TRI NITY JOURNAL

11-3/14/21

Page 3

Little mercury from mining found in Trinity waters

Scientific testing of water quality around abandoned mine sites in Trinity County last fall revealed that the water is very pure here—a fact that surprised the federal team of experts engaged in a mercury monitoring program throughout the historic gold mining regions of California.

The abandoned mines program of the U.S. Geological Survey involves a cooperative effort of federal land, water quality and environmental agencies developed to identify sources of mercury left over from the California Gold Rush era when it was in heavy use to amalgamate gold. It is estimated that up to 30 percent of the mercury used in placer and hardrock mines each season was lost into the environment surrounding the mine sites. Over time, biochemical reactions occur that turn mercury into methylmercury, an organic form absorbed and concentrated in fish, and the most toxic form to humans.

Mercury testing began in Nevada County where high concentrations of methylmercury were detected in fish living in warm, shallow lakes in watersheds that were extensively mined. In California as of 1999, there were fish consumption advisories for mercury in 13 waterbodies including the San Francisco Bay and Delta and several areas in the coast range.

The mercury-monitoring program is ongoing with a long-term goal of remediating the hot spots using the best current technology to clean up the inventoried sites on federal land. The study is only occurring on federal lands.

In Trinity County last fall, the team of scientists tested the water at numerous abandoned mining sites, including both placer mine tailings and hardrock tunnels on BLM and U.S. Forest Service land. The preliminary test results were shared last week with the Trinity County Board of Supervisors by representatives of the BLM and USGS abandoned mines program.

There were particular concerns about the water in Union Hill Pond because it is used for fishing, but results indicated the water there is pristine. The one exception to

the clean water findings was at the site of the Altoona mercury mine at the northern end of Trinity County above the East Fork of the Trinity River, and no one was surprised that high concentrations of mercury were detected there.

There was surprise that the water tested clean at the other sites sampled here where large amounts of mercury were used. Further research is planned to try to determine the reason for the results. It was noted that testing occurred during a low-flow time of year and additional, follow-up sampling is also planned including fish at the north end of Trinity Lake.

A Talkilla alle