

BALANCING MARINE CONSERVATION WITH SUSTAINABLE USE

A Fishing Industry Perspective



Fisheries Council of Canada
Conseil Canadien des Pêches



EXECUTIVE SUMMARY

Nations around the world, including Canada, are facing an increasing amount of pressure to adopt stronger conservation measures to maintain marine and terrestrial biodiversity. In Canada, there is an ambitious target set for 25 percent of marine and coastal areas to be conserved by 2025, and 30 percent by 2030. This represents a significant increase from today and heightens the need for appropriate and effective actions to avoid considerable negative consequences on the fisheries sector and coastal communities.

While the international community has been moving towards increasing their efforts in conserving marine areas through spatial closures, there has simultaneously been a growing understanding of the potential economic benefits of sustainable fisheries. The High-Level Panel for a Sustainable Ocean Economy views the potential for a triple win from the ocean economy. The Canadian Government has committed in the recent mandate letter the move towards a Blue Economy Strategy to help grow Canada's ocean economy. The success of the Blue Economy Strategy cannot be achieved if the marine conservation targets and sustainable fisheries management are viewed as being mutually exclusive.

The departments within the Canadian Government that are responsible for designating marine conservation areas (Fisheries and Oceans, Environment and Climate Change Canada, and Parks Canada) need to be transparent with plans to achieve Canada's conservation targets. Consultation must also be completed in a meaningful way with the fisheries sector and other stakeholders equally within all departments.

INTRODUCTION

The purpose of this Discussion Paper is to identify and examine some of the issues that Canada faces as it works towards its conservation targets over the next decade.

When spatial marine conservation measures are established and implemented appropriately, they can be effective and beneficial. When not done properly, there can be undue economic disruption and potential indirect environmental impacts such as increased bycatch and habitat destruction by fishing efforts location shifting. Care must be taken to ensure that appropriate levels of consultation and stakeholder engagement are undertaken as Canada works towards its targets. Past experience has shown consultations to be sporadic and unsatisfactory at times and measures should be taken to ensure past missteps are not repeated.

MACRO CONTEXT OF FISHERIES, BIODIVERSITY AND THE BLUE ECONOMY

The UN Food and Agriculture Organization (FAO), as the international expert organization on fisheries and aquaculture, indicates that fisheries have an important role to play in conserving ocean biodiversity and contributing to human well-being. More to the point, biodiversity underpins fishers' and fish farmers' livelihoods and ability to produce food. FAO's work related to biodiversity conservation helps Members with information and guidance on the link between fisheries/aquaculture and biodiversity. FAO is working closely with Members and the Convention on Biological Diversity (CBD) community towards a joint agenda.

In February 2021, the FAO Committee on Fisheries (COFI) adopted a new Declaration on Sustainable Fisheries and Aquaculture which notes "the critical role sustainably managed fisheries have in achieving biological diversity outcomes".¹ In December 2019 FAO adopted a Strategy on Mainstreaming Biodiversity and its Committee on Fisheries has this month endorsed an Action Plan for 2021-2023. A key plank of this action plan is offer guidance on identifying, assessing and reporting Other Effective Area-Based Conservation Measures (OECMs) in a fisheries context, especially given the role they will have in the Post-2020 Global Biodiversity Framework.

At this year's COFI meeting Canada re-iterated its support for FAO's work in this area. "In our view, this work is instrumental to demonstrate how fisheries management can contribute to both sustainable use and conservation. It is critical that FAO continue its work on defining how fisheries management measures can contribute to conservation and sustainable use. If the sector does not define this, it will be defined by other processes."²

At the same time, there is a growing appreciation of the potential and need to sustainably generate more economic benefits from the world's oceans. Not the least of that effort is to derive a higher share of global food production from the ocean at lower GHG emission levels relative to terrestrial food production.

The High-Level Panel for a Sustainable Ocean Economy calls for 100 percent sustainable management

1 <http://www.fao.org/3/ne472en/ne472en.pdf>

2 <http://www.fao.org/about/meetings/cofi/en/>

of our oceans by 2025. It has a vision of effective conservation, sustainable production, and equitable prosperity to create a triple win for people, nature, and the economy. The Panel concluded the following:

- Food from the sea provides essential vitamins, minerals, omega-3 fatty acids and other nutrients not found in plant-source foods or other proteins. This is important for global nutrition.
- The world can produce six times more sustainable seafood by 2050 than today. This is critical to global food security.
- Increasing the fraction of ocean-based food in the global diet and reducing the share of animal-based foods would contribute significantly to climate change mitigation.
- Investing in sustainably sourced ocean-based protein yields strong environmental, economic and health benefits – a ratio of 10:1. Canada's coastal communities would surely welcome such investments.



