

ENLOE DLA COMMENT LETTERS

COMMENT LETTER #1



"Enloe Dam"
<Enloe@okpud.org>
11/21/2007 02:59 PM

To <Jlsett@entrinx.com>
cc
bcc
Subject Fwd: Daming our River

This is a comment that came into the Enloe Dam mailbox, but we think the person is referring to the Shankers Bend Project.

----- Message from <simagencies@nethop.net> on Tue, 20 Nov 2007 16:55:40 -0800 -----

To: <enloe@okpud.org>

Subject: Daming our River

Why are you wasting US taxpayers dollars when you KNOW that you will never inundate us up here in Canada with a damn from your state. Please stop wasting money and time now. Thank you, Ernie Marven Keremeos

--- M+ ---

COMMENT LETTER #2

Hello Alyson~ Thank you for informing us that Shawn Black is no longer with the Land Conservancy of BC. We will make the appropriate changes to our distribution list. I was not aware that the Land Conservancy of BC owned land on the lower Similkameen on the Canadian side of the border. The following link will take you to the Enloe Dam sub-page to the Public Utility District No. 1 of Okanogan County's website:

<http://www.okanoganpud.org/enloe/DLA/Enloe%20DLA.html>

The Draft License Application is available for review and comment. Regarding the inundation map, please visit the website and review Subpart E.3 Fish, Wildlife, and Botanical Resources page E.3-53 of the document. If you have any further questions please feel free to contact me, or give me a call at (509) 422-8472.

Thanks,

Nick Christoph
Environmental Coordinator
Phone: (509) 422-8472
Fax: (509) 422-4020
E-mail: NickC@okpud.org

>>> "Alyson Skinner" <ASkinner@conservancy.bc.ca> 1/3/2008 12:24 PM >>>

Hello,

I am the Area Manager for The Land Conservancy (Shawn Black no longer works here). We received a factsheet on the Enloe Dam Project and I am hoping to see a map of the area that will be flooded as a result. As you may be aware, we own land in the Lower Similkameen in BC directly on the US-Canada border. I would like to see how your project will effect our current property and interests in the Similkameen Valley. Could you please provide me with a map of the area that will be affected.

Thank you,

Alyson Skinner

Alyson Skinner
Okanagan Region Area Manager
TLC The Land Conservancy of BC
201-262 Main Street
Penticton, BC, V2A 5B2
askinner@conservancy.bc.ca
Ph.: 492-0173 Cell: 809-8802

--- M+ ---



Jeremy Pratt/Entrix
01/07/2008 02:06 PM

To Jennifer Isett/Entrix@Entrix
cc
bcc
Subject Fw: Enloe Dam

History: This message has been replied to

Jennifer, did you get this for the consultation log?

THANKS

Jeremy Pratt
ENTRIX, Inc.

----- Forwarded by Jeremy Pratt/Entrix on 01/07/2008 02:05 PM -----



"Nick Christoph"
<NickC@okpud.org>
01/04/2008 03:44 PM
PST

To: "Alyson Skinner" <ASkinner@conservancy.bc.ca>
cc:
Subject: Re: Enloe Dam

COMMENT LETTER #3

George Wooten 
226 West 2nd Ave
Twisp, WA 98856
509-997-6010

Hello, I wasn't able to attend either of the Enloe Dam information meetings. I would like to ask a question.

(1) Why did they close the Enloe Dam in the first place

(2) Who ordered it closed

(3) Why not allocate 50% of the electricity to Colville Tribes paying BPA rates?

George Wooten 

*Would like call back
with answer..*

RECEIVED

JAN 10 2007

OKANOGAN COUNTY PUD NO. 1
OKANOGAN, WA

COMMENT LETTER #4

PORTLAND STATE
UNIVERSITY

Butler
Anthropology Department
College of Liberal Arts & Sciences
Post Office Box 731
Portland, Oregon 97207-0731



Building Our Future
The Campaign for Portland State University



POSTNET
\$ 00.34
JAN 14 2008
MAILED FROM ZIP CODE 97201

Mr. Dan Boettger
Public Utility District, Okanogan Co.
PO Box 912
Okanogan, WA 98840

LMBFN1 98840



College of Liberal Arts & Sciences
Department of Anthropology

Post Office Box 751
Portland, Oregon 97207-0751

503-725-3303 tel
503-725-3905 fax
butlerv@pdx.edu

January 8, 2008

RECEIVED

JAN 18 2007

OKANOGAN COUNTY PUD NO. 1
OKANOGAN, WA

Dan Boettger
Director of Regulatory and Environmental Affairs
Okanogan Public Utility District
1331 Second Ave. N
PO Box 912
Okanogan WA 98840

RE: Studies to determine historical presence of anadromy above Similkameen Falls under Enloe Hydroelectric Project, P-12569

Dear Mr. Boettger,

My name is Virginia Butler. I have a Ph.D in interdisciplinary studies (paleoichthyology), with special expertise in historic fish ranges. Currently I am a professor in the Department of Anthropology at Portland State University, where I am conducting research on long-term interactions between people and fish in the Columbia River system, Puget Sound, and wetlands of eastern Oregon, as these can be documented using archaeological fish remains. Last year, I conversed by telephone with your predecessor Larry Felton to discuss the potential for prehistoric fish in the Similkameen system and am following up with a letter to you and your office.

In reviewing the record for the current Enloe hydroelectric licensing proceeding, I am concerned that the Okanogan Public Utility District (PUD) has not given proper attention to the question of passage above Enloe Dam. Specifically, no technical evidence exists to ascertain whether salmon and steelhead (*Oncorhynchus* spp.) were able to ascend past Similkameen Falls before the construction of Enloe Dam. As the PUD is aware, access to the currently blocked portion of the Similkameen system offers significant potential biological value to these species.

To answer the question of historic access, there are two scientific approaches the PUD might take, which I outline more specifically below: study the archaeological record of animal remains, particularly fish bone, from sites along the river and Palmer Lake, and examine the geochemistry of Palmer lake sediments. If appropriate, this information can be reformatted to meet the Federal Energy Regulatory Commission's requirements for additional study requests (18 CFR 5.9 (b) (1)-(7)).

I. Archaeological Fish Record

Animal bones and teeth from archaeological sites provide an important record of past animal distributions that is increasingly used to address contemporary fish and wildlife management issues (Lyman and Cannon 2004). Past humans, through hunting and gathering activities, left residues of the animals they relied on in villages and seasonal camps. Often these places were occupied for hundreds to thousands of years, providing a long sequence of animal bone deposits. For the past ~40 years, the field of zooarchaeology (study of animal remains from archaeological sites) has developed a series of protocols and methods that have enabled detailed reconstructions of past animal distributions and abundances (Lyman 1996; Butler and Campbell 2004).

Using salmon and steelhead trout remains as a measure of past fish distribution is based on the following rationale: salmon and steelhead trout were highly favored foods of Plateau peoples (e.g., Ray 1932; Hewes 1998). If the fish were present in a region, they would be captured and in turn, their remains would be deposited in archaeological sites. This claim is supported by Butler and Campbell's study of fish remains from Columbia Plateau archaeological sites: 90% of the archaeological sites located adjacent to historically known salmon migration corridors contain salmon bones (Butler and Campbell 2004).

The archaeological record in the Similkameen River system is well-suited to address the question of whether the Falls blocked fish movement in the past. Salo (1987) carried out a preliminary review of Similkameen Valley cultural resources and documented 46 cultural resource sites. While testing was limited, his work suggested the likelihood for stratified sites and recovery of fish remains. He specifically noted the value of using the archaeo-fish record to evaluate whether the Similkameen above Enloe Dam supported salmon populations (Salo 1987:52).

While animal bone records from archaeology can be extremely valuable for reconstructing past animal distributions, several issues need to be considered in interpreting bone records.

A. Human transport of fish.

People may have caught fish below the falls or on the Okanogan River proper and only transported animal carcasses or parts to the Similkameen River above the Falls. If this occurred, then the presence of fish remains in sites above the Falls would not mean that salmon and steelhead ascended the falls, only that their skeletons were deposited in these areas. This confounding factor can be addressed by examining the range of skeletal parts represented across multiple sites. Given salmon (especially chinook) and steelhead trout's large size, when transporting fish, only parts of the body would be moved. Thus, the presence of all parts of the skeleton in Similkameen sites would indicate local capture.

B. Preservation.

Bone preservation depends on a complex set of interacting variables including condition when buried, speed of burial, and soil acidity and porosity (Lyman 1994). While specific preservation conditions in the Similkameen drainage are not known, buried remains have been recovered from nearby locations (near Oroville- Chatters et al. 1987) and in multiple archaeological sites along the Columbia River upriver of Chief Joseph Dam (Butler and Campbell 2004). Thus the archaeological record in the Similkameen drainage is likely to have good preservation conditions. Even if the bone has become degraded, small fragments should be preserved and would be recovered if fine-screen sampling was used. If remains are too fragmentary to allow

for species diagnosis using bone morphology, it would be possible to extract ancient DNA from the remains (e.g., Butler and Bowers 1998).

C. Sampling.

Recovery of animal remains requires excavation of buried sediments. Comparative study of sites from nearby project areas and identification of likely site contexts and features (house pits, storage pits) would be needed to develop a sample plan and set sample intensity (e.g., amount of excavated volume needed to establish the presence of the fish, Lyman 1995). In terms of observation and collection in the field, the skeletal elements of salmon and steelhead trout are relatively large and should be recovered using large mesh screens (6.4 mm, ¼" mesh) that are commonly used during archaeological investigation (Butler 1993). If fish processing or other activities have caused the bone to break down, smaller fragments would be identified in finer mesh screens (3.2 mm, 1/8" mesh; 1.6 mm, 1/16" mesh).

D. Previous Archaeological Excavation on the Similkameen River.

Copp summarizes recent excavation projects on the Similkameen in Canada (2006); salmonid remains were not recovered. Elder (2007) argues on several counts that the absence of salmon remains in Copp's study should not be taken as evidence that salmon were not present. The total volume excavated was small relative to other projects with salmon bone, such as from the Columbia River upriver from Chief Joseph Dam (Butler and Campbell 2004). Copp's study sites were mainly located on side streams, not the Similkameen proper, suggesting the site locations were not fishing areas, but more likely hunting camps. Also, bone preservation appeared to be very poor, reducing the likelihood of recovering bone from any creature, much less salmon. Thus Copp's work does not constitute an adequate test for the historic distribution of salmonids in the Similkameen.

Recent archaeological study in the area to be affected by the Enloe Dam Hydro project was carried out by ENTRIX, Inc, in consultation with the Cultural Resources Work Group (Okanogan County, Exhibit E.4). Only limited archaeological excavation occurred as part of this work, which was designed to assess impacts to cultural resources in general, rather than consider the past record for fish. Thus this recent work was not adequate to address questions of ancient salmon in the river system.

II. Geochemistry of Lake Sediments

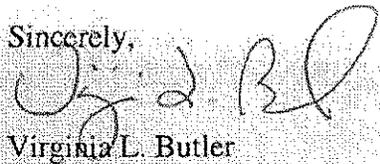
A number of recent studies in southern Alaska (Finney et al. 2000; 2002) and Idaho (Selbie et al. 2007) have established the value of using paleolimnology to reconstruct past salmon abundance and distribution. Briefly, this work relies on the fact that salmon returning to freshwater habitats represent a significant output of marine-derived nutrients that have a distinctive geochemical signal (e.g., enriched Nitrogen-15). This approach is especially useful for studying history of sockeye salmon (*O. nerka*) which rely on lakes as part of their spawning life cycle. Spent, decaying carcasses become incorporated into stratified lake deposits that accumulate as part of natural lake processes. Cores obtained from lake bottoms have provided clear records of past sockeye salmon abundance from the historic era to ~2200 years ago (Finney et al. 2002).

It should be possible to assess whether Palmer Lake at one time supported sockeye salmon populations by coring the lake and conducting analysis of bottom sediments. Kokanee (a land-locked form of sockeye salmon) reside in Palmer Lake today; there was apparently a historic introduction of these fish to the lake in the 20th century. A lake coring study would allow detection of a pre-19th century record of sockeye salmon. Recent lake cores obtained by Bruce Finney and his team in nearby Lake Okanagan and Lake Osoyoos, lakes known to support sockeye salmon, would provide control samples for interpreting geochemistry signals in Palmer Lake (B. Finney, personal communication, June, 2007). Stream bottom sediments (from the Similkameen River channel for example) would not be amenable to this type of study, given the lack of continuous deposition in the more dynamic stream system. Other lakes in the Similkameen system may provide even better sampling sites appropriate for coring and geochemical analyses (Jesse Ford, Oregon State Univ. pers. comm.).

I strongly recommend that archaeological sampling for fish remains and geochemical testing of lake sediments be undertaken, given the importance of the question of past salmon and steelhead trout distribution and the benefits of relying on multiple independent lines of evidence in establishing scientific understanding. Neither approach will provide comprehensive and certain outcomes. For example, if archaeological sites lack bones entirely, then the absence of fish in particular could not be linked to past fish distribution, but rather reflect a lack of preservation. On the other hand, if multiple archaeological sites contain mammal bones (e.g., deer, marmot) but lack fish, the PUD would have a basis for arguing that salmon and steelhead did not migrate above the Falls prior to the 19th century. Alternatively, if multiple sites contain salmon or steelhead trout, then the evidence points to pre-19th century migration of fish above the Falls. The lake core study will evaluate whether sockeye salmon populations utilized the Similkameen and not assess whether other species ascended the Falls.

This letter outlines two approaches the PUD should take to evaluate the key question: did salmon and steelhead trout historically ascend Similkameen Falls? These study outlines are presented from a scientist with specific knowledge of the kinds of studies that are needed to address this question. If the PUD would like me to develop a more detailed proposal and budget or set up project guidelines for other scientists to pursue, I would be happy to work with the PUD in such a way. Please contact me at your earliest convenience to discuss undertaking these identified study approaches.

Sincerely,



Virginia L. Butler

cc:

Bose, Federal Energy Regulatory Commission
Heinith, Columbia River Inter-Tribal Fish Commission
Kirkendall, National Marine Fisheries Service
Swift, American Rivers
Morgan, Upper Columbia Salmon Recovery Board
Bowers, Hydropower Reform Coalition

Letter from Dr. V. Butler

Studies to determine historical presence of anadromy above Similkameen Falls

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Letter from Dr. V. Butler

Studies to determine historical presence of anadromy above Similkameen Falls

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COMMENT LETTER #5

From: <fourbie@biebesheimer.net>
To: <enloe@okpud.org>
Date: 1/27/2008 2:12 PM
Subject: Enloe Dam--Old Powerhouse Structure

CC: <fourbie@biebesheimer.net>
Hi,

I am prompted to write to you following reading the Enloe Dam Update in the 8-1 issue WATTS UP and having read an article on the historical treatment of the powerhouse found in the recent Okanogan County Historical Society Newsletter.

1) Please include me on future newsletter factsheets regarding this project. fourbie@biebesheimer.net thanks.

2) I read the two alternatives proposed in your factsheet4. the recommended one provides for demolition of the building as it is in disrepair and continues to receive vandalism. the second alternative would continue the general structure and provide for a historical landmark to remain available for interested parties to study and enjoy. a fenced structure might be provided to reduce vandalism; appropriately gated and locked to provide controlled access. certainly a portion of the wooden penstock might remain as a historical feature adjacent to the surge tanks. if the condition of the surgetanks and the powerhouse building requires repair, consideration to volunteer staffed and funded projects to accomplish these tasks might be evaluated.

3) The factsheet4 is silent on whether the Okanogan Historical Society was contacted regarding their interest in participating in stabilization or historical enhancement of the powerhouse and related structures. certainly it would seem prudent to evaluate that in regards to preserving a key feature in this Counties history--hydroelectric power generation.

4) I didn't notice whether the powerhouse project (new) is planned to be manned or remotely monitored. if manned they access might be available thru a check-out system for key to the old powerhouse. if unmanned, a key could be obtained from the pud offices in okanogan. a fee could be charged to defray operating costs for access to the old powerhouse, or alternatively a fee controlled gate might be employed, with the fees collect used to directly maintain the old powerhouse facility.

5) other options for usage, improvements, alternatives certainly exist. Please give some of them added consideration.

thanks,

eric

-- M+ --

COMMENT LETTER #6

Initial Statement

On page IS-4 of the draft license application, the applicant states that it anticipates executing a lease agreement with the Washington Department of Natural Resources (Washington DNR) for use of the bed and shore lands of the Similkameen River (to the original, pre-inundation Ordinary High Water Mark) above and below Enloe dam. Please indicate the status of the lease agreement in the final license application, and if it is executed, please include a copy.

