calculations to optimize feed use, the use of one feed form over another, feed cameras or other electronic feedback systems (including frequency of monitoring), pellet size, etc.

13. A fallow period is required. Describe the rotation plan for fallowing and include the licensed site locations where fish (if not being harvested) are to be stocked during this period. Indicate on a map the area to be used for fallow purposes.

Part 3: Site Suitability

If the proposed development is a species add-on or a Change of Ownership, please continue to Part 5 of the application.

1. Indicate if site assessments have been completed to demonstrate site suitability.
 Yes No
- a) If yes, please list the reports (e.g. site suitability studies, profiling, environmental data collection, etc.) and ensure they are included in the application package.

2. Describe any fishing activities (e.g. commercial, Indigenous or recreational fisheries), tourism operations, cabins, recreational activities (e.g. boating, diving, water skiing, swimming, etc.) or industrial facilities, and water uses that are located within a 2km radius of the site lease boundary. Provide information on the activities time(s) of operation and proximity to the site.

3. Identify potential impacts other resource users may have on the proposed development, if applicable. Include the measures to be established to minimize potential interactions and possible negative impacts by other resource users.

4. Identify any potential impacts the proposed operation will have on other resource users during the development phase of the project and while it is in operation, if applicable. Provide details on the measures to be established to minimize the impacts.

Complete either Section A if applying for a salt water cage operation or Section B if applying for a fresh water cage operation.

Section A: Site Suitability for Salt Water Cage Operation

1. Temperature Salinity Profile
Record temperatures and salinity at the indicated depths.

	Spring		Summer		Fall		Winter	
Depth (m)	Temp (°C)	Salinity (ppt)	Temp (°C)	Salinity (ppt)	Temp (°C)	Salinity (ppt)	Temp (°C)	Salinity (ppt)
0								
1								
2								

3								
4								
5								
10								
Bottom less 1 metre								

3. Identify the minimum water depth below the bottom of the net cages at low tide. _____ metres. Include this depth on a cross-sectional drawing of the site.
3. Exposure to wind and waves:
- a) Maximum fetch: _____ kilometers Direction: _____.
- b) Prevailing wind direction:
 Spring _____ Summer _____ Fall _____ Winter _____
- c) Maximum wave height: _____ meters.
4. Indicate the prevailing storm wind direction. Label this wind on a map.
-

Section B: Site Suitability for Fresh Water Cage Operation

1. Water Quality
- Determine the levels of the following parameters at the proposed site at a depth of one meter.

Parameters Values	Spring	Summer	Fall	Winter
Dissolved Oxygen (mg/l)				
Total Alkalinity (mg/l)				
Hardness (as Calcium Carbonate) (mg/l)				
Ammonia (mg/l)				
pH				
Temperature (°C)				

2. Dimensions of Lake
- a) Overall area of lake: _____ hectares.

- b) Average depth of lake: _____ metres.
- c) Maximum depth of lake: _____ metres.

- 3. Minimum water depth below the bottom of the net cages _____ metres.
Include this depth on a cross-sectional drawing of the site.

- 4. Exposure to wind and waves:
 - a) Maximum fetch: _____ kilometers Direction: _____
 - b) Prevailing Winds:
Spring _____ Summer _____ Fall _____ Winter _____
 - c) Maximum wave height: _____ metres.

- 5. Indicate the prevailing storm wind direction. Label this wind on a map.

Part 4: Sustainability of Wild Salmon

- 1. Provide on a map the location of wild salmon rivers in the region and their proximity to the proposed operation.

- 2. Provide details regarding measures to be established to support sustainability of wild salmon (e.g. containment measures, traceability, conservation efforts, etc.) within the vicinity of the proposed operation.

- 3. Provide details regarding any salmon recovery or restoration efforts that are planned or established in the region of operation and how the proposed operation may interact with these efforts.

Part 5: Economic Development

1. Provide an overview of the benefits of the proposed development to the Province. Include the socio-economic benefits, supply and service opportunities, potential direct and indirect spin-off industries and other relevant information that demonstrates the impacts and scale of benefits. For this response, include direct and indirect employment creation and targets/commitments that must be accessible and inclusive of all genders, Indigenous peoples, persons with disabilities, visible minorities, and youth. Please identify if employment expertise availability is local and/or national/international.

2. In Table 5, identify direct and indirect employment creation that will result from the proposed development for the next three years. Identify duration of employment and if possible, provide the types of positions (e.g. managerial, supervisory, technical, administration, etc.).

Table 5

Year	Number of Employees			Type of Position
	Full Time	Part Time	Seasonal	

3. Indicate if the required labour supply and level of skill is available to operate the proposed development. Explain how this has been determined.

4. In the event the required skill-set is not available within the labour supply, describe any training plan and/or other measures to be established to address.

Schedule B: Shellfish Operations

Part 1: Plans and Reporting

As part of a complete application package, various plans and reports are required to be included with a proposal. Table 1 identifies the plans and reports applicants are required to provide depending on the type of development. Applicants are encouraged to consult an Aquaculture Development Officer when preparing application packages.