The future the Panel envisioned cannot be achieved if we view marine conservation and sustainable use being mutually exclusive.

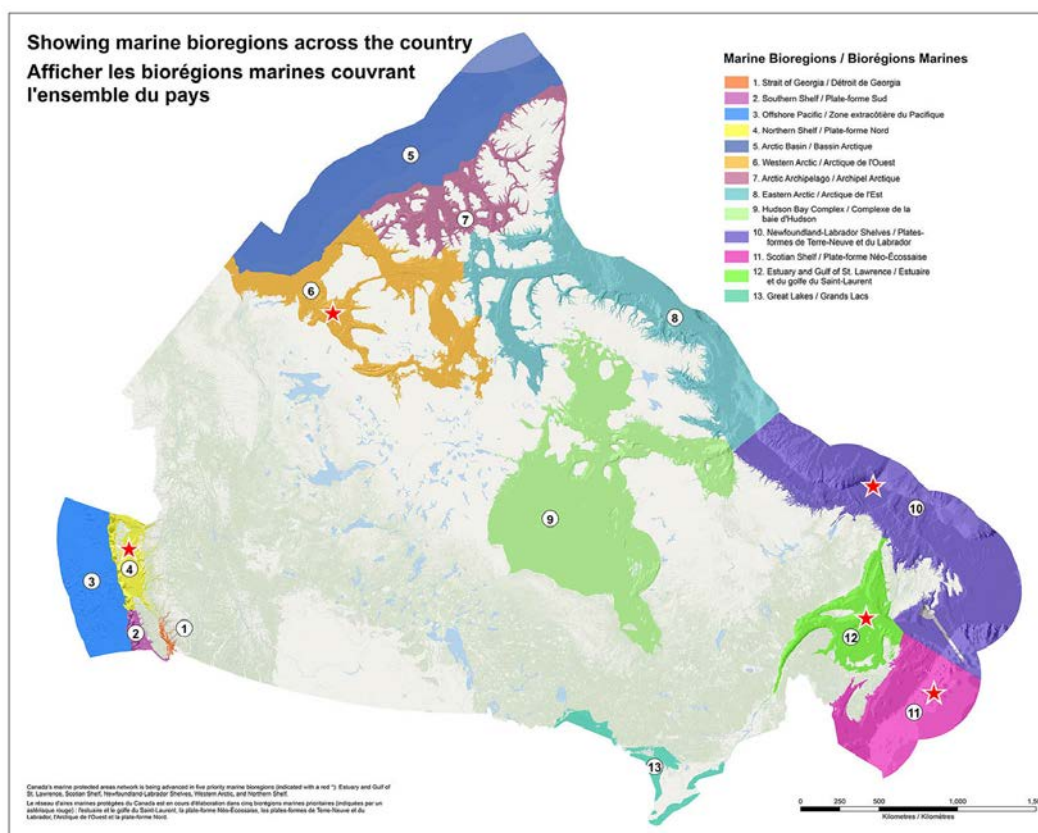
In Canada, implementing the Panel's recommendations should be the focus of the forthcoming Blue Economy Strategy. The Fisheries Council of Canada (FCC) and the Canadian Aquaculture Industry Alliance (CAIA) have developed a joint vision and action plan for the Blue Economy Strategy for Canada to be a global top three best sustainable seafood producer by 2040. The associated aspirational goals are to double the value of Canadian seafood, double the economic benefits and double the domestic consumption of fish and seafood.

Canada boasts a strong regulatory regime for sustainable fisheries management above many jurisdictions in the world. Beyond that, Canada is a global leader in the adoption of third-party certification of sustainable fisheries management. Canada's adoption of certification is multiples higher than the global

average of only 14%. It is important to recognize Canada's strong performance on fisheries management, and the conservation tools within that regulatory regime.

CONSERVATION IN NUMBERS

In 2010, the Convention of Biological Diversity (CBD), an international multilateral treaty, adopted the "Aichi Biodiversity Targets" in which Canada, as a party to the CBD, signed on to as well. Of the 20 targets comprising the Aichi targets, one committed signatories to conserving at least 10 percent of their coastal and marine areas by 2020 through conservation areas and "other effective area-based conservation measures" (OECM). These include formally designated marine protected areas under Parks Canada, Environment and Climate Change Canada, and Oceans Act legislation, and conservation achieved through Fishery Act closures. Canada has surpassed its international target of 10 percent by 2020. With all marine protected areas and OECMs announced or implemented to date, Canada has conserved approximately 805,582 km², or 13.8 percent of Canada's marine and coastal areas. This level of conservation has been achieved by a combination of Marine Protected Areas (44.6%), Marine Refuges (36.0%) and National Marine Conservation Areas (13.7%).