On page IS-6, the statement is made that Bureau of Land Management (BLM) lands affected include a total of 136.4 acres. Elsewhere in the application, it is stated that 35.47 acres of BLM lands would be affected, and that the proposed project boundary would include a total of 136.4 acres. Please ensure that the federal land statements are consistent and correct.

Exhibit A

Figure A-3 shows that 100.76 acres of Washington DNR lands would be located within the project boundary. Figure A-4 indicates, however, that the Washington DNR lands constitute the riverbed within the project boundary. Further, page E.9-6 clarifies that Washington DNR manages the riverbed and shoreline of the Similkameen River within the project boundary up to the Ordinary High Water Mark. Please modify Figure A-3 and any other references to Washington DNR lands in the application to indicate that those lands consist of riverbed and shoreline.

Figure A-4 includes a tabulation of lands of the United States by legal subdivisions of a public land survey. The tabulation does not include acreages, however, nor does it include the total acreage of lands of the United States within the project boundary. Please revise Figure A-4 to include this information.

The Ellis-Barnes Livestock Company is shown on Exhibit G, map 4, as the owner of 0.2 acre of lands within the project boundary. Figure A-4 identifies land ownership for the eastern part of the tract as Bureau of Land Management, but notes, "This railroad parcel is shown as BLM in the county database. However, according to BLM records, it does not belong to them." Was any part of the Ellis-Barnes Livestock Company lands ever owned by the federal government?

Fish, Wildlife and Botanical Resources

Section 3.2.1 of the draft license application does not include pages 16 and 17; the applicant should provide these missing pages in the final license application.

Page E.3-27: Entrainment of Fish at the Project Intake

The applicant provides estimates of percent survival of salmonid and non-salmonid fish species through the project turbines (see tables E.3-6 and E.3-7); however, the applicant did not provide supporting calculations that show how they derived these estimates. The applicant should provide the supporting calculations and associated assumptions in the final license application.

Pages E.3-29 and E.3-30: Powerhouse and Tailrace Impacts

The applicant estimates that the flow through the project's tailrace would be as high as 26 feet per second (fps), presumably at the maximum hydraulic capacity of the powerhouse. The applicant should provide the supporting calculations and associated assumptions for this calculation in the final license application along with clarification that the 26-fps estimate is at the maximum hydraulic capacity.

Page E.3-31: Total Dissolved Gasses (TDG)

The applicant concludes that the project would likely decrease TDG levels during nearly all river inflows, because instead of plunging into a pool below and entraining air along with it, flows diverted for project operations would be diverted to the powerhouse and exit the tailrace without plunging into the river. What's not clear in the draft license application is to what extent there would be a beneficial effect.

Therefore, the applicant should include, in the final license application, estimates of the mean extent of the effect for the high flow months of May and June using a mass-balance approach (or similar methodology) and the results of their TDG study and flow record analyses.

Page E.3-31: Dissolved Oxygen (DO)

The applicant concludes that "the decrease in DO from current elevated levels are [sic] not expected to have an effect of [sic] fish below Similkameen Falls." The applicant neither quantifies the "decrease" nor provides supporting information for their conclusion of no-effect.

In the final license application, the applicant should estimate the mean DO levels that would occur in the river immediately downstream of the tailrace-river mixing zone during project operations for the low flow and high temperature

months of July through September using a mass-balance approach (or similar methodology) and the results of their DO study and flow record analyses.

Page E.3-32: Sediment-Related Protection, Mitigation, and Enhancement Measures (PM&E's)

The applicant proposes to implement Best Management Practices (BMP's) during construction and develop a sediment removal plan for project operations. The applicant states that the costs associated with these BMP's and PM&E's "are provided in Section (water quality PM&Es)." These costs are unclear; therefore, the applicant should clarify the costs and provide supporting information for the estimates in the final license application.

Page E.3-33: Blasting During Construction

The applicant proposes to minimize the adverse effects of blasting during project construction by, among other things, timing near and in-water blasting to coincide with the lowest potential for fish occupation in the area, with a focus on avoiding periods where federally listed or sensitive species may be present. The applicant also proposes to seine as many fish as possible from the blasting area and install an exclusion barrier downstream to prevent fish from returning to the blast zone. The applicant estimates that the total cost for all blasting PME's combined would be \$100,000.

In the final license application, the applicant should note the specific months that they propose to blast rock during project construction (consistent with their proposal to have the blasting coincide with the lowest potential for fish presence) and identify the type of exclusion barrier and installation and removal methods. Depending on the type of barrier utilized, installation and removal of the barrier could have adverse effects on water quality (due to disruption of sediments). We'll need to analyze these potential effects in our environmental document.

The applicant did not explain how they derived the estimate for the capital cost of \$100,000 for the blasting PME's. For example, what portion of the \$100,000-estimate is for the capital cost of constructing the temporary barrier and what portion of the cost is for removal of fish from the blast area prior to the commencement of blasting? In the final license application, the applicant should provide this explanation so that we can verify the reasonableness of their cost estimate.

Page E.3-34: Placement of Boulder Clusters

The applicant proposes “to place boulder clusters in riffles or in plane-bed sections of the Similkameen River upstream of the reservoir.” The estimated capital cost for this measure is \$50,000.

The applicant does not identify the specific areas or fish species that would benefit from the measure; therefore, we are unable to, among other things: (1) identify the number of clusters that the applicant would install in the river; (2) assess what riparian and downstream in-water habitats would be affected by construction and maintenance of the clusters; (3) assess the extent of the benefit; (4) establish the nexus between the specific resource that would benefit from the measure and project effects; and (5) verify the reasonableness of the applicant’s cost estimate for the measure. The final license application should include this information.

Page E.3-34: Large Woody Debris (LWD)

The applicant proposes that “to prevent the loss of LWD from downstream habitats, logs and other LWD will be transported through the reservoir and allowed to go downstream naturally.” The applicant estimates that the annual cost of doing so would be \$2,000.

The applicant appears to propose passive transport of the LWD; however, the applicant at the same time estimates a significant cost for the proposal, which implies some action on the part of the applicant to ensure the transport of the LWD downstream. The final license application should provide an explanation of the cost estimate for the measure, including any actions that the applicant would take to facilitate the downstream transport of the LWD.

Page E.3-38: Proposed PME for Tailrace Effects

The applicant proposes to develop a flow management plan for the project at a cost of \$50,000 for purposes of maximizing the velocities in the draft tubes to create a velocity barrier for fish. The applicant states that the velocity can be predicted in the draft tubes and tailrace in relation to the operation of the two project turbines and the amount of water available. The applicant did not provide this analysis in the draft license application; therefore, we are unable to assess the benefits of this measure on downstream fish species, including federally listed salmonids.

In the final license application, the applicant should calculate the estimated velocities in the tailrace based on a range of reservoir inflows (*e.g.*, 90 percent exceedance, median, and 10 percent exceedance flows) and associated operations for those months in which federally listed salmonids and other fish species are

mostly likely to be present in or near the tailrace. The applicant should also provide an explanation for the estimated cost, including whether the cost is solely administrative in nature (i.e., cost for consultation and writing of the plan) or if the cost considers any generation loss associated with maintaining the velocity barrier.

Pages E.3-40 and E.3-41: Downstream Side-Channel Enhancement

The applicant proposes to identify and enhance a side-channel downstream of the project in either the Simikameen River or Okanogan River at a cost ranging from \$400,000 to \$600,000 for the purpose of improving anadromous salmonid habitat (spawning, rearing, and adult summer holding habitat) in the project area. The enhancement would occur in three phases. In phase 1, the applicant would identify candidate sites, in phase 2 the applicant would select the preferred site, and in phase 3, the applicant would construct, operate, and maintain the side-channel enhancement project.

In order for us to analyze the benefits and costs associated with this measure, the applicant should perform phases 1 and 2 and include this information in the final license application along with an analysis of the construction and maintenance effects on aquatic resources and an explanation for the derivation of the cost estimate. Without this information, we are unable to, among other things: (1) verify the potential for a suitable site to even exist; (2) assess what downstream habitats would be affected by construction and maintenance of the site; (3) assess the extent of the benefit; (4) establish the nexus between the specific resource that would benefit from the measure and project effects; and (5) verify the reasonableness of the cost estimate.

Page E.3-41: Gravel Augmentation

The applicant proposes to augment gravel in the Similkameen River downstream of the project at a cost of \$170,000. The applicant did not explain how the cost estimate was derived. For example, is the cost estimate an annual cost or capital cost? Is the estimate based solely on the volume of gravel that would be acquired and deposited downstream or does it also include the costs to transport and place the gravel in the river? How would the gravel be placed into the river and what effects would the physical placement of the gravel have on aquatic resources? This information should be provided in the final license application.

In addition, the applicant states that “a five-year program would be conducted once during the license period with yearly contributions of gravel.” It is unclear what is meant by this statement. The applicant should clarify the statement in the final license application.

Page E.3-42: Adaptive Management Plan (AMP)

The applicant proposes to prepare an AMP at a capital cost of \$60,000 and annual cost of \$10,000 “to provide for ongoing refinement and measure of effectiveness of the PM&E’s.” The applicant states that it will develop a central database consistent with other aquatic data gather in the Okanogan River basin, and that the data will be used to “examine trends and make decisions regarding adapting the PM&E management to protect the aquatic resources.”

We note that most of the proposed PM&E’s already have a monitoring element included in the proposal (*e.g.*, gravel augmentation monitoring, side-channel enhancement monitoring, tailrace protection monitoring, etc.) and presumably the monitoring elements were included in the individual costs for the measures. Therefore, it is unclear what additional project-related purpose developing and implementing an AMP would serve (over and above the monitoring already proposed for each measure) and how the applicant derived the costs. This information should be provided in the final license application.

Comprehensive Plans Analysis

The draft license application does not include an explanation of how and why the project would, would not, or should not, comply with any relevant comprehensive plans as defined in 18 CFR §2.19 and a description of any relevant resource agency or Indian tribe determination regarding the consistency of the project with any such comprehensive plan. In accordance with 18 CFR §4.38(f)(6), the applicant should include this information in the final license application.

Cultural Resources

Change “Memorandum of Agreement” to “Programmatic Agreement” in the second sentence of the second paragraph of page E.4-2.

Delete the second sentence (beginning, “The Advisory Council...”) of the third paragraph of page E.4-15.

Geological and Soil Resources

Page E.6-14 states that extending the road from the location of the first historic powerhouse to the proposed new powerhouse will require minor amounts of cut and fill, and that approximately 6,000 square feet of soil would be permanently covered by the new section of road. Does this assessment of impacts

to geological and soil resources include your proposals on page A-9 to construct a new, 1.4-mile-long road to replace a disused irrigation ditch, realign and widen the existing road downstream from the dam, and construct a new, 230-foot-long segment of road extending to the proposed powerhouse?

Recreational Resources

Figure E.7-1 shows a BLM recreation site located near Enloe dam. The text of Exhibit E, however, does not describe a BLM recreation site in that location. Please revise the text or the figure, as appropriate, to describe recreation opportunities in the vicinity of the proposed project.

Exhibit E.7 (Recreational Resources) discusses the applicant's recreational use survey. While the text at page E.7-11 states the survey was conducted during the spring, summer, and fall of 2006, the remaining text and associated tables identify the survey from June through October 2006. Please clarify this discrepancy. Further, the applicant acknowledges that the survey was conducted during only one recreational use season. Please note that the Commission staff or an interested participant may require a second recreational use survey for comparison.

The proposed action includes restoration of 5-foot-high flashboards by retrofitting crest gates on the crest of the existing spillway. As a result, the Enloe Project reservoir would increase from elevation 1044.3 feet mean sea level (msl) to elevation 1049.3 feet msl and extend 0.4 mile upstream above Shanker's Bend. This action would result in the inundation of 10.3 acres along Shanker's Bend, converting the lotic (moving water) environment to a lentic (slow or pooled water) environment. You state the decreased amount of lotic environment would have an adverse effect on species requiring this type of habitat during part of their life history. See draft license application, page E.3-24 and page E.3-65 (Fish, Wildlife, and Botanical Resources). In Exhibit E.7 (Recreational Resources) you do not discuss such effects on the recreational fishery. Please provide a discussion.

The length of and the acres to be disturbed by the roads and trails identified as proposed protection, mitigation, and enhancement measures in Exhibit E.7 should be identified in the text and clearly shown on a map or maps in relation to the proposed Enloe Project boundary and the BLM lands located within the project boundary.

On page E.7-25 the applicant proposes to cooperate with Okanogan County in developing a trail on the railroad bed, located adjacent to the Enloe Project boundary, and eventually transfer ownership of the railroad trestle bridge and

associated easements to the county. We refer you to the Commission's *Policy Statement on Hydropower Licensing Settlements*¹ wherein if the Commission requires that a facility be maintained, it can only look to the license to do so. Thus, those lands could be brought into the project boundary.

Figure E.7-3, entitled Access Improvements at Shanker's Bend, should be more legible.

Land Use

Figure E.9-3, entitled Reservoir Inundation Zone With and Without Crest Gates, does not appear to match the acres identified previously in the draft license application. Please clarify.

In order to determine the appropriate access roads to be included in the project boundary, we need to know all the uses made of roads in the project area. You indicate that the realigned access road extending from the Loomis-Oroville Road would be used by the applicant and recreationists. You state on page E.9-9 that the Oroville Golf Club maintains a pumping station and pipeline within the proposed project boundary. Please identify the location of the pumping station and the access road that would be used for its operation and maintenance.

Page E.9-14 refers to the applicant's proposal to enter into an agreement with the Oroville-Tonasket Irrigation District concerning an access road to be constructed in a portion of the District's right-of-way and unused irrigation facilities. Please provide a status of the agreement, and if it is executed, please provide a copy.

Exhibit F

The profile on Exhibit F.1 is too small and unreadable.

Exhibit G

Exhibit G should not be filed as Non-Internet Public Information, in accordance with Order 702, final rule for Critical Energy Infrastructure Information, issued October 30, 2007.

The draft license application does not contain a Distribution List of the interested participants who should have received it. The final license application

¹ See 116 FERC ¶ 61,270 (2006).

must contain a Distribution List. Please ensure that the Government of Canada is on the Distribution List.

COMMENT LETTER #7



United States Department of the Interior



NATIONAL PARK SERVICE
Pacific West Region
909 First Avenue, Fifth Floor
Seattle, Washington 98104-1060

IN REPLY REFER TO:
PWR-S EC
FERC 2/08/Enloe

February 4, 2008

Dan Boettger, Okanogan PUD
Enloe Hydroelectric Project
Draft License Application Comments
1331 Second Avenue North
P.O. Box 912
Okanogan, WA 98840

Dear Mr. Boettger:

The National Park Service (NPS), Pacific West Region, offers the following comments in response to the Enloe Draft License Application (FERC #12569), dated November 7, 2007, submitted pursuant to 18 C.F.R. Section 16.8(b)(4).

Under the NPS Organic Act (16 U.S.C. § 1 *et seq.*), the Outdoor Recreation Act (P.L. 88-29), the Wild and Scenic Rivers Act (P.L. 90-542), guidance from the Council on Environmental Quality regulations (45 F.R. 59190-59191), and the Federal Energy Regulatory Commission (FERC) regulations (18 C.F.R. § 4.41), the NPS is authorized to provide technical assistance for recreation planning in the licensing of hydropower facilities.

General Comments

Okanogan Public Utility District (PUD) is currently seeking comments on the Enloe Hydro Project. However, there is another Okanogan PUD and FERC project located just upstream of the proposed Enloe dam project—the proposed Shankers Bend Hydro Project (FERC #12804), which has a preliminary permit—that should be considered in conjunction with licensing the Enloe project. Each project would substantially change how the Similkameen River is managed; together, there would clearly be cumulative impacts. Because these two projects are located very close together and they are interrelated; we strongly recommend that the two projects be packaged together to provide a holistic view of resource management on the Similkameen River. FERC has consistently taken this watershed approach to hydropower projects (e.g., re-licenses on the Lewis River in Washington and Mid-Snake River in Idaho). Using a comprehensive approach would allow stakeholders the opportunity to thoroughly and adequately analyze effects to the entire area of impact. Accordingly, Okanogan PUD and FERC should also combine the projects into one new licensing process. NPS encourages Okanogan PUD and FERC to hold off on the licensing process for Enloe until Shankers Bend is ready to be licensed. This would provide the opportunity to fully understand the impacts and opportunities of these two hydroelectric projects on the Similkameen River system.

