

# Gravel will be laid in Cowichan River to aid chinook, steelhead

□By Doug Marner - Lake Cowichan Gazette□ □Published: August 25, 2008 9:00 PM

There are a lot of factors impacting the decline of chinook salmon, from loss of habitat to poor ocean survival rates.

In an effort to improve fish habitat in the Cowichan River a pilot restoration project is slated to begin September 2 at two sites in Lake Cowichan. The plan is to deposit large gravel directly below the town hall parking lot, as well as just east of the trestle foot bridge at the Duck Pond. Gravel is used by salmon for spawning.

Craig Wightman, senior biologist for the BC Conservation Foundation who is working on the restoration project, said if the upcoming project is successful it would be extended to other stretches of the Cowichan River near the outflow of Cowichan Lake.

“DFO considers the Cowichan an indicator river for chinook,” said Wightman, who was a fish biologist for the Ministry of Environment before retiring to work for the foundation. “They’re putting a whole recovery program on the Cowichan River.”

Based on 2006 snorkel surveys by the BC Conservation Foundation and the Ministry of Environment, quality gravel deposits are extremely rare in the Cowichan River downstream from the weir in what had traditionally been highly productive spawning grounds.

The survey showed that natural gravel tends to be small and frequently mixed with sand, but there is evidence of salmon and

steelhead use for spawning.

“The amount of gravel has diminished over the last few decades,” said Wightman. “This looked like a good chance to supplement the gravel to improve habitat.”

Chinook and steelhead both spawn in heavier gravel, whereas trout spawn in a finer gravel.

An advantage of starting after the Labour Day long weekend, said Wightman, is that school is back in and activity on the river will diminish. The deadline for completion is September 15.

“We want to do it before the salmon come in, which is typically in October,” said Wightman. That will be followed with monitoring in the fall and spring to determine gravel movement and use by spawning chinook and steelhead.

A project description notes that DFO assessments in 2004-05 show chinook egg-to-fry survivals were significantly higher closer to Cowichan Lake, where water quality was much improved. A hydraulic sampling of spawning areas near the Greendale Trestle found survival rates of 86 per cent, compared to no more than a 6.8 per cent survival rate at three sites downstream.

The project is jointly sponsored by \$25,000 from the Pacific Salmon Commission, Southern Endowment Fund; \$20,000 from the Habitat Conservation Trust Foundation; Living Rivers – Georgia Basin/Vancouver Island; and in-kind contributions of \$5,000 from the Department of Fisheries and Oceans and the B.C. Ministry of Environment.