



Canadian Environmental Assessment Act Review: A Wild Atlantic Salmon Perspective

Prepared for:

EA Review Panel
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Introduction

The Atlantic Salmon Federation (ASF) is pleased to have this opportunity to submit a brief to the Expert Panel regarding the regulatory review of the Canadian Environmental Assessment Act. ASF is encouraged that the federal government has issued a mandate to review Canada's environmental assessment processes to regain public trust, restore robust oversight and thorough environmental assessments of areas under federal jurisdiction, ensure that decisions are based on science, facts, and evidence, provide ways for Canadians to express their views, and require project advocates to choose the best technologies available to reduce environmental impacts. Recognizing the significance of this mandate, ASF encourages the federal government to be thorough in this review.

ASF's Mandate

The Atlantic Salmon Federation is dedicated to the conservation, protection and restoration of wild Atlantic salmon and the ecosystems on which their well being and survival depend. We work closely with our six regional councils, over 100 affiliated local watershed and salmon conservation groups representing thousands of volunteers toward this end. ASF has a long history of also working very closely with federal and provincial governments to ensure that the legislative underpinnings at all levels ensure our wild Atlantic salmon populations and underlying ecosystems are protected and wisely managed.

ASF is committed to working with the federal government to ensure that the implementation of an amended Environmental Assessment Act protects wild Atlantic salmon, their habitats and associated fisheries from the impacts of development projects in an effective and cost efficient way, and therefore helps sustain the many economic, social, and cultural benefits our First Nations and recreational salmon fisheries provide now and long into the future.

Wild Atlantic Salmon

Known in many circles as the "King of Fish", the wild Atlantic salmon is an iconic species that has long been revered for its power, endurance, beauty and mystery. Its storied existence has fed generations of indigenous and non-indigenous peoples physically, culturally, and socially. Indeed, it is one of the most studied fish species on the planet, and is even represented as a fundamental provincial symbol, its image adorning the crown in New Brunswick's coat of arms. Wild Atlantic salmon provide significant economic benefit to rural regions of eastern Canada through recreational and Aboriginal fisheries. Gardner Pinfold Consultants estimated that recreational fisheries for Atlantic salmon contributed \$155M to Canada's GDP in 2010, and provided over 3800 full-time job equivalents in primarily rural regions of eastern Canada, despite the fact that many Maritime salmon



fisheries are presently closed due to low returns. If we can recover the species in some of these areas and reopen First Nations and recreational fisheries, the cultural, social, and economic benefits would be increased substantially.

Wild Atlantic salmon are an anadromous species, meaning that they spawn and hatch and spend their juvenile life stage in freshwater, usually in remote headwater reaches of river systems. They migrate from the rivers as smolt to the distant ocean waters of the Labrador Sea and off the coast of West Greenland to grow and mature for their return to the rivers to spawn. Atlantic salmon are capable of spawning multiple times during their life cycle. Their complex life cycle brings them into contact with a myriad of pressures and threats, some natural, many man-made from their headwater nurseries, through tidal estuaries and bays all the way to Greenland and back again. Habitat loss, reduction of water quality, loss of connectivity between key habitats, and disturbances to migration patterns arise from industry, land-use, power generation, marine-based net pen salmon aquaculture, and unsustainable fishing practices. All have an impact on salmon, as they spend parts of their lives living in, or migrating between, their primary habitats that are exposed to these pressures. Salmon need protection during all of these life stages.

Over the past 40 years, there has been a significant trend of declining wild Atlantic salmon populations, especially in the Maritimes region, and in areas most affected by human activities. As with any population, there are fluctuations up and down from year to year, but the stark reality is that this oscillation has been occurring along a negatively trending line. Some populations have reached the point of being protected under the Species At Risk Act (SARA) – e.g. the Inner Bay of Fundy population, listed in 2003. Others are presently being considered for protection under SARA – i.e. Outer Bay of Fundy (NB), Southern Uplands and Eastern Cape Breton populations (NS), Anticosti Island (QC), and the South Coast Newfoundland population.

The Canadian Environmental Assessment Act and Wild Atlantic Salmon

As noted above, the major threats to Atlantic salmon sustainability and recovery are human caused. As Canada's primary environmental assessment legislation, the Canadian Environmental Assessment Act (CEAA) should, in principle, provide the legislative foundation for assessing, avoiding, mitigating, and monitoring many of these impacts in freshwater, estuarine and marine environments. However, we continue to witness significant negative impacts from human activity on wild Atlantic salmon, many of which go unassessed and unmitigated. Clearly, the current legislation and its administration are not providing sufficient protection to wild Atlantic salmon. In the sections below, we discuss our views on the goals of environmental assessment, outline the ways in which the current legislation does



not meet these goals for Canada's wild Atlantic salmon, and provide recommendations for improving Canada's environmental assessment legislation and its administration.

