5 CONSERVING THE BIODIVERSITY AND HEALTH OF OUR OCEANS

Photo: Victor Carvalho

Recommendation Summary

Long-term, stable funding is necessary to support fulfillment of Canada's domestic and international commitments to ocean governance, co-management and conservation, to support Indigenous Reconciliation and a Blue Economy. The Green Budget Coalition recommends the following major investment to ensure Canada meets its international ocean conservation target commitments up to and beyond 2020, and to restore federal leadership and capacity for ecosystem-based ocean management:

1. Ocean co-management and governance, marine spatial planning, marine protected area (MPA) networks, and Inuit Impact Benefit Agreements
   - **$247.5 million in 2019-2020**
   - **$236 million per year over 2020-2024**
   - Ongoing funding of **$94 million per year thereafter**

Additional funding is recommended for:

2. Rebuilding and enhancing fisheries stock assessment capacity —
3. Aquaculture related environmental research, monitoring, enforcement, and alternative production methods — **$20 million per year over five years**
4. Reducing marine debris including plastic pollution – see complementary recommendation, later in document, on *Plastics – Enhancing Canada's role in the stewardship and reduction of plastic waste in a Circular Economy*

Background and Rationale

Healthy marine ecosystems are the foundation for economically prosperous maritime sectors, communities, and fisheries. Globally and in Canada, evidence clearly demonstrates that our oceans are suffering as a result of climate change and harmful human activities.[26] A comprehensive, ecosystem-based approach to ocean governance, planning and management is needed to ensure that conservation and sustainable human uses are appropriately managed, and will ensure that Canada achieves marine conservation targets and builds a sustainable Blue Economy.

The budgetary measures described below would contribute to the implementation of the commitments made by Canada under the UN Convention on Biological Diversity (especially Aichi Targets 6 and 11),[27] the Ministerial mandate letters for the Ministers of Fisheries, Oceans and the Canadian Coast Guard (DFO) and Environment and Climate Change[28] and the G7 declaration,[29] and the Auditor General's recent reports on fisheries and salmon aquaculture.[30] In addition to restoring federal leadership on ocean conservation and management in Canada, these investments would ensure that the work currently funded under the National Conservation Plan, that ends in March 2019, would continue and be enhanced into the future, and ensure that the government's reconciliation agenda is advanced with coastal Indigenous Peoples.

GBC Feature Recommendations – Alignment with Political Priorities

5

Healthy Oceans

Meeting Public Expectations	✔
Improving Health & Wellbeing	✔
Reducing GHG Emissions	
Climate Resilience	✔
Reconciliation with Indigenous Peoples	✔
Healthy Waters	✔
Protecting Nature & Wildlife	✔
Clean Growth & Innovation	✔
Economically Sustainable Rural & Remote Communities	✔

26. Jones et al. 2018. The Location and Protection Status of Earth's Diminishing Marine Wilderness. Current Biology 28, 1–7 August 6, 2018 ª 2018 Elsevier Ltd. https://doi.org/10.1016/j.cub.2018.06.010
27. https://www.cbd.int/sp/targets/
28. https://pm.gc.ca/eng/mandate-letters
29. The June 8, 2018 Charlevoix Blueprint for Healthy Oceans, Seas and Resilient Coastal Communities commits G7 leaders to: "advance efforts beyond the current 2020 Aichi targets including, the establishment of MPAs where appropriate and practicable and contribute towards these objectives, the sustainable management of fisheries and the adoption of marine spatial planning processes."
30. Office of the Auditor General of Canada. Report 2—Sustaining Canada's Major Fish Stocks—Fisheries and Oceans Canada. http://www.oag-bvg.gc.ca/internet/English/parl_cesd_201610_02_e_41672.html#hd3a
Office of the Auditor General of Canada. Report 1 — Salmon Farming. http://www.oag-bvg.gc.ca/internet/English/parl_cesd_201804_01_e_42992.html

1. Ocean Co-Management

Investments in co-management will advance reconciliation with Indigenous Peoples and directly support the Ministerial mandate for marine conservation in Canada.[31] Achieving real success in the development and implementation of marine use plans and marine protected area (MPA) networks depends on effective, collaborative work with all the federal departments, provinces, territories, Indigenous Peoples, and stakeholders through co-management arrangements for Canada's oceans. Success over the long-term requires ongoing funding that increases certainty for, and commitment by, governments and stakeholders to the effectiveness of the processes.

