

Friends of Living Oregon Waters (FLOW)

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Sent by email on May 30, 2005 at 9:15 PM to 401publiccomments@deq.state.or.us (as printed in the public notice) and to 401publiccomments@deq.state.or.us and
Sent by Fax to 401 Program Coordinator, 503-229-5408

Oregon Department of Environmental Quality
Attn: 401 Program Coordinator
811 S.W. Sixth Avenue
Portland, OR 97204-1390

Re: Comments on DSL Number RP-6696; Rogue River Jet Boats

Friends of Living Oregon Waters (FLOW), P.O. Box 2478, Grants Pass, Oregon, 97528, is an IRS-determined 501(c)3 organization comprised of hundreds of individuals dedicated to advocating for the protection and restoration of Oregon's waters. FLOW uses legal oversight, monitoring and public education to help protect *Oregon Waters* from the impacts of pollution and development. FLOW monitors the ecological health and management of all Wild and Scenic Rivers in the state of Oregon including the Lower Wild and Scenic Rogue River. FLOW members use and enjoy the waters of the Rogue River, including the area being proposed for impacts by the permit application. FLOW members use the Rogue River to raft, hike, swim, photograph, view wildlife and birds, study, and find solitude.

For the reasons stated below FLOW recommends denial of the permit application:

1. The Rogue River was one of the eight original rivers included under the Wild and Scenic Rivers Act as a protected component. The primary objectives of the Act are to preserve the free flow of component rivers and to protect the outstandingly remarkable values of the river that led to their designation. The Oregon Department of Environmental Quality needs to analyze this proposed dredging action with respect to both the Oregon State Scenic Waterways Act and the Federal Wild and Scenic Rivers Act. The DEQ should "protect and enhance" the outstandingly remarkable values of the Rogue River as designated by Congress. These values include: Natural Scenic Qualities, Fisheries Resource, and Recreational Opportunities.
2. The Department of Environmental Quality, although functioning as a federal agency in issuing certificates of compliance under the Clean Water Act, is a state agency and under state law must act with respect to the programs affecting land use, in compliance with statewide land use goals

and in a manner compatible with acknowledged comprehensive plans, so that the department must include limitations reflecting these goals and plans in certificates of compliance issued, to the maximum extent that the Clean Water Act will permit. *Arnold Irr. Dist. v. Department of Environmental Quality*, Or.App.1986, 717 P.2d 1274, 79 Or.App. 136, review denied 726 P.2d 377, 301 Or. 765.

3. The proposed dredging operation is not consistent with ORS 390.835 (Highest and best uses of waters within scenic waterways). According to 390.835(2): Filling of the beds or removal of material from or other alteration of the beds or banks of scenic waterways for purposes other than recreational prospecting not requiring a permit shall be prohibited, except as permitted by the Director of the Division of State Lands upon a finding that such activity would be consistent with the policies set forth under ORS 390.805 to 390.925 for scenic waterways and in a manner consistent with the policies set forth under ORS 196.800 to 196.825 and 196.840 to 196.870 for removal of material from the beds and banks and filling of any waters of this state. Please explain consistency with this statute.

4. According to Oregon Administrative Rule (OAR 141-100-0020) the Division shall:

(1) Preserve and protect the natural setting, water quality, and free flowing condition of Scenic Waterways. ORS 390.815

(2) Recognize recreation, fish and wildlife uses as the highest and best uses of the waters of a Scenic Waterway. ORS 390.835(1)

(3) Protect and enhance scenic, aesthetic, natural, historic, archaeological, recreation, scientific, and fish and wildlife values along Scenic Waterways by protecting the special attributes (as listed in each Scenic Waterway Management Plan prepared by OPRD) that caused the waterway to be included in the Scenic Waterway system.

(6) Prohibit filling, removal, or alteration of the beds and banks of Scenic Waterways except as permitted by the Director as provided in these rules.

(7) Recognize the interrelated nature of regulatory activities affecting Scenic Waterways and the need to achieve coordinated management and protection of Scenic Waterway values. The Division shall work in close cooperation with state, local, and federal agencies, particularly OPRD, Water Resources Department (WRD), Department of Environmental Quality (DEQ), Oregon Department of Fish and Wildlife (ODFW), U.S. Army Corps of Engineers (COE), affected Tribes, and local government land use planning agencies.

(8) Recognize the high level of public interest in Oregon Scenic Waterway management by providing opportunities for comment on proposed policies or rules and individual applications.

