

Fisheries Science and Seafood Innovation

Submission to Standing Committee on Finance Pre-Budget Consultations

October 2022

Recommendations

Fisheries Science:

- Increase funding resources for fisheries science in support of management decisionmaking.
- Prioritize the hiring and retention of fisheries scientists specializing in quantitative stock assessment.
- Engage with industry and leverage industry resources promptly to guarantee assessments can be completed in a timely manner.
- Complete stock assessments at the needed frequency and to a high standard via the CSAS peer review process.
- Revise the CSAS process to address any concerns rather than doing away with the process completely and developing a new one.
- Conduct a review of other countries' conduct on fisheries science to compare to Canada's current practices.
- Implement a resource management framework that is evidence-based, predictable, transparent, and consistently applied.

Seafood Innovation and Optimization:

- The wild-capture fisheries is making a formal commitment to achieve optimal utilization.
 This would entail documenting the current rate as a method to identify the gap and consider steps to close the gap;
- The sector needs to better celebrate and promote its innovation successes. We shouldn't be so modest;
- Federal funding for innovation investments should be renewed in a national, coordinated manner and adjusted to focus support of innovation;
 - DFO needs to innovate itself and should consider how it can be best structured to align with growth of the sector and ensure appropriate separation between teams that explicitly support innovation and development and science & regulatory functions;
 - O DFO's mandate with respect to fisheries should be amended to be more ambitious, such as "As the primary federal steward of Canada's leading ocean sector, we will support the seafood (wild-capture and aquaculture) sector's economic development and innovation while ensuring our resources are sustainable."

- DFO should create a permanent Secretariat dedicated to supporting the growth, innovation and development of the seafood sector: this Secretariat could be called the "Seafood Innovation and Optimization Secretariat" and should be funded and in place in 2023
- The team would lead and develop, in concert with the provinces, a national vision for seafood development, and would set goals and targets for seafood value and growth
- The team would identify regulatory blockages and solutions for achieving goals
- The team should advance an integrated and "one stop shop" approach for seafood development in Canada
- A predictable, science-based regulatory environment is the top condition needed for growth and to attract the investment that wants to come to Canada. All players should collaborate to explore any regulatory barriers and advocate addressing them, such as:
 - DFO improving its performance on core fisheries science that is the foundation of sustainable fisheries management
 - More predictability of access and timely fisheries management decisions would better foster sector investments
 - DFO to accelerate aquaculture facility licensing, especially for "innovative" projects and technologies
 - DFO to conduct faster and predictable reviews for permitting for shellfish farming and/or changes to farm sites that improve sustainable production
 - DFO needs to be ready to accommodate gear innovations in wild-capture fisheries that lead to more sustainable outcomes
 - Health Canada and CFIA to work with industry stakeholders on product approval of new novel products from side-streams
 - Transport Canada ensure its fishing vessel regulations can accommodate emerging vessel designs that improve performance.
- More needs to be done to advance knowledge sharing and innovation within the sector.
 While more integrated sectors (e.g. beef, eggs) have marketing boards and considerable government supports for networking opportunity, the diverse seafood sector struggles to bring people together.

Introduction

Our sector is the leading sector of the blue economy in Canada. We have a vision of becoming by 2040 a top 3 best global quality and sustainable seafood producer. Government policy, particularly its Blue Economy Strategy, has significant influence on whether the sector can realize its growth potential for the benefit of coastal communities.

This submission highlights two aspects of the federal policy environment.

DFO Needs to Fulfill its Mandate on Fisheries Science

DFO lacks resources to conduct foundational fisheries science that underpins sustainable fisheries management. The Minister does not always follow the science when making fisheries management decisions. Both are hurting the sector and communities that rely on it.

