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Ontario and Prairie Region
Fish and Fish Habitat
Protection Program
Burlington, Ontario
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Région de l'Ontario et des Prairies
Programme de la protection du poisson
et de son habitat
Burlington (Ontario)
L7S 1A1

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Our file *Notre référence*

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Barb Pullishy
Impact Assessment Agency of Canada
Attention: Jennifer Howe, Project Manager, Prairie and Northern Region
1145-9700 Jasper Avenue
Edmonton, Alberta
T5J 4C3

Subject: Springbank Off-Stream Reservoir Project – Advice under Section 79 of the *Species at Risk Act* and Comment on Conceptual Offset Measures Plan

The Fish and Fish Habitat Protection Program (the Program) of Fisheries and Oceans Canada (DFO) indicated to the Impact Assessment Agency of Canada on February 3 2021, that the draft Environmental Assessment (EA) Report (dated January 2021) for the Springbank Off-Stream Reservoir Project did not consider: a jeopardy assessment for Bull Trout (Threatened, Schedule 1), a listed aquatic Species at Risk; and measures to offset residual impacts to fish and fish habitat, as well as aquatic species at risk and their critical habitat.

Section 79(1) and (2) of the *Species at Risk Act* (SARA) states:

79 (1) Every person who is required by or under an Act of Parliament to ensure that an assessment of the environmental effects of a project is conducted, and every authority who makes a determination under paragraph 82(a) or (b) of the [Impact Assessment Act](#) in relation to a project, must, without delay, notify the competent minister or ministers in writing of the project if it is likely to affect a listed wildlife species or its critical habitat.

79 (2) The person must identify the adverse effects of the project on the listed wildlife species and its critical habitat and, if the project is carried out, must ensure that measures are taken to avoid or lessen those effects and to monitor them. The measures must be taken in a way that is consistent with any applicable recovery strategy and action plans.

As a Federal Authority on the Springbank Off-stream Reservoir Project, DFO completed a jeopardy assessment in March 2021 with respect to potential impacts to Bull Trout resulting from the Project (Post 2021), in order to support conclusions on a draft EA report.

The risk of death of fish resulting from the Project to the survival and recovery of the species was assessed, based on expert opinion (Post 2021). Dr. Post indicated that, based on the current status of Bull Trout in the Elbow River (substantially reduced FSI scores from historical conditions), existing threats to the species (e.g., species interactions, human induced mortality, habitat fragmentation, alteration and removal), the recovery potential modelling (DFO 2016), recovery potential assessment (DFO 2017), recovery strategy and long-term recovery scenario (DFO 2020), that the additional threat posed by the development and operation of the Project will likely further compromise the recovery potential of the Elbow River Bull Trout. Note that this assessment was made in absence of the consideration of offsetting, to counterbalance residual effects to Bull Trout and its critical habitat.

Offsetting under the *Fisheries Act* will ensure residual effects of the Project to fish and fish habitat are counterbalanced through positive contributions to the aquatic ecosystems (measures to offset), as well as listed aquatic species at risk and their critical habitat. DFO sought advice from the Provincial Fisheries Manager, Alberta Environment and Parks (AEP) on the conceptual offsetting options presented to date by Alberta Transportation (the Proponent), in March and April 2021. Based on discussions with DFO and AEP, the Proponent submitted a memo (dated April 29 2021) on the draft Conceptual Offset Measures Plan for the Springbank Off-stream Reservoir Project (Stantec 2021).

DFO recognizes that the Proponent has considered DFO's guiding principles for offsetting (DFO 2019), in the selection of conceptual offsetting options, and that the initial offset measures for the Elbow River Fish Community (i.e. Elbow River Side Channel Habitat Creation) and Bull Trout (i.e. Canyon Creek Stream Connectivity Measures) meet those guiding principles. In addition, the initial offset measure for Bull Trout aligns with the Recovery Strategy (DFO 2020) and Fishery Management Objectives for the Lower Elbow River (AEP 2021a).

DFO conditionally accepts the Elbow River Side Channel Habitat Creation as an initial offset measure, as well as the sequence of additional offset measures listed in Table 1 to augment the overall offset potential, if required, for harmful alteration, disruption and destruction (HADD) of fish habitat and death of fish associated with the Elbow River fish community. DFO also conditionally accepts the proposal of the initial offset measure for the killing, harming, and harassing and destruction of critical habitat of a listed species at risk (i.e., Bull Trout) at Canyon Creek, as well as the sequence of additional offset measures for Bull Trout listed in Table 4 to augment the overall offset potential, if required, for impacts to Bull Trout and its critical habitat.

Uncertainties exist with estimating the potential effects to fish and fish habitat, in particular those associated with estimates for entrainment and death of fish. Factors causing this uncertainty are noted in the Conceptual Offset Measures Plan (Stantec 2021), as well as in Post (2021), Locke (2021) and AEP (2021b). DFO agrees that the proposed Adaptive Measures Offset Approach can work to address the uncertainty related to entrainment estimates and death of fish estimates, and provide positive contributions to the aquatic ecosystem, as well as Bull Trout and their critical habitat. Within a SARA-compliant *Fisheries Act* authorization, DFO could include contingencies requiring the Proponent implement additional offsetting, should the scale of death of fish due to Project operations be higher than predicted, or should offsets be found to not function as intended. Pre-construction monitoring, reference site monitoring as well as offset monitoring, will be essential to determine if offset measures are effective and functioning as intended (CSAS 2019/057, CSAS 2012/060 and CSAS 2020/013).

As per Section 79 (1) and (2) of the *Species at Risk Act*, based on the Bull Trout Jeopardy Assessment for the Springbank Off-stream Reservoir Project (Post 2021), DFO is notifying the Impact Assessment Agency of Canada that the Project is likely to affect a listed wildlife species and its critical habitat (i.e., Bull Trout). The draft Conceptual Offset Measures Plan, as presented, identifies measures that will be taken (i.e., offsetting) to lessen the adverse effects of the Project on Bull Trout and its critical habitat, and to monitor them. In addition, the initial conceptual offset measures presented are consistent with the Recovery Strategy.

Note that the Conceptual Offset Measures Plan has been submitted as a draft; therefore DFO accepts the plan in principle. DFO notes that Alberta Transportation recognizes and understands that additional site analysis, modelling, design effort and assessment will be required, as well as the estimation methodology and equivalency analysis to ensure that offsets are scaled to the residual effects from the Project, in the development of a final Offset Measures Plan as part of the application for a SARA-compliant *Fisheries Act* authorization. DFO will continue to provide feedback and direction to Alberta Transportation on the development of a final Offset Measures Plan.

If you have any questions with the content of this letter, please contact Kyle Antonchuk at <personal information removed>, or by email at Kyle.Antonchuk@dfo-mpo.gc.ca. Please refer to the file number referenced above when corresponding with the Program.

Yours sincerely,

<original signed by>

Jennifer Thomas
Manager, Regulatory Review
Fish and Fish Habitat Protection Program
Fisheries and Oceans Canada

Cc:

Matthew Hebert, AB Transportation
Wayne Speller, Stantec
Lacey AuCoinn, Stantec
Kyle Antonchuk, DFO
Lynn Dupuis, DFO
Neil Fisher, DFO

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