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Idaho Conservation League

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Mr. Tim Luke, Water Compliance Bureau Chief
Idaho Department of Water Resources
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Email: tim.luke@idwr.idaho.gov

July 14, 2017

Re: Idaho Conservation League comments on the Stickley application for proposed suction dredge mining on Red River, near Elk City

Dear Mr. Luke:

Thank you for allowing the Idaho Conservation League to comment on the proposal to conduct suction dredge mining on the Red River, near Elk City by Mr. John Stickley (Permit No. S82-20067). Since 1973, the Idaho Conservation League has worked to protect Idaho's clean water, wilderness, and quality of life through citizen action, public education, and professional advocacy. For more information, visit www.idahoconservation.org. As Idaho's largest state-based conservation organization we represent over 25,000 supporters, many of whom have a deep personal interest in protecting and restoring our water, wildlands, and wildlife.

The Idaho Conservation League has significant concerns with this proposal and urges the Idaho Department of Water Resources (IDWR) to deny this application. In particular, we do not feel that it is appropriate to consider a suction dredge operation in Red River, which was designated as a State Recreational River, pursuant to the South Fork Clearwater River Basin Comprehensive State Water

Plan (hereafter "Comprehensive Plan"). That plan was approved in 2004 by the Idaho Water Resources Board and was affirmed by the Idaho Legislature in 2005. According to the Recreational River designation, the following activities are prohibited to protect the public interest and existing uses: *"Construction or expansion of dams or impoundments; Construction of hydropower projects; construction of diversion works, dredge or placer mining (including recreational dredging, except where allowed through application for permit, Form 3804-B); Mineral or sand and gravel extraction within the stream channel...."*

The Comprehensive Plan prohibits dredge or placer mining, but allows for consideration of recreational suction dredge mining if applied for consistent with the Form 3804-B Stream Channel Alteration Permit process. In this case, commercial mining is being applied for, and should be appropriately denied. Even if the applicant applied for a recreational suction dredge permit, consistent with the 3804-B process, it is unclear how public interests would be served by approval of this permit.

Supporting information submitted by Mr. Stickely failed to illustrate any compelling interest that would override the protections implemented in 2004 and 2005 to protect public interests and existing water users. As a result, we urge IDWR to deny this permit application.

The Idaho Conservation League shares the concerns of the IDWR, IDWR Board and the Idaho Legislature to protect Red River from the harm associated with suction dredge mining. In particular, we have significant concerns with the proposal based on specific harms to water quality, endangered species, and state species of greatest conservation need.

Red River provides important habitat (spawning, rearing, and migratory habitat) for several threatened, endangered, and sensitive species, including Chinook

salmon, steelhead trout, bull trout, Pacific lamprey, Westslope cutthroat trout and other aquatic species. We do not feel that Red River is an appropriate place for a commercial gold mining operation and feel that the public benefit of the proposed gold mining proposal is far outweighed by the benefits associated with clean water, recreation, fisheries, aesthetics and other core Idaho values.

In addition to effects to listed, threatened or sensitive Chinook salmon, steelhead trout, Pacific lamprey, and bull trout, we are also concerned with the effects to other aquatic species including, but not limited to redband trout, cutthroat trout, as well as other game and non-game aquatic species. Similar to the effects on salmon, steelhead and bull trout, increased sedimentation and erosion may negatively impact spawning, rearing and transitory habitat of numerous aquatic and riparian-dependent species in the Red River. In addition, increased turbidity, downstream erosion, reduced downstream deposition, impacts to interstitial spaces, changes in algal growth, impacts to the food chain (i.e. aquatic invertebrates) and effects on overall aquatic productivity also need to be considered.

