

Report -- suction dredging would increase mercury levels

Ben van der Meer, Marysville Appeal-Democrat, 1-28-11

A report released this week by the U.S. Geological Survey suggests the return of suction dredging for gold mining would lead to high levels of mercury entering the South Yuba River.

The report, which studied the amount of methylmercury in the food chain near historic suction dredging sites and elsewhere, determined the mercury particles most likely to become part of the food chain are the ones such dredging would most likely release.

"We should make clear there's not a risk at this time to recreational use of the river or drinking water," said Charles Alpers, a research chemist with the USGS' California Water Science Center in Sacramento.

A state moratorium on suction dredging for gold was declared in 2009, partly for its destructive effects on the environment.

The USGS studied the amount of methylmercury in invertebrates at a historic mining site on the South Yuba River near where it meets Humburg Creek, in Nevada County. Scientists then studied the amount of methylmercury in such animals at other points on the river where there wasn't such mining, as well as the compound's presence downstream, near Lake Englebright and in the Sacramento-San Joaquin River Delta.

When suction dredging, miners collect larger particles of mercury and gold and mercury blended together, but miss smaller particles, which float downstream, according to the report.

But Alpers said he'd acknowledge relatively small-scale suction dredging would take longer to release high amounts of mercury than in the large-scale dredging of past times.

He said it would also matter when the suction-dredge miners worked.

During the summer, when such activities are more likely, more organisms would be likely to ingest the mercury, he said.

"In the winter, you're flushing out the system," he said. "It's important to put the findings in perspective with the loads and seasons."

Methylmercury is considered a toxic substance that causes damage to the nervous system, and is particularly dangerous for pregnant women, children and fetuses.

The state will lift the moratorium on such mining when three conditions are met: A report is prepared on its effects, new guidelines are written, and the state adopts those guidelines.

Mark Stopher, an environmental project manager with the state Department of Fish and Game, said the state will move closer to the first two goals at hearings next month on a draft supplemental environmental impact report on suction dredge mining.

The report includes a study of water quality, he said, similar to what the USGS studied in its report.

"We do connect the analysis and do make conclusions on whether they're significant," he said.

The report is not available yet, and Stopher would not say what those conclusions were.