Goals of the Environmental Assessment Process

In general, we believe that the primary goal of environmental assessment should be environmental protection through a process to identify, avoid, mitigate, and monitor the negative environmental impacts from human activities and undertakings. As such, the environmental assessment process should be viewed as a planning tool that: 1) ensures decisions about human activities that might affect the environment are informed by a full accounting of the potential costs and benefits; and 2) requires proponents to investigate and incorporate relevant and meaningful environmental monitoring and protection measures to ensure environmental impacts are reduced or prevented to the greatest extent possible.

Sustainability should be a core principle guiding environmental assessment i.e., assessments should aim to ensure the long-term health of the environment and social values, and the equitable distribution of risks, impacts and benefits. Development decisions should not sacrifice environmental protection for short-term economic gains, nor should they prevent future generations from meeting their own needs. As such, when environmental impacts are expected, the environmental assessment process should explicitly assess the need for and alternatives to the project (including the option for rejecting the project), identify the best overall option that maximizes positive and minimizes negative impacts, and require proponents to compensate when adverse effects cannot be avoided.

Why the Current Legislation is Failing Wild Atlantic Salmon

The Government of Canada is responsible for the protection, conservation, and management of wild Atlantic salmon. Given the multiple threats from human activities faced by Atlantic salmon, the federal government cannot meet its mandate of conservation and protection if it is not aware of and able to influence the human activities that impact salmon. Therefore, ASF believes that the responsibility of ensuring proper assessment and mitigation of the impacts of human activity on wild salmon populations lies squarely with the federal government, and that this responsibility is appropriately met through the federal environmental assessment framework. Although some projects or activities may fall under provincial jurisdiction for the purposes of environmental assessment, federal environmental assessment legislation must have the capacity to ensure that impacts on wild salmon are assessed in all relevant situations, and that the standard of assessment is high and consistent across jurisdictions.

Within that context, we believe the federal environmental assessment framework and standards should apply whenever a project or activity has the potential to impact wild salmon. The assessment process



should begin with a screening review of any project or activity that has the potential to negatively impact wild salmon. The screening review would determine, according to clear standards, whether the likelihood and/or significance of potential impacts on wild salmon is sufficient to warrant further assessment; an environmental impact statement should be the rule when there is potential for significant impacts and/or if there is significant public concern. Screening reviews could be conducted by any relevant federal or provincial agency provided they are in accordance with the standards set out by federal environmental assessment legislation.

Despite the federal government's responsibility for protection and conservation of wild Atlantic salmon, the federal environmental assessment process under CEAA 2012 does not provide an adequate level of protection against human activities and undertakings for the following reasons:

1. *There are insufficient triggers to invoke the federal environmental assessment process when human activities may impact wild salmon.* Currently, triggers for a federal EA are based on a “project list” approach, whereby the EA process is only triggered for particular projects included in the list of “designated projects” and will only be undertaken for most listed activities when the government exercises its discretion to do so. However, the list of designated projects only includes a small fraction of the types of activities that can (and do) adversely impact wild Atlantic salmon and their habitat. For example, open net pen salmon aquaculture has been demonstrated to have significant negative impacts on wild salmon populations through a number of mechanisms¹ (e.g., interbreeding between wild and escaped salmon, spread of sea lice and viral/bacterial diseases to wild fish, harmful ecological interactions between wild and farmed fish, etc.). Despite these significant and well-documented impacts, net pen salmon aquaculture is not a designated activity under the current CEAA. Consequently, there is no federal requirement for proponents of salmon aquaculture projects to assess, understand, mitigate, or monitor impacts on wild Atlantic salmon, and decisions about new aquaculture projects are often made without full consideration of the potential costs to wild salmon.
2. *Provincial environmental assessment processes do not substitute for lack of federal oversight and assessment.* Some activities and projects that have the potential to impact wild salmon that do not trigger a federal environmental assessment may trigger an assessment at the provincial level. However, there is inconsistency between the various provincial environmental assessment processes; some projects that have the potential to impact wild salmon may trigger an environmental assessment in some

¹ ICES. 2016. Report of the Workshop to address the NASCO request for advice on possible effects of salmonid aquaculture on wild Atlantic salmon populations in the North Atlantic (WKCULEF), 1–3 March 2016, Charlottenlund, Denmark. ICES CM 2016/ACOM:42. 44 pp.



