

**POLLUTION FROM OLD MINING OPERATIONS:  
Safety of Trinity fish considered; Mercury in meat pushes  
state to issue guidelines**

**Redding Record-Searchlight – 4/28/05**

**By Alex Breitler, staff writer**

WEAVERVILLE -- Most gold miners left town decades ago, but you can still see the pits, piles and ditches they left behind -- evidence of their toils in the mountains of Trinity County.

It's the evidence you can't see, however, that concerns health officials.

The state is finalizing new recommendations for those who eat fish from Trinity Lake, Trinity River and other streams where mercury dumped from long-abandoned mines poses a health risk even today.

Those recommendations, which replace interim guidelines issued by the county in 2002, will be presented at a public meeting Tuesday.

Children and women of childbearing age are potentially most affected. Among other precautions, they are warned to eat bass and salmon from Trinity Lake just once a month. The guidelines below Trinity Dam are less restrictive.

Mercury released by the miners over the years has sunk to the bottom of the 466-foot-deep reservoir. Worms and grubs feed on bacteria in the tainted mud and then are gobbled up by fish, which later are hooked by anglers and fried up at home.

"The mercury works its way into the food chain," said Allan Hirsch, a spokesman for the state Office of Environmental Health Hazard Assessment.

And that could be bad both for children born and unborn. Mercury, which in fish takes on a more toxic form called methylmercury, can harm the development of the brain and the central nervous system.

"The effects on the fetus or child would be pretty subtle," Hirsch said. "It's not something a parent would really notice -- memory, learning ability, language skills, that kind of thing. We feel it's important for people to be aware of that."

Fish advisories aren't unusual. Thousands have been issued nationwide.

The state is presenting these latest guidelines after several years of in-the-field study by the U.S. Geological Survey. The Trinity area had never really been analyzed for mercury before, said Charlie Alpers, a Sacramento-based scientist who headed the project for the survey agency.

The construction of Trinity Dam made it more difficult for nature to wash the mercury away, Alpers said. However, the dam also protects the downstream river from contamination.

"It will go away, but I don't think it's going to happen in many generations," Alpers said. "I think we're looking at hundreds of thousands of years."

The greatest source of mercury appears to be the Altoona Mine, northeast of Trinity Lake, where unknown quantities of the heavy metal were extracted.

That mercury was then used to mine for gold and was ultimately released into streams, where it accumulated in the sediment and slowly moved downstream. It's a similar story all over the state -- miners used millions of pounds of mercury, and up to 30 percent of it ended up in the environment.

Bacteria then converted the mercury into methylmercury, which accumulates in fish at levels many thousands of times greater than mercury in the surrounding water.

A recently released U.S. Forest Service analysis of the upper Trinity River watershed says water quality in general is very good. The biggest problem is sediment that eroded into the waterways after millions of cubic yards of dirt were removed from the mountainsides.

The state's advisory doesn't suggest people wean themselves off Trinity fish entirely. Almost all fish, whether purchased at a store or caught in a mountain lake, have some level of mercury.

Nine out of 10 bass fishermen at Trinity Lake throw back their catches, said fishing guide John Gray of Weaverville, who trolls the 20-mile-long lake with clients.

Many do eat trout, he said. But Gray said he doesn't think the guidelines will take a bite out of the sport-fishing industry at the lake.

"I don't see anybody worried about it at all," he said. #

[http://www.redding.com/redd/nw\\_local/article/0,2232,REDD\\_17533\\_37355\\_28,00.html](http://www.redding.com/redd/nw_local/article/0,2232,REDD_17533_37355_28,00.html)