APPENDIX D

Public Comments Received on the Draft Environmental Assessment and Corps/BPA Responses

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D.1. INTRODUCTION

This appendix presents comments received on the Albeni Falls Dam Flexible Winter Power Operations Draft Environmental Assessment (Draft EA) and responses to these comments provided by the U.S. Army Corps of Engineers (Corps) and Bonneville Power Administration (BPA). Comments were submitted in writing through letters, email, comment forms, and by posting to BPA's comment website. A total of 42 comment submittals were received. Each comment submittal was given an identifying number that corresponds to the order in which the submittal was logged in to BPA's comment website. Comment submittals were received from the following individuals, organizations, and agencies:

- Albni110002, Jimmy Easling, Cusick, Washington
- Albni110003, Steve C. Jamsa, Bonners Ferry, Idaho
- Albni110004, David K. Robinson Jr., Attorney, Coeur d'Alene, Idaho
- Albni110005, Ray Millard, Hope, Idaho
- Albni110006, Pat Manners, PR Properties, Spokane, Washington
- Albni110007, Thomas Herron, Idaho Department of Environmental Quality
- Albni110008, Catherine M. Malison, Clark Fork, Idaho
- Albni110009, Governor C.L. "Butch" Otter, Governor of Idaho, Boise, Idaho
- Albni110010, Don Comins
- Albni110011, Roger B. Buma, Newport, WA
- Albni110012, Douglas H. Furlott, Newport, WA
- Albni110013, Susan Drumheller, Idaho Conservation League, Sandpoint, Idaho
- Albni110014, Diane M. Williams, Tri-State Water Quality Council, Sandpoint, Idaho
- Albni110015, Jimmy Easling, Cusick, Washington
- Albni110016, Chris Bessler, Sandpoint, Idaho
- Albni110017, Susan Drumheller, Idaho Conservation League, Sandpoint, Idaho
- Albni110018, Steven R. Temple, Sandpoint, Idaho
- Albni110019, Mike Lee, Bayview, Idaho
- Albni110020, Mike Lee, Bayview, Idaho
- Albni110021, Connie J. Lewis, Toppenish, Washington
- Albni110022, David Starr, Sandpoint, Idaho
- Albni110023, Raymond Pipella, Wild Rose Water, Road and Irrigation Association, Sagle, Idaho
- Albni110024, Robert D. Geddes, Pend Oreille County Public Utility District, Newport, Washington
- Albni110026, Jeanine A. Pipella, Sagle, Idaho
- Albni110027, Tom and Marjorie Trulock, Heitman Docks at Glengary, Sagle, Idaho
- Albni110028, John W. Leedy, Sandpoint, Idaho

- Albni110029, Marian O'Reilly, Kinnikinnick Native Plant Society, Sandpoint, Idaho
- Albni110030, William and Marie Valentine, Sagle, Idaho
- Albni110031, Carol Jenkins, Sagle, Idaho
- Albni110032, Kim Woodruff, City of Sandpoint, Parks and Recreation, Sandpoint, Idaho
- Albni110033, Tom M. Trulock, Heitman Docks at Glengary, Sagle, Idaho
- Albni110034, Dana M. Mangold, Washington State Department of Ecology, Spokane, Washington
- Albni110035, John Chatburn, Office of Energy Resources, Idaho Department of Fish and Game, Boise, Idaho
- Albni110036, Herman B. Collins, Bonner Soil and Water Conservation District, Sandpoint, Idaho
- Albni110037, Robert W. Cromwell, Jr., Seattle City Light, Seattle, Washington
- Albni110038, Deane Osterman, Kalispel Tribe of Indians, Usk, Washington
- Albni110039, Jennifer Ekstrom, Lake Pend Oreille Waterkeeper, Sandpoint, Idaho
- Albni110040, Will Hart, Idaho Consumer-Owner Utilities Association
- Albni110041, Jerald D. Hansen, Sagle, Idaho
- Albni110042, Diane M. Williams, Tri-State Water Quality Council, Sandpoint, Idaho
- Albni110043, Steven Jenley, Terry Kovatch, Theresa Imlay, Don Leen, property owners, Sagle, Idaho
- Albni110044, Keith Lamotte, Spokane and Furport

Breaks in the number sequence reflect blank or erroneous submittals and submittals that did not include comments or that did not have content applicable to the Albeni Falls Dam Flexible Winter Power Operations project (such as SPAM, including advertisements and nonsensical numbers and letter sequences).

Each comment submittal is reproduced in its entirety in this appendix. Where a comment submittal included multiple comments, each comment was assigned a sequential number. Following each comment submittal are the Corps' and BPA's responses to the comments raised in the submittal.

As a result of reviewing and responding to the comments received, some edits were made to the Draft EA. The reader should consult the Final EA for these edits.

D.2. MASTER RESPONSES

A review of the comment letters received on the Draft EA revealed that some comments raised similar issues, demonstrating a common concern among those submitting written comments. In some cases, the array of similar comments about a particular topic provided more clarity about a specific issue than any single comment. To allow presentation of a response that addresses all aspects of these related comments, master responses have been prepared for those topics that were raised in a number of comments. These master responses are intended to provide the agencies' response that addresses all facets of a particular issue, in lieu of piecemeal responses to individual comments that may not have portrayed the full complexity of the issue.

When applicable, the individual responses to comments cross-reference an applicable master response to provide additional explanation and information. In some cases, a master response may fully respond to the individual comment.

Master responses have been provided for the following issues raised in comments received on the Draft EA:

- Comments related to impacts associated with shoreline erosion (see Master Response 1).
- Comments related to ice damage to private property (see Master Response 2).
- Comments related to liability for property damage (see Master Response 3).
- Comments related to winter recreation impacts (see Master Response 4).
- Comments related to the spread of invasive species (see Master Response 5).
- Comments related to the preparation of an environmental impact statement (EIS) (see Master Response 6).
- Comments related to mitigation and monitoring (see Master Response 7).

Each master response is presented in the following sections. Master responses are referenced throughout this appendix where applicable in response to specific comments.

D.2.1. Master Response 1, Impacts Associated with Shoreline Erosion

The SOR EIS identifies the current rate of erosion as significant and unavoidable. FWPO's incremental wintertime increase to erosion is not a significant alteration of the current significant erosion rate. The primary cause of shoreline erosion around the lakeshore and in the river deltas is the duration and elevation of the summer high lake level combined with wind and wave action during that time period. The proposed winter operation will not alter the duration or elevation of the summer high lake level and associated erosion issues will continue. The proposed winter operation would fluctuate the lake elevation within the winter operating range. The main impact of the proposed winter operation would be the increased frequency of erosion due to processes such as bank seepage and piping related to the water level variation. The contribution of these processes to the overall shoreline erosion rate is small relative to other processes such as wind waves and boat wakes. The increase in the frequency of these processes is not anticipated to significantly alter the overall shoreline erosion rate and is therefore described as an incremental increase in the EA. These impacts will be limited to the portion of the shoreline within the winter operating range which is already severely impacted by being inundated during the summer high lake levels.

Water Quality

The Corps has been conducting water quality monitoring of Lake Pend Oreille and the Pend Oreille River since 2005 in order to establish baseline information on physical, chemical, and biological conditions. Nearshore and open water stations have been monitored by the Corps since 2005. Water quality stations monitored by the Corps include both deepwater and shallow water stations. Samples for nutrients are collected from the epilimnion (shallow water zone) and hypolimnion (deep water zone) monthly from March through October. Additional nearshore monitoring stations (June to September) were added in 2010. These data will allow the Corps to assess trends in water quality and to evaluate any possible water quality impacts to nearshore nutrients and productivity from the FWPO. Water quality is currently monitored at one station

upstream of Lake Pend Oreille, seven in-lake stations, and one station located at the forebay of Albeni Falls Dam. Parameters of concern include nutrients, metals, anions, cations, chlorophyll a, phytoplankton and zooplankton. Water quality monitoring will continue after implementation of the FWPO.

The trophic state of Lake Pend Oreille has been classified as oligotrophic and meso-oligotrophic by several studies. Oligotrophic lakes have low nutrient concentrations with low productivity, mesotrophic lakes have moderate nutrient concentrations and productivity, and eutrophic lakes have elevated nutrient concentrations and high productivity. In general, increased nutrient loading to a lake can result in an increase in biological productivity and a change in a lake's trophic state from oligotrophic to mesotrophic to eutrophic. The Corps understands that the current meso-oligotrophic state of the nearshore areas of Lake Pend Oreille points to the importance of maintaining the oligotrophic state of the nearshore zone. As stated in Section 3.6 of the EA, the nearshore trophic state of Lake Pend Oreille is under pressure from increased development, runoff, and septic systems occurring in the basin. The Corps does not expect the small increase in shoreline erosion under the FWPO will substantially impact the critical summer (June through September) nutrient concentrations and biological productivity in either the open water or nearshore zones of Lake Pend Oreille or change the trophic state of Lake Pend Oreille when compared to the No Action Alternative. However, water quality monitoring will continue in the nearshore areas of Lake Pend Oreille to assess and evaluate any possible changes to the trophic state of Lake Pend Oreille from the FWPO.

Habitat Impacts

Loss of shoreline (riparian) and wetland vegetation currently occurs under the No Action Alternative and has been occurring since construction of Albeni Falls Dam. Wetland losses have been significant, primarily due to the holding of the lake at 2062.5 feet elevation throughout the summer (growing season for plants). This elevation is approximately 8 feet higher than the average pre-dam summer elevation for Lake Pend Oreille. The higher summer elevation effectively drowned all marsh plants and adjacent riparian vegetation, resulting in first, loss of roots which held the soil in place, and then, lacking the support structure the roots provided, the soils eroded away. Approximately 6000 acres of marsh and riparian vegetation were lost in the first few years following completion of Albeni Falls Dam (early to mid-1950s), including nearly all of the delta marshes at the mouths of the Clark Fork and Pack River as described in the SOR EIS. Shoreline erosion was estimated to continue at about 15% per year. These continued losses are due to both summer and winter operations. Winter operations do not generally directly affect emergent wetlands because the lake elevation is usually between 2055 and 2051 feet. This is well below the elevation of emergent marshlands around the lake. Aquatic beds have been less affected by lake operations. Approximately 8000 acres of submerged wetlands remain. The primary loss of submerged wetland is due to the high summer lake elevation. This reduces the amount of light available to the deepest areas of the submerged wetlands compared to the predam condition, causing a slow die-off of the deepest plants. On the other hand, some new areas may have been colonized by submerged aquatic plants following the loss of emergent wetlands. Operation of the lake under the FWPO would not directly affect emergent wetlands because the elevation at which the erosion would occur is at least 6 feet below the elevation of riparian and marsh habitats. Additionally, as the Corps has qualitatively estimated that the FWPO will result

in only a minor increase to existing shoreline erosion, aquatic beds are not expected to suffer any significant erosional losses due to FWPO.

<u>Wildlife</u>

Wetland losses directly affect waterfowl numbers through loss of nesting habitat, foraging habitat, and cover. Loss of over 6000 acres of wetlands and riparian habitat due to construction of Albeni Falls Dam has had a major effect on production of waterfowl that nest around the lake. In addition to 20+ species of waterfowl, osprey, great blue heron, bald eagle and other raptors, white-tailed deer, mink, and other fur-bearing mammals are all adversely affected by loss of wetlands and riparian habitats. Loss of submerged aquatic beds is a general concern for the large wintering population of redhead ducks, especially in Oden Bay, where they feed primarily on Chara and Nitella (both are species of algae), as well as most any green plant shoots they find in the water, along with roots and bulbs, and insects, frogs, snails, as well as fish, etc., that make up a thriving ecosystem. Although the loss of submerged aquatic plant beds is a general concern, loss of aquatic beds is not expected to occur as a result of implementing FWPO.

The FWPO is expected to have incremental effects on winter erosion of shoreline. The impact to aquatic plant beds is also expected to be incremental due to the fact that existing winter elevations of the lake vary between 2051 and 2055 feet, the same range as proposed for FWPO. Further erosion of the native aquatic plant beds is expected to be incremental. Because of the limited effects to wetlands and riparian habitats, the effects to wildlife resulting from implementation of FWPO are expected to be insignificant.

D.2.2. Master Response 2, Ice Damage to Private Property

As stated in Section 4.3 of the EA, the risk of damage to docks and other infrastructure around Lake Pend Oreille as a result of implementation of FWPO is not expected to be significantly different compared to current operations. An exception is an increased risk of damage to the few less structurally sound docks that may exist. These are docks that are not constructed and/or maintained up to the standard of practice for docks around the lake. The primary risk of damage to docks is from natural high flow events that occur when ice and frozen dock conditions exist around the lake. This scenario has occurred in the past (such as in 1996) and will occur again in the future and is unrelated to FWPO.

Under FWPO, there are many factors that would work together to limit dock damage. These include:

1. A gradual change in lake elevation of less than 0.5 feet per day. Usually this will be much less, more likely on the order of 0.2 feet per day during freezing conditions. These rates of change should not result in damage to docks even if ice is present. Rates near 0.5 feet per day would only occur when there is relatively high inflow to the lake. These high inflow conditions would typically occur when weather is above freezing and dock damage is not a concern. In rare cases when high inflow occurs and freezing conditions exist (such as in 1996), dock damage is possible as stated above. In 1996, the rate of increase was 4 feet over 4 days. This latter scenario exists with or without FWPO and would not be exacerbated by FWPO.

- 2. Implementation of the ice BMP. This is designed to reduce risks downstream of AFD, but it would have incidental benefits upstream by further limiting the amount of change in the lake elevation when ice conditions exist around the lake.
- 3. The relative warmth of the lake. Temperature of the water in the lake has to be below 39.2°F before any significant ice can form. The volume of water in the lake would subsequently delay the ice growth.
- 4. Typical weather conditions. Freezing conditions typically persist for only about two weeks or less at a time around Lake Pend Oreille. This is the absolute minimum amount of time necessary to sufficiently lock floating structures into the ice so that they are unable to float when the lake is raised. In order for floating structures to become locked into the ice, the two straight weeks of freezing conditions must also coincide with at least three weeks of dry air conditions (starting one week prior to the two week freeze). For pile related damage to occur, the lake would have to be relatively stable during the minimum two week period of freezing temperatures in order to allow ice to form a tight bond to any piles or other structures. As soon as the air temperature rises above freezing, any ice bond to piles or other structures would melt thereby eliminating the potential for damage.
- 5. A stable lake at low elevation. In order for pile related dock damage to occur, freezing conditions are required when the lake is low (i.e. 2051 feet) followed by raising the lake. Under FWPO, water is more likely to be stored raising the lake level to 2056 feet. If freezing conditions occur when the lake is at 2056 feet, there is minimal concern for damage to docks, as stated in the EA. When the lake is lowered, ice around any structures would fail due to gravity.
- 6. More regular lake fluctuations under FWPO. Fluctuations tend to maintain a small space or active crack between the ice and any structures such as piles. This prevents the ice from freezing directly to the pile. The active crack limits the load transferred to the structure reducing potential for damage.

All of these factors together support the conclusion stated above that FWPO would not increase the risk of dock damage around the lake compared to current operations. Having said this, there are some differences in the nature of this risk under FWPO compared to current operations. Currently, the lake is maintained at a relatively stable elevation throughout the winter. If there is high inflow that occurs after a period of freezing temperatures (such as occurred in 1996), there is potential for dock damage. Under FWPO, this scenario is less likely to cause dock damage because the lake may be fluctuating (as opposed to stable) which would maintain active cracks around any structures. The presence of these active cracks would limit the potential for damage when the lake rises. This is contrasted with the scenario whereby the Corps and BPA have maintained a relatively stable lake and then decided to store water after a period of freezing conditions. The factors identified above would have to line up for this scenario to increase the risk of dock damage. Although this is a remote scenario, the Corps and BPA intend to implement a new minimum lake level fluctuation standard operating procedure (SOP) under FWPO. The SOP would entail monitoring ice conditions around structures on Lake Pend Oreille and actively fluctuating the lake during the winter when power operations are not occurring. The purpose of the SOP is to maintain some minimum lake fluctuation sufficient to maintain the

active cracks around structures (i.e. piles) and a hinge crack along the shoreline of the lake. The SOP is intended to help minimize the risk of damage to structures around Lake Pend Oreille. The implementation of the SOP may over the long term decrease the overall risk of damage to structures from all scenarios combined including those scenarios that occur independent of FWPO. The SOP will not eliminate all risk of damage. For example, flooding of boats and structures frozen to the bed between 2051 and 2056 feet could still occur.

D.2.3. Master Response 3, Liability for Property Damage

Commenters have expressed concerns over past damages to docks and shoreline structures under existing operations and have asked who is responsible to pay for property damage under FWPO. The Corps and BPA believe that operating Albeni Falls in a manner consistent with its authorized operations should not give rise to new liability for either agency. Should a claim be filed, liability, if any, would be determined by a court. The following information provides additional detail concerning Corps authorizations and the extent to which property owners have already been compensated for impacts due to the construction and operation of Albeni Falls Dam.

Congress authorized the construction and operation of the Albeni Falls Dam in Bonner County, Idaho in 1950 as part of the Flood Control Act of 1950, Pub. Law. No. 81 - 51, 64 Stat. 163, 170 (1950). Pursuant to Senate Document No. 9, the Corps is authorized to operate Albeni Falls Dam to regulate the elevation of Lake Pend Oreille, a naturally occurring lake, amongst a range of elevations between 2049.7 and 2062.5 feet to achieve the project's multiple authorized purposes, which include power generation.

In the 1950s the Corps obtained numerous flowage easements around the perimeter of Lake Pend Oreille as a result of the construction of Albeni Falls Dam. Typically flowage easements include language that allows for the Corps "to impound upon, overflow, flood, and submerge" the land lying below elevation 2062.5, amongst other things. The United States has already provided just compensation to individual property owners for these flowage easements. The Corps does not have authority to provide any additional compensation to individuals for any effects experienced as a result of Albeni Falls project operation and maintenance.

The Corps generally has the discretion to change its operation of the project within this range of authorized lake levels to fulfill its multiple authorized purposes, so long as the change does not violate applicable statutes. While we recognize that the proposed operation of FWPO is different from the type of wintertime operation the public has become used to seeing in recent years, it is not different than the Corps' congressionally authorized operating level for Albeni Falls Dam, and it is consistent with how the project has been operated in the past.

Several commenters indicated that damage has occurred to their docks or overwater structures as a result of existing operations due to ice or extreme winter conditions in combination with high inflows or a flood damage reduction operation. This is an inherent risk for properties located around a regulated lake in the wintertime. Reports of such damage, however, appear to indicate that such overwater structures are often not designed to withstand fluctuations that can and will continue to occur within the project's authorized elevations whether or not FWPO is implemented. As Section 3.3 of the EA notes, whether or not FWPO is implemented, over-water structures in Lake Pend Oreille should be designed and maintained to withstand these

fluctuations to avoid damage. The State of Idaho also recognizes that dock owners, and the owners of other forms of overwater structures, are responsible for designing and maintaining their structures to withstand normally anticipated weather conditions in the area. *See* General Conditions IDAPA 20.03.04.015.13f¹. While several commenters indicated that the Corps should be held liable for damages to overwater structures, there is a certain amount of risk that is assumed by a property owner when constructing an overwater structure in a regulated body of water which is subject to extreme winter conditions. Damages to private overwater structures due to harsh winter conditions, flood conditions, or operating the reservoir within its authorized operations are typically considered to be consequential damages and are generally not compensable by the government. This is in part because decisions about the structure's maintenance and final design and engineering integrity rests with the dock owner or his or her agent, who has to determine the level of risk he or she is willing to accept when seeking to insure the adequacy of their structure in withstanding the range of weather conditions in the area.

The Corps of Engineers issues permits for docks and overwater structures under either Section 404 of the Clean Water Act or Section 10 of the Rivers and Harbors Act. The issuance of these Corps permits does not equate to an engineering evaluation of a structure's ability to withstand reservoir operations, but instead focuses on the impact associated with dredging and filling waters of the U.S. as part of the construction and maintenance of the structure, and/or the structure's impact to navigation. Corps permits expressly limit the extent of federal liability associated with their issuance, and do not purport to assume any liability for

- 1. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.
- 2. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.
- 3. Design or construction deficiencies associated with the permitted work.
- 4. Damage claims associated with any future modification, suspension, or revocation of a permit.

The lake level fluctuation that could occur under FWPO is within the range of lake elevations that could occur under existing operations. The risk of damage to overwater structures is described in master response 2 above and Sections 3.3 and 4.3 of the EA. Individual land owners bear the risk that AFD may be managed anywhere within its congressionally authorized operating range (from 2049.7 to 2062.5), and are responsible for managing their lands and property accordingly. The figures in Appendix B illustrate the degree to which the lake has fluctuated in the past during the winter. While FWPO may increase the frequency of these fluctuations in a single year, lake fluctuations caused by natural storm events during the winter have in the past and will continue in the future to fluctuate the elevation of Lake Pend Oreille.

¹ "Weather conditions. Encroachments and their building materials shall be designed and installed to withstand normally anticipated weather conditions in the area. Docks, piers, and similar structures shall be adequately secured to pilings or anchors to prevent displacement due to ice, wind, and waves. Flotation devices for docks, float homes, etc. shall be reasonably resistant to puncture and other damage." In their IDL procedures manual, it adds the following, "Final design and engineering integrity shall rest with the applicant or their agent."

This should be anticipated by all dock owners around the lake regardless of whether FWPO is implemented.

D.2.4. Master Response 4, Impacts to Winter Recreation

Ice conditions around the Lake Pend Oreille shoreline would likely change with implementation of FWPO. This change is due to the more regular and greater magnitude of fluctuations in the elevation of the lake compared to existing conditions. Instead of a rather seamless transition from the shoreline to ice on the lake, there will be a greater probability of a break in the ice between the shoreline and the floating ice. This will affect winter recreation and affect the ability for individuals to gain access to the ice. More information is provided in the EA.

The new shoreline conditions would likely vary from year to year depending on weather and FWPO operations. Conditions could include ice with more cracks in it around the shoreline. This could include pieces of ice that are elevated above the ground that are supported on either end by large rocks or other structure. This latter ice could break if walked upon. Previously floating ice that has become grounded will generally follow the pitch of the sloping shore. Recreationists should monitor the ice conditions around them and proceed cautiously. There are always inherent safety concerns associated with recreating on frozen lakes. Under FWPO, extra caution should be taken especially along the shoreline to ensure good footing. Caution should also be taken when attempting to access the floating ice since this ice may not necessarily be directly attached to the shoreline.

D.2.5. Master Response 5, Impacts Associated with Spreading Invasive Species

Flowering Rush

The invasive flowering rush is a plant that has recently obtained a foothold in Lake Pend Oreille and is spreading around the lake and to locations downstream. It is a plant that has a diverse means of dispersal, including transport of plant fragments on currents, in ice, as well as through seeds. Ice can freeze and then break off pieces of the plant. These pieces can then be transported around the lake in ice or currents. Since FWPO may increase ice movement around the lake, this may aid the spread of rush. The magnitude of this effect is uncertain because as stated above in master response 2, the shore-fast ice is likely to remain in place in most cases and not be transported around the lake. Fluctuations in lake elevation would occur slowly under FWPO (0.5 feet per day or less). The ice BMP may incidentally decrease the rate of change in lake elevation when ice is present. These restrictions on AFD operations should limit the transport of ice and flowering rush around the lake.

Flowering rush also has the potential to encroach on native aquatic bed plant communities and potentially displace them. This potential exists with or without FWPO. Because the spread of flowering rush in Lake Pend Oreille is very recent, we do not yet know the potential extent of this plant. The rapid colonization of flowering rush may begin to reduce the extent of native plants, which would in turn affect the local ecosystem and fish and wildlife species.

Anecdotal observations suggest that this plant has nearly doubled its growing area coverage in the past 3 years (Hull 2011). These observations indicate that only a small portion of the

flowering rush currently present in Lake Pend Oreille is established below elevation 2056 feet. FWPO would only potentially affect the rush below 2056 feet. The majority of the current rush population around the lake would be unaffected by FWPO.

As stated above, the FWPO effect on rush is uncertain and difficult to predict. The best available information indicates that FWPO may potentially increase ice movement within Lake Pend Oreille, and thus we predict that this could aid in the incremental spread of flowering rush, both upstream and downstream of Albeni Falls Dam, as stated in the EA. Over the long term, the fate of rush will not be determined by FWPO but by other factors that are totally independent of FWPO. For this reason, FWPO cannot be considered to significantly affect the dispersal of rush around the lake.

The threat posed by flowering rush on the ecosystem of Lake Pend Oreille occurs under the existing operation and is not anticipated to significantly change due to FWPO. The Corps and BPA agree that the issue warrants additional research. The Corps coordinates with the State of Idaho and local stakeholders in attempting to control rush and other invasive species. This includes application of herbicides in 2011 at several locations to evaluate their effectiveness (Hull, 2011). We expect to continue these efforts to control invasive species in cooperation with the local community.

Eurasian Watermilfoil

The effect of FWPO on Eurasian watermilfoil is similar to the no-action alternative. Additional detail has been added to the EA to further characterize watermilfoil around Lake Pend Oreille and potential effects of FWPO (please reference sections 3.10 and 4.10 of the EA). Over the long term, FWPO is not expected to affect the spread of milfoil.

D.2.6. Master Response 6, NEPA Compliance

A number of comment letters question the ability of the Corps and BPA to rely on the SOR EIS and suggested the Corps and BPA prepare a new EIS before implementing FWPO. These comments are generally addressed by the response below. Additional responses are provided for specific comments throughout this appendix.

Tiering to the SOR EIS

As described in Chapter 1 of the EA, the SOR EIS provides the comprehensive environmental analysis under NEPA to support management strategies for operations and maintenance activities for the FCRPS. While the SOR EIS was completed in 1995, it is still the active, governing NEPA document for the 14 dams for which it described operations. Accordingly, for proposed modifications to FCRPS operations such as the FWPO, the Corps and BPA believe that tiering the environmental analysis of any such modifications to the SOR EIS is appropriate and is in fact 'encouraged' by regulation (40 C.F.R § 1502.20). The use of an EA that is tiered to an EIS allows the Corps and BPA to take a "hard look" at the proposed action and associated impacts to the human environment. This tiering also allows the agencies to focus on the issues which are ripe for decision and exclude from consideration issues already decided.

