

Guide for Marine Aquaculture Renewal, Administrative Amendment or Assignment Development Plans

INTRODUCTION

Purpose of this guide

The Nova Scotia Department of Fisheries and Aquaculture (the Department) has prepared this guide as a reference for proponents preparing a Development Plan for a marine aquaculture licence and/or lease renewal, amendment, or assignment for finfish, shellfish and/or marine plants that does not require an adjudicative process.

The Development Plan fulfills part of the requirements for an application for a marine aquaculture licence and/or lease renewal, amendment, or assignment. A completed application must consist of a Development Plan, and a Renewal/Amendment/Assignment Application Form. The Application Form is available at the Department's website www.novascotia.ca/fish/aquaculture/

Before preparing a Development Plan for an amendment, proponents should first complete a meeting with Department staff to discuss the extent of scoping required for the request. If scoping is required, a Report on Public Engagement during Scoping must accompany the Application Form and Development Plan.

This guide is not a substitute for the Fisheries and Coastal Resources Act or regulations. Proponents should obtain copies of the Act and regulations for their reference (Appendix A). Where the process and time frames given in this document differ from the regulations, the regulations shall prevail.

Updated versions of this guide will be available on the Aquaculture Division website www.novascotia.ca/fish/aquaculture/

Background

This Development Plan is required for marine aquaculture licence or lease requests that can be fulfilled by the Administrator according to the Aquaculture Licence and Lease Regulations for Nova Scotia made under Section 64, Chapter 25 of the Acts of 1996, *the Fisheries and Coastal Resources Act*.

This Development Plan is required for the following requests:

- an amendment of a marine aquaculture licence or aquaculture lease that does NOT include boundary amendments if the change results in an increase in site area, NOR the addition of finfish to an existing shellfish site*;
- a renewal of a marine aquaculture licence or aquaculture lease;
- an assignment of a marine aquaculture licence or aquaculture lease;

- a reallocation of a marine aquaculture site; and
- other processes deemed necessary by the Department.

*Proponents seeking an amendment that includes a boundary change that increases the site area, an amendment that includes the addition of finfish to an existing shellfish site, or those seeking to apply for a new marine site should contact the Department to determine the process for making their request.

The completed Development Plan submitted must provide information that will demonstrate if and how this request will address the eight factors to be considered in decisions related to marine aquaculture sites according to the licencing or leasing process of the Province of Nova Scotia. These are:

- (a) the optimum use of marine resources;
- (b) the contribution of the proposed operation to community and Provincial economic development;
- (c) fishery activities in the public waters surrounding the proposed aquacultural operation;
- (d) the oceanographic and biophysical characteristics of the public waters surrounding the proposed aquacultural operation;
- (e) the other users of the public waters surrounding the proposed aquacultural operation;
- (f) the public right of navigation;
- (g) the sustainability of wild salmon;
- (h) the number and productivity of other aquaculture sites in the public waters surrounding the proposed aquacultural operation.

The Development Plan will also provide information for government network partners in order for them to fulfill their jurisdictional duties in advising the Department on the application. The network partners that will be contacted will depend on the nature of the request.

Information collection for the Development Plan

Information for completing the Development Plan should be acquired through whatever biological, ecological and social data collection and analysis the proponent deems necessary to acquire the requested information.

Submission format

In order to facilitate government review of submitted applications and to establish a standardized format for all applications, applicants must follow the submission format guidelines, as follows:

- All requested information, the minimum of which is the information as required in this document, is to be submitted to the Department in a durable format, such as a three-ring binder or spiral binding. An electronic copy must also be submitted.
- Each section of the Report must start on a new page and be labeled matching the sequence established in this guide.
- Each section of the Report must contain all information required for that section (including supporting information such as maps, diagrams, etc.).

Public notice and disclosure

As part of the process for deciding on an aquaculture application, the Nova Scotia Department of Fisheries and Aquaculture (“Fisheries and Aquaculture”) will disclose application information to other government bodies.

