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Sent Via Email: <ConditDam@ECY.WA.GOV> (hard copy to follow via regular mail)

November 15, 2005

Mr. Derek Sandison SEPA Responsible Official Washington Department of Ecology 15 W Yakima Ave., Ste. 200 Yakima, WA 98902-3452

> Re: Proposed Condit Dam Removal Project, FERC No 2342 Draft Supplemental EIS

Dear Mr. Sandison:

On September 30, 2005, the Washington Department of Ecology (WDOE) released for public comment its Draft SEPA Supplemental Environmental Impact Statement (SEIS) for the proposed Condit Dam Removal Project, FERC No. 2342. The SEIS, as a supplement to previously released environmental assessments conducted by the Federal Energy Regulatory Commission (FERC), constitutes a comprehensive analysis comparing the effects of continued operation of the dam with the removal of the dam.

American Whitewater has been involved in the Condit Dam relicensing for more than a decade and is a party to the settlement agreement for dam removal. American Whitewater is a national non-profit 501(c)(3) river conservation organization founded in 1954. We have over 6,700 individual members and 100 canoe club affiliates, representing approximately 80,000 whitewater paddlers across the nation. American Whitewater's mission is to conserve and restore America's whitewater resources and to enhance opportunities to enjoy them safely. As a river conservation organization, American Whitewater has a strong interest in the future of the White Salmon River and, therefore, the proposed removal of the Condit Dam. Removing the dam will restore several miles of whitewater and reconnect the White Salmon River which is already considered one of the nation's top whitewater resources. A significant percentage of American Whitewater members reside in the Columbia River Gorge—a short driving distance from this project.

American Whitewater strongly believes that removing Condit Dam will have a positive benefit on fishery resources, recreational opportunities, and cultural resources of the White Salmon River. Given our long history of working closely with American Rivers on this issue, we support comments they have filed in response to this SEIS. We make additional comments below:

Fishery Resources

The SEIS states that "one year-class of chum will be lost" (page 1-8, 4.3-26). Evidence presented in the SEIS does not support this conclusion. Chum salmon mature at age 3, 4, and 5 with occasional rare examples of returns at age 2 and 6. A year class generally refers to a single year's cohort (i.e. the year fish emerge from the gravel and not the year they return) and given the variability in returns one would expect to see fish from the 2005, 2006, 2007, and possibly the 2004 and 2008 year classes (the spring they emerge) returning to the river in the fall of 2009, the year following dam removal. In subsequent years the 2009 year class, the cohort most directly impacted by disturbance of the dam removal, would be under represented for the next few generation cycles but fish that returned in fall of 2007 and fall of 2009 could quickly (as measured by generation cycles) make up this deficit. This life history strategy is designed to deal with "catastrophic events" that are characteristic of the geologically young rivers of the Cascades.

Dam removal will make a long-term imprint on the system that will dissipate in the years following removal. However, this event can be described as a pulse disturbance, a type of disturbance that chum are adapted to handle because their year classes are spread out over multiple years. Quinn¹ shows the potential for this distribution in time to be under genetic control and Montgomery² presents this as evidence for the species diversity we see among salmon on the more geologically active mountain rivers of the west coast in comparison to the geologically mature east coast with only one species of salmon. In fact, chum salmon are among the best of the salmon species to deal with this type of disturbance given their more limited utilization of the freshwater environment in comparison to other salmon species. From a fish life history perspective, the proposed method and timing of removal is the best means of minimizing impacts on the population. More importantly, it assures the best chance of future success in restoring these runs.

The SEIS also states that new gravel recruited from upstream may not reach the lower 2.6 miles of river and that this will contribute to the net result of a loss of "several year classes of chum salmon" (page 4.3-26). Limited information is presented on gravel transport to evaluate this statement. However, given the abundance of source material (within the reservoir) and the high gradient and power of this mountain stream, it seems unlikely that gravel transport would not begin immediately. Empirical evidence and observations from the Cedar River and Green River in Washington, both sites of gravel supplementation projects, demonstrates that gravel is swiftly transported downstream during periods of winter flow. Significantly, both of these systems have altered flow regimes where peak flows are reduced due to the presence of dams. Gravel transport would be much more efficient in the White Salmon River given that peak flows would not be regulated, and gravel transport would reach full potential immediately following dam removal.

¹ See Quinn, T.P. 2005. The behavior and ecology of Pacific salmon and trout. University of Washington Press. Seattle, WA.

² See Montgomery, D.R., 2004. King of fish: the thousand-year run of salmon. 2003. Westview Press. Cambridge, MA.

The SEIS is also vague on the subject of habitat condition upstream of the current dam. The SEIS notes that the 2004 NOAA critical habitat designation for chum includes the reach from the base of Condit Dam to the mouth of the river (page C-17). If we currently have suitable habitat to the base of the dam for chum salmon, then this boundary would extend further upstream following dam removal.