In addition, the Corps and BPA are using the FWPO EA to evaluate effects of the FWPO and determine whether a supplemental or new EIS is required, or whether the SOR EIS, as confirmed

through analyses in this EA, is sufficient. This use is consistent with NEPA implementing regulations that allow agencies to prepare an EA "on any action at any time in order to assist agency planning and decision making." (See 40 C.F.R. 1501.3(b)).

To help make this determination, the EA evaluates whether: (1) the FWPO is a substantial change from the proposed action evaluated in the SOR EIS relevant to environmental concerns; or (2) there are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action of the SOR EIS or its impacts. This evaluation reflects the criteria for supplementing an EIS identified in the NEPA implementing regulations (see 40 C.F.R. §1502.9(c)), and incorporates standards for determining significance from these regulations as well (see 40 C.F.R. 1508.27). Accordingly, new circumstances and/or information relevant to environmental concerns are included and evaluated where appropriate in this EA.

The Corps and BPA believe the analysis contained in the EA sufficiently addresses environmental and scientific developments that have occurred since the SOR EIS was completed. For example, as described in Section 2.1 of the EA, there have been several consultations pursuant to the Endangered Species Act (ESA) that have resulted in Biological Opinions. The programmatic analysis of effects in the SOR EIS enabled the adaptive management approach of the respective Biological Opinions used throughout the basin for addressing the needs of various listed fish species and the complexities of operating a large hydropower system. The EA reflects these approaches and considers the changes in river management that have resulted. As described in the EA, the proposed action is not markedly different from the Preferred Alternative in the SOR EIS and ROD, and changes relevant to environmental concerns that have occurred since the SOR EIS was completed do not present a seriously different picture of environmental impacts from what was described in the SOR EIS. Furthermore, existing conditions have not substantially changed from the time of the EIS or in any way that would justify preparation of an EIS.

Significance Criteria & Level of Detail

While the **precise** magnitude of any specific effect may not be presented in either the SOR EIS or the EA, this is not the standard for preparing an EIS. The **general** magnitude and nature of effect (i.e., context and intensity or significance) is the standard required by regulation for the preparation of an EIS. The information that is available, along with the substantial amount of new information that was developed as part of the EA, is sufficient to determine the significance of any effects associated with FWPO. The Corps and BPA are confident in the conclusions reached in the EA regarding the relative significance of the project effects. There has been no new information presented as a result of public comments to indicate otherwise (see individual responses for more detail). While there will always be uncertainty about future effects regardless of how much research, monitoring, and analysis is conducted, it is the opinion of the Corps and BPA that the conclusions are adequately supported and unlikely to change with additional research, studies, and analysis. This is not to say that there will not be effects from the proposed action. These effects are detailed in the EA and the SOR EIS.

Ongoing effects from existing operations have occurred and will continue to occur. Likewise, these ongoing effects do not require preparation of an EIS. An EIS has already been prepared to disclose these effects. The relevant standard for a new or supplemental EIS is described above (i.e. **new** significant environmental effects). Producing a supplemental EIS to simply restate the

magnitude of effects described in the EA, even if additional precision can be provided in an EIS, is not required by law or regulation.

D.2.7. Master Response 7, Implementation of a Monitoring and Mitigation Program

A number of comment letters recommended monitoring and mitigation both for existing operations and in some cases for FWPO. In most case these comments pertained to effects of existing operations. Through the analysis contained in the SOR EIS, which this EA is tiered to, the agencies determined that the existing operations result in significant environmental impacts. This EA does not change that determination. As described in Section 1.3 of the EA, the purpose of the EA is to evaluate whether: (1) FWPO is a substantial change from the proposed action evaluated in the SOR EIS relevant to environmental concerns; or whether, (2) there are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action of the SOR EIS or its impacts (40 C.F.R. §1502.9(c)). It is important to recognize that the effects of existing operations have already been disclosed in the SOR EIS and have been incorporated by reference into the EA. The overall purpose of the EA is therefore not to evaluate effects of existing operations, nor identify monitoring and mitigation appropriate for existing operations. While new information regarding the effects of existing operations has been identified where appropriate in this EA (for instance, with respect to flowering rush), monitoring and mitigation has occurred, and will continue, for impacts resulting from existing operations under several authorities and is not directly tied to the implementation of FWPO. This detail is provided in Chapter 6, Cumulative Impacts of the EA and further detailed below.

For example, monitoring and mitigation for existing operations and construction of AFD have been completed under the Pacific Northwest Electric Power Planning and Conservation Act of 1980 (Northwest Power Act, 16 U.S.C. Sec. 839 et seq.). This act requires that BPA protect, mitigate, and enhance fish and wildlife to the extent affected by the development and operation of the Columbia River Basin hydroelectric dams from which BPA markets power. Under the Northwest Power Act, the Northwest Power and Conservation Council (Council), a four-state compact entity (with representatives from Oregon, Washington, Idaho, and Montana), develops the Columbia Basin Fish and Wildlife Program (Program). Beginning in 1996, BPA began enlisting the Council to periodically solicit projects intended to help meet BPA's share of the Program's measures and objectives through an open and public process. The Council is directed by the Northwest Power Act to conduct a review of submitted restoration project proposals and to make recommendations to BPA for project funding from BPA's annual fish and wildlife program budget. The Council accomplishes its review of the project proposals with the assistance of an Independent Scientific Review Panel (ISRP). Based largely on the Council's final recommendations, BPA makes funding decisions and implements mitigation projects through contracts with numerous entities.

The Northwest Power Act also requires that the agencies responsible for managing and operating the Federal hydroelectric dams in the Columbia Basin exercise those management responsibilities "in a manner that provides equitable treatment for fish and wildlife with the other purposes for which such system and facilities are managed and operated." (16 U.S.C. § 839b(h)(11)(A)(i)). The Council describes equitable treatment as "meet[ing] the needs of [fish] with a level of certainty comparable to that accorded the other operational purposes." (Council

Program 1992, Vol. II. p. 9) Historically, the agencies have provided equitable treatment on a system-wide basis primarily by implementing the Council's integrated fish and wildlife program and relevant Biological Opinions related to FCRPS operations.

For instance, BPA has spent over \$54 million dollars on research and mitigation projects specifically to protect the fish and wildlife and their habitat affected by Albeni Falls Dam. The first wildlife mitigation lands attributed to Albeni Falls were acquired in 1992; since then BPA has spent approximately \$35 million for purchase of Albeni Falls wildlife mitigation properties. In addition to the expenditure for properties, BPA has provided approximately \$20 million in funding for enhancement, restoration, and O&M actions upon the mitigation lands.

Following the impoundment of the river and lake by the dam, the lake was held at 2062 feet throughout the winter immediately following impoundment. These levels, in conjunction with winter storms, exacerbated losses of highly erodible soils. As a result, beginning in the late 1950s the lake has been held at lower elevations during the winter months to reduce erosion impacts (Corps 1964²). The Corps performed bank protection projects around the north end of the lake and on the river upstream of AFD to stabilize the shoreline. It is estimated that the Corps and partners have constructed approximately six miles of bank stabilization structures for the purposes of shoreline stabilization, protection of infrastructure and cultural resource protection.

Through the on-the-ground mitigation and research projects and the hydro operations, the Corps and BPA ensure that they meet fish and wildlife needs with the same certainty as other authorized purposes. This is one of numerous concerns that we address through implementation of our regular operations and maintenance plan.

As indicated in the EA, there are no significant new environmental impacts to resources as a result of FWPO. Marginal differences in impacts as a result of the proposed action will be accommodated within the existing monitoring and mitigation initiatives that address impacts from the existing operations.

² Corps. 1964. Design memorandum 23B: The master plan for development and management of reservoir lands. 56 pp.

D.3. RESPONSES TO INDIVIDUAL COMMENTS

I attended the meeting last night and have no problem with the proposal unless you decide to release the extra water causing flooding downstream. It is nice to be able to have public comments, but, in the end, the government does not listen to the people anyway. Classic examples are the healthcare and debt 110002-2 issues. The majority of Americans did not want either.

Response to Comment Albni110002-1

As stated in the draft EA, the National Weather Service flood flow downstream of AFD is 100 kcfs. The maximum flow under FWPO is only 45 kcfs. This is far below the flows that would create a flood concern.

Response to Comment Albni110002-2

The Corps and BPA have responded to public concerns throughout this process while still trying to fulfill our agencies' missions. As described in chapter 7 of the EA, the evaluation of FWPO has included a number of public meetings designed both to inform the public about the proposal and also to understand public concerns. The agencies have responded to public concerns through several avenues including development of the Ice Best Management Practice and the minimum fluctuation SOP.

Albni110002 Easling

Albni110003 Jamsa

As a sportsman who ice fishes on LPO I am against the drawdown as a drawdown can create dangerous 110003-1 ice condtions for the fishermen. The present management plan works fine.

Response to Comment Albni110003-1

The commenter's objection to FWPO is noted.

Please reference master response 4 for a response to comment on ice conditions for fisherman.

Albni110004 Robinson Jr., Attorney

I am opposed to letting the Army Corps of Engineers being able to drop the winter levels at Albeni Falls110004-1Dam by 5' between December and March each winter on a fluctuating basis, as this would not be good110004-2for we duck hunters who launch or boats in Bonner Co on Lake Pend Oreille or on the Pend Oreille River,110004-2and could make launching almost impossible, not to mention possibly drying up the wetlands along the110004-3edges of the lake and river where migrating waterfowl loaf and feed on their way south.110004-3

Response to Comment Albni110004-1

The commenter's objection to FWPO is noted.

Response to Comment Albni110004-2

FWPO is not expected to negatively affect access to boat launches. FWPO may actually improve access to a minor degree because FWPO would on average result in higher lake elevations than would otherwise occur. This would result in slightly more of the boat ramps being in the water compared to current operations when the lake would remain closer to 2051 feet. In years when the MCE is set to 2055 feet, there would be no difference between the number of useable boat ramps between FWPO and current operations.

The change in water level is limited to 6 inches per day, limiting the extent of the icy boat ramp. Sublimation and solar radiation should deice the upper sections of the ramp.

Response to Comment Albni110004-3

FWPO will not lower Lake Pend Oreille below the recent minimum winter elevation of 2051 feet. While FWPO would fluctuate the lake between 2051 and 2056 feet, this falls within the normal winter operating range. Therefore no additional exposure ("drying up") of wetlands would occur. Also reference master response 1 regarding habitat impacts.

A winter lake level fluctuation of 5' is not acceptable to the over-all health of our fishery, effects of erosion, and recreational activities. I understand the demand for energy and drive toward managing the lake level to maximize this opportunity but the effect on the local citizens must be considered also.

Response to Comment Albni110005-1

The commenter's objection to FWPO is noted.

The Corps and BPA considered all effects associated with implementing FWPO, as identified in this EA, including public comments such as yours, before making a decision whether or not to implement FWPO.

FWPO is not expected to result in any measureable effects on fisheries. Please reference master response 1 for a response to comment on erosion and master response 4 for response to comment or recreation.

	Albni11000 Manners/PR Propertie
•	
Proposed Albeni Falls Dam Winter Po	wer Operations Project
Note: Any comments submitted will become part of t	he public record for this project
I have these comments:	
IT HAS BEEN A C PROCES AND SHOULD	RE APROLED. 1100
THE SHORELINE NEEDS LE	SS OF A BEATTING
DURING WINTER MONTIS.	
HOPEFULLY THECON WOULD BE I ESS.	SUMER 50575 1100
	<u>, 1985 </u>
A CAL	
Print Name and Organization (optional):	
PAT MANNERS / PR PROI	ERTIES
If you would like to receive a bard conv of the draft EA placer	Novide your name and address
	provide jour name and address.
You can also submit comments electronically at: www.bpa.gov/c Ms. Leah Wickstrom, CENWS-PM-CP-CJ, U.S. Army Corps of E	cmment or provide written comments to: ngineers, P.O. Box 3755 Seattle.
Washington 98124-3755 by August 29, 2011.	casi sali di S

Response to Comment Albni110006-1

The commenter's approval of FWPO is noted.

Response to Comment Albni110006-2

Please reference master response 1 for response to comment on erosion.

Response to Comment Albni110006-3

As discussed in the EA, the proposed FWPO would store additional water in the lake when it is available from late December through March and use the water during periods when it would provide a higher value to serve regional power demands, for example during a cold snap or a major power plant outage. Utilizing flexibility consistent with the congressionally authorized purposes would assist BPA in minimizing power rates, which could help keep costs lower for electric consumers in the Pacific Northwest. This will depend in part on the ability to utilize the proposed operation.

Albni110007 Herron/Idaho Department of Environmental Quality Proposed Albeni Falls Dam Winter Power Operations Project Note: Any comments submitted will become part of the public record for this project I have these comments: of the document And conversations with In MY FRAding STAFF At the open concerned that there are house Assumptio are being MAde by the Acoe hat that better defined The position of the Acoe Already significant erosion and autrient tupre is CLAUKFORK RIVER AS Well AS LEGACY Prosion throughput 500m the is though true there AresigniFicant Sources with this EROSION And throughputs, it doesn't diminish inclutive impacts And Importance Additional logding vigilant for New sources of nutvients And We ha dont Add Additional erosion And be sure that we Autrients Implementation efforts have resulted reduction of in 110007-1 Montana And Tdaho utvients in " This Relation to TMDL SO AdditionA Londing ANALYSIS WAS made 6Ading INCREASE Also the Assumption that Seems Apparent suce the LAKe is Oligotrophic that that high Assymilative capacity of the lake in Relation 15 This nuturients. not true In oligotrophic APCESSARily 15 Atos-a Frew Additional nutrient inputs can have a significant water Quality import. Nearshore Areas are very close to Print Name and Organization (bptional): TIMOL Target levels at times and New Nutriente Sources must be offeset with shoreline stabilization. Monitoring Should include flypolimetic and Deepwater Hypolimatic nutrient SigniFICANT 4 Kes-a If you would like to receive a hard copy of the draft EA, please provide your name and address: Sampling to establish a water Quality baseline in Relation to this proposal for winter flux ation Existing water Quality impacts Name (Print): FROM AFD have not been mitigated or Remediated Address: And No Now Scurces of elevated nutrients ARE Authorized City: without mitigation for existing impact Zip: Thomas HERRON IDEQ Thomas Herron @ deg. idaho.gov 769-1422 You can also submit comments electronically at: www.bpa.gov/comment or provide written comments to: Ms. Leah Wickstrom, CENWS-PM-CP-CJ, U.S. Army Corps of Engineers, P.O. Box 3755 Seattle, Washington 98124-3755 by August 29, 2011.

Response to Comment Albni110007-1

Please see the master response 1 for response to your comments on erosion and water quality.

 Albni110008 Malison

 I oppose a five foot fluctuation of the Lake Pend Oreille lake levels over the winter. The current one foot movement of water levels, used in past years, has allowed safe ice fishing on the lake, and little damage to docks. A five foot rise or drop of water is going to cause negative effects on ice fishing and the local community, from both a safety standpoint, and an economic standpoint. Also, five foot rise and falls in water levels will do structural damage to docks. People living along the lake have suffered major damage in 2011 from the high water in the spring and early summer, and they do not need further problems over this coming winter.
 110008-2

Response to Comment Albni110008-1

The commenter's objection to FWPO is noted.

Response to Comment Albni110008-2 and Albni110008-3

Please reference master response 4 for response to comment on ice fishing, master response 2 for response to comment on dock damage, response to Albni110010-4 for comment on effect of water level fluctuations on property, and section 4.4 of the EA for comment on high water levels.

	Albni110009 Otter, Office of the Governor
	C. L. "BUTCH" OTTER GOVERNOR
	August 1, 2011
	11454011, 2011
Colonel Bruce Estok U.S. Army Corps of Engineers	
Seattle, Washington 98124-3755	
RE: Albeni Falls Dam Flexit Assessment	ole Winter Power Operations – Draft Environmental
Dear Bruce,	
I am writing to request an exte Falls Dam Draft Environmenta	nsion of 30 days to the comment period for the Albeni al Assessment.
An extension is desired so that various state agencies that will to provide their input as well.	the State of Idaho can coordinate comments between the be affected by this decision, and also to allow for citizens
If you have any question please appreciate your timely and pos	e feel free to contact my office at (208) 334-2100. I
	As Always – Idaho, "Esto Perpetua"
	Gol Butch Dave
CLO/sg	C.L. "Butch" Otter Governor of Idaho

Response to Comment Albni110009-1



DEPARTMENT OF THE ARMY SEATTLE DISTRICT, CORPS OF ENGINEERS P.O. BOX 3755 SEATTLE, WASHINGTON 98124-3755

Civil Works Branch

Honorable C. L. "Butch" Otter Governor of Idaho P. O. Box 83720 Boise, Idaho 83720

Dear Governor Otter:

Thank you for your letter dated August 1, 2011 regarding the public comment period for the Albeni Falls Dam Flexible Winter Power Operations Draft Environmental Assessment (EA).

The U.S. Army Corps of Engineers and Bonneville Power Administration are joint-lead agencies on this draft EA, and we will extend the public comment period by 15 days to provide state agencies with additional time to coordinate comments in response to your request. The draft EA can be viewed at http://bit.ly/n0a0wx. To submit comments on the draft EA, visit www.bpa.gov/comment. The last day to provide input on the draft EA will now be September 13, 2011.

If you would like additional information or to request a hard copy of the draft EA, please contact Ms. Leah Wickstrom, Project Manager, at (206) 764-3652 or leah.j.wickstrom@usace.army.mil.

Sincerely,

Bruce A. Estok Colonel, Corps of Engineers District Commander

Albni11001 Comins am definitely opposed to the ACOE's proposal to allow excessive (5') LPO lake level fluctuations during he winter months. Water level fluctuations during winter months will cause unneccesary and excessive mark erosion and severe dock damage from ice movement as water levels are raised. Sheets of ice will reak free of the shore as levels rise and the current increases along the Pend Oreille River both above	
the effects of normal spring runoff and now asking them to fight water level fluctuations during winter months is inappropriate. I do not believe the additional power generated will offset the property damage this proposal will certainly cause.	110010-4

Response to Comment Albni110010-1

The commenter's objection to FWPO is noted.

Response to Comment Albni110010-2

Please reference master response 2 for response to comment on dock damage.

Response to Comment Albni110010-3

Ice along the shoreline and the frozen banks will protect the shore from damage by ice floes. This is different than conditions in the spring when the shore ice has melted and exposed the shore and structure to moving ice.

Shoreline scouring due to ice floes is not expected to be an important contributor to shoreline erosion around Lake Pend Oreille.

Response to Comment Albni110010-4

As described in section 4.3 of the EA, the Corps and BPA do not anticipate FWPO will result in water level fluctuations that would cause damage to property. These flows and lake elevations are well below flood levels that would cause damage. Please reference master response 1 for information on FWPO effects on erosion and please reference master response 2 concerning property damage related to ice.

Albni110011 Buma

I am adamately against the ACOE's proposal to allow excessive (5') LPO lake level fluctuations during the winter months. This past spring was an example of how high waters cause excessive bank erosion and severe dock damage. The winter ice movement would most certainly cause even more damage as ice breaks free of the shore. We have considerable investment in our property to prevent erosion. In addition, we work out of town during the winter months and are unable to monitor the situation, should damage occur to our trees, bank and dock. Most assuredly ice flows could pile up against docks causing excessive strain and pressure on docks and pilings, as well as causing serious erosion problems on the river. Please reconsider this plan, as the additional power generated will most certainly not offset the property and bank damage that owners along the river will suffer.

Response to Comment Albni110011-1

The commenter's objection to FWPO is noted.

Please reference master response 1 for response to comment on erosion, master response 2 for response to comment on dock damage, and section 4.15 of the EA and response to comment Albni110006-3 for response to comment on power benefits.

Albni110012 Furlott

I am against changing the water levels on Lake Pend Oreille by 5 feet during the winter months. I have 110012-1 had property on the river for 27 years and I can reflect to an incident that happened prior to when we built our home in 1997. It was around 95 or 96. We received a call from a neighbor that Albeni Dam had released a lot of water when the lce was breaking up and it tore my neighbors three pilings out his stair casing leading to the dock and tore the dock to pieces. Part of his dock ended up on mt dock which was shoved by the ice snapping my piling off out in the river and damaging my dock. Numerous neighbors had bent pilings and damage to there docks. You are talking thousands of dollars in damage that could have been prevented had Albeni Dam not released the water during the ice break up. This is a bad decision and as a home owner on the river I am totally against it.

Response to Comment Albni110012-1

The commenter's objection to FWPO is noted.

Response to Comment Albni110012-2

Please reference master response 2 for response to comment on dock damage.

In 1996, there was a storm that resulted in high water coming into Lake Pend Oreille while ice existed around the lake. This resulted in the need to release water during ice conditions and resulted in the damage referenced in the comment. These conditions are likely to occur again and cannot be prevented by AFD regardless of whether or not FWPO is implemented. As decribed in section 4.4.2 of the EA, the ice BMP was developed to minimize the risk of creating an ice jam as a result of FWPO. Also reference response to comment Albni110031-3.

Albni110013 Drumheller/Idaho Conservation League



ww.idahoconservation.org

Idaho Conservation League PO Box 844, Boise, ID 83701 208.345.6933

Aug. 8, 2011

Holly Harwood Project Manager Albeni Falls Dam Flexible Winter Power Operations Bonneville Power Administration

RE: Draft Environmental Assessment, Albeni Falls Dam Flexible Winter Power Operations comment period

Dear Ms. Harwood,

I am writing on behalf of the Idaho Conservation League to request both an extension of the comment period for the Draft Environmental Assessment of the Albeni Falls Dam, Flexible Winter Power Operations and a public hearing on the proposal.

Since 1973, the Idaho Conservation League has been Idaho's voice for clean water, clean air and wilderness—values that are the foundation for Idaho's extraordinary quality of life. The Idaho Conservation League works to protect these values through public education, outreach, advocacy and policy development. As Idaho's largest state-based conservation organization, we represent over 20,000 supporters, many of whom have a deep personal interest in maintaining the water quality of our treasured waterways, including Lake Pend Oreille and the Pend Oreille River.

Late last week the public notice was issued on the Draft EA for the Albeni Falls Dam, Flexible Winter Power Operations and the Draft EA was made available online for review. This 133-page document is a "tiered" document that relies largely on the findings of the 1995 Columbia River Power System Operation Review Environmental Impact Statement. Several other documents are also referenced in the document that are relevant to the environmental assessment, including the 1983 Albeni Falls Dam EIS and biological opinions issued in 2000 and 2006. Given the complexity of this topic and the multiple documents necessary for a thorough review, it is unreasonable to limit public comments to a 30-day comment period, particularly in August when many people are taking summer vacations.

Given the intense interest of the community in this project, the potential impacts to the lake, including erosion, the spread of aquatic invasive species, and property damage, we request that you extend your comment deadline another 60 days to October 28, 2011. We also believe that within the next two months, the U.S. Army Corps of Engineers and Bonneville Power Administration should schedule a public hearing. Last night's open

house was held on short notice, when many people are on vacation, and on the first night of the Festival at Sandpoint, which is perhaps the biggest event of the year in this community. The open house format, also, is less conducive to public understanding of the issue because attendees do not benefit from the questions and conversations that other attendees have. A public meeting would allow everyone to benefit from those exchanges.

110013-1 (cont'd)

Again, given the intense public interest in the proposal to fluctuate winter lake levels on Lake Pend Oreille and the complexity of this issue, we believe that in the interest of public involvement and adequate public review, the public comment period should be extended an additional 60 days. In addition, we request a public hearing to allow the public adequate opportunity to understand and participate in this decision.

I look forward to hearing back from you as soon as possible on this request. Please contact me at 208-265-9565 or <u>sdrumheller@idahoconservation.org</u> if you have any questions

Sincerely,

Susan Drumhelle

Susan Drumheller North Idaho Associate Idaho Conservation League P.O. Box 2308 Sandpoint, ID 83864

Response to Comment Albni110013-1



DEPARTMENT OF THE ARMY SEATTLE DISTRICT, CORPS OF ENGINEERS P.O. BOX 3755 SEATTLE, WASHINGTON 98124-3755

Civil Works Branch

Susan Drumheller North Idaho Associate Idaho Conservation League P.O. Box 2308 Sandpoint, ID 83864

Dear Ms. Drumheller:

Thank you for your letter dated August 19, 2011 regarding the Albeni Falls Dam Flexible Winter Power Operations draft Environmental Assessment (EA). I am writing today on behalf of both the U.S. Army Corps of Engineers (Corps) and Bonneville Power Administration (BPA).

The Corps and BPA are joint-lead agencies on this draft EA, and have agreed to extend the public comment period by 15 days to provide the public with additional time to review the draft EA and other referenced supporting documentation. The last day to provide input on the draft EA will now be September 13, 2011. The draft EA can be viewed at http://bit.ly/n0a0wx. To submit comments on the draft EA or to look at other comments that have been submitted, visit www.bpa.gov/comment.

Although we appreciate your desire for a different public meeting format, the agencies do not believe that a public hearing or additional public meeting is warranted. The Corps and BPA have done extensive public outreach to date in the Lake Pend Oreille area. The Corps held a public meeting in December 2009 in a format similar to what you are proposing to explain the proposal and allow the public to ask questions in a public forum. In addition, the Corps and BPA hosted two open houses during the summer of 2010 to explain the proposal to the public. Two open houses were held in August of 2011 to explain the content of the draft EA. In addition to these public meetings, the Corps and BPA have also participated in Pend Oreille Basin Commission meetings to discuss the NEPA process and the proposal. Any questions that were not asked at the public open houses in August of 2011 can be directed to the project team via the telephone line provided at the open house and in the public notice. That number is 800-622-4519.

The agencies are providing a thorough and accurate record of public comments via BPA's public website where individuals can both post comments on the draft EA and view all other public comments that the agencies have received. The final EA will include an appendix of all comments collected on this site as well as the agencies' responses to those comments. If you have additional comments or concerns, please provide them during this public comment period.

If you would like any additional information, please contact me at (206) 764-3652 or leah.j.wickstrom@usace.army.mil.

Sincerely,

stron

Leah Wickstrom Project Manager U.S. Army Corps of Engineers



Additionally, the meeting format did not provide for an adequate exchange of questions and answers between the public and the agencies. An open house/informational meeting does not allow the public to hear the all of the questions and issues at play, nor does it hold the agencies accountable for answers that are provided to individual members of the public. A public meeting or public hearing would best meet NEPA's requirement for full public disclosure and participation, and would provide a thorough and accurate record of public comments and agency responses.

