

INTERIM GUIDE TO FISHERIES RESOURCE  
USE CONSIDERATIONS IN THE  
EVALUATION OF  
AQUACULTURE SITE APPLICATIONS

**Fisheries and Oceans Canada**

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This guide will be reviewed and updated on a regular basis to reflect recent research findings, changes in aquaculture technologies and practices, and new legislative and policy initiatives.

Feedback on the content and format are welcome. Please send any comments to:

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## 1.0 INTRODUCTION

The purpose of this document is to provide guidance to Fisheries Management officers on their roles and responsibilities, *with respect to consideration of fisheries resource use information*, when responding to requests for the review of site applications for aquaculture operations. Fisheries resource use considerations include potential impacts on socio-economics such as access an area for fishing and access to the fish in an area.

It is also intended to raise awareness of:

- the policy environment in which the Department is operating with respect to aquaculture and the potential impact on fisheries resource use; and
- the fisheries resource use-related information needed to inform the Department's review and assessment of aquaculture site applications.

It should be noted that when an aquaculture site application triggers an environmental assessment (EA) under the *Canadian Environmental Assessment Act*, potential impacts on fisheries resources, species at risk and other environmental areas, will be considered as part of the EA. Fisheries managers as well as Science Sector may have information to contribute to the EA, and should do so as part of the EA referral process. Where there is an impact on fisheries resource use, as a result of a change in the environment, the resource use impacts may also be considered under the EA (see Interim Guide to the Consideration of Socio-economic Effects under CEAA).

It should also be noted that where an aquaculture site application does NOT trigger an EA, fisheries management will still be contacted by DFO's Regional office in charge of the site referral process (generally the Regional Aquaculture Coordinator) to provide input into DFO's response to the site leasing authority.

## **2.0 AQUACULTURE POLICY CONTEXT**

The Government of Canada recognizes the significant societal benefits associated with aquaculture. As a result, it has made sustainable aquaculture development a key federal priority. As the lead federal agency for aquaculture development, Fisheries and Oceans Canada (DFO) is committed to creating policy conditions that increase both industry's competitiveness in global markets and the public's confidence that aquaculture is being developed in a sustainable manner.

### **2.1 DFO Aquaculture Policy Framework**

In October 2001, DFO adopted a new Aquaculture Policy Framework to guide internal decision making with respect to aquaculture. This policy framework: orients DFO around a common vision for aquaculture; drives the development of future departmental aquaculture policies and programs; guides the development of operational policies for the application of DFO's regulatory responsibilities in relation to aquaculture; informs any changes to DFO's legal and regulatory frameworks; and clearly conveys to other federal government departments, provincial and territorial governments, the aquaculture industry, and other stakeholders the framework within which DFO is committed to taking action.

DFO's vision for aquaculture development is to benefit Canadians through the culture of aquatic organisms, while advancing the ecological and social values associated with Canada's oceans and inland waters.

As the lead federal agency for aquaculture development, and consistent with its departmental mandate, DFO will initiate actions and discharge its responsibilities in a manner that adheres to the following policy commitments:

1. DFO will support aquaculture development in a manner that is consistent with its commitments to ecosystem-based and integrated management, as set out in departmental legislation, regulations and policies.
2. DFO will address issues of public concern in a fair and transparent manner, based on science and risk management approaches endorsed by the government of Canada.
3. DFO will communicate with, and be informed by the views of Canadians on issues pertaining to aquaculture development.
4. DFO will respect constitutionally protected Aboriginal and treaty rights and will work with interested and affected Aboriginal communities to facilitate their participation in aquaculture development.

5. Recognizing that aquaculture is a legitimate use of land, water and aquatic resources, DFO will work with provincial and territorial governments to provide aquaculturalists with predictable, equitable and timely access to the aquatic resource base.
6. DFO will ensure that its own legislative and regulatory frameworks enable the aquaculture sector to develop on an even footing with other sectors
7. In partnership with other federal departments, provinces and territories, the academic sector and industry, DFO will support the responsible development of the aquaculture sector.
8. DFO will make every effort to understand the needs of aquaculturists and to respond in a manner that is solutions-oriented and supportive of aquaculture development.
9. DFO will work with other federal departments and with provincial and territorial governments to coordinate policy development, integrate regulatory frameworks and improve service delivery.