As you are aware, the Environmental Protection Agency (EPA) developed a general National Pollution Discharge Elimination System (NPDES) permit for recreational placer mining activities in the State of Idaho. Small-scale suction dredging as a general activity was found to adversely affect Endangered Species Act (ESA)-listed salmon and steelhead and their habitat. Most of the Snake, Salmon, and Clearwater drainages containing listed salmon and steelhead and their designated critical habitat were excluded from suction dredging activities of the general permit (NOAA, 2012). As such, Red River is excluded from the general permit and an individual NPDES permit is required by Mr. Stickley before any activities can be approved. NPDES permits are required pursuant to the clear statutory and regulatory provisions of the Clean Water Act. Failure to require compliance with federal law creates unnecessary liability to the residents

of the State of Idaho and if this stream channel alteration permit is approved we urge you to clearly communicate to the proponent that a NPDES permit must be secured prior to any initiating any in-stream work. As part of any analysis associated with the issuance of a NPDES permit, the EPA must also consult with the Fish and Wildlife Service and NOAA – Fisheries.

In addition to an NPDES discharge permit required pursuant to the Clean Water Act, the proponent must also coordinate with the U.S. Forest Service, which holds title to adjacent uplands and therefore owns the bed of the river in this segment. As a result, the Forest Service would have to initiate a NEPA analysis. As part of any NEPA analysis, the Forest Service must also consult with the Fish and Wildlife Service and NOAA – Fisheries. A more recent Environmental Assessment (EA) for suction dredging in similar tributaries of the South Fork Clearwater River in 2016 requires submission of detailed Plans Of Operation (POOs) for any dredge mining operations (USFS, 2016).

In addition to coordination with the Forest Service, the Army Corps of Engineers (ACOE) should consider the activity pursuant to Section 404 of the Clean Water Act. The ACOE maintains a Nationwide Permit for minor discharges, however the volume of that discharge is limited to 25 cubic yards. According to the California Department of Fish and Game, modern 4" dredges similar to Mr. Stickley's have a capacity to displace 1-5 cubic yards of sediment per hour (CDFG, 2009). Although Mr. Stickley claims he will only discharge 30 cubic yards of sediment, if he operates his dredge from July 15 to September 30 as stated in the application, we would anticipate the sediment discharge will be much higher. There is good reason to believe Mr. Stickley is purposefully underestimating his sediment output to dodge regulations. As a result, this does not meet the limitations of a "minor discharge" and thus a 404 permit is required.

As noted above, we are especially concerned about the impacts to Spring/Summer Chinook salmon, Fall Chinook salmon, steelhead, bull trout and other aquatic species within, and downstream of the project area. Suction dredge mining can alter physical, chemical and biological characteristics of streams and can also impact the geomorphic structure of streams (Kondolf, 1991), depending on the volume of material displaced. Removal and redistribution of in-stream gravels can also increase water velocity, increase downstream erosion, disturb the equilibrium of streams, and thereby impact upstream and downstream riparian habitats. Impacts to riparian vegetation, bank undercutting, and removal of woody debris can have long-term impacts on important habitat components that contribute to stream health (Stern, 1988). See also EPA (2012) and NOAA – Fisheries (2016).

Sediment loads and turbidity have been found to increase in the direct vicinity of dredging operations. Harvey et al (1986) found increases in suspended sediment in association with research in California. Similarly, Newcombe and MacDonald (1991) found that high concentrations of suspended sediment can alter survival growth and behavior of stream biota. See also EPA (2012), Power (1990), Hogg and Norris (1991), Phillips et al. (1975), Fudge and Bodaly (1984), and NOAA – Fisheries (2016).

Suction dredge mining also creates unstable spawning habitat through the deposition of tailings below mining areas. These unstable gravel beds can attract spawning fish and threaten spawning success. As Harvey and Lisle (1996) point out, “[s]ubstrate stability is critical to spawning success of fall-spawning species because the weeks or months of embryo development in the gravel commonly coincide with the season of high flows that mobilize streambed (Holtby and Healey, 1986; Lisle and Lewis 1992).” In addition, Harvey et al (1996) also details how suction dredge mining can also lead to filling of pools, which are important

resting and rearing habitat for many species of transitory and migratory fish species in Red River. See also EPA (2012) and NOAA – Fisheries (2016).

