



Standing Committee on Fisheries and Oceans
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RE: Restoring lost protections and incorporating modern safeguards into Canada's *Fisheries Act*

To the Standing Committee on Fisheries and Oceans,

Thank you for this opportunity to contribute to the review of the *Fisheries Act*. Fish and fisheries are an integral part of Canada's history, culture, and economy. However, our country is failing to sustainably manage our once-abundant marine^{1,2} and freshwater^{3,4} fisheries resources, and failing to protect our globally significant fish habitats^{5,6,7,8}. The *Fisheries Act* is Canada's oldest environmental law, and is long overdue for comprehensive review. We fully support the Prime Minister's mandate to the Minister of Fisheries, Oceans and the Canadian Coast Guard to review the *Fisheries Act* and "restore lost protections and incorporate modern

¹ Wappel T. 2005. Northern cod: a failure of Canadian fisheries management. Report of the Standing Committee on Fisheries and Oceans. URL: <http://www.parl.gc.ca/HousePublications/Publication.aspx?DocId=2144982&Language=E&Mode=1&Parl=38&Ses=1>. Accessed November 25, 2016.

² Baum JK, Fuller SD. 2016. Canada's marine fisheries: status, recovery potential, and pathways to success. Report prepared by the University of Victoria for Oceana Canada. URL: <http://www.oceana.ca/en/publications/reports/heres-catch-how-restore-abundance-canadas-oceans>. Accessed November 25, 2016.

³ Cooke SJ, Murchie KJ. 2015. Status of aboriginal, commercial and recreational inland fisheries in North America: past, present and future. *Fisheries Management and Ecology* 22: 1-13.

⁴ Lapointe NW, Cooke SJ, Imhof JG, Boisclair D, Casselman JM, Curry RA, Langer OE, McLaughlin RL, Minns CK, Post JR, Power M. 2013. Principles for ensuring healthy and productive freshwater ecosystems that support sustainable fisheries. *Environmental Reviews* 22: 110-134.

⁵ Olszynski M. 2015. From 'badly wrong' to worse: an empirical analysis of Canada's new approach to fish habitat protection laws. *Journal of Environmental Law and Practice* 28(1). URL: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2652539. Accessed November 25, 2016.

⁶ Harper DJ, Quigley JT. 2005. No net loss of fish habitat: a review and analysis of habitat compensation in Canada. *Environmental Management* 36: 343-55.

⁷ Quigley JT, Harper DJ. 2006a. Compliance with Canada's *Fisheries Act*: a field audit of habitat compensation projects. *Environmental Management* 37: 336-50.

⁸ Quigley JT, Harper DJ. 2006b. Effectiveness of fish habitat compensation in Canada in achieving no net loss. *Environmental Management* 37(3): 351-66.

safeguards”⁹ and we are encouraged by the Prime Minister’s mandate to “use scientific evidence and the precautionary principle, and take into account climate change, when making decisions affecting fish stocks and ecosystem management”⁹. We urge an evidence-based approach in developing a strong and modernized *Fisheries Act*, in close coordination with the ongoing federal review Environmental Assessment (EA) processes, in order to deliver on the sustainable management of fisheries, and on the protection of marine and freshwater fish habitats which also provide countless other ecosystem services that benefit the Canadian economy and society.

We are submitting our comments and recommendations in our respective capacities as Wildlife Conservation Society (WCS) Canada conservation scientists specializing in freshwater, fisheries, and wildlife biology (see Appendix 1). Our recommendations echo numerous other briefs submitted to the Standing Committee^{10,11,12,13} and the Minister of Fisheries, Oceans, and the Canadian Coast Guard¹⁴. However, as our research and conservation programs focus on northern boreal landscapes, our comments and recommendations concentrate on the elements of the *Fisheries Act* that are most relevant to these vast and remote environments, which nonetheless represent an important and often often-overlooked component of Canada’s fisheries and fish habitat.

1. Brief background on fish and fisheries in the northern boreal

Canada contains 28% of the world’s boreal forests, including the largest undisturbed tracts of boreal forest left in the world¹⁵. Interspersing and sustaining this terrestrial landscape is an immense network of freshwater. Canada’s boreal forests contain nearly 200 million acres of surface freshwater, including 4 of the world’s 10 largest lakes, 5 of the world’s 50 largest rivers, and 25% of the world’s wetlands^{16,17}. This vast expanse of northern boreal landscapes and the freshwater resources they contain are home to a diverse array of fish, including culturally and economically important freshwater fisheries. Canada’s northern boreal landscapes are the

⁹ Trudeau, J. 2015. Minister of Fisheries, Oceans and the Canadian Coast Guard Mandate Letter. URL: <http://pm.gc.ca/eng/minister-fisheries-oceans-and-canadian-coast-guard-mandate-letter>. Accessed November 25, 2016.

