Request for Proposals

Trout Creek Fish Passage Barrier: Hydraulic Modelling Phase

Issued: January 16, 2026
Closing Date: 16:30 - Jan 23, 2026
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PROJECT BACKGROUND

Freshwater Conservation Canada (FCC) is a science-based, national, charitable conservation organization. We were founded in 1972 in response to challenges to freshwater fisheries through a focus on volunteer-driven, science-based resource conservation and hands-on activities. Our mission is “to conserve, protect and restore Canada's freshwater ecosystems and their coldwater resources for current and future generations”.

The Trout Creek watershed was, until recently, home to abundant populations of Westslope Cutthroat Trout. Decades of industrial, recreational, and agricultural land use impacts, exacerbated by environmental stressors including recent severe drought have resulted in functional extirpation of this population, sometime between 2019 and 2023. To recover a healthy population of Westslope Cutthroat Trout in the upper watershed, (within the Porcupine Hills Public Land Use Zone (PLUZ)), FCC has been undertaking habitat rehabilitation work here since 2018. The final step in recovery will be recovery stocking using the conservation broodstock developed by Alberta Environment and Protected Areas.

Recovery stocking efforts would be significantly hampered by the invasion of the upper watershed by non-native salmonids, namely Rainbow Trout *Oncorhynchus mykiss* and Brook Trout *Salvelinus fontinalis*, both of which are currently present downstream of the PLUZ. To keep these species from invading fish habitats upstream, a fish passage barrier is being explored. A preliminary engineering report completed in 2024 suggested further assessment of the bedrock present at the proposed barrier location is necessary to inform a final design of the barrier structure. This assessment was completed in fall 2025, and can inform potential design concepts for the barrier. To enable further development of design concepts, a hydraulic model is necessary. Development of this model is the subject of this request for proposals.

FCC is seeking letter proposals from qualified hydrotechnical engineers to develop a hydraulic model for the proposed Trout Creek fish exclusion barrier. This model will help inform future design concepts for this structure, which is intended to prevent invasion of Rainbow Trout, Brook Trout and Brown Trout into the upper reaches of the Trout Creek watershed which are being considered for recovery stocking of Westslope Cutthroat Trout.

PROJECT LOCATION

The barrier is proposed to be installed along Trout Creek, within the Porcupine Hills PLUZ on public land. The proposed barrier site is located approximately 55 km west of

Claresholm and can be accessed with on-highway vehicles via Hwy 520 and the East Trout Creek Road from either Hwy 22 or Hwy 2. The proposed barrier site is located at approximately 50.02531818593806, -114.03960381993873 (Figure 1). We do not anticipate field work being necessary for this project.

Figure 1. Proposed barrier location, photo looking upstream. Photo credit: Brian Meagher, Alberta Environment and Protected Areas.

PROJECT GOALS

The goal of this project is to produce a 2D hydraulic model of the proposed barrier site, to enable the advancement and testing of design concepts under an array of flow regimes. The selected proponent will be provided with topographical survey data (LiDAR and point shots), and the *Geotechnical Assessment – Trout Creek Fish Passage Barrier* report produced by Parkland Geo for FCC in November 2025, to assist with better understanding the characteristics and geology of the proposed barrier site.

DESIRED SERVICES

The expected deliverables for this project include:

1. Task 1: meet with FCC to discuss project objectives and deliverables in project kickoff meeting
2. Task 2: develop 2D hydraulic model of proposed barrier site
3. Task 3: prepare summary report including findings and recommendations
4. Task 4: present findings to FCC in project closure meeting

SCHEDULE

A proposed schedule is described below, all dates are 2026:

Milestone	**Deadline**
Proposal Submission Deadline	16:30 MST January 23
Evaluation of Submissions	January 23-26
Selection of Preferred Contractor	January 26
Milestone/task 1	January 27
Milestone/task 2	January 28-February 15
Milestone/task 3	February 20

BUDGET

The total budget for this project is $15,000 including GST. As Freshwater Conservation Canada is a registered charity, donation of in-kind services can be recognized as project sponsorship and recognition provided. Canada Revenue Agency does not permit charities to issue tax receipts for services, however cash donations are receiptable. More information is available on the CRA website: https://www.canada.ca/en/revenue-agency/services/charities-giving/charities/operating-a-registered-charity/receiving-gifts/gifts-services.html .

We are happy to discuss donation options with interested parties.

PROPOSAL SUBMISSION

Freshwater Conservation Canada is looking for a partner to work collaboratively on this project to help us reach our goals. We are open to suggestions and advice throughout this project. Contractors interested in this project should submit a short proposal outlining what can be completed within our budget and identify any value-added components that can be provided in-kind. The proposal should also demonstrate relevant experience of the project team.

Please submit your proposals to Freshwater Conservation Canada (info@freshwatercanada.org) by 16:30 MST on January 23, 2025

CONSIDERATIONS

The successful contractor will be expected to enter into a professional service agreement with Freshwater Conservation Canada.

The Contractor shall:

- Provide all articles, labour, equipment, transportation, hoisting, and incidentals noted, specified, and required to complete the work of this project.
- Carry out all work on this project in compliance with all applicable federal, provincial, municipal, and industry standards and regulations.

REFERENCE MATERIAL

Freshwater Conservation Canada can provide interested proponents with reference documents and files upon request, including:

- Geotechnical Assessment – Trout Creek Fish Passage Barrier (Parkland Geo, Nov 2025)
- LiDAR survey and elevation profiles of barrier site, example below