Table 1

Type of Development	Plans and Reports Required
New/Site Boundary Amendment	<ul style="list-style-type: none"> <input type="checkbox"/> Business Plan (Commercial) <input type="checkbox"/> Consultation Report <input type="checkbox"/> Environmental and Waste Management Plan <input type="checkbox"/> Fish Health Management Plan (includes Biosecurity) <input type="checkbox"/> Incident Management System Plan <input type="checkbox"/> Production Plan <input type="checkbox"/> Project Plan (Non-Commercial)
Species Add-on	<ul style="list-style-type: none"> <input type="checkbox"/> Business Plan (Commercial) if existing plan does not accommodate the proposed add-on <input type="checkbox"/> Project Plan (Non-commercial) <input type="checkbox"/> Production Plan <input type="checkbox"/> Updated management plans
Change of Ownership	<ul style="list-style-type: none"> <input type="checkbox"/> Business Plan (Commercial) if existing plan does not accommodate the transition <input type="checkbox"/> Project Plan (Non-Commercial) <input type="checkbox"/> Production Plan <input type="checkbox"/> Updated management plans

Part 2: Development / Production Plan

Complete the sections that are applicable to the proposed development.

Section A1: Collection of Blue Mussels

1. Are you collecting seed to sell to other growers? Yes No
2. Indicate the collection system to be used: Individual collector Continuous

3. Provide the length of the collector based on collection system to be used:
 - a) Individual collector: _____metres
 - b) Continuous:_____metres
4. Indicate the average length of mainlines for collectors: _____metres.
5. Indicate the distance between collector mainlines: _____metres.
6. Provide the production plan for blue mussel collection in Table 2.

Table 2

Year					
Number of collectors to be set					
Number of mainlines to be used					

Section A2: Collection of Scallops

1. Are you collecting seed to sell to other growers? Yes No
2. Indicate the average length of mainlines for collectors:_____ metres.
3. Indicate the distance between collector mainlines: _____metres.
4. Provide the production plan for scallop collection in Table 3.

Table 3

Year					
Number of collectors to be set					
Number of mainlines to be used					

Section B: Intermediate Culture: Scallops or Oysters

1. Identify the proposed species: Scallops Oyster
2. Provide final grow-out details for the proposed species in Table 4.

Table 4

Year/Month	Gear Type*	Number Per Unit System	Total Number of Animals

***Gear Type:** Pearl Nets, Lantern Nets, Racks, Baskets, Trays, Other (please specify)

3. Will the proposed species be sold at this stage? Yes No
 a) If yes, provide approximate shell length. _____centimetres.

Section C1: Grow-out and Production: Blue Mussels

1. Indicate the maximum estimate which could be harvested from the site when it is fully developed? _____ kilograms.
2. Do you propose to purchase seed for grow-out? Yes No
 If yes, will the seed be used for initial start-up only or for ongoing operation of the site?

3. Indicate the length of the production cycle (from the time the seed is socked to the time of harvest): _____months.
4. Type of production system to be utilized: Individual Socks Continuous
5. Provide the average length based on the production system to be utilized:
 a) Individual Socks: _____metres
 b) Continuous (length of loops): _____metres
5. Indicate the anticipated yield per meter: _____ kilograms.
6. Indicate the distance between mainlines. _____ metres.
7. Provide the average length of mainlines for socks: _____metres.
8. Complete Table 5.

Table 5

Year					
Amount of socking to be filled (metres)					
Number of mainlines to be used					
Production (kilograms)					

Section C2: Grow-out and Production: Scallops or Oyster

1. Identify the proposed species: Scallops Oyster
2. Provide final grow-out details for the proposed species in Table 6.

Table 6

Year/Month	Gear Type*	Density per unit system	Number of Animals

* **Gear Type:** Pearl Nets, Lantern Nets, Racks, Baskets, Trays, Other (please specify)

3. Provide production estimates that are applicable to the proposed species in Table 7. Note: Projections are to begin with first year of harvest.

Table 7

Product Type	Average Number per kilograms	Production (kilograms)				
		Year 1	Year 2	Year 3	Year 4	Year 5
Meats						
Meat with Roe						
Whole/Live						
Other						

Part 3: Site Suitability

If the proposed development is a species add-on or Change of Ownership, please continue to Part 4 of the application.

1. Indicate if site assessments have been done to demonstrate site suitability.
Yes No
a) If yes, please list the reports (e.g. site suitability studies, profiling, environmental data collection, etc.). Ensure reports are included with the application package.

2. Indicate if the proposed site, or portion(s) of, have been closed due to the presence of toxins. Yes No
a) If yes, provide the year: _____

3. What is the prevailing storm wind direction? Label this wind on a map.

4. Describe any fishing activities (e.g., commercial, Indigenous, or recreational fisheries), tourism operations, cabins, recreational activities (e.g., boating, diving, water skiing, swimming, etc.) or industrial facilities, and water uses that are located within a 2km radius of the site lease boundary. Provide information on the activities time(s) of operation and proximity to the site.

5. Identify potential impacts other resource users may have on the proposed development, if applicable. Include the measures to be established to minimize potential interactions and possible negative impacts by other resource users.

6. Identify any potential impacts the proposed operation will have on other resource users during the development phase of the project and while it is in operation, if applicable. Provide details on the measures to be established to minimize the impacts.

Part 4: Economic Development

1. Provide an overview of the benefits of the proposed development to the Province. Include the socio-economic benefits, supply and service opportunities, potential direct and indirect spin-off industries and other relevant information that demonstrates the impacts and scale of benefits. For this response, include direct and indirect employment creation and targets/commitments that must be accessible and inclusive of all genders, Indigenous peoples, persons with disabilities, visible minorities, and youth. Please identify if employment expertise availability is local and/or national/international.

2. In Table 8, identify direct and indirect employment creation that will result from the proposed development for the next three years. Identify duration of employment and if possible, provide the types of positions (e.g. managerial, supervisory, technical, administration, etc.).