Because of the prohibitions on harassment of ESA-listed species that utilize habitat within the area proposed for mining, we are concerned that it is inappropriate to approve a suction dredge operation at this location. Further, dredging can expose underlying fine-particle sediments that can wash downstream, smothering sensitive spawning beds, even if none are present directly below or under dredge mining activities. Finally, instream dredging equipment, materials and disturbance may inhibit movement of fish. As Nielsen et al (1994) indicated, minor disturbances during the summer may harm adult salmonids when their energy supplies are at critical levels and are exacerbated by increased stream temperatures. These concerns were reiterated in the 2016 Biological Opinion from NOAA Fisheries (included and to be considered as part of these comments), which recommended mitigation actions by Forest Service representatives to delineate exclusion areas and assess habitat quality in proposed mining sites prior to dredging activities (NOAA, 2016). While Mr. Stickley's claim is on Forest Service land, no habitat mitigation measures were proposed in his application which states; "Don't know of any mitigation plan procedure as this is the usual standard practice used for years, any mitigation may be included in the [sic]". This incomplete statement is unclear. Further consideration of this proposal should only be based on a complete and final application.

The project area lies within a reach of the Red River designated as Critical Habitat for several ESA-listed species. In addition spawning areas have been documented in close proximity, both upstream and downstream of the project area. Sediment from mining operations is likely to reach spawning beds and has the potential to harm, harass or kill salmon, steelhead and bull trout eggs and fry. As such, we feel that it is inappropriate to approve a stream channel alteration

permit without first consulting with the NOAA-Fisheries and the US Fish and Wildlife Service, identifying mitigation activities, developing a habitat conservation plan (HCP), obtaining an Incidental Take Permit (ITP), and working with the Forest Service to create a POO. At a minimum, we feel that the Idaho Department of Water Resources must consult with the US Fish and Wildlife Service and NOAA – Fisheries to determine whether a HCP and ITP are warranted, prior to approval of this application.

We are particularly concerned about potential impacts to Spring Chinook salmon and steelhead trout, which may be present and spawning during periods of active suction dredge mining. It is imprudent and fiscally irresponsible to expend millions of dollars in limited state, federal, tribal and private resources on restoration projects that have been carried out in the Red River drainage, while simultaneously approving mining activities that negatively impact these same resources in the name of a comparatively minimal commercial development. In a brief exercise to determine the actual expenditures on salmon and steelhead recovery in the state, it became evident that between state and federal investments a low ball estimate of direct expenditures from the Office of Species Conservation, SRBA, Idaho Fish Accords, Idaho Fish and Game, Bonneville Power Administration, Idaho Fish and Game, Forest Service and other state, federal and tribal programs, that annual expenditures easily exceed \$20-\$30 million for salmon and steelhead recovery programs.

In particular, Red River has been the focus of restoration work. In 2011 alone, BPA (through the Nez Perce Tribe) contributed over \$1.2 million in funding, and the Nez Perce National Forest contributed an additional \$90,000 to improve riparian function and habitat conditions in Red River. Limiting factors include impacts from past mining, and other activities, that include: negative effects to channel morphology, fish passage barriers, loss of riparian vegetation, sediment issues and channel alteration.

Just upstream from Mr. Stickley's proposed mining site, Idaho Fish and Game manages the Red River Wildlife Management Area with the explicit aim of enhancing salmon, steelhead, and trout fisheries. After spending millions of dollars to restore this stretch of the Red River to historic conditions, allowing suction dredge mining in a critical staging zone for upstream spawning habitat would undermine hard-won habitat improvements. A suction dredge operation that benefits Mr. Stickley would defraud countless taxpayers and sportsmen who have invested in the rehabilitation of the Red River fishery.

Again, as a result of our concerns, we feel that a HCP and ITP will required to move forward with this proposal, along with permits, analysis, and consideration from the U.S. Forest Service, Army Corps of Engineers, NOAA – Fisheries, US Fish and Wildlife Service, and the Nez Perce Tribe in the development and consideration of the permit.

Once again, thank you for providing ICL the opportunity to provide comments on this project. We are interested in being informed of other in-stream mining projects and encourage you to place ICL on the mailing list for future projects. Please feel free to contact me if you have any questions about these comments and keep us on the mailing list for all future documents associated with this proposal. We look forward to working with you on this and other projects in the future.