jurisdictions and not others. For example, New Brunswick uses a “project list” trigger approach similar to the federal process whereas Newfoundland and Labrador uses a “potential impacts” approach under which any undertaking that has the potential for environmental impacts must be registered for environmental assessment. Using the net pen salmon aquaculture example above, aquaculture facilities in NL would trigger an environmental assessment if they are likely to have an impact on wild salmon; however, because aquaculture is not on the list of designated projects in NB, the same project in NB would only trigger an environmental assessment if it met other listed criteria (e.g., by water withdrawal, wastewater treatment, introduction of a non-native species, or by the presence of rare, unique or endangered environmental features). Likewise, the NL environmental assessment regulations require that any undertaking that will occur within 200 metres of the high water mark of a scheduled salmon river be registered for environmental assessment; however, similar provisions do not exist in other provinces. Because of these inconsistencies between provinces, the various provincial environmental assessment processes can not be relied upon to compensate for the lack of oversight and triggers at the federal level. When provincial environmental assessment legislation does not provide appropriate consideration of impacts on a federally protected species like wild salmon, CEAA should be the mechanism by which this is done – thoroughly, and with public confidence in the outcomes.

3. *The federal Fisheries Act does not substitute for a federal environmental assessment.* The Fisheries Act is the federal government’s primary legislation for the protection of fish, fish habitat, and fisheries. Although the Fisheries Act provides some protection to fish and fish habitat from potentially damaging human activities, it is not a substitute for an environmental assessment process regarding impacts on wild salmon for a number of reasons²:
 - a. The definition of harm to fish and fish habitat in the Fisheries Act are narrow and do not encompass many of the ways human activities negatively impact wild salmon (e.g., non-lethal, but long-term population effects such as reduced fitness from the interbreeding between wild and aquaculture escape salmon, and temporary impacts such as short duration disturbances to critical habitat such as spawning beds are not considered harm). Consequently, these types of impacts cannot be addressed under the Fisheries Act;
 - b. Authorizations to destroy fish or fish habitat granted under the Fisheries Act do not trigger a federal environmental assessment;

² In November 2016, ASF made a detailed submission to the Standing Committee on Fisheries and Oceans regarding weaknesses in Fisheries Act in terms of the protection offered to wild Atlantic salmon. A copy of that submission can be obtained by contacting ASF.



- c. The Fisheries Act relies heavily on proponent self-assessment and requires little formal assessment of potential impact prior to commencement of most activities;
- d. The Fisheries Act does not provide sufficient protection to salmon populations that do not currently support recreational, commercial, or First Nations fisheries.

In short, the Fisheries Act aims to protect fish, fish habitat, and the fisheries they support, but it does not provide a robust framework for assessing and mitigating the potential impacts of a proposed activity on wild salmon. Indeed, the Fisheries Act authorizes the minister of DFO to permit the destruction of fish or fish habitat which, under CEAA 2012, can be done without triggering an environmental assessment. The Fisheries Act and the CEAA must work in tandem. A strong legislative framework for environmental assessment is necessary to backstop and support the Fisheries Act in achieving its goals of fish and fisheries protection, and on a broader scale, serve to prevent or avoid species from requiring protection under the Species At Risk Act.

- 4. *The Species at Risk Act (SARA) requires a stronger CEAA to be effective.* As noted above, most Atlantic salmon populations in the southern part of their Canadian range are either listed or assessed as threatened or endangered. As such, these populations require a higher level of protection from potentially damaging human activities. For those populations that have been listed (e.g. Inner Bay of Fundy Atlantic salmon), SARA requires that persons undertaking an environmental assessment of a project that might affect SARA listed species “identify the adverse effects of the project on the listed wildlife species and its critical habitat and, if the project is carried out, ensure that measures are taken to avoid or lessen those effects and to monitor them.” However, this provision is only invoked AFTER a determination has been made that an environmental assessment is required for a project; the presence of a SARA listed species is not a trigger for requiring a federal environmental assessment. Consequently, many projects and activities that have the potential to negatively impact threatened/endangered populations of wild Atlantic salmon and their SARA mandated recovery plans undergo no environmental assessment because they do not meet the narrow criteria to trigger the federal assessment process. Moreover, projects that do trigger at least a screening review under CEAA are no longer required to consider the impact on critical habitat for species at risk in the information submitted for screening.