Table 8

Year	Number of Employees			Type of Position
	Full Time	Part Time	Seasonal	

3. Indicate if the required labour supply and level of skill is available to operate the proposed development. Explain how this has been determined.

4. In the event the required skill-set is not available within the labour supply, describe any training plan and/or other measures to be established to address.

Schedule C: Land-Based Operations

Part 1: Plans and Reporting

As part of a complete application package, various plans and reports are required to be included with a proposal. Table 1 identifies the plans and reports applicants are required to provide depending on the type of development. Applicants are encouraged to consult an Aquaculture Development Officer when preparing application packages.

Table 1

Type of Development	Plans and Reports Required
New/Site Boundary Amendment	<ul style="list-style-type: none"> ○ Business Plan (Commercial) ○ Consultation Report ○ Environmental and Waste Management Plan ○ Fish Health Management Plan (includes Biosecurity and Integrated Pest Management Plan) ○ Incident Management System Plan ○ Production Plan ○ Project Plan (Non-Commercial)
Species Add-on	<ul style="list-style-type: none"> ○ Business Plan (Commercial) if existing plan does not accommodate the proposed add-on ○ Project Plan (Non-Commercial) ○ Production Plan ○ Updated management plans
Change of Ownership	<ul style="list-style-type: none"> ○ Business Plan (Commercial) if existing plan does not accommodate the transition ○ Project Plan (Non-commercial) ○ Production Plan ○ Updated management plans

Part 2: Development/Production

1. Complete the areas that apply to the proposed operation. Label the equipment on site layout diagrams.

Incubation units:

Number _____ Egg Total _____

Larval Tanks:
Number _____ Total Water Capacity _____

Tanks:
Number _____ Total Water Capacity _____

Raceways:
Number _____ Total Water Capacity _____

Phytoplankton Tanks:
Number _____ Total Water Capacity _____

2. From start-up to full operation, please indicate in Table 2 the:
- a) estimated year and month the animals will be stocked;
 - b) animal stage to be stocked (eggs, larvae, or juveniles);
 - c) number to be stocked;
 - d) estimated growth period in months;
 - e) average final weight;
 - f) expected losses over the growth period; and
 - g) expected production at the end of the growth period.

Table 2

Year/Month	Animal Stage	Stocking Number	Growth Period (months)	Average Final Weight (kg)	Expected Losses (%)	Expected Production (kg)

3. Schedule of Production:

Month and Year the starting stock will be introduced _____

Month and Year the facility will be in full production _____

Amount of production at full capacity _____ kilograms

4. In Table 3, provide the range of biomass on site within the following five calendar years.

Table 3

Year	Biomass (kg)	
	Minimum	Maximum

Note: Minimum biomass is usually the amount of product at the facility immediately after shipment of production. Maximum biomass is usually the amount of product at the facility just before shipment of production starts.

5. In Table 4, provide the feed schedule for the entire growth cycle. Include planned amounts to be used.

Table 4

Year/Month	Species Biomass (kg)	Monthly Feed Amount (kg)

6. Indicate the type of feed to be used. _____
7. Indicate if automatic feeders will be used. Yes No
8. Indicate if a feed-fine recovery system will be used. Yes No
9. Silage or other feed manufacturing proposed. _____

10. Describe the disposal methods for solid waste (e.g. mortalities, feed bags, etc.).

Part 3: Site Suitability

1. Describe any fishing activities (e.g., commercial, Indigenous, or recreational fisheries), tourism operations, cabins, recreational activities (e.g., boating, diving, water skiing, swimming, etc.) or industrial facilities, and water uses that are located within a 2km radius of the site lease boundary. Provide information on the activities time(s) of operation and proximity to the site.

2. Identify potential impacts other resource users may have on the proposed development, if applicable. Include the measures to be established to minimize potential interactions and possible negative impacts by other resource users.

3. Identify any potential impacts the proposed operation will have on other resource users during the development phase of the project and while it is in operation, if applicable. Provide details on the measures to be established to minimize the impacts.

Complete either Section A if the proposed operation will use seawater or Section B if the proposed operation will use freshwater.

Identify source body of water, intake and discharge lines, and other relevant details on site layout diagrams.

Section A: Site / Water Suitability for Seawater Operation

1. Name the source body of water. _____

2. Does the water source have a disease profile? Yes No

a) If yes, identify the source of information.

3. Indicate if the facility will be a flow-through system. Yes No

a) If no, please provide details on recirculating facility.

4. Describe filtration disinfection system to be used, if applicable.

5. Indicate the intake rate: _____ litres/day

6. Indicate the maximum and minimum depth of intake:

a) Maximum _____ metres

b) Minimum _____ metres

7. Indicate the depth of discharge: _____ metres

8. Indicate the distance from discharge to intake: _____ metres

9. Indicate the discharge rate: _____ litres/day
10. Indicate the intake and/or outlet grid size: _____
11. Indicate the distance from discharge to nearest aquaculture facility.
_____ kilometers
12. Describe the wastewater treatment method.

13. Indicate if the water quality parameters fall within the water quality requirements for the proposed species? Yes No
- a) If no, indicate how the water quality parameters will be brought within accepted requirements for the species?

Section B: Site / Water Suitability for Freshwater Operation

1. Indicate the water supply type: Municipal Private
- a) If municipal, indicate if the following:
- i. Supplied by lake, stream, dug well, drilled well, or flowing spring: _____
 - ii. Pumped or gravity flow: _____
 - iii. Name of the source body of water: _____
- b) If private, indicate the following:
- i. Supplied by lake, stream, dug well, drilled well or flowing spring: _____
 - ii. Pumped or gravity flow: _____
 - iii. Name of the source body of water: _____

2. If private water supply, does the water source have a disease profile? Yes No

a) If yes, identify the source of information.