Many of the details of the recreation planning as part of the Enloe project are being left to the Recreation Management Plan, which has not yet been developed. In order to fully understand what is being proposed, we recommend that a draft recreation management plan be developed, in consultation with



stakeholders, and included in the Final License Application. The Draft License Application does not adequately address the future recreation use as required by FERC regulations. *See* 18 C.F.R. § 4.41 which states the license application should address “current *and future* recreation use”. The plan should consider recreation trends and accommodate future recreational activities in the recreation proposals. The final application and recreation management plan should also include provisions for recreation monitoring and regular plan updates that are responsive to monitoring findings.

Specific Comments

1. Rail to Trail Development. We are supportive of the Okanogan County PUD working with Okanogan County on the development of a trail on the old railroad bed. This will be a great asset to the area.
2. The Greater Columbia Water Trail Coalition is working on developing a water trail on the Columbia, Okanogan, and Similkameen Rivers. This water trail development will increase awareness and use of this area for flat water paddle sports. Water trail use is on the rise state-wide, as shown in the State Comprehensive Outdoor Recreation Plan. We recommend that the PUD work with the Bureau of Land Management (BLM), United States Fish and Wildlife Service (USFWS), NPS, and the Greater Columbia Water Trail Coalition to identify access points (including put-in, take-out, rest-stops, camping sites, and parking) to enhance the water trail opportunity. We also recommend that the PUD include signage about the water trail at their access points. We support the PUD’s proposal to develop a map of the recreation sites and access thereto and recommend that the PUD work with the Greater Columbia Water Trail Coalition to develop a map specific to the Similkameen River section of the water trail.
3. Access at, below, and around Enloe Dam. Portage options for watercraft around the dam should be provided for those wishing to do so. This is likely to become more popular as the water trail is developed in this area. It is our understanding from talking with Okanogan PUD that an 800’ long trail will be provided for portage around the dam, and in addition, the PUD will provide vehicle access to users upon request. This information should be readily available on project signage, websites, and maps/brochures. We recommend that the PUD work with the Greater Columbia Water Trail Coalition, BLM, and NPS to when developing details on the portage trail including grade, width, and surfacing. A discussion on portage options should also be included in the final license application. The visitor use survey showed that access below Enloe dam was important to users. However the proposal to improve access below the dam that was included in the Initial Consultation Document is no longer included in the draft license application. We recommend the PUD re-look at providing access below the dam as part of this licensing process. In addition, access at Enloe dam will change due to the construction of the intake structure. Please provide detailed drawings and information on how this structure will affect the current site, and how this site is integrated with foot paths, parking, and vehicle access. Any roads that are closed should be considered for conversion to a trail. Finally, please re-consider allowing overnight camping at PUD proposed recreation sites. Camping will likely become a more desired use in the future as the Greater Columbia Water Trail and the rail trail are developed.
4. Recreational Monitoring and Use Plan. We recommend that the recreation management plan be updated at minimum every 6 years, consistent with the FERC Form 80 requirement. We also recommend consultation with BLM, NPS, USFWS, and the Greater Columbia Water Trail Coalition in developing and implementing the monitoring plan, and that it cover use of the Greater Columbia Water Trail.
5. Aesthetics. Aesthetic impacts resulting from the project’s plan to dewater the waterfalls should be analyzed. NPS recommends that PUD provide concrete information on the extent of the impacts through an aesthetic flow study, and analyze opportunities for aesthetic flow releases as part of mitigation. The study could utilize the comparative flow analysis using a focus group Stakeholders should be consulted on identification of key vantage points and times of day for photographing the various flows; selection of flows to be evaluated by the focus group; and final selection of flow release and schedule based on the

results of the aesthetic study. Photographs, and preferably videos, of actual flows should be used rather than an artist's renderings, to provide an accurate portrayal of the various flows. Videos, in addition to providing the best image of flows, provide the additional benefit of sound associated with those flows. (See Whittaker, Doug et al., "Instream Flows for Recreation: A Handbook on Concepts and Research Methods" and Whittaker, etc. al., "Flows and Recreation: A Guide to Studies for River Professionals.") Other relicensing efforts that have undertaken similar studies include the Spokane River and the Mid-Snake River projects.

Thank you for the opportunity to comment on this Draft License Application. We look forward to working with Okanogan PUD, FERC, and stakeholders on these projects. If you have any questions, please contact Susan Rosebrough, NPS Northwest Hydropower Coordinator, at susan_rosebrough@nps.gov or (206) 220-4121.

Sincerely,

/s/signed

Rory D. Westberg
Deputy Regional Director

cc: Susan Rosebrough, NPS, PWR
Michael Linde, NPS, PWR
Kelly Powell, NPS, PWR
Keith Dunbar, NPS, PWR
Rosemary Mazaika, BLM
Joe Kelly, BLM
Diane Priebe, BLM
Steve Lewis, FWS
Jim Eyachner, Washington State Recreation and Conservation Organization (jime@rco.wa.gov)
Rich Bowers, Hydropower Reform Coalition (rich@hydroreform.org)
Allison O'Brien, REO, OEPC (reapn@mindspring.com)
Preston Sleeper, REO, OEPC (reopn@mindspring.com)
Nolan Shishido, SOL

COMMENT LETTER #8

From: <kstingle@efn.org>
To: <Enloe@okpud.org>
Date: 1/31/2008 10:32 PM
Subject: NO to the dams

The proposed dams on the Similkameen will be very destructive to the environment and fish habitat. These plans are being railroaded through with little chance for citizen input. At the very least, the study period should be extended to allow for more input. This is going in the wrong direction. Don't destroy such a beautiful place. Instead, put your energy into CONSERVATION, which is way more productive and forward thinking.

Karen Stingle
Okanogan orchard worker and landowner

--- M+ ---

COMMENT LETTER #9

From: Patrice <prb@televar.com>
To: <Enloe@okpud.org>
Date: 1/31/2008 9:19 PM
Subject: the proposed enloe and shankers bend dams

As a resident of Okanogan County, and as a grid electric user, I do not feel that either the drawbacks and dangers, nor the touted benefits of the Enloe and Shankers Bend dams have been studied enough to merit the permits the PUD has applied for to use these facilities for electric generation.

More needs to be looked at in several areas. Obviously (to me, anyway) there needs to be more talk of fish ladders and a guarantee of fish passage before one even considers a plan on a river. And then there's the water quality to address more thoroughly than has been done--temperature changes, oxygen levels, and toxic (heavy mining metals) sediment stirring. And the general safety of the dam facilities/structures themselves.

The economic benefits brought up to date don't seem to take into account what happens when the people who are supposedly going to move here for a beautiful rural experience find that it's devoid of salmon fishing and full of big electric outdoor lights that fill the night sky and blot out the stars. I came here for fishing and nature, and if the scenery changes much I will just go back to the big city, not stay here.

And it's kind of a deal breaker when the dam floods the selling points of the place...or breaks later and ruins your new development...or causes all us taxpayers to fork out for the damage and loss of life. What's the impact on the community when a disaster hits an inadequate dam and we don't have the financial or medical resources to deal with it? You can't just say "more power means more housing and jobs"-- it also means more infrastructure of other kinds are needed.

Many of us are not impressed by growth; progress is not "bigger" and "more". People moving in need to be encouraged to conserve grid power and supplement with wind and solar.

The PUD itself should put funding into wind generation instead of dams, in my opinion. And into ever better conservation--tell people the resources are finite and they will have to develop better ways of doing things instead of supplying endless power.

Current assessments used for permit applications do not address these issues well enough, and the project should not be pushed through.

Sincerely,

Patrice Belzer
738 Mary Ann Creek Road
Oroville, WA 98844

--- M+ ---

COMMENT LETTER # 10

From: "Michael "Buffalo" Mazzetti" <mbuffalo@purewater.org>
To: <enloe@okpud.org>
Date: 2/1/2008 8:38 PM
Subject: Comments on Dam Proposal

Hello,

I would like to comment on the proposal for the new Enloe Dam.

First, it is imperative that a fish ladder of some sort be installed with any permanent structure on the Similkameen. If we have collectively learned anything with our other dams in the Pacific NorthWest, we have learned to allow fish the ability to traverse man made impediments. It is only natural for fish to have access. We cannot block them or we will destroy our heratige. I cannot emphasize this enough. Salmon for one, are nearing extinction. We cannot dissallow access for them or any other fish.

Second, I am concerned with tailings from abandoned mines being flooded and released into the water. What research as been done realted to tailings and the dispersal and disturbance of them as a result of your actions. I would like to see a complete assesment of the impacts your actions will have on abandoned and proposed mining sites above and below the dam site.

Third, There is a historic value to the building that is there on the river at the old dam site. Your photograph "takes it out" and shows the building gone. I have always thought that that space would be a great tourist attraction if access were given to it. A restaurant or a coffee shope here would increase tourism to this area. The Building could be refinished and leased out by the PUD to a private enterprise. This would be an economic boon to the North County. Kind of like "food at the falls" It is a spectacular place and with good lighting, it would be awesome.

Thanks for this opportunity
Sincerely,
Michael "Buffalo" Mazzetti
PO Box 433
Tonasket, WA 98855

--- M+ ---

COMMENT LETTER # 11



United States Department of the Interior

RECEIVED
FEB 04 2008

OKANOGAN COUNTY PUD NO. 1
OKANOGAN, WA

IN REPLY REFER TO:
2320 (134)

BUREAU OF LAND MANAGEMENT
Spokane District
Wenatchee Field Office
915 Walla Walla Avenue
Wenatchee, Washington 98801

February 1, 2008

Dan Boettger
Okanogan Public Utility District
P.O. Box 912
Okanogan, Washington 98840

Re: Draft License Application for the Enloe Hydroelectric Project, FERC Project No. 12569

Dear Mr. Boettger:

The Department of the Interior (Interior), through the Bureau of Land Management (BLM) has reviewed the subject Draft License Application (DLA) for the Enloe Hydroelectric Project (Project), Federal Energy Regulatory Commission (FERC) No. 12569. The BLM appreciates the January 16, 2008 informational meeting in Wenatchee with Entrix and the Okanogan Public Utility District (PUD). The presentation and the question and answer portion of the discussion helped clarify certain details where we lacked understanding. The presentation also raised some issues and questions which we have included in the main body of the letter as a response to the DLA.

Reservation of Authority

The Project occupies public domain lands administered by the BLM that have been withdrawn for waterpower purposes. Pursuant to Section 4(e)¹ of the Federal Power Act, the BLM is responsible for the adequate protection and utilization of reserved lands and purposes for which these were established. Consistent with this administrative responsibility, the FERC shall include, as necessary, such conditions, as identified by the Secretary of the Interior, to ensure the protection and utilization of the BLM reservation and purposes for which BLM lands are administered. BLM's reservation of authority accommodates consideration of additional data and information as it becomes available throughout the relicensing proceeding.

¹ Section 4(e) of the Federal Power Act defines "reservation" to include "...national forests, tribal lands, embraced within Indian reservations, military reservations, and other lands and interests in lands owned by the United States, and withdrawn, reserved, or withheld from private appropriation and disposal under the public land laws; also lands and interests in lands acquired and held for public purposes; but shall not include national monuments or national parks."

Comments and Questions by Resource:

Recreation

General

- The recreation sections are very vague, with details deferred to some future time when the Recreation Management Plan is developed. Thus, the DLA is inadequate in detail, specifically on points listed below.
- The recreation study, while helpful, only considered recreation use at one time of the year, and for only one year. The BLM believes this is inadequate as the basis for evaluating recreation use and potential impacts from the proposed Project. The study needs to be performed over a minimum of three years total and at different times of the year (consider spring, fall and winter in addition to summer survey times). Additional study is necessary to accurately assess and evaluate current recreation use and potential impact consequent of Project operations.
- The Recreational Resources portion of the DLA only addresses current recreation use and does not incorporate estimates of projected use over the next 30 to 50 years based on regional trends. Trends in recreation use across the United States, in Washington and in Okanogan County, reflect an increasing demand for use of existing sites and a need for new recreation sites and sites highlighting particular recreation opportunities. Current recreation projects such as the Oroville-Nighthawk Rail Trail and the Greater Columbia Water Trail are anticipated to draw more visitors to the Similkameen and Okanogan valleys. The recreation analysis should account for these and other like trends and recreation uses.
- The PUD must consult with BLM on proposed Recreational Use Plan, and all activities proposed for BLM-managed areas.
- BLM requests a specific discussion of the PUD's proposed maintenance schedule for the new recreation site construction and administration planned for BLM-administered lands at Shanker's Bend and the Enloe site. Specifics should include: proposed facilities, layout, design, access, use, maintenance, enforcement schedule, implementation, and the PUD's long-term plans for these sites.

Specific Comments

Road Access to Enloe Dam and Immediate Vicinity:

- The access road to the Project including the new road segment needs to be a two-lane gravel road, or be constructed with turnouts to allow vehicles to pass along this road.
- The old road should be gated or blocked with rocks at both ends to restrict access.
 - Spur roads leading from the access road should be closed to vehicles. Portions of these roads could be modified for turn arounds, or blocked.

- The DLA mentions that “the road will be open spring through fall for dam access and recreation use.” How will this closure be maintained and enforced? Will there be gates that PUD will open and close at the beginning and end of the season, or is it expected that weather will close the road?
 - The Enloe Dam Road is an Okanogan County road, but if the County is not going to improve and maintain this road, it should be gated off or obliterated. This road is steep, poorly maintained, and is a hazard to travel and to public health and safety. The PUD has proposed improving the old irrigation ditch road as the primary entrance road into the site; therefore the Enloe Dam Road will not be necessary. The PUD should work with the County to secure the necessary closures.
- **Access to the River Corridor Below Enloe Dam (East Bank):** The Enloe Initial Consultation Document and 1992 Environmental Assessment (EA) refer to a “new access site” to be located below the Dam. One of the key findings of the 2006 visitor intercept survey was that “access to the river corridor below the dam is important to visitors.” However, the DLA does not address an access site below the dam, mentioning only improved recreation facilities at Enloe Dam and Shanker’s Bend sites, and that “Access below the dam would be limited to existing “informal, unimproved user trails.”
 - Since below dam access is important to visitors, BLM recommends that the PUD improve access trails below the dam.
 - The DLA references a new recreation access site at Shanker’s Bend. The BLM administers the Shanker’s Bend area and did not propose or request this mitigation. The rationale for the PUD’s decision to create a new site at this location, rather than developing the downstream access site as originally proposed, needs to be outlined.
- **Enloe Dam Public Access:**
 - Fencing:
 - Please provide a diagram or site drawing of fencing at Enloe Dam.
 - Cattle should be excluded from both this area and the Shanker’s Bend recreation site.
 - What type of fencing will be used? If possible, please avoid using chain-link or barbed wire type fencing, using instead smooth wire fencing or post-and-rail type construction. How will it be maintained?
 - Any proposals for fencing on Federal land would require the necessary environmental clearances and developed in consultation with the BLM.
 - The DLA states that overnight camping at the Enloe site will be prohibited. How will this be enforced? Will the PUD allow overnight camping at Shanker’s Bend recreation site? PUD should reconsider having camping at both sites, as it is such a popular activity in the area and will be even more popular once recreational improvements are made. Rail trail and Greater Columbia Waterway users will also benefit from camping facilities in this area. BLM recommends that PUD work with BLM, FWS, NPS, the Greater Columbia Water Trail Group, the Pacific Northwest Trail group and Okanogan County to identify water and trail access

points that are likely to become popular as the water and rail trails are developed in this area.

