

# Slocan River Rainbow Trout Habitat Enhancement Project

Summer 2006

Newsletter #9

## The Importance of a Healthy Riparian Habitat

### What is riparian habitat?

Riparian habitat is the densely vegetated transition zone between the water and adjacent upland habitat. Since these areas are next to water, they tend to have more moisture, with plants and soils that reflect wetter conditions.

Riparian habitat is extremely important because of its high value to fish and wildlife.

Vegetation intercepts sediment and agricultural run-off before it reaches the river, gives cover to small mammals and amphibians, and creates feed and nesting areas at the river's edge for birds. It also increases nutrient and woody debris levels in the river and moderates water temperature by providing shade.



Above: This riparian area is eroding, has no vegetation, and does not provide fish habitat.



Above: This healthy riparian area has abundant cover on the streambank.

Riparian vegetation can also be an important source of fish food. Leaves fall into the river and decay, providing nutrients which are the basis for the aquatic food chain. Fish feed on insects falling from streamside vegetation and small fish use the slower water along the margins of larger streams.

Mature riparian vegetation, when it falls into the river, is the source of large, woody debris that is used by trout as habitat.

Human settlement, agriculture and logging along large sections of the Slocan River have reduced sources of large, woody debris and have reduced shade, which has raised water temperature. Accelerated runoff, increased erosion and constant sedimentation have further reduced good fish habitat in the river.

The goal of the Riparian Restoration Program is to address riparian habitat degradation on the river, which supports Brilliant Expansion Power Corporation's goal to assist in restoring additional rainbow trout to the Slocan River.

## Interpretive Signage

During early 2006, Columbia Power Corporation worked with a local graphic artist to design interpretive signage for the Slocan River Rainbow Trout Habitat Enhancement Project, based on content developed by Rena Vandenbos and Tim Thurston from Selkirk College. These signs have been located on the Slocan Valley Trail and explain both the fish habitat structures and the riparian restoration component of the Project.

## What is the Slocan River Riparian Restoration Program?

The **Slocan River Riparian Restoration Program** is a component of the Slocan River Rainbow Trout Habitat Enhancement Project, Brilliant Expansion Power Corporation's (\*BEPC) fish compensation plan for the construction of the Brilliant Expansion Project, near Castlegar. During the development of the Project, riparian restoration was identified by the public as a key component in the recovery of the health of the Slocan River and its trout population. BEPC has committed \$20,000 annually in funding for riparian restoration projects on land along the Slocan River. \*BEPC is a subsidiary of Columbia Power Corporation and Columbia Basin Trust.



Watch for these interpretive signs on the Slocan Valley Trail, just south of Winlaw.



## IN FOCUS: The Bowles and Wright Project

When property owners Bob Wright and Tracy Bowles purchased 3 km of riverfront property in 1986, it had recently been logged by the previous owner. Being a silviculture forester, Bob replanted and rehabilitated the logged areas. Over the years, Bob and Tracy have developed a horse boarding and equestrian centre on their property, complete with riding trails. They also have approximately 20 head of cattle, which graze on a transmission line right of way that runs through their property. Their cattle's access to the river has deteriorated the river bank and

riparian area. When Bob and Tracy read about the Riparian Restoration Program in the local paper, they developed a plan to fence certain areas of their property, and submitted their proposal to Columbia Power Corporation. This spring, the Steering Committee approved a portion of their proposal, and will review further funding in 2007. This year's project, set to begin in September, will see the erection of fencing to keep the cattle out of the riparian area, which includes a section of rare Western Yew forest. Excluding the cattle from the riparian

area is expected to enhance natural regeneration and improve the water quality of the river.



*Above: This past spring, the Steering Committee toured the applicants' properties prior to approving funding.*

## Phase One Demonstration Fish Habitat Structures Undergo Further Studies

As reported in our January 2006 newsletter, the five demonstration habitat structures that were installed in the spring of 2005 have undergone further fish use monitoring during the summer to confirm that the structures are effective. Preliminary results show fish use in the target age class has doubled in the last year.

Work will also be undertaken to refine the proposed locations of the Phase Two structures, based on the performance of the Phase One structures.

Feedback will be gathered from the public in fall 2006, once the Phase Two plans have been refined.

## Columbia Power Corporation Funds Additional Projects on the Slocan River

In addition to funding the Slocan River Rainbow Trout Habitat Enhancement Program, Columbia Power Corporation has recently donated \$3,000 to the Slocan River Streamkeepers for their on-going community awareness program that includes a school outreach program, and the gathering and cataloguing of river data.

Professional biologists working with the Streamkeepers and students from Mount Sentinel Secondary School will establish a database that will make available much of the research that has been conducted on the river over the past 20 years. This database will contain information on fish counts, spawner surveys, water

temperature studies, flow, coliform bacteria and water quality tests.

The Streamkeepers have also planned a full river snorkel to document key ecological indicators.



*Audrey Repin (left) from CPC presents a cheque for \$3,000 to the Slocan River Streamkeepers, while students from Brent Kennedy Elementary School look on.*

## Riparian Restoration Projects Funded in 2006

Thirteen projects were approved for funding this year from a total of 16 proposals received. The proposals were reviewed by a steering committee consisting of: Peter Corbett and Gregoire Lamoureux from the Slocan River Streamkeepers, Bruce MacDonald from DFO Canada, Jeff Burrows from the Ministry of Environment, Kenton Andreashuk from the Canadian Columbia Inter-Tribal Fisheries Commission, and Audrey Repin and Llewellyn Matthews from Columbia Power Corporation.

## Contact Information

For more information on the Riparian Restoration Program, please visit the CPC website at:

[www.columbiapower.org](http://www.columbiapower.org).

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