As a non-profit, collaborative organization of business, industry, government, tribes and citizens working for the past 17 years to protect and improve water quality throughout the Clark Fork-Pend Oreille watershed in Montana, Idaho and Washington, the Tri-State Water Quality Council has a keen interest in the water quality of both Lake Pend Oreille and the Pend Oreille River which will be impacted by the proposed operation. The Council facilitated and coordinated development of the Lake Pend Oreille Nearshore TMDL, developed the Lake Pend Oreille TMDL Implementation Plan (lake management plan), and is presently leading TMDL implementation activities.

To reiterate our requests, we believe that the comment period for the draft EA should be extended an additional 60 days due to the complexity of the issue and documents to be reviewed, and that a public hearing-type meeting should be held to allow for adequate public understanding, review, and participation and to allow for an accurate record of agency responses to questions from the public.

Please feel free to contact me at 208-265-9092 or tristatecouncil@sandpoint.net if you have any questions. I look forward to your timely and positive consideration of our requests.

Sincerely,

Milliano Diane M. Williams

Executive Director

cc: Leah Wickstrom, ACOE

110014-1 (cont'd)

Response to Comment Albni110014-1



DEPARTMENT OF THE ARMY SEATTLE DISTRICT, CORPS OF ENGINEERS P.O. BOX 3755 SEATTLE, WASHINGTON 98124-2255

Environmental and Cultural Resources Branch

Diane M. Williams Executive Director Tri-State Water Quality Council 101 N. Fourth Ave., Suite 105 Sandpoint, Idaho 83864

Dear Ms. Williams:

Thank you for your letter dated August 19, 2011 regarding the Albeni Falls Dam Flexible Winter Power Operations draft Environmental Assessment (EA). We appreciate your continuing interest in this proposal, as detailed in your prior December 30, 2009 letter.

The U.S. Army Corps of Engineers (Corps) and Bonneville Power Administration (BPA) are joint-lead agencies on this draft EA, and have agreed to extend the public comment period by 15 days to provide the public with additional time to review the draft EA and other referenced supporting documentation. The last day to provide input on the draft EA will now be September 13, 2011. The draft EA can be viewed at http://bit.ly/n0a0wx. To submit comments on the draft EA or to look at other comments that have been submitted, visit www.bpa.gov/comment.

Although we appreciate your desire for a different public meeting format, the agencies do not believe that a public hearing or additional public meeting is warranted. The Corps and BPA have done extensive public outreach to date in the Lake Pend Oreille area. The Corps held a public meeting in December 2009 in a format similar to what you are proposing to explain the proposal and allow the public to ask questions in a public forum. In addition, the Corps and BPA hosted two open houses during the summer of 2010 to explain the proposal to the public. Two open houses were held in August of 2011 to explain the content of the draft EA. In addition to these public meetings, the Corps and BPA have also participated in Pend Oreille Basin Commission meetings to discuss the NEPA process and the proposal. Any questions that were not asked at the public open houses in August of 2011 can be directed to the project team via the telephone line provided at the open house and in the public notice. That number is 800-622-4519.

The agencies are providing a thorough and accurate record of public comments via BPA's public website where individuals can both post comments on the draft EA and view all other public comments that the agencies have received. The final EA will include an appendix of all comments collected on this site as well as the agencies' responses to those comments. We believe that the draft EA has addressed the issues raised by your prior December 30, 2009 correspondence; if you have additional comments or concerns, please provide them during this public comment period.

If you would like any additional information, please contact Ms. Leah Wickstrom, Project Manager, at (206) 764-3652 or leah.j.wickstrom@usace.army.mil.

Sincerely,

Evan Lewis Chief, Environmental and Cultural Resources Branch U.S. Army Corps of Engineers
Albni110015 Easling

I am against this draft proposal. Until the Corps can manage the downstream elevation levels without flooding, I do not have any confidence in their management of more water being stored. There is no reason to flood, with proper management, when you live between two dams. Especially when Albini is a flood control dam.

Response to Comment Albni110015-1

The commenter's objection to FWPO is noted.

Albeni Falls Dam, like most federal projects, was not designed nor authorized to eliminate all flood risk. FWPO would not alter Corps management of high water events as discussed in section 4.4.2 of the EA.

Albni110016 Chris Bessler, Sandpoint, Idaho

Although I concur with others that have protested the insufficient comment period you have provided, I'm 110016-1 adding my comments now in the event you do proceed with a decision. I've lived most of my life in Sandpoint and am a frequent user of Lake Pend Oreille and its tributaries for swimming, sailing, kayaking, fishing, ice skating and cross-country skiing. I'm also own property in town on the city water system that uses lake water. The construction of hydroelectric dams seems to assume that once a dam is built, electric power generation takes primacy over all the other many historical, varied and essential uses of free flowing rivers and streams. This is wrong. Dam operations should be based upon realizing nothing 110016-2 more than a value added benefit that does not infringe on other historical beneficial uses for those who live and recreate along the watercourses, and above all, does not harm the ecosystem health. I'm completely opposed to the Corps proposal to operate Albeni Falls Dam with a five-foot operating range in winter. It will harm many other uses of the lake, as well as cause damage to docks and boat houses of lakeshore property owners. Dam operations should more closely mimic the natural cycle of the watercourse, with lake levels dropping in fall to a low elevation threshold that is most beneficial for the fish and ecosystem; and then rising again in spring to the maximum high elevation threshold that again is 110016-3 beneficial for the ecosystem as well as the lake's recreational and aesthetic uses. In other words, operations similar to those currently in place, though with even more allowance for the non-hydropower uses. Thank you. Chris Bessler Sandpoint, Idaho

Response to Comment Albni110016-1

Please reference responses to comments Albni110009, Albni110013, and Albni110014 for response on the public comment period.

Response to Comment Albni110016-2

Commenter's objection to FWPO is noted. As stated in the EA (pages 1-1 and 1-2), AFD was authorized as a multiple purpose project. These multiple purposes include hydropower, recreation, flood risk reduction, and fish and wildlife conservation. All these purposes are considered throughout the year. Operating for multiple purposes is complex, and operations cannot be optimized for all purposes at all times. The Corps attempts to balance these multiple purposes as best as possible, consistent with the project authorities and in a way that maximizes the overall benefits of the project.

Please reference master response 2 for response to comment on dock damage and master response 4 for response to comment on recreation.

Response to Comment Albni110016-3

Current operations do not follow the natural hydrologic cycle of the lake. The natural pre-dam hydrologic cycle of the lake resulted in much different summer conditions. The original authorizing documents indicate that Lake Pend Oreille generally receded rapidly beginning in June and reached a low point in September. One of the main purposes of AFD was and continues to be stabilization of the lake during the spring and summer recreation season at 2062.5 feet. The effects of operating AFD to more closely mimic a natural water cycle were amongst the range of different management strategies analyzed in the SOR EIS.



Albni110017 Drumheller/Idaho Conservation League

August 29, 2011

Ms. Leah Wickstrom CENWS-PM-CP-CJ U.S. Army Corps of Engineers P.O. Box 3755 Seattle, WA 98124-3755

RE: Albeni Falls Dam, Flexible Winter Power Operations

Dear Ms. Wickstrom,

Thank you for this opportunity to comment on the Draft Environmental Assessment of the proposed Albeni Falls Dam Flexible Winter Power Operations. Since 1973, the Idaho Conservation League has been Idaho's voice for clean water, clean air and wilderness—values that are the foundation for Idaho's extraordinary quality of life. The Idaho Conservation League works to protect these values through public education, outreach, advocacy and policy development. As Idaho's largest state-based conservation organization, we represent over 20,000 supporters, many of whom have a deep personal interest in water quality, both for the aesthetic and recreation values it provides, but also for the wildlife that depends upon it.

Bonneville Power Administration is proposing to fluctuate winter lake levels to maximize power generation in the winter months. Before endorsing the proposal to fluctuate winter lake levels, we need to be sure that the environmental impacts, such as erosion and impacts to fish and wildlife, are thoroughly examined and found to be minimal. After reviewing the Environmental Assessment, questions still remain regarding the potential for the winter lake fluctuation to increase erosion, negatively impact water quality, and have detrimental affects on wildlife. We believe further study through an Environmental Impact Statement may be needed to address these issues. Short of conducting an EIS, the USACE and Corps should be proposing robust monitoring and mitigation of potential future impacts.

Details regarding our concerns are as follows:

Erosion

Existing erosion problems are extreme, and are inadequately addressed in both the Draft Environmental Assessment (EA) and the *Columbia River Power System Operation Review Environmental Impact Statement* (SOR EIS), which is the document that the EA relies upon. In particular, the river deltas are very heavily impacted from existing operations. The SOR EIS

Albeni Falls Dam, Flexible Winter Power Operations Draft EA, ICL Comments 1

provides no information specific to Albeni Falls or Lake Pend Oreille regarding erosion. 1 Vegetation and wetlands information is based on the 1983 Albeni Falls EIS, which is outdated. (10017-3 conťd)
The draft Environmental Assessment states the impacts would be "incremental," but doesn't provide data that supports that assumption. Nor does the EA consider recent information on the erosion problem, such as that contained in the 2009 report: "Change in the Extent and Ecological 1 Condition of Wetlands Surrounding Lake Pend Oreille, Idaho," prepared for NatureServe and the U.S. Environmental Protection Agency. (See attached.) That report states that 30 acres of wetlands are lost each year due to hydroelectric dams, and that half that loss is occurring in the Clark Fork Delta area.	10017-4
Nor does the EA consider the report prepared in 1998 for Washington Water Power Company during that utility's dam relicensing entitled: "Assessment of Geomorphic Processes Clark Fork Hydroelectric projects Relicensing Phase 1 Report." (See attached executive summary.) In that report, it was estimated that 70 to 80 percent of the Clark Fork delta area changes could be attributed to Albeni Falls Dam.	10017-5
While the SOR EIS clearly explains the means by which erosion can occur from lake level fluctuation, nowhere in either the SOR EIS or the EA did we find any discussion of the combined impacts of sapping, slumping, ice scouring and potential increased velocity from the regular ramping of upstream dams in the Clark Fork River.	10017-6
In short, it appears the EA did not consider all the new information available regarding erosion, including the recent mitigation efforts in the Pack River Delta. The lack of detailed analysis of one of the biggest environmental impacts of lake level fluctuation combined with the omission of recent information regarding erosion in Lake Pend Oreille and the Pack River and Clark Fork deltas point to the need for a more detailed environmental impact statement.	10017-7
Another approach would be to commit to aggressive monitoring and mitigation. The SOR EIS called for monitoring, specifically yearly landslide and erosion monitoring on reservoirs where that was not currently occurring. However, the studies that have occurred in recent years on erosion have not been driven by the USACE or BPA and do not appear to be part of a regular monitoring program that resulted from the SOR EIS. Moreover, BPA is not contributing any mitigation dollars for existing operations, even though erosion is extreme as a result of those operations, as evidenced by recent studies conducted by other agencies.	10017-8
Until BPA is tracking and mitigating for current operations, even incremental increases in erosion that exacerbate the situation are unacceptable.	
Water Quality	
In 1994, Lake Pend Oreille – which is designated a special resource water in the state of Idaho - was placed on the Idaho Section 303(d) list as a "threatened" water body because of the concern that the nearshore areas were not meeting the state's narrative water quality standards due to algae and aquatic plant growth. Among the goals of the watershed restoration plan (Total Maximum Daily Load allocation) for the nearshore areas of Lake Pend Oreille are to protect the Pend Oreille Lake water quality by maintaining or reducing current rates of nutrient loading from	110017-9
2 Albeni Falls, Flexible Winter Power Operations Draft EA, ICL Comments	

the Clark Fork River and to re local sources.	duce nearshore eutrophication by reducing nutrient loading from	110 (cor
Erosion is clearly a local sour- the direct sloughing of sedime help filter nutrients and protec estimates on the loss of sedim from dam operations. It's diff existing problem.	ce of nutrient loading, by increasing nutrients and turbidity from ents into the waterway. Erosion also causes the loss of wetlands that et water quality. Neither the EA nor the SOR EIS gives any ent and sediment loading into Lake Pend Oreille caused by erosion icult to know how much these operations will exacerbate the	11
Mitigation of the dam operation of water quality monitoring of supporting education efforts to activities; funding native plan in stormwater runoff; financia community systems or sewer; in the delta areas and rebuild in filter incoming river water and thereby reducing sedimentation	ons' contribution to nutrient loading could include financial support f the nearshore areas to determine nutrient levels; financially o help shoreline residents reduce nutrient loading from their upland tings and restoration of natural shorelines to help capture nutrients illy supporting efforts to replace aging septic systems with upland and financially supporting interagency efforts to capture sediments islands and wetlands. The restoration of wetlands will help both d stormwater, and help prevent continued erosion in the delta areas, on.	110
Wildlife		
Deltas are unique and importa significantly reducing habitat acknowledges that the winter which could negatively impac provide cover for predatory fi Endangered Species Act.	Int for migrating waterfowl. Erosion of the delta areas is for migrating waterfowl, as acknowledged in the EA. The EA also fluctuation proposal could increase the spread of Flowering Rush, at foraging for waterfowl species such as redheaded ducks, and sh that feed on Kokanee and bull trout, a listed species under the	110
Again, the discussion is gener The biological information co Dam EIS, which is woefully co or has any data on how curren EA notes that Albeni Falls Da habitat. Section 3.11.1 states t negatively affects riparian veg has likely affected wildlife po	al regarding these impacts and lacking in any real data or details. ntained in the EA appears to be based on the 1983 Albeni Falls out of date. Nothing in the document references recent bird counts at operations are impacting migrating waterfowl. Nonetheless, the un operations affect wildlife predominantly through effects on hat " significant erosion is occurring around the lake that getation and wetland habitat used by many wildlife species. This pulations around the lake."	110
Yet, the document concludes t of additional review in an EIS how the authors of the EA we	that any additional impact would be "incremental" and not worthy . Unfortunately, without any hard data, it's difficult to determine re able to come to this conclusion.	
In addition, the document not species that has the potential t waterfowl. In fact, the propose this weed three-fold. The EA but instead assumes that the a inevitable and makes no sugge	es that Flowering Rush is an aggressive new aquatic invasive o negatively impact habitat and the foraging of migrating ed winter pool operations could potentially increase the spread of does not consider this a significant environmental issue, however, ggressive takeover of the aquatic environment by this species is estions for its mitigation.	110

According to Executive Order 13186, any federal agency taking actions that are likely to have a measurable negative effect on migratory bird populations are to develop and implement a Memorandum of Understanding with the U.S. Fish and Wildlife Service that promotes the 110017-15 conservation of migratory bird populations. Given this requirement, an EIS should be conducted to determine whether the winter fluctuation proposal is going to have a measurable impact on waterfowl. Or, the BPA should be required to monitor and mitigate for the potential impacts on waterfowl. This would include both annual monitoring of bird populations and financial support of efforts to restore we tlands and prevent the continued erosion of important bird habitat in the Pack River and Clark Fork deltas. Supporting research on management of Flowering Rush is also greatly needed in the Pend Oreille basin. In summary, the EA lacks sufficient data and details to determine if the increased erosion will truly be "incremental," and how that erosion could impact water quality and wildlife. In addition, it appears that monitoring that was called for in the SOR EIS is not occurring, and recent information about erosion in the delta areas was not considered in the EA. Finally, the 110017-16 combined impacts of erosion and the spread of Flowering Rush on waterfowl have not been studied. The BPA should either conduct an EIS to further examine these issues, and monitoring and mitigation of the impacts to water quality and waterfowl should be part of the proposal. Again, thank you for the opportunity to comment on the draft Environmental Assessment. If you have any questions, feel free to call me at (208) 265-9565, or email me at sdrumhellen@idahoconservation.org. Sincerely, Susan Drumhello Attachments: Change in the Extent and Ecological Condition of We tlands Surrounding Lake Pend. Oreille, Idaho, Washington Department of Natural Resources, 2009. Assessment of Geomorphic Processes Clark Fork Hydroelectric projects Relicensing Phase 1 Report, Executive Summary, Washington Water Power Co., 1998. Albeni Falls, Flexible Winter Power Operations Draft EA, ICL Comments

Response to Comment Albni110017-1

Please reference master response 6 for response to comment on the need to prepare and EIS.

Response to Comment Albni110017-2

Please reference master response 7 for response to comment on the need for monitoring and mitigation.

Response to Comment Albni110017-3

Both the SOR EIS (see Appendix L, Section 4.2.1) and the EA acknowledge that shoreline erosion is a significant unavoidable impact of project operation. Section 3.5.1 of the EA describes the ongoing erosion at the river deltas as a result of the duration and elevation of the summer high lake level. Please reference master response 1 for additional response to comment on erosion.

Response to Comment Albni110017-4

Thank you for bringing this report to our attention. We agree with the findings in the report that the loss of wetlands to shoreline erosion is a significant ongoing issue primarily due to wind and wave action during the summer high lake level.

Response to Comment Albni110017-5

This report was considered in the EA and is referenced as Parametrix (1998) in section 3.5.1 of the EA.

Response to Comment Albni110017-6

Please reference master response 1 for response to comment on erosion.

The EA (Section 3.5.1) cites the Parametrix (1998) study which investigated erosion in the Lower Clark Fork river and determined that the most significant cause of erosion was the high river current velocities during the spring and early summer flood flows. Water level variation due to the daily flow cycling of the Cabinet Gorge Project, along with loss of vegetation and highly erodible soils were also identified as significant causes of erosion. The combined effects of these process results in an average erosion rate of approximately 0.5 ft /yr. These processes are not expected to be impacted by the proposed winter operations.

Response to Comment Albni110017-7

The most significant factor influencing erosion in the Pack River and Priest River deltas is the duration and elevation (2062.5 feet) of the lake during summer, combined with wind-generated waves and boat wakes. There are ongoing efforts by various entities to restore portions of the Pack River delta lost to erosion by increasing the height and stability of portions of the islands which are submerged during the summer high lake level.

Response to Comment Albni110017-8

Please reference master response 7 for response to comment on monitoring and mitigation.

Response to Comment Albni110017-9

Please reference master response 1 for response to comment on water quality.

Response to Comment Albni110017-10

Please reference master response 1 for response to comment on erosion and water quality.

Response to Comment Albni110017-11

Please reference master response 1 for response to comment on water quality and master response 7 for response to comment on monitoring and mitigation.

Response to Comment Albni110017-12

Please reference master response 1 for response to comment on erosion and wildlife, and master response 5 for response to comment on flowering rush.

Response to Comment Albni110017-13

Please reference master response 1 for response to comment on erosion and wildlife impacts.

Response to Comment Albni110017-14

Please reference master response 5 for response to comment on flowering rush.

Response to Comment Albni110017-15

Based on the existing scientific data, we have determined that the incremental effect on wetlands and waterfowl would be negligible from implementation of the FWPO, as compared to existing operations (see Section 4.11 of the EA). It is therefore unlikely that the proposed FWPO would have a measurable negative effect on waterfowl or other migratory bird populations. Preparation of an EIS to address this issue thus is not necessary, nor is the mitigation proposed by the commenter. Also please reference master response 1 for response to comment on erosion, master response 5 for response to comment on flowering rush, and master response 6 for response to comment on preparation of an EIS.

The Department of Energy and the Department of Defense each have memoranda of understanding with the U.S. Fish and Wildlife Service that address the Corps' and BPA's obligations under Executive Order 13186 with respect to promoting the conservation of migratory birds.

Response to Comment Albni110017-16

Please reference master response 1 for response to comment on erosion, master response 5 for response to comment on flowering rush, and master response 6 for response to comment on preparation of an EIS.

Albni110018 Temple I do not support the wide fluctuations of the lake level in winter. The resulting ice floes will cause damage to private and public property. Who will be liable for the cost of repairs? The proposed levels are too high to avoid damage to docks, marinas, jetties, water intakes, etc. Until the plan can avoid this damage, and clarify private citizens damage claim rights, we cannot support it.

Response to Comment Albni110018-1

The commenter's objection to FWPO is noted.

Please reference master response 2 for response to comment on damage to docks and other infrastructure and master response 3 for response to comment on liability for cost of repairs.



Response to Comment Albni110019-1

It is acknowledged that shoreline erosion is an ongoing issue around the lakeshore. Areas located near boat launch facilities such as Farragut State Park are particularly susceptible to erosion due to recreational boat wakes. This area is most susceptible to erosion during the summer high lake level and is not expected to be impacted by the proposed winter operation. Both shoreline armoring and modifying no wake zones have been successfully used to reduce erosion in other areas of the lake and should be considered for this area. Designation and enforcement of such no-wake zones and shoreline stabilization is within the purview of the State of Idaho. Requests should be directed to the State.

Please reference master response 7 for response to comment on monitoring and mitigation.

	Lee
	Farragut State Park Management The shoreline of Farragut State Park is a critical spawning resource that has been allowed to degrade to the point where it no longer supports a once thriving Kokanee spawning ground.
	I have watched with disgust as the shoreline along Farragut State Park has eroded into the lake smothering the Kokanee spawning beds. Where once scores of eagles spent the winter feasting now nothing spawns.
1 104	This has been reported yet no one responds. There is still a healthy spawn in the protected Bay in Bayview where there is a no-wake zone. Huge boats and recreational boaters now routinely roar along the sensitive shoreline in the park.
	In the fall as the water level recedes the muck follows it down and covering the once productive beds. While a ton of money is spent, you are ignoring this ongoing problem. It would be easily solved by increasing the no-wake zone, encouraging vegetation and placing logs and rocks along the shoreline. I have done this in small test areas and completely stopped the erosion.
	Everywhere else the shoreline trail is disappearing and trees are falling into the lake. Another issue are the many trails leading from the park to the shoreline that channel sediment directly into the lake. This is a disgrace. Go to the Farragut boat launch and walk east where the trail has disappeared. Then go to the Beaver Bay swim area and see how the protective peninsula is falling into the lake.



Beaver Bay Peninsula Perhaps some of you remember the huge round rock that once sathere.



Shoreline Trail This is typical of the extreme erosion that occurs all along the trail.



Summer Sediment

Each year this washes down adding to the muck that covers once productive spawning beds.



Here is a tree I saved by stacking rocks and driftwood along the shoreline.



Here is one of several trails that feed sediment directly into the lake.



Response to Comment Albni110020-1 and Albni110020-2

Please reference response to comment Albni110019-1.

Concerns about violation of state laws should be directed to the appropriate state regulatory authority.

Albni110 Le	021 wis
I support the project. However, in the past, the Yakama Nation chosen to use non-Union construction workers which resulted in faulty facilities. The Lyle Fish Ladder was done poorly as was the Legends Casino waste water treatment plant. Please make sure this project is completed in the right way.	110021-1

Response to Comment Albni110021-1

The commenter's approval to FWPO is noted.

We do not anticipate any construction work to implement this project.

Albni110022 Starr/retired

We are adamantly opposed to the five-foot fluctuation proposed for Albeni Dam this winter. We have owned property on LPO for 15 years; in that period we have seen over 20 feet of sand beach disappear, a depth of about 4 feet. Our dock, seawall, and boat lift have been undermined severely, requiring annual repairs that in turn are undermined. The direct cause of this pervasive erosion is the annual lowering and raising of the lake level, allowing wave damage to simply work its way down and up the slope of our "beach". The Corps has for many years been subject to often successful litigation for the illegal taking of property through its arbitrary actions along waterways.

Response to Comment Albni110022-1

The commenter's objection to FWPO is noted.

Please reference master response 1 for response to comment on erosion and master response 3 for response to comment on liability for property damage.

Both the SOR EIS and the EA acknowledge that shoreline erosion is a significant unavoidable impact of AFD's operation. One purpose of lowering the lake level in the winter is to reduce shoreline erosion due to wind waves. Lowering the lake effectively reduces the fetch across the lake and limits the amount of wave energy that can reach the shoreline. A properly engineered shoreline protection structure should take into account the full congressionally authorized range of annual water levels variation (2049.7 to 2062.5 ft) resulting from AFD's operation.

Albni110023 Pipella/Wild Rose Water, Road and Irrigation Association

Ms. Leah Wickstrom CENWS-PM-CP-CJ U.S. Army Corps of Engineers P.O. Box 3755 Seattle, Washington 98124-3755 RE: Comments on Fluctuation Lake Pend Orielle; Dear Ms. Leah Wickstrom; My name is Raymond Pipella, Secretary Treasurer of the Wild Rose Water, Road and Irrigation Association. Our association encompasses approx 30 areas and over 3000 waterfront footage on the Pend Orielle River and Cocolalla Creek. Our properties have been irrigating out of the Pend Orielle River going back previous to the inception of the Albany Dam being build in the early 50's. Our Major Concern; • When the surface river elevation in the winter drawdown is 2051 feet our irrigation housing that holds the pumping 110023-1 system sits almost even (within a few inches) of the winter river water level of 2051 feet. • Should the River and/or shoreline freeze and the Albany Dam starts raising the water level there could be substantial damage to our pumping housing structure. • After reading the Draft Environmental Assessment ice damage is a very high probability. Please note our irrigation housing structure is located on private property. We further understand that there is a perpetual right of way and easement to overflow, flood and submerge a portion of our property Instrument # 407502 recorded August 9th 1952, Bonner County. We feel Albany dam should be liable for any and all damages that would occur during this winter drawdown 110023-2 fluctuation. Regards, Raymond Pipella Sec/Treasurer Wild Rose Water, Road and Irrigation Association 160 Wild Rose Lane Sagle, Idaho, 83860 208-265-5508.

Response to Comment Albni110023-1

Please reference master 2 for response to comment on dock damage.

If the top of irrigation housing is below 2051 feet and buried in the lake bed, the ice will not be able to freeze to it and extract it from the lake bed. Under FWPO, the potential for damage is similar to the exposure under existing operations when the lake is drawn to 2051 feet.

Response to Comment Albni110023-2

Please reference master response 3 for response to comment on liability for property damage.

Albni110024 Geddes/Pend Oreille County PUD

Pend Oreille County PUD #1 would like to thank you for your recent Open House and opportunity to comment on the Albeni Falls Dam Flexible Winter Power Operations Draft Environmental Assessment dated July 2011. Please view the comments attached.



Pend Areille County Public Utility District Administrative Offices – P.O. Box 190 • Newport, WA 99156 • (509) 447-3137 • FAX (509) 447-5824 Sox Canyon Hydro Project – P.O. Box 547 • Ione, WA 99139 • (509) 446-3137 • FAX (509) 447-6790

August 29, 2011

Anthony Wright, Colonel USACE Seattle District PO Box 3755 Seattle, WA 98124-3755 Stuart H. Clark, Jr. Bonneville Power Administration 909 First Avenue, Suite 380 PSW/Seattle Seattle, WA 98104-3636

RE: Albeni Falls Dam Flexible Winter Power Operations Draft Environmental Assessment dated July 2011

Dear Colonel Wright and Mr. Clark:

Thank you for the recent Open House and opportunity to comment on the Albeni Falls Dam Flexible Winter Power Operations Draft Environmental Assessment (EA) dated July 2011.

