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*Overview of Canada's  
Wild Atlantic salmon stressors  
analysis*

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Fisheries and Oceans Canada

NASCO Annual Meeting, June 2025

# Significant stressors to Atlantic salmon in Canada

Threat classification	Ranking (number of DUs impacted)	Ranking (population abundance impacted)	Description of threat
Fishing & harvesting	1 (13 DUs)	1 (30.2%)	Harvest from marine mixed stock fisheries (West Greenland and Canada) and in freshwater
Introduced genetic material	2 (9 DUs)	2 (13.9%)	Interbreeding of fish with farmed or stocked salmon
Temperature extremes	3 (8 DUs)	3 (13.8%)	Near-lethal and lethal river temperatures
Problematic native species/diseases	5 (7 DUs)	4 (11.5%)	Increased disease prevalence in warmer waters and around aquaculture sites; Increased abundance of native predators
Habitat shifting and alteration	4 (8 DUs)	5 (11.4%)	Changing temperatures, marine productivity, and food availability impacting survival

# Challenges and considerations for interpreting Canada's stressors analysis and formulating next steps

- 850+ Canadian rivers support Atlantic salmon: delivering actions that collectively have 'urgent and transformative' impact when considering this geographical scale will be challenging.
  - The approach is focused on pathway-of-effects, leading to a detailed list of threats. However, this list doesn't fully align with how we often talk about stressors in a policy context:
    - Climate change-related impacts are split across several threat categories
    - Aquaculture impacts from different stressors are likewise split
    - Introduced genetic material threat arises from two different activities.
    - Impacts: may underestimate effects; may complicate design of action plan.
  - Explored two approaches to provide an overall ranking of threats across the Canadian range of Atlantic salmon:
    - By number of DUs impacted (i.e., emphasize diversity of Canadian stocks)
    - By the relative abundance of salmon impacted (i.e., emphasize overall abundance)
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# Take home messages and next steps

- Canada's final selection of priority stressors and actions to address those stressors will include consideration of relevant policies and legislation, Canada's new *National Strategy to Ensure the Future of Atlantic Salmon*, publication of COSEWIC's final assessment (2025), and further discussion among our delegation and with other stakeholders and partners.
- It will also draw on comments and feedback received from NASCO participants. We'll welcome those in this session, on the margins, or later.