Sincerely,

A handwritten signature in green ink, appearing to read 'J. Oppenheimer', with a stylized flourish at the end.

Jonathan Oppenheimer
Government Relations Director

References

- California Department of Fish and Game. 2009. Literature Review of the Impacts of Suction Dredge Mining in California. Redding, CA.
- Dayton, P.K. 1998. Reversal of the burden of proof in fisheries management. *Science*. 179:821-822.
- Fudge, R.J. P and R. A. Bodaly. 1984. Postimpoundment winter sedimentation and survival of lake whitefish (*Coregonus clupeaformis*) eggs in Southern Indian Lake, Manitoba. *Can. J. Fish. Aquat. Sci.* 41:701-705.
- Griffith, J.S., and D.A. Andrews. 1981. Effects of a small suction dredge on fishes and aquatic invertebrates in Idaho streams. *North American Journal of Fisheries Management*. 1:21-28.
- Harvey, B.C. 1986. Effects of suction gold dredging on fish and invertebrates in two California streams. *North American Journal of Fisheries Management*. 6:401-409.
- Harvey, B.C. and T.E. Lisle. 1998. Effects of suction dredging on streams: a review and an evaluation strategy. *Fisheries Habitat*. 23(8):8-17.
- Hogg, I.D. and R.H. Norris. 1991. Effects of runoff from land clearing and urban development on the distribution and abundance of macroinvertebrates in pool areas of a river. *Aust. J. Mar. Freshwater Res.* 42:507-518
- Holtby, L.B. and M.C. Healey. 1986. Selection for adult size in female coho salmon (*Oncorhynchus kisutch*). *Can. J. Fish. Aquat. Sci.* 43:1,946-1,959.
- Kondolf, G.M, G.E. Cada, M.J. Sale, and T. Felando. 1991. Distribution and stability of potential salmonid spawning gravels in steep boulder-bed streams of the eastern Sierra Nevada. *Trans. Am. Fish. Soc.* 120:177-186.
- Newcombe, C.P. and D.D. MacDonald. 1991. Effects of suspended sediments on aquatic ecosystems. *N. Am. J. Fish. Manage.* 11:72-82.
- NOAA. 2016. Endangered Species Act Section 7(a)(2) Biological Opinion, and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Response for the South Fork Clearwater River Suction Dredging Program, Idaho County, Idaho.
- Phillips, R.W., R.L. Lantz, E.W. Claire, and J.R. Moring. 1975. Some effects of gravel mixtures on emergence of coho salmon and steelhead trout fry. *Trans. Am. Fish. Soc.* 104:461-466.
- Power, M.E. 1990. Resource enhancement by indirect effects of grazers: armored catfish, algae and sediment. *Ecology* 71:897-904.

- Somer, W.L. and T.J. Hassler. 1992. Effects of suction-dredge gold mining on benthic invertebrates in a northern California stream. *North American Journal of Fisheries Management*. 12:244-252.
- Stern, G. R. 1988. Effects of Suction Dredge Mining on Anadromous Salmonids in Cnyon Creek, Trinity County, California. Humboldt State University. Arcata, CA.
- Thomas, V.G. 1985. Experimentally determined impacts of a small, suction gold dredge on a Montana stream. *North American Journal of Fisheries Management*. 5:480-488.
- United States Environmental Protection Agency – Region 10, Officer of Watersheds and Office of Environmental Assessments. 2012. Biological Evaluation for Small Placer Miners in Idaho National Pollutant Discharge Elimination (NPDES) General Permit. Seattle, WA.
- United States Forest Service – Nez Perce National Forest. 2000. Genesis Placer Claim, Draft Environmental Impact Statement. Grangeville, ID.
- United States Forest Service – Nez Perce-Clearwater National Forests. 2016. Small-Scale Suction Dredging in Orogrande and French Creeks and South Fork Clearwater River, Environmental Assessment. Orofino, ID.