



Keeping you informed

The Cheakamus Ecosystem Recovery Community Update is a prepared by CN for the residents of Squamish and nearby communities describing the ongoing fish population recovery work underway on the Cheakamus River.

In this issue we provide details of our newly announced, multi-year funding initiative for recovery projects on the Cheakamus River – the *Cheakamus Ecosystem Recovery Fund* – and update our many other fish population recovery programs currently underway.

For previous issues of this newsletter as well as the latest news and information on the Cheakamus ecosystem recovery, visit the Cheakamus Ecosystem Restoration Technical Committee (CERTC) website at www.certc.ca.

AN ONGOING COMMITMENT

CN is dedicated to the recovery of fish populations on the Cheakamus River, meeting monthly as a member of the Cheakamus Ecosystem Restoration Technical Committee (CERTC) since August 2005. CERTC is made up of representatives from CN Environment, District of Squamish, Fisheries and Oceans Canada, BC Ministry of Environment and Squamish Nation – all dedicated to supporting fish recovery and habitat enhancement in the Cheakamus River.

CN'S CHEAKAMUS ECOSYSTEM RECOVERY FUND

As one element of CN's *Cheakamus Ecosystem Recovery Plan*, CN has established the *Cheakamus Ecosystem Recovery Fund* to complement ongoing recovery efforts and encourage the construction of enhancement projects on the Cheakamus River by local residents and environmental stewardship groups. Other large-scale enhancement and construction projects will continue to be developed and implemented by CN.

The recovery fund is similar to existing funding programs provided through the Pacific Salmon Foundation and BC Hydro's Bridge Coastal program, with a few modifications:

- The qualifying funding area is the Cheakamus River from the Daisy Lake dam to the Squamish estuary including the tributaries to the Cheakamus River.
- The target species include those determined to have been most affected by the sodium hydroxide spill, specifically steelhead, chinook, char and sculpin. Those species less affected will also be considered.
- The project review and selection committee is

represented by CERTC membership (CN, District of Squamish, Fisheries and Oceans Canada, BC Ministry of Environment and Squamish Nation). BC Hydro will also review projects that have the potential to confound or affect BC Hydro's interests on the Cheakamus River.

- The program provides opportunity for groups to hire professionals to assist in the projects and does not limit the amount of funds it can provide to any one project.

CN will provide all project funding. The yearly budget for all projects will be \$400,000 and the program will run from 2007 until 2011. Total possible funding over the course of the program is \$2 million. Applications are currently being accepted.

Additional information on CN's *Cheakamus Ecosystem Recovery Fund* including funding and eligibility criteria, and the application form, can be found online at www.certc.ca.

This funding initiative is one of many restoration strategies in CN's overall *Cheakamus Ecosystem Recovery Plan* (CERP). CN continues to investigate and develop enhancement and construction projects outside of the funding program, including:

- Wilson Slough reunion – design nearing completion, permit acquisition
- Cheekye River fish passage – design underway
- LWD Demonstration project – contracted, design nearing completion, consultation
- Swift Creek – problem assessment and reconnaissance underway to determine feasibility
- Km 8 Channel rewatering – problem assessment and reconnaissance underway to determine feasibility

CHEAKAMUS ECOSYSTEM RECOVERY PLAN

The comprehensive recovery plan, funded by CN and developed through the Cheakamus Ecosystem Restoration Technical Committee (CERTC), is made up of two distinct program areas – monitoring and recovery. Details of some of the initiatives within these program areas are outlined below:

MONITORING PROGRAMS

Monitoring programs are the backbone of the *Cheakamus Ecosystem Recovery Plan*. These programs enable CN, in co-operation with CERTC, to determine the status of fish populations annually as well as over time, and help to establish pre-spill population estimates. Look for more information on CN's monitoring programs online at www.certc.ca.

RECOVERY PROGRAMS

Recovery programs are the more visible projects of CN's *Cheakamus Ecosystem Recovery Plan*. The Cheakamus River is a high velocity river, prone to flooding with private development, First Nation land and linear corridors. Any changes to the river or its tributaries must be done carefully and planned with consideration for all users of the Cheakamus valley.

Numerous projects are underway in various stages from initial assessment to implementation. Details of a sampling of these projects are below.

- **Cheakamus Ecosystem Recovery Fund**

The *Cheakamus Ecosystem Recovery Fund* is one piece of CN's overall recovery plan. This program, as detailed earlier in this issue, provides funds to community groups, watershed societies and environmental stewardship committees to develop and implement restoration/enhancement activities, independent to those of CN.

- **Fish Culture**

Fish culture is being used for a short period of time to increase fish numbers during the years that populations are expected to be low. These CN funded programs are implemented in co-operation with Fisheries and Oceans Canada and the BC Ministry of Environment, and are designed to supplement wild populations, not replace them. Over the course of six years, the focus of the fish culture program will be chinook, pink, coho and steelhead, and include necessary upgrades to the Tenderfoot and Fraser Valley hatcheries (see table below).

- **Cheekye Bridge Fish Passage Modification**

CN has completed its investigation of the Cheekye River bridge abutments and the stream profile surveying. This information is being used to help design the corrective measures necessary to protect the abutments and remove the concrete apron. Over the next few months, engineers will be working on design options and CN will submit the project to the environmental agencies for permitting. Construction is planned for lower flows in the instream work window of late summer 2007.



- **Swift Creek and km 8**

Thanks to input from the Stakeholder Team, CN has completed an initial reconnaissance of the Swift Creek and km 8 area. Further investigations will determine the issues around this area, feasibility and potential corrective measures. Updates will be available online at www.certc.ca and in future issues of this newsletter.

- **Wilson Slough Reunion**

The District of Squamish has completed their review of the CN design for Wilson Slough and final designs are currently underway. Once designs are complete, the project to install a culvert under two roads and three tracks to join Wilson Slough with the Squamish River will be submitted to the environmental agencies for approval. Construction will be scheduled to minimize impact to local residents and the Whistler Mountaineer in 2007.

- **LWD Demonstration Project**

CN has partnered with the British Columbia Conservation Foundation (BCCF) to complete a large, woody debris (LWD) demonstration project in the Cheakamus mainstem near the North Vancouver Outdoor School. The design calls for the construction of 11 triangular wood structures to increase cover and complexity along the riverbank to provide fish habitat. Steelhead, chinook, coho, and char are the primary targets, although other species are expected to use the structures periodically. BCCF is spearheading the CN-funded project, including conducting public consultation and environmental permitting. Construction is tentatively planned for late summer 2007.

SPECIES	2005/2006	2006/2007	2007/2008	2008/2009	2009/2010	2010/2011
Chinook	Actual: 7,378 fry released May 2006	Target: release 100,000 Actual: approximately 100,000 released late April 2007	Target: release 100,000	Complete	Complete	Complete
Pink	Actual: 574,533 fry released January–March 2006	Off Year	Target: release 1,000,000	Off Year	Target: release 1,000,000	Complete
Coho	Not Planned	Not Planned	Target: release 80,000	Complete	Complete	Complete
Steelhead	Not Planned	Target: release 20,000 Actual: 10,000 Tenderfoot planned for volitional release to Tenderfoot Creek early May 2007. Remaining 10,000 Fraser Valley fish planned for release late May 2007.	Target: release 20,000 (4 adult females and 4 adult males still to be collected for 2007/2008 stock)	Complete	Complete	Complete