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RE: PSF Comments on DFO's Discussion Paper on 'A Canadian Aquaculture Act'

To whom it Concerns:

Thank you for the opportunity to have input and clarifying the relationship between the Fisheries Act and a proposed Aquaculture Act. The Pacific Salmon Foundation (PSF) is a non-government environmental charity dedicated to the conservation and use of Pacific salmon in British Columbia and the Yukon Territory.

"PSF is the independent, thoughtful leader and catalyst in conservation, restoration, and enhancement of Pacific salmon and their ecosystems through strategic partnerships and leveraged use of resources." (<https://www.psfstrategicframework.ca/> )

As such, our comments are focused on sustainability of Pacific salmon in British Columbia as related to current and future aquaculture development, and the inter-relationship with all BC communities (First Nation and others) so connected with the Pacific salmon ecosystem.

In its 2012 final report entitled "[The Uncertain Future of Fraser River Sockeye](#)", the Commission of Inquiry into the Decline of Sockeye Salmon in the Fraser River (the Cohen Commission) strongly recommended that the responsibility for the regulation of salmon aquaculture be separated from DFO's responsibilities under the *Fisheries Act*, [RSC 1985, c F-14](#) as "there is a risk that DFO will act in a manner that favours the interests of the salmon farming industry over the health of wild fish stocks." The Cohen Commission specifically recommended that "Government of Canada should remove from the Department of Fisheries and Oceans' mandate the promotion of salmon farming as an industry and farmed salmon as a product."

While the PSF has strong concerns that all anthropocentric developments affecting Canada's wild fish and fish habitat be accounted for within the Fisheries Act, if the direction of the Federal Government is to create an Aquaculture Act, we can support this development if it clearly provides for the following:

1) The protection of wild Pacific salmon and their ecosystems is the first responsibility of government; that

- 2) All aquaculture proposals would need to meet the requirements of the Fisheries Act and there can be no legislative or regulatory exemptions from HADS under the new Fisheries Act (2019);
- 3) First Nations must be meaningfully involved in decisions about aquaculture operations within their areas; and in the monitoring and reporting of environmental conditions;
- 4) The Precautionary Principle applies in topics with significant uncertainty or debate (environmental protection comes first); and
- 5) The science required to minimize interactions between aquaculture and wild fish populations is adequately supported and publicly reported.

*Comments by Element:*

Element 1: Application, Purpose, and Definitions

A preamble is a useful tool and should include clarification of the interaction between an Aquaculture Act and the Fisheries Act. While clear distinction is made later in this paper, we recommend immediate declaration in the proposed preamble. Further, the preamble should match the detail provided in the new Fisheries Act, and include overarching direction to adopt a precautionary approach for managing aquaculture in a manner that minimizes risks to wild salmon. This would subsequently necessitate including a definition of ‘Precautionary’.

A definition for aquaculture is required to clarify the scope of the Aquaculture Act. There are many clear definitions for aquaculture in the literature ... FAO defines it simply as: Aquaculture is the farming of aquatic organisms in both coastal and inland areas involving interventions in the rearing process to enhance production. ([www.fao.org/aquaculture/en/](http://www.fao.org/aquaculture/en/)). We recommend a clear, concise definition that broadly encompasses all aspects of aquaculture; unless added detail is required for specific types of aquaculture developments.

We also recommend a clear commitment in the preamble to the application of the Precautionary Principle, and a clear commitment to continued science and research to better understand the risks aquaculture poses, including the avoidance, minimization and mitigation of any harms to evolving ecosystems.

Our particular concern for “definitions and overarching factors” includes needing a clear separation of sustainability as directed to the aquaculture industry and to wild Pacific salmon populations. The FAO website makes similar separation.

The inclusion of hatcheries as an aquaculture or natural stock restoration tool should be addressed. Both aquaculture and natural resource management involve hatcheries but hatcheries directed to natural stock conservations and restoration should **not** be included in an Aquaculture Act. While they certainly included intensive culture, their guidelines and regulations the Aquaculture Act should be clear that hatcheries for conservation and restoration of wild fish remains under the Fisheries Act.

Considerations for First Nations and their inclusion in aquaculture development will be necessary within an Aquaculture Act, particularly given the recent commitment of the federal government to the United Nations Declaration on the Rights of Indigenous Peoples (<https://www.un.org/development/desa/indigenouspeoples/declaration-on-the-rights-of-indigenous-peoples.html> ).

#### Element 2: Leases, licenses, and fees

Given the differences in leases and licencing for aquaculture across Canada, our concern would be how changes to the present processes in British Columbia may change under one Act. Any more detailed reply from PSF would rely on what changes are proposed. However, we do believe that fees for use of Canada’s marine environment is under-valued and suggest development of higher fees to be maintained in an environmental fund for habitat or salmon restoration if there are impacts attributed to this industry.

The Minister should be allowed to revoke leases or licenses if environmental sustainability (to be defined) is compromised, if obligations to First Nation agreements are not met, and if actions are taken that are contrary to lease or license agreements. Such questions are more suitable to First Nations and legal experts but environmental experts maybe more appropriately engaged in developing environmental conditions/protocols and monitoring and assessment of compliance (within established quantitative frameworks).

#### Element 3: Indigenous Reconciliation

This section is clearly more appropriately addressed by First Nations but PSF has openly supported the development of Area-based management agreements in British Columbia. These agreements must engage First Nations and other local communities in defining limitations and monitoring within each Area. If fully established, the Area Management “groups” would have authority to negotiate agreements to sustain aquaculture within their jurisdiction and limitations to local habitats and Pacific salmon populations.

We would further recommend a commitment to increased capacity for First Nations to develop programs and secure funds to support First Nation reviews of site applications, and for subsequent engagement in related science, management, monitoring and enforcement when it takes place in their traditional territories.

