



Greene Environmental Services

33180 Dorset Lane
Philomath, Oregon, USA 97370-9555

April 4, 2013

Subject: **Senate Bill 401**

Dear Senator

I am writing to ask for your vote of **NO** on SB401.

This Bill is an unreasonable and emotional attack on the Oregon small-scale gold suction dredge mining industry. A simple overview of the listed streams and locations makes it clear that this Bill is not written to preserve scenic waters. It is written to indirectly outlaw all small-scale gold suction dredge mining in the listed Oregon waterways.

The genesis for these bills is concern for, and protection against, environmental harm. I have included information that demonstrates that all of this anti-suction dredge mining furor you are seeing and hearing this legislative session is a solution looking for a problem.

The information I have supplied is data taken from the \$1.2 million dollar California Department of Fish and Game Final Environmental Impact Report (2012) and numerous scientific environmental studies. The consensus of all this scientific literature is that the act of performing small-scale gold suction dredging has a **Less-than significant** impact on the environment.

In 1994 the California Department of Fish and Game produced an Environmental Impact Report with the same conclusion (**Less-than-significant**). Furthermore, in January 2000 the US EPA Alaska office confirmed results from a study on the 40-mile river which showed that the environmental effect of large 8- and 10-inch dredges was **Less-than-significant**. Consequentially, the results of all 3 major research programs arrived at the same conclusion - "The effects upon the environment from the operation of Small-scale gold suction dredges is **LESS-THAN-SIGNIFICANT**".

I hope you will pay reasonable attention to this information and my request for your **NO** vote on all of these ill conceived Senate Bills that are directly or indirectly attacking the industry of small-scale gold suction dredging.

I might add there are no emergencies that these Bills are addressing.

Will you please include this information in the official record?

Sincerely,

Joseph C. Greene

Research Biologist
U.S. EPA (Retired)

(1). Bullets Regarding the Environmental Impacts of Small-scale Gold Suction Dredging

- I. **The Effects of Small-Scale Suction Dredging on Fish, Fish Eggs, and Sensitive Early Life Stages**
No effects because Small-scale suction dredges are not allowed to operate in Oregon streams and rivers for about 9-months out of each year, to protect spawning salmonids, fish redds, and early life stages. **Less-than-significant**
- II. **The effects of suction dredging on invertebrates**
Fish and invertebrates were not highly sensitive to dredging in general (Harvey, B.C., 1986). **Less-than-significant.**
- III. **Stream Bed Movement and Habitat Disturbances from Small-Scale Suction Dredging**
Cross-sectional profiles indicated that the impact of the dredge piles relative to the stream width of the river is small. The operation of multiple dredges do not result in cumulative effects. Gravels are dispersed by the high stream flows, which included dredge tailings, compose a portion of the suitable spawning gravels each year. **Less-than-significant.**
- IV. **Turbidity, Siltation, Sediment Effects from Small-Scale Suction Dredging**
Water quality is typically temporally and spatially restricted to the time and immediate vicinity of the dredge. Sediment rates from suction dredging are only a minor fraction of natural rates in mountainous streams. Inter-gravel permeability is not significantly changed by dredging. **Less-than-significant.**
- V. **The Effect of Small-Scale Suction Dredging on Water Chemistry**
Water quality is impacted only during the actual operation of the suction dredge, which was generally 2 to 4 hours of actual operation. The primary effects of suction dredging on water chemistry could be increased turbidity, total filterable solids, and copper and zinc concentrations downstream of the dredge. These variables will return to upstream levels within 50- 100 downstream of the dredge. **Less-than-significant.**
- VI. **Recreation**
A California DF&G Viewer Response survey to Suction Dredging Activities at the Suction Dredge Site were not negative. Also, there were no Safety Hazards to Dredgers and Others from Suction Dredge Operations, Equipment, and/or Geomorphic Changes. **Less-than-significant.**
- VII. **Economy**
Greater than **\$9.2 million dollars** will be lost from the Oregon economy, from mining operating costs, if the small-scale gold suction dredging industry is destroyed. Furthermore, if each of the 1200 miners were to collect just 3.4 ounce of gold (average for California dredgers) that would be a loss of income of approximately **\$6.9 million dollars** ($\$1680/\text{oz} \times 1200 \text{ miners} \times 3.4 \text{ oz}/\text{miner}$). **Significant and avoidable**
- VIII. **Small-Scale Dredging Efficiency and Rates**
Studies to date have not shown any actual effect on the environment by suction dredging, except for those that are short-term and localized in nature (USACE, 1994). **Less-than-significant.**