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April 17, 2009

Dave Kaumheimer
U.S. Bureau of Reclamation
1917 Marsh Road
Yakima, WA 98901-2058

**Re: Comments on Lake Roosevelt Incremental Storage Releases Project,
Draft Environmental Assessment**

Dear Mr. Kaumheimer,

These comments are submitted on behalf of the Center for Environmental Law & Policy, Columbia Riverkeeper, and Sierra Club. The Center for Environmental Law & Policy is dedicated to preservation of the freshwater resources of Washington state and the Columbia River basin. Columbia Riverkeeper is a membership-based nonprofit with a mission of protecting and preserving the Columbia River and all life connected to it, from the headwaters to the Pacific Ocean. Sierra Club's mission is to protect and restore the natural resources for present and future generations.

We are submitting the attachments referenced in this letter directly to your office in Yakima on a compact disk titled "CELP, et al. Comments on Lake Roosevelt EA, Attachments, April 17, 2009" and, for two of the attachments, via overnight delivery. Please incorporate those attachments and include them as part of these comments. In addition, we adopt and endorse the comments of our organizational members, including those submitted by Richard Leaumont and Yvonne Geissler-Eyler.

Comment Section A: Chapter 1 *Purpose and Need*

1. Section 1.2: Timing of the Environmental Assessment (EA) is improper. The Lake Roosevelt Project EA should have been issued at the time that the Bureau signed the 2004 Memorandum of Agreement or before it submitted its applications for secondary use permits to the Department of Ecology. By failing to conduct NEPA review at that time, the Bureau foreclosed review of all of the impacts associated with the drawdown proposal and limited the choice of reasonable alternatives. The lateness of NEPA review has resulted in inadequate consideration of alternatives.

2. Section 1.2: The Purpose & Need statement is too narrow. The Bureau has tailored the EA to a problem that may not exist, or which may have alternative solutions: that is, the question of whether water is scarce in eastern Washington, and whether or how the Bureau should facilitate provision of water to water users. By characterizing the purpose and need of the EA as being the need to release water to water users and downstream fisheries, the Bureau forecloses consideration of alternatives and limits consideration of the full range of impacts.
3. Section 1.2: Congressional authorization for Project. The Purpose and Need statement fails to identify the Congressional authorization for actions taken by the Bureau to create and implement the Lake Roosevelt Incremental Storage Releases Project.
4. Section 1.3: Congressional authorization for transfer of the Bureau's water right to non-Project parties. The Bureau's 1938 storage right was created solely for the purpose of serving the Columbia Basin Project. See Attachment F-1. The Bureau lacks authority to enter into agreements to supply water to entities that are outside the boundaries of the Columbia Basin Project. Section 1.5. The EA fails to adequately describe the Bureau's 1938 storage water right, which restricts use of Lake Roosevelt storage water to purposes located within the Columbia Basin Project. See Section F below.
5. Section 1.3. The Project will not meaningfully improve instream flows in the Columbia River because the Bureau is unable to measure and control the proposed releases from Grand Coulee Dam. This may exacerbate low flow impacts on fisheries by allowing for out-of-stream diversions (which most certainly will be taken) without ensuring proper mitigation.
6. Section 1.3: For the reasons stated in Paragraph A.5 above, the Project will cause the Bureau to violate the Endangered Species because the Bureau cannot ensure "bucket for bucket" mitigation of water diversions attributable to the Lake Roosevelt Project.
7. Section 1.6: The Washington State Department of Ecology Lake Roosevelt Project Programmatic and Supplemental Environmental Impact Statements (PEIS and SEIS) are insufficient to serve as a basis for federal analysis of the proposed project. The PEIS and SEIS also provide too narrow scope of review of alternatives, fail to identify all impacts, and fail to identify appropriate mitigation. The Bureau may not rely on these documents to satisfy its NEPA obligations. See Attachment A-1 (CELP Comments on Lake Roosevelt SEIS (2008)).
8. Section 1.8: The Bureau may not rely on the actions of third parties, particularly state and tribal agreements, as mitigation for impacts that are caused by and under the control of the Bureau.

