



DFO Review of Siting Guidelines for Marine Finfish Aquaculture

February 2014



Introduction

- DFO initiated a review of the current siting guidelines for marine finfish aquaculture in summer 2014.
- A discussion document and presentation were developed to support to engagement processes.
- Fall 2014 – DFO undertakes consultation and engagement sessions with First Nations, industry and stakeholders (e.g. environmental interests).
- The purpose of today's presentation is to:
 - Provide an update on work to date;
 - Present draft proposed siting guidelines based on feedback and comments received;
 - Lay out next steps and opportunities for further review.



Introduction

- Appropriate siting of fish farms forms key part of DFO's broader strategy to support an environmentally sustainable and economically prosperous aquaculture sector in Canada.
- Siting guidelines form a key component of the strong regulatory and management framework established by DFO for aquaculture in B.C.
- Key Objective
 - To site new aquaculture facilities in locations that provide optimal conditions for fish health, environmental sustainability and compatibility with existing marine resource use(r)s.



Purpose of Siting Guidelines

- The purpose of these proposed siting guidelines is two-fold:
 - To set out the siting guidelines used by DFO to assess applications for new marine finfish aquaculture facilities in B.C.
 - To provide guidance to applicants on the management objectives being pursued and rationale for each component.
- The proposed guidelines will also provide First Nations, stakeholders and the public with more information and increased transparency regarding DFO's review process.



Considerations

- In establishing these proposed guidelines, the following key considerations were applied:
 - Consistency with DFO's legislative and regulatory mandate;
 - Ensuring that aquaculture development respects constitutionally protected Aboriginal and treaty rights and that the priorities of Aboriginal users are taken into consideration;
 - Alignment with the strategic outcomes and objectives of the Department;
 - Current scientific understanding of aquaculture / environmental interactions; and
 - Efficacy and appropriateness in terms of mitigating potential risks.



Key Themes

- The proposed siting guidelines are organized into the following four themes identifying key management elements and potential issues (risks) regarding aquaculture activities
 1. General siting guidelines;
 2. Fish health and wild-farmed interactions
 3. Potential fish and fish habitat, and environmental impacts;
and
 4. Potential fishery Impacts.



1. General Siting Guidelines

- Under this theme, DFO's management objective is to ensure that all new marine finfish aquaculture facilities:
 - are located in areas that are consistent with Treaty and/or Non-Treaty agreements with First Nations; and
 - have all the necessary permits and tenures to operate legally.
- **Aquaculture facilities should be located in areas that are consistent with Treaty and/or Non-Treaty agreements with First Nations.**
- To ensure that the proposed aquaculture activity is consistent with such agreements; achieved through consultation and engagement with First Nations, and input from Federal and Provincial agencies.



1. General Siting Guidelines cont'd

- **Where required, aquaculture facilities will have a Provincial land tenure; and**
- **Where required, aquaculture facilities will have a Navigable Waters permit.**
- These guidelines ensure that applications and reviews for all of the required tenures and permits have been submitted and are proceeding, as the DFO licence application is considered.
- Generally, applications for Federal licence, Provincial land tenure and Navigable Waters permits are submitted at the same time.
- Follow 'harmonized' application and review process.



2. Fish Health and Wild-Farmed Interactions

- Under this theme, DFO's management objective is to minimize and/or mitigate potential risks to the health of wild and farmed stocks resulting from interactions between wild and farmed stocks.
- The mandatory fish Health Management Plan (HMP) is the primary mechanism required by the Department to minimize potential risks to wild and farmed stocks.
- Siting aquaculture facilities in areas that present optimal conditions for fish health will further reduce:
 - Likelihood of disease outbreaks at aquaculture facilities
 - Potential risks to wild and farmed stocks.



2. Fish Health... cont'd

- **Aquaculture facilities should be located at least 1 kilometre from an S1 or S2 riparian classified stream*.**
- This proposed guideline establishes an additional precautionary measure to further reduce potential disease transfer risks from farmed fish to wild, and *vice versa*, in near shore sensitive estuarine fish habitat. * Fish Stream Identification Handbook classification.
- The 1km distance is based on historical usage of this buffer zone which was originally established as a measure of convenience.
- Farm health management practices have improved significantly since the establishment of this 1km distance – the Department views the continued use of this distance as an additional precautionary measure as scientific research around disease transmission risks is ongoing.



2. Fish Health... cont'd

- **Aquaculture facilities should be located at least 3 kilometres from an existing marine finfish facility**
- This proposed guideline establishes an additional precautionary measure to further reduce potential disease transfer risks between aquaculture facilities.
- The 3km distance is based on historical usage of this buffer zone which was originally established as a measure of convenience.
- Where proposed aquaculture facility is located within 3km of existing facility(ies); DFO review to determine whether potential risks to wild and farmed stocks may be mitigated through additional elements in mandatory HMP specifying response, co-ordination and communications plans between farms.



