

Testimony of Forrest English before the Oregon Senate Environment and Natural Resources Committee in support of Senate Bill 830 relating to mining for precious metals in and near streams

April 16th 2015

Senator Edwards, 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 3rd generation Oregonian. 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.

Support for SB 830

I urge the committee to vote in favor of SB 830 with the -2 amendments.

The measures outlined in SB 830 with -2 amendments squarely address the worst of the impacts to salmon and other sensitive aquatic species and their habitat, provides the state more sufficient resources to better manage this regulatory program, and houses permitting under a single state agency.

First, it is important that Oregon fully protect sensitive species such as salmon, lamprey, bull trout and mollusks from these types of mining as recommended by the Oregon Chapter of the American Fisheries Society. The proposed bill as amended would prohibit mining in habitat essential for salmon, lamprey, bull trout and mollusks. Many of these species are important for Oregon's economy, as well as the cultural identity of our state and many of our indigenous residents, and in some cases are identified by state and federal agencies as at risk. The importance of protection of these most valuable habitats cannot be overstated.

Second, the number of permits available for mining with a suction dredge needs to have a cap. In the past the lack of an upper ceiling has led to wild fluctuations of permits and impacts that follow the price of gold or a perception of new mining areas. A statewide cap on the number of permits would ensure that state and federal agencies can manage based on a more predicable level of impacts, and that we will not see the type of backlash that we saw in 2012 and 2013 to the massive increase in mining.

Third, it is important that any legislation address mining adjacent to our streams as well as the impacts to sensitive waters through mining upstream in those watersheds. Mining near our streams impacts habitat just as it does in the stream itself. Mining in the floodplain or nearby frequently removes important riparian habitat and damages wetlands that are critical to aquatic species and water quality. Additionally, it is important to recognize the upstream impacts that mining in watersheds that contain waters already impaired for pollution, or that contain the sensitive habitats discussed earlier can have. A

more site-specific permitting system should be included to analyze and address these issues.

Fourth, the state is investing millions in restoring salmon habitat, yet currently allowing damage to that same habitat with a \$25 permit to mine. Streams and rivers where Oregon has invested more than \$100,000 to restore habitat for salmon should be off limits for further mining to protect those investments.

Fifth, permit fees for mining need to be adequate. Current permit fees are cheaper than fishing licenses, with even less oversight and agency resources available. The state needs to be able to set permit fees to support a sufficient program to analyze, issue and oversee these permits without placing a burden on the taxpayers. The cost of this program should be largely shouldered by permittees that stand to profit, rather than by the public whose resources the state has been entrusted to protect.

Background

Mining for gold using suction dredges and other methods near our streams has seen dramatic increases 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 2012, and down to somewhat lower levels following temporary changes in 2013. The impacts of mining for precious metals on our streams and rivers merits a workable and protective solution for the long term. Clean water and the species that depend on them must be safeguarded for all Oregonians, regardless of the price of gold in the future.

The geographic distribution of suction dredge mining is most 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.¹ The gravel substrates of streams that once teemed with life suffer losses.

When salmon spawn in areas with dredged tailing piles, the salmon eggs are more likely to be scoured out by winter floods.² 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.³ The fine sediment settles as a fine coating on the stream bottom that degrades habitat for aquatic insects and juvenile fish.⁴

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.⁵ 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.⁶ 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.⁷

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

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

Except for temporary dredge holes¹⁰, 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.¹¹

Similarly, as frequently highlighted by NOAA Fisheries biologists, mining near streams can have substantial impacts by clearing and removing important streamside vegetation that provides shade, wildlife habitat and water filtration. Mining near streams can alter the floodplain, leading to runoff of to our streams, impacting wetlands and affecting side channel habitat that is important to salmonids.

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, or Thompson Creek in 2013 where campers or residents had firearms discharged at them.

As part of my job I spend time in the field monitoring suction dredge mining for compliance with existing permitting requirements due to limited state oversight for these types of permits. DEQ, DSL spend as little as 2 days per year in the field on this issue, and Oregon State Police (OSP) simply have a lot more on their plate and are generally complaint driven. 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. NOAA Fisheries recovery plan for threatened Southern Oregon Northern California coho salmon specifically identifies the need for improved regulations governing mining practices. A recent Rogue-River Siskiyou National Forest Biological Assessment considers many of these mining practices likely to adversely affect threatened salmon and other fish species. The Oregon Chapter of the American Fisheries Society has identified a number of impacts from these types of mining, and has recommended prohibiting motorized mining in sensitive habitats as well as more detailed study of other issues.

In light of all of the above outlined reasons, I strongly support passing SB 830 with the -2 amendments.

Sincerely,

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- 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.