The SEIS discusses the need to remove the coffer dam and the impacts this structure will have on fish passage immediately following dam removal. While we agree with the need to evaluate the options for removal and potential impacts on fish populations, does a potential also exist for this derelict dam to fail during reservoir draining in which case fish would have immediate access to upstream habitat? In evaluating the full range of alternatives, the possibility of dam failure should be considered. Failure is relevant to the discussion of winter-run steelhead, that may or may not have access to upstream reaches in the months following dam removal depending on the state of this coffer dam. Again however the claim that an entire year class of steelhead would be lost if the coffer dam cannot be removed until spring 2009 (page 4.3-19) is not valid for reasons stated above for chum salmon. Indeed steelhead display even more variability than chum in life history strategies with regard to return date for spawning and can be iteroparous.

The dam removal will have an impact on benthic invertebrates present at the time of dam removal. As with fish, however the native species of the Pacific Northwest are adapted to pulse disturbance and the potential for a "slow recovery" (page 4.3-20) and "several years to fully reestablish" (page 4.3-26) invertebrate populations is not well supported by the information in the SEIS. The impact of increased quantities of organic material and nutrients from returning salmon and their impact on recovery of benthic invertebrates is not discussed. Many species of invertebrates benefit from this subsidy, which would have an immediate impact on populations upstream of the dam. So while these invertebrates are in fact an important component of the primary food base for juvenile salmonids, they themselves benefit from the returning adults in an important feedback cycle that is not discussed in the context of invertebrate population status and recovery. As invertebrate populations upstream of the dam site benefit from restored access to marine nutrients and carbon, it is likely that they will quickly recruit and colonize available habitat downstream of the dam site.

To summarize the impacts to the fishery and aquatic resources, the SEIS provides a good overview but does not adequately acknowledge the fact that the impact of the dam removal as proposed represents a pulse disturbance. This is in contrast to a press disturbance (i.e. a sustained impact over a period of time). While removal of the dam is a human action, it more closely mimics the type of disturbance these species are adapted to deal with given their evolutionary legacy in the young and geologically active Cascade Mountains. The most important point is that the ultimate long-term effect of the proposed action will be, as quoted in the SEIS, "improvement of spawning conditions for chum salmon and fall-run Chinook salmon". Indeed, benefits will extend beyond these species and benefit all aspects of the White Salmon River ecosystem.

Aesthetic and Recreational Opportunities

The SEIS refers to a "loss of aesthetic/scenic resources" (page 1-21). Apparently contradicting this statement, the SEIS later states that the change from a reservoir to a river view may depend on one's perception and "may or may not be a significant impact." From our perspective we do not believe that there will be a loss of aesthetic resources but in fact a gain with the restored view of a scenic free-flowing river. The White Salmon River is widely regarded as one of the most scenic whitewater rivers in the country, appearing in nationally-distributed print media and films.

The SEIS discusses removal of most project facilities but the project powerhouse and parking area would remain (page 1-6, page 3-21). The reason for leaving some project works is not addressed.

PacifiCorp has proposed extending the boat launch at Northwestern Lake Park to access the river following dam removal to provide new recreational opportunities (Page 4.10-8). In addition to the important river restoration goals that will be accomplished, our organization has a direct interest in these new recreational opportunities, in particular the opportunity to kayak or raft the White Salmon River from Buck Creek to the confluence with the Columbia River. While the enhancements to the current facility at Northwestern Lake Park will help achieve this objective, recreational use of this section also depends on a safe site to exit the river (i.e. to be considered an enhancement, the collective needs for a put-in and take-out should be addressed). In considering the aesthetic and scenic resources, and the public's opportunity to experience them, the need for safe and legal access to the confluence area and the fate of project lands in this area should be addressed.

The SEIS describes several measures to reinforce the Northwestern Lake Bridge (page 4.2-4) that include new concrete wing walls and backfill of a cofferdam and concrete crib structure. Details of the design are not presented but we are concerned with public safety implications of this design for river navigation (not reviewed in section 4.11). Fatalities on bridge pilings have been documented on many rivers across the country³. As additional material is placed around bridge pilings, the potential for these types of accidents increases which is significant given the popularity of this river for recreation. Additional safety review of the proposed actions to protect the bridge should be considered along with other alternatives that could meet the need for a safe bridge across the river.

Conclusion

Condit Dam removal provides a unique restoration opportunity to restore and maintain the chemical, physical, and biological integrity of the White Salmon River. As FERC staff found in their environmental analysis, dam removal provides the only opportunity for complete ecosystem restoration. The dam has a finite life and removal

³ American Whitewater Accident database. http://www.americanwhitewater.org

now also represents the safe and economic alternative. In fact keeping the dam in place will only continue the process of sediment accumulation in the reservoir which one way or another will eventually return to a free-flowing river. As clearly detailed in the SEIS, the long-term benefits of removal far outweigh the short-term impacts in the context of ecosystem function and health. More than 600 dams have been removed across our country⁴ and a consistent theme observed at many of these projects is the rapid rate of system recovery and ecosystem benefits.

American Whitewater appreciates the opportunity to comment on the proposed project. Feel free to contact me if you have any questions about these comments, or would like to discuss any issues further. I can be reached at (425) 417-9012.

Sincerely,

Thomas O'Keefe, PhD

Pacific Northwest Stewardship Director

⁴ American Rivers dam removal database, http://www.americanrivers.org