





This concrete barrier prevented fish from travelling upstream.



The bypass channel is a series of steps and pools.

## Ellis Creek By-Pass Channel – A Cool Dam project

Submitted by Donna Olsen, Environmental Services Coordinator

After about 50 years that a dam prevented upstream fish passage on Ellis Creek, an innovative solution has been implemented to allow fish, like kokanee and rainbow trout, to freely navigate around the obstruction.

The project, located in downtown Penticton, was completed as part of fish habitat compensation works. These were required by Fisheries and Oceans Canada, for a ministry project to widen Eastside Road, just west of Penticton.

The existing dam, approximately 1.5 metres in height, encases an active storm sewer line so it could not be impacted by the project works. As a result, the decision was made to construct a by-pass channel around the dam, featuring a series of steppools to allow the fish to access several kilometres of habitat on Ellis Creek, above the dam. Water flow into the by-pass channel is tightly controlled via an intake structure which allows the fish an opportunity to rest as they move up the 55-metre long bypass channel. Less than 24

hours after water was diverted down the new channel, kokanee were observed moving into the new channel, and shortly thereafter, above the obstruction.

Urban Systems Ltd. designed the project and provided environmental monitoring, while construction supervision services were supplied by McElhanney Consulting Services. The Penticton Indian Band also provided expertise for archaeological and environmental monitoring



Constructing the bypass channel to help fish like kokanee and rainbow trout.

during the course of construction. Works began in early August, and were completed Sept. 9.

Final site restoration and vegetation planting will take place in cooperation with the City of Penticton, in Spring 2016. The ministry sincerely

thanks the City of Penticton, Urban Systems, McElhanney, the Penticton Indian Band and the equipment operators and workers, who all played critical roles in bringing the project to fruition and enabling the fish to travel upstream, once again. •



One of the large pools, created downstream from the dam, that help fish get to the bypass channel.