

PacifiCorp proposes to remove natural wood barriers that may form downstream after breaching with mechanical equipment. If natural barriers form, how long will the project continue to artificially remove them in order to ensure benefits to habitat extension that justify the project?

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See response to Comment A6-62.

URS (August 14, 2002) described inadequacies of the FERC Final SEIS for the purposes of covering SEPA requirements. They included a statement that the Final SFEIS does not address whether there are any significant impacts from proposed woody debris removal, including blasting. The Draft SEIS does not fully address those impacts other than to suggest fish mortality can be reduced by timing the blasts to occur when fish are less likely to be present.

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See response to Comment A6-62.

3.5. Invasive Species

Removal of Condit Dam and the subsequent reintroduction of migratory fish species to the upper White Salmon River has potential to expose the resident native trout and char populations to a host of new infectious diseases and pathogens. Increased loading of existing pathogens is also a possibility. Fish in the White Salmon River above RM 3.3 have been isolated since 1918 when upstream fish passage was blocked by Condit Dam. These populations may have been protected from a number of viruses, protozoans, and bacteria now having serious impacts on downstream fisheries resources. Pathogens include Whirling Disease (*Myxobolus cerebralis*) and IHN (Infectious Hematopoietic Necrosis). Whirling disease has been discovered to be the cause of serious declines of regional trout populations and IHN regularly affects large numbers of trout. Populations exposed to new diseases or increased loadings of existing diseases could suffer effects ranging from reduced fitness, smaller size, and degraded reproductive success, to large-scale mortality.

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Presumably, this comment refers to the spread of whirling disease. The presence of a dam on the White Salmon River that blocks upstream migration of fish would not prevent the spread of whirling disease above the dam. Whirling disease is spread by stocking infected hatchery fish, the source usually being from non-permitted stocking by individuals who obtain diseased fish from private hatcheries. Other sources of contamination are migratory water birds, boats, waders, and bait fish that transport the disease. Whirling disease is far more likely to enter the upper White Salmon River basin on the felt-soles of an angler who failed to disinfect wading boots (and fly lines, rubber rafts, kayaks, etc.) used in an infected watershed before wading into the White Salmon River to fish.

The White Salmon River upstream of Condit Dam includes two potentially unique and sensitive fish populations: bull trout and resident trout. The bull trout has been listed as a threatened species under the federal Endangered Species Act. The resident fishery was included as an outstandingly remarkable value (ORV) in the White Salmon Wild and Scenic River Management Plan. To protect uninfected populations, some states, such as Oregon, do not allow transfer of infected fish to an area not known to have the parasite.

It is currently unknown whether or not the existing isolated fishery population in the upper White Salmon River is susceptible to introduction of new diseases. To potentially expose a healthy native resident stock of fish to destructive pathogens is not in the best interest of state and regional fish management policies and could potentially result in take of listed species. It is reasonable to assess the potential risk to native fish from reintroducing anadromous species into the upper river, but that analysis is missing from the Draft SEIS.

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The spread of whirling disease and future diseases of fish in the White Salmon River are best dealt with by educating the public to disinfect their fishing and boating gear before transporting it to another watershed and ensuring that only disease-free fish are stocked in a watershed if stocking is mandated by state, federal, and tribal management. Even with complete control of manmade sources, migratory birds and other migratory animals have the potential of transporting the disease to new watersheds.

Questions that should be resolved prior to removal of the dam include:

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1. What are the existing types and loads of fish pathogens in the fish population upstream of the existing dam?

- 2. What are the types and loads of fish pathogens likely to be introduced upstream of the existing dam?
- 3. What is the risk of impact to the listed bull trout population from exposure to new or increased pathogen loading?
- 4. What is the risk of impact to the ORV resident trout population from exposure to new or increased pathogen loading?
- 5. What is the risk of loss of unique or genetically distinct populations due to the introduction of pathogens?

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3.6. ESA Impacts

The proposed Settlement Agreement with Modifications alternative would, as all parties agree, lead to a complete and total loss of all habitat and fish currently in the lower river. This impact is expected to last for somewhere between two and 20 years. Methods to avoid this take are available and are described in both the Draft SFEIS and Final SFEIS. It is reasonable to expect that a detailed review of reasonable and prudent alternatives could find that sediment removal from behind the dam prior to dam removal would provide the protection necessary to avoid take of federally threatened and endangered species, and should be required by the Services in keeping with their responsibility to protect listed fish. Alternative measures are described in Section 7 of this letter.