Comment Section B: Chapter 2 *Alternatives*

1. The scope of alternatives is inadequate. The EA contains only two alternatives: no action (discussed for one-half page) and provision of water via the incremental storage releases calculus. The Bureau incorporated Washington's SEIS by reference. To the extent the SEIS considered additional alternatives, those alternatives fail to consider appropriate and sustainable alternatives to the drawdown proposal. Moreover, as the text of the Draft EA clearly demonstrates, the Bureau failed to analyze the state's alternatives in the Bureau's Draft EA.

Other activities that should be but are not discussed in the Bureau's EA as stand alone or combination alternatives include:

- a. Water conservation measures to meet consumptive water use needs. The East Columbia Basin Irrigation District has provided water to lands east of the East Low Canal (near the contemplated service area for this project) via water conservation efforts. See Attachment B-1. (Dept. of Ecology Press Release, 2005). In addition, the Department of Ecology prepares annual studies of water conservation potential in the Columbia Basin, which indicate substantial potential for water conservation in the basin. See Attachment B-2 (Washington State Water Supply Inventory) and B-3 (Dept. of Ecology, Water Supply Projects List (ECY 2008)).
 - b. Water marketing to transfer water to more valuable uses. Water markets were used to provide water to interruptible water rights in 2001 in an arrangement between the Bureau and the Department of Ecology. See Attachment B-4 (Drought Update (ECY 2001)). In addition, there have been a number of recent water right transactions in and around the Columbia Basin, indicating that water markets can be used to provide private sector solutions to water scarcity problems.
 - c. Reversion from irrigated to dry-land farming in the Odessa Subarea. Numerous farms in this area are successfully producing wheat and other non-irrigated crops.
 - d. Use of Columbia River Treaty-based supplemental operating agreements as a mechanism to ensure water releases are adequate to meet non-power uses, including target flows for instream flow and habitat needs for aquatic species downstream of Grand Coulee Dam. The Bureau already engages in such agreements to meet annual targets for instream flows. Attachment F-2.
2. Section 2.2: The EA indicates that the Bureau will only provide water to Odessa Subarea groundwater pumps. It does not discuss or analyze the zero-sum problem of water depletion in the Odessa Subarea. Groundwater is and has been depleted in the Odessa Subarea such that even if irrigators substitute surface water for groundwater, there is no evidence that the water levels will rebound or that other Odessa irrigators will not continue the depletion. To the extent the EA assumes that Odessa groundwater will flow to and contribute to

streamflow in the Columbia River, that assumption lacks support in science given pumping conditions.

3. Section 2.2: Tables 2-1 and 2-2 (p.12) contain a confusing and contradictory descriptions of average and dry year releases.
4. Section 2.2: The EA indicates that during dry years, there would be no releases for downstream municipal and industrial water rights. September is a hot, dry time of year in the Columbia Basin, even in non-drought years. What will municipal and industrial users use for water supply during this time period? It is infeasible and represents bad policy to assume curtailment of public water supply for the month of September (or for any time).
5. Section 2.2: The assumption that releases will be available to satisfy state "Voluntary Regional Agreements" presupposes that the Bureau will release even more of its 1938 storage right in the future to non-Project users. This assumption is not supported or discussed in the EA, including in the cumulative impacts section, discussed below.
6. Section 2.2: According to public statements made by USBR personnel at the Lake Roosevelt Forum, held in Spokane on April 13, 2009, the Bureau commenced upgrades to the Weber Siphon in January 2009. Likewise, the Bureau announced on April 15 that federal "stimulus" funds (\$50 million) will be made available to upgrade the Weber Siphon for this project.¹ These activities confirm that the Bureau has prematurely decided to conducting, receiving public comment on, or incorporating the results of the Lake Roosevelt Project prior to conducting NEPA analysis.