Furthermore, populations that have been assessed by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) to be threatened or endangered but have not yet been listed (e.g. Outer Bay of Fundy, Southern Uplands and Eastern Cape Breton, NL south coast) receive no protection under SARA. The time between a COSEWIC assessment and a listing can be many years, with the assessed populations being in a precarious state. For example, the populations



mentioned above were assessed by COSEWIC in 2010 and the earliest possible decision on listing will be the spring of 2017, seven years later. This represents a significant gap for vulnerable populations, especially considering that they suffered decades of human impacts leading to the COSEWIC assessment. This gap needs to be addressed in improving and strengthening CEAA to ensure that potential human impacts on populations awaiting listing under SARA are assessed and mitigated.

As with the Fisheries Act, SARA and CEAA must work in tandem. A strong legislative framework for environmental assessment is necessary to ensure that the protections offered by SARA are applied in all cases where they are needed.

Recommendations for an Improved CEAA

If Canada's federal environmental assessment legislation is to provide effective protection to species whose protection and conservation are the responsibility of the federal government (e.g., Atlantic salmon), a number of changes to the legislation and its administration are urgently needed. These include:

1. The federal environmental assessment process must be triggered when a proposed project or activity has the potential to negatively impact a species for which the federal government is responsible. This should occur regardless of who the proponent is, the type of activity/project, or whether the federal government has any role in the project or its approval. All projects of this type should undergo at least a screening-level assessment to determine if the potential impacts on species of federal responsibility warrant further assessment and mitigation. The criteria for triggering a screening review/further assessment should be explicit, clear, and reasonable.
2. Federal environmental assessment legislation must work in tandem with the Fisheries Act and the Species at Risk Act to ensure the highest level of protection is applied in all relevant situations.
 - a. The presence of SARA listed species/populations (and, for precautionary reasons, those undergoing the listing process due to a COSEWIC assessment) or the potential for projects to impact such species should trigger a screening review under the federal environmental assessment process. Likewise, the likelihood of impacts on SARA-listed and COSEWIC-assessed species should be an explicit criterion to be considered in the decision as to whether further assessment is required.



- b. Assessments of impacts on fish and fish habitat should not be limited by weaknesses in the Fisheries Act (i.e., all relevant impacts should be assessed, not just those fitting the narrow definition of “harm” under the Fisheries Act), and any authorizations to harm fish or fish habitat made under the Fisheries Act should trigger an environmental assessment.
3. Federal legislation must have the power to ensure that assessments of potential impacts on species under federal jurisdiction conducted through a provincial environmental assessment process are consistent across jurisdictions and meet (at least) the federal standard.

In addition, ASF offers the following general recommendations for key elements of federal environmental assessment legislation and its administration.

1. People must be explicitly viewed as part of the environment. Prediction, mitigation, and monitoring of impacts from projects must include all relevant social impacts, including impacts on the way humans currently value, use, and benefit from environments and resources.
2. An effective environmental assessment process must provide public participation that is meaningful, early, ongoing, accessible and dynamic. The public participation process should ensure that all human values around the environment are considered in the decision-making process and have the ability to influence outcomes.
3. Assessments must incorporate the best and most up to date information on the natural and human environments where potential impacts might occur. Where information is not available to accurately predict impacts, the process must ensure appropriate data are collected and considered before decisions are made. Relevant information should be sought from multiple sources including science, local knowledge, and indigenous knowledge. Information must be made available to the public in a timely manner.
4. The environmental assessment process should apply to all levels (project, regional, strategic) and have the capacity to address cumulative impacts.
5. Legislation should set out clear criteria and rules to guide data collection, assessments, and decisions. Decision makers should be required to present a comprehensive reason for decision, and the public should have right to appeal decisions.



6. Where there are indications of significant impacts of projects (or activities contained therein), proponents should be required to investigate alternatives and justify any rejection of those alternatives.
7. The environmental assessment process should be used to support Canada in fulfilling its commitments made under international agreements. For wild Atlantic salmon these would include (but not limited to) the North Atlantic Salmon Conservation Organization (NASCO) and the Convention on Biodiversity.

Conclusion

ASF views the Canadian Environmental Assessment Act as foundational in protecting wild Atlantic salmon from the negative impacts of human activities and developments. The recommendations we have made in this document are based on our extensive scientific and policy experience working toward the conservation, protection and restoration of Canada's wild Atlantic salmon and the ecosystems on which they depend. Moreover, we believe that these recommendations are also relevant to the broader context of protecting all species under federal jurisdiction for the benefit of all Canadians.

ASF appreciates the opportunity to have input into the review of the CEAA, and we look forward to seeing the Panel's recommendations for improving Canada's environmental assessment legislation and processes.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Stephen Sutton', is written over a light grey rectangular background.

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