(9) Adhere to the Division's State Agency Coordination Program (OAR 141-095-0000), to assure compliance with the statewide planning goals and compatibility with acknowledged city and county comprehensive land use plans.

5. A significant issue presented by the application in its current form is that little to no findings regarding environmental impacts are provided to the public. This is not the basis of informed public comment or decisionmaking. This issue is especially important in Essential Habitat Streams and in waters that contain Threatened and Endangered Species such as the Rogue River.

6. Instream dredging from reaches of DSL-managed streams that support spawning, rearing, and feeding of listed sensitive, threatened or endangered fish species (salmonids or others) should not

be allowed. In addition, it is recommended that this restriction be applied to streams that support Coho salmon because of their seriously declining populations. The severity of the population declines and the lack of definite information regarding potential impacts of removal- fill operations make this the only reasonable and prudent approach to responsible management of these populations.

7. According to Oregon Administrative Rule (OAR 141-100-0050)(1) Applications for approval of removal/fill activities in Scenic Waterways shall be submitted to the Division in writing, in advance of the proposed activity, and shall include all information needed to evaluate the request. There was no impact information or scientific findings regarding effects on TES species. The application filed does not include all information needed to evaluate the request and should be denied.

8. There are important determinations regarding the application that the State of Oregon must make. According to ORS 196.825(3) there are numerous considerations in determining whether or not a permit shall be issued. This includes ORS 196.825(3)(a) “The public need for the proposed fill and the social, economic or other public benefits likely to result from the proposed fill.” There has been no explanation to the public or to state agencies why there is a public need to dredge the Rogue River. The social and economic costs to the public may be significant due to the harm caused by the proposed dredging and the “public” benefit goes to one river user. The application also failed to comply with ORS 196.825(3)(f) and analyze “whether the proposed fill is in conformance with existing public uses of the waters and with uses designated for adjacent land in an acknowledged comprehensive plan and zoning ordinances.”

9. There have been no Oregon-specific studies to evaluate and/or monitor the environmental impacts of aggregate extraction or material filling. This lack of specific field data to support the removal/fill permit process hinders the goals of protection, preservation, and best use of water resources stated under ORS 196.805.

10. Instream dredging can directly impact salmonids by degrading and simplifying spawning and rearing habitats, increasing turbidity and decreasing substrate stability thereby influencing lower trophic levels upon which salmonids depend on for food (Spence, B.C., G.A. Lomnický, R.M. Hughes, and R.P. Novitzki. 1996. An ecosystem approach to salmonid conservation. TR-4501-96-6057. ManTech Environmental Research Services Corp., Corvallis, Oregon.)

Instream dredging typically alters channel geometry, including local changes in gradient and width-to-depth ratios. Local scouring and erosion can occur as a result of increased water velocity and altered sediment load associated with dredging. Changes in channel stability can also cause a loss of riparian vegetation. Channel bed incision can occur upstream or downstream from a dredging operation (Kondolf, G.M. 1994. Geomorphic and environmental effects of instream gravel mining. *Landscape and Urban Planning*. 28:225–243). The premise that instream dredging can be accomplished without affecting the channel may ignore downstream bed load requirements for channel maintenance and the complex physiochemical and biotic responses to changes in bed load (Meador, M.R. and A.O. Layher, 1998. Instream sand and gravel mining: Environmental issues and regulatory process in the United States. *Fisheries*. 23 (11): 6-13). The majority of the bedload in a river is transported during high flows, particularly floods. Multiple

factors can slow water velocity in streams and rivers including decreasing gradient, widening of the channel, and friction of transporting bedload across the streambed. In cases where the bedload is lost upstream due to instream dredging, water velocity does not decrease as quickly and as a result the water picks up sediment and new bedloads by eroding banks and removing gravel from other deposits including downstream gravel bars and salmonid spawning beds. This situation is referred to as “hungry water” (Kondolf, G.M. 1997. Hungry water: effects of dams and gravel mining on river channels. *Environmental Management*. 21 (4): 533–551).