Through this policy framework DFO has committed itself to be both an enabler and regulator of aquaculture development, affirming its role as a department of sustainable development. "Enabling," means improving the business climate for aquaculture development to benefit Canadians. DFO will do this by:

- ensuring that DFO's laws and regulations relating to aquaculture are clear, efficient, effective and consistently applied and relevant to the sector;
- investing in aquaculture science and R&D;
- working in partnership with provinces to develop a proactive siting process; and
- considering support for industry development programs consistent with DFO's mandate and objectives.

## **2.2 DFO's Aquaculture Action Plan**

In March 2000, DFO's Strategic Plan, identified Aquaculture as one of the four key policy renewal initiatives for the next 5 years. The Plan clearly identified two strategic departmental objectives for aquaculture. Through its policies and programs DFO is committed to:

- increasing public confidence in sustainable aquaculture development; and
- increasing the competitiveness of Canada's aquaculture industry in global markets.

In support of these strategic objectives, DFO has developed an Aquaculture Action Plan consisting of six core elements: the Program for Sustainable Aquaculture (\$15M per year); the development of an enabling policy and regulatory environment; increased federal-provincial harmonization; the development of responsive industrial development/support programs (e.g., a National Aquatic Animal Health Program) and increased internal and external communications initiatives.

***Bringing increased clarity, consistency and efficiency to the aquaculture site application process is an important element of implementing DFO's commitment to an "enabling regulatory environment". It is intended that the information and guidelines provided here will assist in meeting this objective.***



### 3.0 LEGAL CONTEXT

At the federal level, there are three statutes with their accompanying regulations that may impact on the decision whether an aquaculturist will secure aquatic space to establish a new enterprise and/or expand existing aquaculture operations – the *Fisheries Act* (FA), the *Navigable Waters Protection Act* (NWPA) and the *Canadian Environmental Assessment Act* (CEAA). These statutes deal with, among other things; the conservation and protection of fish and fish habitat, the protection of navigable waters to ensure safe navigation, and the assessment of potential adverse environmental effects associated with projects.

The federal Parliament has exclusive jurisdiction, under section 91(12) of the *Constitution Act, 1867*: Sea Coast and Inland Fisheries, over conservation and protection of all fisheries throughout Canada including non-tidal waters and tidal waters to the two hundred-mile limit. The federal Parliament has exclusive constitutional authority over all aspects of fisheries management in tidal waters. Provinces have no jurisdiction over fishing in tidal waters with the exception of fishing devices, such as kiddles and weirs, affixed to those soils that are vested in the Province between the low and high water mark.

In most provinces, the Provincial government acts as the leasing authority for aquaculture operations located in near-shore sea coast and inland waters in areas falling under their jurisdiction. The federal government has the power, under the Constitution and the enabling authorities in the *Fisheries Act*, to object, based on fisheries management concerns, to the issuance or expansion of a provincial lease where the area in question is located in tidal waters. Whether the Minister has the legal tools to effectively prevent or to require that his approval be obtained prior to the issuance of the lease depends on the wording in the applicable federal regulation. As a result of the existing regulatory regime, in most provinces, the Minister of Fisheries and Oceans has legal authority by virtue of the *Fisheries Act*, for fisheries management reasons, to be consulted on and to provide recommendations regarding the issuance or expansion of leases issued by Provinces. These recommendations and/or advice will be taken into account by the provincial leasing authority. Considering the wording in the relevant regulations, ***DFO's approval of the provincial lease, based on fisheries management considerations, in most cases, is not required.*** One exception is in Newfoundland where a federal approval is required for leases which deal with the growing of species other than Atlantic salmon

Where the federal government acts as the aquaculture leasing authority, (e.g., for operations located on federal property such as Port Authorities, National Parks, and for operations located offshore), federal permission would have to be issued to authorize aquaculture activities that have an impact on the public right to fish. In these cases, as the leasing authority, DFO will take into account fisheries management concerns in making the decision to issue or not a federal licence, or to grant a federal lease for a proposed aquaculture operation.

The Fisheries Management issues that will typically be considered in the context of an aquaculture application concern the potential impact of the aquaculture operation on wild fish, on commercial and recreational fisheries, on aboriginal fisheries, and on fish habitat.

A Legal Overview, outlining the legal basis for the role of fisheries management staff in assessing fishery management considerations in the context of aquaculture operations, has been prepared and is available to DFO staff for information purposes.

## 4.0 INFORMATION REQUIREMENTS

The information that Fisheries Management Sector may provide in order for the Department to make an informed recommendation to the Province on aquaculture site applications located on provincial property is summarized below.