As you are aware, the hydroelectric project known as Box Canyon Dam is owned and operated by the Pend Oreille Public Utility District #1 (the District) and is a run-of-river project located downstream of Albeni Falls Dam.

While the District recognizes there may be a benefit to power production at Grand Coulee operating under a flexible winter plan, the District will suffer a loss of renewable energy at its Box Canyon project with a change in operation and the Corps will incur a loss of renewable energy as well when proposed operations exceed turbine capacity at the projects. We will take this opportunity to comment on the areas we feel need further evaluation that may not be adequately addressed in the draft EA.

1. Ice/Debris

Operationally speaking, the primary concern for Box Canyon Dam for the proposed winter operation of Albeni Falls Dam is ice. The ice concerns are in the form of ice accumulation in the forebay and ice buildup at the spillway during spill operations.

Ice break-up on the river and accumulating ice in the forebay can interfere with dam operations and power production. This can be very costly both in removal and loss of power production. It was noted in the draft EA that stage increases more than three times the existing ice thickness will likely break-up the ice downstream of Albeni Falls Dam. Because of this increased risk of ice jams and problems, the EA proposes to implement an Ice Best Management Practice (BMP) to minimize this risk. This BMP amounts to looking at accumulating freezing degree days and applying a limit to outflow increases based on a formula and then monitoring the river for ice problems. A good portion of the

BMP plan involves just observing river conditions and then making adjustments as problems arise.	110024-2 (cont'd)
Chapter 3.1.2 (Hydrology Downstream of Albeni Falls Dam) states that flows entering the project at Albeni Falls Dam take an average of 3.5 days to reach Box Canyon Dam. In fact, a change in flow at Albeni Falls Dam is realized within 12 to 15 hours when flows are at 25k cfs. The District questions how well the EA authors really understand the river below Albeni Falls Dam.	10024-3
Ice buildup at the spillway occurs when spilling water at temperatures below freezing. The spray mist from water spilling over the gates forms as ice on the dam structure and spillway crane. This buildup of ice requires deicing on a regular basis to insure that the crane and dogging devices are functional when needed. Sometimes deicing must be done before a gate can be moved. The ice buildup from the spray at the spillway produces very slippery and unsafe working conditions for the Box Canyon crew. The BMP plan calls for more frequent and smaller changes in Albeni Falls discharge during cold temperatures. This may lead to more frequent gate changes at Box Canyon Dam causing increased deicing, labor costs and potential safety issues.	10024-4
Ideally, if the discharge out of Albeni in winter could be limited to the hydraulic capacity of turbines at the Box Canyon powerhouse, the spillway icing concerns at Box Canyon would be eliminated.	10024-5
Additionally, the Corps has proposed the BMP will minimize the risk of creating an ice jam downstream of AFD as a result of the Flexible Winter Power Operations (FWPO) by utilizing cameras and other monitoring equipment to monitor the conditions prior and after implementation of the FWPO. The District has concerns that the limited number of cameras and monitoring devices below Albeni Falls Dam will not capture the full area of ice build-up. The District recommends additional monitoring sites be added downstream of Albeni.	10024-6
2. Operations - Maximum Discharge	
Paragraph four of the Operations section 1.2 of the draft EA, states that Albeni Falls Dam is operated within the following parameters which are derived from Congressional authorization and the Water Control Manual:	
 authorized upper limit lake regulation of 2062.5 feet authorized lower limit lake regulation of 2049.7 feet maximum daily drawdown of the lake of 0.50 feet per day below elevation 2058 feet maximum daily change in discharge of 10 thousand cubic feet per second (kcfs) 	10024-7
 maximum hourly change in discharge of 5 kcfs and minimum project discharge of 4 kcfs 	



Additionally, moving water and forcing spill through Albeni Falls Dam and Box Canyon Dam may have significant impact to total dissolved gas (TDG) levels until such time as TDG mitigation measures have been implemented as further noted in section 3 below.	110024-9
Ideally if the discharge out of Albeni in winter could be limited to the hydraulic capacity of the Box Canyon powerhouse this would eliminate spillway icing concerns, limit spill/TDG and not harm the local economy.	110024-10
It is also mentioned in Chapter 2.3 of the draft EA that the proposed winter operation would be implemented for the life of Albeni Falls Dam.	
This statement is troublesome. The District believes there should be an evaluation period after implementation to assess any impacts and areas of concern. The recommended evaluation period is described further in the Notification, Communication and Coordination section below.	110024-11
3. <u>Environmental – Erosion, Water Quality</u>	
<u>Erosion</u> : Through a series of conversations pieced together at the Open House meeting held at the Camas Wellness Center on August 3, 2011, it was explained that Grand Coulee operations are constrained by a Bureau of Land Management mandated drawdown rate at Lake Roosevelt to reduce the extreme erosion that has occurred in the past. They are well aware of the potential for erosion and other damages to shoreline and archaeological concerns. BPA wants the water in a 'rush' from Albeni at the exact time they are 'rushing' water out of Grand Coulee so they can keep their lake level stable, minimizing the impacts to their shoreline and generate more power during a cold snap. All the while, moving the environmental and operational problems and damage upstream to the Pend Oreille Public Utility District. The District has invested well over \$1,000,000 over the past 5 years on improvements to recreational areas and erosion prevention in order to improve and protect our natural resources.	110024-12
We feel the proposed operational changes at Albeni Falls may put these resources at risk.	
As noted above, the District believes there should be an evaluation period after implementation to assess the environment impacts, operational cost reimbursement upstream for erosion maintenance and other areas of concern that may be caused by the water displacement.	110024-13
<u>Nutrients</u> : Draft EA, Chapter 4.6.2 indicates that few studies exist on the impacts of water level drawdown on river sediment and river water quality. The District feels further study and evaluation period after implementation are needed in the areas of turbidity, contaminants and nutrients due to speculation and insufficient evidence during winter period.	110024-14
Water Quality-Total Dissolved Gas Supersaturation (TDG): Draft EA, Chapter 4.7.1 indicates there is limited TDG data available measured at Albeni Falls forebay during the	110024-15

under the FWPO only on rare occasions. The same section assumes after Box Canyon Dam upgrade, BCD should be able to discharge flows greater than 45 kcfs without increasing TDG. Until mitigation measures have been implemented, spilling water at BCD will increase TDG levels that otherwise would not have occurred.	110024-15 (cont'd)
The District feels further study and evaluation period after implementation are needed in the areas of turbidity, contaminants and nutrients due to speculation and insufficient evidence during winter period.	110024-16
4. Notification, Communication and Coordination	T
Chapter 7 of the Draft Environmental Assessment indicates the initial proposal originate in September 2009 and that there have been numerous meetings, calls and corresponden with the public, elected officials and stakeholders. It mentions that previous comments were received and used to evaluate the effects of FWPO and that the Corp and BPA hav attempted to address these comments in the EA.	ed ce 110024-17
Representatives from the District have attended these meetings and did provide commer along with other entities comments provided in December 2009 and July 2010. The District is unable to locate where these comments are posted for consideration in the dra EA.	nt aft
There are several areas in the draft EA that indicate operations will be monitored and adjusted as necessary, however, it does not identify who is responsible for monitoring a making adjustment decisions. The District recommends a communication and coordination plan to include the BMP communication and coordination process for all parties affected. The plan should also coincide with the WECC Scheduling Calendar criteria in order to mitigate adverse affects on downstream parties.	nd 110024-18
Periodic Review of Albeni Falls Flexible Winter Power Operations	
Since it is mentioned in Chapter 2.3 of the draft EA that the proposed winter operation would be implemented for <u>the life of Albeni Falls Dam</u> , the Corp should review and evaluate the monitoring data along with any information obtained by the Corps or provided by other parties regarding erosion and TDG impacts that may be attributable t the FWPO. The District recommends beginning with a review 2 years after implementation, and again at 5 years and 10 years after implementation. Public notice prior to each review would allow interested parties to submit any information relevant the Corps evaluation.	o 110024-19 to
the second se	he

5. Adverse Economic Impact on the District As previously mentioned, the District recognizes there may be added benefit operating under a flexible winter plan, however, given the late notification of the proposed maximum outflow limitation change from the Albeni Falls Dam capacity of 28,000 cfs to 110024-20 an even higher outflow limitation which will cause spill, the District recognizes there will be detrimental economic and environment effects. Ideally if the discharge out of Albeni in winter could be limited to the hydraulic capacity of the Box Canyon powerhouse, this would eliminate spillway icing concerns, limit spill/TDG and not harm our local economy. The turbines and generators at the BCD are being upgraded pursuant to the Districts new 110024-21 license issued by FERC. During the turbine/generator upgrade project, the hydraulic capacity is reduced. Box Canyon Dam's current powerhouse capacity is 22,500 cfs and will increase by 900 cfs in 2012 and again in 2013. In 2014, Box Canyon Dam will complete its turbine and generator upgrade project and be operating at its full capacity of 33,000 cfs. We thank you again for the opportunity to comment on the Draft Environmental Assessment for the proposed Albeni Falls Dam Flexible Winter Power Operations and appreciate your consideration of our concerns. Sincerely, Robert Geddes General Manger rg/sh

Response to Comment Albni110024-1

The commenter asserts that FWPO will result in a loss of renewable energy at Box Canyon and Albeni Falls Dams. This would likely be true if the project were operated per the bookend operation analyzed in the EA; however, under a more likely scenario the result could be either increased or decreased renewable energy. The bookend operation was used in the EA to demonstrate the maximum potential impact of FWPO. As described in section 2.3 of the EA, this bookend approach is unlikely to occur because it is not a power operation. The more likely scenario is that water will be stored during periods when water and energy are abundant and subsequently released when water and energy is less abundant. This may result in AFD storing water that would have otherwise been spilled at both AFD and Box Canyon. For example, in January of 2011 there was a spike in inflows into the project that resulted in spill at both AFD and Box Canyon. If the lake had been at elevation 2051 feet and FWPO had been available this water could have been stored avoiding the need for spill and loss of renewable energy.

Response to Comment Albni110024-2

The BMP was developed using a Corps hydraulic model (HEC-RAS model with the ice options). This technique has been used successfully in other rivers in cold regions of the world. The analysis was conservative as the lower limit for the BMP was 2 times the ice thickness. One objective of the monitoring system is to calibrate the hydraulic model to improve its precision.

Reference: Tuthill, A.M. and Zabilansky, L.J. 2011. *Effects of Large Flow Increases on Ice Processes Pend Oreille River; Albeni Falls to Box Canyon Dam Technical Report* Hanover, NH. U.S. Army Cold Regions Research and Engineering Laboratory.

Response to Comment Albni110024-3

The original text in the EA was correct for a limited set of circumstances (small flow changes or steady state conditions.) The commenter correctly notes that when there is a more pronounced flow change, the signal from that change travels faster than the steady state flow. The text in the EA has been edited to more accurately characterize these flow conditions.

Response to Comment Albni110024-4

In a forty-eight hour period, non-BMP operations would allow 5 kcfs change/hour and 20 kcfs total change over the two days. Assuming a desire to ramp up rapidly, that corresponds to 4 changes/48 hours. When the BMP applies, the ramp rate decreases to 2 kcfs/hr, and 10 kcfs over two days. These operations would result in 5 changes over the two day period – one more than in the non-BMP scenario.

On the whole, flexible winter operations may result in fewer gate changes, as there will be multiday periods when the lake is being drafted or refilled and the discharge kept steady.

The Corps reviewed gate operations on 9/23/11 with Jason Johnson, the plant engineer at Box Canyon Dam. We recommend using a lower gate to spill water increasing the distance the water droplets have to travel before freezing to the gate infrastructure. The Corps has published an engineering manual on operation of hydraulic structures that include chapters on ice management. This is available on the internet at <u>http://140.194.76.129/publications/eng-manuals/em1110-2-1612/toc.htm</u>. These recommendations may help address some of the safety concerns made in the comment.

Response to Comment Albni110024-5

This comment, along with comments 110024-10 and 110024-21, identify potential impacts that the commenter believes could be avoided if the discharge from AFD were limited to the hydraulic capacity of Box Canyon Dam. Based on the analysis in the EA, the agencies believe that operations under FWPO would not result in a significant difference from existing conditions regarding the potential impacts identified by the commenter, and that the commenter's suggested limitation is not necessary. The following provides further information concerning the issues raised by the commenter.

<u>Icing concerns on the dam</u> - In response to this comment, a representative from the Corps Cold Regions Research and Engineering Laboratory (CRREL) met with the POPUD at their Box Canyon Dam to discuss ice management practices. The Corps provided and discussed reference materials with POPUD to facilitate their development of best management practices at their Box Canyon Dam (please reference response to comment Albni110024-4). Through these measures, it is expected that no significant impacts related to icing would occur at Box Canyon Dam as a result of FWPO at AFD.

<u>Spill/TDG concerns</u> - As discussed in other responses, AFD would continue to be operated under FWPO consistent with its congressional purposes and operating range specified in Section 1.2 of this EA. The range of flows expected under FWPO is consistent with the range of flows for the current operation. As described in Section 4.7 of the EA, the effects to water quality (TDG) associated with FWPO are not considered new effects requiring the supplementation of the SOR EIS.

<u>Economic concerns</u> – The commenter expresses concern about the potential for FWPO to cause Box Canyon Dam to spill water that might otherwise be useful for power generation, thereby having a financial impact on the commenter and the local economy. As described in Section 4.15.2 of the EA, the Corps and BPA considered the power-related impact of FWPO to downstream non-federal generators. POPUD will have full access to their rights and their associated obligations under the PNCA. PNCA has procedures for energy exchange when reservoir operations differ from the PNCA planned operation as a result of power operating decisions (e.g. FWPO). By utilizing its rights under the PNCA, POPUD would be able to largely avoid any lasting impact to its power generation, or local economic conditions, under FWPO.

Response to Comment Albni110024-6

The purpose of the monitoring stations is to calibrate the HEC-RAS model for the Pend Oreille basin. The model is primary tool for assessing operation scenarios.

Response to Comment Albni110024-7

The maximum FWPO discharge of 45 kcfs discussed in the EA was the result of an iterative process that considered many practical issues, weather, and power generation. The information that was quoted by the commenter from 2009 related to a proposal for an operation that was proposed for the winter of 2009-2010. The proposal for that winter was to implement a power operation that limited the discharge to the AFD power house capacity. In January 2010, however, the Corps and BPA announced that a decision concerning winter power operations would be deferred, pending further review and public coordination. The Corps and BPA then began to prepare this EA to provide this review and coordination. At the initial stages of EA preparation, no discharge limit on the operations at AFD was identified, and this was communicated to the POPUD in the summer of 2010. However, after discussions with stakeholders at various meetings and open houses held in the area, BPA modified its proposed operation to limit discharge to 45 kcfs to reduce the uncertainty about the magnitude of flows that downstream parties might experience as a result of FWPO.

Response to Comment Albni110024-8

Please reference response to comment Albni110024-5 for response to comment on economic impact and Albni110024-4 for information on safety and ice.

Response to Comment Albni110024-9

As described in the EA, the FWPO will be managed to avoid exceeding 110% TDG at AFD. However, the flow range of FWPO may result in spill at BCD and result in increased TDG saturation levels as discussed in section 4.7.2 of the EA.

Response to Comment Albni110024-10

Please reference response to comment Albni110024-5 for response to comment on discharge and capacity at Box Canyon Dam.

Response to Comment Albni110024-11

As part of the ice monitoring and BMP, there will be regular evaluation of data to determine if the BMP requires adjustment. This will be an iterative process. We would expect to share this information with Box Canyon Dam.

The Corps and BPA believe that a formal evaluation period for FWPO is not necessary. While we acknowledge that significant effects (such as from erosion) are occurring from existing operations at AFD, the anticipated relatively minor incremental effects that might result from FWPO itself do not justify such a formal monitoring and evaluation period. Please also reference master response 7 for additional response to comment on monitoring.

Response to Comment Albni110024-12

The commenter is correct in that significant erosion is occurring as a result of operations at Grand Coulee Dam. FWPO is not expected to reduce this erosion, but may in fact cause an incremental increase in erosion in Lake Roosevelt, the reservoir for Grand Coulee Dam, as stated in the EA. We thus fundamentally disagree with the commenter assertion that erosion and other impacts are being transferred from Grand Coulee Dam to upstream reaches.

Please reference master response 1 for additional response to comment on erosion.

Response to Comment Albni110024-13

Please reference response to comment Albni110024-11 for response to comment on evaluation period.

Response to Comment Albni110024-14

Please reference master response 1 for response to comment on erosion and water quality.

Response to Comment Albni110024-15

These effects of FWPO on TDG are detailed in the EA Section 4.7.2.

Response to Comment Albni110024-16

Please reference response to comment Albni110024-11 for response to comment on evaluation period.

Response to Comment Albni110024-17

Comments received during meetings in 2009 and 2010 were not reproduced in the EA. These comments were used by the Corps and BPA to identify issues and concerns that needed to be addressed by the EA. We believe all the issues raised during these previous meetings and by submitted comments have been addressed in the EA.

Response to Comment Albni110024-18

BPA is willing to discuss with Seattle City Light, Pend Oreille Count PUD and other project operators upstream and downstream of Albeni Falls Dam what type of information would be useful to be shared regarding each party's forecasted project operations. There is potential for each to benefit from sharing the forecasted operations upstream and downstream of Albeni Falls Dam.

The Corps operates AFD and makes the final determination on dam operations. Under FWPO, BPA will request a power operation and the Corps will evaluate that request along with ice conditions (according to the Ice BMP) and other factors. The Corps will then make a decision on whether to grant the request.

Response to Comment Albni110024-19

Please reference response to comment Albni110024-11 for response to comment on evaluation period.

Response to Comment Albni110024-20

Please reference response to comment Albni110024-5 for response to comment on economic impact.

Response to Comment Albni110024-21

Please reference response to comment Albni110024-5 for response to comment on safety, discharge, and capacity at Box Canyon Dam.

Albni110026 Pipella	
September 9th, 2011 Ms. Leah Wickstrom CENWS-PM-CP-CJ U.S. Army Corps of Engineers P.O. Box 3755 Seattle, Washington 98124-3755 RE: Comments on Fluctuation Lake Pend Orielle; Dear Ms. Leah Wickstrom; We are property owners on the Pend Orielle River with approx 2500 feet of waterfront footage. Our names are Ray and Jeanine Pipella. Our property is approx of 20 acres with 10 acres below the summer level high water mark. After reading the Draft Environmental Assessment these are our concerns; • Dock We have a floating dock with steel pilings. Our dock sits level on the bare sand at	110026-1
2051 If level with the river just a few feet away. Should we have freezing weather and frozen ice on the river and Albany Dam raises the water level 5 feet damage would be done to our dock and pilings as well as erosion. • Riprap Erosion – Our approx 2500 feet of waterfront property has been totally riprapped. A large portion of the river shore line at the 2051 foot level, comes to the bottom of our riprap. According to the draft environmental assessment much erosion could occur costing us a fortune to repair. To replace this riprap today would cost in excess of \$500,000. • HardshipAfter reading the Draft Environmental	110026-2
Assessment ice damage and erosion is a very high possibility causing us great hardship as we are hardworking folks and our life savings have been invested into our riverfront home property. Please note - We own 10 areas under the summer high water mark and understand that there is a perpetual right of way and easement to overflow, flood and submerge a portion of our property Instrument # 407502 recorded August 9th 1952, Bonner County. We feel Albany dam should be totally liable for any and all damages that would occur during this winter drawdown fluctuation. Regards, Jeanine and Ray Pipella 160 Wild Rose Lane Sagle, Idaho, 83860 208-265-5508	110026-3

Response to Comment Albni110026-1

Please reference master response 2 for response to comment on ice and potential for dock damage.

Response to Comment Albni110026-2

Please reference master response 1 for response to comment on erosion.

Response to Comment Albni110026-3

Please reference master response 1 for response to comment on erosion and master response 2 for response to comment on ice and potential for dock damage.

Response to Comment Albni110026-4

Please reference master response 3 for response to comment on liability for property damage.

Albni110027 Trulock/Heitman Docks at Glengary	,
The following are my comments in regard to the draft Environmental Assessment (EA), created by the US Army Corps of Engineers and the Bonneville Power Administration, addressing the potential impacts of a proposed flexible winter power operation at the Albini Falls Dam on the Pend Oreille River for the purpose of increasing electrical power production. Please also refer to our previous comments on the record regarding this proposal.	
First and foremost, it is not lost on me that the two agencies that stand to gain from this project are the ones that have drafted this document and ultimately have decided that a new Environmental Impact Statement is not necessary. I consider this a significant conflict of interest. Several times in the document inconclusive words/terms are used (i.e. "possibly", "may", "might", "typically", "should", "likely", "expected", "seemingly") suggesting to me that there isn't sufficient data to support the statements that used these terms/words.	110027-1
You admit that the current EIS did not analyze ice impacts (4.3.4) to the extent that this proposal would create. You admit there are few studies regarding the impacts of river fluctuations and resulting sedimentation impacts (4.6.2). These items alone suggest that more research is needed before you implement a lake management plan that I consider to be a potential disaster to the local communities, economy and environment. I also believe that research of this nature should be done by entities that don't directly benefit from the results of the findings. My wife and I are owner/operators of Heitman Docks at Glengary, a marina built by my wife's parents in the 1940s. It has been in continuous operation since that time.	110027-2
The dock systems are primarily log floated wood construction. Given the shallow nature of our bay, ice formation can occur rapidly and become quite thick. We also must adjust our system twice a year to accommodate the rise and fall of the lake. The dock configuration is dependent on what level the lake drops to. At 2051, we move the inner docks out the farthest due to the shallow water, thus exposing them more towards unprotected water outside of our breakwater. At 2056, we are able to keep them in further where they are more protected. If this flex plan is allowed to move forward there will be several issues that we will have to deal with during the winter that threaten to damage our infrastructure such as frozen down docks and boats. Moving gangways and adjusting docks in winter conditions to accommodate these fluctuations will expose us to more risk than in the past. The inner portion of our marina is quite often frozen down and the entire marina and bay periodically freeze solid with six plus inches of ice. These conditions occur more readily when the lake is at 2051.	110027-3
We are probably the smallest year round operating marina on the lake and I am not at all confident that our situation would be taken into account by the Corps. during any decision making process relevant to the "ice BMP" outlined in Appendix A. Chapter 3 starts with a statement that navigation is not impacted by this proposal. I would disagree in the many navigational hazards that are exposed at 2051 will be slightly submerged at 2056, thus becoming a very real threat to navigation. It is noted that dock systems should be designed to withstand lake fluctuations within the dam's operating range (3.3.1). It is unclear whether	110027-4
this simply means the rise and fall of the lake level ore that process combined with the potential damage from being frozen down when the lake rises. I am not aware of any design criteria that is identified in the permitting process addressing a freeze down event with the lake level rising. Piling can and will be pulled up if they frozen in when the lake rises. So will water supply lines of which there are many. Ice flows in places like Bottle Bay have historically caused damage and this proposal will only increase the potential	110027-5 110027-6
for this type of damage. Flooding events over ice are not a common event but obviously do happen. The FWPO proposal would increase the likelihood of these events simply by the fact that the lake level would fluctuate 5 feet up to 3 times a winter. It is stated that the "ice BMP" in Appendix A will address this issue. Assuming that this EA is meant for public review and comment, I would suggest that the "ice BMP" be presented in such a way that someone without an engineering degree can understand it. I have no idea what the bulk of it says or means and consequently I am not at all comfortable that it is an effective BMP for what it is intended to	110027-7

110027-7 address. It is stated that with this type of fluctuation the Clark Fork water could spend more time mixing (cont'd with the Bayview water, thus warming it slightly and reducing ice formation potential (4.2.1). You insert the word "possible" into this sentence. You should leave it out altogether as it doesn't appear 110027-8 you have data to back it up. Erosion issues are discussed at length although there is little discussion on the effects of outward in-ground hydraulic pressure from an elevated water table once the lake level 110027-9 drops. You refer to the Clark Fork delta as an area that experiences this with significant bank failure. I would think this would be an issue on the Pend Oreille River as well. The document dismisses the spread of Flowering Rush as "inevitable over time" so it's not a consideration for this proposal. Lake level fluctuation will accelerate the spread of this plant. It seems irresponsible to not give science as much time 110027-10 as possible to discover some type of solution to this issue. To conclude, I do not feel that this EA adequately addresses the many issues that are at play with this type of lake level fluctuation. The way the 110027-11 document is written suggests a fair amount of speculative thought process that lacks foundation in fact; enough so that I feel strongly that an Environmental Impact Statement should be undertaken. My ultimate preference would be that the proposal be dropped and the dam continues to operate as it is currently. 110027-12 Tom & Marjorie Trulock Heitman Docks at Glengary.

Response to Comment Albni110027-1

Please reference master response 6 for response to comment on need to prepare an EIS.

Response to Comment Albni110027-2

Please reference master response 7 for response to comment on additional monitoring. Note that the Corps and BPA have funded much work conducted by third parties including contractors, state agencies, and Indian Tribes for the purpose of generating information on the effects of AFD.

Response to Comment Albni110027-3

To avoid damage, docks should be positioned in the configuration used for a lake elevation of 2051 feet. This would allow the docks to move with the ice sheet as the water level fluctuates. Techniques developed on the Great Lakes could be used to protect the docks from potential hazards outside the breakwater (references can be found at www.crrel.usace.army.mil).

Response to Comment Albni110027-4

The introduction to chapter 3 refers to navigation in the context of project authorities and effects on commerce per the SOR EIS. The commenter's assertion of the potential for navigation hazards resulting from alternately exposed and then slightly submerged obstructions immediately upstream and downstream of AFD is a slightly different issue. Nevertheless we generally agree with the comment. While we don't anticipate any effects on navigation as it pertains to commerce, FWPO would lead to changing navigational conditions throughout the winter due to lake fluctuations that may periodically expose and submerge sandbars, pilings, wood debris, or other navigation hazards. Section 4.14 of the EA has been edited with additional text to describe this issue.

Response to Comment Albni110027-5

Please reference master response 2 for response to comment on dock damage from ice and master response 3 for response to comment on design criteria and permitting.