3. Indicate if the facility will be a flow-through system. Yes No

b) If no, please provide details on recirculating facility.

4. Describe filtration disinfection system to be used, if applicable.

5. Indicate the intake rate: _____ litres/day

6. If using surface water, indicate the maximum and minimum depth of intake:

a) Maximum _____ metres

b) Minimum _____ metres

7. Identify where the water will be discharged to:

lake

stream

municipal sewer

onsite waste disposal system

other (please describe): _____

8. If discharging to a water body, provide the following:

a. Name of the water body: _____

b. Depth of discharge: _____ metres

9. Indicate the discharge rate: _____ litres/day

10. Indicate the intake and/or outlet grid size: _____

11. Indicate the distance from discharge to the nearest aquaculture facility.
_____ kilometers

12. Does the water source provide for future expansion? Yes No

13. Determine the seasonal levels of the following water quality parameters.

Parameter (mg/l = ppm)	Spring	Summer	Fall	Winter
Dissolved oxygen (mg/l)				
Carbon dioxide (mg/l)				
Total alkalinity (mg/l)				
Hardness (as calcium carbonate) (mg/l)				
Dissolved Reactive phosphorous (mg/l)				
Ammonia (mg/l)				
Nitrate (mg/l)				
Nitrite (mg/l)				
Copper (mg/l)				
Zinc (mg/l)				
Iron				
Total suspended solids				
pH				
Hydrogen Sulphide (mg/l)				
Temperature(°C)				

14. Describe the wastewater treatment method.

15. Indicate if the water quality parameters fall within the water quality requirements for the proposed species? Yes No

b) If no, indicate how the water quality parameters will be brought within accepted requirements for the species?

16. Identify an alternative water source if the primary source fails.

17. Indicate the provision(s) for aeration and/or denitrification?

Part 4: Economic Development

1. Provide an overview of the benefits of the proposed development to the Province. Include the socio-economic benefits, supply and service opportunities, potential direct and indirect spin-off industries and other relevant information that demonstrates the impacts and scale of benefits. For this response, include direct and indirect employment creation and targets/commitments that must be accessible and inclusive of all genders, Indigenous peoples, persons with disabilities, visible minorities, and youth. Please identify if employment expertise availability is local and/or national/international.

2. In Table 5, identify direct and indirect employment creation that will result from the proposed development for the next three years. Identify duration of employment and if possible, provide the types of positions (e.g. managerial, supervisory, technical, administration, etc.).

Table 5

Year	Number of Employees			Type of Position
	Full Time	Part Time	Seasonal	

3. Indicate if the required labour supply and level of skill is available to operate the proposed development. Explain how this has been determined.

4. In the event the required skill-set is not available within the labour supply, describe any training plan and/or other measures to be established to address.

Schedule D: Fish-out Pond Operations

Part 1: Plans and Reporting

As part of a complete application package, various plans and reports are required to be included with a proposal. Table 1 identifies the plans and reports applicants are required to provide depending on the type of development. Applicants are encouraged to consult an Aquaculture Development Officer when preparing application packages.

Table 1

Type of Development	Plans and Reports Required
New/Site Boundary Amendment	<ul style="list-style-type: none"> ○ Baseline Survey Report ○ Business Plan (Commercial) ○ Consultation Report ○ Environmental and Waste Management Plan ○ Incident Management System Plan ○ Production Plan ○ Project Plan (Non-Commercial)
Species Add-on	<ul style="list-style-type: none"> ○ Business Plan (Commercial) if existing plan does not accommodate the proposed add-on, ○ Production Plan ○ Project Plan (Non-Commercial) ○ Updated management plans
Change of Ownership	<ul style="list-style-type: none"> ○ Business Plan (Commercial) if existing plan does not accommodate the transition, ○ Production Plan ○ Project Plan (Non-Commercial) ○ Updated management plans

Part 2: Development / Production Plan

1. List the overall dimensions of all planned structures and their completion times in Table 2 (see example below).

Table 2

Description	Number	Dimensions (m) L x W x D	Volume (m ³)	Completion Date

Fish-out Pond	1	20 m x 10 m x 2 m	2100 m ³	May 2021
Fish-out Pond	1	40 m x 15 m x 3 m	1800 m ³	June 2021
Canteen/Takeout	1	10 m x 5 m	50 m ²	July 2021

2. For anticipated full operation, indicate in Table 3:
 - a) the estimated year and month stock will be introduced;
 - b) the expected number of fish to be stocked;
 - c) the growth period;
 - d) the average individual fish weight at the start and when fish are ready to be sold;
 - e) the expected losses over growth period; and
 - f) the final production quantity at the end of growth period.

Table 3

Year/ Month	Stocking Number	Grow-out Period (months)	Avg. Start Weight (kg)	Avg. Final Weight (kg)	Expected Losses (%)	Expected Production (kg)
Example 09/21	5000	100 grams	400 grams	18 months	10%	

- In Table 4, provide the feed schedule for the entire growth cycle. Include planned amounts to be used.

Table 4

Year/Month	Species Biomass (kg)	Monthly Feed Amount (kg)

- What is the annual feed consumption? _____ kg
- Specify the type of feed to be used (e.g. moist, dry, silage based, other).

- Describe the method of feed administration (e.g. by hand, auto feeders, etc.).