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4. WATER QUALITY STANDARDS

4.1. The Proposed Alternative is Not Legal under Existing State Water Quality Standards

The Draft SEIS summary on page 2-6 for Water Resources fails to include that State Water Quality Standards would be violated for periods of 5 to 10 years or more in the Columbia River where breaching, activities post-breaching, and sediment movement over time causes greater than 5 NTU increases over background. As identified above, the duration of these impacts as described in the Draft SEIS assumes a best case scenario. A more plausible disturbance regime following dam removal consists of between 5 and 10 years of potentially lethal episodic turbidity impacts (see Sections 2 and 3 of this letter), during which violations of water quality standards in the White Salmon and Columbia Rivers will occur.

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The proposed action violates current water quality standards under Chapter 173-201A WAC. The Draft SEIS on page 4.2-8 indicates turbidity standards would be violated down to the mouth of the Columbia River initially, and for years through the White Salmon River into the Columbia River and the Bonneville Pool. The more accurate assessment taking into account reasonable uncertainty is that impacts could last 5 to 10 years.

EPA has not yet approved changes to Chapter 173-201A-110 WAC proposed by Ecology that would specifically exempt dam removal projects from the standards under a "short term modification." This change would be required before the project could receive a

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The total loss of fish and other aquatic organism populations in the White Salmon River below Condit Dam is the conservative assumption used in the impact analysis. However, the habitat loss would be neither complete and total, nor long term. Some habitat for some organisms would be useable almost immediately after the initial flush, and recovery would continue rapidly, based on evidence from the Toutle River after the eruption of Mt. St. Helens. Fish and aquatic organism populations would also recover within a few years and many would expand upstream. The comparison of whether the partial removal of sediment would provide enough benefits to offset the impacts and costs was already made by FERC in their FSEIS. Their conclusion was that the benefits, including the differential of impacts, did not outweigh the costs. The Biological Opinions of both the USFWS and NMFS also concluded that the incidental take was acceptable (USFWS 2005; NMF6 2006).

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This is a legal argument to which no response is required because it is not directly relevant to SEPA.

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401 Certification, but this is not disclosed in the Draft SEIS. The long-term durations of water quality violations exceed those that could be reasonably addressed by an allowance for a short term water quality modification under Chapter 173-201A WAC.

Prior comments on the proposed change to the water quality standards to allow the proposed project were submitted to the EPA²⁵ and are reiterated here. Federal Antidegradation policy (40 CFR 131.12) and the Existing Uses definition (40 CFR 131.3) do not explicitly allow the level of impact the breaching without sediment removal would cause. The federal Antidegradation policy appears contrary to the Antidegradation policy proposed in draft Chapter 173-201A-300 WAC if the state's interpretation is that the revised policy would allow the proposed method of Condit Dam removal. The federal policy says: *"In allowing such degradation or lower water quality [reference is to degradation necessary to accommodate important economic or social development], the State shall assure water quality adequate to protect existing uses fully. Further, the State shall assure that there shall be achieved the highest statutory and regulatory requirements for all new and existing point sources and all cost-effective and reasonable best management practices for non-point source control."* The state's proposed draft Antidegradation policy would allow permanent loss and temporary harm [173-201A-300 (3)] if lowering of water quality is *"necessary and in the overriding public interest"* [173-201A-300 (2)(c)(ii)]. Even then, however, the state ought to require all known, available, and reasonable methods of prevention, control, and treatment (AKART) for a human action such as the Condit Dam removal [173-201A-300 (2) (d)]. The state's revised policy ought not to reasonably allow the proposed method of dam removal, if a wet or dry sediment removal alternative, coupled with some method of management (i.e., longer operation before removal) to generate revenues to offset the increased cost of sediment removal, could reasonably lessen impacts. Prior sediment removal ought to meet the definition of AKART and be required under state and federal policies.