Beyond 2020, the next set of conservation targets are even more ambitious with Canada's Federal Government setting targets at 25 percent of marine and terrestrial area by 2025, and 30 percent by 2030. As part of Canada's engagement in the CBD negotiations, it joined the Global Ocean Alliance which is advocating to conserve 30 percent of the world's oceans by 2030 through establishments of MPAs and OECMs.

Reaching the 25 percent target would require an additional 653,232 km² of ocean area conserved over the upcoming four years which is equivalent to conserving the same area as the entirety of Manitoba or Saskatchewan. To reach 30 percent by 2030 requires an additional 291,763 km² beyond the 2025 target, which is equivalent to double the area of the three Maritime provinces combined.

IMPLEMENTATION OPTIONS

In addition to the foundational conservation measures built into fisheries management, Canada has several spatial management tools it can use to conserve marine biodiversity and ecosystems. The deployment of these tools is the responsibility of multiple different departments within the federal government. Within the arsenal of conservation tools that the Federal Government has are the following:

- The Oceans Act Marine Protected Areas (MPA), established by Fisheries and Oceans Canada, protect and conserve marine species, habitats and ecosystems which are ecologically significant and distinct. The Marine Protected Areas program entails leading and coordinating the development and implementation of a national system of marine protected areas, and the types of activity allowed or prohibited within an Oceans Act MPA is dependent on the area's conservation objective.
- Fisheries and Oceans Canada have also established Marine Refuges under the Fisheries Act which are measures that qualify under OECMs. Marine Refuges are intended to help protect important species and their habitats from impacts of fishing and are often established under the Significant Benthic Areas policy (2012).
- The Canada National Marine Conservation Areas Act, established under Parks Canada, gives them the authority to create National Marine Conservation Areas (NMCAs) to protect and conserve areas of Canada's oceans and Great Lakes for the benefit, education and enjoyment of the public. NMCAs are required to include at least two types of zones: one that fosters and encourages ecologically sustainable use and another that fully protects special or sensitive features of the area's ecosystem.



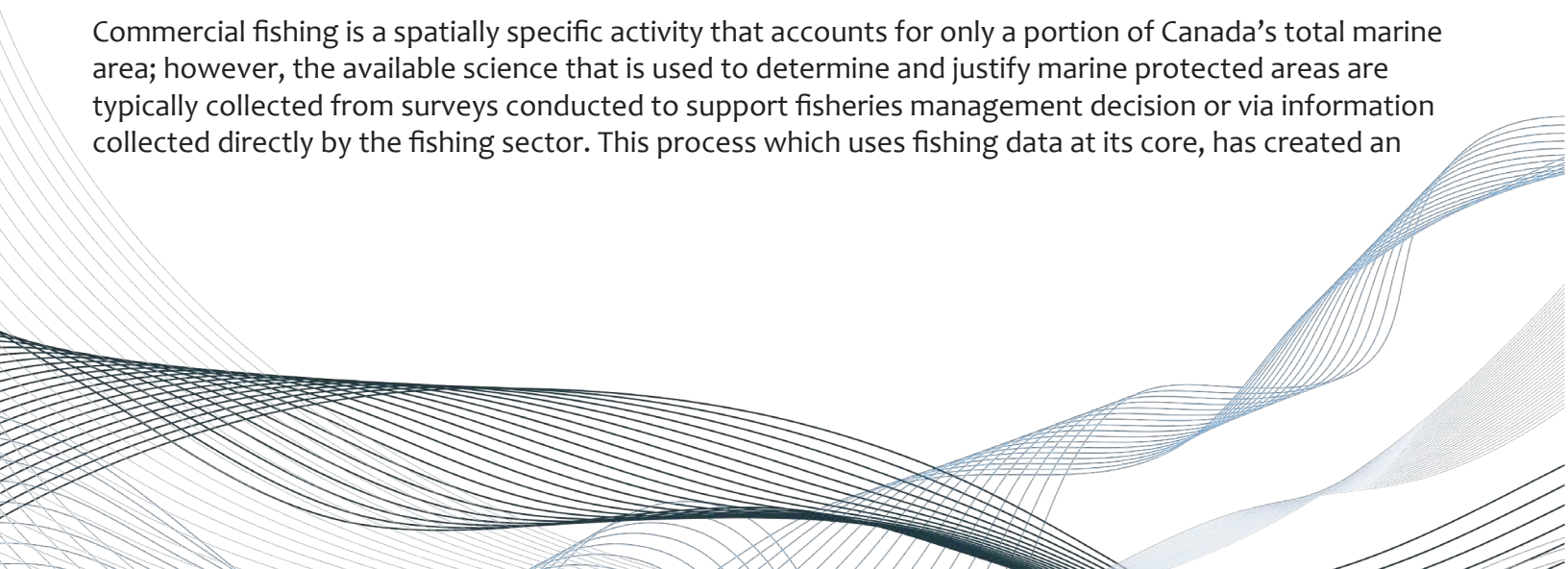
- Lastly, the marine components of National Wildlife Areas and Migratory Bird Sanctuaries (established under Environment and Climate Change Canada), and National Parks (established under Parks Canada) are other tools the government can use to conserve marine biodiversity. These sites are designated for wildlife conservation, research, and interpretation. The activities that are prohibited will vary by site.

