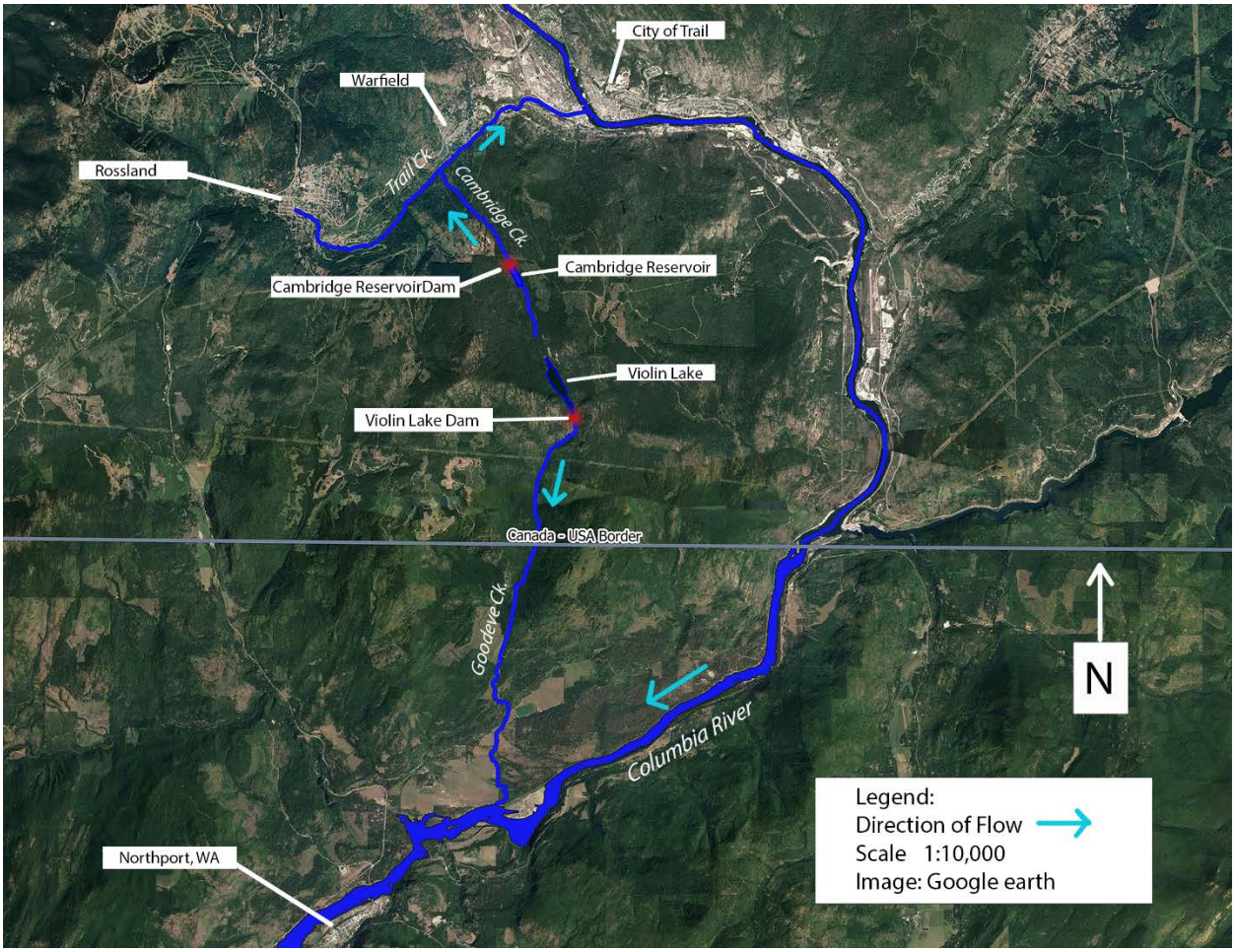
Cambridge Reservoir and Violin Lake
Dam Removal and Ecosystem Restoration Project

Where is the Cambridge reservoir and Violin Lake dam system, and what was it used for?



