## Testimony of Forrest English before the Oregon Senate Environment and Natural Resources Committee in support of Senate Bill 1530 relating to mining for precious metals in and near streams

February 4, 2016

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 3<sup>rd</sup> 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 1530

I urge the committee to vote in favor of SB 1530 with the -1 amendments.

The measures outlined in SB 1530 with -1 amendments lay out a road map that scales back existing restrictions on mining, and focuses much needed protections for salmon and water quality. The bill would use a current moratorium as a much-needed "breather", giving the agencies time to develop new more targeted regulations to carry us into the future. Additionally, the new program would provide the state greater resources to implement a simplified regulatory program for instream and near stream gold mining, while placing fewer burdens on the taxpayer.

First, it is important that Oregon fully protect sensitive species such as salmon, lamprey, bull trout and mollusks from mining directly in stream such as suction dredging as recommended by the Oregon Chapter of the American Fisheries Society based on a review of current science. SB 1530 as amended would prohibit mining in habitat essential for salmon, lamprey, bull trout and mollusks, while allowing for mining in other areas. 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. In SB 1530 temporary restrictions will allow the agencies to develop an effective program without ongoing pressures to our resources.

Second, substantial compromise has been made reducing the burdens of the original moratorium that is in effect now on miners adjacent to our streams. It is important that any legislation address mining adjacent to our streams. 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. In SB 1530 DOGAMI will be given some additional permitting authority to regulate small scale mining along our streams, and will do so in a fashion proposed by so called upland miners.

Third, permit fees for mining need to be adequate. 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 permitees that stand to profit, rather than by the public whose resources the state has been entrusted to protect. SB 1530 through combining DEQ and DSL permitting authority will both simplify permitting and reduce agency expenses, but a new permit will allow DEQ to set new reasonable fees to cover a more substantial portion of program implementation with permits fees.

## Background

Mining for gold using suction dredges and other methods near our streams has seen dramatic increases throughout Oregon the recent past, generating substantial public concern and bringing the issue to light. Permits issues for this activity by Oregon Department of State Lands (DSL) and Oregon Department of Environmental Quality (DEQ) went from hundreds, to thousands in 2012, and down to somewhat lower levels with the decline in the price of gold. There is currently a 5-year temporary moratorium in place for these forms of gold mining and there must be an effective plan in place for afterwards.

The impacts of mining for precious metals in 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, though there are areas spread throughout the state. 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 teamed 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.<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>

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 were storing equipment on the banks of their property, and using their lawns as an outhouse. The noise is incredible; imagine 15 lawnmowers next door, all day, every day, all summer. Property owners tried repeatedly to get county law enforcement's response, but all they could say is that suction dredging is legal. Rafters faced an increasingly difficult situation navigating the density of suction dredges tied up in some areas, with ropes and cables obstructing passage downstream. We 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 were 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 and 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 complaint driven. In recent years during mining season it has been 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 were even allowed under the pre-moratorium and current permit structure. Issues such as this have been 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, and the bold statements by the Galice Mining District that right now miners are knowingly violating the current moratorium and mocking state law. Many miners publicly consider that Oregon has no authority to regulate their activities. I think you can see how lack enforcement is a challenge and leads to harm to the resources and our communities.

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 Coast 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. The California State Water Resource Control Board recommended in a letter to the California agency regulating suction dredging the only effective method of protecting water quality was to prohibit the activity completely.

As you can see a review of the issues makes it easy to see why many environmental groups ask for a complete and permanent ban on suction dredging and mining along our streams. However as you can see, SB 1530 does not go nearly that far and contains significant compromises that seek to truly provide a laser focus on clean water, fish and aquatic life where it is most needed, yet allows mining in other areas.

The issues outlined above have lead to public outcry, and the current moratorium. The moratorium must be used as a path forward to long-term regulations that work and are targeted where it is most important. What is outlined in SB 1530 does just that.

I strongly support passing SB 1530 with the -1 amendments.

Sincerely,

Forrest English, Program Director

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**10** Harvey and Lisle. 1998.

11 DSEIR, Chapter 4 Environmental Impacts and Chapter 8 References.