- PUD proposes to “clean up and restore the wooded area on the east bank of the reservoir to enhance visitor experience.” What does this mean? What will the wooded area look like after it is restored? Will this encourage increased public access to the area?
 - What interpretive features does the PUD propose to develop? Any proposals for developing interpretive facilities will require the necessary environmental clearances developed in consultation with the BLM. Will the PUD replace interpretive signs altered due to vandalism, fading, weathering, etc.? PUD will need to involve BLM in the development of signs. More detail is needed regarding signs, topics, materials and locations.
 - Map of Enloe Dam area: A map of the Project, including river access points, dam portage information and recreation opportunities in the area within and adjacent to the Project boundary, should be posted as a separate sign or on informational boards around Enloe Dam area, as well as at Shanker’s Bend and any other waysides that give the public access to the Similkameen/Enloe area (e.g. Miner’s Flat, Similkameen camp area). Also, develop map in brochure-type format.
 - In addition to interpretive signs, informational kiosks should be constructed at Enloe and Shanker’s Bend sites to provide information and site rules to visitors.
 - Where will the PUD install video surveillance?
 - The intake channel will include a substantial portion of the current parking area at the existing Enloe Dam. How will this affect the future recreation site at this location? How will public access be restricted? Consider visual effects of locating a fenced intake channel within a recreation site and the effects this will have on the potential size and utilization of the recreation site.
- BLM supports the development of a Recreational Use Monitoring and Use Plan for the Project area.
- BLM also supports development of a cooperative, non-motorized public access trail along the old railroad grade from Oroville to Nighthawk.

Subpart E. 8 Aesthetic Resources

- Why were improvements such as the improved recreation area at Enloe, the access road (particularly the new segment), riparian fencing and Shanker’s Bend recreation improvements not analyzed in Key Observation Point (KOP) discussions? These improvements will be visible from several of the KOPs, and should have been analyzed.
- The PUD did not consider the aesthetic and fisheries effects of de-watering the spillway and rocky area below the dam or consider the alternative of spilling water over the spillway all year.

Fisheries:

Specific Comments

- BLM's primary concern with fisheries and fish habitat is that the spawning habitat below the Enloe falls be maintained and possibly improved. The steelhead spawning in the Similkameen river below Enloe dam makes up approximately 15% of the steelhead population in the Okanogan Basin, and the summer Chinook make up 50% of the basin population. The plan to build a new spawning channel with gravel down stream of the falls has the potential to improve spawning habitat. However, the location of the proposed channel has not been identified or analyzed. The BLM recommends locating the spawning channel near areas of the Similkameen where natural anadromous spawning occurs.
- The BLM has some concerns about the location, timing, and potential impacts of blasting. We believe that the PUD will make every effort to control flow fluctuations to prevent dewatering of downstream spawning gravels. Elevated summer water temperatures that may result as a function of Project operations are also of concern and have not been analyzed. Its possible that the increased surface area of the reservoir could elevate water temperature as a result of exposure to the sun. The PUD should model potential temperature effects of diverting flows from the Similkameen to the penstock for power generation and not spilling water over the dam. The PUD should also analyze high flows over the dam in excess of the capacity of the turbines and subsequent effects on dissolved oxygen (DO).
- The DLA lacks adequate discussion of the potential warm-water bass and perch recreational fishery in the pool reservoir upstream of the dam. Given the increased popularity that warm-water bass and perch fisheries have had in nearby Palmer and Chopaka lakes, BLM anticipates increased public interest in recreational fisheries in the reservoir above Enloe Dam. Developing hiding structures (logs, trees, rootwads) along the bank may enhance conditions for the bass and perch populations. (personal conversations with Bob Jateff, Fisheries Biologist, WDFW)

Wildlife:

Specific Comments

The wetland and riparian mitigation does not address wetland impacts or enhancements as a consequence of increased surface water elevation of the reservoir (e.g. wetlands above the ordinary high water line of the reservoir may function more properly than those connected to the river). Off-channel wetlands or ponds will provide breeding habitat for amphibians not affected by warm-water fish.

The DLA did not identify livestock control structures that will be installed to protect wetlands and riparian habitats.

Please correct spelling of BLM staff Neal Hedges.

Botany:

Specific Comments

Please provide copies of any field reports for our files. More details about the thought process of how the field search was limited to *Spiranthes diluvialis* would lend credibility to the report.

Also *Cryptantha spiculifera*, a State Sensitive species has been found in the Similkameen River area. This was not included in the rare plant assessment.

A statement should be included about future development of a restoration plan, including goals, the species to be used, methods and benchmarks of success, for botany resources. The BLM should be involved in development of any plan that would be reviewed and approved by the agency. A restoration plan for abandoned roads, including details for surface preparation to deal with compaction issues, seeding, mulching, and replacing shrubs, should be proposed. Vague statements like "replace planting if survival is low" should be clarified to reference standards like 50% survivorship for instance, in preparing a more detailed restoration plan.

The discussion of noxious weed control and management is vague and needs more specifics, including, but not limited to timeframes, species, and methods of control, etc.

Realty

General Comments:

As is noted in the DLS, the PUD is aware of the need to obtain an amended right-of-way (ROW) from BLM to authorize new construction and refurbishment activities at Enloe Dam. Ideally, the PUD's application to amend the ROW should be submitted soon after the PUD's final license application is filed with FERC. The ROW application must include all projects or activities proposed on BLM lands. This includes the new hydroelectric facilities, reconstruction activities, recreation enhancements, access roads, powerlines, mitigation projects, and any other improvements. The application to amend the ROW would be processed concurrent with FERC's review of the license application.

Initial Statement:

The BLM noted previously that the legal description shown in item #7 "Lands of the United States Affected" is not complete.

Exhibit E - E.9.4. - Oroville Tonasket Irrigation District:

Because the BLM is the underlying landowner for the property crossed by this easement, a request for construction and use of an access road along the abandoned canal must also be included in the PUD's ROW application to BLM.

Cultural:

Specific Comments

Cultural resource issues regarding the Enloe Dam project are being addressed through the Cultural Resources Work Group (CRWG). The CRWG has met regularly to advise the PUD regarding completion of the Section 106 requirements for the licensing process.

The cultural resource inventory reports and evaluations for the project are in draft. It is our understanding that the CRWG will continue to advise the PUD regarding any additional testing that may be required for evaluation of archaeological sites to be affected by the proposed improvements. A traditional cultural study conducted by the Colville Confederated Tribes has been completed for the project area. Once all evaluations and inventory documents have been completed, the reports will be reviewed and submitted for concurrence from the State Historic Preservation Office, the BLM, consulting Tribes, and the FERC. After completion of the inventory and evaluation reports, an historic properties management plan (HPMP) will be developed. It is our expectation that the CRWG will continue to review and guide the Section 106 review process through completion of the HPMP. The HPMP would guide future management of historic properties in the project area. The CRWG requested County PUD consider options for stabilizing the historic powerhouse and facilities. The facilities are historically significant and options to complete demolition and removal should be considered in consultation with the CRWG and interested parties.

Grazing:

Specific Comments

There are three BLM grazing allotments within the Enloe Dam FERC project area. The affected grazing lessees need to be consulted concerning the impacts of the Enloe Dam project on their livestock operation. BLM has concerns about areas that may be fenced for recreation, riparian mitigation, facility protection and other purposes. Concerns with fencing include loss of access to livestock water and loss of forage. Two year notice to the grazing lessees is required if grazing has to be reduced due to loss of land available for grazing. Access to water at the Similkameen River is necessary for the livestock operations leasing the BLM lands within the project area. BLM will need to review the specific plans for fencing that may exclude livestock.

The PUD should consider the interactions between livestock and the public due to the potential changes in recreational use of the project area that may result from the recreation site development.

The BLM appreciates the opportunity to submit these comments and looks forward to our continued work with the PUD through this process. If you have specific questions or require additional information, please contact Joe Kelly (Fisheries Biologist) of my staff at 509-665-2118.

Sincerely,

A handwritten signature in black ink, appearing to read 'Sally Sovey', with a long, sweeping horizontal line extending to the right.

Sally Sovey
Field Manager

cc: Robert Towne, District Manager, Spokane District BLM
Rosy Mazaika, OR-932, Oregon State Office
Allison O'Brien, Department of Interior, Office of Environmental Policy Compliance
Frank Wilson, Department of Interior, Regional Solicitors Office

COMMENT LETTER #12



STATE OF WASHINGTON
DEPARTMENT OF FISH AND WILDLIFE
1550 Alder St. N.W. • Ephrata, Washington 98823 • (509) 754-4624 FAX (509) 754-5257

February 4, 2008

Enloe Hydroelectric Project
Draft License Application Comments
Attn: Dan Boettger
re: Enloe Dam DLA FERC#12569
1331 Second Avenue North
Post Office Box 912
Okanogan, WA 98840

RECEIVED

FEB 04 2008
OKANOGAN COUNTY PUD NO. 1
OKANOGAN, WA

Dear Mr. Boettger:

Thank you for the opportunity to provide Okanogan Public Utility District #1 (OKPUD) with Washington State Department of Fish and Wildlife's (WDFW) comment on the Draft License Application (DLA) for Enloe Dam, per your request in the November 7, 2007 letter. The WDFW looks forward to engaging in a collaborative dialogue about the project proposal, views on key resources, resource impacts, and mitigation measures. WDFW has the following comments for the development of Enloe Hydroelectric Project, FERC# 12569:

- Exhibit E.3-55, Wildlife. Surveys should be conducted to assess the impact of inundation of 12+ upland acres ground nesting birds. Appropriate prevention, mitigation, and enhancement (PM&E) measures should be included in the license.
- WDFW is concerned about impacts of potential increased flow of Palmer Creek and the effect of this increase on the kokanee population within Palmer Lake. The use of crest gates could potentially cause more water to be fed into Palmer Lake than currently occurs. On an annual basis, during high flows, the Similkameen River backs up into Palmer Creek; consequently feeding turbid water to into Palmer Lake. The introduction of this turbidity into Palmer Lake could have negative effects on lake productivity and temperature.
- Exhibit E.3-38, Powerhouse and Tailrace Impacts. The monitoring plan should include sampling that will identify the impact to fish attempting to swim past the velocity barrier, consequently depleting the fish's energy reserve, negatively effecting it's survival, and it's ability to reproduce.
- Exhibit E.3-42 Adaptive Management Plan. A technical working group made up of natural resource agencies, tribes, and OKPUD should review the monitoring of mitigation

action (eg. gravel augmentation and enhancement to existing side channel spawning areas for steelhead) and observation of additional negative impacts related to natural resource, for example observations of effects of the tailrace on fish. This group should be empowered to make recommendation for adaptively managing the mitigation measures to ensure the mitigation goal is being achieved.

- There is a winter whitefish fishery in the Similkameen River above Enloe Dam. Identification of project impacts should be conducted. Loss of spawning areas, productivity, distribution and associated impacts to recreations should be identified.
- Exhibit E.3-39, Instream Flows. The use of crest gates is not clear. During periods of time when the reservoir is filling, will natural river flows be reduced? More explanation is needed to clarify how the crest gates will be operated in all potential scenarios. Downstream impacts, including impacts to fish habitat should be identified.
- Exhibit 2.8-32, Water Temperature. WDFW agrees there is uncertainty related to the use of crest gates and water temperature. Water temperature data was collected during a one-year period of time. This data set may not be robust enough to identify all downstream impacts of the project related to temperature. The PM&E plan to monitor water temperatures for five-years may not be sufficient to capture project impacts on temperature due to seasonal variations of ambient temperature and climate change.

WDFW appreciates the opportunity to provide comments on the Enloe Dam DLA. Consultation and technical assistance requests, questions, and comments, related to the proposed project should be directed to me. Please contact me at (509) 754-4624 ex. 13 or by e-mail at verhepmv@dfw.wa.gov if you have any questions. My address is in the letterhead on this document.

Sincerely,

Patrick Verhey, WDFW Major Projects Mitigation Biologist

Cc:

John Arteburn, Colville Confederated Tribes, Omak, WA
Bob Rose, Yakama Nation, Toppenish, WA
Dennis Beich, WDFW, Ephrata, WA
Pat Irlle, Ecology, Yakima, WA
Stephen Lewis, USFWS, Wenatchee, WA

COMMENT LETTER #13



The Best Place on Earth

February 4, 2008

File: 34560-20-04/Enloe

Enloe Hydroelectric Project
Draft License Application Comments
1331 Second Avenue North
P.O. Box 912
Okanogan, WA 98840

RECEIVED

FEB 04 2008

OKANOGAN COUNTY PUD NO. 1
OKANOGAN, WA

Dear Sirs/Madams:

Re: Comments on Public Utility District No. 1 of Okanogan County, Enloe Hydroelectric Project Draft License Application, FERC Project No. 12569 on behalf of the Province of British Columbia, Ministry of Environment, Environmental Stewardship Division.

Thank you for the opportunity to review the Public Utility District No. 1 of Okanogan County's "Draft License Application" for the Enloe Hydroelectric Project - FERC Project No. 12569. The report was extremely comprehensive, well organized and thorough in addressing concerns raised during the initial round of consultations. The following comments are provided for your consideration.

Overall the proposed Enloe Dam east bank redevelopment represents low risk for resident fish species in the Canadian portion of the Similkameen River. Concerns raised by the MoE during the first round of consultations centered around potential impacts and associated risk to juvenile and adult steelhead migrating to and from the Canadian portion of the Okanogan/Okanagan River. Specifically, questions focused on potential impacts to steelhead resulting from changes in water temperature, flow, dissolved oxygen, and sediment mobilization in the lower Similkameen River.

Baseline monitoring has suggested:

- **Water Temperature:** Will not be adversely impacted as a result of the revitalized facility, nor compliance with water quality standards compromised. Post-project implementation temperature monitoring is supported by the MoE, in addition to Protection, Mitigation & Enhancement (PM&E) measures proposed to improve spawning, rearing and summer thermal refugia in the lower Similkameen or nearby Okanogan/Okanagan River habitat.
- **Flow:** Enloe Dam will operate as a run-of-the-river facility, and with the exception of a short section between the dam and the tailrace, flows in the Similkameen River will not be altered. The location of the dam in relation to Similkameen Falls means only a short steep section of habitat would be impacted.

Ministry of Environment

Environmental Stewardship Division
Okanagan Region
102 Industrial Place
Penticton BC V2A 7C8

Telephone: (250) 490-8200
Facsimile: (250) 490-2231

- Measures proposed to compensate for potential decreased production, including habitat enhancement, tailrace re-location, and entrainment studies are supported.
- Total Dissolved Gases: TDG levels are expected to decrease as a result of facility operation, which may be beneficial to downstream salmonids.
 - Dissolved Oxygen: A decrease in dissolved oxygen may occur in the bypass reach immediately below the dam, however impacts to fisheries are expected to be negligible. Rationale for this determination was well supported. Proposed habitat enhancement projects, are reasonable as a means of compensation.
 - Sediment Movement: Sediment will be mobilized to a limited extent. In addition, sediment sampling in the upstream reservoir revealed trace amounts of arsenic, copper, and cadmium. PM&E's to avoid discharge of sediment laden water into the Similkameen River and minimize transport of potentially contaminated materials downstream are sound.

Information presented in the 'Draft License Application' has alleviated any concerns we have at this time, and we are confident the proposed project represents low risk for steelhead migrating to and from the Canadian portion of the Okanogan/Okanagan River. We recognize the value of follow-up monitoring and look forward to review of post-project implementation monitoring & evaluation results, as well as the potential population response associated with fisheries enhancement projects proposed.

Thank you for the opportunity to review the proposed project. If you have any questions regarding these comments, please feel free to contact me at (250) 490-2287.

Yours truly,



Tara C. White, R.P.Bio
Senior Fish Biologist
Okanagan Region

TW/cl

- cc. Jeff Guerin, Habitat Biologist, Fisheries and Oceans Canada, Kamloops
Steve Matthews, Fish & Wildlife Section Head, Ministry of Environment,
Penticton
Ted Down, Manager Fisheries Science Section, Ministry of Environment,
Victoria
Phil Epp, Regional Hydrologist, Ecosystems Branch, Ministry of Environment,
Penticton

From: "White, Tara ENV:EX" <Tara.White@gov.bc.ca>
To: <enloe@okpud.org>
Date: 2/4/2008 10:52 AM
Subject: MoE Response Enloe Dam darft license application_FERC 12569
Attachments: Final L04Feb08_MOE response to Enloe Dam draft license application 12569.pdf

CC: "Matthews, Steve ENV:EX" <Steve.Matthews@gov.bc.ca>, "Down, Ted ENV:EX" ...

Please find attached Comments on Public Utility District No. 1 of Okanogan County, Enloe Hydroelectric Project Draft License Application, FERC Project No. 12569 on behalf of the Province of British Columbia, Ministry of Environment, Environmental Stewardship Division. Thank you for the opportunity to review the proposed project. If you have any questions regarding the attached comments, please feel free to contact me at your convenience.

