QUESTIONS AND ANSWERS

Restoring salmon habitat connectivity through fish-friendly beaver bafflers

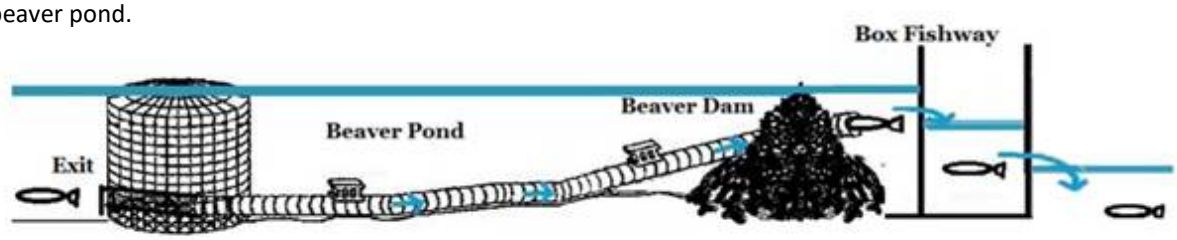
Through NCC's coastal restoration project, NCC is working with World Wildlife Fund (WWF) Canada to test the installation of a device called a beaver baffler at Shinney's Brook. It is an alternative management tool that helps salmon move past a chronic beaver dam without draining their ponds. It aims to improve the passage of salmonids in streams without interfering with the functionality of beaver lodges, dams, or the ecosystem services they provide.

Why NCC is undertaking this project?
Beavers are natural occurring species to Labrador ecosystems and have co-existed and co-evolved with salmon. Beaver dams, however, are often perceived to be an obstruction to fish passage and concerns about beaver dams as barriers to salmonid upstream migration has been raised by NCC members and others throughout Newfoundland and Labrador. Beaver ponds are deep, cool, slow-moving, food-rich habitats that persist year-round. This habitat promotes fish growth during critical early life history periods and provides refuge for adult salmonids.

Despite the valuable ecosystem services beavers provide, there are instances where salmonid stream migrations have been reported to be impaired. Salmon may be delayed for days or weeks due to inadequate depth of water for propulsion or they may be reluctant to move through an area with reduced flow. It is very rare to have complete blockage of fish passage for an entire system for the span of the migratory period.

What is a beaver baffler?
The beaver baffler is a modified flow device which is a man-made solution that is typically used to manage beaver-related flooding problems by regulating the water level of a beaver dam and to facilitate fish passage. They consist of pipes installed through the beaver dam, or pipe and/or fence systems that protect road culverts from being blocked.

How does the beaver baffler work?
A fish-friendly flow device is like a mini fish ladder. An adult salmon is attracted the flow of water at the slot, through which it can swim into a pool. The fish will next be attracted to the outflow of the 30-40-foot-long pond leveler pipe. The water velocity in the 15" diameter pipe is well below salmon sustained swimming capabilities. The pipe creates a direct hydrologic connection between the beaver pond and pool. The fish swims through the pipe, and into the beaver pond. As a salmon exits the device, a wire mesh cylinder over the pipe safely guides it straight through a one-way door exit to the open water of the beaver pond.



When will the beaver baffler be installed?
NCC has tentatively scheduled the week of November 9, 2020, to install the beaver baffler.

Who is NCC partnering on this project?
NCC is working with WWF Canada with support from the province of Newfoundland and Labrador (furbearer Biologist) and partnership with expert practitioners from the Beaver Institute.

Need more info? Have questions? Please contact Kristen Milbury, Coastal Restoration Coordinator at 709-896-0592, ext 227 or kmilbury@nunatukavut.ca or Charlene Kippenhuck, Natural Resources Manager at 709-896-0592, ext 230 or ckippenhuck@nunatukavut.ca.