11. Extraction of alluvial material from within or near a stream bed has a direct impact on the stream’s physical habitat parameters such as channel geometry, bed elevation, substrate composition and stability, instream roughness elements (large woody debris, boulders, etc.) depth, velocity, turbidity, sediment transport, stream discharge, and temperature (Kondolf 1997; OWRRI 1995; Meador and Layher 1998). OWRRI (1995) states that: Channel hydraulics, sediment transport, and morphology are directly affected by human activities such as gravel mining and bank erosion control. The immediate and direct effects are to reshape the boundary, either by removing or adding materials. The subsequent effects are to alter the flow hydraulics when water levels rise and inundate the altered features. This can lead to shifts in flow patterns and patterns of sediment transport. Local effects also lead to upstream and downstream effects. Altering these habitat parameters can have deleterious impacts on instream biota, food webs, and the associated riparian habitat (Spence et al. 1996; Brown, A.V., M.M. Lytle, and K.B. Brown. 1998. Impacts of gravel mining on gravel bed streams. *Trans. Amer. Fish. Soc.* 127: 979-994).

12. Instream gravel operations disrupts the preexisting balance between sediment supply and transporting capacity, and can result in channel incision and bed degradation (Kondolf 1997; Meador and Layher 1998). This is partly because gravel “armors” the bed, stabilizing banks and bars, whereas removing this gravel causes excessive scour and sediment movement (OWRRI 1995; Kondolf 1997). Degradation can deplete the entire depth of gravel on a channel bed, exposing other substrates that may underlie the gravel, which would reduce the amount of usable anadromous spawning habitat (Kondolf 1997; OWRRI 1995). Thus, gravel removal not only impacts the extraction site, but also may reduce gravel delivery to downstream spawning areas (Brown et al. 1998).

13. Instream gravel operations can cause increases in suspended sediment, sediment transport, water turbidity, and gravel siltation (Kanehl, P. and J. Lyons. 1992. Impacts of in-stream sand and gravel mining on stream habitat and fish communities, including a survey on the Big Rib River, Marathon County, Wisconsin. Wisconsin Depart. Nat. Resour. Res. Rep. 155, Madison, WI. 32 p.); OWRRI 1995; Kondolf 1997). Brown et al. (1998) also note that the fine material can travel long distances downstream as a plume of turbidity while the gravel is being removed, and during floods, turbidity is likely to be higher than normal for even longer distances downstream due to the higher flow rate and increased entrainment of sediments as a result of channel deformation. Fine sediments in particular are detrimental to salmonid redds (nests) because (1) blockage of interstitial spaces by deposited silt prevents oxygenated water from reaching the incubating eggs within the redd, as well as the removal of waste metabolites; (2) embryos or sac fry can be smothered by high concentrations of suspended sediments that enter the redd; and (3) emerging fry can become trapped if enough sediment is deposited on the redd (Reiser, D.W. and R.G. White. 1988. Effects of two sediment size-classes on survival of

steelhead and Chinook salmon eggs. N. Amer. J. Fish. Manage. 8: 432-437). High silt loads may also inhibit larval, juvenile and adult behavior, migration, or spawning (Kanehl and Lyons 1992; OWRRI 1995).

14. Operation of heavy equipment in the channel bed can directly destroy spawning habitat, rearing habitat, the juveniles themselves, and macroinvertebrates, and produce increased turbidity and suspended sediment downstream (Kondolf 1994). Additional disturbances to redds may occur from increased foot and vehicle access to spawning sites, due to access created initially for gravel extraction purposes (OWRRI 1995). Also, heavy equipment is powered by diesel fuel and lubricated by other hazardous petroleum products, leading to the potential for toxic chemical spills. Petroleum-based contaminants, such as fuel, oil, and some hydraulic fluids, contain harmful polycyclic aromatic hydrocarbons.

15. Instream roughness elements, including the gravel itself, play a major role in providing structural integrity to the stream or river ecosystem and provide critical habitat for salmonids (OWRRI 1995; Collins, B.D. and D.R. Montgomery. 2002. Forest development, wood jams, and restoration of floodplain rivers in the Puget Lowland. Restoration Ecol. 10:237-247). These elements are important in controlling channel morphology and stream hydraulics, in regulating the storage of sediments, gravel and particulate organic matter, and in creating and maintaining habitat diversity and complexity (OWRRI 1995).

Summary

FLOW has significant concerns about the implications of dredging the Wild and Scenic Rogue River for jetboat passage. The proposed dredging is not consistent with federal and state law for State Scenic Waterways and Wild and Scenic Rivers and the impacts of this proposal should be made available for public review and comment before a decision is issued. The permit application should be denied or referred for environmental analysis with full public comment on the findings.

Respectfully submitted,

/s/ Joe Serres

Joe Serres, President, Board of Directors
Friends of Living Oregon Waters (FLOW)