Tara

<<Final L04Feb08_MOE response to Enloe Dam draft license application 12569.pdf>>

Tara White, R.P.Bio.
Senior Fisheries Biologist
Ministry of Environment
Environmental Stewardship Division
Penticton, BC
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Email: tara.white@gov.bc.ca

--- M+ ---

COMMENT LETTER #14



RECEIVED

FEB 04 2008

OKANOGAN COUNTY PUD NO. 1
OKANOGAN, WA

Electronic Filing – enloe@okpud.org

February 4, 2008

Enloe Hydroelectric Project
Draft License Application Comments
1331 Second Avenue North
P.O. Box 912
Okanogan, WA 98840

**Re: Enloe Hydroelectric Project, Project No. 12569
Comments on the Draft License Application**

To Whom It May Concern:

On November 7, 2007, Public Utility District No. 1 of Okanogan County (Okanogan PUD) issued for public comment its draft license application (DLA) for the Enloe Hydroelectric Project. American Rivers, the Center for Environmental Law and Policy, the Selkirk Conservation Alliance, the North Cascades Conservation Alliance, the Cascade Chapter of the Sierra Club, and the Columbia River Bioregional Education Project (collectively, the Conservation Groups) appreciate the opportunity to comment on the draft license application, dated November 2007. We have reviewed the document and offer the following comments.

I. Overarching Comments

A. The DLA Fails to Clearly Define the Proposed Operations of the Enloe Hydroelectric Project

A fundamental requirement of a draft license application is a clear and comprehensive description of how the proposed project will be operated. The DLA falls short in providing that description. There are repeated references to normal operations, however, the DLA fails to identify what constitutes normal. Of particular concern is the failure to specify what, if any, flow will be provided to the Similkameen River below Enloe Dam.

The DLA states that normally there is sufficient flow to operate at full capacity during the spring/summer freshet and that for the rest of the year output would be regulated according to flow in the river. (DLA, p. A-1). It also states the headworks divert a “portion” of streamflow from the Similkameen River and convey it to the intake. (DLA, p. A-6).

Further, flows in the reach below Enloe Dam would be reduced and dewatered during low flows. (DLA, p. E.3-29). While it is not at all clear, presumably, Okanogan PUD is proposing to divert the entire flow of the Similkameen River into the powerhouse because of its assertion that the river will be dewatered at certain times. However, the DLA does not specify at what flows the reach will be dewatered, the percentage of time during the year that dewatering will occur, and so forth. The final license application must provide significantly more detail regarding the proposed operations and the amount of water to be provided to the Similkameen River below the dam. And, for the reasons outlined throughout these comments, water must be provided to the Similkameen River, including the reach below Enloe Dam, at all times and in sufficient amounts to adequately protect aquatic resources in the river and other designated beneficial uses.

In addition, the DLA includes neither a proposed ramp rate during times of shut down or changes to project operations, nor an adequate discussion of how the crest gates will be operated during unscheduled outages to ensure continuous flow in the river. These measures (or an alternative to achieve the same objectives) have been repeatedly discussed and called for in the PUD's past attempts to relicense the project, but are not discussed adequately in the current DLA. We urge the PUD to more fully develop these measures, both of which are critical to protecting aquatic resources below the project and should be included in any future proposal.

B. DLA Fails to Adequately Address Water Quality Impacts

Section 401 of the Clean Water Act establishes that “[a]ny applicant for a Federal license or permit to conduct any activity . . . which may result in any discharge into the navigable waters, shall provide the licensing or permitting agency a certification from the State in which the discharge originates . . .” (33 U.S.C. §1341(a)(1)). The Act further states that any certification provided pursuant to section 401 shall set forth any effluent limitations and other limitations, and monitoring requirements necessary to assure that any applicant for a Federal license or permit will comply with [§ §1311, 1312, 1316, 1317] and with any other appropriate requirement of State law set forth in such certification, and shall become a condition on any Federal license or permit subject to the provisions of this section. (33 U.S.C. §1341(d)). In sum, before a federal agency, in this case the Federal Energy Regulatory Commission, may issue a license for any project that may result in a discharge to navigable waters, the state must certify that the proposed project will comply with applicable state water quality standards.

Prior to issuance of a Clean Water Act Section 401 water quality certification, Ecology must find that there is reasonable assurance that the proposed action – relicensing the Enloe Hydroelectric Project – will comply with state water quality standards. Evaluation of water quality standards compliance requires findings for whether or not all components of standards will be met. Standards consist of three components: (1) existing or potential beneficial uses of the waterbody, (2) specific numeric and narrative criteria needed to support the designated beneficial uses; and (3) an anti-degradation component.

The DLA references some of the criteria at issue with the relicensing of the project, but fails to include all the relevant standards that must be met. WAC 173-201A-600 identifies

the designated uses in the Similkameen River: salmonid spawning, rearing and migration; primary contact recreation; domestic, industrial and municipal water supply; stock watering; wildlife habitat; harvesting; commerce and navigation; boating; and aesthetic values. In addition, the lower Similkameen has been identified as needing additional spawning and incubation protection under WAC 173-201A-200(1)(c)(iv). The DLA contains limited analysis of the various designated uses, focusing on three criteria related to salmonid use. These include temperature, dissolved oxygen, and total dissolved gas.

The DLA falls short with regard to water quality in several regards. First, the limited analysis set forth in the DLA focuses on existing conditions rather than potential impacts of the project. For example, there is no analysis of how an increase in storage volume in the reservoir may affect reservoir temperatures as well as lower river temperatures. At a minimum, Okanogan PUD should model the proposed scenarios, followed by a comprehensive monitoring program during the life of any new license. Second, the limited analysis of total dissolved gas (TDG) impacts of the project precludes the ability to make any conclusions regarding those overall impacts. The study conducted by Okanogan PUD is limited to a few days in the spring and fails to consider potential effects on TDG during times of higher temperatures. The PUD assumes that TDG issues will be resolved by running the water through the turbines and bypassing the falls. However, there is no analysis or modeling of this proposed action. The PUD has not adequately studied or addressed the TDG problem. Third, with regard to water temperature, the DLA asserts that the project will not violate Washington state water quality standards because it will not result in an increase of .3°C above natural background conditions in the river. This conclusion does not appear to be supported by the data provided in Appendix B to Appendix E.2.1 of Exhibit E. Appendix B sets forth 7DADMax Temperatures in the Similkameen River. While it is not entirely clear where the measurements were taken – River 1, River 2, River 4, River 6 – we assume that they represent temperature measuring points within the Project area. The data in this Appendix identifies multiple violations of the .3°C limitation.

Importantly, while not entirely clear as noted above, it appears that the project will completely dewater the reach below the dam and Similkameen Falls at certain times of the year. Such a proposal ignores designated uses of the river – aesthetics, salmonid spawning and rearing. In coordination with interested stakeholders and the Washington Department of Ecology, the PUD should undertake a study to analyze various flow levels in the Similkameen River and over the falls and identify a flow regime that will adequately protect the designated beneficial use of aesthetics. Similarly, dewatering of a river has the potential to affect macroinvertebrate drift, which would adversely affect salmonid and resident fish species that utilize the Similkameen River below the falls. The DLA concludes that the macroinvertebrate production in the river below the dam is likely limited due to a number of factors, but it has not provided any data to support this claim. The PUD should undertake the necessary field studies to accurately assess the production. In either situation, flows must be provided in the Similkameen River to ensure protection of designated beneficial uses; the question is the appropriate level of such flows.

In addition to ensuring protection of the designated uses, the Environmental Protection Agency's regulations implementing the Clean Water Act require that states adopt anti-degradation policies to ensure that existing instream water uses and the level of water quality

necessary to protect the existing uses shall be maintained and protected. (40 C.F.R. 131.12). Washington's anti-degradation policy is set forth in Part III of Washington's water quality standards for surface waters for the State of Washington, Chapter 173-201A WAC. The state's anti-degradation policy calls for restoration and maintenance of the highest possible quality of the surface waters of Washington. The policy requires that existing uses be maintained and protected, with no degradation that interferes with or injures such existing uses. (WAC 173-201A-310). The DLA fails to address how the proposed project will meet this requirement. Dewatering of a reach that is currently watered is wholly inconsistent with the anti-degradation requirements.

Finally, as noted in the January 13, 2006 letter from the Washington Department of Ecology to Okanogan County PUD, the state requires no net loss of wetlands. The DLA acknowledges that wetlands will be lost as a result of the increased reservoir storage, but fails to identify how that impact will be addressed and how the no net loss requirement will be met. In addition to state requirements, Clean Water Act section 404 guidelines prohibit the discharge or disposal of dredged or fill material if that discharge will adversely impact wetlands if a less damaging practicable alternative is available. 40 C.F.R. § 230.10(a). The past three administrations have embraced the concept of "no-net-loss" of wetlands. The DLA must address the issues associated with the loss of wetlands caused by the project.

C. The DLA Fails to Adequately Assess Historic Range of Anadromous Salmonids

Okanogan PUD has tried to relicense the Enloe Hydroelectric Project three times prior to the current effort. In each of the previous proceedings, the issue of fish passage at the project has played a central role. Parties to those proceedings have differed greatly in their views of whether anadromous salmonids, in particular steelhead, ever passed Similkameen Falls to access miles of habitat in the Similkameen drainage. Significant documentation was provided in each of those proceedings regarding the question of fish passage, making it clear that there is no conclusive evidence that Similkameen Falls served as a barrier to fish passage. The PUD has not undertaken any additional study since the last relicensing effort, yet it again asserts that the Falls is a documented barrier to fish passage. We disagree and request that the PUD conduct the necessary studies to resolve the issue.

The record is replete with information calling into question the PUD's assertions. In its November 1991 filing, the Columbia River Inter-Tribal Fish Commission stated that it disagreed with the PUD's assertion that natural falls have historically represented the upper terminus of anadromous fish migration. It identified several studies that documented salmon and steelhead well into the Canadian Similkameen Basin. (CRITFC Petition to Intervene and Request for Studies, November 27, 1991). The Confederated Tribes of the Colville Reservation similarly questioned the PUD's assertion, noting that there is strong evidence that salmon utilized at least part of the Similkameen River above the Enloe Project before the dam was built. (Confederated Tribes of the Colville Reservation Petition for Leave to Intervene, November 25, 1991). The U.S. Department of Interior argued that "while the evidence at this time may not be clear that anadromous fish ever ascended the Similkameen River above Enloe Falls, neither is there clear evidence to the contrary." (U.S. Department of Interior Request for Rehearing and Finding of No Significant Impact, March 1, 1993, p. 5) Even FERC stated that it found that "the evidence was inconclusive as to . . . the historic presence of anadromous fish above the falls prior to the dam's construction."

(FERC, Order on Rehearing , Rescinding License, Denying License Application, and Terminating Stay, February 23, 2000).

More recently, a report prepared for the Colville Tribes, Department of Fish and Wildlife, states that “photographic interpretations of the falls suggest possible passage” and that “[t]he presence of redband trout upstream of Enloe Dam . . . gives strong evidence that at certain times these falls were likely passable by Interior Columbia River Redband Steelhead. (Aterburn, K. Kistler, and C. Fisher, Barriers to Anadromous Fish in the Okanogan Basin, January 2007). In addition, the National Marine Fisheries Service recently adopted its recovery plan for Upper Columbia listed stocks. In NMFS’ response to comments, the agency stated:

“NMFS agrees with the commenter that there is a possibility that steelhead once made it past the natural barrier where Enloe Dam is presently located. Studies show that many miles of high quality habitat exist in the Similkameen River above Enloe Dam. If passage were provided, the upper Similkameen River could become an important area for recovery of the Okanogan steelhead population, especially if actions in other areas of the Okanogan watershed are not successful. NMFS will wait for discussions to be completed with FERC, tribal governments, and others before providing a final position on passage.” (NMFS Responses to Public Comments On the Proposed Upper Columbia Spring Chinook Salmon and Steelhead Recovery Plan, September 2007).

The need to resolve the issue of the historic extent of fish runs in the Similkameen River prior to construction of Enloe Dam has been around for years. For example, the National Marine Fisheries Service, in its June 1, 1992 filing in one of the previous attempts to relicense the project, stated that “[d]espite the clear potential for anadromous fisheries in the Similkameen River Basin, there is an unresolved issue of the presence of anadromous fish in the Similkameen River Basin prior to construction of Enloe Dam.” (National Marine Fisheries Service Comments, Recommendations, and Fishway Prescriptions and Conditions, June 1, 1992, p. 3). This sentiment is repeated throughout the history of relicensing efforts at the Enloe Project. Nonetheless, the PUD has failed to conduct scientific studies that would help resolve the issue. In an effort to resolve the issue, we urge the PUD to undertake the studies set forth in the January 8, 2008 letter to Dan Boettger, Okanogan Public Utility District from Virginia Butler, Portland State University. (Attached)

In addition, the final application should include detailed information regarding the intensive mining that took place in the Similkameen River, beginning in the 1860s. The intensive mining undoubtedly had an adverse impact on the health of the Similkameen River, including any fish species that inhabited it. This information is critical to inform the issue of fish presence above the Falls.

Finally, the final license application should reference the unresolved nature of the issue rather than repeatedly asserting that Similkameen Falls serve as a complete barrier to anadromous fish. The data does not support such a conclusion.

D. The DLA Fails to Provide Critical Context Regarding Fish Passage

As already noted, Okanogan PUD has made three previous attempts to relicense the Enloe Hydroelectric Project. In each instance, FERC rescinded licenses that had been issued, the most recent on February 23, 2000. In part, the rescission was a result of an unresolved fish resource issues, including fish passage. As FERC noted in its September 13, 1996 Order Issuing License, “[t]he obstruction to fish passage at Enloe Dam has long been recognized, and several efforts to address this problem have been undertaken during the last 20 years.” (FERC, Order Issuing License, February 23, 1996). The issue of historic access above the falls has played an important role in this critical discussion, but is not the only factor informing the discussion. The DLA should provide a much more comprehensive discussion of the fish passage issue including relevant legislation. A good summary of it can be found both in FERC’s 1996 Order Issuing License and in the 1996 National Marine Fisheries Service’ Comments, Recommendations, and Fishway Prescription and Conditions.

The Similkameen River has long held the promise of mitigating for the massive loss of salmon caused by Columbia River mainstem dams. In 1976, Congress, in Title II of the Reclamations Authorizations Act of 1976, directed the Secretary to undertake “measures necessary to provide fish passage and propagation in the Similkameen River” as part of development of the Oroville-Tonasket unit extension, Okanogan-Similkameen division, Chief Joseph Project. Accompanying the legislation was the U.S. Senate’s Committee on Interior and Insular Affairs report (No. 94-1122) that stated that “[F]ishery enhancement will be accomplished by providing access to forty miles of potential spawning and rearing areas in the Similkameen River above the existing Enloe Dam Enloe Dam and powerhouse were constructed in the 1920s but use was discontinued in the early 1950’s. Alternatives for providing fish passage at Enloe Dam include dam removal or fish laddering.”

A 1977 Bureau of Reclamation study found that removal of Enloe Dam would be the preferred method for accomplishing the requirements of the Act. Much action was taken in the subsequent years regarding this issue. Pursuant to the Pacific Northwest Electric Power Planning and Conservation Act, the Northwest Power Planning Council proposed that the Bonneville Power Administration (BPA) provide funds for passage at Enloe Dam. BPA then undertook a study evaluating several passage alternatives. In 1983 BPA published its Similkameen River Habitat Inventory, and concluded that “[s]molt production from the system was estimated at about 610,000 steelhead trout and between 1.6 million and 4.8 million Chinook salmon. No water quality, temperature or flow problems for anadromous salmonids were evident from the available data and the habitat inventory.”

Throughout the previous FERC proceedings, fish passage has uniformly been recommended and required. In one form or another, it has been supported by federal agencies, tribes and other stakeholders. Dam removal, fish ladders, and constructing the project so that it could later be retrofitted with fish passage facilities have all been discussed. At one point, the U.S. Department of Interior argued that upstream passage at Enloe dam should be considered as off-site enhancement for the mainstem Columbia River anadromous fish losses as well as mitigation for the construction and reactivation of the Enloe Dam Project. It further argued that regardless of the issue of historic habitat, neither the Federal Power Act nor Commission regulations require the historical presence of anadromous fish as justification for a prescription of fish passage. Ultimately, Interior argued that prior to

authorizing construction and operation of the project, the Commission should not only assure that the project would be compatible with future installation and operation of fish passage facilities but it must resolve the issue of funding. (U.S. Department of Interior Request for Rehearing and Finding of No Significant Impact, March 1, 1993). Either way, this issue needs to be addressed in the current effort to relicense the project.