¹⁰ Ecojustice. 2016. *Fisheries Act* review – protection of fish habitat and associated provisions. Brief submitted to the Standing Committee on Fisheries and Oceans.

¹¹ Northern Confluence. 2016. Briefing Note: DFO Habitat Monitoring and Enforcement Capacity since changes to the *Fisheries Act* in 2012. Brief submitted to the Standing Committee on Fisheries and Oceans.

¹² Olszynski M. 2016. Re: *Fisheries Act* Review – “Serious Harm to Fish” and Associated Provisions. Brief submitted to the Standing Committee on Fisheries and Oceans.

¹³ West Coast Environmental Law, Forum for Leadership on Water. 2016. Habitat 2.0: A new approach to Canada’s *Fisheries Act*. Brief submitted to the Standing Committee on Fisheries and Oceans. URL: <http://wcel.org/resources/publication/habitat-20-new-approach-canadas-fisheries-act>. Accessed November 25, 2016.

¹⁴ West Coast Environmental Law. 2016. Scaling up the *Fisheries Act*: Restoring lost protections and incorporating modern safeguards. Brief submitted to the Minister of Fisheries, Oceans and the Canadian Coast Guard. URL: <http://wcel.org/resources/publication/scaling-fisheries-act-restoring-lost-protections-and-incorporating-modern-safe>. Accessed November 25, 2016.

¹⁵ Global Forest Watch Canada. 2010. Atlas of Canada’s intact forest landscapes. URL: http://globalforestwatch.ca/sites/gfwc/files/publications/20100913A_01CanadaAtlas_IFL_highres.pdf. Accessed November 25, 2016.

¹⁶ Boreal Songbird Initiative. 2015. Conservation values of the boreal forest. URL: <http://www.borealbirds.org/conservation-values-boreal-forest>. Accessed November 25, 2016.

¹⁷ PEW Environmental Group. 2012. A forest of blue: Canada’s boreal. URL: <http://borealscience.org/wp-content/uploads/2012/06/report-forestofblue.pdf>. Accessed November 25, 2016.

ancestral and current home of Indigenous peoples who rely on fish for subsistence, as well as for cultural connections to their traditional ways of life. Canada's northern boreal lakes and rivers are popular and profitable fly-in recreational fishing destinations, and support commercial fisheries, including the first eco-certified freshwater fishery in the Western hemisphere¹⁸. Although Canada's northern boreal landscapes are currently largely intact, there is significant pressure for development, with increasing pressure for new mines, hydropower, forestry, pipelines, and the transportation corridors to support these industries^{19,20}. Climate change is also already affecting this landscape, with warming temperatures and reduced precipitation causing changes in watershed chemistry and water balance, as well as shifts in fish species ranges²¹. Freshwater fish in Canada's northern boreal forests are therefore both valuable and vulnerable, and require strong legislation to ensure that freshwater habitats are protected and fisheries are managed sustainably for the future.

2. Restoration of lost protections

In 2012, Section 35 of the *Fisheries Act* was amended from a prohibition against any “work or undertaking” that resulted in the “harmful alteration or disruption, or the destruction of fish habitat” (HADD) to a prohibition against any “work, undertaking, or activity” that results in “serious harm to fish that are part of a commercial, recreational or Aboriginal fishery”. This amendment has resulted in both a weakening of protection⁵ and in a profound lack of clarity for freshwater protection, particularly landscapes such as the northern boreal. Freshwater habitats in Canada's northern boreal landscapes are comprised of a connected network of lakes, rivers, and wetlands that function at the watershed scale to sustain freshwater fish communities, which in turn may support Aboriginal, recreational, and commercial fisheries. A prohibition against “harmful alteration or disruption, or the destruction of fish habitat” is relatively straightforward in such a landscape, since the connected network of freshwater encompasses fish habitat. However, demonstrating “serious harm to fish that are part of a commercial, recreational or Aboriginal fishery” is problematic from the perspective of both interpretation and implementation. For example, the destruction of small streams that provide critical nursery habitats for prey species could be damaging to an Aboriginal fishery, but demonstrating these connections requires time-consuming and costly studies that are often not feasible in practice. To address these issues, we recommend:

Recommendation 1. Reinstate the prohibition against the “harmful alteration, disruption and destruction of fish habitat”, but retain “activity”, such that there is a prohibition against any

¹⁸ Marine Stewardship Council. 2014. New supply of sustainable freshwater walleye and northern pike. URL:

<https://www.msc.org/newsroom/news/new-supply-of-sustainable-freshwater-walleye-and-northern-pike>. Accessed November 25, 2016.

