Harper Creek Channel Open for (Fish) Business

Submitted by Brent Persello, Manager, Environmental Services

A representative from Triton Environmental Consultants Ltd. conducting sampling.

Rainbow trout from a stream sampling.

Results are promising from restoration of a 500-metre long section of Harper Creek, part of the ministry's project to four-lane three kilometres of Trans-Canada Highway, between Kamloops and Chase.

Harper Creek is a tributary stream to the South Thompson River that has been heavily impacted by past land use practices in the area. A number of natural and man-made obstructions (poorly installed culverts and stream diversions) have prevented fish from being able to freely access habitats both above and below the project area, about 40 kilometres east of Kamloops.

The majority of work on Harper Creek was undertaken under the direct supervision of ministry Field Services and Environmental Services staff. Key highlights of the Harper Creek work involved restoration of 500 metres of new channel; construction of new culverts under Highway 1, the frontage road and Canadian Pacific Railway tracks; and installation of spawning gravels, boulder clusters, root wads, overhanging logs and riparian planting (vegetation planted near river banks) along the entire section of restored stream. Over time, the restoration measures will provide a variety of complex habitat features for both juvenile and adult fish species.

Kirk Densmore, Donna Olsen, Jared Wedel, Elaine Shibata, Wendy Cummings, Lily Grubisic, Sher Horvath, Brent Persello and Paul Riegert at the Harper Creek site.

Due to its proximity to the regional office, the project offered a unique learning opportunity for a number of regional staff. Personnel from other business units were invited on two occasions this spring to accompany environmental services staff to the site. There they participated in some "hands on" fish habitat restoration work, including willow staking (driving live plant stems into the ground by hand) and fish sampling, and gained an overall appreciation for the amount of work that goes into building a new riparian ecosystem. A big thanks to all who came out to lend a hand during these sessions.

Fish are now able to freely access the upper reaches of the stream from the South Thompson, for the first time in almost a century. (Yes that's right!) Stream sampling completed in May confirmed that more rainbow trout and Chinook salmon than identified in pre-construction surveys are taking up residence in the newly constructed portions of the Harper Creek channel.

As the riparian vegetation begins to mature, it is expected that the numbers of fish using this section of stream will continue to increase in the coming years. Ministry environmental staff will be closely monitoring the site to ensure the features installed, function as intended. However, the results from initial biological sampling at the site are already exceeding expectations.

I would like to personally acknowledge the tremendous support provided by Rod Tresierra and Melvin Smith of Field Services throughout the duration of construction. In June, our group acknowledged them with commemorative plaques for their tireless efforts and dedication to the project. ♦

Willow stakes adjacent to the stream and logs placed in the stream provide shade, nutrient sources and improve fish habitat.

Wendy Cummings and Jared Wedel participated in stream restoration.

Rod Tresierra and Melvin Smith from Field Services contributed greatly during construction of the improved fish habitat.