Comment Section C: Chapter 3.1.2 *Climate*

1. Climate change is a major issue with respect to water management in the Columbia River Basin. Treatment of the topic in this EA is inadequate. The January 2009 "Washington Climate Change Impacts Assessment," prepared by the University of Washington Climate Impacts Group (CIG) refutes the Bureau's conclusions that too much uncertainty attends the question of climate change to provide analysis of impacts. Attachment C-1 (Climate Impacts Group, The Washington Climate Change Impacts Assessment, Executive Summary (Final Draft, Feb. 2009)).²
2. It is accepted science, and the EA acknowledges, that temperatures increases are occurring and will continue in the Columbia River Basin. An attendant and key impact of temperature increases is the loss of snowpack, which in turn

¹ See USBR News Release of April 15, 2009 at http://recovery.doi.gov/docs/bor/factsheets/weber_siphon.pdf

² Available at <http://cse.washington.edu/cig/res/ia/waccia.shtml>.

impacts streamflow, particularly during summer months when out-of-stream demand is high and instream flows for aquatic habitat are stressed. Recent science indicates that snowpack reduction will be substantial, ranging from 27 to 65% between the 2020's and the 2080's. See Attachment C-2 (Elsner, M.M., et al., Implications of 21st Century Climate Change for the Hydrology of Washington State (Final 3/3/09) in Washington Climate Change Impacts Assessment).

3. The CIG modeling confirms these snowpack and streamflow impacts, and further concludes that although regional model simulations may suggest different precipitation scenarios, none of the scenarios indicate sufficient precipitation changes to offset summer low flow impacts. See Attachment C-3 (Salathe, E.P., et al., Regional Climate Model Projections for the State of Washington, (Final 3/3/09), in Washington Climate Change Impacts Assessment); see also Attachment C-2. The Bureau's reliance on past uncertainty about precipitation changes as a basis for failing to consider climate impacts on streamflow is outdated and incorrect.
4. The CIG scenarios predict that "[p]rojected changes in annual precipitation, averaged over all models, are small (+1 to +2%), but some models project an enhanced seasonal cycle with changes toward wetter autumns and winters and drier summers." See Attachment C-4 (Mote and Salathe, Future Climate in the Pacific Northwest, (final draft 2/10/09) in Washington Climate Change Impacts Assessment); see also Attachment C-2.
5. The Bureau's reliance in the EA on the State of Washington's Supplemental Environmental Impact Statement is improper because the State failed to consider the impacts of climate change on stream flow, and because new and significant information in the form of the Washington State Climate Change Impacts Assessment was released in February 2009, thus becoming available since publication of the SEIS.
6. The Bureau is aware of the CIG Washington State Assessment because it assisted in providing data and information for the Columbia River and Yakima River basin scenarios.
7. The scientifically accepted method to evaluate climate change impacts is to utilize modeling to prepare future climate impact scenarios. The Bureau failed to prepare such scenarios in its assessment of impacts of climate change on Columbia River streamflow and water storage. Substantial Columbia River scenarios already exist and could be used as a tool by the Bureau to evaluate climate impacts on river flows.³

³ The Climate Impacts Group Columbia River climate scenario webpage and web-based scenario tool with time series data and projections for 16 Columbia River basin sites is incorporated by reference. Please see <http://cses.washington.edu/cig/fpt/ccstreamflowtool/sftscenarios.shtml>.

8. The Bureau's reliance on historic records of precipitation, snowpack, streamflow and other factors is no longer an acceptable method to project future hydrology of the Columbia River.
9. The Bureau's reliance on historic climate records to determine "dry" or "drought" periods fails to properly analyze potential increases in the frequency of droughts due to changes in temperature and precipitation. Omission of climate change contributions to drought or dry period frequency and duration leads to underestimation of Project impacts on streamflow available for fisheries, exposure of Lake Roosevelt sediments and toxics, frequency of Banks Lake drawdowns, and recreational impacts.