The DLA excludes information, including federal law, critical to the question of fish passage at the Enloe Hydroelectric Project. The Conservation Groups strongly urge the PUD to provide significantly more discussion of the issue in the final application.

E. The DLA Provides Insufficient Information on the Need for Power and the Value of Generation

Marginal economic value has been a central issue throughout the history of Enloe Dam. The Conservation Groups request that the PUD provide additional and more detailed data on the need for power, the value of generation, and on other project benefits in its final license application. Such data would provide a better understanding of project economics and would allow public, agency (including FERC), tribal and other stakeholders to accurately weigh the value of potential power production against the impacts to the Similkameen River and related resources.

As the PUD notes, the original project was decommissioned in 1958 because lower cost energy was available from other sources. In subsequent licensing efforts, FERC rescinded licenses for this project on the grounds that the anadromous fishery issues had to be resolved before a licensing decision could be made. While fish passage played a role in the economics of each of these licenses, it did not stand alone. As FERC stated in its February 23, 2000 Order on Rehearing, Rescinding License, Denying License Application, and Terminating Stay “[T]he obligation to construct and operate a fish ladder would significantly increase the costs of a project that already appears to be uneconomical.”

In its July 2005 Initial Consultation Document, the PUD stated that it believes that it is “feasible to resolve the fish passage issues . . . and therefore, it has a renewed interest in developing the site”. (ICD, Project History, p. 2). In support of this, the PUD has referenced a number of new economic factors which they believe benefit the value of this project, including: (1) rehabilitating an existing facility; (2) projected generation needs; (3) community benefits from construction and employment; (4) cost of relicensing; and (5) value in replacing carbon-fuel energy.

Unfortunately, the DLA does not provide adequate supporting evidence that demonstrates how these factors would change or improve the economics of a new Enloe Hydroelectric Project. Nor does the DLA discuss how the proposed and interrelated (economically and environmentally) Shanker’s Bend project would change the hydroelectric operations of the Enloe Project. Thus a more comprehensive study of overall project economics (including the Shanker’s Bend project) would be of great value and should be included in a final application. We touch on some of the PUD’s rationales for its renewed interest below.

Projected generation needs

The DLA states that “[a]ll feasible power generation is needed to meet forecasted demand in the District Service Area.” Table B-5 shows that the annual average load growth for the past 18 years has been less than 10MW, while Table B-6 shows that the annual average load projected for the next 11 years has increased to 25MW. The DLA neither supports nor justifies this purported 150% annual increase. The final application should explain where this projection increase will come from, especially in light of the assertion that the region is expecting “mostly residential growth, with some commercial growth but very little industrial growth” and Table E.5-4 which shows that total population growth in Okanogan County has been much slower than the state as a whole (less than 1% between 2000 and 2005), as well as a lower growth in per capita income than other areas of the state (42%).

Community benefits from construction and employment

The DLA discusses the expected economic benefits to the local community from construction and operation of the Enloe Project. While construction will certainly benefit local employment, this benefit is short term; the longer term benefits of operation are usually very small to nonexistent at hydropower projects. This would seem to be confirmed. The DLA states “[a]lthough not finalized at this point, it appears that there will be no long term increase in on-site employment or payroll within the impact area due to the operation of the Project.” (DLA, p. E.5-6) The final application should expand this discussion and provide hard numbers in terms of employment.

Value in replacing carbon-fuel energy

The DLA states that “If a new large capital project were considered to replace market purchases, natural gas or coal-fired generation would be the most likely preferred sources.” (DLA, p.D-6). The DLA further states that replacement generation from a natural gas fired power plant or a coal fired power plant would contribute the equivalent of an estimated 20,000 tons of CO₂ per year or the equivalent of 44,000 tons of CO₂ per year, respectively. (DLA, p. D-7). The Conservation Groups are deeply concerned with the problem of climate change, and we recognize that carbon emissions caused by human activity play a significant role in exacerbating this problem. We also understand the need to lower carbon emissions to reduce the societal impacts of global warming, and we appreciate that hydropower may play some role in solving this problem. However, we believe that the PUD’s statement that this project will leave “no carbon-footprint” and “can contribute to reduced emissions” (DLA, p. D-5) is an overly simplistic consideration of this important issue. This assumes that if Enloe Dam is not built, generation would be replaced by coal-fired or natural gas generation. This analysis does not include or refer to any supporting evidence, and fails to consider other perfectly reasonable options. For example, projected power from Enloe operations could be replaced by other sources of energy that emit significantly less carbon than coal, such as solar or wind. Alternatively, its power could be replaced through energy conservation, such as the existing PUD conservation program which successfully saved more than 5,000 MWh in 2004.

In the final application, we would ask the PUD to provide substantial analysis in support of a realistic consideration of the carbon that could be emitted by various sources of replacement power – including conservation – and to not conclude that the sum of the assumptions listed in the draft will result in a net benefit for the project.

F. The DLA Fails to Adequately Consider the Proposed Shanker's Bend Project

On May 17, 2007, Okanogan PUD applied for a preliminary permit application for the proposed Shanker's Bend Project (FERC Project No. 12804). The project would be located at RM 7.3, with the powerhouse located at RM 6.2. While we realize that the Shanker's Bend Project is not certain to occur, there is no question that it would have a significant impact on operations of the Enloe Hydroelectric Project as well as on the resources of the Similkameen River. In fact, the preliminary permit application for Shanker's Bend states that the two projects will be operated in conjunction. Nonetheless, Okanogan PUD opts to exclude any analysis of the two projects in the DLA, other than to assert that they are compatible. The impacts of the two dams must be considered together, not in a piecemeal fashion. We urge the PUD to defer action on the Enloe Project until there is a better understanding of the status of Shanker's Bend. Given the interrelated nature of the proposed projects, it is premature to move forward on the Enloe Hydroelectric Project.

Moreover, absent consideration of both projects, the Federal Energy Regulatory Commission (FERC) will be unable to take a watershed approach, to adequately assess cumulative impacts as required under the National Environmental Policy Act, and to make the necessary findings under the Federal Power Act. The FPA requires that the project adopted "shall be such as in the judgment of the Commission will be best adapted to a *comprehensive plan* for improving or developing a waterway or waterways for the use or benefit of interstate or foreign commerce, for the improvement and utilization of water-power development, for the adequate protection, mitigation, and enhancement of fish and wildlife (including related spawning grounds and habitat), and for other beneficial public uses, including irrigation, flood control, water supply, and recreational and other purposes. (16 U.S.C. § 803(a)(1)).

II. Specific Comments

In addition to our overarching comments above, we offer the following comments on specific sections of the Draft License Application.

Initial Statement (p. IS-3)

In the discussion of water rights necessary for operation of the Enloe Hydroelectric Project, Okanogan PUD acknowledges that it will need to apply for and receive an additional water right for 600 cfs in order to fully develop the Project. As the WA Department of Ecology states in its January 13, 2006 letter to the PUD, "there is no guarantee that a certification will be issued." As such, the final license application should include an analysis of project operations, power generation, and economics should a water right be denied.

Exhibit A – Project Description

Section A.2 – Impoundment (p. A-11)

The DLA describes the reservoir as being fairly shallow due to the accumulation of sediment. The Enloe project, like all reservoirs, will continue to fill with sediment, and therefore, the storage and generating capacity of the Project will continue to diminish over

time. The final application should discuss sediment inputs, diminishing storage, and corresponding impacts on generation over the life of the license. Such discussion should include a timeline estimate of when sedimentation would prevent or seriously compromise power generation and plans, if any, for sediment removal.

The DLA relies on studies conducted more than 15 years ago to support its claim that thermal stratification does not occur in Enloe Reservoir. The final application should explain how 15-year old data is still applicable. And, importantly, the PUD should include additional analysis of the impact of an increase in the water surface elevation and size of reservoir on thermal stratification.

Exhibit B – Project Operation and Resource Utilization

As outlined above, Okanogan PUD must include a much more comprehensive, detailed description of how it plans to operate the Enloe Project. There are some fundamental components that are critical to understanding the impacts of the Project. These include but are not limited to: (1) minimum flows adequate for aquatic resource protection and aesthetics in the Similkameen River below Enloe Dam and how those will be provided and monitored; (2) ramping rates and how those will be controlled; (3) crest gate raising and lowering; and (4) how the crest gates will be operated during times of unscheduled outages. Absent a more comprehensive plan, it is not possible to accurately assess the impacts of the Project on the resources of the Similkameen River. Moreover, exclusion of critical protection measures, including flows and ramping rates, both of which have been required in previous licenses, will result in inadequate protection, mitigation, and enhancement of affected resources.

Section B.2 – Alternative Facility Designs, Processes and Operations Considered (p. B-4)

The DLA lists several alternative intake designs that were considered but fails to provide a comprehensive discussion of the characteristics of each one and the potential level of protection that they would provide to fish resources. Rather, the DLA just asserts that the trashrack was selected, in part because of the different survival of fish that become entrained. The underlying analysis, however, is insufficient, to conclude that the trashrack will be sufficient and that the other alternatives are not needed.

The survival estimates upon which the PUD is relying are identified later in the document, p. E.3-27, and are based on predictive models developed by the U.S. Department of Energy's Advanced Hydro Turbine System Program (Franke, et. Al. 1997). The PUD has not adequately explained why those predictive models are applicable to and representative of the two vertical axis Kaplan turbine/generator units that will be installed. The final application requires significantly more information in order to assess the adequacy of the proposed measure and justify rejection of more protective ones. This information is particularly essential in light of filings in previous proceedings that required the PUD to install a more protective screen at the intake as well as FERC's Order Issuing License that required a fish screen (FERC Order Issuing License, September 13, 1996).

*Section B.5 – System and Regional Power Needs
Conservation Programs (p. B-20)*

Section 10(a)(2)(C) of the Federal Power Act requires the Commission, in acting on a license application of a state or municipality, to consider the extent of electric consumption efficiency programs. The DLA briefly touches on conservation programs that the PUD is implementing and the savings that have been realized. A mere listing of the programs being implemented, however, does not allow consideration of the overall program as required by law. As evidenced by the savings in 2004, clearly there is the potential for significantly more conservation to be realized. The final application should describe what the PUD's program has consisted of during the past years, what was undertaken in 2004 that led to significantly greater savings, and what the real potential is from conservation. This information is essential to assessing the overall need of the power.

Section B.6 – Applicant's Plan for Future Development of the Project

See comments above regarding the proposed Shanker's Bend Project and the need to integrate the analysis.

Exhibit E – Environmental Report

Section E.2.2 – Flows, Water Uses, and Project Discharges Stream Flows (p. E.2-1)

On page E.2-3, Okanogan PUD states that the Project would divert up to 1,600 cfs of water for generation. As noted earlier, the final application should clarify both (1) impacts on the project should an additional water right not be issued, and (2) how the diversion will occur in relation to a flow in the Similkameen River below the Dam. Diversion of the entire flow of the river will result in failure to protect designated beneficial uses in the Similkameen River.

Section E.3.2.1 Existing Conditions (p. E.3-1)

The DLA includes a discussion of fish distribution and abundance that relied in part on surveys conducted in 2006 and 2007. The surveys employed different methods for above and below Enloe Dam. Details of the surveys are set forth in Appendix E.3.1. The surveys in 2006 took place in July, August and September to represent "typical stream temperatures and flows, as well as the presence of fish life stages". In 2007, for the same reason, the surveys took place in March and July. The DLA, however, fails to explain how the months chosen represent the identified parameters, and how this limited analysis would adequately represent conditions at all times of the year. Given that the PUD is relying on this data, and the numbers of fish identified, to justify several of the proposed protection, mitigation, and enhancement measures, the final application should include a more detailed discussion regarding the adequacy of these limited surveys. In addition, it would be beneficial to survey the reach above the reservoir to get a more comprehensive picture of the species that will be affected by both the Enloe and Shanker's Bend Projects.

The DLA references a number of different studies with regard to fish use in the Similkameen River below Enloe Dam. In combination, however, it is challenging to get an accurate picture of fish distribution and abundance in the river. The DLA notes that adult

anadromous fish are most abundant in the river during spawning season, however, because spawning occurs during the spring freshet when flows and turbidity are high, snorkeling observations were not possible. (DLA, p. E.3-8) These conditions seem applicable to steelhead spawning timing, however, they do not justify failure to snorkel survey during summer chinook spawning that occurs during the late fall. (DLA, p. E.3-13) It is not clear why snorkel surveys were not conducted at that time.

In addition, although the PUD did not conduct redd surveys, the DLA references summer chinook and steelhead redd surveys conducted by WDFW and OBMEP respectively. We realize the challenges associated with surveying at different times of year and the potential impact on the accuracy of the findings. It would be beneficial to include a discussion of the conditions under which the various studies were conducted to allow for better understanding of the results. For example, spring flow and turbidity conditions precluded an adult snorkel survey in 2006, yet OBMEP conducted steelhead redd surveys at the time. Under what conditions were the redd surveys undertaken? We urge the PUD to provide greater detail of the various studies, the water years under which they were conducted, and the basis for the survey timing. We also recommend that the PUD, in conjunction with federal and state fishery agencies, tribes, and other stakeholder, undertake additional comprehensive fish distribution and abundance surveys.

Fisheries Management Framework/Fisheries Resource Management Plans (p. E.3-15 to E.3-16)

The DLA identifies the authority of the U.S. Fish & Wildlife Service and the National Oceanic and Atmospheric Administration Fisheries as responsibility for fish and wildlife on federal lands. The authority of both agencies is broader and not limited to federal lands. The final application should include a more accurate description of their authorities. It would be helpful if the final application including the following: (1) Status of the Okanogan River Watershed Management Plan; and (2) Date of the Okanogan Subbasin Plan

Habitat Type and Quality (p. E.3-20)

The DLA states that the relatively limited amounts of gravel in the river result in limited spawning habitat and that the Similkameen appears to be a naturally gravel starved system. (DLA, p. E.3-22). Several studies are cited in support of this finding. It appears that Entrix conducted a number of studies related to sediment, all of which are in Appendix 6. There is no discussion of the other studies upon which the PUD is relying to conclude that the Similkameen is sediment starved, and it is difficult to identify the actual studies. The final license application should include a discussion of each of the studies, including how they support the finding regarding gravel in the river, and identify them in a manner that allows people to locate and review them.

Section E.3.2.2. – Impacts

Operational Impacts

Entrainment of Fish at the Project Intake (p. E.3-27)

The discussion of entrainment in the DLA lacks critical information necessary to fully understand the impacts of the project. The final application should include the following: (1) explanation of how/whether the turbine survival predictive models are applicable to the

Enloe Hydroelectric Project, (2) greater clarification on what is meant by the statement that smaller fish are not meant to occupy the area to any substantial degree, (3) any spillway survival studies that have been conducted, and (4) support for and relevance of the potential that entrained fish may be replaced by emigration from upstream populations. Even if that were to occur, the population as a whole may decline due to ongoing mortality at the project.

In addition, we disagree with the PUD's assertions that turbine survival is relatively high. For larger non-salmonids, survival could be as low as 77.6%. And, for salmonids, it could be as low as 57.3%. And, there is no data regarding spillway survival that supports the PUD's claim that "there is expected to be little difference in the survival rates of fish passing over the spillway . . . and fish passing through the turbines." (DLA, p. E.3-28). If the PUD has conducted spillway survival studies, please include those in the final application.

Bypass Reach Impacts (p. E.3-29)

As already noted, eliminating all flow in the Similkameen River below the dam has unacceptable adverse impacts. In addition to adverse effects on aesthetics and macroinvertebrate drift, dewatering the reach will have a direct impact on those fish that use the reach between the dam and the falls. We disagree with the PUD's claim that impacts would be insignificant.

Powerhouse and Tailrace Impacts (p. E.3-29)

We disagree with Okanogan PUD that, based on the existing information, a tailrace barrier is not needed and that the flows will operate as a velocity barrier. There is no discussion of what flows are necessary to create an actual velocity barrier and whether that will exist even at the lowest flow. Moreover, it is difficult to understand how fish will not suffer adverse impacts if they are able to swim upstream into the tailrace and continue through the draft tube into the turbine environment. Certainly, if they are able to access the turbine area during what the PUD describes as normal operations, they will suffer injury or mortality during start up and shut down periods. Recognizing these adverse impacts, in the previous licensing effort, FERC required that the PUD develop a plan to install a "submerged bar rack tailrace barrier to prevent fish from entering the tailrace discharge chamber." (FERC Order Issuing License, September 13, 1996, p. 54). The PUD has not provided any new data that would lead to a different conclusion regarding the need to address the impacts of the project.