Design techniques for piles in ice environments exist as well as passive and active systems to protect piles from ice uplift (references can be found at www.crrel.usace.army.mil).

Response to Comment Albni110027-6

If the water lines are above elevation 2051 feet they are at risk of being damaged under existing operations, regardless of whether FWPO is implemented or not. FWPO would not increase this risk. To avoid damage, pipes should be buried so the top of the pipe is below AFD's congressionally authorized operating range (2049.7 – 2062.5 feet).

Response to Comment Albni110027-7

Language has been added to the introduction section of the ice BMP in Appendix A of the final EA. This should help clarify the benefits of the BMP.

Response to Comment Albni110027-8

During winter, existing AFD operations roughly match outflow with inflow to maintain a relatively constant lake level. Although water circulation models for the lake are not available, the orientation of the lake is such that water from the Clark Fork likely travels along the northern shore of the lake to the Pend Oreille River. This flow pattern circumvents possible mixing with the "warmer" water in the southern part of the lake. Under FWPO, water will be stored in the lake when discharge is reduced below inflow. This would increase the residence time of the water in the lake and allow for greater mixing with the 'warmer' water in the south part of the lake and ultimately an incremental increase in the temperature of water exiting the lake.

Response to Comment Albni110027-9

Please reference master response 1 for response to comment on erosion.

Response to Comment Albni110027-10

Please reference master response 5 for response to comment on flowering rush.

Response to Comment Albni110027-11

Please reference master response 6 for response to comment on need to prepare an EIS.

Response to Comment Albni110027-12

The commenter's objection to FWPO is noted.

Albri110028 Leedy

Response to Comment Albni110028-1

Please reference response to comment Albni110027-6 for response to comment on water system and master response 3 for response to comment on liability for property damage.

Response to Comment Albni110028-2

Please reference master response 4 for response to comment on safety for ice fisherman and recreation.

Albni110029 O'Reilly/Kinnikinnick Native Plant Society



Regarding flowering rush, "...although implementation of FWPO may accelerate the expansion of flowering rush in Lake Pend Oreille, the plant is already effectively established." Downstream of AFD, 4.10.2 states "Under FWPO, more ice is expected to be transported downstream of AFD through the spillway compared to the No Action Alternative. Because ice is an important mechanism for transporting flowering rush, it is possible that FWPO could spread rush downstream of the dam." 6.4.2 states "FWPO has the potential to accelerate the broader distribution of rush over Lake Pend Oreille, as well as below AFD, though the incremental effect the FWPO has as compared to the existing operation is difficult to determine. Since the expansion of flowering rush is expected to be inevitable over time, the incremental effect of FWPO on spread of rush is not considered a significant cumulative effect."

The EA Conclusion, states "Because of the opportunistic nature of FWPO, countless potential water storage and drafting scenarios could be analyzed. For this reason, a "bookend" scenario was used ... (which) is considered unlikely to occur, because it does not account for important variables such as power demand, weather, and system conditions that would trigger the need to utilize the available storage. The effects identified include a combination of new information and effects that had not previously been disclosed in the SOR EIS, and more detailed information on effects that were previously disclosed in the SOR EIS. The new environmental and socioeconomic effects include: ...Potential increase in the rate that the invasive flowering rush is spread around Lake Pend Oreille and to locations downstream of AFD. This is due to the species tendency to be transported by moving ice, which is predicted to increase with implementation of FWPO...The effect on flowering rush is not considered a significant environmental concern in the context of 40 C.F.R. §1508.27. This is due primarily to the very limited role FWPO could play in the seemingly inevitable spread of this invasive species. The remaining effects identified in this draft EA are considered additional detail to effects, including those that were previously identified as significant, that were previously disclosed in the SOR EIS. These effects include...an increase in shoreline erosion around the lake and...the dewatering of aquatic habitat along the margins of the river...Our preliminary conclusion is that 1) the FWPO is not a substantial change from the SOR EIS proposed action relevant to environmental concerns, and 2) there are no significant new circumstances or information relevant to environmental concerns and bearing on the SOR EIS proposed action or its impacts (40 C.F.R. §1502.9(c)). Therefore, to proceed with adoption of the FWPO as a winter management operation will not require preparation of a supplemental or new EIS."

The EIS for Operation of the Albeni Falls Dam was completed in 1983, **28 years ago**. The SOR EIS (Columbia River Power System Operation Review Environmental Impact Statement) is dated 1995. The current Draft EA refers to a **1987** study to document shoreline erosion (Section 3.5.1 "Shoreline erosion in Lake Pend Oreille outside the deltas is caused by a combination of erosion from wind-generated waves, freeze-thaw processes at the air-water interface of the lake, groundwater-induced sliding, and boat wakes (Gatto and Doe)." In 1983 and 1995, invasive aquatic threats were still in our future. In Section 3.10.1, "The Idaho Department of Agriculture manages a local task force that monitors the spread of invasive species around the lake. They identify problem locations and then apply chemical treatments to control these species." Our organization has had direct involvement with and support of the Bonner County Invasive Aquatic Species Task Force and we are aware that funding for future chemical treatments is not a given, and that an integrated approach is most successful in controlling these invasive plants. The winter freeze to kill Eurasian Watermilfoil is one of those control mechanisms which FWPO will threaten, and FWPO will increase the spread of flowering rush according to the draft EA. In addition, lake and river shoreline erosion increases the use of riprap which has the additional effect of reducing natural riparian habitat.

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U.S. Army Corps of Engineers and Bonneville Power Administration

In part, the mission of our organization is to advocate for the protection and preservation of the natural terrestrial and aquatic flora of our region, and the proposed FWPO will threaten native flora 110029-9 through shoreline erosion negatively impacting terrestrial species, increased sedimentation affecting aquatic species, and increasing conditions for the spread and propagation of invasive aquatic plants further negatively impacting aquatic habitat.

The Kinnikinnick Native Plant Society is the organization advocating for native plants and habitats in 110029-10 this region. KNPS strongly requests No Action on the BPA proposal for FWPO. As an alternative, we request a new EIS which will reflect current conditions regarding, in particular, shoreline erosion and invasive aquatic species in the Lake Pend Oreille system.

110029-11

Sincerely,

an Marian O'Reilly, Chair **Conservation Committee**
² Kinnikinnick Native Plant Society, Inc

Carol Jenkins, President, P.O. Box 1092, Sandpoint, ID 83864, president@nativeplantsociety.org

www.nativeplantsociety.org

President Carol Jenkins (208) 265-9204

Vice-President Jim Stern (208) 265-6733

Secretary Dennis Rieger (208) 263-5947

Treasurer Ken Haag (208) 255-4413

Arboretum Manager Sylvia M. Chatburn (208) 263-2175

Founder Lois Wythe (208) 263-8038

Board Members

Janice DeBaun (208) 263-8970

Nancy Fontaine (208) 255-7748

Joanna Fuchs (208) 265-4839

Bob Wilson (208) 683-2387 Army Corps of Engineers

December 29, 2009

Seattle Division Attn: Nola R. Leyde, Public Affairs Specialist Via email: <u>nola.r.leyde@usace.army.mil</u>

The Kinnikinnick Native Plant Society wishes to strongly express its concerns about fluctuating the winter pool level of Lake Pend Oreille without significantly more study of potential consequences.

- Strong consideration needs to be given to the high risk of shoreline erosion and the negative impacts on shoreline vegetation, siltation of riparian zones, and nutrient loading (and the increased risk such nutrient loading has for the propagation of invasive species such as Flowering rush and Eurasian Milfoil).
- Fluctuation will negate any benefit for reducing or killing Eurasian Water Milfoil that might result from hard freezing of the exposed littoral zone during drawdown.
- The repair work next summer to any resulting structural damage has a potential for site disturbance activities. This again poses risk of damaging sensitive riparian zones during the work.
- The Army Corps own procedures for implementing NEPA suggest that an EA should be conducted prior to a decision to move forward.

See:

http://www.gsa.gov/Portal/gsa/ep/contentView.do?contentType= GSA_DOCUMENT&contentId=12886&noc=T (page 3, Section 7, paragraph d)

In short, we encourage you to abandon this plan for the winter of 2009/2010 and study it carefully before future consideration. Please add us to your mailing list for this issue.

Sincerely,

Molly O'Reilly Chair, Conservation Committee conservation@nativeplantsociety.org

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Response to Comment Albni110029-1

Please reference master response 1 for response to comment on erosion/nutrient loading. Please reference master response 5 for response to comment on invasive species.

Response to Comment Albni110029-2

Please reference master response 1 for response to comment on shoreline erosion and master response 5 for response to comment on invasive species.

Response to Comment Albni110029-3

Please reference master response 5 for response to comment on invasive species.

Response to Comment Albni110029-4

Please reference master response 1 for response to comment on erosion/wildlife and master response 5 for response to comment on invasive species.

Response to Comment Albni110029-5 and Albni110029-6

Please reference master response 6 for response to comment on need to prepare an EIS.

Response to Comment Albni110029-7

Please reference master response 5 for response to comment on invasive species.

Response to Comment Albni110029-8

Riprap is the usual choice for control of bank erosion. We do not believe, however, that the use of riprap will increase significantly with the implementation of FWPO. In areas where severe erosion is occurring, bank protection can actually reduce the erosion of riparian habitat over the long term.

Response to Comment Albni110029-9

Please reference master response 1 for response to comment on shoreline erosion and master response 5 for response to comment on invasive species.

Response to Comment Albni110029-10

Your request for selection of the no action alternative is noted.

Response to Comment Albni110029-11

Please reference master response 6 for response to comment on need to prepare an EIS.

Albni1 Val	10030 entine
Leah Wickstrom U.S. Army Corps of Engineers P.O. Box 3755 Seattle, WA 98124-3755	
Lake Pend Oreille Winter Fluctuation To Support Power Generation	
I object to this plan and also to using an old EIS.	
You should require a new one since there are a lot more folks living around the lake now than then. This has all the earmarks of pretending that the public has had input when all you had was an open house. That was not a public forum regardless of how it was couched.	110030-1 110030-2
The issue is breaking the ice up and having it float around and grind into the shore, docks and spawning beds.	110030-3
Why not drop the lake even more so that the high fluctuation level stays below previous low draw-downs? Make A. Vatertre Wm. A. and Marie A. Valentine 146 Stewarts Drive Sagle, ID 83860	110030-4

Response to Comment Albni110030-1

The commenter's objection to FWPO is noted.

Please reference master response 6 for response to comment on need to prepare an EIS.

Response to Comment Albni110030-2

Chapter 7 of the EA details an extensive public coordination process. The amount of public coordination conducted for FWPO far exceeds what is typical for an EA. The extensive coordination has been the direct result of concerns expressed by the public. Modifications to the project have also occurred as a direct result of the public involvement (see response to comment Albni110002-2).

Response to Comment Albni110030-3

Please reference master response 1 for response to comment on erosion and master response 2 for response to comment on docks. Also reference response to comment Albni110010-3 for response on ice gouging the shoreline.

Response to Comment Albni110030-4

Under current operations, the minimum winter lake elevation is determined through a process described in section 3.8 of the EA for the benefit of kokanee spawning. This process will continue under FWPO. The minimum possible lake elevation under this process is 2051 feet. Furthermore, the original congressional authorization for AFD established a minimum regulated lake elevation of 2049.7, which is below the proposed elevation ranges for FWPO. The Corps and BPA are not proposing a change to the project's congressionally authorized minimum lake elevation, but rather are proposing to operate within the project's authorized ranges.

Albni110031 Jenkins

September 4, 2011

Leah Wickstrom U. S. Army Corps of Engineers P. O. Box 3755 Seattle, WA 98124-3755

Dear Leah Wickstrom,

After reviewing the draft EA for the FWPO for AFD, I strongly request that the Corps not go through with this plan. The EA recognizes that FWPO will cause damage to docks and shoreline around the lake. We are property owners on Lake Pend Oreille. We had our dock constructed under approval of all the required agencies. We had no way to construct our dock for future unanticipated changes in winter lake conditions that FWPO would create. There is no recommended course of action for citizens to protect their property under these conditions, and no mitigation available to us after the damage occurs. Once, I believe in the 1980's, the Corps approved a winter fluctuation which caused damage to docks and boats on the lake. Wisely, this practice was not continued, but the damage was done. In all fairness and respect for private property, do not adopt FWPO.

Sincerely,

Carol Jenkins, P.O. Box 453 Sagle, ID 83860

Response to Comment Albni110031-1

The commenter's objection to FWPO is noted.

Response to Comment Albni110031-2

Please reference master response 1 for response to comment on shoreline erosion and master response 2 for response to comment on dock damage from ice.

Response to Comment Albni110031-3

Please reference master response 3 for response to comment on dock permitting and liability for damage. The lake elevation that could occur under FWPO is within the range of lake elevations that could occur currently, and, as you note, has in fact occurred under historical operations.



Response to Comment Albni110032-1

Please reference master response 2 for response to comment on dock damage from ice, and master response 3 for response to comment on liability.

The marina in Sandpoint was used as an example in the EA because we are very familiar with the construction and it is accessible during the winter for characterization of the ice conditions in shallow bays. As stated in the EA, we do not expect the risk of damage to the marina at Sandpoint to change under FWPO.



Response to Comment Albni110033-1

Responses to the referenced comments can be found following each individual comment letter in this appendix.

Albni110034 Mangold/WA Department of Ecology

The Washington State Department of Ecology (Ecology) has reviewed the EA and understands that the Corps analysis indicates that AFD is unlikely to increase TDG levels under FWPO except on rare occasions and that during these "rare occasions when there is potential for AFD discharge to exceed the water quality standard, TDG [will] be monitored and operations adjusted as necessary to insure there is no exceedance." If the analysis is accurate, Ecology is pleased that FWPO will not only ensure compliance with Idaho water quality standards but also Washington water quality standards applicable at the Idaho/Washington border. However, If TDG exceedances occur at a frequency greater than the analysis predicts, Ecology expects that necessary operational adjustments will be made to ensure compliance with both state water quality standards.

110034-1

Response to Comment Albni110034-1

Commenter is correct. The Corps will manage FWPO so that the water quality standard for TDG of 110% saturation will not be exceeded immediately downstream of AFD. This will be confirmed by monitoring. If monitoring indicates the 110% standard has been exceeded, operations will be immediately adjusted to decrease TDG to levels below 110% saturation. This should result in TDG less than 110% at the border between Idaho and Washington during FWPO.

OFFICE OF ENERGY RESOURCES

C.L. "BUTCH" OTTER Governor

JOHN CHATBURN Interim Administrator



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Chatburn/State of Idaho

Albni110035

(208) 332-1660 FAX (208) 332-1661

September 13, 2011

To: United State Army Corps of Engineers/ Bonneville Power Administration

The state of Idaho appreciates this opportunity to comment on the Draft Environmental Assessment (EA) for Albeni Falls Dam Flexible Winter Power Operations. Please note our gratitude for the 15 day extension to the comment period.

Idaho supports the concept of using the existing hydroelectric system to generate additional energy. For decades our region's economy has benefitted from the wise use of our natural resources to produce clean, renewable power.

Attached please find specific comments on the draft EA raised by the Idaho Department of Fish and Game (IDFG). As you will see, the major concerns with the proposed flexible winter operations center on increased erosion and impacts to Idaho's ongoing efforts, in partnership with the Bonneville Power Administration (BPA), to rebuild the fishery in Lake Pend Oreille. IDFG has generated questions that merit additional clarification before a preferred alternative is implemented or this EA is finalized.

Idaho also seeks clarification on how the federal agencies intend to mitigate the erosion problem and protect existing important habitat, should the flexible winter operations be implemented. It remains unclear how BPA would fund its mitigation responsibilities and if BPA would use a portion of the revenue generated via a flexible winter operation to assist Idaho's efforts to protect critical habitat along the Clark Fork River delta and other areas.

Thank you for this opportunity to provide input to our federal partners. We acknowledge your difficult challenge to meet the Biological Opinion imposed spill targets and provide the region with the affordable power needed to foster job creation and economic stability.

Sincerely,

Blin

John Chatburn Interim Administrator

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IDAHO DEPARTMENT OF FISH AND GAME 600 S Walnut / P.O. Box 25 Boise, Idaho 83707

C.L. "Butch" Otter / Governor Virgil Moore / Director

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Idaho Department of Fish and Game Comments Proposed Albeni Falls Dam Flexible Winter Power Operations Draft Environmental Assessment

Idaho Department of Fish and Game appreciates the opportunity to review this document and offer our evaluation and advice regarding fish and wildlife resources to decision-makers. We have reviewed the above referenced draft Environmental Assessment (draft EA) for the proposed change in management of the winter lake level of Lake Pend Oreille, as controlled by the Albeni Falls Dam (AFD) project. The proposal includes storing and discharging water behind AFD for power purposes during the winter months. This would result in fluctuating the surface elevation of Lake Pend Oreille between 2,051 feet and 2,056 feet from about mid-December until March 31 every year. The proposal modifies AFD winter operation compared to recent years, in which surface elevation of Lake Pend Oreille has generally been targeted at 2,051 or 2,055 feet with a one foot operating range. Idaho Department of Fish and Game (IDFG) has previously met with the U. S. Army Corps of Engineers (COE) and Bonneville Power Administration (BPA) on a number of occasions about this proposal, and we have provided written comments expressing concerns and issues with the proposed change in operations, offering information about the potential for negative effects to fish and wildlife resources affected by the project. Chief among these concerns is the potential for severe erosional loss of the biologically rich and unique delta, shoreline, and island habitats 110035-5 present along the lake and down the Pend Oreille River to the AFD. The increased losses to these habitats from the proposed changes in operations of the AFD would be in addition to impacts resulting from construction and inundation of the Albeni project, for which mitigation remains a work in progress by several partners with BPA. Our empirical evidence indicates that the proposed operational changes will substantially magnify these erosional losses that have been diminishing important wildlife habitat since the project began operations in the 1950s. In addition to the above habitat concern, we note several other potential effects to fish and wildlife that should be considered in the draft EA, including effects to kokanee spawning habitat, 110035-6 increases in invasive species, changes in waterfowl use of the lake, effects to habitat for warmwater fish in the Pend Oreille River, and effects to fish and wildlife habitats in the lower Clark Fork River. We suggest that determinations about "significance" of effects of the proposal are not only a function of the draft EA but should also considered in comparison with the 1995 System Operations Review (SOR) EIS. Although we have appreciated discussion with BPA and the COE, our assessment of the draft EA is that many of the fish and wildlife issues did not receive 110035-7 sufficient assessment to determine significance or were not addressed at all. We believe more thorough assessment is warranted to assess effects and to consider potential mitigation actions. Keeping Idaho's Wildlife Heritage Equal Opportunity Employer • 208-334-3700 • Fax: 208-334-2114 • Idaho Relay (TDD) Service: 1-800-377-3529 • http://fishandgame.idaho.gov

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As currently written, the draft EA clearly states the intent is to change operations to allow drawdown to 2,051 ft. elevation every year. We have already described our substantial of that such operations will negatively impact delta, shoreline, and island wildlife habitats. addition, our assessment is that an annual drawdown to 2,051 ft. will have a major negat effect on the survival of kokanee embryos and correspondingly could negatively affect th trout population, which depend on kokanee as a major food source. Although our conver- with BPA and the COE suggest the intent is not to manage the lake all the way down to ft. elevation every year, we are obligated to provide our evaluation of the proposal as sta the draft EA.	v for concern In ive ne bull rsation the 2,051 ted in
If the base winter pool elevation will also be influenced by non-power resources, includi and wildlife, then we suggest explicitly incorporating these decision factors into the prop currently described in the draft EA. Without a reflection of the orally stated intent to con establish winter lake levels that will benefit resident fish, it is difficult to understand how proposal will serve to comply with the responsibility of the Action Agencies to operate t project in a manner that benefits fish and wildlife (see Section 1.1).	ng fish posal ntinue to this he
We point out that the winter operations proposal may increase impacts above and beyond currently occurring under existing operations adding to the cumulative effects of the hydrosystem as well as increasing the operational impacts to fish and wildlife of the Albo project. BPA funding pursuant to the Northwest Power and Conservation Council's Fish Wildlife Program has not been able to fully mitigate fish and wildlife impacts to date. M capacity to address additional degradation of fish and wildlife habitat in Idaho in and aro Lake Pend Oreille is thus unclear, and raises concerns about capacity for addressing addi- mitigation burden.	l what is eni Falls and litigation und itional
The draft EA does acknowledge that the proposed action will negatively affect the foragi success of over-wintering waterfowl, but the context and intensity of these effects on wil populations are not adequately described or discussed in regard to potential modification elevation of up to three times during the winter. We had specifically identified this issue needing assessment prior to development of this EA.	ng dlife of pool as 110035-1
On the critical issue of erosion, we believe the draft EA did not sufficiently address likel negative effects, particularly the issue of exposure of re-saturated and exposed, un-veget banks in the Clark Fork River delta due to peaking flows emanating from Cabinet Gorge Similarly, along the Pend Oreille River in Idaho, and in the Pack River delta, the issue of saturating soils up to three times per winter and then subjecting those banks to increased velocities as the lake is drawn back down for power production is not addressed. The dr relies on conclusions from other studies indicating wave action at full pool as being the period for erosion. While we do not disagree that wave action at full pool is a major sou erosion, we also find that the erosional effects of physical draw-down and draw-up for the winter proposal were inadequately described and current data from the Department, incluempirical observations using bank pins to measure erosion during the winter months, we utilized, leading to incomplete assessment and conclusions about the potential effects of operation. IDFG can provide these data to the action agencies for inclusion into the anal	y ated Dam. f re- river aft EA primary rce of tis iding re not this ysis.