- The Cambridge reservoir and Violin Lake dam system is located just south of the City of Trail.
- It was used as a drinking water source for the City of Trail until 1994.
- The original system consisted of a dam built across Cambridge Creek and another across Goodeve Creek, the natural channel for Violin Lake. The creeks drain in opposite directions, North and South respectively.
- In 1968, the City increased the storage capacity of both dams and also installed a piping system to increase the year round availability.

Can the public use this area?

- Currently, the water impounded by the dams is **not available to the public** for recreation. One must cross private property to access the area. The road between Cambridge Reservoir and Violin Lake is in poor condition and would be expensive to rebuild. Even if this road were rebuilt, there is no legal route for the public to access the area as it is not connected to the public road network.
- The Cambridge Reservoir and Violin Lake are not considered to be fishable waters. Cambridge Reservoir and Violin Lake may contain Eastern brook trout that were stocked from 1911 to 1934. The Eastern brook trout are non-native and aggressive. Previous fishery surveys conducted identify that both water bodies do not contain other species of fish.

Could this area have public access in the future?

- The future uses of the area are outside the scope of the current project and will be considered in greater detail once the dam decommissioning project is complete.

What are the City's plans with this area?

- The City of Trail is planning for the full decommissioning of the dams so that no storage of water (beyond natural storage) may remain.
- Today, the City of Trail no longer needs this water storage system. The increasing costs of continued operation and maintenance of theses dams easily outweigh the benefits.
- There is also potential risk of property damage and loss of life in Canada and the USA if the dams were to fail. This categorized risk was determined by modelling various hydraulic scenarios. Improving the levels of public safety combined with avoiding the cost of ongoing inspections and the increasing costs of maintenance for the dams are the primary goals for the City of Trail to decommission the dams.

What kind of studies and work have been done so far?

- The City of Trail has completed a number of studies of the Cambridge Creek Reservoir, and of Violin Lake. In December 2019, the Dam Safety Officer ordered the City of Trail to either upgrade the spillway at the Cambridge Creek Dam or pursue the decommissioning of the dam. Accordingly, the City of Trail's intent is to decommission both the Cambridge Creek and Violin Lake dams.

- Section 9 of the BC Dam Safety Regulation requires the owner of a dam give the Regional Water Manager at least 60 days' notice prior to decommissioning a dam, and must submit a decommissioning plan to the Regional Water Manager for approval.
- The City of Trail is working in partnership with the British Columbia Wildlife Federation (BCWF) to prepare a Final Design Report for removal of the dams. This report shall be used to request permission for removal of the Cambridge Creek and the Violin Lake dams. The BCWF is assisting the City of Trail in applying for grants to restore wetlands and streams that were affected by dam construction as part of the dam decommissioning project.

Are there opportunities for the area?

- Many dams and their associated reservoirs provide benefits to British Columbians beyond the beneficial use of water authorized in the water license. Removal of the dam may have a negative effect on the local population and some projects may have a significant impact on environmental values in the stream. Therefore, before proceeding with the dam removal project, the City of Trail must take into account potentially significant adverse environmental, social, economic, health and heritage effects. Once identified, prevention or reduction strategies may be developed. Opportunity should be provided to anyone who might be willing to take ownership of the dam. "Consultation is intended to ensure that opportunities exist for the public to understand the proposed project and to have their comments appropriately considered" (Environmental Assessment Office, Public Comment Policy).

Please contact John Howes (Engineering Technician IV, City of Trail) for more information: JHowes@trail.ca

The dam on the Cambridge Creek Reservoir requires repair and frequent inspections to maintain public safety.

This photo shows the dam on the Cambridge Creek Reservoir.

The spillway for the Cambridge Creek Reservoir Dam has been found to be under-sized for significant storm events, which may cause failure of the dam.

Water is being removed from the Cambridge Creek Reservoir to reduce the possibility of failure of the dam.

The dam across Goodeve Creek, the natural outlet of Violin Lake, is in poor condition.

Beaver regularly block the poor-quality wooden spillway for the Violin Lake Dam. Water is leaking under the spillway, which may cause the dam to fail.