DFO resources (staff and \$) for core fish stock assessment science have not kept pace with competing interests or assessment complexities. In conversations with DFO, FCC has been assured that sufficient resources have been allocated to conduct the necessary science, including fish stock rebuilding plans, but that has yet to be demonstrated. FCC is not questioning the resources allocated to inform Canada's marine conservation efforts. We need to do both – oceans science and fisheries science.

Recent staffing efforts within the Department in response to increased funding for other priorities has drained many fisheries stock assessments groups of staff and new qualified stock assessors are difficult to find. Positions within the stock assessments groups are routinely left unfilled or filled by staff with limited subject matter expertise. The demographics of the existing cadre of staff means that attrition by retirement is taking its toll on institutional knowledge. This shortage of Highly Qualified Personnel to complete the necessary stock assessments has led to less rigorous stock assessments.

Robust scientific analysis rests on robust data sets. Increasingly, activities that carry out data collection critical for analysis have been disrupted, due to either lack of funds, inability to procure a survey vessel, or other processes taking precedence over stock assessments because of the staffing issues described above. It is becoming routine for extended gaps in Research Vessel surveys throughout the Atlantic and Arctic oceans due purely to mechanical failures of Coast Guard survey vessels and poor logistical planning. An example of this occurring is in the North where the DFO multi-species survey, the primary survey for Greenland Halibut in NAFO Areas OA and OB have not had a survey completed in the last 4 years. The Atlantic and Pacific regions are years or decades out of date with some fisheries never having had a stock assessment completed.

Sixty percent of Canada's fisheries are third-party certified to ensure the product is sustainably sourced. The Marine Stewardship Council (MSC) is currently the main certification body for wild capture fisheries. To be considered MSC certified as sustainable, it is essential that our seafood

be fished from sustainable fish stocks. This determination is dependent on the stock assessments performed by DFO, and in cases where assessments get delayed or skipped for multiple years, it potentially results in fisheries losing their MSC certification. This also means losing major investments into a sustainable program. Global markets look for MSC certification, at a cost completely on the industry level. Losing this certification can have devastating effects on the hard work to build the market and labeling required to continue in the program and puts Canadian fish and seafood at a market disadvantage with consumers seeking confidence that it is sustainably sourced.

Science-based decisions are key for Canada to maintain its position as a global leader in fisheries management. While the previous sections detail instances where data gaps have negative consequences for the delivery of assessment advice, there are other stocks that have good reliable science on which to base management decisions. However, even with the science available, decisions get made that do not follow the science.

Recommendations:

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- Engage with industry and leverage industry resources promptly to guarantee assessments can be completed in a timely manner.
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Renewing Canada's Seafood Commitment: Growth through Seafood Innovation and Optimization as Core to the Blue Economy

The federal government continues to consider next steps in its Blue Economy Strategy. To support Canada's seafood sector to achieve the very best sustainable growth and production, further integrated support for innovation and technology deployment is increasingly important.

Investment in ocean-based proteins is a smart investment. The High-Level Panel for a Sustainable Oceans Economy has concluded that such investments carry a 10:1 benefit ratio and connect with all priorities of this government: environmental, health and social and economic. Canada

would do well to further support this foundational sector for rural, coastal and Indigenous communities across Canada.

The growth envisioned for wild capture fisheries is by increasing value much more than volume. Market-driven innovation of operations and optimizing utilization is the path to that growth. Examples of Seafood Optimization include innovations in:

- harvesting activities increase efficiency, reduce fuel usage and GHG emissions, reduce bycatch and other environmental impacts
- processing of traditional seafood products automation, increase yield, enhance quality
- introduction of new novel products from side-streams.

Optimization is a key concept. It conveys a consideration of both value and volume. The sector wants to utilize what it harvests and maximize value at the same time. It also incorporates adopting/creating best practices within and across our diverse sector. Canada has some 180 commercial wild fish species. Some are niche seafood products. We must acknowledge that diversity and recognize some potential limitations it might represent. Thus, we need a "Made in Canada" solution that recognizes the particular circumstances in Canada.

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