Section D: Section 3.1.3 *Surface Water*

1. The EA predicts a 26-year interval for drought years. As noted in comment Section C-9, this prediction is based on reference to the historic record, not future modeling and projections based on climate change data. The EA therefore underpredicts the frequency of drought periods and impacts.
2. The EA predicts that incremental storage releases will "continue to maintain water temperatures warmer than 64.4 degree F criterion, but cooler than 68 degree F." The Climate Impacts Group projects that August mean surface air and maximum stream temperatures in the Columbia River Basin will range from stressful to fatal for salmon. See Attachment C-1, Fig. 9, p.13.
3. The EA fails to analyze the extent to which incremental releases will contribute to and exacerbate warming of river and stream temperatures in the basin. The Columbia River at and below Lake Roosevelt are water quality limited for temperature under the Clean Water Act. See Washington 303(d) list (approved by EPA in January, 2009). The EA fails to account for the cumulative effects of removing more water from a waterbody that the state and federal environmental agencies list as impaired for temperature.

Comment Section E: Section 3.1.4 *Groundwater*

1. Groundwater maintains ephemeral streams in the Columbia Basin (see p. 26), which are important components of the shrub-steppe and wildlife habitat of the Plateau.

2. The EA asserts that Lake Roosevelt water would “simply replace groundwater currently being used for irrigation.” However, a number of Odessa-area irrigators have stopped irrigating. While their water rights may be immune from legal relinquishment, replacing former groundwater irrigated-lands with Lake Roosevelt surface water represents a physical change, i.e., an increase, in water consumption that is not discussed in the EA.
3. The EA asserts that delivery of Lake Roosevelt surface water to Odessa area will “decrease the rate at which historical groundwater level declines have occurred over the past 50 years.” What evidence is there for this assertion? January 2009 Columbia Groundwater Management Area studies indicate that the Odessa-area aquifers are in steep decline and have miniscule recharge rates. This information is ignored in the EA. See Attachment E-1.

Comment Section F: Section 3.1.5 *Legal Considerations*

1. This section contains no mention of the purpose of the Bureau’s 1938 Lake Roosevelt storage right, the source of water for the drawdown and releases, which is reserved solely for serving water to Columbia Basin Project (CBP) lands. The use of this water right as a basis for a secondary water use permit to serve water to non-CBP lands is improper under federal law. See Attachments F-1 and F-2 (U.S. Bureau of Reclamation Application for Water Permit (1938) and Certificate of Water Right (1972)).
2. The EA fails to discuss the Endangered Species Act implications of the proposed drawdown. The Lake Roosevelt Project will result in the issuance of hundreds of new water rights to be used during the summer season. Given depletion of streamflow in the Columbia River projected due to climate change, the impacts of new out-of-stream water rights will affect the Bureau’s ability to release water to meet target flows for ESA-listed species, including the potential that the Bureau will be required to either further draft Lake Roosevelt or curtail or cut service contracts to water right holders. The environmental and socioeconomic implications of these alternatives are significant, but the EA contains no discussion.
3. The EA fails to discuss the potential impacts of changes in the Columbia River Treaty. The Bureau is currently engaged in preparing Phase 1 analysis of the implications of changes in the Treaty, along with the Corps of Engineers and the Northwest Power Planning Council. The EA contains no discussion of the significant implications associated with changes to the Treaty that could change

reservoir storage and streamflows on the Columbia River. See Attachment F-2 (BPA and ACOE, Columbia River Treaty Review 2014-2024 (2009)).

Comment Section G: Section 3.1.8 *Fish*

1. The Bureau is incapable of measuring on an instantaneous or even month-to-month basis the amount of water that it proposes to release via Grand Coulee Dam for fisheries (as well as consumptive use).⁴ The EA does not acknowledge this problem, nor discuss the potential environmental consequences of the Bureau's inability to measure its releases and therefore protect instream flows that are already stressed during certain months of the year.