1a. Co-Management Governance

Co-management requires new decision-making bodies, trilateral governance structures, and supporting administrative structures based in a renewed *Oceans Act*. Successful co-management and implementation of marine plans rests on greater transparency, communication, engagement, and outreach with the full range of ocean decision makers and interests, especially coastal communities.[32]

Additional federal funding is needed to support the creation and operation of these structures and processes for all marine bioregions and to provide long-term funding for their long-term work.

Recommended Investment: $60 million per year for five years and $32 million ongoing

Photo: Ron Whitaker

31. Commitments to co-management were made through both the 2015 Liberal Party of Canada election platform and the Mandate Letter for the Minister of Fisheries, Oceans and the Canadian Coast Guard.
32. The following are examples of collaborative marine planning efforts currently underway in Canada's ocean territory: 1) BC's Marine Planning Partnership (MaPP), and Pacific North Coast Integrated Management Area (PNCIMA); 2) Atlantic Regional Oceans Plan (ROP); 3) Beaufort Sea Partnership's community conservation planning; 4) Nunavut's Land Use Plan; and 5) Nunatsiavuit government Immapivut.

1b. Marine Spatial Planning (MSP)

Marine spatial planning can define thresholds and ecological limits within ocean ecosystems, providing certainty and a more stable investment climate for industry. Investments in tools to facilitate better MSP will set the foundation for achieving both ecological conservation and sustainable resource use goals and will help ensure an integrated, ecosystem-based approach to the planning, protection, management, and responsible use of marine resources.

Recommended Investment: $40 million per year for five years and $32 million per year ongoing

1c. Marine Protection – National Marine Protected Areas (MPA) Network

Marine protected areas make a vital contribution to Canada's $39 billion a year ocean economy.[33] MPA networks are the most effective tool to conserve marine biodiversity, and to support many ecosystem services upon which coastal communities depend. They can help fish stocks to recover, boost nature-based tourism, buffer the impacts of climate change and ocean acidification by ensuring resiliency, and ensure that fisheries sector jobs are maintained into the future.

Meeting Canada's international and national commitments to protect ***at least*** 10% of our ocean territory by 2020, and the G7 commitment to a post-2020 agenda, will require an effective well-connected national MPA network, embedded in ecosystem-based marine spatial planning efforts. Budget 2016 funding ($81.3 million over five years) is a critical base for achieving Canada's commitments; however, additional funding is needed to replace the National Conservation Plan funding that ends in 2019 and to provide ongoing funding for MPAs. This will ensure that all federal agencies can fully contribute to building an effective national MPA network, one that includes MPA networks across all marine bioregions in Canada.

Recommended Investment: $36 million per year for 5 years and $30 million per year ongoing

Photo: Jorge Vasconez

1d. Fifth International MPA Conference (IMPAC5) 2021

In 2021, Canada will play host to the International Marine Protected Areas Conference in Vancouver. This once every four-year conference brings together MPA practitioners and decision makers from around the world, and features a high-level government meeting focused on advancing MPAs globally. As the host country, Canada can highlight domestic success on MPAs and MPA networks on each coast and demonstrate leadership in advancing a new ambitious global target.

Recommended Investment: $11.5 million in 2019

33. Canada's ocean economy based on 2008 numbers — http://www.dfo-mpo.gc.ca/rpp/2013-14/SO1/so-rs-1-eng.html

1e. Inuit Impact Benefit Agreements

Respecting Indigenous rights and upholding the government's commitment to reconciliation must be paramount in meeting the potential and need for MPAs in Canada's Arctic Ocean. An equitable, consistent, and transparent financing formula for impact benefit agreements (IIBAs) across all four Inuit land claim regions should be negotiated well in advance with Inuit representative organizations. Significant long-term and stable funding is necessary to ensure progressive investment in community infrastructure to allow communities to manage and benefit from marine conservation.

Recommended Investment: $500 million envelope for IIBA negotiations and settlements for individual MPAs and MPA networks ($100 million per year over 5 years)

2. Rebuild and Enhance Stock Assessment Capacity, Particularly for Data-Poor and At-Risk Fish Stocks

In Canada, fish and seafood exports were worth $6 billion in 2015 and recreational fishing was worth a further $8 billion in 2010.[34] Since 1970, an estimated 52% of the biomass of Canada's fisheries has disappeared. A recent report by the Auditor General (OAG) highlighted the need for DFO to better manage, update and increase data as well as rebuild fish stocks in Canada.[35] Eighteen Atlantic Canadian marine fish species are considered as endangered or threatened[36] and forage fish populations from coast to coast have seen unprecedented declines, affecting the health of species like the western Bluefin Tuna and the endangered Southern Resident Killer Whale.