Instream Flows (p. E.3-30)

Fish Passage (p. E.3-30)

Please see discussion above in our overarching comments.

Section 3.2.3 Protection, Mitigation, and Enhancement Measures

Operational Impacts Associated with Sediment (p. E.3-32)

Analysis of sediment issues in the DLA is limited. It acknowledges some impacts that will occur during project construction, however it fails to adequately assess the issue

of sedimentation impacts on the Similkameen River, including potential and cumulative impacts from ongoing project operation. It does not address annual sedimentation buildup, high historic sedimentation during the spring/summer freshet, or the impacts of sedimentation over the life of the proposed license, including how sedimentation could effect future power generation, dam safety issues, or the need for future dredging of the reservoir. The DLA does not define the expected or potential risk of large sediment discharges from project operations (including crest gate manipulation) on water quality or habitat and navigable waters downstream from the project. Rather, it merely concludes that "sedimentation may accumulate in the intake area or other project facilities during lower flows and become mobilized during higher flows resulting in release of sediment into waterways." (DLA, p. E.3-32). The final application should include detailed data and information regarding each of the sedimentation issues listed above.

Operational Impacts Upstream of the Dam – Inundation of Riverine Habitat (p. E.3-34)

To address the impacts of the project resulting from increased storage and inundation of habitat, the PUD proposes to increase structural diversity and improve the quality of habitat by adding boulder clusters. It is difficult to assess what, if any, benefits such action will provide without significantly greater detail. At a minimum, the PUD should commit to implementing a measure that provides a specific amount of biological and habitat improvements.

In addition, the PUD has failed to address the loss of wetlands that will occur as a result of the project. As discussed above, this is not allowed under current law. Therefore, the final application should clarify how the PUD intends to address this loss of wetland habitat. One element of that will be for the PUD to better describe the characteristics of the wetland habitat that will be lost.

Operational Impacts at the Project Powerplant – Entrainment of Fish at the Project Intake (p. E.3-35)

To reiterate, the Conservation Groups disagree with the PUD's proposal to address entrainment at the project. Neither the level of potential impacts nor the level of expected benefit identified by the PUD are adequately supported. In addition, there is no way to assess the potential benefits of the downstream enhancement that the PUD refers to because of the lack of detail regarding what the project will actually be. The PUD is relying on the as yet to be defined project to address multiple impacts of the project, entrainment being just one.

The PUD does commit to conducting a turbine entrainment study, which we support provided it is sufficiently comprehensive. However, there is no indication of how the results of the study will be used. Is it the PUD's contention that the single habitat measures proposed for the lower river is to also mitigate for the results of the entrainment study? The final application should provide greater clarity on how this and other monitoring studies will inform protection, mitigation, and enhancement measures.

Operational Impacts Upstream of the Dam – Riparian Vegetation (p. E.3-37)

Planting riparian vegetation along the reservoir does not mitigate for the loss of wetland habitat that will occur with project operation.

Powerhouse and Tailrace Impacts (p. E.3-37)

Okanogan PUD has not provided sufficient information in its DLA to justify forgoing implementation of a tailrace barrier. Even if the PUD were to move forward without a tailrace barrier, significantly more information must be developed to support the assumption that it can create the appropriate conditions in the tailrace to keep the fish safe.

Downstream Impacts – Instream Flows (p. E.3-38)

The final application should include a ramp rate to ensure adequate protection of aquatic resources in the lower river. This should be applied to all flow sources, as practical.

Downstream Impacts – Protection of Habitat Downstream of Similkameen Falls (p. E.3-39)

Okanogan PUD proposes to relocate the tailrace in order to mitigate for adverse impacts to habitat downstream of the Falls. It is not entirely clear from where the PUD is relocating the tailrace. Use of the existing project facilities is not feasible for a number of reasons, several of which the PUD has identified. As such, it is not clear how construction of the project can also serve as mitigation for the project. Construction of the tailrace in the proposed location is a component of the project itself, but is not mitigation for its operation. The final application should not include tailrace relocation as a protection, mitigation, or enhancement measure.

Downstream Impacts – Fisheries Enhancement Projects (p. E.3-40)

The Conservation Groups support the implementation of habitat improvement projects below Enloe Hydroelectric Project. However, we do not support the PUD's premise that it is not practical to otherwise address the impacts that the projects are intended to mitigate. In addition, the DLA is flawed in several respects. It lacks sufficient information on which to review the proposed side channel development and get any indication of the benefits that it will provide. The PUD does not provide examples of other similar projects, does not establish any biologically measurable goals, and does not provide information that suggests it is even feasible to implement such a measure. As the DLA notes, the first phase of the measure will be to assess whether there are even possible sites. And subsequent phases also are critical to the question of feasibility. Absent more analysis, the proposed measure does not sufficiently protect, mitigate, or enhance the resources of the Similkameen River. The final application should include significantly more data regarding this measure.

We also support gravel augmentation to improve spawning habitat. However, it is not possible to assess the scale or possible adequacy of the proposed program. While the PUD identifies a cost of \$170,000 for the measure, it fails to include a discussion of how much gravel will be added, how much additional habitat is expected to result, and how its use by fish will be measured. It also fails to support that gravel augmentation will be successful and

that gravel will be retained in place. It is critical that these components be included in the final application.

Okanogan PUD is relying on these two enhancement projects to mitigate for a number of impacts of the project – entrainment injury and mortality, injury and mortality from tailrace operations, impacts resulting from construction and dewatering of a reach of the river. Yet, the DLA provides wholly inadequate information on which to assess the adequacy of the measures. Because of this, as well as limited data regarding impacts of the project, it is difficult to understand how the PUD concludes that “[t]he two measures together will more than compensate for loss that could occur as a result of the construction and operation of the project.” (DLA, p. E.3-41). We disagree.

*Section E.10.2 – Alternative Facility Designs, Processes, and Operations Considered
Streamflow Downstream of Enloe Dam (p. E.10-7)*

The PUD repeatedly asserts that the proposed operation would effectively have no impacts on the flow regime of the Similkameen River. Again, it asserts that the flow regime downstream of the Project would be similar to natural inflow to Enloe Reservoir. (DLA, p. E.10-7). This statement is misleading and should be modified to reflect that the PUD is proposing to dewater a reach of the river.

III. Conclusion

Considering the long history of licensing for this project and the depth with which many of the issues affecting this project have been debated over the years, the Conservation Groups are disappointed with the lack of information presented in the DLA. The Conservation Groups request that Okanogan PUD delay further action on the Enloe Hydroelectric Project until there is greater clarity regarding the status of the Shanker’s Bend proposal. Alternatively, we urge the PUD to modify the draft license application in accordance with our comments, including a comprehensive analysis of the cumulative impacts of Shanker’s Bend and Enloe. Absent such action, the DLA fails to provide sufficient information for purposes of relicensing.

Thank you for consideration of our comments. Please contact me at (503) 827-8648 or via email at bswift@amtrivers.org for further information or if you have any questions.

Sincerely,

Brett Swift
American Rivers

John Osborn, M.D.
Center for Environmental Law and Policy

Jerry R. Boggs, Ph.D.
Selkirk Conservation Alliance

Rick McGuire
North Cascades Conservation Alliance

Geraldine Gillespie
Columbia River Bioregional Education Project

Mike O'Brien
Sierra Club, Cascade Chapter

Cc: Kimberly D. Bose
Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, D.C. 20426

From: "Brett Swift" <bswift@americanrivers.org>
To: <enloe@okpud.org>
Date: 2/4/2008 2:52 PM
Subject: DLA comments
Attachments: DLA Comments_Final_Feb 08.pdf

To Whom It May Concern:

Attached please find American Rivers, the Center for Environmental Law and Policy, the Selkirk Conservation Alliance, the North Cascades Conservation Alliance, the Cascade Chapter of the Sierra Club, and the Columbia River Bioregional Education Project Comments on the Draft License Project for the Enloe Hydroelectric Project. Thanks for the opportunity to comment.

Please contact me if you have any questions.

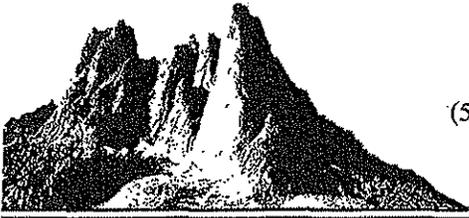
Best,

Brett

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--- M+ ---

COMMENT LETTER #15



OKANOGAN COUNTY
OFFICE OF PLANNING AND DEVELOPMENT
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email: planning@co.okanogan.wa.us

To: Dan Boettger
Director of Regulatory and Environmental Affairs

From: Charlene Beam, Natural Resource Senior Planner
Okanogan County Planning and Development

Date: February 4, 2008

Subject: Enloe Hydroelectric Project

RECEIVED

FEB 04 2008

OKANOGAN COUNTY PUD NO. 1
OKANOGAN, WA

Dear Mr. Boettger,

Thank you for the opportunity to comment on the scope of Enloe Hydroelectric Project Draft License Application Comments. After reviewing the proposal I offer that Okanogan County has no concerns regarding the project as proposed.

- Effects on ESA listed species should be negligible due to the natural impediment of the existing falls.
- Effects on interruptible water rights should be negligible as the water is only diverted to flow through the dam and returned to the river.
- Temperature within the Similkameen River should not be affected.
- Existing seasonally sub-standard access roads will be abandoned and new access roads constructed.

Having commented on the preceding, Okanogan County would like to encourage Okanogan County Public Utility District to pursue any possibilities to avoid destruction of the historic power house, Natural Register site 45OK368. Okanogan County would be interested in entering into discussions about investigating potential funding sources to that end. We regard the historic power house as an important asset of the Okanogan County Trail System.

Once again, thank you for the opportunity to comment on Enloe Hydroelectric Project Draft License Application Comments.

Charlene Beam
Natural Resource Senior Planner

Cc: Perry Huston, Director
File

From: "Char Beam" <cbeam@co.okanogan.wa.us>
To: <enloe@okpud.org>
Date: 2/4/2008 3:52 PM
Subject: Comments
Attachments: Enloe FERC Comments.doc

Hi Dan,

Attached are comments regarding Enloe Dam, please let me know if you need anything else from me.

Thanks and have a great evening!

Char

Charlene Beam

Natural Resource Senior Planner

Okanogan County Office of Planning & Development

123 5th Ave North, Ste. 130

Okanogan, WA 98840

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-- M+ --

COMMENT LETTER #16



The Confederated Tribes of the Colville Reservation
Environmental Trust Dept. P.O. Box 150, Nespelem, WA 99155
(509) 634-2421 FAX: (509) 634-2422



February 4, 2008

RECEIVED

FEB 04 2008

OKANOGAN COUNTY PUD NO. 1
OKANOGAN, WA

Enloe Hydroelectric Project
Draft License Application Comments
1331 Second Avenue North
P.O. Box 912
Okanogan, WA 98840

RE: Comments, Enloe Hydroelectric Project, FERC Project #12569

To Whom It May Concern:

Following are comments submitted by the Confederated Tribes of the Colville Reservation on the Draft FERC License Application in lieu of public comments per our MOU.

These comments do not address consultation or comments regarding the Tribal Historic Preservation Office, rather comments regarding Tribal natural resource issues and concerns.

Water Rights

The Confederated Tribes of the Colville Reservation have prior and paramount unquantified water rights in the Okanogan River system that will need to be considered and protected.

Fish and Wildlife

Overall the proposed project provided an acceptable balance of mitigation actions to address most fisheries related issues. An apparent bias appears to exist related to what this site looked like historically and needs to be more objective. Upon review of this document Tribal Fish & Wildlife evaluated technical issues related to water quality and more specifically the way that temperature and total dissolved gases data were presented and made suggestions for improvements.

Fish passage was agreed to be off the table for discussion as part of this project but the inclusion of clearly biased information such as was included in Exhibit E, Appendix E.4.1, Page 5 threaten this by providing only one side of a highly contentious issue. The "Rock Wall" described in this document described as being 33 feet high and fairly perpendicular is not supported by any conclusive evidence. A spectacular site such as this would have been a gathering point for both native and nonnative people to congregate take photos and remember but this is the only reference to this place that I have ever seen. Many efforts have been made to settle fish passage issues at this site but most have concluded that insufficient information exists to clearly determine this issue one way or the other. I would suggest exclusion of the whole "Pre-dam era

section or at least that it be rewritten from an objective unbiased approach giving equal consideration to the opposing sides of this issue.

Water temperatures vary widely when data loggers are placed in shallow stream sections whereas those placed in deep water habitats have attenuated minimums and maximum temperatures (Figure 1). When determining differences between sites the use of maximum temperatures result in what would appear to be decreasing temperatures and use of minimum temperatures will result in what appears to be increasing temperatures. These results are the product of the study design and do not represent the true value that is unchanged as reflected by the mean temperature that focuses on the real temperature rather than the noise. Use of the 7day max temperatures in evaluating this project result in what appear to be decreasing temperatures which is misleading.

Water retained behind a dam will be exposed to increased solar radiation due to reduced shading from riparian vegetation, increased channel width, and reduced velocities, resulting in an increase in water temperature. The extent of this increase resulting from the existing project compared to historical is unknown and not addressed. In addition the amount of warming that could be attributed to the proposed pool raise is not predicted. Water temperatures (Figure E.2-1 of the draft application) downstream of the project area already exceed lethal levels for coldwater salmonids during the middle of the month of July and remain stressful from early July through mid-September. Therefore, any increase in water temperature would be considered detrimental to endangered summer steelhead that might attempt to rear in the Similkameen River from July through September and should be mitigated. Even temperature increases in the tenths of a degree should be mitigated for by supplementing coldwater inputs below the project from lake, or ground water to a level that would off set these increases 2 fold.

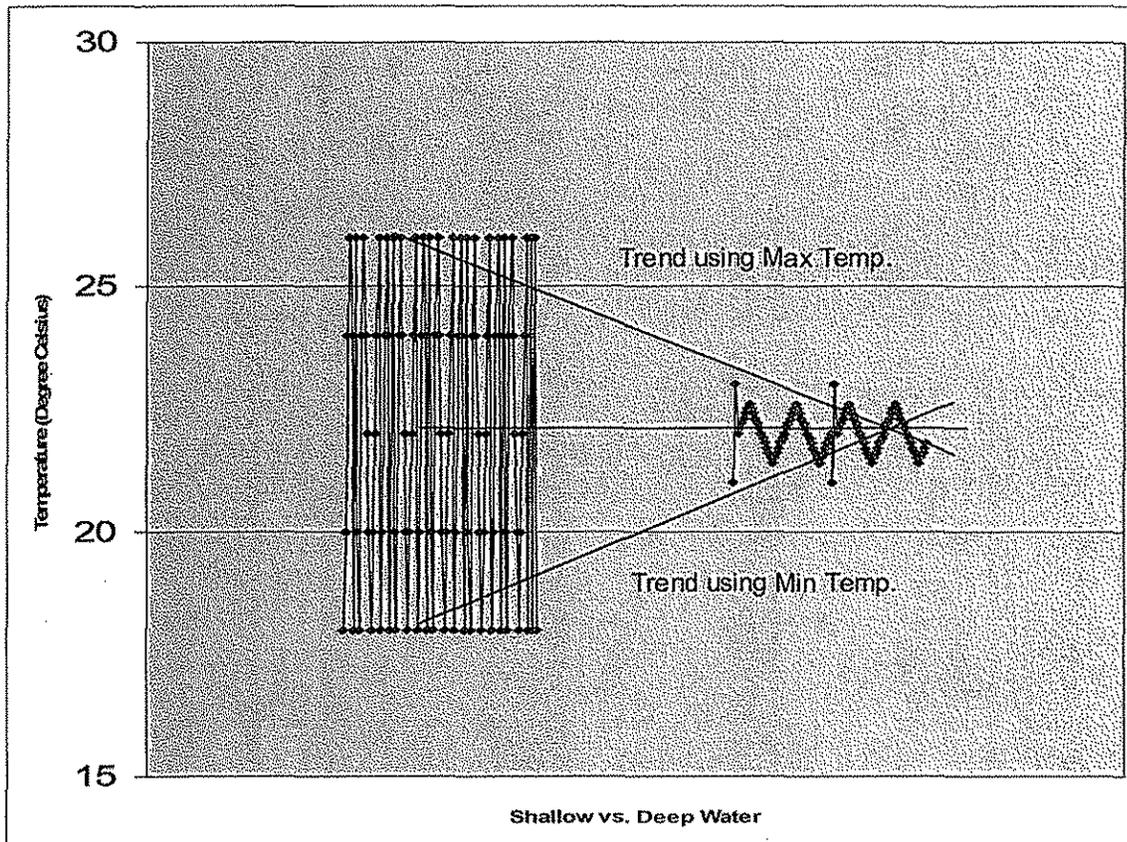


Figure 1. Temperature data collected in a shallow area (left) and deep water habitat (right) with resulting trend lines when minimum, maximum, and mean values are used.

