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To: Wed, Jun 13, 2007 11:09 AM
Date: "Comment Letter - Suction Dredge Mining"

Water Quality and Suction Dredging

State Water Resources Control Board
Division of Water Quality
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Sacramento, CA 95812-0100
Email: commentletter@waterboards.ca.gov

Dear Song Her,

I am sending you this letter in support of suction dredging on the California waterways, I have been dredging for many years and can report form personal as well as several studies that suction dredging has little or no impact on water quality.

California Department of Fish and Game (1997) described typical dredging activities as follows "An individual suction dredge operation affects a relatively small portion of a stream or river. A recreational suction dredger (representing 90-percent of all dredgers) may spend a total of four to eight hours per day in the water dredging an area of 1 to 10 square meters. The average number of hours is 5.6 hours per day. The remaining time is spent working on equipment and processing dredged material. The area or length of river or streambed worked by a single suction dredger, as compared to total river length, is relatively small compared to the total available area."

In the Oregon Siskiyou National Forest Dredge Study, Chapter 4, Environmental Consequences, some perspective is given to small-scale mining. "The average claim size is 20 acres. The total acreage of all analyzed claims related to the total acres of watershed is about 0.2 percent. The average stream width reflected in the analysis is about 20 feet or less and the average mining claim is 1320 feet in length. The percentage of land area within riparian zones on the Siskiyou National Forest occupied by mining claims is estimated to be only 0.1 percent." The report goes on to say, "Over the past 10 years, approximately 200 suction dredge operators per season operate on the Siskiyou National Forest" (SNF, 2001).

A report from the U.S. Forest Service, Siskiyou National Forest (Cooley, 1995) answered the frequently asked question, "How much material is moved by annual mining suction dredge activities and how much does this figure compare with the natural movement of such materials by surface erosion and mass movement?" The answer was that suction dredges moved a total of 2,413 cubic yards for the season. Cooley (1995) used the most conservative values and estimated that the Siskiyou National Forest would move 331,000 cubic yards of material each year from natural causes. Compared to the 2413 (in-stream) cubic yards re-located by suction mining operations the movement rate by suction dredge mining would equal about 0.7% of natural rates.

It has been suggested that a single operating suction dredge may not pose a problem but the operation of multiple dredges would produce a cumulative effect that could cause harm to aquatic organisms. However, "No additive effects were detected on the Yuba River from 40 active dredges on a 6.8 mile (11 km) stretch. The area most impacted was from the dredge to about 98 feet (30 meters) downstream, for most turbidity and settleable solids (Harvey, B.C., K. McClenneghan, J.D. Linn, and C.L. Langley, 1982). In another study, "Six small dredges (<6 inch dredge nozzle) on a 1.2 mile (2 km) stretch had no additive effect (Harvey, B.C., 1986). Water quality was typically temporally and spatially restricted to the time and immediate vicinity of the dredge (North, P.A., 1993)."

A report on the water quality cumulative effects of placer mining on the Chugach National Forest, Alaska found that, "The results from water quality sampling do not indicate any strong cumulative effects from multiple placer mining operations within the sampled drainages." "Several suction dredges probably operated simultaneously on the same drainage, but did not affect water quality as evidenced by above and below water sample results. In the recreational mining area of Resurrection Creek, five and six dredges would be operating and not produce any water quality changes (Huber and Blanchet, 1992).

As you can read by the for mentioned studies, suction dredging has little or no effect on water quality,
most dredgers go to extreme practices to keep our water clean, we work in it!
Thank You,
Robert Stuard
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