In accordance with departmental policy, which seeks to promote public involvement in the process for deciding on aquaculture applications, Fisheries and Aquaculture may disclose application information – not including, however, personal or business confidential information – on the departmental website.

Privacy statement

The personal and business confidential information collected as part of an aquaculture application will only be used or disclosed by Fisheries and Aquaculture for the purpose of deciding on the application.

All application information collected is subject to the Freedom of Information and Protection of Privacy Act (“FOIPOP”) and will only be used or disclosed in accordance with FOIPOP.

For more information

If you would like further information, please contact the Nova Scotia Department of Fisheries and Aquaculture, Aquaculture Division.

Phone: 902-875-7439

Fax: 902-875-7429

Email: aquaculture@novascotia.ca

Mail: 1575 Lake Road,
Shelburne, NS
B0T 1W0

REQUIRED DEVELOPMENT PLAN CONTENT

Minimum content requirements for a Development Plan for a request for a marine aquaculture licence and/or lease renewal, administrative amendment, or assignment are as follows. (See below.)

Since the assessment will examine changes since the last development plan was approved, information in addition to what is requested below may be required for clarification.

SECTION 1: THE OPTIMUM USE OF MARINE RESOURCES

Describe the application request. This should include a description of the original licence and the desired changes to the licence. The species, scale, technology used, and location should all be described. The reason for the request must also be provided.

In addition, using all the information collected, describe how fulfillment of this request will promote an optimum use of marine resources.

This section should be prepared last, after all of the other sections have been completed. It should be a cohesive look at the overall picture of the request, its overall effects, impacts, and benefits. The optimum use of marine resources is the over-riding theme of all of the other factors to be considered in decisions on marine aquaculture operations.

SECTION 2: THE CONTRIBUTION OF THE PROPOSED OPERATION TO COMMUNITY AND PROVINCIAL ECONOMIC DEVELOPMENT

2.1 Production plan

For requests that involve finfish, and for each species to be reared, describe the following, and indicate how/if the production plan information differs from what is currently practiced at the site.

- Species and strain (if applicable);
- Maximum site biomass (kg);
- Maximum cage density (kg/m³);
- Expected time to achieve maximum production;
- Size(s) of cages, including net volumes (m³);
- Maximum cage number, maximum total net volume (m³);
- Maximum number of fish per cage;
- Intended initial stocking date and seed source;
- Expected grow out period; and
- Expected fallow period.

This production plan information is understood to be based upon the information available at the time of the application. In future years, the actual numbers stocked may be higher or lower than the projections and will be determined by operational performance outcomes experienced at the site, including, but not limited to, environmental monitoring and fish

health. Other production plan requirements such as maximum cage numbers and fallow period will be similarly determined for future years.

For requests that involve shellfish and/or marine plants, and for each species to be reared describe the following, and indicate how/if the production plan information differs from what is currently practiced at the site:

- If using suspended method (include spat or seed collection, if applicable):
 - Species;
 - Gear unit type (socks, lanterns, trays, etc.), including dimensions of individual gear units, and if using socks, whether they will be single or continuous;
 - Maximum number of gear units;
 - Maximum number and lengths of lines;
 - For shellfish: maximum shellfish introduced (number or mass) and maximum shellfish on site (number or mass);
 - For plants: maximum biomass on site (mass);
 - Seed source; and
 - Expected time to achieve maximum production;

- If bottom culture with gear:
 - Species;
 - Gear unit type (bags, trays or cages), including dimensions of individual gear units ;
 - Maximum number of gear units;
 - Type and dimensions of frames used (including length, width ,depth and height off sea bed) (if applicable); and
 - Maximum number of frames (if applicable);
 - Maximum shellfish introduced (number or mass) and maximum shellfish on site (number or mass);
 - Seed source; and
 - Expected time to achieve maximum production.

- If bottom culture without gear:
 - Species;
 - Maximum shellfish on site (number or mass);
 - Seed source; and
 - Expected time to achieve maximum production.