3. Potential Fish, Fish Habitat and Environmental Impacts

- Under this theme, DFO's management objective is to minimize and/or mitigate potential risks to the environment (e.g. seabed) which may result in a negative impact on CRA fisheries of important valued ecosystem components.
- The Department requires that the proponent of each application conducts surveys, undertakes analyses and submits a set of comprehensive reports detailing the physical and biological characteristics of the localized ecosystem around the proposed site.
- These survey data and reports are assessed during the application review process.



3. Potential Fish, Fish Habitat and Environmental Impacts cont'd

- **Aquaculture facilities should be capable of meeting benthic management performance thresholds**
- This guideline mitigates the potential that on-going operation of the aquaculture facility will be unsustainable in terms of benthic environmental performance.
- **The predicted footprint of increased deposition should be located in water depth of greater than 30 metres.**
- This guideline mitigates potential impacts to shallow water habitats which support CRA fisheries such as kelp beds, eelgrass beds, spawning areas etc.



3. Potential Fish, Fish Habitat and Environmental Impacts cont'd

- **A minimum distance of 10 metres should be maintained between the bottom of the farm infrastructure (i.e. netting, predator nets etc.) and the seafloor.**
- This guideline mitigates potential impacts to seafloor habitats as a result of scouring and dragging of nets on the benthic ecosystem and enables water movement beneath the cages to disperse fish wastes.
- Specifically, the aquaculture facility should not come into contact with the seafloor (with the exception of anchor lines and blocks).



3. Potential Fish, Fish Habitat and Environmental Impacts cont'd

- **The proposed aquaculture facility should be located outside of areas that have been assigned a protected designation.**
- This guideline mitigates potential risks to “protected areas”. Analysis of whether farm operation would impact protected ‘value’ could be undertaken during application assessment process.
- **Operation of the proposed aquaculture facility should not impact SARA listed species.**
- This guideline mitigates potential risks to SARA listed species that may be directly impacted as a result of operation of the proposed aquaculture facility.



4. Potential Fishery Impacts

- Under this theme, DFO's management objective is to minimize and/or mitigate potential impacts on other fisheries.
- Within this theme, Aboriginal rights to fish for FSC purposes have priority, after conservation, over other uses of the aquatic resource.
- The guidelines set out under this theme identify the specific assessment that **the Department** carries out to evaluate the potential impact of the proposed aquaculture facility on existing commercial, recreational and/or Aboriginal fisheries.
- This includes the requirement to establish Canadian Shellfish Sanitation Program (CSSP) "prohibited areas" around aquaculture facilities.



4. Potential Fishery Impacts

- **DFO will evaluate the potential impacts to First Nations' ability to fish for FSC purposes resulting from the operation of the proposed aquaculture facility.**
- Consistent with its federal consultation commitments, the Department will work with potentially impacted First Nations to determine the impacts to opportunities to fish for FSC purposes.
- **DFO will evaluate the potential impacts to existing fishery activities (i.e. commercial, recreational and aboriginal), resulting from the operation of the proposed aquaculture facility**
- Information regarding existing fisheries and potential impacts comes from a variety of sources – DFO's Resource Management Branch; First Nations; survey data, commercial and/or recreational harvesters.



Proposed Timeline and Next Steps

- October-November: Consultation and engagement with First Nations, industry and stakeholder
- December: DFO review of information and feedback provided via consultations
- January: Revisions and internal review of revised draft siting guidelines
- February/March: Further engagement and feedback on proposed siting guidelines
- Spring 2014: finalization and implementation of new siting guidelines



Discussion Questions

- Views on proposed guidelines identified?
- Are there additional elements that should be reflected in this work?
- Elaboration around rationale for each of the proposed guidelines?



Appendix 1: Current DFO Siting Criteria

1. Is the site situated greater than 1 km from the mouth of a salmon-bearing stream determined as significant? (Yes/No)
2. Is the site situated greater than 1 km from herring spawning areas designated as having “vital”, “major” or “high” importance? (Yes/No)
3. Is the site situated greater than 300 m from intertidal shellfish beds that are exposed to water flow from a finfish farm and which have regular or traditional use by First Nations, recreational, or commercial fisheries? (Yes/No)
4. Is the site situated greater than 125 m from all other wild shellfish beds and commercial shellfish growing operations? (Yes/No)
5. Is the site situated an appropriate distance from the areas of “sensitive fish habitat” as determined by DFO? (Yes/No)
6. Is the site situated an appropriate distance from areas used extensively by marine mammals, as determined by DFO? (Yes/No)
7. Is the site situated outside an area that would pre-empt important Aboriginal, commercial or recreational fisheries? (Yes/No)
8. Is the site greater than 3 km from any existing finfish aquaculture site? (Yes/No)
9. Is the site consistent with objectives contained in the applicable Integrated Management of Aquaculture Plan(s)? (Yes/No)