There are other tools used by the federal government that are not intended for marine conservation and are not calculated into the official percentage area conserved but can contribute to conservation network objectives. Fisheries management, for instance, uses a variety of fishing closures that apply only when the conservation issue is present. Timeframes for closures can range from seasonal to decadal. Spatial seasonal closures can be applied to protect spawning fish and migrating marine mammals. Small and large-scale closures have been instituted as single-species refuges from fishing to promote rebuilding of depleted stocks.

The ocean is constantly changing due to effects from climate change. Oceans are getting warmer and more acidic which is changing the range and annual distribution of fish stocks and consequently how those fisheries are managed. Scientists have been working on attempting to forecast how climate change will ultimately affect our oceans and what to expect in the future, though so far it has proven to be a herculean task. A group of U.S. marine scientists, all who have been involved in providing advice to federal or state governments, recently submitted an open letter to the American Federal Government indicating “marine protected areas that are not based on the best scientific information available ... will have unanticipated consequences such as increased bycatch and habitat destruction by shifting the location of fishing effort” and would not be the most effective way to conserve marine biodiversity. Moreover, the group argues the marine protected areas would not solve the issues that arise due to climate change and would instead hinder the flexibility of the fisheries management system to adapt to those issues.

Fishing often occurs in areas of relatively high abundance of target species that may also be rich with biodiversity, so it is highly likely that conflicts will arise between fishing and the designation of marine conservation areas that exclude fishing. It should be noted that establishment of permanent spatial closures in high-value fishing areas leads to reduced catch rates, increased habitat impacts, and greater GHG emissions as less optimal areas are focused on for harvest. Typically, when ocean biodiversity and fishing sustainability is discussed by the public, it is only the marine ecosystem that is focused on rather than the more complex, yet complete picture which includes social and economic considerations. In a 2020 paper by Ray Hilborn et al., it was shown that area- and gear-based effort regulations can provide the high levels of biodiversity most no-take areas strive for. In many instances there are certain fishing gears that do not impact the conservation goal for specific area and therefore could potentially still be used while achieving the desired ecological integrity of the area.

Commercial fishing is a spatially specific activity that accounts for only a portion of Canada’s total marine area; however, the available science that is used to determine and justify marine protected areas are typically collected from surveys conducted to support fisheries management decision or via information collected directly by the fishing sector. This process which uses fishing data at its core, has created an



inherit bias of focusing marine protected areas in areas of high fishing value and tends to exclude areas where fishing is either limited or non-existent.