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We find the conclusion that periodically raising the lake level during the winter could somehow benefit species like largemouth bass in the Idaho portion of the Pend Oreille River difficult to understand and technically unjustified. Changes in lake level would seem more likely to draw fish into overwintering habitat available at higher pool elevations, only to force them out of those habitats as the lake is drawn down for power generation, so such fluctuation may actually have a destabilizing effect on the warmwater fish population using overwinter habitat. Because the warmwater fishery in the Pend Oreille River is essentially a substitution for the native fish coldwater fishery that existed prior to impoundment, we believe effects to the warmwater fishery warrant more thorough assessment than is currently provided.	110035-14
The document repeatedly identifies (e.g., Sections 1.2, 3.1, 3.8) the area of impact as the upper end of Lake Pend Oreille downstream to Grand Coulee Dam, but fails to include the lower three miles of the Clark Fork River that is annually inundated due to operation of the AFD project. The Clark Fork River delta has been identified as very important habitat in the Idaho Statewide Wildlife Conservation Strategy. The draft EA inadequately describes the designation of the area of impact, as well as the effects that operational changes could precipitate. The coldwater habitat for salmonids in the lower river is likely the most productive in the Idaho reach given the preponderance of riffle/pool and riffle/run habitat. It is plausible that modifying that habitat up to three times per winter from a lotic to lentic habitat type has the potential to negatively affect overwintering salmonids and should be considered in the draft EA to address potential operational and mitigation opportunities.	110035-15
The following provides more specific comments about the EA:	
Page 1-1, Intro – As previously discussed, we suggest clarifying whether the proposal is that the project would be operated down to 2,051 ft. elevation annually or less frequently to accommodate other resource needs such as kokanee and bull trout. There are additional sections where this comment is relevant throughout the draft EA.	110035-16
Section 2.3 – The draft EA describes that winter elevation and discharge could be in response to flood control needs and/or weather/precipitation events, but does not mention the needs of kokanee as an operational factor. We recommend explicit reflection of whether and how kokanee needs (and hence bull trout needs) would factor into the operational decision.	110035-17
Chapter 3 second bullet – It is unclear if the Action Agencies (BPA, BOR, COE) are implying that the newly implemented irrigation project at Grand Coulee will not affect decisions on water delivery from AFD. We recommend this be clarified.	110035-18
Section 3.2.1 – The discussion about ice seems to imply that Lake Pend Oreille periodically freezes over completely. Due to the depth and size of the lake, that has not happened in modern imes.	110035-19
Section 3.5 – The discussion of shoreline erosion accepts Washington Department of Fish and Wildlife assessments for the lower Pend Oreille River, but not IDFG assessments for erosion around the upper river and lake, including to the upper end of the Clark Fork River delta. We previously noted the Department can provide assessment and monitoring information from the	110035-20
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shorelines of Lake Pend Oreille, the Pend Oreille River, the Pack River delta, and the Clark Fork River delta that are relevant to the erosion issue and illustrate our concern. We also have substantial photographic documentation of this monitoring that can be provided and would be happy to work with BPA and the COE to incorporate this information into the EA. We believe inclusion of this important and relevant information is necessary to provide objective and adequate assessment of the proposal effects to key fish and wildlife habitats.	110035 (cont'd)
As previously noted, we concur with the draft EA that summertime wave action is a major cause of erosion of valuable wildlife habitat, but we believe our empirical observations make it clear that winter erosion is substantial and significant, and that the evidence strongly points to significant exacerbation of the problem with the proposed change in operations. Given the success of the pilot delta restoration project in the Pack River delta, we believe it is imperative that the draft EA reflect the significant erosion risk the new operation proposal would create, and identify mitigation measures to offset those losses should the change be implemented.	110035
Section 3.6 - The draft EA fails to explain the connection and role of wetland habitats and their association with water quality. As water enters a wetland it slows down and the sediment carried by the water settles out and is trapped by the wetland plants and their roots. Plants also absorb almost two-thirds of the nitrate and phosphorous, and bacteria in the water and soil can also neutralize wastes, including the body wastes of animals and humans. The continued loss of wetland habitats on and near the shorelines and delta areas of the affected area through erosion affects these habitats and their contribution to water quality.	110035
Section 3.8.1 – We recommend using language from the Idaho Fishery Management Plan to lescribe the fishery. Lake trout are not a "popular trophy fishery", rather they are a species being effectively targeted for suppression in Lake Pend Oreille. The "Habitat" portion of the discussion offers the odd conclusion that Fluctuating Winter Pool Operation (FWPO) might actually improve conditions for species such as largemouth bass (see discussion above). It seems nore likely that bass will be negatively affected if periodically forced to move from desirable habitats at higher elevations to lower elevations with increased velocities during power maximization flows.	110035
We also suggest the entrainment issue should be more completely assessed. While it may be that winter conditions coupled with constraints on drawdown rates and fish behavior would limit the potential for entrainment losses, the draft EA should identify that kokanee can be very susceptible to entrainment with population level effects, which has been observed in Lake Pend Dreille in the past as well as other operations such as Dworshak Reservoir and warrants discussion.	110035
Section 3.10.1 – We agree with the statement: "since the time of construction of AFD, annual ake level fluctuations have continued to erode shorelines and destroy remaining wetlands". This reflects the important issue of operational impacts of Albeni Falls Dam, which have yet to be nitigated, and in our assessment will likely be increased substantially by the proposed action. As mentioned previously, we believe the draft EA should better define existing operational effects and then what, if any, new or different effects the proposed operational changes will have on fish and wildlife habitats along the lake's deltas, shorelines, and islands within the assessment	110035
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area. We also recommend that if more thorough assessment identifies negative effects to fish and wildlife habitat from operational changes, then the draft EA should identify mitigation strategies that will be taken to offset them.	110035
Section 3.11.1 – This section should also specifically reference the Priest River delta area, which has been severely affected by winter drawdowns and increased water velocities, along with wave caused erosion during the period summer pool elevation in order to provide a complete assessment of potential effects from operational changes and consideration of mitigation strategies.	110035
Section 3.12 – We recommend identifying kokanee, as forage for bull trout, as a key component of the bull trout recovery strategy.	110035
Section 3.14.1 – We recommend that the EA clearly identify the criteria for differentiating between significant and insignificant recreational impacts, especially as related to fishermen, hunters, and wildlife viewers. For example the draft EA states: "as many as 100 to 200 ice fishermen per day will fish the iced over portions of the north end of Lake Pend Oreille yet there is implication that changed ice conditions will affect recreation only insignificantly. In our view, this type of displacement is significant, but objective criteria would inform the assessment.	110035
Chapter 4 currently states: "The bookend scenario is considered unlikely to occur because it does not account for variables such as power demand, weather, and system conditions that would trigger the need to utilize available storage." This seems ambiguous. We believe the draft EA should provide more clarity, expanding the description about how lake level decisions are made, for what reasons, and how changes in operations will be incorporated into existing decision making processes and structures.	110035
Section $4.1 - We$ recommend this section clearly state that use of the decision tree, or at least kokanee considerations, are a consideration in the decision making process.	11003
Section $4.2 -$ This section fails to describe effectively how changing shoreline ice conditions will affect the substantial number of ice anglers and others seeking to pursue wildlife based recreation on the lake. If there is basis for the currently unsubstantiated assumption that most ice anglers will adapt to the ice entry of changed operations, it should be provided. If there is not a basis, then the assumption should not be offered.	110035
Section 4.3.1 – Complete ice cover never appears on Lake Pend Oreille. The implication that it does suggests a lack of familiarity with ice conditions around the lake and raises questions about interpretation of how ice formations will respond to changing water elevations.	11003
Section 4.5.1 (Shoreline Erosion upstream) - If shoreline or delta erosion is increased from current winter operation, there could be negative implications for kokanee because increased sedimentation could negatively influence spawning habitat. Also, further compromising the natural function of delta habitats could reduce potential for nutrient input to the lake that has a "bottom-up effect" on kokanee. We currently do not have data to adequately address whether this would be a substantial issue, but there is potential for this to occur. We recommend the EA	110035
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at least acknowledge this potential issue and identify means for better understanding and mitigating any problems that would result from this operational effect.	110035-34 (cont'd)
Section 4.5.1 - This section provides very limited analysis to reach the conclusion that the expected increase in erosion is not significantly higher than what is described in the SOR EIS. However, we have provided plausible information supporting an alternative outcome of increased winter shoreline erosion, which should be incorporated into the assessment.	110035-35
Section 4.8 – We believe the only logical and supported conclusion is that the proposed action will negatively affect the warmwater fishery in the Pend Oreille River, and if the summary statement is correct (annual drawdown to 2,051 ft.), this operational scenario could severely impact kokanee through poor embryo survival. Also, effects to species such as largemouth bass, which do not seek out flowing water with velocities similar to those expected during power drawdowns, are not indicated for the Idaho reach of the river and should be included in any revision of the EA assessing operational changes to the lake.	110035-36
Section 4.8.1 (Habitat) – There is very little mention of effects to warmwater fish in the Pend Oreille River. We agree that kokanee spawning itself will likely not be affected because water will not decrease below the base winter pool elevation. By periodically raising the water level, it is possible the proposed draw-up could actually provide some security for a limited number of redds created in shallow water that would normally be vulnerable to scour from wave action during big winter storms when the lake is at minimum pool.	110035-37
Redd dewatering appears to be the primary factor considered when assessing impact on kokanee yet given the proposed operation, dewatering of redds should not occur at minimum elevation that does not fall below 2,051 ft. There is no mention of the impact that the FWPO might have on habitat, despite the title of this section. The proposed winter operation fluctuations will occur in years when the base winter pool elevation is set at 2,051 feet. Managing the lake at 2,051 feet creates less available spawning habitat for kokanee, but the benefit of this elevation operation is cleansing (of sediment) and redistribution of gravels that are in the 2,051-2,055 foot band. This process is very important for kokanee early survival. It is unclear what effect the proposed winter operation fluctuations will have on this process so we cannot predict the outcome. We believe there is reasonable potential for negative influence because important kokanee spawning habitat benefit occurs during big winter storms. If storms do not occur when the lake is higher than the base winter pool elevation then the same habitat benefit will not occur as would happen at base pool of 2,051 feet. For instance, if the lake is at 2,055 ft. elevation and a big storm hits, gravel in the 2,051-2,055 ft. band may not benefit at all.	110035-38
Typically, big storms create a gravel berm slightly above the waterline (2,052 ft.) that is very high quality for spawning use in subsequent 2,055 ft. years. This berm may or may not be created in the same fashion or at the same elevation pursuant to the proposal. Again, this is nearly impossible to predict given the range of winter elevation management scenarios that could occur pursuant to the proposal. Some scenarios might have no effect, or potentially even a positive effect, while others might result in poorer habitat for spawning in future years. We recommend the final EA address this specific issue, as it is a critical component of the lake level management strategy to benefit kokanee recruitment.	110035-39
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Section 4.8.1 (Entrainment) - Kokanee are vulnerable to entrainment during v age-1 fish that spend a lot of time on the north end of the lake. Spring runoff but winter floods can be as or more detrimental. If the proposed FWPO incre- higher ramping at the AFD, then we believe entrainment risk could be higher existing operations. There are scenarios where entrainment could be lessened because there is flexibility to "catch" a big storm event when in the past these higher ramping to keep the lake at the established minimum winter pool level considered in the proposal.	winter, especially Poses a big risk, eases the risk of than under the d under the FWPO e events required I. This should be	0035-4
Section 4.11.1 – This section indicates that most of the habitat loss would be Rather, it seems more mudflats would be created as vegetated banks continue and the habitat loss will be to vegetated areas such as emergent wetlands and Further, we believe the draft EA needs to provide a more thorough assessmer effect of changing winter lake levels on overwintering waterfowl, and in part such as redheads, to ensure the operation will not affect food availability, or t mitigation measures if it will.	low value mudflat. e to slump away, riparian zones. nt of the potential icular diving ducks to identify potential	10035-4
Section 4.14 – This section should quantify effects on ice fishing participation conditions change as described. Loss of opportunity could have local econor these should be described.	n expected if ice nic impacts and	10035-
Section 6.2 – This section does a poor job of describing the actions occurring Clark Fork Settlement Agreement. Bull trout have been captured and hauled purposes for about ten years. What is currently being evaluated is what a per facility will look like. Numerous other projects, including some that ameliors by AFD have been implemented. Failure to adequately recognize other actio suggests a lack of thoroughness in the assessment. Although there is conside about the proposed MOA between the Kalispel Tribe and the Action Agencie that the MOA has not yet been approved. We have previously provided our of proposed MOA through MOA public comment process.	pursuant to the for fish passage manent trapping ate impacts caused ns in the basin rable language es, it should be noted concerns about the	10035-
Section 6.6 – Duck hunting is not addressed. Hunting is an important recreat likely to be affected by the proposed FWOP so it should be assessed.	ional opportunity	10035-4
Section $7.2 -$ This section identifies six tribes with reservations in the project in Idaho and one in Montana that clearly do not have reservations within wha document describes as the project area. These discrepancies should be rectifi accurate jurisdictional and legal authorities of the entities as well as a clear do project area.	area including two at the rest of the ded to reflect the efinition of the	10035-
Keeping Idaho's Wildlife Heritage		

Response to Comment Albni110035-1

Appreciation for the 15 day extension to the public comment period is noted.

Response to Comment Albni110035-2

The Corps and BPA appreciate the state of Idaho's support for the existing hydroelectric system.

Response to Comment Albni110035-3

Please reference master response 1 for response to comment on erosion and individual responses to specific comments on fishery and other effects below.

Response to Comment Albni110035-4

Please reference master response 7 for response to comment on mitigation.

Response to Comment Albni110035-5

Please reference master response 1 for response to comment on erosion.

Response to Comment Albni110035-6

Please reference responses to specific comments below.

Response to Comment Albni110035-7

As discussed in section 1.3 of the EA, the purpose of the EA is to evaluate the potential effects of FWPO and determine whether these effects are sufficiently covered by the SOR EIS or are otherwise not significant, or if a supplemental or new EIS is required for the proposed FWPO. This means that the effects of FWPO need to be evaluated to determine whether or not they were adequately described in the EIS. If this analysis concludes that there are new and significant environmental effects that were not previously described in the EIS, then a supplemental EIS is warranted. Conversely, if the analysis concludes that all of the anticipated environmental effects under FWPO are 1) already described in the EIS, or 2) non-significant, then a supplemental EIS is not warranted. In chapter 4 of the EA, we have provided analysis and conclusions for each resource section and compared these to the EIS. We believe that sufficient analysis has been conducted to characterize the magnitude of effect of FWPO as compared to the effects disclosed in the SOR EIS, and to conclude that a supplemental or new EIS is not warranted. Please also reference master response 6.

Response to Comment Albni110035-8 and Albni110035-9

Please reference master response 1 for response to comment on erosion.

As stated in section 2.3 of the EA, FWPO would fluctuate the elevation of Lake Pend Oreille between the annually established minimum control elevation (MCE) and 2056 feet. The MCE is typically established between 2051 and 2055 feet. FWPO would not affect how the MCE is established in the future. The EA for FWPO assumed, for the purpose of analysis only, that the annual MCE were established at 2051 feet every year. Note that there was an error on the summary page of the draft EA that stated FWPO would fluctuate the lake from 2051 to 2055 feet

every year. This error has been corrected for the final EA. In years where the MCE was established at 2055 feet, FWPO would be no different than current operations. Since FWPO would not affect the establishment of the annual MCE, no related effects to kokanee or bull trout are anticipated.

Response to Comment Albni110035-10

Please reference response to comment Albni110035-8. FWPO would not affect the annual MCE decision tree process.

Response to Comment Albni110035-11

Please reference master response 7 for response to comment on mitigation.

Response to Comment Albni110035-12

Please reference master response 1 for response to comment on erosion and wildlife.

Response to Comment Albni110035-13

Please reference master response 1 for response to comment on erosion.

Response to Comment Albni110035-14

In years when the MCE is established at 2051 feet, FWPO would result in an incremental increase in aquatic habitat area as the lake elevation is raised to store water for power as compared to maintaining a constant winter lake elevation of 2051 feet as occurs under current operations. More available habitat generally correlates with a more productive fish population. It is true, as the commenter indicates, that as the lake is drawn down for power purpose, this habitat would be lost. This is also stated in the EA. The commenter further suggests this drawdown could result in a destabilizing effect on the warmwater fish population. This effect would be no different than what occurs under current operations as the lake is drawn down annually in the fall. We agree that adverse effects occur to warmwater species when the lake is drawn down in the fall. However, the only effect of FWPO would be to provide some additional habitat for part of the winter. This is not a negative. It is doubtful this additional habitat would increase the population relative to current operations, but it certainly would not result in negative effects. In years when the MCE is set at 2055 feet, there would be no difference between available habitat under FWPO and under current operations. In the Pend Oreille River between the lake and AFD, habitat conditions under current operations are not conducive to warmwater species. This will not change under FWPO. Velocities may be slightly higher or lower through this reach depending on FWPO operations (see figures 4-5 and 4-6 in the EA). In certain locations of the river, particularly between AFD and the confluence with the Priest River, velocities will noticeably increase when FWPO discharges are at the high end of the flow range making this habitat even less favorable for warmwater species. When FWPO discharges are low, velocities would decrease and habitat conditions would become more lake-like. Since the river is not habitat for warmwater species during the winter, these changes in the river conditions would have only a very limited, if any, effect on these species.

Response to Comment Albni110035-15

The geographic area of effect is defined as the hydrologic footprint of FWPO as stated in the introduction of chapter 3. This includes the 2056 foot contour of the lake and any adjacent shoreline that may be affected by this hydrologic footprint including the lower reaches of the Clark Fork River. We agree that the habitat in the lower Clark Fork River inundated by FWPO will become more similar to a lake environment, similar to what occurs under current operations when the MCE is established at 2055 feet. Under FWPO, the lower section of the river could alternate between lake like conditions and river like conditions depending on the nature of power operations. This may affect the movement of some fish. Fish tending to prefer the quite lake-type habitat would tend to move upstream or downstream with the fluctuating lake. Fish preferring the stream-like conditions changes will be quite gradual, there is no spawning occurring at this time, and the resident fish are relatively dormant, this is not expected to result in any notable adverse effects.

Response to Comment Albni110035-16 and Albni110035-17

Please reference response to comment Albni110035-8. FWPO would not affect the annual MCE decision tree process. This is stated in section 2.3 of the EA.

Response to Comment Albni110035-18

BPA and the Corps do not anticipate modifications outside the operating range specified in Section 1.2 of this EA.

Response to Comment Albni110035-19

Commenter is correct. Anecdotal evidence implies the lake has not frozen over in the past 20 years. But since there is no documentation (i.e. date, locations, ice thickness, etc.) available to calibrate the ice models, the ice analysis is very conservative with respect to ice processes in the basin. The lack of reliable data is the motivation for implementing monitoring stations.

Response to Comment Albni110035-20

We have received the referenced monitoring reports. The monitoring data presented in the 2010 report identifies annual shoreline erosion rates of between 0.3 and 2 feet per year which is consistent with the annual erosion rates identified in section 3.5.1 of the EA. The monitoring data also show that the maximum shoreline erosion rates are at elevations associated with the summer high pool level of 2062.5 feet.

While we understand the erosional losses at the locations you mention have been severe, these occurred (and continue to occur) as a result of current AFD operations. As stated in the EA, we believe additional erosional losses due to FWPO will be incremental and insignificant.

Response to Comment Albni110035-21

We agree that existing operations contribute to significant erosion during the winter months; however, the monitoring data provided by IDFG indicated that the maximum erosion rates are at elevations corresponding to the summer high lake level and decrease as you approach the winter operating range. Please also reference master response 1 for additional response to comment on erosion and master response 7 for response to comment on mitigation.

Response to Comment Albni110035-22

The loss of wetlands in the Lake Pend Oreille basin is of concern to the water quality of Lake Pend Oreille and the Pend Oreille River. Wetlands play an important role in maintaining the water quality of a lake because wetlands act as filters to remove nutrients and suspended sediments from runoff prior to entering a lake. However, the loss of wetlands around Lake Pend Oreille are largely a result of Albeni Falls Dam holding the pool elevation at 2062.5 feet during the summer, and shoreline erosion due to the annual lake elevation fluctuation between summer and winter pools. These wetland impacts have been occurring since the construction of Albeni Falls Dam altered the natural lake elevation fluctuations. The FWPO would not alter the existing impacts to wetlands and the continued loss of wetland functionality from summer pool elevations and summer shoreline erosion. The FWPO is expected to result in incremental erosion around the lake compared to the No Action Alternative. However, most wetland habitat is above elevation 2056 feet and would not be affected by FWPO. Water quality impacts are not anticipated to be appreciably different under FWPO compared to existing operations. Continued water quality monitoring of Lake Pend Oreille will assess and evaluate water quality impacts, if any, from the FWPO.

Please reference master response 1 for additional response to comment on erosion and habitat impacts.

Response to Comment Albni110035-23

Language in the final EA has been edited to describe lake trout management. Please reference section 3.8.1 of the EA for new language.

Please reference response to comment Albni110035-14 for response to comment on habitat conditions for warmwater species.

Response to Comment Albni110035-24

The velocities that exist in the Pend Oreille River between the lake and AFD for the range of flows possible under FWPO (up to 45 kcfs) are relatively low. A new figure has been added to the final EA (section 4.8.1) illustrating the modeled average velocities in the river. The model indicates that velocities are generally on the order of 1 fps or less throughout most of this stretch of the Pend Oreille River for the range of flows expected under FWPO. This should not affect kokanee residing in the lake since there is only a minor change in velocity predicted at the lake outlet. Kokanee present within the river itself may be subject to higher velocity in certain locations of the river. But few kokanee are expected to be present in the river. Velocities that occur in the Pend Oreille River during high spring flows are on the order of 2 to 7.5 fps (at 100 kcfs). This would be coupled with higher inflows to the lake and some small increase in velocity in the lake itself. These latter two variables would play an important role in moving kokanee into the Pend Oreille River. FWPO would not affect inflow to the lake and would have an inconsequential affect on velocities in the lake. The model indicates velocities increase downstream of the confluence with the Priest River. Aquatic species in the 4 mile reach of the

Pend Oreille River between the Priest River confluence and AFD would be subject to relatively higher velocities (up to 3-4 fps in front of the dam) at the higher FWPO flows. This could incrementally increase the rate of entrainment of fish residing in this stretch of river. This would be balanced against periods when flows are much lower than average, potentially decreasing the rate of entrainment. On balance, the general conclusion expressed in the EA, that fish behavior is the primary factor in determining rates of entrainment, is still considered accurate.

Response to Comment Albni110035-25

Mitigation for wildlife and wildlife habitat losses due to construction of AFD is ongoing through the Northwest Power Planning and Conservation Act, managed by BPA. IDFG is a primary partner in this effort. As discussed in the EA, it is not expected that FWPO would result in any significant changes in impacts to fish and wildlife habitats as compared to existing operations. Should additional impacts associated with implementation of FWPO be discovered, then IDFG is welcome to present additional proposals for mitigation of these impacts.

Response to Comment Albni110035-26

Please reference master response 1 for response to comment on erosion and master response 8 for response to comment on mitigation.

Response to Comment Albni110035-27

Section 3.11.1 of the EA indicates that AFD operations have affected wildlife habitat primarily from erosion throughout the lake. This includes the various river deltas including the Priest River delta.

Response to Comment Albni110035-28

The importance of kokanee as a forage fish for bull trout is described in sections 3.8 and 4-12.

Response to Comment Albni110035-29

Please reference master response 4 for response to comment on recreation.

While it is likely that ice conditions under FWPO would affect winter recreation including ice fishing, it is not possible to predict the magnitude or frequency of this effect. This is due to the variable nature of FWPO, the variable lake elevation at freeze-up under FWPO, and the variable behavior of individual fishermen. These factors will likely result in high year to year variation in the number of fisherman affected by these new ice conditions. In some years, it is possible that ice conditions may prohibit most ice fishing around the lake. These conditions are expected to be rare, but also occur occasionally under current operations as well. In other years, conditions are likely to be similar to current operations (which are also highly variable).

A more formal analysis of the economic impact of decreasing or eliminating ice fishing is not possible because data is not available on the number of winter ice fishing trips or the economic value this has for the local community. We have provided information on the annual fishing effort on Lake Pend Oreille in the EA. The winter fishing effort is a subset of this total.

Response to Comment Albni110035-30

As described in Section 1.2 of this EA, AFD is managed for multiple purposes and operations vary depending on the time of year. All existing decision and communication process would remain in place under the FWPO. The Corps and BPA agree that there is some degree of ambiguity in what the specific operation will look like in a given year because, as described in Section 2.3, FWPO would provide an opportunity for BPA to request water to be stored when:

- There is an expectation that storing water in the near term will provide power benefits at a future date when that water is released. This depends on power prices, load demand and conditions at Grand Coulee.
- Inflow to the project increases significantly (weather related) and there is an opportunity to store that water to prepare for future power needs.

However, while these circumstances are unknown at this time, they are within the "bookend" approach.

Response to Comment Albni110035-31

FWPO does not alter the current decision making process for establishing the minimum winter lake elevation. The consideration of kokanee in deciding lake elevations is described in various sections of the EA including section 2.3 which describes FWPO. Section 4.1 is a description of hydrologic effects of FWPO based on certain assumptions. A discussion of the decision tree in this section is not warranted.

Response to Comment Albni110035-32

Please reference master response 4 for response to comment on recreation.

Response to Comment Albni110035-33

Please reference response to comment Albni110035-19 for response to comment on ice cover.

Response to Comment Albni110035-34

Localized erosion is possible as a result of FWPO.

Please reference master response 1 for response to comment on erosion. The incremental erosion expected as a result of FWPO is not expected to affect kokanee spawning or egg survival as stated in the EA. Please also reference correspondence from USFWS on this issue in appendix C of the EA.

Response to Comment Albni110035-35

Please reference master response 1 for response to comment on erosion.

Response to Comment Albni110035-36

The Corps and BPA disagree with the conclusion that FWPO would negatively affect warmwater fish species such as bass. There is no information provided to substantiate such an assertion.

We agree that lake drawdown from 2062.5 feet to the winter lake elevation (typically 2051 or 2055 feet) does negatively affect warmwater species. However, this is an effect caused by existing operations that would occur with or without implementation of FWPO (also reference response to comment Albni110035-8, Albni110035-14, and Albni110035-24 above).

Response to Comment Albni110035-37

Please reference response to comment Albni110035-14 for response to comment on effects to warmwater fish species.

Comment agreeing with conclusion in the EA that there are likely no effects to kokanee spawning itself is noted.

Response to Comment Albni110035-38 and Albni110035-39

The Corps and BPA recognize the importance of kokanee in Lake Pend Oreille. In accordance with Section 7 of the ESA, the Corps requested the USFWS's determination that: 1) the FWPO is described in the Corps' and BPA's 1999 Multi-Species Biological Assessment of the Federal Columbia Power System; and 2) the effects analysis in the USFWS's subsequent 2000 Biological Opinion on the Effects of the Federal Columbia River Power System on Threatened and Endangered Species remains valid. In summary, USFWS found that the effects to kokanee, and therefore bull trout, from the FWPO are expected to be insignificant.

Response to Comment Albni110035-40

Please reference response to comment Albni110035-24 for response to kokanee entrainment. The commenter correctly indicates that FWPO could be used to 'catch' a storm event thereby decreasing velocities in the Pend Oreille River and potentially entrainment. As described in section 2.3 of the EA, this would be one of the factors considered by BPA in requesting an operation under FWPO. This would only be possible when there is room in the lake to store water (such as if the lake elevation were already at elevation 2056 feet).

FWPO would have no effect on flood management at AFD. FWPO would not increase the probability of higher river velocities in the Pend Oreille River if a flood happened to occur during FWPO.

Response to Comment Albni110035-41

Please reference master response 1 for response to comment on erosion and wildlife.

Response to Comment Albni110035-42

Please reference master response 4 for response to comment on recreation.

Please reference response to comment Albni110035-29 for response on recreation and economic impact.

Response to Comment Albni110035-43

The section cited by the commenter (Section 6.2.2) is intended only to provide an overview of the work performed by IDFG, Avista, and others in the Clark Fork delta. While more details could have been provided in this section, we do not agree that this reflects a lack of thoroughness in our analysis; rather it is an attempt to concisely summarize existing information where possible, in keeping with NEPA implementing regulations (see e.g., 40 C.F.R. 1502.2 and 1508.9). The efforts by IDFG, Avista, and others in this area are noted, as are IDFG's comments concerning the proposed Kalispel MOA.

Response to Comment Albni110035-44

Effects of FWPO on hunting which includes movement/access around the lake shoreline are provided in section 4.14 of the EA. Also reference response to comment Albni110004-2, and master response 4 for additional detail on recreation impacts of FWPO.

Response to Comment Albni110035-45

A thorough NEPA analysis uses geographic boundaries large enough to include all potentially significant effects on the resources of concern. Towards that end, we have included the six federally recognized Indian Tribes with reservations and/or areas of interest, including areas reserved and protected by treaty as usual and accustomed fishing, hunting and gathering areas, within the project area. The only Indian Tribe with a reservation within the project area is the Kalispel Tribe of Indians. The five other tribes have ancestral lands that extend into the project area and/or are located immediately downstream of AFD. Therefore, the proposed action has the potential to influence or affect resources of concern to those tribes.

Albni110036 Collins/Bonner SWCD

I am writing on behalf of the Bonner Soil & Water Conservation District (BSWCD). We thank you for this opportunity to comment. BSWCD believes that no actions should take place that present any chance of increased impacts on the Lake Pend Oreille system until mitigation funds can be directed to operational losses from the dam. The communities that will be affected by this proposal are small and dependent on Lake Pend Oreille for their livelihoods and recreation. What may appear to be small losses or costs to Bonneville Power Administration and the Army Corps add up to be much larger in their effect on these small communities. The EA suggests only minor impacts or impacts of unknown significance. On the contrary, we believe the potential impacts to be significant. BSWCD has been actively engaged with programs to control aquatic invasive species for years. We believe that the impacts that the fluctuation	110036-1 110036-2
will have on flowering rush are minimized in the EA. The spread of flowering rush is increased dramatically with ice movement and waterfowl disturbance during the drawdown period. Flowering rush rhizomes are very brittle and quickly break apart. Cold conditions followed by moving water will increase flowering rush movement throughout the watershed. This will lead to an inundation of flowering rush to private dock owners, as well as the potential to change the ecosystem of entire bays. It will also significantly increase aquatic invasive species management costs. If mitigation costs are not secured, these costs will fall on landowners, the State, and local government. To date, the Idaho State Department	110036-3
of Agriculture (ISDA) has spent approximately six million dollars on research and control of aquatic invasive plants in Lake Pend Oreille. The EA assumes that "the existing monitoring and eradication program" will continue, although the program it is referring to is funded by ISDA and funds are not guaranteed. In addition, costs associate with the impacts from this proposal should not fall on the State's	110036-4
and therefore BSWCD is calling for an Environmental Impact Statement(EIS) to be conducted in order to further investigate the likely impacts associated with winter fluctuation to the spread of flowering rush. BSWCD feels that the EA section on ice movement leaves room for possible damages to local	110036-5
infrastructure and losses to recreation. We believe these damages will have significant costs to the local community. These include infrastructure repair costs to municipalities and local property owners and recreation loss due to infrastructure damage and loss of ice fishing and ice skating opportunities. We believe the comment period deadline was set at a time of was when local marines watefront.	110036-6
landowners, and community members were too busy supporting their livelihoods to adequately look over the extensive EA. As a result, we believe the comments you receive regarding the EA will not adequately	110036-7
represent the community's view on this important decision. BSWCD also has concerns with the possible increase in erosion and the effects that this could have on native fish populations and wildlife habitat. We feel that our concerns have been addressed thoroughly by the comments made by the Idaho	110036-8
Conservation League. Thank you for this opportunity to comment. We hope that you will take these statements into consideration before moving forward with this proposal. Herman B. Collins Board Chairman.	110036-9

Response to Comment Albni110036-1

Please reference master response 7 for response to comment on mitigation.

