



October 4, 2022

House of Commons Standing Committee on Fisheries & Oceans
c/o Christine Sing
Clerk of the Committee
House of Commons
Ottawa, ON K1A 0A6

RE: Science at the Department of Fisheries and Oceans; A Submission to the Parliamentary Standing Committee of Fisheries & Oceans

Dear Members of the Standing Committee on Fisheries and Oceans:

As an integral part of Canada's agri-food industry, the Canadian farm-raised seafood sector has deep interest in the integrity of the science and science-based decision-making at Fisheries and Oceans Canada (DFO). Canada's seafood producers, processors and those all along the value chain are making important contributions to Canada's goals in the areas of climate change, Indigenous reconciliation and economic opportunity, food security and supporting a flourishing Canadian blue economy. On their behalf, we submit this briefing to the Committee.

Our Recommendations

- 1. The Standing Committee on Fisheries & Oceans should regularly consider DFO's progress in meeting the recommendations of the management action plan provided by the Chief Science Advisor on aquaculture science.**
- 2. The Standing Committee on Fisheries & Oceans, as a follow up to its discussion on science, should undertake an expert review of DFO's implementation of environmental risk management in the contexts of economic development and precaution in scientific based decision making.**
- 3. The Standing Committee on Fisheries & Oceans, in order to better support the reputation of DFO science and regulation, should recommend the removal of any aquaculture sector development and promotion activities from DFO and give these responsibilities to the Department of Agriculture and Agri-Food Canada (AAFC).**



Scientific integrity and science-based policy decisions are critical for the sustainable future of aquaculture in Canada and economic vitality in rural, coastal and Indigenous communities

The Committee has heard from witnesses engaged in the DFO Canadian Science Advisory Secretariat (CSAS) process about how departmental science advice gets incorporated into regulatory frameworks and management decisions. Both of these areas are foundational to the health and sustainability of the aquaculture sector in Canada.

Agri-food sectors are among the most strictly regulated in Canada and rely heavily upon science to inform policies and regulation. This is key for consumer health, environmental and ecosystem integrity, and animal welfare. Within the broader industry, there is perhaps no other sub-sector more dependent on sound, science-based policies than fisheries and aquaculture. Fishers depend on assessments of stock health and the policy and regulatory interpretation of risk based on these assessments. For seafood farmers, site locations, licensing decisions, and a host of thresholds set under the aquaculture activities regulations are all based on scientifically-determined thresholds. Thousands of jobs across Canada in the seafood sector are dependent on sound science and even moreso, sound and reasonable interpretations of risk.

The 2020 Ministerial decision to close salmon farms in BC's Discovery Islands provides a stark example of how damaging it is when Ministerial decisions fail to reflect sound scientific advice. In April 2022, the federal court overturned the December 2020 decision by the Minister, finding that due process had not been followed by the Minister, including failure to consider science advice provided to the Minister. Tragically, in the interim between the Minister's decision and the federal court decision, millions of healthy fish had to be culled, hundreds of people lost their jobs during an already difficult and stressful period of time, BC's top agri-food export was reduced while supply chains were stressed, and there was a national chill on investment that included the cancellation or delay of equipment and technology that would improve production and environmental performance.

Canada's credibility hinges on sound, unbiased science and policy-setting

Public trust in Canada's agri-food system and federal regulators is of paramount importance to a sustainable future for seafood production. Governments must focus on tangible, incremental improvements to existing processes, and resist the temptation to wholesale change promoted by extreme voices in debates. Ministers of the Crown and Members of Parliament have a tremendous responsibility in upholding science and scientific processes as these have been developed over decades. Improvements are always possible and desirable. Trust in science and the regulator is undermined when Ministers of the Crown and MPs broadly condemn and criticize government science evaluation processes, often in response to extreme activist voices, without proposing reasonable and specific ideas for improvement.



This erosion of trust extends beyond aquaculture. DFO provides leading science advice to other Departments that are charged with protecting Canada's environmental and public health. The National Contaminants Working Group, the Canadian Shellfish Sanitation Program and the National Aquatic Animal Health Program are just three examples of interdepartmental programs where DFO provides the foundational science for advice and decision-making. Casting aspersions on the integrity of DFO's scientists and CSAS process risks eroding trust in these programs as well.

If we, as Canadians, are to be confident in the services and protection that these programs provide, we must also believe in the science advice that underpins aquaculture regulations and the processes that provide that advice. The DFO Minister must support and defend DFO scientists and the science process. If the Minister has concerns, he or she should propose and make specific improvements to the process.