- Describe, in detail, the methods that will be adopted to minimize excess feed such as the use of feed tables, calculations to optimize feed use, the use of one feed form over another, feed cameras or other electronic feedback systems (including frequency of monitoring), pellet size, etc.

- Indicate the expected maximum stocking density. _____ kg/m³

Part 3: Site Suitability

If the proposed development is a species add-on or Change of Ownership, please continue to Part 3 of the application

Section A: Site Information

1. Is the pond natural or man-made? _____

2. Indicate if site assessments have been done to demonstrate site suitability.
Yes No

a) If yes, please list the reports (e.g. site suitability studies, profiling, environmental data collection, etc.) and ensure they are included in the application package:

3. Name the source of water. _____

4. Is the proposed pond gravity fed? Yes No

5. Is the proposed pond spring fed? Yes No

6. Will water be diverted from an existing source? Yes No

7. Does this source of water flow year round? Yes No

8. Indicate the minimum litres/minute of water source.

Spring _____ litres/minute Summer _____ litres/minute

Fall _____ litres/minute Winter _____ litres/minute

9. Does the water source have a disease profile? Yes No

If yes, identify the source of information. _____

10. Intake grid size (if applicable): _____

Note: Department of Fisheries and Oceans Canada may require installation of intake and outlet screens.

11. Water will be discharged to:

- lake stream
 municipal sewer on site waste disposal system
 other, please describe _____

12. Indicate the name of receiving water body. _____

13. Indicate the discharge volume. _____ litres/day

14. Provide the outlet grid size. _____

Section B: Water Quality

1. Determine the seasonal levels of the following parameters:

Parameters Values	Spring	Summer	Fall	Winter
Dissolved Oxygen (mg/l)				
Total Alkalinity (mg/l)				
Hardness (as Calcium Carbonate) (mg/l)				
Ammonia (mg/l)				
pH				
Temperature (°C)				

2. Does the water source provide for future expansion? Yes No

3. Dimensions of pond:

- a) Overall area of pond: _____ hectares.
b) Average depth of pond: _____ metres.
c) Maximum depth of pond: _____ metres.

4. Indicate if the water quality parameters fall within the water quality requirements of the species to be held. Yes No

a) If no, how do you propose to bring water quality parameters within accepted requirements for the species?

5. What provision has been made for aeration?

6. Describe any fishing activities (e.g., commercial, Indigenous, or recreational fisheries), tourism operations, cabins, recreational activities (e.g., boating, diving, water skiing, swimming, etc.) or industrial facilities, and water uses that are located within a 2km radius of the site lease boundary. Provide information on the activities time(s) of operation and proximity to the site.

7. Identify potential impacts other resource users may have on the proposed development, if applicable. Include the measures to be established to minimize potential interactions and possible negative impacts by other resource users.

8. Identify any potential impacts the proposed operation will have on other resource users during the development phase of the project and while it is in operation, if applicable. Provide details on the measures to be established to minimize the impacts.

Part 3: Economic Development

1. Provide an overview of the benefits of the proposed development to the Province. Include the socio-economic benefits, supply and service opportunities, potential direct and indirect spin-off industries and other relevant information that demonstrates the impacts and scale of benefits. For this response, include direct and indirect employment creation and targets/commitments that must be accessible and inclusive of all genders, Indigenous peoples, persons with disabilities, visible minorities, and youth. Please identify if employment expertise availability is local and/or national/international.

2. In Table 5, identify direct and indirect employment creation that will result from the proposed development for the next three years. Identify duration of employment and if possible, provide the types of positions (e.g. managerial, supervisory, technical, administration, etc.).

Table 5

Year	Number of Employees			Type of Position
	Full Time	Part Time	Seasonal	

3. Indicate if the required labour supply and level of skill is available to operate the proposed development. Explain how this has been determined.

4. In the event the required skill-set is not available within the labour supply, describe any training plan and/or other measures to be established to address.

Schedule E: Cod Operations

Part 1: Plans and Reporting

As part of a complete application package, various plans and reports are required to be included with a proposal. Table 1 identifies the plans and reports that applicants are required to provide depending on the type of development. Applicants are encouraged to consult an Aquaculture Development Officer when preparing application packages.

Table 1

Type of Development	Plans and Reports Required
New/Site Boundary Amendment	<ul style="list-style-type: none"> ○ Baseline Survey Report ○ Business Plan (Commercial) ○ Consultation Report ○ Environmental and Waste Management Plan ○ Incident Management System Plan ○ Production Plan ○ Project Plan (Non-Commercial)
Species Add-on	<ul style="list-style-type: none"> ○ Business Plan (Commercial) if existing plan does not accommodate the proposed add-on, ○ Production Plan ○ Project Plan (Non-Commercial) ○ Updated management plans
Change of Ownership	<ul style="list-style-type: none"> ○ Business Plan (Commercial) if existing plan does not accommodate the transition, ○ Production Plan ○ Project Plan (Non-Commercial) ○ Updated management plans

Part 2: Development / Production Plan

In Table 2, record the following information:

1. From start-up to full operation, in Table 2 indicate:
 - a) the estimated month and year stock will be introduced;
 - b) the expected number of animals to be stocked;
 - c) the growth period;
 - d) the average individual fish weight at the start and the end of growth;
 - e) the expected losses over growth period; and
 - f) the final production quantity at the end of growth period.