Photo: Kea Mowat

34. Office of the Auditor General of Canada. Report 2—Sustaining Canada's Major Fish Stocks—Fisheries and Oceans Canada http://www.oag-bvg.gc.ca/internet/English/parl_cesd_201610_02_e_41672.html#hd3a
35. Office of the Auditor General of Canada. Report 2—Sustaining Canada's Major Fish Stocks—Fisheries and Oceans Canada http://www.oag-bvg.gc.ca/internet/English/parl_cesd_201610_02_e_41672.html#hd3a
36. McDevitt-Irwin, J. M., Fuller, S.D., Grant, C., Baum, J. K. 2015. Missing the safety net: evidence for inconsistent and insufficient management of at-risk marine fishes in Canada. Can.J. Fish. Aquat. Sci. 72: P6. https://foca.on.ca/wp-content/uploads/2015/06/Fish-Species-at-Risk-insufficiently-managed-NRC-Report-Sep-2015.pdf

New measures are urgently needed to undertake more frequent stock assessments, improve knowledge of data poor fisheries, and rebuild fish stocks upon which coastal and indigenous communities rely.[37] Increased funding would align Canada with leading progressive fishing nations and international fisheries law and help drive progress on ensuring recovery of threatened/degraded stocks and on the long-term sustainability of fisheries and the populations of fish upon which they depend.

The Green Budget Coalition recognizes recent federal government investments to better protect fish, modernize the *Fisheries Act,* protect species at risk, and establish new recovery initiatives for priority species.[38] However, significant gaps in fisheries stock assessment, management, and rebuilding plans remain. New investments are needed to:

- Refine policies and management structures to update and implement science-based rebuilding plans by dates committed in response to the OAG report on Sustaining Canada's Fisheries;
- Establish science-based catch limits that account for ecological interactions/requirements;
- Adapt technological tools needed to advance science-based rebuilding plans, including electronic monitoring and data system modernization; and
- Coordinate fisheries management with MPA management plans.

Recommended Investment: $30 million per year over 5 years

37. Hutchings, J.A., Côté, I.M., Dodson, J.J., Fleming, I.A., Jennings, S., Mantua, N.J., Peterman, R.M., Riddell, B.E., Weaver, A.J. and VanderZwaag, D.L. 2012. Sustaining Canadian marine biodiversity: responding to the challenges posed by climate change, fisheries, and aquaculture. Expert panel report prepared for the Royal Society of Canada, Ottawa.
38. https://www.budget.gc.ca/2018/home-accueil-en.html

3. Expand and Extend the Sustainable Aquaculture Program

Properly managed, sustainable aquaculture has the potential to benefit Canadians and support coastal and rural communities, including Indigenous communities.[39] However, open net pens in the ocean can have unacceptable effects on wild fish, benthic habitat, and the larger ocean ecosystem.[40]

Additional investment is urgently required to address the challenges identified by the Auditor General in 2018 that DFO is not adequately managing the risks associated with salmon aquaculture consistent with its mandate to protect wild fish.[41] DFO's Sustainable Aquaculture Program should be expanded to include a whole-of-government approach involving Science, Health Canada, Agriculture and Agri-Food Canada, Crown-Indigenous Relations and Northern Affairs Canada, and Innovation, Science and Economic Development Canada, to ensure that the aquaculture industry does not harm ocean health or infringe on Indigenous rights. The recommended investment would support:

- Monitoring, compliance and enforcement;
- Improved transparency and public reporting;
- Research on environmental effects, especially disease and parasite impacts and management for wild salmon;
- Land-based aquaculture systems research, science, and innovation; and
- Alternative species production and farming practices to support land-based systems.

Recommended Investment: $20 million per year over five years.

Photo: Doug Firre

39. The Finance Minister's Advisory Council on Economic Growth identified agriculture and food – including aquaculture - as key sector to leverage as a driver for a future-oriented economic agenda. https://www.budget.gc.ca/aceg-ccce/home-accueil-en.html
40. Office of the Auditor General of Canada. Report 1 — Salmon Farming. http://www.oag-bvg.gc.ca/internet/English/parl_cesd_201804_01_e_42992.html
41. ibid

Photo: Rich Carey

4. Reducing marine debris including plastic pollution

The Green Budget Coalition is separately recommending $86 million per year over five years for *Plastics – Enhancing Canada's Role in the stewardship and reduction of plastic waste in the Circular Economy.* Please see the complementary recommendation, later in this document, for more details.

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