Chapter 90.54.020 (3) (b) RCW establishes as state law that *"Regardless of the quality of the waters of the state, all wastes and other materials and substances proposed for entry into said waters shall be provided with all known, available, and reasonable methods of treatment prior to entry...except in those situations where it is clear that overriding considerations of the public interest will be served."* The state may convincingly argue that the Condit Dam removal itself is an action serving the public interest, however the method of removal proposed has sediment impacts that are avoidable or could be minimized by AKART. The state's revised Antidegradation policy does not reasonably change or reinterpret that overriding requirement.

Even if EPA approves the Ecology-proposed change to Chapter 173-201A-110 WAC to allow pH and turbidity lethal impacts of the scale proposed by the project for a duration measured in years under a "short term modification" allowance, reasonable assurance is not provided that the duration of impacts is adequately described, for reasons described above. Reasonable assurance is not provided that AKART has been provided to avoid

²⁵ Foster Pepper & Shefelman. August 8, 2003. Letter to Marcia Lagerloef, EPA Region 10, Re: EPA Review of Washington State Department of Ecology's Proposed State Water Quality Standards: Comments of Klickitat and Skamania Counties.

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This is a legal argument to which no response is required because it is not directly relevant to SEPA.

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If AKART applies, based on analysis the proposed actions would meet it.

turbidity impacts by removal of sediments before dam breaching (for example, as under earlier wet and dry dredging alternatives) as required under Chapter 173-201A-100 WAC, OR that a mixing zone can reasonably extend from the dam site to the mouth of the Columbia River under Chapter 173-201A-100 WAC.

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4.2. Concrete Spoils Disposal – Impacts on Sediment and Groundwater Quality

The Draft SEIS refers to the June 4, 2004 *Project Description* by PacifiCorp. Appendix 4 to the *Project Description*, an RW Beck letter to Mark Sturtevant RE: Concrete disposal (July 1998), taken together with Appendix 8 of the *Project Description*, the Squier Associates *Evaluation of pH Effects Due to Pulverized Concrete* indicate that concrete powder from blasting and cutting concrete into “blocks” and rubble” has not been considered with regard to impacts at spoils disposal site, either to surface or to groundwater. Concrete debris has only been considered in terms of impacts on the White Salmon River from explosives and cutting, and where the pH impact was expected to be catastrophic in terms of toxicity.

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The Draft SEIS only mentions disposal of concrete “rubble” from drilling and blasting, and “blocks” from blasting. Page 58 of the Final SFEIS does mention “crushed concrete”, but that is not further described in Draft SEIS in terms of where concrete would be crushed, or mitigation or Best Management Practices (BMPs) to avoid noise, air quality, and surface and groundwater quality impacts of crushing operations, if they are actually proposed as part of potential recycling. Appendix 8 of the *Project Description* verifies that unmitigated impacts from crushing could be large, since even concrete dust from cutting and explosives use to dismantle the dam would cause toxic impact to the White Salmon River.

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Since even residual concrete powder from blasting and cutting is expected to reach toxic levels in the White Salmon River, it is reasonable to expect hydrogeologic analysis of soils, groundwater, and alkaline pH migration from the three alternative spoils sites, most particularly the site adjacent to White Salmon Municipal wellfield. PacifiCorp specifically says there will be no liner or other measures to prevent pH migration at the spoils site, but there is no analysis to say why that is not needed. To the contrary, analysis in Appendix 8 indicates there is considerable evidence to suggest such mitigation may be needed, depending on conditions at each of the spoils sites.

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URS (August 14, 2002) described inadequacies of the FERC Final SEIS for the purposes of covering SEPA requirements. Identified inadequacies included the fact that the Final SFEIS did not address environmental conditions on the proposed disposal site and whether there are any significant impacts from use of the disposal site. The Draft SEIS does not fully address those impacts for the three alternative spoils disposal sites.

There is no reasonable assurance that surface water, groundwater and drinking water quality standards will be protected at the alternative spoils sites, or that concrete recycling would not cause undisclosed impacts from concrete crushing mentioned in Final SFEIS.