Comment Section H: Section 3.1.9 *Environmental Health*

1. The Bureau's EA fails to analyze the human health and environmental impacts of the Drawdown Project, including the impact of airborne toxics released from sediments on the bed and banks of Lake Roosevelt.⁵ Contrary to the Bureau's conclusion, the Drawdown Project will have a significant effect on the human environment.
2. The Bureau acknowledges that, "[i]n a normal year, the number of additional acres exposed along . . . [Lake Roosevelt's shoreline] would be approximately 400 acres." Draft EA at 40. The Bureau relies on a Draft 2006 EPA study to conclude that this increase in shoreline exposure will have only a "slight" impact. Id. The Bureau fails to explain how the agency can rely on EPA's draft study of pre-Project beach contamination to conclude that additional impacts will be slight.
 - a. Question: On what basis does the Bureau conclude that EPA's draft study of 15 beaches supports a finding that the Project will not pose significant environmental consequences given that the Bureau acknowledges the Project will expose at least 400 acres of shoreline during the popular recreation season?

⁴ Bureau personnel have acknowledged that the instantaneous quantities of water contemplated for the drawdown cannot be measured and that the only means to determine that the releases have occurred is by measuring the elevation Lake Roosevelt reservoir at the end of August, to determine that it is 1.0 or 1.8 feet lower than "normal." This revelation was made at the Lake Roosevelt Forum in Spokane, on April 13, 2009, during a presentation by Bill Gray on the Lake Roosevelt Project.

⁵Both the Bureau's EA and Washington's Programmatic EIS and Supplemental EIS, which the Bureau incorporates by reference in its EA, fail to analyze the environmental health impacts and cumulative impacts of the Drawdown Project.

3. EPA's draft study relied on a small subset of samples collected at Lake Roosevelt. Additionally, the study failed to include two popular beaches: Bradbury Beach and Colville Flats. See EPA, Draft Screening-Level Risk Assessment Use of Beaches, Upper Columbia River Remedial Investigation and Feasibility Study (2006). EPA intends to include these beaches in the final study. Id.
4. Moreover, the Bureau's decision to rely on the EPA Draft Study is unreasonable given EPA's recognition that this study is incomplete and more study is needed before drawing conclusions on risk assessment. See EPA, Upper Columbia River Work Plan for the Remedial Investigation and Feasibility Study, Dec. 2008.
5. In analyzing the Drawdown Project's environmental health consequences, the Bureau relies on one draft study that EPA acknowledges requires further analysis while ignoring: (1) the extensive EPA study currently underway, and (2) studies and data prepared by the U.S. Geological Survey and EPA. See Attachment H-1. (Cox, S.E., Bell, P.R., Lowther, J.S., VanMetre, P.C., 2005, *Vertical distribution of trace element concentrations and occurrence of metallurgical slag particles accumulated bed sediments of Lake Roosevelt, Washington*, Sept. 2002: U.S. Geological Survey Scientific Investigations Report 2004-5090, 70 p.); (EPA Region 10, Draft Final Phase I Sediment Sampling Data Evaluation Upper Columbia River Site CERCLA RI/FS, Aug. 25, 2006); Attachment H-2-1 and H-2-2 (EPA, Upper Columbia River Work Plan for the Remedial Investigation and Feasibility Study, Dec. 2008).
7. Overall, the EA completely fails to examine the impact of lowering Lake Roosevelt on air-borne transport of contaminated sediment. The Bureau fails to discuss both the human health and environmental consequences of exposing 400 acres of contaminated shoreline to wind-born air contaminants. See EPA, Section 5: Air Quality. The Bureau's decision not to analyze the environmental health consequences of exposing an additional 400 acres of shoreline is unreasonable.
8. Question: On what basis can the Bureau conclude that the Drawdown Project does not have significant environmental effects when the Bureau failed to analyze the environmental effects of exposing at least 400 acres of shoreline to wind and suspension in the air?
9. The Bureau's proposed mitigation measure for Section 3.1.9, *Environmental Health*, is inadequate. The Bureau acknowledges the EPA's extensive study underway on the human health and ecological hazards of Lake Roosevelt. See Draft EA at 42 (describing Remedial Investigation and Feasibility Study (RI/FS)). The study will provide vital information necessary to assess the long and short term impacts of the Bureau's proposed Drawdown Project and the cumulative impacts of the Project and current operations. Nonetheless, the Bureau's EA relies on the pending study as a guide for unknown mitigation measures. See EA at 42 ("If new information indicates that the proposed action negatively impacts

the environment by re-entraining pollutants into the air or water, the State will establish a working group with the CCT to develop mitigation measures and pursue funding for those measures (Washington State and the CCT, 2007).”). In particular, the Bureau relies on a to-be-formed State workgroup to “develop mitigation measures and pursue funding for those measures.” The Bureau cannot and should not rely on hypothetical State actions as a surrogate for mitigation. See 40 C.F.R. § 1508.20 (defining “mitigation”). Under NEPA’s implementing regulations, mitigation is a defined term. Under 40 C.F.R. § 1508.20, “mitigation” includes:

- (a) Avoiding the impact altogether by not taking a certain action or parts of an action.
- (b) Minimizing impacts by limiting the degree or magnitude of the action and its implementation.
- (c) Rectifying the impact by repairing, rehabilitating, or restoring the affected environment.
- (d) Reducing or eliminating the impact over time by preservation and maintenance of operations during the life of the action.
- (e) Compensating for the impact by replacing or providing substitute resources or environments.

Id. The Bureau’s proposed “mitigation” measures for Environmental Health are inconsistent with and contrary to NEPA’s implementing regulations.

10. The Bureau fails to assess the downstream water quality impacts of releasing “instream” water from Lake Roosevelt. The Bureau must consider the downstream water quality impacts of releasing more water from the Upper Columbia River Superfund site. Even if the Bureau determines that instream releases are an environmental “benefit,” the Project is still one that “significantly” impacts the environment under NEPA. See 40 C.F.R. § 1508.27(b) (defining “significantly” and describing factors to consider, including “[i]mpacts that may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial.”).

Comment Section J: Section 3.1.11 *Socioeconomics*

1. More than twenty years the Bureau undertook to complete the “second half” of the Columbia Basin Project. That effort was soundly criticized and ultimately failed because of the Bureau’s failure to consider, among other items, the energy costs and subsidies associated with pumping water from Lake Roosevelt to the Odessa subarea. See Attachment J-1 (General Accounting Office, Water Resources: Issues Concerning Expanded Irrigation in the Columbia Basin Project, Report No. GAO/RCED-86-82BR (Jan. 1986)). In 2009, the Bureau commits the identical error in this EA by failing to discuss the subsidized energy costs associated with pumping water to the Odessa, a subsidy that will accrue to Bonneville ratepayers and federal taxpayers. The EA is inadequate for this failure

to discuss true economic and environmental costs. The Bureau must consider “[t]he degree to which the effects on the quality of the human environment are likely to be highly controversial.” 40 C.F.R. § 1508.27. The EA fails to consider the degree to which the Project’s effects have been and are highly controversial.

2. Under NEPA, “effects” include both direct and indirect effects. See 40 C.F.R. § 1508.8. The Bureau fails to consider the indirect effects—including growth inducing effects and related effects on air and water—of removing additional water from the Columbia River for industrial, municipal, and irrigation purposes.
3. We adopt and endorse the EA comments dated April 14, 2009, submitted by Professors Norm Whittlesey and Walter Butcher. The problems of water subsidy for the Columbia Basin Project are further described in Whittlesey, et al., *Water Project Subsidies: How They Develop and Grow*, Illahee, Vol. 11, Nos. 1&2 (1994). See Attachment J-2.

Comment Section K: Section 3.1.12 *Public Services & Utilities*

1. The EA fails to discuss the impacts to Columbia River hydropower generation caused by releases and diversions of water to and from the Columbia River, particularly in the context of future changes to streamflow in the Columbia projected by climate scientists. See footnote 1 reference for information about the significance of these potential changes, and they methods by which they are being analyzed by the Northwest Power & Conservation Council.