Fisheries resource use considerations, for this Guide, include potential impacts on socio-economics such as access an area for fishing and access to the fish in an area. Information on fish stocks is required only to support resource use information.

When an aquaculture site application triggers an environmental assessment (EA) under the *Canadian Environmental Assessment Act*, potential impacts on fisheries resources, species at risk and other environmental areas, will be considered as part of the EA. Some, or all of the information listed below, may therefore be supplied by the proponent as part of the EAA. However, Fisheries managers as well as Science Sector may have additional information to contribute, and their input will be sought as part of the EA referral process. Where there is an impact on fisheries resource use, as a result of a change in the environment, the resource use impacts may also be considered under the EA (see Interim Guide to the Consideration of Socio-economic Effects under CEAA).

It should also be noted that where an aquaculture site application does NOT trigger an EA, fisheries management will still be contacted by DFO's Regional office in charge of the site referral process (generally the Regional Aquaculture Coordinator) to provide input into DFO's response to the site leasing authority.

A structured and detailed format for completion of the information for this Guide is provided in **Appendix A**.

**Note:** that many aquaculture site applications will require an Environmental Assessment under the *Canadian Environmental Assessment Act*. In these cases, some of the information below *may* provided by the proponent as part of the environmental assessment.

Information may be provided on the following areas:

### 1. The existence of wild stocks in the area under application, including:

- a) presence and status of wild fish stocks including species proposed for culture on the proposed tenure;
- b) percentage contribution to the annual Total Allowable Catch (TAC) of existing harvestable wild stock in the area under application; and
- c) species at risk.

**2. Primary stakeholder reliance on wild stocks in the area under application, including**

- a) number of commercially licensed fishers potentially displaced;
- b) frequency of wild harvest (i.e. # days/year);
- c) potential annual loss of commercially harvestable product (volume and whole sale value) and impact on processing plant workers; and
- d) recreational fisher impact.

**3. Potential impact on the department's management of commercial and recreational fisheries in and adjacent to the area under application, including**

- a) adjustments required to manage commercial fisheries in and adjacent to the area under application (i.e., relocation of support infrastructure such as fish packers, tenders, enforcement fleet, test fisheries, etc.); and
- b) potential impacts on the enforcement of harvest closures of areas managed under the Canadian Shellfish Sanitation Program (i.e., in the management of contaminated fisheries).

**4. Aboriginal Fisheries**, in consideration that the federal and provincial governments are required to act in a manner consistent with the constitutional protection provided to existing aboriginal and treaty rights by ss 35(1) of the *Constitution Act*, 1982, information may be included to:

- a) identify any Aboriginal fishing licences for the area of the proposed aquaculture site; or of any Aboriginal group which may have an interest in fishing for a species in the area of a proposed aquaculture site, but which does not hold a licence to fish there; and
- b) document Aboriginal concerns that DFO has become aware of through direct consultations or discussions with the group. Identify possible venues for consultation (e.g. contact lists, addresses, etc.).

**5. Mitigation Measures**, in consideration that it may be possible to minimize/eliminate potential impacts of aquaculture on commercial, recreational and other fisheries in and adjacent to the site under application, information may be included to:

- a) identify possible tenure boundary adjustments, site relocations, etc. that might accommodate co-existence;
- b) provide advice on possible ways to integrate wild and cultured fisheries (i.e. employment of fishers in farming operations); and
- c) encourage the creation of local planning boards comprising local stakeholders and government(s) to plan aquaculture development in a manner consistent with the social, economic and environmental interests of the community.

## APPENDIX A:

### INFORMATION THAT MAY BE REQUIRED FROM THE FISHERIES MANAGEMENT SECTOR

#### A. General Information

1. Provincial referral (application) no.: # \_\_\_\_\_
2. Navigable Waters Protection Division file no.: # \_\_\_\_\_
3. Company name: \_\_\_\_\_
4. Site location: \_\_\_\_\_  
General description \_\_\_\_\_  
Latitude/Longitude Coordinates \_\_\_\_\_  
Fishery Management Area/Sub-area \_\_\_\_\_
5. Culture species: \_\_\_\_\_
6. Culture technology (eg. sea-cages, suspended, bottom) \_\_\_\_\_

#### B. Fisheries Values within the Site under Application

##### Shellfish

1. Species present:

- |         |         |
|---------|---------|
| • _____ | • _____ |
| • _____ | • _____ |
| • _____ | • _____ |
| • _____ | • _____ |
| • _____ | • _____ |