Also, given the federal and BC Provincial government’s endorsement of United Nations Declaration of Rights of Indigenous People (UNDRIP) - it is now possible to create a placeholder in the new Aquaculture Act. This would acknowledge that aquaculture governance, including tenure, licencing, management, and monitoring is managed consistent with UNDRIP.

#### Element 4: Cooperation

In BC, broad community engagement must be improved and merits emphasis in Element 4. We suggest that the goal should be to increase community, stakeholder and local government

engagement in marine spatial planning and water use planning in order to improve public trust in aquaculture siting and operations. And more specifically, why not commit to supporting stakeholder and local government advisory committees for aquaculture spatial planning activities.

PSF's reference to Area-based management agreements in Element 3 also applies to Element 4. In June 2020, the Area-based Management Technical Working Group supported the implementation of Area-based process to manage aquaculture risks in BC. PSF sees this development as an opportunity for First Nations, coastal communities, local government, and industry for sustainable aquaculture operations but within agreed environmental guidelines and with regulatory powers (to be determined). Area-based management processes within a transparent decision structure could address both questions posed for Element 4.

#### Element 5: Environmental Protection

This is the primary element of concern for the PSF. As exemplified in the first sentence of "Proposed modifications": *"It is proposed that the Aquaculture Act maintain and **potentially enhance** the environmental prohibitions found under the Fisheries Act, but modify what, and the conditions under which, **other-wise prohibited activities may be authorized.**"*

While this text suggests potential for enhanced environmental protections, it also notes the expectations for harm in order to conduct aquaculture. If these decisions are made within an Area-based decision process with the appropriate monitoring and evaluation, this could be workable locally. But in BC, Pacific salmon are highly migratory and are likely to intersect multiple management areas; which introduces concern for cumulative effects possibly addressed through an over-sight group that monitors overall wild salmon survival and trends. While the PSF focused on west-coast issues, we don't see why similar concerns would not be considered for Atlantic salmon in Atlantic Canada.

As to what impacts should be addressed by the Act, we stress that the Fisheries Act restrictions on HADS must still apply to aquaculture and agree that impacts similar to the Fisheries Act are appropriate with these additional considerations:

- Specific reference to the issue of pathogen transmission ... while it may be indirectly considered under harmful alteration or disruption of habitat, we feel it merits specific identification.
- Control of sea lice in west coast farms continue to be serious concern, but could be included under pathogens so long as regulations for control are stipulated and enforced.
- An acknowledgement that when uncertainty arises, the precautionary principle will apply.
- A full prohibition on exotic species until a full risk assessment is completed and reviewed internationally, and that any such occurrence before this is grounds for immediate penalties and removal of the animal/plants.

As to additional powers should DFO have to respond to impacts, we suggest:

- Access to farm sites for random sampling and removal of animal/plants for fish health monitoring and reporting.
- A requirement for provision of information via a publicly accessible website ... this topic has been identified in past reviews but has not been fully implemented.

Further, within Area-based management plans, a neutral third-party, may be engaged to monitor environmental conditions and report publicly to provide a trusted independent voice for environmental protection.

#### Element 6: Enforcement and Alternative Compliance Measures

“The Aquaculture Act must include a broad and modern range of tools to enforce the Act to help ensure DFO is able to meet its commitment to sustainably manage aquaculture and protect fish and fish habitats” (page 9) ... we totally agree, and suggest deleting “help”.

The enforcement tools described seem appropriate but this is not a topic that PSF is well equipped to assess.

Specific powers that enforcement personnel should have include open access to any aquaculture site at any time in order to assess compliance with conditions and collect environmental data. Oversight and any actions following should be provided publicly and timely. Under an area-based management process, accounting for enforcement actions for other non-aquaculture samples (e.g., water sampling for e-DNA examination), a public record of such enforcement activities would also seem appropriate to include in the public record.

#### Element 7: Regulations

We understand the objectives to enable the development of aquaculture-specific regulations to address, among other topics, environmental protection, enforcement, leasing and licensing, and reporting while leaving open the ability to address emerging issues and innovations in aquaculture without having to amend the legislation.

PSF supports all of these, but would suggest that regulations under the new Act must set standards that ensure no incremental harm to wild salmon, transparent public reporting in prompt manner, and regular/evergreen review of conditions and standards for both siting and operations to allow regulators to proactively respond to changing ecosystems, including impact of climate change.

#### Element 8: Public Reporting and Legislative Review

“The Aquaculture Act would include a modern range of measures to support effective public reporting, accountability and transparency. These tools would foster public confidence in the sustainable management of the aquaculture industry.” (Page 11) ... PSF fully supports this statement.

We presume a public registry is a publicly accessible website and timely notification and access. Further, while DFO does provide the information listed, it's timely provision is not assured but if the Act addressed timely and comprehensive information; it would "foster public confidence" in the industry. More specifically it could develop a new, interactive and GIS-based website similar to the BarentsWatch site (<https://www.barentswatch.no/en/>) applied in Norway.

Inclusion of periodic legislative review is appropriate for any new legislation, particularly for one linked with environmental change, links to natural populations and to climate change.

Additional Topics:

It is surprising that a new act with extensive uncertainties associated with its primary purpose ... the conduct and future of Aquaculture; could be discussed without consideration of how the Precautionary Principle would be incorporated. Further, we are struck by the absence of science as an objective or goal to achieve environmental protection. As noted above, we recommend a commitment in the preamble to the application of the Precautionary Principle, a clear definition of that principle, and a clear commitment to continued science and research to better understand the risks aquaculture poses, including the avoidance, minimization and mitigation of any harms to evolving ecosystems.

Yours sincerely;



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