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The potential impacts to surface water and groundwater quality due to the short-term storage and on-site disposal of concrete debris is described in Section 4.2.2 of the DSEIS and FSEIS. Additional text has been added to the FSEIS in this section to clarify that only a relatively small volume of concrete powder would be expected to adhere to the larger pieces of concrete debris. The FSEIS also includes a new mitigation measure in Section 4.2.3 that recommends monitoring shallow groundwater downgradient of the concrete disposal site in the event this disposal option is selected. In the event that groundwater quality standards were exceeded, additional measures (e.g., remediation) could be required by regulations such as the Model Toxics Control Act Cleanup Regulations (WAC 173-340).

The pH impact to the river due to concrete cutting would be mitigated by collecting the cutting fluids that contain the concrete powder, as described in Section 4.2.3 of the DSEIS and the FSEIS. The changes in pH as described in Section 4.2.2 of the DSEIS and FSEIS are not considered catastrophic, as they are estimated to return to near normal pH levels within 15 minutes of the blast and would only be at lethal levels for less than a minute.

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If concrete is able to be recycled, crushing would not occur at the dam or transfer/disposal site. If recycling is feasible, the concrete would be hauled to a recycling location and all crushing would occur there under the recycler’s permits and using the BMPs applied to those permits. A scenario for a recycling alternative has been developed and included in Section 4.6.2 Transportation Impacts of the FSEIS.

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See response to Comment A6-74.

4.3. Sediment Quality

A sampling program²⁶ for Northwestern Lake sediments has been prepared to comply with United States Army Corps of Engineers (COE) requirements for unconfined aquatic disposal of sediments in the Lower Columbia River system. The plan provides justification for limiting the amount of future sampling of sediment in Northwestern Lake required by the COE in their Dredged Material Evaluation Framework (DMEF), Lower Columbia River Management Area (November 1998). Page 3 of the letter states:

“Based on the information presented in the 1994 Condit Study the lower basin includes about 51% of the sediments (1,222,000 cubic yards) and the upstream gravels include about 49% of the sediments (1,078,000 cubic yards).”

This statement conflicts with information provided in the *Sediment Behavior Analysis Report* prepared by G&G Associates for PacifiCorp. Page 7 of the report indicates the total volume of gravel in the reservoir is only 54,900 cubic yards. The total volume of gravel plus bedload sand is 581,338 cubic yards. The implication from the Squier/Kleinfelder letter that the upper Basin consists of homogeneous material is in error. Therefore, the justification presented in the Squier/Kleinfelder letter for segregation of the reservoir sediments into two Dredged Material Management Units (DMMU's) as illustrated on their Figure 1 is flawed since it is based on incorrect data. Squier/Kleinfelder uses the flawed analysis to limit additional sampling needed to comply with requirements of the DMEF to the lower Basin in Northwestern Lake. The errors in the Squier/Kleinfelder letter invalidate the proposed sampling plan, because fine sediments with potential for contamination occupy more of the reservoir basin than the letter assumes. The errors ought to be corrected, and appropriate revisions to the sampling plan should be presented in a revised analysis of the suitability evaluation.

5. WETLAND MITIGATION PROPOSAL IS INCONSISTENT WITH ECOLOGY'S BEST AVAILABLE SCIENCE AND 2004 GUIDANCE ON WETLANDS IN WASHINGTON STATE.

The goal of the wetland mitigation plan in the *Project Description* referenced in the Draft SEIS is *“Post-dam removal conditions will be enhanced by allowing riparian wetlands to naturally establish and provide a net gain in wetland functions.”* The wetland mitigation plan is unlikely to be approved because it lacks reasonable assurance of no net loss in wetlands functions and values following an estimated loss of 2.8 acres of wetlands, as required under Ecology's administration of the Federal Clean Water Act in issuing a Section 401 Certification.

²⁶ Squier/Kleinfelder - April 14, 2005. Suitability Evaluation of Northwestern Lake Sediment Characterization Study, Squire Associates (dated April 1994). Attachment B to the September 23, 2005 Six-Month Update for the Condit Hydroelectric Project.

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In the context of the Northwestern Lake sampling plan, “upstream gravels” is simply a reference to the upstream Dredged Material Management Unit (DMMU) and the word “gravel” is not used in a soil classification context as it is used on page 7 of the Sediment Behavior Analysis Report (G&G Associates 2004a). This comment presumes that all of the material in a DMMU must be “homogenous” with the definition of homogenous met only if the material in the DMMU consists of the same size soil particles under the Unified Soil Classification System. That is not the case. With the Dredged Material Evaluation Framework, homogenous sediment does not mean sediment of the same particle size, but rather material that is deposited together and may likely contain the same contamination. It does not have the meaning presumed in the comment.