Comment Section L: Section 3.3 *Cumulative Effects*

1. The EA incorrectly asserts that the impacts Odessa Subarea Special Study are not reasonably certain to occur and therefore need not be considered as a part of the cumulative impacts analysis. This conclusion fails to acknowledge that the Bureau itself has determined the range of water supply diversions and acreage to be served by the Odessa Subarea Study. See Attachment L-1 (U.S. Bureau of Reclamation, *Odessa Study Update* (Mar. 2009)). The Bureau’s update states that the Odessa diversion will range from 202,700 to 377,700 acre-feet per year.
2. As important, the Odessa Subarea Study covers, in part, the identical area that the Lake Roosevelt Project is intended to serve, the feasibility study and environmental impact analysis are underway, and these documents are being prepared by the same Bureau region that is the author of the EA. See *Odessa Subarea Plan of Study* (USBR 2006) and *Initial Alternative Evaluation* (USBR 2006), referenced in the EA. See also Attachment L-3 (*Odessa Subarea Special Study Appraisal Level Investigation Summary of Findings* (USBR 2008)).
3. The Lake Roosevelt Drawdown Project is a connected action with the Odessa Subarea Special Study and they must be analyzed as part of the same project in

a single NEPA document. The Draft EA fails to analyze the Drawdown Project and Odessa Subarea Special Study a connected action.

4. The EA fails to acknowledge the cumulative effects of the Quincy Basin water right proposal, in which water rights are presently being issued in a partnership between the Bureau and the Department of Ecology. See Attachment L-2 (Quincy Basin Water Rights Press Release (ECY 2009)).
5. The EA fails to acknowledge the cumulative effects of water rights proposed for issuance in the "508-14" area of the Columbia Basin Project.
6. The EA fails to discuss the cumulative effects of the Potholes Supplemental Feed Route. See Attachment L-4 (Potholes Supplemental Feed Route and FONSI (USBR 2007)).
7. The EA fails to discuss the cumulative effects of the Department of Ecology's Columbia River Mainstem Off-Channel Storage Options Assessment (2007). See Attachment L-5.
8. Overall, the EA fails to discuss the extent to which the Columbia River is over-appropriated, including as recognized in the Bureau's own publication regarding cumulative effects, and how additional diversions from the River via the Lake Roosevelt Project will harm instream flows, aquatic habitat, and other in-river resources. See Attachment L-6 (Ellis, J., Drafting From an Overdrawn Account: continuing water diversions from the mainstem Columbia and Snake Rivers (Env'l Law, Vol. 26, 1996); Attachment L-7 (National Research Council, Managing the Columbia River: Instream Flows, Water Withdrawals, and Salmon Survival (NAS 2004)).
9. The EA fails to discuss the cumulative effects of existing water rights and pending applications for new water rights in the Columbia Basin, including in Montana, British Columbia, Idaho, Oregon and Washington.
10. The EA fails to discuss the cumulative effects of past and present drawdown operations by the government at Lake Roosevelt.
11. The EA fails to discuss the cumulative effects of current drawdown operations at Lake Roosevelt in addition to the Project's increased drawdown over normal operating conditions in the context of human and environmental health. Specifically, the EA fails to discuss the cumulative effects of exposing additional contaminated sediment.

In sum, the Bureau should: (1) withdraw its water rights applications because the Bureau did not prepare an Environmental Assessment or Environmental Impact Statement before the agency began implementing the Project; and (2) prepare an Environmental

Impact Statement because the Project will have a significant effect on the human environment.

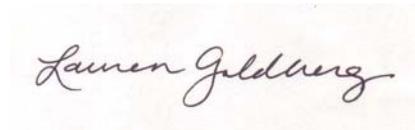
Please provide all of the undersigned with a copy of any communications related to these comments at the addresses shown above. Cascade Chapter mail may be addressed by email to cascade.chapter@sierraclub.org.

Thank you for the opportunity to provide comments on the Lake Roosevelt Incremental Storage Releases Project.

Yours very truly,

Rachael Paschal Osborn for

Rachael Paschal Osborn, Center for Environmental Law & Policy

A handwritten signature in cursive script that reads "Lauren Goldberg". The signature is written in dark ink on a light-colored, slightly textured background.

Lauren Goldberg, Staff Attorney, Columbia Riverkeeper

Cecilia Biosca, Member, Columbia Riverkeeper

Tristin Brown and Shallan Dawson, Sierra Club