This production plan information is understood to be based upon the information available at the time of the request. In future years, the actual amount of gear used, seed stocked and other production values may be higher or lower than the projections and will be determined by operational performance outcomes experienced at the site, including, but not limited to, environmental monitoring, shellfish health, and farm operations.

If depuration of shellfish is intended, you must obtain approval for your protocol from the Canadian Food Inspection Agency according to the Shellfish Sanitation Program (<http://www.inspection.gc.ca/food/fish-and-seafood/manuals/canadian-shellfish-sanitation->

program/eng/1351609988326/1351610579883?chap=12). Describe the status of this application, if applicable.

2.2 Infrastructure

Describe any infrastructure additions or changes required to support the request (e.g. buildings, wharves, transportation, onsite equipment, etc.). Include the location (s) of the existing or pending infrastructure to be changed.

2.3 Services and suppliers

Describe service and/or supplier additions or changes required to support the request, any change in the scale of the requirements on an annual basis, and where they will be sourced (i.e. from what region). Include feed, seed, processing, general supplies, and other relevant requirements that may contribute to local or provincial economic activity.

2.4 Employment

Describe the expected number of direct employees on a yearly basis over the next five years – both local and Provincial, if the request is fulfilled. Break down the allocation according to full time, part time, and seasonal employment. Include types of positions (managerial, technical, administrative, etc.) where possible. Explain how fulfillment of the request will increase employment or improve the security of employment.

2.5 Other economic contributions to the local community and Province

Describe any other economic spin offs and benefits to the operation if the request is fulfilled - in terms of contributions to the community and the Province.

2.6 Adverse economic impacts

If applicable, describe possible adverse impacts on the economic development of the community and the Province and how these will be mitigated.

SECTION 3: FISHERIES ACTIVITIES IN THE PUBLIC WATERS SURROUNDING THE PROPOSED AQUACULTURAL OPERATION

3.1 Impacts on fisheries activities

Identify possible changes to impacts on fisheries activities in the public waters surrounding the aquaculture operation (commercial, recreational, food, social and ceremonial) that may occur if the request is fulfilled. Include a description of what measures will be taken in the establishment and execution of the request that: reduce impacts, mitigate risks, and complement or benefit fisheries activities. All fisheries concerns raised during the scoping process (if applicable) should be addressed here.

SECTION 4: OCEANOGRAPHIC AND BIOPHYSICAL CHARACTERISTICS OF THE PUBLIC WATERS

4.1 Oceanographic environment

Describe any major events experienced by this site since its development due to oceanographic and biophysical characteristics of the site. (e.g. super-chill incidents, ice damage, storm damage, etc.).

For shellfish sites, state the location classification.

4.2 Environmental monitoring

Describe how fulfillment of the request may impact the benthic environment. Include what mitigation measures you will employ for expected adverse impacts.

4.3 Site design

Describe how the oceanographic and biophysical characteristics of the waters of the location have been accounted for in this request, including past major events described in 4.1. Aspects to be explained could include site configuration, site design, production plan and/or other relevant aspects of the development.

SECTION 5: THE OTHER USERS OF THE PUBLIC WATERS SURROUNDING THE PROPOSED AQUACULTURAL OPERATION

5.1 Impacts to other users including wildlife

Describe what aspects of the request may change how the operation affects other users of the public waters surrounding the site. Include how they may affect other users, and how you will minimize these effects during both the establishment and the execution of the request. Other users identified should include those in the area who may be affected by the request and may include:

- Adjacent property owners;
- Pleasure craft and commercial boat traffic;
- Anchorages and moorings;
- Processing plants (within 10 km);
- Campgrounds;
- Communities (including cottage communities);
- Municipal, industrial and agricultural users which may be sources of effluent;
- Tourism or recreational operations;
- Private and government wharves;
- First Nations territories/reserves;
- Any known or suspected pre-contact or historic archaeological resources;
- Important habitats and conservation areas;
- Other known potential projects (confirmed or proposed) and activities;
- Other users who are relevant to the area, if applicable.