Regardless, it is not necessary for PacifiCorp or Ecology to respond to this comment since the Corps would determine if the proposed sampling plan meets their requirements. The Corps, through email communication to Todd Olson of PacifiCorp on October 16, 2006, has approved the sampling plan.

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Ecology believes the proposed mitigation is appropriate given the unique circumstances, including the type of wetlands to be lost.

The wetland mitigation plan performance target is 1:1 replacement of wetlands on an acreage basis. This does not follow Ecology’s 2005 Best Available Science (BAS)²⁷ and fails to comply with current Ecology guidance for wetland mitigation planning.²⁸ The proposed mitigation plan fails to provide for reasonable assurance by lacking functional assessment methodology for the mitigating wetlands, failure to accommodate Ecology’s methods for justifying a mitigation ratio of only 1:1 for a relatively high risk and uncertain proposal to allow mitigation wetlands to naturally regenerate at their own pace, failure to mitigate for temporal loss of wetland functions, failure to provide for protection of mitigation wetlands, and failure to account for risk of mitigation replacement under the natural regeneration or a contingency plan for wetland creation as mitigation compensation. There is no proposal to reasonably assure success of mitigation wetlands because only 2 years of success monitoring is proposed, whereas the typical standard is 10 years of success monitoring in recent 401 certifications issued by Ecology for reasonable assurance of successful mitigation wetland establishment and compliance with permit conditions.

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More specifically, the plan for natural regeneration of wetlands is speculative, not reasonable assurance, for the following reasons:

- Hydrology support of wetlands is assumed, possibly by “*other runoff and seepage from the slope not previously identified*” and estimates “*reasonable to assume*”. These are speculative assumptions of future hydrology. Mitigation ought to assume the worst case and be prepared for it.
- There is no support that hydric soils will be present or form where it is estimated wetlands will regenerate, or that hydrology will support such wetlands.
- There is no basis provided for the rationale on when or how much wetland may appear, and the monitoring program does not provide for anything other than “*manipulation of residual reservoir sediment*” (page 4.4-9) in the event there is not enough wetland regeneration, or that regenerated wetlands are of such poor quality that they fail to replace lost functions and values. If there is a failure for wetlands to reestablish in the long term, a primary reason will be failure of supporting hydrology. Manipulation of reservoir sediments is not certain to improve or provide hydrology support.
- There is no discussion of temporal losses or how long wetland regeneration may take, which coupled with the uncertainty of natural wetland regeneration and an uncertain ability to manipulate conditions where natural regeneration fails means that there is no reasonable assurance wetland impacts are mitigated and state water quality standards are maintained.
- The monitoring for wetland regeneration proposed will not last long enough for wetland hydric soils or wetland vegetation to establish, and criteria for determination of how much wetland will eventually successfully re-establish (and when) is not reasonably determined.

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Ecology believes the proposed mitigation is appropriate given the unique circumstances, including the type of wetlands to be lost.

²⁷ Washington Department of Ecology. March 2005. Wetlands in Washington State. Volume 1: A Synthesis of the Science.

²⁸ Washington Department of Ecology. April 2005. Wetlands in Washington State. Volume 2: Guidance for Protecting and Managing Wetlands.

A contingency plan for wetland mitigation is included in the *Project Description* (page 19 as referenced above), but a site plan, methodology, compliance criteria, and monitoring program are not defined. Under the Settlement Agreement cost cap proposed by the Applicant, there is no reasonable assurance that if sufficient wetlands fail to regenerate naturally in a reasonable time, funds will be left for the contingency wetland mitigation to be implemented.

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Ecology believes the proposed mitigation is appropriate given the unique circumstances, including the type of wetlands to be lost.

Page 19 of Attachment B of the *Project Description* indicates PacifiCorp does not believe mitigation for wetlands lost from decommissioning is legally required. Even if that is determined to be true, the Draft SEIS ought to require a mitigation plan meeting state best available science standards. At minimum, why should there be no mitigation for wetlands impacted by construction of roads as part of the decommissioning other than natural regeneration?

