



1 Challenger Drive  
PO Box 1006, P500  
Dartmouth, NS B2Y 4A2

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*Our file    Notre référence*  
18-HMAR-00523

Karen Lalonde  
Project Manager, Atlantic Region  
Impact Assessment Agency of Canada  
200-1801 Hollis Street  
Halifax, NS B3J 3N4

**Subject:    DFO comments on the Draft Environmental Assessment Report and Draft Potential Conditions – Boat Harbour Remediation Project**

Dear Karen Lalonde:

The Fish and Fish Habitat Protection Program (the Program) of Fisheries and Oceans Canada (DFO) received your request to review the draft Environmental Assessment (EA) Report and draft potential conditions for the proposed Boat Harbour Remediation Project on October 15, 2024. We understand that the proponent is proposing the following:

- The remediation of Boat Harbour and nearby lands, located next to Pictou Landing First Nation and east of Pictou, Nova Scotia. The Project will include waste management, expansion of the existing containment cell, remediation, and infrastructure decommissioning.
- During remediation activities in the Site Study Area (SSA), hydraulically (and in some cases, mechanically excavated) dredged sludge will be pumped through a dredge line to the containment cell (with an expected storage capacity of 930,000 cubic metres) to be dewatered by Geotubes. Leachate from the Geotubes will be collected and piped back into Boat Harbour to undergo natural attenuation. Remediation activities will start upstream in the SSA to ensure any impacts will be captured downstream.
- Freshwater wetlands and the estuary will be remediated by using ex-situ remediation for highly contaminated areas or natural attenuation for areas impacted to a lesser degree. The Proponent has estimated that approximately 27 hectares (ha) of the freshwater wetlands and 1.7 ha of the estuary would require ex-situ remediation. The entire footprint of Boat Harbour and associated basins below the Ordinary High Water Mark would undergo ex-situ remediation.
- Remediation will likely require the operation of dredges, excavators, rock trucks, dozers, loaders, and a mid-size compactor.

- Following remediation, the original tidal influence will be restored by mechanically demolishing the dam and dredging the channel from Boat Harbour to the estuary to match the channel shape and depth required for the construction of the new bridge. Infrastructure decommissioning will include the existing causeway, the dam, the pipeline, and treatment buildings.
- The Project is expected to take approximately 4 to 7 years to complete.

DFO has reviewed the draft EA report, select appendices, and draft potential conditions. Our review focused on sections of the draft EA, appendices and the draft potential conditions most relevant to the conservation and protection of fish and fish habitat. DFO offers the following comments for consideration:

### **General**

- DFO is of the view that the Impact Assessment Agency of Canada (the Agency) has:
  - Accurately and adequately characterized the potential environmental effects within federal jurisdiction and identified key mitigation measures, monitoring, and follow-up programs;
  - Accurately and adequately summarized comments and views from DFO.
- Based on the information provided in the draft EA, DFO agrees that a *Fisheries Act* authorization will be required for the project.

### **Executive Summary**

- *“Mitigation measures would be implemented to prevent or reduce potential adverse effects of the Project. IAAC identified key mitigation measures, which include, but are not limited to: establish and implement a protocol for the euthanization and capture and relocation of fish; develop and implement a fish habitat offsetting plan;...”*
  - IAAC should be made aware of the fact that DFO does not consider habitat offsetting to be a mitigation measure. DFO’s Hierarchy of Measures for the Conservation and Protection of Fish and Fish Habitat emphasizes that efforts should be made to first prevent (measures to avoid) the occurrence of adverse effects. When avoidance is not possible, then efforts should be made to minimize (measures to mitigate) the extent of the death of fish and adverse effects on fish habitat resulting from the proposed work, undertaking, or activity in question. Finally as a last resort, any residual adverse effects should then be addressed by efforts to counterbalance this loss of fish and fish habitat through positive contributions to the aquatic ecosystem (measures to offset). The Department emphasizes measures to avoid and mitigate as the preferred steps in the hierarchy of measures, followed by measures to offset as a last resort.

## **Section 5.1 – Fish and Fish Habitat**

- “A list of all species at risk identified by the Proponent and federal or provincial experts within the marine SSA, LSA and RSA are listed in Appendix C.”
  - The Appendix identified in this sentence is Appendix C – Spatial Boundaries. The information referenced in this sentence is likely from Appendix D – Species at Risk and COSEWIC-listed Species that may be found near the Boat Harbour Remediation Project.
  - Appendix D only lists Species at Risk and COSEWIC-listed species identified in the SSA and RSA. Consider removing LSA from this sentence if it is not included in Appendix D.
- “Euthanization would occur annually, prior to dredging and in consultation with Fisheries and Oceans Canada.”
  - This statement is partially correct, however, the following changes (bolded) should be considered: “Euthanization would occur annually, prior to dredging and in consultation with **Pictou Landing First Nation and Fisheries and Oceans Canada.**”

### **5.1.2 – IAAC Analysis and Conclusions**

- “IAAC acknowledges that Fisheries and Oceans Canada can not authorize the harmful alteration, disruption, or destruction of fish and fish habitat after it has occurred and highlights the importance of addressing these uncertainties prior to the removal of the dam.”
  - This statement is correct, but please consider the following changes (bolded): “IAAC acknowledges that Fisheries and Oceans **Canada** can not authorize the **death of fish by means other than fishing, or the harmful alteration, disruption or destruction of fish habitat** after it has occurred and highlights the importance of addressing these uncertainties prior to the removal of the dam.”

Refer to DFO’s website, <https://www.dfo-mpo.gc.ca/pnw-ppe/index-eng.html>, for further information on DFO’s regulatory review process and for further measures to protect fish and fish habitat.

If you have any questions with the content of this letter, please contact Ella Maltby at our Dartmouth office at 902-441-3188 or by email at [Ella.Maltby@dfo-mpo.gc.ca](mailto:Ella.Maltby@dfo-mpo.gc.ca). Please refer to the file number referenced above when corresponding with the Program.

Yours sincerely,

Matt Beyer  
 A/Senior Regulatory Review Biologist  
 Ecosystems Management-Regulatory Reviews  
 Maritimes Region