Describe if/what aspects of the request may change how the operation affects wildlife identified in the region of the proposed operation. This should include migratory birds, marine mammals and other animals that inhabit or migrate through the area. Include how you will minimize negative effects during both the establishment and the execution of the request.

Describe if there has been any change in knowledge of local species at risk since the current licence/lease was approved. If yes, and a species at risk has been identified (http://www.registrelep-sararegistry.gc.ca/sar/index/default_e.cfm), permits are required for activities that may affect these species. (http://www.registrelep-sararegistry.gc.ca/sar/permit/permits_e.cfm#). Describe the status of this permit(s), if applicable.

Describe how fulfillment of the request may complement the other users, where applicable.

Concerns raised during the scoping process (if applicable and if not previously described) should be addressed here.

5.2 Impacts by other users including wildlife

If applicable, describe how other users may impact fulfillment of the request. Include how you will minimize interactions with and mitigate possible negative impacts by other users.

SECTION 6: THE PUBLIC RIGHT OF NAVIGATION

6.1 Navigation Protection Act (NPA) approval

The assurance of the public right of navigation is determined by Transport Canada through the Navigation Protection Act (<http://www.tc.gc.ca/eng/programs-673.html>). Changes or additions of, or to, any structure, device or thing—temporary or permanent—made by humans that is in, on, over, under, through or across any navigable water may require an approval under this Act. To determine whether an NPA approval is required, include the following within this section if a change to gear or configuration will be required for the request:

- A completed and signed “notice of works” form with all mandatory fields completed (https://www.tc.gc.ca/media/documents/marinesafety/Form-NOTICE_OF_WORKS_FORM.pdf)
- Location map (indicating the exact location of the work)
- Legal site description and work position (in latitude and longitude)
- Plan view drawings (top down) complete with all relevant dimensions
- Profile view drawings (side view) complete with all relevant dimensions
- Project description (detailing the project)
- Construction methodology (outlining how the work will be undertaken)
- Anticipated start and end dates

The Department will submit this information directly to Transport Canada to allow assessment of the work and initiate the application for an NPA approval, if required.

If no change in gear or configuration will be required for the request, provide the current NPA approval.

SECTION 7: THE SUSTAINABILITY OF WILD SALMON

7.1 Identification of local salmon populations

Identify any changes in the status of salmon run rivers in the region since the current licence/lease was approved. These should include designated salmon rivers within the DFO Designatable Unit. Salmon rivers and Designatable Units are to be defined based on the latest DFO Canadian Science Advisory Secretariat Science Response for the Maritimes Region: Status of Atlantic salmon in salmon fishing areas (SFAs) 19-21 and 23; and the latest DFO Canadian Science Advisory Secretariat Science Response for the Gulf Region: Update of stock status of Atlantic salmon (*Salmo salar*) in DFO Gulf Region (Salmon Fishing Areas 15 to 18) (<http://science-libraries.canada.ca/eng/fisheries-oceans/>). Describe the proximity of these rivers to the site (if applicable).

7.2 Support of the sustainability of wild salmon

Describe if fulfillment of this request will affect the sustainability of wild salmon. If yes, how? Will any measures be taken to support the sustainability of wild salmon?

Describe any salmon recovery or restoration efforts that are underway or planned in the region and how fulfillment of this request may interact with these efforts

SECTION 8: THE NUMBER AND PRODUCTIVITY OF OTHER AQUACULTURE SITES IN THE PUBLIC WATERS SURROUNDING THE PROPOSED AQUACULTURAL LOCATION

8.1 Interactions with other aquaculture operations

Describe if and how fulfilling this request will or may affect other existing or known proposed aquaculture sites in the area.

Provide the measures to be taken in the establishment and execution of the request that will mitigate risk or support any benefit to the aquaculture activities identified above (if applicable).

SECTION 9: DEVELOPMENT VIABILITY

9.1 Financial ability

Describe proof of financial viability of the request. This may include historical and projected financial resources for this development; historical Income Statements including revenues, expenses, and EBITDA for the past three years (if applicable) and one projected production cycle forward. This could also include strategic relationships that can assist with the viability of the proposed development; or other relevant information to demonstrate the financial ability to execute the proposed development.