¹⁹ Webster KL, Beall FD, Creed IF, Kreutzweiser DP. 2015. Impacts and prognosis of natural resource development on water and wetlands in Canada's boreal zone. *Environmental Reviews* 23:78-131.

²⁰ Kreutzweiser DF, Beall FD, Webster K, Thompson D, Creed I. 2013. Impacts and prognosis of natural resource development on aquatic biodiversity in Canada's boreal zone. *Environmental Reviews* 21:227-259.

²¹ Schindler DW, Smol JP. 2008. Cumulative effects of climate warming and other human activities on freshwaters of Arctic and Subarctic North America. *Ambio* 35: 160-168.

“work, undertaking, or activity” that result in “harmful alteration, disruption and destruction of fish habitat”.

Recommendation 2. Restore protection for all native fishes, not just “fish that are part of a commercial, recreational or Aboriginal fishery”.

Recommendation 3. Restore Section 32, which prior to 2012 prohibited the destruction of fish by means other than fishing.

Recommendation 4. The *Fisheries Act* has not had a stated purpose since 1986. The modernized *Fisheries Act* should have a purpose, which should include habitat protection and protection of native biodiversity, alongside other desired conservation, social, and economic outcomes.

3. Incorporating modern safeguards

Although reinstating the prohibition against the harmful alteration, disruption and destruction of fish habitat is an important first step in reforming the *Fisheries Act*, an effective and modernized *Fisheries Act* requires more than reverting to the previous status quo. Indeed, the *Fisheries Act* was failing to protect fish habitat even prior to the 2012 amendments, primarily as a result of failures in management and enforcement^{5,6,7,8}.

In order to effectively protect fish habitat, this legislation should not simply revert to the pre-2012 habitat provisions, but should be comprehensively reformed to include the introduction of modern safeguards. Such modern safeguards include: 1) Precautionary principles; 2) Ecosystem approaches; 3) A commitment to evidence-based decision making; 4) Consideration of cumulative effects; 5) Consideration of climate change; 6) Stronger provisions for co-management; and 7) A commitment to enforcement.

3.1. Proactive planning that considers cumulative effects and climate change

In particular, we emphasize that Canada’s northern boreal fish habitats require proactive, watershed-level planning that considers cumulative effects and climate change. In intact landscapes such as Canada’s northern boreal forests, there is little scope for restoration, and any development project will inevitably lead to losses in fish habitat. Therefore, the proactive identification of acceptable thresholds for development within watersheds, and explicit protection of significant and irreplaceable habitats, is critical to ensure that fish habitats are protected and fisheries remain sustainable at the watershed scale. Finally, climate change is already having effects on freshwater habitats and fish in Canada’s northern boreal landscapes²¹, and must be considered alongside other effects. To address these issues, we recommend:

Recommendation 5. Include a commitment to evidence-based decision-making directly in the legislation, and implement explicit processes to take into account the best available science, research, and technical information available when making decisions.

Recommendation 6. Include the incorporation of the precautionary principle and ecosystem approaches to fisheries management and fish habitat protection, which will also bring Canada closer to achieving international goals and targets adopted through the Convention on Biological Diversity²² in the management of fisheries and in the conservation and protection of fish and fish habitat.

Recommendation 7. Apply a cumulative effects framework, and incorporate proactive, watershed-level planning to avoid the piecemeal deterioration of fish habitats, following the processes recommended by West Coast Environmental Law and Forum for Leadership on Water²³.

Recommendation 8. Explicitly consider climate change alongside other cumulative effects, which will also bring Canada closer to achieving international goals and targets communicated through Intended Nationally Determined Contributions to the United Nations Framework Convention on Climate Change²⁴.