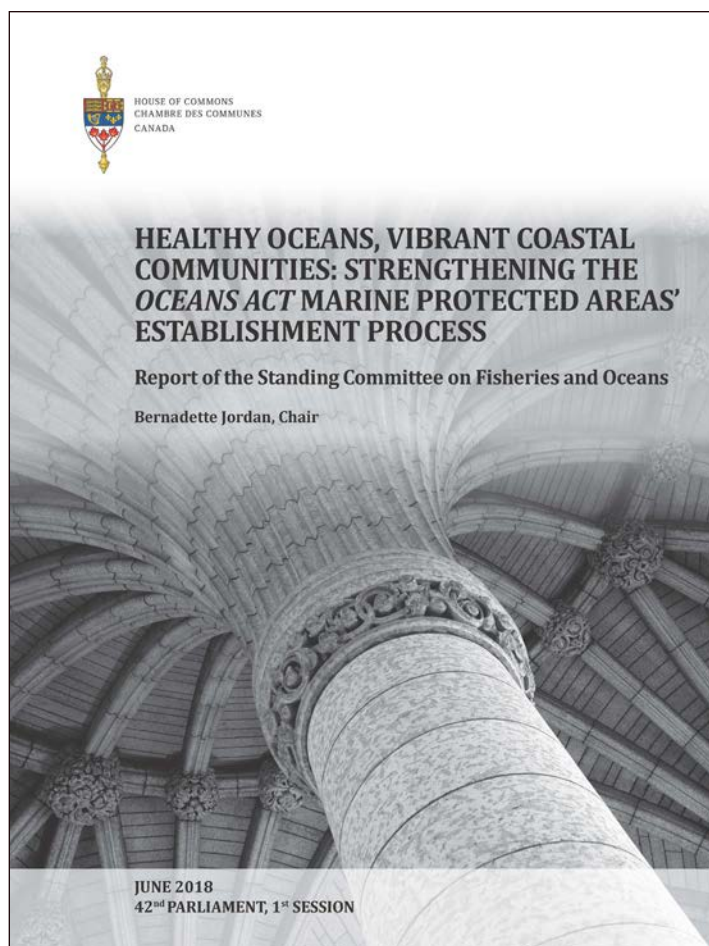
TRANSPARENCY AND CONSULTATION

The government's transparency and consultation with stakeholders throughout the process of identifying areas for marine conservation is the utmost important priority moving forward. FCC urges the government to be transparent about its plan to achieve its targets by clearly identifying and articulating their overall objectives, such as biodiversity attributes across our marine and coastal areas. Stakeholders can better weigh proposed actions if known in the broader context of a fulsome plan. Doing so will also facilitate bottom-up support for actions to achieve Canada's targets. The level of transparency and consultations differs between the conservation tools used as Environment and Climate Change Canada is not mandated to consult with industry stakeholders when creating an NMCA.

It is worth noting that in 2018, the House of Commons Standing Committee on Fisheries and Oceans (FOPO) tabled a report on marine protected areas titled: "Healthy Oceans, Vibrant Coastal Communities: Strengthening the Oceans Act Marine Protected Areas' Establishment Process". The report clearly concludes that the process to establish marine protected areas and other marine conservation measures can be improved. As Canada proceeds towards new targets, FCC

believes the following three conclusions are worth highlighting and suggests they apply to all marine conservation actions not just formal Marine Protected Areas under the Oceans Act:

1. In the Committee's view, "marine biodiversity conservation is both an environmental and socio-economic priority".
2. The Committee believed that "the process being used by Fisheries and Oceans to identify and establish marine conservation actions can be enhanced to ensure that they are effective and achieve their intended benefits".



3. The Committee noted that access to living marine resources is important for the sustainability of Indigenous and coastal communities. In the Committee's opinion, such "access should be transparently considered by Fisheries and Oceans as a central element in its decision-making processes". Unfortunately, to what extent marine conservation actions affect the socioeconomics of coastal communities that rely on the oceans for their livelihoods was a question that was not clearly answered during the course of the study. Testimony submitted to the Committee, however, showed that "failing to incorporate social, economic and cultural considerations into the conservation measure establishment process can lead to significant conflict, loss of trust, resistance, and in some cases, the creation of measures that may not be as effective as they could be".
4. The Committee was convinced that when local and affected stakeholders are included in the planning and management of the marine environment, they are more likely to support sustainable management practices and contribute to the success of conservation objectives. Such inclusion will also help foster ownership of and cultural connections to these areas, and encourage local monitoring and stewardship, which in turn will help the MPAs achieve their conservation objectives.

Following the submission of the Committee's report with detailed recommendations to the Canadian Government, the Government issued a response that commended the Committee on their work and supported all the recommendations that the report put forward. The response indicated the overarching goal for marine conservation measures is to maximize the ecological benefits of the area while minimizing the socio-economic and cultural impacts to the greatest extent possible.

FINAL THOUGHTS

It is possible to improve Canada's sustainable management of its oceans. It is possible to conserve marine biodiversity while deriving economic benefits from our oceans. FCC stands ready to assist the Government of Canada in moving forward in a responsible manner that provides effective conservation AND facilitates socio-economic prosperity of coastal communities that rely on the fisheries sector. In addition, FCC members are engaged in more regional and local discussions on specific actions. We urge the Government of Canada to engage with us in an open and transparent process to find the triple win envisioned by the High-Level Panel for a Sustainable Ocean Economy.

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