Include a brief description of previous successes and failures of business ventures.

9.2 Technical ability

Describe changes or additions to the technical ability that will be required to ensure viability of the operation if the request is granted. Describe how these will be accommodated. This can include information on the applicant, management and technical team (if known) in terms of the following:

- Education;
- Business experience;
- Aquaculture experience;
- Other relevant information to demonstrate the human resource ability to execute the proposed request.

9.3 Compliance history

Describe your record of compliance in previous aquaculture operations or in other operations that required management and monitoring of environmental effects.

List any enforcement issues of the past and explain how they were resolved.

APPENDIX A

NOVA SCOTIA AQUACULTURE REGULATIONS

Fisheries and Coastal Resources Act S.N.S. 1996, c. 25:

<http://nslegislature.ca/legc/statutes/fisheries%20and%20coastal%20resources.pdf>

Aquaculture Management Regulations made under Section 64 of the *Fisheries and Coastal Resources Act*. S.N.S. 1996, c. 25 O.I.C. 2015-339 (October 26, 2015), N.S. Reg. 348/2015:

https://www.novascotia.ca/JUST/REGULATIONS/regs/fcraquamgmt.htm#TOC1_1

Aquaculture Licence and Lease Regulations made under Section 64 of the *Fisheries and Coastal Resources Act*. S.N.S. 1996, c. 25 O.I.C. 2015-338 (October 26, 2015), N.S. Reg. 347/2015:

<https://novascotia.ca/just/regulations/regs/fcraqualiclease.htm>

APPENDIX B

Additional Resources and Contact Information

Below is a list of reference websites or sources that the proponent may find helpful in gathering information relating to fisheries and wildlife:

- Nova Scotia Provincial Coastal Resources Coordinators (CRC): <https://www.novascotia.ca/fish/documents/crc-map.pdf>
- Fishermen & Scientists Research Society: www.fsrns.ca
- Nova Scotia Fisheries Sector Council: www.nsfsc.ca
- Fisheries and Oceans Canada: www.dfo-mpo.gc.ca
- Nova Scotia Salmon Association: www.nssalmon.ca
- Atlantic Salmon Federation: www.asf.ca
- Local salmon or angling associations
- SARA Registry: www.sararegistry.gc.ca
- Committee On the Status of Endangered Wildlife in Canada: www.cosewic.gc.ca
- Atlantic Canada Conservation Data Centre: www.accdc.com
- Atlas of Breeding Birds of the Maritime Provinces (1992): www.mba-aom.ca
- Important Bird Areas of Canada: www.ibacanada.com/
- Western Hemisphere Shorebird Reserve Network: www.whsrn.org/
- Wetlands of the Maritime Provinces: Revised Documentation for the Wetlands Inventory (1996): <http://publications.gc.ca/site/eng/65538/publication.html>
- Ducks Unlimited: www.ducks.ca
- RAMSAR Sites: www.ramsar.org/
- North American Waterfowl Management Plans: <http://nawmp.wetlandnetwork.ca/>
- Federal Policy on Wetland Conservation: <http://publications.gc.ca/site/eng/100725/publication.html>
- Environment Canada's Protected Areas Network: <https://www.ec.gc.ca/ap-pa/>
- Nature Conservancy of Canada: www.natureconservancy.ca
- Federation of Nova Scotia Naturalists: [www. http://naturens.ca/](http://naturens.ca/) Nova Scotia Nature Trust: www.nsnt.ca/
- Migratory Bird Regulations in Canada – July 2014: <https://www.ec.gc.ca/rcom-mbhr/default.asp?lang=En&n=F74028E2-1>
- Local naturalist groups
- Federal Science Library: <http://science-libraries.canada.ca/eng/fisheries-oceans/>
- Transport Canada Navigation Protection Program - Forms and Guidance Material: <https://www.tc.gc.ca/eng/programs-624.html>