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Ecology believes the proposed mitigation is appropriate given the unique circumstances, including the type of wetlands to be lost.

We conclude there is no reasonable assurance that wetland functions and values will be protected as required under the state water quality standards and Section 401 of the Clean Water Act; or as required under Section 404 of the Clean Water Act.

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This is a legal argument to which no response is required because it is not directly relevant to SEPA.

6. MONITORING PLANS

Monitoring may produce data useful to avoiding impacts on another project, but is not mitigation for this project unless it leads to useful contingency response. Monitoring Plans from Attachment B to the 6 Month Update (9/23/05) have the following flaws:

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Some monitoring is related to mitigation, but other monitoring is indeed designed to inform other future dam removal projects. Ecology concludes that is appropriate given the unique circumstances.

- Fish passage monitoring ought to be linked to adaptive responses that will mitigate project impacts;
- Turbidity and other water quality parameters are only monitored to provide data for future projects, not adaptively manage this one. URS (2002) recommended that turbidity monitoring occur to “*check on the effectiveness of measures to stabilize or remove sediment remaining in the former area,*” which would by inference only be useful if adaptive response is planned. This monitoring as described without adaptive response is not mitigation for the proposed impacts of this project (see page 40 of Attachment B to the 6-month update, under “Performance Criteria”);
- The goal of vegetation monitoring and hydroseeding to prevent erosion appears overstated in the Draft SEIS (see page 3-21) and on page 11 of Attachment B to the 6-month update, where it says one goal is to “*minimize the potential for long-term erosion and delivery of sediment of the river and streams caused by construction activities and the effects of dam removal.*” PacifiCorp acknowledges seeding will not stave off the type of slope stability failures expected in the reservoir sediments, but will only control surface erosion which amounts to 1% of total eroded sediment volume; and
- With the proposed Settlement Agreement cost cap, there is no reasonable assurance that all the monitoring and management plans after dam removal will

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Monitoring of turbidity and flow is one way of estimating the amount of material moved by the river. This would be directly useful for adjusting the application of active measures for sediment removal/stabilization. Otherwise, the monitoring data would have application for future projects.

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Other mitigation measures, including the use of water cannons, are proposed to address the major unstable sediment locations. Revegetation is to address surface erosion.

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This is a legal argument to which no response is required because it is not directly relevant to SEPA. Please note that the revised Settlement Agreement changes the cap on mitigation costs to \$5.3 million. Further, FERC settlement policy states that FERC will not likely limit obligations by a settlement cap, and any 401 certification that the state issues will not limit obligations by such a cap.

be implemented, including contingency measures such as tree planting and additional wetland mitigation.

7. MITIGATION DOES NOT INCLUDE THE ALTERNATIVE WITH LEAST ENVIRONMENTAL IMPACTS

On page 4-80 of the 1996 Final EIS, FERC staff rejected a dam retirement alternative with no sediment treatment. Staff concluded the highest concentrations of suspended sediment would occur during dam removal and for approximately one year after dam removal is completed. This is shorter than the two years now projected for high concentrations of suspended sediment leading to elimination of fish below the dam site under the Settlement Agreement with Modifications alternative evaluated in the Final SFEIS. To explain why FERC staff reversed their conclusion, the Final SFEIS (pages xxxii to xxxiii, and on pages 185 to 186) indicates the Settlement Agreement with Modifications is now preferred for the following reasons:

- Mitigation (dredging or other prior removal) is too expensive;
- Sediment impacts would be of shorter duration (though more severe);
- Spoils from dredging would not impact uplands; and
- Shorter duration of construction (dam and related structure removal) than for partial dam removal.

These four reasons are used to justify the lethal sediment pulses the Final SFEIS indicates could be released for a minimum of two years after dam breaching. These sediment pulses would kill all fish and aquatic biota living in the former reservoir area and downstream, which includes critical habitat for federally listed species. Serious habitat degradation would continue between periods of lethal pulses. The potentially much less damaging alternative of first dredging much of the sediment from the reservoir is rejected by FERC for weak reasons.

