

Staying the course on the Tsolum

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The Mirror

Going to Winnipeg in late October to talk about old, leaching mines doesn't sound like a whole lot of fun.

But Father Charles Brandt of Black Creek is looking forward to speaking at a national conference about the history of an abandoned mine at the top of Mount Washington and how it affected a river system.

"In 1982, the Puntledge hatchery released 2.5 million pink (salmon) fry into the Tsolum River. Not a single pink salmon returned and then they knew something was wrong," says Brandt, a founding member of the Tsolum River Restoration Society.

Almost 25 years later, the Tsolum still has its problems – as a result of copper leaching into the headwaters from the abandoned mine – but there are fish in the river.

"The returns this year were poor, we only had about 150 pinks in the river and returns were also down in the Oyster (River)," he points out. "Four or five years ago we had 35,000 return but that was a fluke. Last year we had 8,000 and that's not bad."

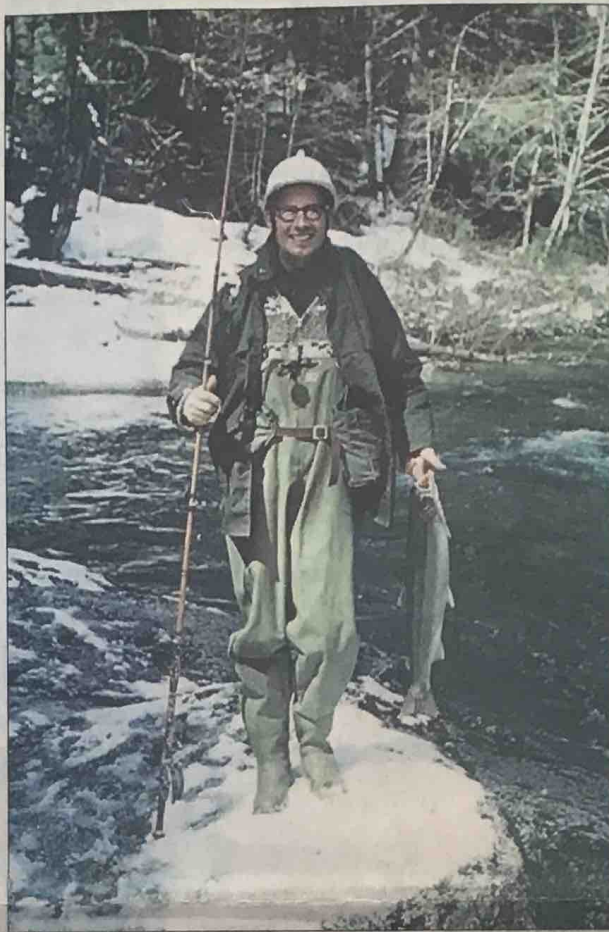
Brandt has been invited as a guest speaker at the Oct. 26-27 workshop of the National Orphaned/Abandoned Mines Initiative. The purpose of the conference is to explore and understand the best, emerging and innovative practices relating to the management of orphaned and abandoned mines.

Brandt will be talking about the history of the Mt. Washington mine, how leaching copper turned the Tsolum into a "dead" river, how various groups worked together to cap the mine and continue to revitalize the river system.

"They want to find out the best way of looking after these mines...and we have a pretty good track record," Brandt says of the restoration society.

The Mt. Washington Milling Company operated an open-pit copper mine at the top of the mountain from 1964-'67, and then went into receivership.

"Then we didn't hear much about it until 1978 when Esso Minerals thought they could extract more copper. They introduced acid to get copper but after four years, it wasn't economically feasible," says Brandt, speaking by phone from his home on the bank of the Oyster River.



Charles Brandt caught this steelhead in the Tsolum River in the late 1960s. In the coming years, all the river's fish disappeared due to copper contamination from an old mine on Mount Washington.

By 1985, it was well-known the Tsolum – which generally runs through the Merville area – was a "dead" river. According to Brandt, that's when the Comox Valley chapter of the Steelhead Society reconvened with the mandate to reclaim the minesite and save the Tsolum.

"We used to catch steelhead in there – back in the good ol' days," says Brandt who has a picture of himself holding a good-sized steelhead, he caught in the Tsolum, back in the late 1960s.

In 1987, the Ministry of Environment finally got involved and that led to a partial reclamation in 1988-'89 by the contractor SRK which covered up the 7.5 hectare site.

"That's actually quite small for a mine," says Brandt. "Basically what (SRK) did was put a 'rain-coat' on the site to keep out air and water."

Work continued on the site for a few years and copper levels fell by 50 per cent in the Tsolum – a decent reduction but still not healthy enough for fish.

The committee first formed by the Steelhead Society eventually changed into the Tsolum River Restoration Society. This group then formed a partnership with Fisheries and Oceans Canada, the provincial environment and mining ministries, TimberWest and the Pacific Salmon Foundation.

"That partnership made a big difference, for the better," says Brandt.

The copper levels were further reduced when a TimberWest hydrologist came up with the idea of detouring a feeder creek through wetlands and then back into the Tsolum.



The former copper mine at the top of Mount Washington was capped once to prevent leaching. It will likely be capped again at a cost of approximately \$5 million.

"We were seeing 90 micrograms of copper in the Tsolum River and that was reduced to seven (micrograms) and under," notes Brandt. "There are certain parts still around 20 (micrograms) and that can be bad for coho and steelhead (salmon)."

With the creek detour, plants in the wetland are soaking up the copper residue and, at some point the management strategy will no longer be effective. That's why the Tsolum partners are heading back to the "drawing board."

The province recently put up \$50,000 for a preliminary study on how to cap the mine for the long-term. SRK has been hired again to do the work which could cost \$5 million.

"We'll have to find the funds for that," says Brandt, who is optimistic about the Tsolum's future. "We're getting there and a I'm encouraged by this plan."

Rehabilitating mines – The National Orphaned/Abandoned Mines Initiative encompasses the work of the National Orphaned/Abandoned Mines Advisory Committee.

The committee was struck in March 2002 at the request of Canadian mining ministers that a multi-stakeholder advisory committee be set up to study various issues and initiatives relating to the development of partnerships in the implementation of remediation programs across Canada.

Responsibilities of the advisory committee include:

- Providing strategic direction and implementing action plans endorsed by mines ministers at their annual conference.

- Developing an annual work plan for the initiative and tracking progress.

- Assisting in technology transfer activities.

- The advisory committee consists of representatives of federal/provincial/territorial governments, the Canadian mining industry, environmental non-governmental organizations, and aboriginal peoples and their communities.