

**Testimony of Forrest English before the Oregon Senate Environment and Natural Resources Committee in support of Senate Bill 838 relating to a moratorium on suction dredging in salmon habitat**

April 15<sup>th</sup> 2013

Senator Dingfelder, members of the Senate Environment and Natural Resources Committee:

My name is Forrest English and I am the Program Director of Rogue Riverkeeper, as well as a 3<sup>rd</sup> generation Oregonian and a resident of our state for my entire life. The mission of Rogue Riverkeeper is to protect and restore water quality and fish populations in the Rogue River Basin and adjacent coastal watersheds through enforcement, advocacy, field work and community action.

Suction dredge mining is increasing dramatically throughout Oregon in recent years. Permits issued for this activity by Oregon Department of State Lands (DSL) and Oregon Department of Environmental Quality (DEQ) have gone from hundreds, to thousands in just 5 years. As more neighboring states increasingly regulate to protect their natural resources, Oregon is becoming known as the state where anything goes.

DSL reports the permit registrations for suction dredging for the following years:

2008 – 656  
2009 – 832  
2010 – 1,095  
2011 – 1,527  
2012 – 2,409

Permits issued by DEQ jumped from 958 in 2011 to 1,913 in 2012, a nearly 200% increase in a single year.

The geographic distribution of suction dredge mining is highly concentrated in areas in the Rogue and Umpqua Basins of southwest Oregon. According to reports from DSL, the Rogue Basin is the most dredged area in the state, of particular concern to Rogue Riverkeeper given the focus of our work.

Suction dredging directly kills aquatic insects, mollusks, fish eggs, fish larvae, amphibian eggs and amphibian tadpoles when they are entrained by the dredge.<sup>1</sup> The gravel substrates of streams that once teemed with life suffer large losses.

When salmon spawn in areas with dredged tailing piles, the salmon eggs are more likely to be scoured out by winter floods.<sup>2</sup> This means that there will be fewer baby salmon emerging from the gravel and fewer juvenile salmon swimming to the ocean the following year.

Dredging causes turbid plumes of fine sediment for several hundred feet below the dredge.<sup>3</sup> The fine sediment settles as a fine coating on the stream bottom that degrades habitat for aquatic insects and juvenile fish.<sup>4</sup>

Suction dredgers sometimes illegally excavate into streambanks. Excavating streambanks damages streamside vegetation, increases erosion, causes harmful sedimentation, greatly increases turbidity, and causes channels to become shallower and wider.<sup>5</sup> The damaged stream banks will take decades to be restored naturally. Extreme turbidity caused by excavating streambanks can have harmful effects on fish and other aquatic animals.

Suction dredging may mobilize elemental mercury buried deeply in streambeds. Some of this mobilized mercury likely contributes to bio-accumulation of mercury in the food chain.<sup>6</sup> Health warnings have been issued in Oregon for consuming freshwater fish contaminated with mercury.

Noise, fumes, and turbidity caused by suction dredging makes streams being dredged less desirable for swimming, boating and fishing.<sup>7</sup>

Dredgers sometimes leave unsightly messes of trash, gasoline barrels, and equipment in remote pristine forests.<sup>8</sup>

Suction dredging is currently prohibited in California because of potentially deleterious impacts to fish.<sup>9</sup>

Except for temporary dredge holes<sup>10</sup>, scientific studies have found no benefit to aquatic animals or improved stream habitat from suction dredging. Overall impacts have been found to be neutral or adverse but not beneficial.<sup>11</sup>

In addition to the ecological impacts, suction dredging is having ongoing and increasing conflicts with other uses of these areas. Landowners on the Rogue River have frequently called me absolutely irate at the damage to their irrigation equipment from sediment plugging their filters and destroying motors as well tying dredges up directly to their intake pipes. Miners are storing equipment on the banks of their property, and using their lawns as an outhouse. The noise is incredible, imagine 15 teenagers mowing the lawn, all day, every day, all summer. The property owners have tried repeatedly to get county law enforcement's response, but all they can say is that suction dredging is legal. Rafters face an increasingly difficult situation navigating the density of suction dredges tied up in some areas, with ropes and cables obstructing passage downstream. We have heard complaints from customers looking for a quiet trip on the river, only to have noisy dredges on their float. Some favorite swimming holes and camping spots are taken over by full time mining camps and suction dredging, making it less appealing for area residents. Finally miners appear to think that public lands belong to only them, discharging firearms at people they perceive to be on "their property", such as incidents on the Illinois River in 2011 where campers were shot at.

As part of my job I spend time in the field monitoring suction dredge mining for compliance with existing permitting requirements due to a lack of state enforcement resources. DEQ, DSL spend as little as 2 days per year in the field on this issue, and Oregon State Police (OSP) are simply too shorthanded to assure reasonable compliance with existing rules. It's very difficult for me to go into the field without finding a number of permit violations. Most frequently I see undercutting of the bank, using tools and high-pressure water to dig into the bank, long turbid plumes of sediment more than 300 feet in length, the clearing of riparian vegetation and dragging gas cans through the water to refuel the dredge in the river without adequate spill protection. None of these activities are currently permitted under the existing permit structure. Issues such as this are frequent, especially in remote areas of the state. Add to this the increasing advice from many miners that permits should not be obtained for suction dredging, as many conclude that Oregon has no authority to regulate their activities and I think you can see how enforcement is a challenge.

Extensive review of science by the state agencies in California has determined that there are environmental impacts, many of which are not possible to mitigate. The California Environmental Impact Report (EIR) is the most comprehensive document relating to suction dredging's effects to date. I would strongly recommend that Oregon carefully evaluate the material and conclusions of the California EIR when evaluating if and where suction dredging should be permitted.

Agencies in California tasked with health and water quality are recommending the moratorium in California be made permanent (these letters are attached). Would be wise for Oregon to learn from the considerable time and expense that California has put into studying this issue. The California State Water Resources Control Board (with responsibilities roughly equivalent to DEQ and DSL in regards to the water pollution and fill/removal) states simply the following regarding the current moratorium on suction dredging in California.

*Based on the water quality impacts of recreational suction dredging, we recommend that the existing moratorium be continued indefinitely, or that this activity be permanently prohibited. Given the current scientific understanding of this activity's impacts, this is the only and the most cost-effective method to fully mitigate all significant water quality impacts.*

In light of all of the above outlined reasons, I strongly supports passing SB 838, and would like to see it made stronger to require new regulations discussed in section 3 of the bill.

Sincerely,

Forrest English, Program Director  
Rogue Riverkeeper  
PO Box 102, Ashland, OR 97520  
541-488-9831

- 1** Harvey and Lisle. 1998. Effects of Suction Dredging on Streams: A review and an evaluation strategy. Fisheries Vol. 23 (8):9.
- 2** Harvey and Lisle. 1999. Scour of Chinook salmon redds on suction dredge tailings. North American Journal of Fisheries Management 19: 613-617.
- 3** Oregon Department of Environmental Quality. 2010. 700PM-General Permit Fact Sheet.
- 4** Harvey and Lisle. 1998.
- 5** Harvey and Lisle. 1998.
- 6** Draft Subsequent Environmental Impact Report (DSEIR), Suction Dredge Permitting Program, California Department Fish & Game. 2011.Chapter 4.2
- 7** Recreational Placer Mining in the Oregon Scenic Waterways System. 2003. D. Bernell, J. Behan, B. Shelby.
- 8** DSEIR: 4.6-13
- 9** DSEIR
- 10** Harvey and Lisle. 1998.
- 11** DSEIR, Chapter 4 Environmental Impacts and Chapter 8 References.