Table 2

Year/ Month	Stocking Number	Growth Period (months)	Avg. Start Weight (kg)	Avg. Final Weight (kg)	Expected Losses (%)	Expected Production (kg)

Example

2021/05	1,000,000	28	0.25 kg	5.95 kg	10%	5,652,500 kg
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1. Fisheries Identification Number (where applicable): _____
2. Indicate the expected maximum stocking (rearing) density. _____ kg/m³
3. Indicate if broodstock will be reared. Yes No
 - a) If yes, state approximate number and weight: _____ kg
 - b) If broodstock are stripped, where will egg incubation occur? _____
4. In what year do you anticipate to reach peak production. _____
5. Indicate anticipated harvest for this site at peak production. _____ kg
6. In Table 3, indicate the number and type of net cages proposed for each year.

Table 3

Year/Month	Type of Cage and Mesh Size	Net Length (m)	Number of Cages	Holding Capacity (m³)

Example

2021/05	140 m HDPE Circular Cages 36 mm HDPE 3.1 mm	20	10	390,000 m ³
---------	--	----	----	------------------------

7. Specify the type of feed to be used (e.g. moist, dry, silage based, other).

8. Describe the method of feed administration (e.g. by hand, auto feeders, etc.).

9. In Table 4, provide the feed schedule for the entire growth cycle. Include planned amounts to be used.

Table 4

Year/Month	Species Biomass (kg)	Monthly Feed Amount (kg)

10. What is the annual feed consumption? _____ kg
11. Describe in detail, the methods that will be adopted to minimize excess feed such as the use of feed tables, calculations to optimize feed use, the use of one feed form over another, feed cameras or other electronic feedback systems (including frequency of monitoring), pellet size, etc.
-
-
-
-

Part 3: Site Suitability

If the proposed development is a species add-on or a Change of Ownership proposal, please continue to Part 4 of the application.

1. Indicate if site assessments have been completed to demonstrate site suitability.
 Yes No
- a) If yes, please list the reports (e.g. site suitability studies, profiling, environmental data collection, etc.) and ensure they are included in the application package.
-
-
-
-
3. Describe any fishing activities (e.g. commercial, Indigenous or recreational fisheries), tourism operations, cabins, recreational activities (e.g. boating, diving, water skiing, swimming, etc.) or industrial facilities, and water uses that are located within a 2km radius of the site lease boundary. Provide information on the activities time(s) of operation and proximity to the site.
-
-
-
-

4. Identify potential impacts other resource users may have on the proposed development, if applicable. Include the measures to be established to minimize potential interactions and possible negative impacts by other resource users.

5. Identify any potential impacts the proposed operation will have on other resource users during the development phase of the project and while it is in operation, if applicable. Provide details on the measures to be established to minimize the impacts.

6. Identify the minimum water depth below the bottom of the net cages at low tide. _____metres. Include this depth on a cross-sectional drawing of the site.

7. Exposure to wind and waves:

a) Maximum fetch: _____ km Direction: _____.

b) Prevailing wind direction:

Spring _____ Summer _____ Fall _____ Winter _____

c) Maximum wave height _____ meters

Part 4: Economic Development

1. Provide an overview of the benefits of the proposed development to the Province. Include the socio-economic benefits, supply and service opportunities, potential direct and indirect spin-off industries and other relevant information that demonstrates the impacts and scale of benefits. For this response, include direct and indirect employment creation and targets/commitments that must be accessible and inclusive of all genders, Indigenous peoples, persons with disabilities, visible minorities, and youth. Please identify if employment expertise availability is local and/or national/international.

2. In Table 5, identify direct and indirect employment creation that will result from the proposed development for the next three years. Identify duration of employment and if possible, provide the types of positions (e.g. managerial, supervisory, technical, administration, etc.).

Table 5

Year	Number of Employees			Type of Position
	Full Time	Part Time	Seasonal	

3. Indicate if the required labour supply and level of skill is available to operate the proposed development. Explain how this has been determined.

4. In the event the required skill-set is not available within the labour supply, describe any training plan and/or other measures to be established to address.

Schedule F: Cleanerfish Species Add-on

Part 1: Plans and Reporting

As part of a complete application package, various plans and reports are required to be included with a proposal. Table 1 identifies the plans and reports applicants are required to provide for the Cleanerfish Species Add-on. Applicants are encouraged to consult an Aquaculture Development Officer when preparing application packages.

Table 1

Type of Development	Plans and Reports Required
Species Add-on	<ul style="list-style-type: none"> ○ Business Plan (Commercial) if existing plan does not accommodate the proposed add-on ○ Production Plan ○ Project Plan (Non-Commercial) ○ Updated management plans

Part 2: Development/Production

1. In Table 2, record the following information:

- a) the estimated month and year stock will be introduced;
- b) the expected number of cleanerfish to be stocked;
- c) the growth period;
- d) the average individual fish weight at the start and the end of growth period;
- e) the expected losses over growth period; and
- f) the final production quantity at the end of the growth period.

Table 2

Year/ Month	Stocking Number	Growth Period (months)	Avg. Start Weight (kg)	Average Final Weight (kg)	Expected Losses (%)	Expected Production (kg)

2. Expected maximum stocking (rearing) density: _____ kg/m³

3. State the targeted ratio of cleanerfish to salmon: _____

4. Specify the type of feed to be used (i.e. moist, dry, silage based, other).

5. In Table 3, provide the feed schedule for the entire growth cycle. Include planned amounts to be used.

Table 3

Year/Month	Species Biomass (kg)	Monthly Feed Amount (kg)

6. Provide the annual feed consumption: _____ kg

7. Describe the method of feed administration (e.g. by hand, auto feeders, etc.).

8. Describe in detail, the methods that will be adopted to minimize excess feed such as the use of feed tables, calculations to optimize feed usage, the use of one feed form over another, feed cameras or other electronic feedback systems (including frequency of monitoring), pellet size, etc.

