



Mount Polley tailings spill effects could last for decades

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Next spring, the sockeye eggs that are now being laid in spawning beds throughout the Fraser River system will hatch and the young fish – by the hundreds of millions – will migrate into lakes to rear.

And that, at least in one lake, could be a disaster.

Quesnel Lake, into which 24 million cubic metres of water and mine tailings flushed when the Mount Polley tailings dam burst, is one of the biggest and most important sockeye nurseries in the province.

No matter how hard Imperial Metals works to clean up the tailings that escaped, the heavy metals that swept down into Quesnel Lake are still there, settling out on the bottom, where they will slowly be taken up into the food chain.

In the spring, vast schools of young sockeye – estimated to be up to 60 million in some years – emerge from tributaries, and flood down into Quesnel Lake. There, they spend a year before migrating down the Fraser to the Pacific, returning to spawn as four-year-olds.

The year in the lake is a crucial period of growth in which the fish must become large enough to survive the rigours of the out-migration. No wonder then, that biologists and First Nations are worried not just about the immediate impact of the spill, but also about the long term.

The run of about 1.5 million sockeye now flooding into spawning beds around Quesnel Lake was put in jeopardy by the tailings plume.

But Richard Holmes, a fisheries biologist and head of Cariboo Envirotech, says it appears the adults are okay.

“I manage a spawning channel for the Department of Fisheries and Oceans, as a consultant, near the village of Horsefly, and we’re currently loading sockeye into the channel and they seem fine. I assume they are swimming around the plume [in Quesnel Lake],” he said in an interview.

“So I don’t have any immediate concerns. My concerns as a fisheries biologist are long term. The deposition of heavy metals on the bottom of the lake is worrisome to anybody who knows anything about heavy metals and fish.”

Mr. Holmes said those heavy metals could be a threat for ages.

“I mean they will weep for a long time – decades, perhaps centuries – at the bottom of the lake. They will mix with the water column and get into the food web, first of all through zooplankton and phytoplankton, which are eaten by sockeye smolts ... then up the food chain that way.”

Aaron Hill, of the Watershed Watch Salmon Society, shares those concerns.

“It’s really scary. It’s a bad situation. But we don’t know yet how bad it will be,” he said.

Chief Darrell Bob of the Xaxli’p First Nation is far downstream of the spill site, living in Lillooet on the banks of the Fraser River. But he joined with two other chiefs this summer to shut down the salmon fishery because of concerns the fish exposed to the Mount Polley pollutants might pose a human health risk. Shortly after the spill, he said, there were reports of sickly looking fish being caught, so they told people to stop fishing, even though the summer sockeye harvest is a staple of their diet.

“It’s been devastating. It’s like losing a close family member. That’s how close we are to our fish,” he said, describing the emotional impact of losing the salmon fishery this year.

“The biggest fear we have now is that it’s going to wipe out one quarter of the stock on the Fraser,” he said, referring to the threat pollutants pose to young fish. The chief doesn’t like to think about what it would be like for his people if the Quesnel component of the Fraser’s sockeye run is wiped out.

Imperial Metals and the B.C. government, which sets the regulations for mines, has a lot to answer for this year because of the Mount Polley disaster. As devastating as that spill has been, however, the full impact on salmon won't be known for years.

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