Response to Comment Albni110036-2

Please reference master response 6 for additional response on significant effects.

Response to Comment Albni110036-3

Please reference master response 5 for additional response to comment on flowering rush.

The EA has evaluated the extent of existing operations and implementation of FWPO on flowering rush. The commenter cites waterfowl disturbance as a key method of spreading this species. This in concert with the relatively unvegetated banks of the lake are important reasons

why flowering rush is spreading. However, these conditions exist with or without FWPO. Rush will thus be spread with or without FWPO which is the conclusion in the EA. The commenter also cites ice movement as a dispersal mechanism for rush. The EA acknowledges this, and for this reason FWPO could potentially increase the rate of rush dispersal around the lake as stated in the EA. Over the long term, the fate of rush will not be determined by FWPO but by other factors that are independent of FWPO. For this reason, FWPO cannot be considered to significantly affect the dispersal of rush around the lake.

Response to Comment Albni110036-4

Please reference master response 5 for response to comment on flowering rush.

Response to Comment Albni110036-5

Please reference master response 6 for response to comment on preparation of an EIS.

Response to Comment Albni110036-6

Please reference master response 2 for response to comment on docks and master response 4 for response to comment on recreation.

Response to Comment Albni110036-7

Please reference master response 2 for response to comment on docks.

The Corps and BPA have extensively coordinated the FWPO proposal with the local community over the past two years. This coordination is documented in chapter 7 of the EA. We disagree that the time of year was not appropriate for release of the draft EA as asserted by the comment. On the contrary, due to the many vacation homes in the region, the summer time period maybe the most appropriate time to release a draft EA to ensure maximum participation because many residents are gone outside of the summer season.

Response to Comment Albni110036-8

Please reference master response 1 for response to comment on erosion. While FWPO may result in effects on individual fish, it is not expected to have any measureable impact on native fish populations.

Response to Comment Albni110036-9

All comments were considered before making a decision about the project.



Albni110037 Cromwell/Seattle City Light

Seattle City Light Jorge Carrasco, Superintendent

September 13, 2011

Ms. Leah Wickstrom CENWS-PM-CP-CJ U.S. Army Corps of Engineers P.O. Box 3755 Seattle, Washington 98124-3755

Via electronic submission through to www.bpa.gov/comment

Draft Environmental Assessment - Albeni Falls Dam, Flexible Winter Power Operations

Dear Ms. Wickstrom:

Thank you for the opportunity to comment on the Draft Environmental Assessment ("EA") for Albeni Falls Dam Flexible Winter Power Operations. Seattle City Light ("Seattle") is a signatory of the Pacific Northwest Coordinating Agreement ("PNCA") through which it coordinates operation of Boundary Hydroelectric Project on the Pend Oreille River downstream of Albeni Falls Dam ("AFD"). We appreciate the efforts of the U.S. Army Corps of Engineers ("USCOE") and Bonneville Power Administration ("BPA") to produce a comprehensive EA for this proposed federal action.

However, Seattle believes that while the EA may have comprehensively analyzed the benefits to the Federal Columbia River Power System ("FCRPS") of the Federal Winter Power Operations ("FWPO"), it has not considered sufficiently the downstream non-federal generation effects and the losses of regional capacity and energy supply. As a consequence, the EA has also not considered the impacts to the individual non-federal project owners and 110037-1 their abilities to maintain the same level of capacity and energy adequacy previously assumed to be available to meet individual utility loads and regional loads during FWPO. While the EA indicates that Seattle, as well as other downstream operators, may benefit at times from the proposed winter operations, and other power-related impacts may be mitigated by

700 Fifth Avenue, Suite 3200, P.O. Box 34023, Seattle, WA 98124-4023 Tel: (206) 684-3000, TTY/TDD: (206) 684-3225, Fax: (206) 625-3709 An equal employment opportunity employer. Accommodations for people with disabilities provided upon request. Ms. Leah Wickstrom September 13, 2011 Page 2

exercising contractual rights under the PNCA. Seattle believes that it is necessary to take steps to develop an operating agreement with BPA, the USCOE, and the other affected project operators to ensure that not only benefits be derived by the downstream parties at times during FWPO, but to also ensure that at other times such downstream parties are able to maintain the same level of capacity and energy adequacy previously assumed to be available to meet individual utility loads and regional loads.

To further illustrate Seattle's concerns, because the EA failed to take into account the entire generation effect at the four plants downstream of AFD, the proposed changes to operations at AFD may appear to have a relatively small impact. For example, a decrease in outflow of 10,000 cfs at AFD results in a loss of federal energy of approximately 18 MW. However, 110037-3 such a decrease would affect non-federal project output by more than ten-fold or by more than 530 MW¹. The adverse impacts on capacity are even larger. AFD has only 49 MW of capacity. When it is at minimum discharge for the purpose of refilling, lack of inflow at the five plants immediately downstream could potentially disable over 2,000 MW of reliable Northwest capacity. We look forward to working with BPA and the USCOE to assure that this sort of risk is minimized through better coordination of operations. Seattle understands from statements made at the public meetings held by the BPA and USCOE that Seattle's 110037-4 rights under the PNCA agreement, in particular our rights to "in lieu energy return", will be fully available for the quantity of water that is the subject of the draft EA, and look forward to a written affirmation of that fact.

We agree with the EA author's assertion that "active communication and coordination with downstream operators regarding AFD drawdown activities would help further reduce power-related impacts" (page 4-32 of the draft EA). To that end, Seattle urges the federal operators to adopt the broadest possible interpretation of this statement. Liberal access to operations planning data from AFD and BPA at the earliest possible date with regular updates would enable Seattle, and other downstream operators, to minimize impacts of AFD operations on downstream facilities and optimize use of hydroelectric potential. Useful data includes actual and forecasted inflows, elevations, reservoir release volumes, planned rate of change in elevations, and any other information considered by the USCOE and BPA in planning AFD operations.

Finally, Seattle hopes to see enhanced sharing of AFD planning data evolve into a broader regional discussion of how to further improve coordinated hydroelectric operations throughout the length of the Pend Oreille River, a development that could potentially benefit many utilities and ratepayers around the Northwest and mitigate the concerns identified above.

¹ Based on the PNCA's 2011Actual Energy Regulation for H/K and the rated capacities of downstream plants.

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Ms. Leah Wickstrom September 13, 2011 Page 3

We look forward to review of the final environmental assessment, as well as continuing discussions with stakeholders and other interested parties. Please contact me at (206) 684-3856 if there are any questions.

Sincerely,

Robert W. Cromwell, Jr. Director, Power Contracts & Resource Acquisition Division Power Supply & Environmental Affairs Business Unit

RWC:cmw

cc: Stuart Clarke, BPA – Seattle Sandy Hunt, Pend Oreille PUD Jim McNaughton, BC Hydro

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Response to Comment Albni110037-1, Albni110037-2, and Albni110037-3

The EA did consider the impact of FWPO on non-federal generators in Section 4.15.2. While it is true that the downstream projects capacity and energy supply will be reduced during the period when outflow from Albeni Falls is lower than inflow the inverse is also true. When outflow from Albeni Falls is higher than inflow downstream projects capacity and energy supply will be increased. Further, because Albeni Falls will generally be storing water during periods of lower energy prices there would likely be available energy in the market to meet individual utility loads and regional loads from other sources. Because energy prices are a function of supply and demand in the region, timing flows from Albeni Falls such that more energy is produced from the federal and non-federal hydroelectric system during periods of higher prices will generally align higher capacity and energy supply with periods when it is most needed in the region.

Response to Comment Albni110037-4

Seattle City Light will have full access to their rights and their associated obligations under the PNCA, including any provisions that would allow shaping of energy deliveries within the day.

Response to Comment Albni110037-5 and Albni110037-6

BPA is willing to discuss with Seattle City Light, Pend Oreille Count PUD and other project operators upstream and downstream of Albeni Falls Dam what type of information would be useful to be shared regarding each party's forecasted project operations. There is potential for each to benefit from sharing the forecasted operations upstream and downstream of Albeni Falls Dam.

The Corps relies on publicly available data and forecasts to comply with publicly available operating guidelines and restrictions. We publish planned operations as soon as those plans have been made via the Columbia Basin Teletype or CBT. Real-time data including elevations, inflows and discharge are available on our website. Plans are sometimes altered at the last minute due to new management issues that arise and/or inflows not matching forecasts. AFD operates downstream of Cabinet Gorge Dam, a privately-owned major peaking power plant, and must respond to adjustments they make for unit outages, forecast error, market conditions and other reasons.

Albni110038 Osterman/Kalispel Tribe



Kalispel Tribe of Indians P.O. Box 39 Usk. WA 99180 (509) 445-1147 (509) 445-1705 fax

www.kalispeltribe.com

September 13, 2011

Ms. Leah Wickstrom CENWS-PM-CP-CJ U.S. Army Corps of Engineers P.O. Box 3755 Seattle, Washington 98124-3755

RE: Albeni Falls Dam, Flexible Winter Power Operations

Dear Ms. Wickstrom:

Thank you for the opportunity to comment on the Draft Environmental Assessment (EA) of the proposed Albeni Falls Dam Flexible Winter Power Operations. The Kalispel Tribe has appreciated working with the Corps and BPA at recent meetings to resolve some of the Tribe's initial questions regarding this proposal. However, the Tribe continues to have a number of outstanding concerns, which it submits below for your consideration.

General Concerns

Tiering

NEPA does not permit tiering to an EIS that becomes outdated by new developments. *Blue Mountains Biodiversity Project v. Blackwood*, 161 F.3d 1208, 1214 (9th Cir. 1998). The Draft EA does not adequately identify significant environmental and scientific developments that have occurred in the Columbia River watershed in the fifteen-year time period since the SOR EIS was finalized. This omission is significant because such developments are necessary to informed decision-making and are useful in evaluating the accuracy of conclusions based on science and information from 1995 or earlier. The EA should therefore identify relevant developments from 1995 to the present and explain whether those developments are consistent with the environmental forecast from the SOR EIS. If any substantial inconsistencies exist, an EIS should be performed to assess the environmental impact of the proposed operation on the <u>existing</u> environment based on the best <u>current</u> science.

The Tribe respectfully submits that the proposed operation itself was not foreseeable at the time of the SOR EIS. Although section 5 of the EA explains that the preferred alternative in the SOR EIS would have allowed more environmentally destructive winter operations than the proposed 110038-2

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operation permits, the Albeni Falls project has never been managed in that way. For the past fifteen years, the Tribe and the agencies have always discussed winter lake level as a fixed event along a contingent curve—drafting the lake to a negotiated basement and refilling to accommodate flood control. The proposed operation is a marked deviation from standard winter operations and merits the "hard look" that the SOR EIS neither provided nor anticipated needing to provide.	110038-2 (cont'd)
Cumulative Impacts	
Although the EA includes an entire section on cumulative impacts, the document does not sufficiently evaluate the incremental impact of the proposed operation on the environment. This shortcoming is most obvious in the EA's discussion of cultural and erosive impacts. For instance, section 4.13.2 states:	110038-3
FWPO will result in periods with higher flow during the winter compared to the No Action Alternative. This may incrementally increase the erosion of existing cultural resources within this reach. However, this effect is expected to be minor, because much higher flows and, therefore, greater potential for erosion occurs during the spring snowmelt	110038-4
Similarly, section 4.5.2 states:	
An increase in the frequency and magnitude of water level change would result in increased erosion, primarily due to an increase in bank scepage and piping. This increase would be an extension of existing processes related to soil sloughing and piping from the repeated wetting and drying of sediments caused by water level variation and associated freeze-thaw effects. These increases are expected to be incremental relative to the existing erosion rate. The flows associated with the winter operations are expected to be significantly lower than the peak flows experienced annually during the spring snowmelt.	110038-5
In both cases, the EA summarily dismisses the impact of the proposed action because crosion is worse during spring snowmelt. The relevant question for purposes of a cumulative impact analysis is not whether more damaging impacts exist at other times, but what the incremental impact of the proposed action is on top of other existing and foresceable impacts. As the Tribe's specific concerns outlined below explain, these impacts are significant and merit additional analysis.	110038-6
Specific Concerns	
Cultural/Historic Resources	
The Tribe disagrees with the EA's conclusion that the proposed operation will have only "minor" effects on cultural resources. For at least a decade, wintertime operations have exposed historic sites to periodic erosive effects at specific elevations. One in five years all sites between 2051' and 2055' would get "slapped," whereas four out of five years only those sites at 2055' and above would be susceptible to erosion. The EA proposes, as an alternative, two potential drafts	110038-7
2 P a g e	I

and fill events per season within the 2051' and 2055' bracket. This operational regime would effectively increase erosive events tenfold for sites below 2055' relative to the past decade and reduce the size of the window in which to implement appropriate mitigation measures.	110038-7 (cont'd)
The draft EA also states that the rate of site decay shall be tracked by existing site monitoring protocols at the Albeni Falls Dam project. There are two problems with this statement. First, the Albeni Falls Programmatic Agreement, which determines mitigation priorities and necessities pursuant to the SWPA, has yet to be drafted and agreed to by various stakeholders. Second, the current IDIQ contract between the Corps and the Kalispel Tribe did not consider the possibility of wintertime monitoring when snow conditions make it impossible to access many boat ramps and difficult to safely inspect sites. Accordingly, there is no mechanism in place to carry out the equisite monitoring.	110038-8
Finally, the Draft EA acknowledges the potential for downstream impacts to historic properties but delegates mitigation/management of those impacts to third parties. This approach to nitigation is inconsistent with law—namely, that an agency undertaking shall minimize, avoid or nitigate for its impacts to significant historic properties. 36 C.F.R. § 800.8(c)(4). The EA must to a more thorough job of identifying potential impacts to historic properties, explaining how hose impacts will be minimized, avoided, or mitigated, and if mitigation is appropriate, lescribing how it will be funded and who will perform the mitigation. Foisting mitigation for whatever impacts may occur on unidentified third parties does not comport with NHPA or NEPA.	110038-5
Shoreline Erosion	
Che Kalispel Tribe has a limited land base, including 70.742 feet of shoreline on the Pend Oreille River. As explained above, the proposed operation will alter the frequency and magnitude of rosive events occurring on Kalispel shorelines. Neither the EA nor SOR EIS adequately assesses the cumulative, long-term impacts of the new winter operational regime on Kalispel horelines (nor on other downstream shorelines for that matter).	110038-1
Total Dissolved Gas	
The Draft EA satisfies the Tribe's initial concerns regarding total dissolved gas (TDG) at Albeni falls Dam. By contrast, the proposed operation will cause significant near-term TDG impacts below Box Canyon. According to the Corps' own water quality modeling, the proposed peration will cause additional days of TDG violations above the 110% criteria (and concomitant cute gas bubble trauma in fish) until new turbines capable of handling higher flows are installed t Box Canyon. The Tribe requests that the higher flows anticipated with this proposed peration be managed to protect water quality and fisheries downstream of Box Canyon until ew capacity is created with turbine upgrades or impacts are adequately mitigated.	110038-
ish Entrainment	I
₽ a g e	

The proposed operation will increase fish entrainment through Albeni Falls Dam, in particular juvenile bull trout and spawning westslope cutthroat trout from the Priest River. Over the past several years, the Tribe has documented a small population of pre-spawn westslope cutthroat trout at the mouth of the Priest River in the winter and early spring. This time period also coincides with the out migration of juvenile bull trout from the Priest River as documented by telemetry studies. In 2011, as an example, the Tribe found that 31% of the westslope cutthroat trout tagged at the mouth of the Priest River became entrained and were lost to the overall gene flow of that population. In addition, over the course of the Restoration of Bull Trout Passage at Albeni Falls Dam project, the Tribe has found an alarmingly high number of entrained fish below the project as soon as flows begin to increase at Albeni Falls Dam. The number of entrained fish appears to track closely each spike in the hydrograph at the project. It is only recently that the Tribe has begun to realize the magnitude of entrainment and "take" associated with the operation at Albeni Falls Dam. Given the dramatic spike in wintertime flows associated with the proposed operation, there is a need for additional studies enumerating the entrainment and subsequent mitigation for the impacts.	110038-12
Fish Stranding	
The Tribe still has a concern with fish stranding and the cross-sections of the Pend Oreille provided by the Corps illustrate that point. River mile 69.57, 68.54 and 66.43 are all along the Kalispel Reservation. These areas contain backwater sloughs that will have water during high discharge of winter operations. Once flows are reduced, these areas will be subject to fish stranding.	110038-13
In summary, the EA lacks sufficient data and details on the above-mentioned items. BPA should either conduct an EIS to further examine these issues or monitor and mitigate the impacts of the resource areas described above. Again, thank you for the opportunity to comment on the draft EA. If you have any questions, feel free to call me.	110038-14
Sincerely, D. E. D. D. Deputy Director Deane Osterman, Executive Director Kalispel Natural Resource Department	
4 Page	

Response to Comment Albni110038-1 and Albni110038-2

Please reference master response 6 for response to comments on NEPA.

Response to Comment Albni110038-3, Albni110038-4, Albni110038-5, and Albni110038-6

We disagree with the comment asserting that the EA summarily dismisses the erosion impact because it is worse during the spring snowmelt. The purpose of comparing erosion caused by FWPO to that which occurs during high flows during the spring is to put into context the relative magnitude of the erosion. The EA acknowledges that FWPO might result in incremental erosion downstream of AFD. The nature of this incremental erosion is more completely described by a comparison to the level of erosion that occurs generally in this stretch of the river. The range of flows that would occur under FWPO is relatively modest compared to the flows that occur during the spring. This speaks directly to the relative effect of FWPO on erosion. While erosion caused by FWPO is additive relative to the erosion that occurs during the spring, the relative magnitude of this additive erosion is inconsequential compared to the magnitude of the erosion in the spring. Please also reference master response 1.

Response to Comment Albni110038-7

The word "minor" has been removed from the EA and replaced with the statement "this effect is not expected to significantly increase above the existing conditions ..." We acknowledge that the proposed operation would increase the frequency of exposure of cultural sites between elevations 2051 feet and 2055 feet over the existing condition thus altering the potential for erosion at these sites. This generally would result in increasing the erosion of some cultural sites while decreasing the erosion of others. There is potential for erosion at the lower elevations (around 2051 feet) to be less under FWPO. This is due to the water storage and corresponding increase in lake elevation that would occur thereby flooding these lower elevations and protecting them from wave action and subsequent erosion. The change in the rate of erosion at any specific site would be much less than the order of magnitude asserted by the comment and is expected to be incremental relative to the existing erosion rate. See also master response 1.

Response to Comment Albni110038-8

Mitigation needs and priorities for historic properties management at the Albeni Falls project are identified and addressed through the FCRPS Cultural Resource Program (Program). The Program, administered jointly by the Army Corps of Engineers, the Bonneville Power Administration, and Bureau of Reclamation, has been in place since 1997, and is implemented through and the Systemwide Programmatic Agreement for the Management of Historic Properties Affected by the Multipurpose Operations of Fourteen Projects of the FCRPS (SWPA) (2009).

The SWPA was developed following commitments made by the agencies in their respective Records of Decision issued in 1997 following the analysis of the SOR EIS. As a part of the SOR process, the agencies found that project operations have the potential to adversely affect historic properties, and may continue to threaten historic properties (including cultural resources) eligible for the National Register of Historic Places.

The SWPA defines the FCRPS undertaking as operation and maintenance of the 14 Columbia

and Snake River Federal hydropower dams of the FCRPS for all of their multiple authorized purposes, including all construction (routine and non-routine) and operation and maintenance activities required for current and future operation of the FCRPS. It provides a framework of standards, requirements, and obligations for the Agencies' compliance with Section 106 of the National Historic Preservation Act. The SWPA was developed in cooperation and consultation with tribes, state and tribal historic preservation officers, the Advisory Council on Historic Preservation, federal land managing agencies and other interested parties.

Other management documents that guide historic properties management at the Albeni Falls project include the Albeni Falls Historic Properties Management Plan (HPMP) (2008), which summarizes specific information about the nature and condition of historic properties at the project, and Annual and Five-year plans, which are continuously updated with current information about work needs and priorities. These management documents may be augmented in the future by a project-specific programmatic agreement for Albeni Falls (currently in development), which will implement the project HPMP.

Monitoring to evaluate the condition of historic properties and aid management decisions is conducted annually. Monitoring work, conducted under contracts administered by the Army Corps, will continue in the future. Monitoring frequency may increase or decrease if warranted by future operational changes. Although current contracts do not include specifications for winter season monitoring, those contracts could be modified to respond to emerging needs. While the lake is less accessible during the winter due to more limited boat ramp access and weather as described in the comment, monitoring can still be conducted under these conditions.

Response to Comment Albni110038-9

Responsibility for mitigating downstream impacts on historic properties has not been delegated to third parties. The Corps, BPA, and the Bureau of Reclamation share responsibility for impacts on historic properties resulting from operation and maintenance of the FCRPS. The Corps and BPA share responsibility at 12 FCRPS projects (including AFD), and the Bureau of Reclamation and BPA share responsibility at two FCRPS projects (including Grand Coulee). Any downstream impacts at Grand Coulee resulting from operational changes at AFD would be managed through the same FCRPS Cultural Resource Program that allows agencies to mitigate effects at the Albeni Falls project, though different regional partners might provide advisement about appropriate mitigation at Grand Coulee. This approach is consistent with direction at 36 CFR 800 and the terms of the SWPA.

Response to Comment Albni110038-10

Please reference master response 1 for response to comment on erosion..

Response to Comment Albni110038-11

Please reference response to comment Albni110024-5 for response to comment on request to modify flows to avoid spill and Box Canyon Dam.
Response to Comment Albni110038-12

The data provided in the comment were collected under current operations. These data thus provide more information on the magnitude of the entrainment effect under current operations. It is unclear how this translates to effects under FWPO. The comment references the outmigration season and the Priest River. Outmigration could be triggered by flows in the Priest River or occur independent of flow. FWPO would have no effect on this. The comment further indicates that the 'number of entrained fish appears to track closely each spike in the hydrograph' suggesting that changes in flow in the Pend Oreille River in response to FWPO could cause these fish to move downstream. While we don't discount this possibility, the opposite could be equally true. Lower flows under FWPO could decrease fish movement downstream and thus decrease entrainment at AFD. The net result is simply a change in the timing of entrainment, but the overall rate of entrainment would be similar to current operations.

The precise timing of a high flow or a FWPO 'spike' relative to the timing of fish migrating out of the Priest River might also be an important factor. There are likely numerous factors involved here that require further study to fully understand. New figures provided in the EA indicate that river velocity in the Pend Oreille River is noticeably higher downstream of the Priest River both under existing conditions and FWPO. These velocity cues may spur fish species downstream regardless of the total flow. This is another factor that may affect the behavior of fish migrating from the Priest River. We acknowledge that periodic high flows under FWPO could notably increase velocities in the Pend Oreille River downstream of the Priest River compared to existing conditions, and this could affect fish migration and would likely affect fish movement in the river. While we acknowledge there is some uncertainty, we maintain that fish behavior (independent of flow) is the primary driver behind the timing and rates of entrainment at AFD as stated in the EA. Flow may play a role and alter the timing of entrainment, but it is doubtful the overall rate of entrainment would be affected by FWPO. If FWPO were not implemented, these fish would likely still migrate downstream.

As we have previously discussed, an entrainment study has not been conducted at AFD. Based on discussion with resource agencies, the current priority is upstream fish passage at AFD. Issues related to downstream fish passage including fish entrainment will be investigated in the next phase of the AFD fish passage feasibility determination project.

Response to Comment Albni110038-13

We agree that some fish stranding is possible in response to FWPO. This is stated in the EA.

Response to Comment Albni110038-14

Please reference master response 6 for response to comment on preparation of an EIS and master response 7 for response to comment on monitoring and mitigation.