3.2. Provisions for co-management and co-governance

Further, to ensure that changes to the *Fisheries Act* respect the Constitutional rights of Indigenous peoples in Canada, all review and reform of the *Fisheries Act* must be consistent with the duty to consult and accommodate guided by the honour of the Crown. Federal commitments to a new relationship with Canada's Indigenous peoples must be reflected in a modernized *Fisheries Act*, including: 1) Commitments to the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), including principles such as Free, Prior and Informed Consent (FPIC); 2) Commitments to implementation of the Truth and Reconciliation Commission's recommendations (which include implementation of UNDRIP); and 3) Commitments to address climate change, with subsequent implications for development and adaptation planning by Indigenous peoples, particularly in remote regions. To address these issues, we recommend:

Recommendation 9. Include strong provisions for co-management and co-governance of fisheries that must be developed collaboratively with Indigenous peoples.

3.3. Implementation and enforcement

Finally, two of the key issues with the *Fisheries Act* prior to the 2012 changes were: 1) The Minister had the discretion to authorize "harmful alteration or disruption, or the destruction of fish habitat"; and 2) There was a basic lack of monitoring and enforcement, which resulted in

²² Convention on Biological Diversity. 2010. Canada country profile. URL: <https://www.cbd.int/countries/?country=ca>. Accessed November 25, 2016.

²³ West Coast Environmental Law, Forum for Leadership on Water. 2016. Habitat 2.0: A new approach to Canada's *Fisheries Act*. Brief submitted to the Standing Committee on Fisheries and Oceans. Recommendation 4 (pp. 22-25). URL: <http://wcel.org/resources/publication/habitat-20-new-approach-canadas-fisheries-act>. Accessed November 25, 2016.

²⁴ Canada's INDC submission to the UNFCCC. 2015. URL: <http://www4.unfccc.int/submissions/INDC/Published%20Documents/Canada/1/INDC%20-%20Canada%20-%20English.pdf>. Accessed November 25, 2016.

consistent habitat losses despite prohibitions^{5,6,7,8}. Thus, former habitat protection measures prior to 2012 could be either circumvented through Ministerial discretion, or disregarded in practice despite the regulations. To address these issues, we recommend:

Recommendation 10. When reinstating prohibitions against “harmful alteration or disruption, or the destruction of fish habitat”, prohibit the Minister from providing exemptions.

Recommendation 11. Require habitat monitoring to ensure that targets are being met.

Recommendation 12. In tandem with legislative reform, review internal capacity devoted to enforcement and scientific assessments, which are key underpinnings to ensuring that the modernized *Fisheries Act* is implemented.

Thank you again for the opportunity to submit this brief, and for taking the time to consider these comments and recommendations.

Sincerely,



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Appendix 1: Information on WCS Canada and authors

WCS Canada (www.wcscanada.org) was established in May 2004 as a Canadian non-government organization with a mission to conserve wildlife and wildlands by improving our understanding of, and seeking solutions to, critical problems that threaten key species and large wild ecosystems throughout Canada. WCS Canada generates knowledge through research and tools for conservation of the fish and wildlife species and ecosystems and the services they support. WCS Canada provides this information to Government and First Nations' decision makers to create policies and governance systems that support conservation, sustainable use of biological resources, and best practices for industrial development.

Dr. Constance O'Connor is an Associate Conservation Scientist with WCS Canada and Adjunct Professor at Lakehead University, and focuses on freshwater science in Ontario's Northern Boreal landscape. She is using individual-level data on freshwater fish to understand population and community-level processes. She then applies this information to develop better tools for monitoring and predictive modelling for policy, management and planning decisions that affect freshwater ecosystems.

Dr. Brie Edwards is a WCS Canada Postdoctoral Fellow and University of Toronto Visiting Scholar. Her research focuses on understanding the cumulative impacts of climate change and development on freshwater fish and benthic invertebrate communities.

Dr. Cheryl Chetkiewicz is an Associate Conservation Scientist and the Lead Scientist for WCS Canada's research and conservation efforts in Ontario's Northern Boreal landscape. She focuses on regional-scale research and planning in Ontario's Far North, specifically wildlife research and monitoring, cumulative effects assessment, regional strategic environmental assessment, and protected area planning.

Dr. Justina Ray is the President and Senior Scientist of WCS Canada, as well as an Adjunct Professor at University of Toronto and Trent University, and has been engaged in field research in Ontario's Far North for over a decade. She is one of the few biologists to spend significant time in this remote region, with a specific focus on wolverine and caribou. Dr. Ray served on the MNRF's Provincial Caribou Technical Committee and co-authored Ontario's Wolverine Recovery Strategy. She was a member of MNR's Far North Science Advisory Panel.