Part 3: Site Suitability

- 1. Provide details regarding the environmental conditions onsite appropriate for, and conducive to, utilizing the proposed species.

- 2. On an annual basis, indicate the anticipated additional waste in tonnes resulting from the introduction of the proposed cleanerfish (BOD as well as mortality).

- 3. Provide details regarding methods to promote fish welfare for any cage containment system modification that may be required for the proposed cleanerfish species (e.g. hides).

- 4. Provide details regarding any additional onsite operational procedures specific to cleanerfish.

- 5. Indicate how the cleanerfish stock performance will be monitored and evaluated.

6. If applicable, provide details regarding the potential risks to the site by the introduction of cleanerfish.

7. What will be the end use/destination of the cleanerfish once the site is to be harvested? If the cleanerfish are destined to be slaughtered along with the harvest, how will they be humanely euthanized?

Schedule G: Closed/Semi-Closed Containment System

Part 1: Plans and Reporting

As part of a complete application package, various plans and reports are required to be included with a proposal. Table 1 identifies the plans and reports that applicants are required to provide depending on the type of development. Applicants are encouraged to consult an Aquaculture Development Officer when preparing application packages.

Table 1

Type of Development	Plans and Reports Required
New/Site Boundary Amendment	<ul style="list-style-type: none"> ○ Baseline Survey Report ○ Business Plan (Commercial) ○ Consultation Report ○ Environmental and Waste Management Plan ○ Fish Health Management Plan (includes Biosecurity and Integrated Pest Management Plan) ○ Incident Management System Plan ○ Production Plan ○ Site Restoration Plan ○ Project Plan (Non-Commercial)
Species Add-on	<ul style="list-style-type: none"> ○ Business Plan (Commercial) if existing plan does not accommodate the proposed add-on ○ Project Plan (Non-Commercial) ○ Production Plan ○ Updated management plans
Change of Ownership	<ul style="list-style-type: none"> ○ Business Plan (Commercial) if existing plan does not accommodate the transition ○ Project Plan (Non-Commercial) ○ Production Plan ○ Updated management plans

Part 2: Technology Information

1. Type of technology to be used: _____
2. Manufacturer of technology: _____

3. Indicate the maximum stocking density for the proposed technology as specified by the manufacturer. _____ kg/m³
4. Is the containment system closed or semi-enclosed? _____
5. Indicate if proposed technology been used for this purpose before. Yes No
a) If yes, indicate the jurisdiction in which the technology has been used and provide details regarding the scale of the operation and the species cultured.

6. Provide the dimensions of the containment system.

7. Indicate if the proposed technology will occupy the entire site or a portion of the site. Provide system deployment details and indicate the layout on site drawings.

8. Describe the mooring system required for the proposed technology.

9. Will onshore power be required in order to operate this technology? Yes No
 a) If yes, a separate Crown Lands Lease Application will be required if the land intended to be used is crown land.
10. Is this a fully automated / remote operated system? Yes No
 a) If yes, does it require internet access to troubleshoot? Yes No
 b) What is the required bandwidth and is it available at the site location?
-
- c) If necessary, can the system be operated manually? Yes No

Part 3: Development / Production Plan

1. From start-up to full operation, use Table 2 to record the following information as it relates to the cultivation of the species using the proposed technology:
- a) estimated month and year stock will be introduced;
 - b) the expected number of smolts/fingerlings/fry to be stocked;
 - c) the growth period;
 - d) the average individual fish weight at the start and the end of growth;
 - e) expected losses over growth period; and
 - f) the final production quantity at the end of growth period.

Table 2

Year/ Month	Stocking Number	Growth Period (months)	Avg. Start Weight (kg)	Avg. Final Weight (kg)	Expected Losses (%)	Expected Production (kg)

Example

2021/05	1,000,000	28	0.25 kg	5.95 kg	10%	5,652,500 kg
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2. Indicate the expected maximum stocking (rearing) density. _____ kg/m³
3. If applicable, will the proposed technology be used during regular stocking at the site or during the fallow period as prescribed by the Bay Management Areas Agreement?

4. Specify the type of feed to be used (e.g. moist, dry, silage based, other).

5. Describe the method of feed administration.

6. In Table 3, provide the feed schedule for the entire growth cycle. Include planned amounts to be used.

Table 3

Year/Month	Species Biomass (kg)	Monthly Feed Amount (kg)

7. What is the annual feed consumption? _____ kg
8. Describe in detail, the methods that will be adopted to minimize excess feed such as the use of feed tables, calculations to optimize feed use, the use of one feed form over another, feed cameras or other electronic feedback systems (including frequency of monitoring), pellet size, etc.

Part 4: Site Suitability

1. Describe any fishing activities (e.g. commercial, Indigenous or recreational fisheries), tourism operations, cabins, recreational activities (e.g. boating, diving, water skiing, swimming, etc.) or industrial facilities, and water uses that are located within a 2km radius of the site lease boundary. Provide information on the activities time(s) of operation and proximity to the site.

2. Identify potential impacts other resource users may have on the proposed development, if applicable. Include the measures to be established to minimize potential interactions and possible negative impacts by other resource users.

3. Identify any potential impacts the proposed operation will have on other resource users during the development phase of the project and while it is in operation, if applicable. Provide details on the measures to be established to minimize the impacts.

