**UNITED STATES DEPARTMENT OF COMMERCE**
**National Oceanic and Atmospheric Administration**
NATIONAL MARINE FISHERIES SERVICE
West Coast Region
1201 NE Lloyd Blvd., Suite 1100
PORTLAND, OREGON 97232-1274

July 26, 2017

Tim Luke
Idaho Department of Water Resources
322 East Front Street
P.O. Box 83720
Boise, Idaho 83720-0098

Re: Comments on permit applications Idaho Department of Water Resources S82-20066 and Idaho Department of Water Resources S82-20067

Dear Mr. Luke:

NOAA's National Marine Fisheries Service (NMFS) staff have reviewed the above referenced dredge mining permit applications and supporting documents. NMFS believes that approval of the proposed mining activities would result in adverse effects on Snake River Basin steelhead and spring/summer Chinook salmon, and their habitat in Red River. Snake River Basin steelhead are listed under the Endangered Species Act (ESA) and have designated critical habitat in the area proposed for dredging. Snake River spring/summer Chinook salmon in this watershed are not listed under ESA; however, the section proposed for dredging is part of their essential fish habitat designated under the Magnuson-Stevens Fishery Conservation and Management Act (MSA).

Federal permits from the U.S. Forest Service (USFS) and the U.S. Environmental Protection Agency (EPA) apparently also would be needed for these dredge mining activities; therefore, those agencies would likely complete ESA and MSA consultations with NMFS. NMFS has not yet heard of or received consultation requests associated with these proposals. NMFS previously consulted on the USFS-permitted suction dredging program on the mainstem South Fork Clearwater River (SFCR; NMFS 2016[1]). That consultation described in detail how the water quality and substrate alterations caused by suction dredging can adversely affect steelhead and salmon. The mainstem SFCR suction dredging program and consultation also involved several key conservation measures to ensure that short and long term effects are minimized. The newly proposed applications mention generally that they will follow standard practices and state

[1] National Marine Fisheries Service (NMFS). 2016. Endangered Species Act Section 7 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. June 14, 2016. West Coast Region, Seattle, Washington.

regulations, but do not include specific measures to minimize effects on salmon and steelhead and their habitat in Red River, which is a headwater tributary of SFCR.

Based on the limited information provided for these two applications to Idaho Department of Water Resources (IDWR), NMFS offers these initial comments. Please consider the concerns outlined below (and described in more detail in NMFS 2016) before making your decision regarding these applications.

Permit applications S82-20066 and S82-20067, if issued, would allow using 4-inch and 5-inch nozzles respectively to move 30 cubic yards of stream substrate down to bedrock on each of two 150-foot sections of Red River. The activities proposed in S82-20066 would occur from June 15 to October 30, 2017, and the activities proposed in S82-0067 would occur from July 15 to either August 15 or September 30, 2017. Red River is an important spawning and rearing stream for salmon and steelhead.

The types of physical effects anticipated from these two proposals in Red River include excavation of substrate that creates holes and mounds in the stream bottom, outfall of silt and sand below the dredge that causes turbidity and covers and fills stream substrate, noise and visual disturbance, and fuel leakage and potential for spills into the stream. Those physical effects in turn have the potential to: 1) Impede upstream and downstream movement of adult and juvenile salmon and steelhead; 2) displace the fish from spawning and rearing habitat; 3) expose particularly juvenile fish to adverse effects from turbidity; 4) reduce availability and quality of spawning gravels; 5) reduce survival of eggs and pre-emergent fry in the gravels; 6) reduce instream cover and interstitial spaces in the substrate for rearing and overwintering juvenile fish; 7) reduce production of invertebrate prey species for juvenile salmon and steelhead; 8) alter reach hydrology and habitat function; and 9) reduce water quality through contamination by fuels and oils used in dredge machinery. Those effects are expected to occur and would reduce survival and productivity of salmon and steelhead in Red River if the activities are not mitigated through specific techniques and measures, and through avoidance of spawning and early rearing habitats. Such techniques and measures and careful siting of the activities are critical components of the IDWR/USFS mainstem SFCR dredging program.

The timing of the proposed activities raises additional concerns. With these proposals involving or potentially involving activities after mid-August, the instream disturbance, turbidity, and sedimentation impacts of mining activity could impact adult Chinook salmon spawning habitat in Red River. The activities may interfere with Chinook salmon that are spawning, selecting spawning sites, moving or holding in pools in preparation to spawn. Also, with dredging for permit S82-20066 proposed to start June 15, developing eggs and pre-emergent juvenile steelhead in the stream substrate will be susceptible to entrainment in dredges and smothering by sand and fine sediment in dredge outfall areas.

Additionally, the suction dredging impacts described for the mainstem SFCR in NMFS (2016) would be amplified in smaller channels and sensitive habitats of Red River. For instance, turbidity and other passage impairments caused by the activities will be harder for salmon and steelhead to avoid and get around than in the wider channel of the mainstem SFCR. Also, with the smaller channel and lower gradient of sections of Red River compared to SFCR, it is possible

that these two mining activities will encounter more fine sediments and cause water column and substrate sedimentation effects for greater distances below the dredge sites.

Finally, these proposals appear to run counter to the Idaho and U.S. Environmental Protection Agency (EPA) SFCR total maximum daily load (TMDL) limitations for SFCR, and run counter to the restoration efforts in Red River to reduce legacy mining impacts. The SFCR mainstem suction dredging program and continuance of those historic practices may already utilize the full allotment in the TMDL of sediment effects from dredge mining for the subbasin. (The SFCR program does have conservation measures for spacing, location, turbidity plume distance, hole filling etc., but does not necessarily reduce the amount of sediment generated in comparison to what was considered in Idaho's and EPA's development of the TMDL.) Also, within Red River, comprehensive and expensive channel and habitat projects have been implemented by a broad array of agencies, tribes, and the public working toward restoring the lower Red River from legacy mining impacts. The proposed dredge mining has the potential to diminish the positive impacts of those restoration activities.

In summary, NMFS believes that approval of these two permits in Red River, without substantial mitigation provisions, would degrade essential spawning, rearing, and migrating habitat of Chinook salmon and steelhead, and would limit recovery efforts. Dredge mining impacts can be reduced through careful mitigation measures. Please consider those measures included in NMFS (2016) and any others that would help protect salmonid habitat and the efficacy of habitat improvements.

Sincerely,

For Michael P. Tehan
Assistant Regional Administrator

cc: A. Golart – IDWR
J. Hansen – IDFG
C. Probert – USFS
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T. Peak – EPA