A Eckstrom/Lake Pend Oreille W	llbni110039 /aterkeeper
September 13, 2011	
To whom it may concern:	
Thank you in advance for considering Lake Pend Oreille Waterkeeper's (LPOW) following comments about the proposal to operate Albeni Falls Dam for Flexible Winter Power Operations (FWPO). This letter is intended as Lake Pend Oreille Waterkeeper's official request that the Army Corps of Engineers (USACE) adopt the "No Action Alternative," as detailed in your July, 2011 Environmental Assessment (EA). Alternately, we advocate that you fully research your preferred alternative, the FWPO, and develop an Environmental Impact Statement (EIS) before proceeding with FWPO.	110039-1 110039-2
LPOW works in the public interest to protect water quality in the Pend Oreille watershed, as well as to advocate for water management that is protective of our common interest in maintaining a water body that meets beneficial uses as identified under the federal Clean Water Act. The USACE preferred alternative of FWPO, and its potential consequences, have not been sufficiently researched to ensure beneficial uses would be met if the preferred alternative for FWPO are implemented.	110039-3
Specifically, LPOW's concerns are related with erosion and water quality, as well as propagation of invasive species.	
The USACE anticipates an 'incremental' increase of erosion if the preferred alternative for FWPO is implemented, and indicates so in the EA. No data is provided that confirms the erosion would be incremental rather than more significant. The EA also indicates that there is inconclusive data about nutrient release from sediment during fluctuation.	110039-4
Additionally, the USACE indicates that erosion as well as related potential harm to water quality will be monitored. The USACE's intent to monitor is presented as if it were justification for allowing the activity which will cause increased erosion and which could further impair water quality. This is unacceptable.	110039-5
Increased nutrient pollution is in direct conflict with both the Pend Oreille Lake Nearshore Nutrient TMDL and the Pend Oreille River's inclusion on the federal 303(d) list of waterways already impaired with phosphorous pollution. The intent of the law in both cases is to ensure that pollution is decreased in order to ensure that beneficial uses are supported into the future. Unfortunately, according to the preferred alternative for FWPO, the monitoring information will be gathered after the FWPO has already been implemented, and related pollution problems have already been	110039-6

exacerbated. Additionally, there is no assurance that the monitoring would be used to take action to reduce this pollution in the future. The USACE needs to provide evidence that the proposed FWPO will not further impair water quality and undermine beneficial uses before proceeding with this preferred alternative.	110039-6 (cont'd)
There has been an exponential increase in the human population on Lake Pend Oreille in the approximately 25 years since the last EIS regarding flexible winter pool was developed. Along with changes in the human population came changes in the aquatic system. Thus, whatever historical data you retained from that archaic document is largely moot. One of the more significant changes in the last 25 years is the introduction	110039-7
and spread of aquatic invasive weeds. Invasive weeds such as Flowering Rush and Eurasian Watermilfoil are detrimental to beneficial uses such as swimming, fishing and enjoying the aesthetics of the water body. These same weeds are fed by excessive nutrients, which would likely increase under FWPO, as described above.	110039-8
The EA indicates "The Idaho Department of Agriculture manages a local task force that monitors the spread of invasive species around the lake. They identify problem locations and then apply chemical treatments to control these species." Several inaccuracies in this statement indicate inadequate research about the invasive species issue in the preparation of this EA. The "local task force" is not "managed" by the Idaho Department of Agriculture (ISDA), it does not monitor the spread of invasive species (the ISDA does that) and it does not apply chemical treatments to control the species (an independent applicator does it). The Bonner County Aquatic Invasive Species Task Force, which LPOW is a current member of, did develop a strategic plan that calls for an integrated approach to invasive species management.	110039-9
Unfortunately, there is currently no known effective treatment for Flowering Rush , whether chemical herbicide or otherwise. Therefore, in order to support beneficial uses in the Lake Pend Oreille Nearshore and Pend Oreille River areas that are infested with this invasive weed, the only currently available option is to do everything possible to minimize its spread.	
The USACE needs to provide evidence that the proposed FWPO will not directly increase the spread of Flowering Rush and that it will not increase nutrients which feed invasive weeds, before proceeding with that alternative.	110039-10
For all of the above reasons, we implore you to do what is both the right thing and legally required: either adhere to the "No Action Alternative" or	110039-11

develop a new Environmental Impact Statement addressing the aforementioned concerns. Thank you for considering these comments. Sincerely, Jennifer Ekstrom Executive Director – Waterkeeper Lake Pend Oreille Waterkeeper 208.597.7188

Response to Comment Albni110039-1

The commenter's request for selection of the no-action alternative is noted.

Response to Comment Albni110039-2

Please reference master response 6 for response to comment on preparation of an EIS.

Response to Comment Albni110039-3

AFD is a multiple purpose project authorized for power, recreation, flood risk reduction, and fish and wildlife conservation as described in chapter 1 of the EA. We disagree with the commenter that effects of FWPO have not been sufficiently researched. The EA is a rather extensive document that includes new modeling and detailed analysis of the effects of FWPO. With respect to the Clean Water Act, we do not anticipate exceeding any water quality criteria in Lake Pend Oreille or a as a result of actions at AFD. Also reference master response 6.

Response to Comment Albni110039-4

Please reference master response 1 for response to comment on erosion and water quality.

Response to Comment Albni110039-5

The objective of the water quality monitoring program is to determine the existing physical, chemical, and biological condition of Lake Pend Oreille and the Pend Oreille River at Albeni Falls Dam. Meeting this objective will allow the Corps and BPA to compare existing water quality to Idaho and Washington State standards, identify any project related water quality trends, and better understand the role of AFD on the water quality in the Pend Oreille River. We do not consider the presence of the monitoring program to be justification for FWPO. The monitoring program has been ongoing for many years irrespective of FWPO.

Please reference master response 1 for response to comment on erosion and water quality.

Response to Comment Albni110039-6

The Corps and BPA do not expect FWPO to affect nutrient concentrations in Lake Pend Oreille. The rationale for this conclusion is presented in the EA. Note that the Corps has annually monitored water quality in the lake since 2005. Monitoring data will be used to verify the conclusion that FWPO will not alter water quality in the lake. Also reference master response 1.

Response to Comment Albni110039-7

Please reference master response 6 for response to comment on preparation of an EIS.

Response to Comment Albni110039-8

Please reference master response 5 for response to comment on invasive species.

We disagree with commenter's assertion that nutrient levels will increase in Lake Pend Oreille as a result of FWPO. The rationale for this conclusion is described in the EA. No information is provided by the commenter to alter this conclusion or support a contrary conclusion. Also reference master response 1.

Response to Comment Albni110039-9

Please reference master response 5 for response to comment on invasive species.

Response to Comment Albni110039-10

Please reference master response 5 for response to comment on invasive species, and master response 1 for response to comment on water quality.

Response to Comment Albni110039-11

Please reference master response 6 for response to comment on preparation of an EIS.



Albni110040 Hart/Idaho Consumer Owned Utilities Association

September 12, 2011

Governor C.L. Butch Otter PO Box 83720 Boise, ID 83720

Dear Governor Otter,

The combined twenty-two electrical utilities making up the Idaho Consumer-Owned Utilities Association (ICUA) are writing you in support of the Bonneville Power Administration's (BPA) proposal to the Army Corps of Engineers to regarding the Albeni Falls Dam.

BPA has proposed to operate Albeni Falls Dam during the winter months (approximately late December through March) to increase water storage and power generation potential. Under BPA's proposal, the operating range would generally be between elevation 2,051 feet and 2,056 feet.

This operation would allow operators to:

- Store additional water in the lake when water is available from late December through March.
- Use the water during periods when it would provide a higher value to serve regional power demands, for example during a cold snap or a major power plant outage.

ICUA believes the proposal BPA has put forward for Albeni Falls would benefit all BPA rate payers and that it is economically and scientifically sound.

We urge you to support BPA in this effort and direct Idaho's pertinent state agencies to support the project as well.

Sincerely,

William I Hart The

Will Hart Executive Director, Idaho Consumer-Owned Utilities Association

Response to Comment Albni110040-1

The commenter's support for FWPO is noted.

Albni110041 Hansen September 12, 2011 Colonel Bruce A. Estok Seattle District Commander U.S. Army Corp of Engineers 4735 East Marginal Way South Seattle, Washington 98124-3755 Nola Leyde, Public Affairs Specialist Attn. Joe Summers, Manager Albeni Falls Dam Re: Bonneville Power Administration Request to Alter the Albeni Falls Dam Winter Operations Between 2051-2056 feet (lake level elevation). Dear Colonel Estok: It is respectfully requested that U.S. Army Corp decision to grant the above referenced BPA proposal be denied. As an owner of the Willow Bay Marina located on the Pend Oreille River between Albeni Falls Dam and Lake Pend Oreille, I expressed our concern to Corps staff that raising the lake/river levels during the winter months can significantly damage our marina. This marina was permitted by the Army Corps and the Idaho Department of Lands in 2007 and 83 slips have been constructed of the 115 slips permitted. 110041-1 The potential adverse impacts associated with the Corps approval of the BPA proposal is a high risk proposition with potentially significant consequences to the interests of our Community and to the interests of the State of Idaho. I am hopeful the Corps decision will be consistent with the stated Corps Environmental Operating Principle (2009) to "continue to accept corporate responsibility and accountability under the law for activities and decisions under our control that impact human health, safety and welfare in addition to the continued viability of natural systems." As a waterfront resident on Lake Pend Oreille, an owner of the Willow Bay Marina on the Pend Oreille River and a marina developer in Washington State for the past 35 years, the following comments are offered for your consideration and will be germane to your pending decision: **Public Informational Meetings** On December 8, 2009 in Sandpoint, Idaho, I attended two public information meeting that were held by the U.S. Army Corps of Engineers staff which included a representative from BPA, to discuss the potential impacts that may occur if the 110041-2 Corps grants the BPA proposal. At both meetings the Corps staff unequivocally stated the Corps had not made a decision with respect to the BPA Proposal and "if

it was determined by the Corps there were potential adverse impacts to either the Lake Pend Oreille environment or adverse impacts to public or private property the BPA request would not be granted" (emphasis added).	110041- (cont'd)
<u>BPA and Army Corp Commitment to Mitigate Impacts Associated with the</u> <u>BPA Proposal</u>	
In reviewing Level Management Programs and Operational Policies regulated by the Corps in the northern U.S. Regions, the major benefits of lowering lake levels during the winter months is flood control and <u>elimination of ice damage to</u> shoreline structures and natural systems.	
To date, BPA and the Corps have not addressed mitigating damages to shoreline property owners. With rising of the lake level during ice conditions, potentially significant damage will have occurred and any response by BPA or the Corps will be after the fact and without any recourse to repair damages shoreline structures.	
There are over a 1,000 docks, piers, boat houses, float homes and shoreline improvement on Lake Pend Oreille and Pend Oreille River that are fixed to the shoreline and venerable to shifting ice conditions. Annually, many docks on the lake and river are damaged by large ice sheets frozen to structures and stressed by wind and lake currents.	110041-
Damage to shoreline properties is also caused by the "pushing" action of an ice sheet and from wind blown ice piling up on the shoreline damaging properties. Ice cracks, because due in part to ice edges, are firmly attached to shoreline structures.	
Attached are photos taken from my home in Bottle Bay located on Lake Pend Oreille, which depicts fixed docks near the 2051 shoreline elevation. Bottle Bay is a shallow bay that freezes annually and is a favorite area for ice fishermen. With the fluctuation of the lake level up to 5 feet during winter months these piers will be locked in ice and highly venerable to damage with the raising and lowering of the winter lake level.	
<u>Corps Environmental Assessment – Page 10, Section 4.3 (Docks, Infrastructure, and Ice).</u>	I
The EA concludesunder freeze-up conditions when the lake is a 2051 feet, there is greater potential for damage due to a rising lake. An increase in lake elevation from 2051 to 2056 causes additional vertical forces to act on floating docks. Dock systems that extend below 2051 feet could be damaged as the floating portion of the structure responds to the rising water level while the grounded portion is frozen securely to the substrate. Utilities integrated into the dock system could also be damaged"	110041-

Improvements	
The Willow Bay Marina located on the Pend Oreille River west of Sandpoint is floating marina with guide piles driven into a clay substrate. The entire marina is constructed at a river level of 2046 to 2051. Both our engineer, Jeff Layton (Layton & Sell - Kirkland, Washington) and our marina dock manufacture (Transpac Marinas, Inc Anacortes, Washington) believe there are potential impacts to "jacking/lifting" steel piles with the marina locked in ice and rising th water levels and the grounding/abrasion to the docks floatation system when lowering water levels during the winter months.	a s
I met with Mr. Leonard Zabilansky, PE - Corps Research Engineer and Mr. Joe Summers, Manager – Albeni Falls Dam, on site at the Willow Bay Marina in the winter of 2009 to discuss our concerns. Our marina was completely embedded in a foot of ice with half of the marina frozen in the clay sediments of the bay. Witt ice melt in the spring the marina is suspended to float unobstructed as lake levels reach summer pool. Given our marina is a floating marina, the piles have no vertical loading and are subject primarily to horizontal loading and stress; consequently, without vertical loading the piles are more subject to uplifting if locked in ice with winter lake levels rising. <u>Mr. Zabilansky stated "if the BPA</u> <u>Winter Operations Proposal was implemented, structural damage to the Willow</u> <u>Bay Marina would very likely occur".</u>	2 1 110041 1 5
Attached for your perusal are photos taken on December 9, 2009 that depicts ou docks and pilings locked in ice and denotes the vertical alignment of the pilings relation to the horizontal docks. Please note the photo depicting ice under the dock frozen to both the piling and the dock. With rising water levels, under these conditions, there is a high likelihood the vertical forces under the dock will displace these pilings.	r in e
National Engineering Standards:	
The American Society of Civil Engineers Manual 50: Planning and Design Guidelines for Small Craft Harbors (1994), Chapter 3, Inner Harbor Structures, under section F: Ice Problems and ActionsVariations of Water Levels states:	
"Water fluctuations cause ice uplift and down drag forces and actions. Marina piles can be ice-jacked by cyclic water level fluctuates from a few inches to 20 feet or more. They can even be completely pulled out from the harbor bottom soils into which they were driven. Uplift forces on marina piles vary from as litt as 10 klps to perhaps 75 or more kips"	le 11004 ⁻
"A sudden drop in water level can render a once-floating ice sheet a large hangin dead weight of up to 150 lbs/sq ft on structure memberslarge blocks of ice rubble are created when an ice sheet which is frozen to a structure fails to drop with a water-level drop. The ice fails in diagonal tension and pieces splits out of	ıg

the sheet. This rubble then remains on top of the ice and the area from where came eventually refreezes to full thickness. When the sheet then rises, these rubble pieces push and damage the docks above."	110041-6 (cont'd)
Summary	
The recently completed EA by the Army Corps states under certain lake level/winter conditions there will be damage to shoreline marinas, structures, and improvements (Mr. Leonard Zabilansky, PE - Corps Research Engineers).	110041-7
The requested BPA permit is unequivocally inconsistent with the Reservoir Level Management Programs and Operational Policies regulated by the Corps in the northern J.S. Regions, which states "the major benefits of lowering lake levels during the winter nonths is flood control and <u>elimination of ice damage to shoreline structures and natural</u> <u>systems.</u> " To my knowledge there are no other Flexible Winter Power Operations Programs in existence in the northern U.S. Regions (and for good reason).	110041-8
In the recent Army Corps public workshop that were held in Sandpoint on the draft Environmental Assessment, Corp staff were asked what is the responsibility of the Army Corps or BPA if there are significant structural damage to docks, structures, and utilities The Corp staffs response was "property owners only recourse would be to sue the Army Corp of Engineers." <u>Any adverse impacts to shoreline structures and improvements that</u> <u>nay occur with the present BPA proposal are currently without mitigation!</u> . BPA ncreases its revenues via the proposed winter operations and North Idaho waterfront property owners have no reasonable recourse to deal with property damage. Both BPA and the Army Corp have no accountability if the BPA permit is approved.	110041-9
Given there are approximately 2500 waterfront property owners on Pend Oreille Lake and River who own public and private marinas, docks, boat sheds, boat lifts, float homes n water utility lines and larger moored vessels during the winter months, I am hopeful he Army Corps will consider the significant potential impacts of the BPA proposal.	2
The only viable action that would insure no adverse impacts would occur to lake and iver waterfront property owners is to deny the BPA Flexible Winter Power Operations Permit. Many in our community believe the BPA proposal is a done deal and the Army Corps will rubber stamp their permit request. I am hopeful this is not the case.	110041-10
Your time, consideration and efforts to these important issues are very much appreciated	
lerald D. Hansen 399 East Bottle Bay Road Sagle, Idaho 83860	
Cc. C.L. Butch Otter, Governor of Idaho Elsaesser, Jarzabek, Anderson, Elliott & MacDonald, Chtd.	

Response to Comment Albni110041-1

The commenter's objection to FWPO is noted.

Response to Comment Albni110041-2

The Corps and BPA evaluated FWPO for more than 2 years to determine whether or not to move forward with the project. This process included the public meetings referenced by the commenter. This process and its results are summarized in the EA. The conclusion to move forward with FWPO was made in consideration of all of its potential effects. Please reference master response 1 and 2 for additional response on erosion and effects to property.

Response to Comment Albni110041-3

Please reference master response 2 for response to comment on potential for dock damage and master response 3 for response to comment on liability for damages.

The Corps water reservoir managers in the northern tier of the US are not aware of the Level Management Programs and Operational Policies making it difficult understanding the context of the statement being cited. In theory, the water level fluctuations will maintain a hinge crack around the perimeter of Bottle Bay which will relieve the pressure waves under the ice that is causing the damage.

Response to Comment Albni110041-4

Yes, there is a potential for damage if the dock sections are frozen to the substrate as the lake rises. The question that needs to be answered is if there will be a sufficient freezing period when the water level is at 2051 feet to freeze the dock to the river bed. The anchoring force will be limited by the bond between the dock support and mud and inner strength of the frozen mud. Climatic conditions and water level are independent variables and doubtful there will be ideal conditions to develop a competent anchoring force that exceeds the buoyancy force. Please reference master response 2 for more detail on potential for dock damage.

Response to Comment Albni110041-5

The marina is located in a narrow bay along the river which will limit the area of ice contributing to the vertical uplifting ice forces. Also reference master response 2 for more detail on potential for dock damage.

There are several options that could be investigated for protecting your docks from damage. Alternatives that could be considered include, but are not limited to, the following: Active deicing systems developed for the severe winter conditions, and extending the existing feet (with filled fiberglass or PVC pipe as the ice has limited bonding strength) to support the dock above the 2056 ft elevation (references can be found at www.crrel.usace.army.mil).

Response to Comment Albni110041-6

The ASCE Small Craft Harbor Design manual is based on extensive research and documentation of ice damage in marinas around the Great Lakes where the ice thickness in excess of 18". Unlike the Great Lakes, the increase in water level upstream of the Albeni Falls Dam is

associated with relatively warm weather events (also reference master response 2). Cold periods in the Pend Oreille basin are on the order of two weeks and "warm" weather will limit the ice strength and bonding to structures. The BMP is intended to avoid sudden changes in the lake level allowing the ice to creep, relieving stresses within the ice.

Response to Comment Albni110041-7

The objective of the BMP is to avoid the conditions that would cause damage.

Response to Comment Albni110041-8

Please reference response to comment Albni110041-3.

Fluctuating the water level during the winter months is common practice for hydroelectric facilities in the northern tier of the US and other cold regions around the world.

Response to Comment Albni110041-9

Please reference master response 3 for response to comment on liability for damages.

Response to Comment Albni110041-10

The Corps and BPA undertook a process to gather information and thoroughly evaluate effects of the proposal including comments from the public. The final decision was made in consideration of this analysis including public comments.



that consultation has not yet been initiated or completed with the USFWS regarding the recent designation of critical habitat for bull trout. This is another major Federal action whose consequences need to have been considered in the context of the FWPO proposal.	110042-3 (cont'd)
 Section 1508.23 states that a "proposal exists at that stage in the development of an action when an agency subject to the Act has a goal and is actively preparing to make a decision on one or more alternative means of accomplishing that goal and the effects can be meaningfully evaluateda proposal may exist in fact as well as by agency declaration that one exists." 	
• Section 1508.18 further states that the use of the word "major" for Federal actions does not have a meaning independent of significantly.	
• Section 1508.27 further states "Significantly as used in NEPA requires considerations of both context and intensity." In the case of context, "both short-and long-term effects are relevant." In the case of intensity, considerations include:	
- the degree to which the proposed action affects publicsafety (in this case ice- related damage and ice-related impacts to recreation)	
 unique characteristics of the geographic area such as proximity to historic or cultural resources,wetlands,or ecologically critical areas (in this case tribal cultural resources, wetlands, and critical bull trout habitat) 	
- the degree to which the effectsare likely to be highly controversial (in this case the FWPO has been demonstrated to be highly controversial)	
- whether the action is related to other actions with individually insignificant but cumulatively significant impacts (in this case cumulative impacts from erosion and wetland damage on top of already existing operational losses which have not yet been quantified or mitigated)	110042-4
- the degree to which the action may cause loss or destruction of significant scientific, cultural, or historical resources (in this case tribal cultural resources, though BPA is attempting to preempt tribal opposition to the FWPO through its draft MOA/Fish Accords with the Kalispel Tribe)	
- the degree to which the action my adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the ESA (in this case threatened bull trout)	
- whether the action threatens a violation of State or local law or requirements imposed for the protection of the environment (in this case violation of Idaho, Washington, and Kalispel Tribe water quality standards for TDG).	
Therefore, The FWPO is both a proposal as well as a major Federal action because of its significance as to intensity. As put forth throughout the EA, FWPO will affect public safety; will impact cultural resources, wetlands and ecologically critical areas; is highly controversial; may cause loss or destruction of cultural resources; may affect designated bull trout critical habitat; and threatens a violation of State and tribal laws through violation of water quality standards for	
TDG.	I
2	

The specific procedures for implementing NEPA by the ACOE (33 CFR Ch. II) state that an EA is a "brief document", and in the case of operating projects, "the EA normally should not exceed 110042-5 15 pages" (Section 230.10). Clearly the sheer number of pages in the FWPO draft EA points to the significance of the issues and potential impacts surrounding this proposal. Overall the EA takes the approach of approve the FWPO now, and thoroughly study the impacts later -- this is counter to the intent of NEPA. By taking this approach, all impacts are deemed insignificant whether or not adequate information or studies exist to support that conclusion. The agencies haven't even incorporated the results of the recent LIDAR study which would have 110042-6 provided a wealth of information pertaining to the proposed FWPO. Certainly by dismissing every possible impact as insignificant, the agencies avoid having to prepare a more thorough supplemental EIS or full EIS, develop a range of alternatives to the proposed action (besides just a no action alternative), and develop and disclose any plans or funding mechanisms to mitigate current or FWPO dam operations. Also of note is the lack of demonstration of need for the FWPO. The draft EA does not demonstrate how or why existing winter operations are not currently meeting the objective of 110042-7 providing "adequate, efficient, economical and reliable power supply." Furthermore, this objective is only one of the purposes of the AFD, whereas the other purposes will be negatively impacted by this proposal. Regarding specific comments on concerns and impacts, we hereby incorporate comments you have received from the State of Idaho and its agencies, the Idaho Conservation League, the Pend 110042-8 Oreille Basin Commission, and numerous dock and shoreline property owners. In conclusion, we strongly urge the agencies to more thoroughly study and address the impacts of 110042-9 this major, significant proposed action through preparation of a supplemental or full EIS as required by law. Respectfully submitted, Diane M. Williams **Executive Director** cc. Leah Wickstrom

Response to Comment Albni110042-1 and Albni110042-2

Please reference master response 6 for response to comment on preparation of an EIS.

Response to Comment Albni110042-3

Please reference correspondence with USFWS in appendix C of the EA for response to comment on bull trout consultation with USFWS.

Response to Comment Albni110042-4

Please reference master response 6 for response to comment on preparation of an EIS.

All of the issues raised in the comment are discussed in the EA and identified as effects of FWPO. As stated in the EA, in each case the specific effect has been previously disclosed in the SOR EIS or the degree of effect does not rise to a level of significance based on the context and intensity of the effect as described in the EA.

Response to Comment Albni110042-5

The length of the EA is primarily due to 1) the fact this EA is tiered to an EIS with a certain history that requires explanation, and 2) the high level of public interest in the project. This EA has been used as a planning tool and thus much history, discussion, and comparison of FWPO to the SOR EIS was required to adequately address the range of issues. The Corps and BPA attempted to address all the issues raised by the public through the numerous meetings and other coordination activities that were conducted. Since the public raised a number of concerns, this added to the length of the document. We thus believe the length of the EA in this instance is justified, and does not necessarily indicate that any of the issues discussed rise to the level of a significant impact, within the meaning of NEPA, that has not been previously considered in the SOR EIS.

Response to Comment Albni110042-6

The Corps and BPA disagree with the commenter's assertion that the agencies have taken an 'approve now – study later' approach to FWPO. As the commenter mentions in the previous comment, the EA is a rather lengthy document that includes extensive analysis. This is in large part due to the number of comments and concern about the project expressed by the public over last couple years as the Corps and BPA have studied FWPO. The analysis does incorporate the recent LIDAR referenced in the comment. This level of analysis provides confidence that the Corps and BPA have adequately analyzed the project and developed a defensible set of conclusions. The rigor of the analysis indicates that monitoring is not justified for FWPO.

Please reference master response 7 for response to comment on mitigation.

Response to Comment Albni110042-7

Please reference response to comment Albni110006-3 for response to comment on the need for FWPO.

Since AFD is a multipurpose project, there is always a balance that must occur between the various purposes. The Corps strives to manage these purposes consistent with the project authorization, legal requirements, and to maximize the benefits that can be achieved by the project as a whole.

Response to Comment Albni110042-8

Responses to the referenced comments can be found following each individual comment letter in this appendix.

Response to Comment Albni110042-9

Please reference master response 6 for response to comment on preparation of an EIS.

Albni110043 September 10, 2011 **Property Owners** Leah Wickstrom U.S. Army Corps of Engineers P.O. Box 3755 Seattle, WA 98124-3755 Dear Leah Wickstrom, After reviewing the draft EA for the Flexible Winter Power Operations (FWPO) for Albeni Falls Dam, we 110043-1 strongly request that the Corps not approve this plan. The Environmental Assessment recognizes that FWPO will cause damage to docks and shoreline around the lake. We are property owners on Lake Pend Oreille. We had our docks constructed under approval of all the required agencies. We had no way to construct our dock for future unanticipated changes in winter lake conditions that FWPO would create. 110043-2 There is no recommended course of action for citizens to protect their property under these conditions, and no mitigation available to us after the damage occurs. In the 1980's the Corps approved a winter fluctuation which caused damage to docks and boats on the lake. Wisely, this practice was not continued, but the damage was done. In all fairness and respect for private property, do not adopt 110043-3 FWPO. Sincerely, Address Property owner

Response to Comment Albni110043-1

The commenter's objection to FWPO is noted.

Response to Comment Albni110043-2

Please reference response to comment Albni110031-3 for response to comment on regulatory approval of docks.

Response to Comment Albni110043-3

Winter lake fluctuations have occurred throughout the history of AFD. This is illustrated in the figures located in Appendix B of the EA. Damage to docks has also occurred in the past. The reason for such damage is usually high flow events or floods during the winter when ice exists on the lake. The most recent example of this was 1996 as described in section 3.3 of the EA. We do not have specific information about dock damage that occurred in the 1980's, but there were instances of winter high flows that could have been responsible for the damage mentioned

in the comment. These weather events will continue to occur and dock owners should be prepared for them. Please also reference response to comment Albni110031-3 and master response 3.

Albni110044 LaMotte/Spokane and Furport This highly technical information is way above my pay grade. Can you, in a few words, convey what effect this will have on the river level downstream (@10 miles) from the dam? I have a project that would be greatly enhanced is the water level at Furport were VERY low in the next couple of months.

Response to Comment Albni110044-1

FWPO would only affect river flows between mid-December and March 31. Figure 4-4 in the EA presents potential river stage levels in response to FWPO. The river could potentially be between elevation 2030 and 2039 feet approximately 10 miles downstream of AFD when FWPO is in effect. Over the next couple months (September to mid-December), FWPO would have no effect on downstream river levels.