## **NEWS FOCUS**

## Report confirms copper factor in killing Tsolum

By MARK ROGERS

HE chairman of the Tsolum River Enhancement Committee has welcomed an announcement that the provincial government plans action to prevent further pollution of the river from an abandoned copper mine.

"It's a very positive step," said Father Charles Brandt.

A preliminary report from the ministry of environment confirms

that acid drainage from the Mount Washington mine led to copper concentrations in Tsolum River known to be toxic to salmonids.

"Total copper concentrations in the Tsolum River at certain times of the year are considered acutely toxic to salmonids, suggesting that the poor returns to the Tsolum hatchery and the declining steelhead fishery may be partly due to the acid mine drainage. Other factors have likely contributed to the decline in pink



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salmon stocks."

While some wild fish can still be found in the river, it has been termed dead.

In the spring of 1982, 2½ million pink-salmon fry were released from

the Tsolum River pilot hatchery. Not one returned.

The Steelhead Society of B.C.'s Comox Valley chapter, through the Tsolum River Enhancement Committee, has focused attention on the plight of the river since pollution was first probed in June 1985.

"We're gratified they admit high levels of copper and are taking steps to do something," Brandt said.

He pointed out, though, that according to the report copper concentrations in the river are known to have reached levels lethal to salmonids as early as 1972.

"It's really an embarrassment to the government," he added. "The mine was never covered or reclaimed. They (the company) just left it wide open."

An unofficial version of the report was first circulated nine months ago. The current draft was completed in April, but not released until July 25.

It recommends there be a detailed survey of water quality, and of the quantity of drainage from all waste rock dumps and the pit. The survey will pinpoint which part of the mine site generates acid, and which watercourses are affected.

The report says monitoring should be carried out from May to July, when snow melts and acid concentrations are highest. Emphasis should be on Pyrrhotite Creek, which leads into Tsolum River by way of Murex Creek.

"This study confirms that acid drainage from the site is affecting water quality in the Tsolum River watershed," Environment Minister

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## Government plans action to clean Tsolum

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Austin Pelton said in a press release.

"The data contained in this report will be used, along with the results of future investigations, to determine what remedial work, including reclamation at the mine site, may be required."

Preparation of the report was coordinated by the ministry of environment, with involvement from the ministry of energy, mines and petroleum resources, the federal ministry of environment, and the federal department of fisheries and oceans.

"We will be conducting a survey

of water users in areas of possible contamination," Pelton said. "All areas where there may be a question as to the quality of the drinking water will be posted."

The report says health risk from consumption of drinking water is confined to Pyrrhotite Creek, but adds there is little chance of this occurring since there are no residences or recreational facilities near the mine.

In addition to monitoring, action taken to date includes digging ditches above part of the mine to divert surface water away from waste rock.

Plans include:

· Collection of additional water

quality and quantity data for the mine and Tsolum River.

· Meetings with people holding interest in the land, including surface landowners and metal rights holders.

 Investigation of the location and suitability of cover material, along with contour mapping of the mine and waste rock.

A spokesman for the ministry of environment in Nanaimo, Ted Oldham, said a final decision on reclamation of the mine by covering it has not yet been made, but preliminary work will allow this option to be kept open.

He noted that results of further monitoring will determine what

steps are to be taken.

"We know much more than we did a couple of years ago, but we're still learning."

Oldham pointed out that while the report says copper concentrations in the river are high enough at some times of the year to kill fish, a direct tie has not yet been found between toxicity levels and the failure of the 1984 salmon run.

A team of eight senior experts from federal and provincial ministries visited Mount Washington June 26, 1985 to investigate the copper mine.

Brandt had sent several letters to both levels of government, beginning in November 1984, calling for rehabilitation of the river.

A tailings pond measuring 30-40 acres and huge piles of overburden still sit on the mountainside.

Brandt, who worked two years as a technician for the federal fisheries department, said he sees release of the preliminary report as "very positive."

He added, though, that the ministry of environment has to be "extremely careful" because it is impossible to prove what killed the fish. He said the best that can be hoped for are laboratory results showing this was the most likely cause.

The government could be embarrassed by the report, he said, because the mine - which operated from 1965 to 1967 - was allowed to remain exposed to the elements after it was closed.

This led to the formation of copper acid that eventually worked its way into the watershed.

Mine-reclamation legislation was passed in 1969.

Copies of the report, called A Preliminary Assessment of Acid Mine Drainage from an Abandoned Copper Mine on Mount Washington, B.C., are available through the ministry of environment's Vancouver Island regional headquarters at 2569 Kenworth Road, Nanaimo, V9T 4P7. Phone 758-3951.