2. Species at risk (under proposed *Species at Risk Act*):

- |         |         |
|---------|---------|
| • _____ | • _____ |
| • _____ | • _____ |
| • _____ | • _____ |
| • _____ | • _____ |
| • _____ | • _____ |

3. Species subject to commercial harvest:

Species	Regional Total Allowable Catch (TAC), in tonnes	% Contribution of TAC within site	Number of fishers	Frequency of harvest (ie., days/year)	Estimated landed value (\$)	Estimated annual revenue (\$) per fisher

4. Species subject to recreational harvest:

Species	Estimated number of fishers/year, or level of fishing pressure (low, medium, high)	Estimated volume/weight of harvest	Potential for commercial harvest (Yes/No)

**Finfish**

1. Species present:

- |         |         |
|---------|---------|
| • _____ | • _____ |
| • _____ | • _____ |
| • _____ | • _____ |
| • _____ | • _____ |
| • _____ | • _____ |

2. Species at risk (under proposed *Species at Risk Act*):

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

3. Species subject to commercial harvest:

Species	Regional Total Allowable Catch (TAC), in tonnes	% Contribution of TAC within site	Number of fishers	Frequency of harvest (ie., days/year)	Estimated landed value (\$)	Estimated annual revenue (\$) per fisher

4. Species subject to recreational harvest:

Species	Estimated number of fishers/year, or level of fishing pressure (low, medium, high)	Estimated volume/weight of harvest	Potential for commercial harvest (Yes/No)

**Marine Mammals**

1. Species present (i.e. seals, sea lions, whales, etc):

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

2. Distance to nearest known seal/sea lion haul out site: \_\_\_\_\_ km.

3. Whale-watching location (Yes/No): \_\_\_\_\_

**C. Potential Impact on the Management of Commercial and Recreational Fisheries in and outside the Area under Application**

1. Potential # of displaced fishers in application area: \_\_\_\_\_

2. Can the displaced fishers be integrated into same fisheries outside the area of application? (Yes/No): \_\_\_\_\_

3. If integration is possible, estimate the potential annual average revenue loss per commercial fisher: \_\_\_\_\_

4. Canadian Sanitary Shellfish Program:

a) Classification of area: \_\_\_\_\_

b) Potential for classification change: \_\_\_\_\_

c) Identify potential impacts on the enforcement of harvest closures under the Canadian Shellfish Sanitation Program (ie. increased/decreased patrols, investigations, etc...): \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

5. Identify Fisheries Management Sector adjustments required to manage commercial fisheries which occur in the immediate vicinity of the site under application (ie. relocation of support infrastructure such as packers, tenders, enforcement fleet, test fisheries, etc.): \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_



6. Other Potential Impacts:

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**D. Aboriginal Fisheries in the Area under Application**

1. Number of communal or communal/commercial licences: \_\_\_\_\_

2. Name of licence holder(s) by Aboriginal community/organization:

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

3. Identify any Aboriginal group who may have an interest in fishing for a species in the area under application:

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

4. Identify concern/objections of an Aboriginal group that DFO has become aware of through direct consultations or discussions with the group:

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5. Identify list of Aboriginal Contacts, including Chief and Councilors, that should be consulted by the Province in connection with the site under application:

Contact	Address	Phone #	Fax #	Email

Contact	Address	Phone #	Fax #	Email

**E. Mitigation Measures**

1. Identify possible site boundary adjustments and/or relocations that might accommodate co-existence between the proposed aquaculture project and existing or potential commercial/recreational/aboriginal fisheries:

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2. Identify fishers, fisher organizations, including processors, local Management Boards, and other local stakeholders (names, addresses, phone numbers, etc.) that may be affected by the proposed aquaculture venture and who should be consulted by the Province:

- ---
- ---
- ---
- ---
- ---

3. Other:

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**F. Summary Advice**

1. Concerns (Yes/No): \_\_\_\_\_
  
2. If there are concerns with the proposed aquaculture operation that are mitigable, please provide the following information:
  - a) potential impacts: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
  
  - b) possible mitigation measures: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
  
  - c) recommended stakeholder consultations: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
  
3. If there are concerns with the proposed operation, that are not mitigable, please provide a Fisheries Management Recommendation, along with detailed supporting factual information, on the proposed issuance of the lease to the aquaculturist by the provincial leasing authority:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_