The CSA evaluation of CSAS recommendations

In 2019, Canada's Chief Science Advisor (CSA), supported by an international expert advisory panel, conducted [an evaluation](#) of the CSAS process at DFO. The evaluation found that *"the CSAS science advisory process is a unique and important mechanism for developing and providing science advice for decision making and supports the mandate and priorities of DFO and the federal government."* The review also found that *"the majority of end-users (91%) felt that the peer-review assessments are a main strength of the CSAS science advisory process. Peer review is considered a best practice and aligns with the SAGE principle of sound science and science advice. Opportunities for improving peer-review assessments include clarification regarding participation and guidelines to mitigate conflicts of interest."*

The CSA evaluation made five recommendations and included a detailed management action plan with targeted dates for each action item. One recommendation was that DFO adopt a conflict-of-interest policy, which has since happened (and was referred to by one of the witnesses). Members of the Standing Committee on Fisheries & Oceans have an essential responsibility to be informed on DFO's progress in meeting the recommendations of the management action plan.

The Need for clarity and realism on risk evaluation

In the British Columbia salmon farming discussion, environmental protection activists typically promote "no activity, and zero risk," believing that farm-raised salmon have a certain level of risk towards wild salmon and this risk must be totally eliminated. A major ongoing challenge is evaluating and discussing the issue of "risk" based on evidence. Risk is inherent in all human activities, and food production and resource development always have some level of risk. Weighing the benefits of undertaking specific actions against any residual risks is a very underdeveloped practice in Canada and at DFO. Effective resource management requires a more nuanced discussion of practical actions that can reduce risk to an acceptable level that is well



balanced with the resulting benefit. In the example of BC salmon farming, when existing risks are addressed by practice changes or stronger regulation, these have not been recognized or acknowledged by activists.

The FOPO committee, as part of its discussion on science, should also undertake a discussion on acceptable risk. Science, evaluation, and acceptable risk is an undivided triumvirate that forms a necessary relationship regarding science-based policy making.

Focusing of DFO's responsibilities regarding aquaculture

One criticism directed at DFO regarding its management of aquaculture, noted as a recommendation of the Cohen Commission, is that a "mixed mandate" at DFO between science/regulation and promotion of the aquaculture sector is a conflict that should be addressed.

We believe that as aquaculture is a farming sector, and Agriculture and Agri-Food Canada (AAFC) is structured to support the Canadian farming sector's development, that these responsibilities should move to AAFC. This will assist in re-building greater public trust in objectivity of the science and regulatory capacity at DFO and address any perceived conflicts of interest.

For aquaculture, DFO should focus on science and regulation, while promotional and sector development responsibilities should move to AAFC. We would ask for the Committee's support in making this recommendation to the Minister and Prime Minister, and believe that both industry and industry critics would support this recommendation.

Conclusion

Canada is a global leader in the sustainable production of farm-raised seafood. This leadership is predicated on an objective, reliable science assessment process and the soundness of evidence-based decisions.

Radical changes that are based on the loud voices of individual activists that have pre-determined outcomes in mind, and/or that have extreme and unrealistic views on risk, continue to undermine the aquaculture sector's significant sustainable development opportunity for Canada. Other countries are moving ahead very strongly with developing their aquaculture resources, but Canada continues to be hobbled by constant doubt and self-criticism based on the loudest voices with unreasonable expectations. Unfortunately, the discussion, especially in BC, is dominated by an approach of "can't do" rather than a positive and constructive attitude of "can do" and "should be the best sustainable producers in the world."

The goal of the Canadian aquaculture sector is to provide sustainable, fresh, healthy and affordable seafood, not just for the few, but for the many securely and consistently. We thank the Committee



for its attention to these important matters and for supporting a growing and sustainable seafood farming sector for Canada, the future of the growth of the seafood sector for Canada.

About the Canadian Aquaculture Industry Alliance and the Sector

The Canadian Aquaculture Industry Alliance (CAIA) represents over 95% of the aquaculture industry production (volume and value) in Canada, including finfish, shellfish and seaweed producers, marine and freshwater operations, regional aquaculture associations, feed suppliers and other companies across the aquaculture value chain in Canada.

Farm-raised seafood is currently among the fastest growing and most important food sectors in the world, accounting for over fifty percent of the world's total seafood production. Canadian seafood farmers generate over \$5 billion in economic activity, \$2 billion in GDP, and more than 20,000 full-time jobs for Canadians in primarily rural, coastal and Indigenous communities in ten provinces and one territory.

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