4. If applying for a saltwater operation, provide temperature and salinity at the indicated depths in Table 4.

Table 4

Depth (m)	Spring		Summer		Fall		Winter	
	Temp (°C)	Salinity (ppt)	Temp (°C)	Salinity (ppt)	Temp (°C)	Salinity (ppt)	Temp (°C)	Salinity (ppt)
0								
1								
2								
3								
4								
5								
10								
Bottom less 1 metre								

5. If applying for a freshwater operation, provide the following water quality parameters in Table 5 at a depth of one meter.

Table 5

Parameters Values	Spring	Summer	Fall	Winter
Dissolved Oxygen (mg/l)				
Total Alkalinity (mg/l)				
Hardness (as Calcium Carbonate) (mg/l)				
Ammonia (mg/l)				
pH				
Temperature (°C)				

6. Identify the minimum water depth below the bottom of the containment system at low tide: _____metres. Include this depth on a cross-sectional drawing of the site.
7. Identify the depth of water required for intake. _____metres
8. Identify the estimated water flushing/turnaround time for the containment system.

9. Exposure to wind and waves:
 - a) Maximum fetch: _____ kilometers Direction: _____.
 - b) Prevailing wind direction:
Spring _____ Summer _____ Fall _____ Winter _____
 - c) Maximum wave height: _____ meters.
10. Indicate the prevailing storm wind direction. Label this wind on a map.

11. Provide details on the ability of the proposed technology to withstand the conditions described above. Identify measures to mitigate potential impacts that may result from weather conditions.

Part 5: Sustainability of Wild Salmon

1. Provide on a map the location of wild salmon rivers in the region and their proximity to the proposed operation.
2. Provide details regarding measures to be established to support sustainability of wild salmon (e.g. containment measures, traceability, conservation efforts, etc.) within the vicinity of the proposed operation.

3. Provide details regarding any salmon recovery or restoration efforts that are planned or established in the region of operation and how the proposed operation may interact with these efforts.

Part 6: Economic Development

1. Provide an overview of the benefits of the proposed development to the Province. Include the socio-economic benefits, supply and service opportunities, potential direct and indirect spin-off industries and other relevant information that demonstrates the impacts and scale of benefits. For this response, include direct and indirect employment creation and targets/commitments that must be accessible and inclusive of all genders, Indigenous peoples, persons with disabilities, visible minorities, and youth. Please identify if employment expertise availability is local and/or national/international.

2. In Table 6, identify direct and indirect employment creation that will result from the proposed development for the next three years. Identify duration of employment and if possible, provide the types of positions (e.g. managerial, supervisory, technical, administration, etc.).

Table 6

Year	Number of Employees			Type of Position
	Full Time	Part Time	Seasonal	

3. Indicate if the required labour supply and level of skill is available to operate the proposed development. Explain how this has been determined.

4. In the event the required skill-set is not available within the labour supply, describe any training plan and/or other measures to be established to address.

APPENDIX 3
Consultation Report

Consultation Report

Aquaculture licence applicants are required to conduct consultations with other resource users that may be impacted by the proposed development. Submission of a Consultation Report is a required component as part of an aquaculture licence application package for new or site boundary amendment proposals. Include in the application a Consultation Report that provides the following information:

- Name of the organization consulted: include names of those members.
 - Names of individuals consulted and the sector they represent.
 - Method of communication (i.e. Town Hall meeting, in-person meeting, telephone call, etc.)
 - If a meeting was conducted, provide the location of meeting(s) that were held.
 - Date(s) of communication.
 - Overview of the concerns raised and how the applicant will mitigate.
 - Details of discussions including any compromise or adjustments made as a result of the consultation.
 - Any other information that may be relevant to the application.
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APPENDIX 4
Fee Schedule

Aquaculture Licensing Fee Schedule

Activity	Name of Fee	Agency Responsible	Fee
New Licence Application Fees			
	Aquaculture Licence Application Fee - Finfish	FFA	\$145/hectare
	Aquaculture Licence Application Fee - Finfish Other	FFA	\$1,000
	Aquaculture Licence Application Fee – Shellfish	FFA	\$500
	Crown Lands Application Fee	FFA	\$150 (+HST)
	*Water Use Licence	ECC	\$400 (+HST)
	Title Document Preparation for Crown Lands Lease fee	FFA	\$300
Change of Ownership Fees			
	Aquaculture Licence Application Fee - Finfish	FFA	\$145/hectare
	Aquaculture Licence Application Fee - Finfish Other	FFA	\$1,000
	Aquaculture Licence Application Fee – Shellfish	FFA	\$500
	Crown Lands Notice of Assignment Fee	FFA	\$200
	*Water Use Licence	ECC	\$400 (+HST)
Annual Licence Fees			
	Finfish	FFA	\$145/hectare
	Finfish Other	FFA	\$1,000
	Shellfish	FFA	\$500
	Crown Lands Annual Rental Fee	FFA	\$8/hectare
	*Water Use Charge (Marine)	ECC	\$1,000
	*Water Use Charge (Freshwater)	ECC	\$10,000
	*Water Use Charge (\$5 per 1,000 m ³ licensed and used plus \$0.50 per 1,000 m ³ licensed but not used)	ECC	
Species Add-on Fees			
	Species Add-on fee – Finfish	FFA	\$1,000
	Species Add-on fee - Shellfish	FFA	\$500
Site Boundary Amendment Fees	Refer to New Licence Application Fees		

***Water Use Licence and Water Use Charge Fees do not apply to shellfish aquaculture.**

Other provincial and federal costs that may be associated with aquaculture are not included.

FFA – Fisheries, Forestry and Agriculture
ECC – Environment and Climate Change

December 9, 2021