First, adverse modification of critical habitat (and direct species take) should not be justified by cost of avoidance alone. While the sediment released by the proposed action will certainly be lethal to all fish (in excess of 500,000 ppm), it is very possible that with appropriate mitigation the minor amount of sediment that may be released during dredging would result in few if any impacts. Timing of dredging and silt curtains are examples of the very measures FERC suggests as mitigation for dredging in the lower White Salmon River on pages 96-97 of the Final SFEIS, yet dismiss as impractical for Northwestern Lake sediments. Second, the five year period of sediment impact FERC claims is associated with the 1996 Dam Removal with Sediment Removal Alternative ought to be considered irrelevant, when under PacifiCorp's preferred alternative the result is indicated in the Draft SEIS to be 100 percent mortality of fish species for up to two years, and more reasonably for much longer. Third, much larger quantities of sediments are routinely disposed of in environmentally friendly ways. Impacts to small areas of common upland plants and wildlife habitat is poor justification for killing listed species and eliminating critical habitat, especially when the upland disturbance would be temporary. Fourth, avoidance of a localized and temporary increase in construction noise,

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FERC's FSEIS conclusions are consistent with the SEPA DSEIS conclusions. More information and more mitigation measures are now part of the proposed alternative than in 1996.

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FERC and all of the signatory entities of the Settlement Agreement have already concluded that the short-term impacts associated with the proposed dam removal method are acceptable in trade for the long-term benefits. This SEPA FSEIS builds upon the analysis done by others, has applied additional design information and mitigation measures, and further documents the short-term nature of most of the impacts, given the latest information.

traffic, exhaust and dust is not, and has never been, cited as sufficient justification for take of listed species.

Sediment removal prior to dam removal cannot be eliminated as a reasonable and prudent alternative. The reasons put forth by PacifiCorp and FERC to date are based on additional cost and minor upland disturbances do not justify adverse modification of critical habitat, especially since effective means are available to avoid these lethal impacts.

Numerous comments have been made to the effect that the wet or dry sediment removal alternative clearly has the least impacts to the natural environment and ought to be included in all assessments.²⁹ This assessment is borne out by the summary in Table 1, attached, which compares the 1996 Dam Removal Alternative (Partial Sediment Removal) with the 2002 Dam Removal Alternative (No Sediment Removal) Associated with the Land Used For Spoils Disposal (the latter is the sole alternative in the Draft SEIS).

As Table 1 makes clear, the environmental differences caused by more fill and longer project duration of the partial fill alternative are fill of 44 more acres of rangeland and orchard, which would be reclaimed. This is not a large habitat impact justifying the impacts to salmonids, habitat, and water quality extending for years that are described as the impacts of the no sediment alternative.

We conclude the brief Draft SEIS alternatives discussion and conclusion is flawed, and that the Draft SEIS inappropriately excluded the dry or wet partial sediment removal alternatives. The Draft SEIS prematurely concluded impacts to the natural environment were greater under the partial sediment removal alternatives, because it claims impacts from sediment disposal with partial sediment removal are greater than impacts to the White Salmon River, in-lieu Site, Bonneville Pool, and Columbia River plus disposal sites under the sole proposed alternative evaluated in the Draft SEIS. Table 1 (attached) shows this cannot be the case.

²⁹ July 25, 2002. Comments of Klickitat and Skamania Counties on Final Supplemental Final Environmental Impact Statement.; Foster Pepper & Shefelman, August 5, 2002. Letter to NOAA National Marine Fisheries Service; Foster Pepper & Shefelman, March 22, 2002. Klickitat and Skamania Counties' Comments on the Draft SFEIS.

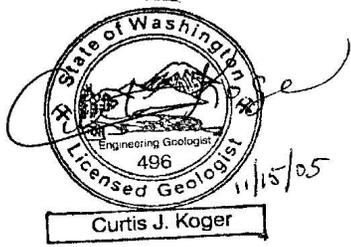
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Despite the commenters' opinions, the NMFS Biological Opinion concludes that the proposed removal process will not jeopardize the listed fish species or adversely harm critical habitat (NMFS 2006). The Biological Opinions of both NMFS and USFWS provide for incidental take of listed species (NMFS 2006; USFWS 2005).

Sincerely,



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