High Total Dissolved Gas (TDG) levels have resulted in fish kills along the Similkameen River in the past. High TDG typically are associated with high discharges however, the evaluation of TDG occurred in May at a discharge of between 8,310 and 8,340 shortly after the high flows of the season. However, runoff in 2007 was prolonged beginning in March and not ending until the end of June. Peak discharges were muted as a result of this extended gradual snowmelt. The typical annual runoff pattern has much higher flows over a shorter duration during primarily May and June and a much higher peak discharge of 15,000 CFS or more. Therefore, it is likely that TDG level would be much higher than presented here. Additional monitoring of TDG to establish a solid baseline is needed in order to compare post project monitoring results. These data once analyzed should provide the basis for an adaptive management and appropriate mitigation loop. This adaptive management loop concept is also missing for other mitigation elements especially when only limited data are currently available.

Figure E.2-11 shows the Similkameen River at high flows in 1905 and no falls are evident. It is these large flood events that provided passage opportunities for summer steelhead. This type of runoff event would likely result in higher TDG levels today than would have historically existed. However, the extent of this change can not be quantified without any monitoring data and interpretation from a photograph is of very limited value.

Water Quality Monitoring

The draft report Water Use and Quality section discusses conclusions based on analysis of 2006 water quality monitoring data conducted by the proponent and modeling efforts utilizing the 2006 water quality data.

Results of temperature data and subsequent modeling efforts conclude that the project did not elevate water temperature during the June-September 2006. Regardless of the modeling effort, it defies logic that the reservoir behind the dam does not increase overall water temperatures. While five years of monitoring is suggested in the Prevention, Mitigation & Enhancement Measures, monitoring should be expanded to include water quality including temperature, dissolved oxygen, total dissolved gas, Total Suspended Sediment (TSS), total and dissolved metals (As, Cu, Cd) in water, and sediment quality throughout the life of the operation of the project. Because this river is the primary source of water to the Okanogan River it is imperative that water quality impacts be monitored and prevented throughout the life of the project. It is recommended that continuous real time monitoring be conducted throughout the life of the project. Experience at numerous other dam sites has shown that real time TDG monitoring is the best way to evaluate and develop measures to mitigate TDG at a dam on specific conditions. Sometimes Near field array monitoring for "worst case" flow conditions can also be of use in refining mitigation measures. Mitigation for fish and aquatic resource damages should be conducted on a case by case basis with Tribal fisheries staff.

Total dissolved gas data collected in 2006 suggest a 3-7% increase in TDG from the dam, regardless if the waterfall below the dam increases TDG further. This is an impact to water quality from the dam which may or may not change during the operation of the project; this was not modeled under various operational and flow scenarios. We agree that the bypass design will probably benefit water quality for TDG below the project, but this needs to be monitored regardless. It is recommended that monitoring be conducted throughout the year, preferably continuous real time monitoring. Mitigation for fish and aquatic resource damages shall be conducted on a case by case basis with Tribal fisheries staff.

Exhibit E.2 Water Use and Quality states, "...there are no established regulatory criteria for chemical contaminants in freshwater sediments..." Text at this and other references or comparisons to sediment quality standards should be revised to accurately reflect that the Colville Confederated Tribes has established regulatory criteria at Chapter 4-16 of the CCT Tribal Code for freshwater sediment quality and at Chapter 4-8 for water quality.

Exhibit E.2 Sediment Quality concludes that the potential for water quality standards to be exceeded as a result of sediment disturbance during Project construction is indicated. However, as clearly demonstrated in Appendix E.6.3 Technical Memorandum for Pool Hydraulics, Sediment Balance, and Sediment Transport Study, the potential for exceedances of water quality standards exists under both existing and proposed Project operations throughout the Enloe Reservoir impoundment and downstream of the dam. Consequently, water/sediment quality monitoring and Project PM&Es must address potential impacts throughout the life of operations of the Project, in addition to impacts during construction.

The study area addressed in Appendix E.6.2 Technical Memorandum for Bank Stability and Erosion Assessment is limited to a 12 mile long region of the Similkameen River downstream of Nighthawk. No discussion is presented on criteria for limiting the study to the canyon section of the Similkameen River in the U.S. The assessment concludes zones of fine grained sedimentation are "scattered and generally small in size and volume" in the study area upstream of the impoundment. Furthermore, the study concludes, "Most of the upland sources do not appear to have a direct connection to the Similkameen River." These conclusions directly contradict the conclusions of both Washington State Dept of Ecology and the Colville Confederated Tribes that remobilization fine-grained sediments in channel and bank sediments of the Palmer Lake and Similkameen River valley from ~RM 19 to the international boundary at ~RM27 are a major source of suspended sediment-driven water quality exceedances in the Similkameen River. Also absent from consideration of sediment sources and upstream bank stability are large unstable deposits of contaminated mining detritus perched on the riverbank at Hedley, B.C. and other former mining sites in Canada, including those released to the Similkameen River from the Similko Mine near Princeton, B.C.

Water Quality monitoring plan needs to be expanded to include monitoring for the life of the project for toxics, TDG, and temperature within the impoundment and downstream.

As with TDG, temperature, and other water quality issues, sediment quality in large transboundary watersheds are a focus of intergovernmental efforts to recognize and address water quality issues that are international in nature and must be dealt with holistically and cooperatively, neither of which is a consideration in this Draft License Application.

If you have any questions regarding these comments, please contact me at 509-634-2426 or Patti Bailey at 509-634-2415. Thank you for your continued efforts to consult with the Colville Tribes on this project.

Sincerely,

Gary Passmore, Director
Office of Environmental Trust
Confederated Tribes of the Colville Reservation

Cc: Dan Brudevold, Land & Property

From: "Patti Bailey" <patti.bailey@colvilletribes.com>
To: <enloe@okpud.org>
Date: 2/4/2008 4:04 PM
Subject: Enloe FERC Comments
Attachments: Enloe2-4-08.doc

Please accept the attached comments submitted by the Confederated Tribes of the Colville Reservation.

If you have problems or questions with this transmission, please contact me, Patti Bailey at patti.bailey@colvilletribes.com or at 509-634-2415.

-- M+ --

COMMENT LETTER #17

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Fisheries
and Oceans

Pêches
et Océans

FEB 15 2008

OKANOGAN COUNTY PUD NO. 1
OKANOGAN, WA

Oceans, Habitat and Enhancement Branch
BC Interior
985 McGill Place
Kamloops, BC, V2C 6X6

February 14, 2008

Our File: 5140-S-3

Enloe Hydroelectric Project
Draft License Application Comments
1331 Second Avenue North
PO Box 912
Okanogan, WA, 98840

**RE: Public Utility District No. 1 of Okanogan County, Enloe Hydroelectric Project, FERC
Project No. 12569 – Fisheries and Oceans Canada comments on the draft license application**

Dear Sirs/Madams;

Thank you for providing our agency the opportunity to review the submitted information for the headlined proposal. The federal Department of Fisheries and Oceans (DFO) provided previous comments related to this proposed project in January 2006. As identified previously, our primary concerns are related to potential impacts on chinook and sockeye salmon stocks which migrate across the Canada/US border in the Okanogan/Okanagan watershed, within the Columbia River system. Maintenance of safe fish passage both upstream and downstream in the Okanogan/Okanagan system and potential for changes in stream flows, water temperatures, dissolved oxygen (DO) and other gases, sediment transport regimens, and heavy metal concentrations were identified as priority issues by our agency. The importance of pre-development studies addressing specific production bottlenecks was also identified at that time.

We are pleased to note that numerous studies have been completed to date related to these potential issues and that more studies are planned to inform future management decisions and an adaptive management program, if the project proceeds.

It is noted that the license application process will include a 600 cubic foot per second (cfs) increase in licensed extraction for non-consumptive purposes. As this facility will operate effectively as a run-of-river project, the proposed increase in the water license volume should not be an issue. However, the submission indicates that the calculated mean and median annual low flow volumes have been notably lower since 1974 (out of the ~100 year data set). Assumably, development of the adaptive management program will be cognizant of this potential issue and actual low flow volumes will be tracked over time. This data could inform future decisions related to potential low flow issues (including inter-related water quality aspects) that may affect resident fish as well as anadromous fish migrating through the Okanogan/Okanagan River system.

We support the development of an operational plan for the crest gates structures, as identified in the submission documents. The submission indicates that the plan will be targeted at preventing impacts related to potential dewatering during the spawning periods in the Similkameen River. It may be prudent to expand the scope of the operational plan to also address potential flow related impacts during the incubation and rearing periods, as well as downstream in the Okanogan river mainstem.

The relocation and design of the tailrace structure is supported, as it is expected to mitigate potential water temperature and dissolved oxygen (DO) issues immediately downstream of the project site, as well as provide a velocity barrier for fish that may attempt to access the turbine structures.

The submission indicates that changes in Total Dissolved Gas Pressure (TDG) are not perceived to be an issue and that the TDG concentrations decreased throughout the descending limb of the peak flow hydrograph. Furthermore, negative impacts related to operation of the facility are expected to be low for nearly all flows, as the water diversion through the powerhouse is expected to reduce TDG concentrations below the dam (vs. flows spilling over the dam).

The protection, mitigation and enhancement (PME) measures document indicates that a variable duration monitoring program will be initiated related to this proposed project. We support the commitment to follow-up monitoring as outlined in Appendix D.1, which identifies numerous initiatives to monitor a number of aspects related to water quality and fisheries resources, and also includes some habitat enhancement proposals. The further commitment of the proponent to develop an adaptive management as more information becomes available is also commended.

In relation to the five year water temperature monitoring, our agency would support the collection and analysis of data related to maximum peak water temperatures, to determine if the average maximum temperatures (i.e. 7-DADMax) are indeed within the typical range expected (1 degree Celsius cooler than the highest daily maximum temperature). It is assumed that the frequency of data collection will mimic the studies completed to date (i.e. data collected continuously at 15 minute intervals). Our agency strongly supports this proposed five year initiative as it may be quite beneficial in assessing potential impacts on trans-boundary salmon stocks migrating through the Okanogan system. If further DO data is collected, perhaps the sampling frequency could be expanded to include those time periods with the lowest flows and/or the highest water temperatures. It would be useful for future reporting of the DO levels to include the corresponding water temperatures and stream flows at the time of sampling, as reference for the reviewers.

The development of the Erosion and Sediment Control Plan (ESCP) for all project components and construction, repair and operations is also supported by our agency. The potential for negative effects on water quality from disturbance of metal laden sediments in the reservoir appears to be high. As such, the development of mitigative measures intended to minimize this risk are also strongly supported.

If there are any questions, concerns or comments related to this submission, please contact the undersigned at your convenience. Thank you again for the opportunity to comment on this water license application.

Sincerely,

Original signed by Jeff Guerin

Jeff Guerin, Habitat Biologist
Oceans, Habitat and Enhancement Branch

cc Tara White and Steve Matthews, Ministry of Environment
Howie Wright, Okanagan Nation Alliance
Les Jantz, Jason Hwang, Barry Rosenberger and Bruce Reid, Fisheries and Oceans Canada
(all via e-mail)

COMMENT LETTER #18



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FEB 04 2008

OKANOGAN COUNTY PUD NO. 1
OKANOGAN, WA

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

15 W Yakima Ave, Ste 200 • Yakima, WA 98902-3452 • (509) 575-2490

February 4, 2008

Enloe Project
Okanogan County PUD
P.O. Box 912
Okanogan, WA 98840

**RE: Enloe Hydroelectric Project FERC No. 12569
Draft License Application
Comments**

Dear Mr. Dan Boettger:

We would like to offer the attached comments on your Draft License Application (DLA) for the proposed Enloe Hydroelectric Project.

As you recall, the DLA discussed the applicability of some of the Washington State laws and regulations with respect to the Project. As described in our comments, Ecology is currently investigating some of the details of these laws and regulations and Ecology's responsibilities with respect to the Project. We hope to be able to provide further detail on this within the next month.

If you have any questions on water quality or the general content of our comments, please feel free to call me at the Washington Department of Ecology at (509) 454-7864. For questions specific to water resources and water rights, please call Breean Zimmerman at (509) 454-7647. For questions regarding contaminated sediments, please contact Don Abbott at (509) 454-7837.

Sincerely,

Pat Irle
Hydropower Projects Manager

Cc:
Kimberley D. Bose, FERC
Patrick Verhey, WDFW
Don Hurst, Colville Confederated Tribes (Spokane)
Scott Carlon, NMFS (Portland)
Steve Lewis, USFWS (Wenatchee)
Brett Swift, American Rivers

Attachment



Comments on Enloe Hydroelectric Dam Draft License Application (DLA)

Statutes and Regulations

Several Washington state laws are discussed in the "Initial Statement". The following are corrections or clarifications to some of those statements regarding laws under which Ecology has authority. Ecology is currently investigating more details on the applicability of state laws and regulations and Ecology's responsibilities with respect to licensing the Project. We hope to be able to provide further detail on this in the next month or so.

1. 401 Certification(s). Ecology intends to issue (or deny) a 401 certification for the FERC license for the Enloe Hydroelectric Project. However, Ecology has not yet determined whether one or more certifications will be required for activities associated with the Project, including in-water work that may require a Corps 404 permit. The scope of the 401 certification(s) will be addressed by Ecology in the future.
2. Dam Safety. Ecology's role with respect to determining the safety of the dam ceases once the FERC process takes over (RCW 43.21A.068). FERC has indicated to Ecology that its (FERC's) authority has begun.
3. Water Rights. Under the Federal Power Act (16 USC Chapter 12, Sec. 821), the States retain their authority over water rights. Under State law, the water purveyor is responsible for ensuring that the proposed use(s) are within the limitations of its water rights. If the proposal's actions are different than the existing water right (source, purpose, the place of use, or period of use), then a change is subject to approval from Ecology pursuant to Sections 90.03.380 RCW and 90.44.100 RCW.

The FERC application states that a new water right application will be submitted to Ecology, upon approval of the project license, for 600 cfs. Ecology agrees that additional supply is needed to meet the additional proposed demand. In addition, there are other uses, consumptive and non-consumptive, that may require an application to appropriate water right if not encompassed in the additional 600 cfs requested. (These are described in more detail later in this document.) A water right permit is required for *all* surface water diversions and for any water from a well that will exceed 5,000 gallons per day (Chapter 90.03 RCW Surface Water Code and Chapter 90.44 RCW Regulation of Public Ground Waters). If in doubt, check with the Ecology Water Resources Program (Breean Zimmerman, (509) 454-7647).

4. SEPA. A SEPA assessment is not required when a NEPA document is prepared, unless it is determined that the NEPA document is not adequate (RCW 43.21C.150; WAC 197-11-600 (4)(d)). Although the Federal Power Act (FPA) doesn't have jurisdiction over the State's authority with respect to water rights (16 USC Chapter 12, Sec. 821), the NEPA assessment is expected to address this project impact. If the NEPA assessment is not adequate, SEPA may be applied prior to issuing water rights. With respect to other state laws, although Ecology doesn't expect to require SEPA for application of these state

laws, SEPA may be applied to portions of the project that are not (or cannot be) adequately addressed under NEPA.

5. Shoreline Management Act. Ecology has in the past retained the ability to incorporate provisions of SMA into its 401 certifications. Ecology expects to provide further clarification on this in the near future.
6. JARPA. The PUD has indicated that it plans to apply for permits through JARPA. This typically includes a 401 certification with SMA and HPA requirements. 401 certifications and SMA are discussed above. The HPA requirements will need to be discussed in context of the 401 certification(s).
7. Construction Stormwater General Permit. The National Pollutant Discharge Elimination System (NPDES) and State Waste Discharge General Permit for Stormwater Discharges Associated with Construction Activity (RCW 90.48 Water Pollution Control Law and CWA (33 USC, Section 1251 et seq.)) will be needed for the out of water construction associated with this project.
8. Contaminated sediments. If sediment contamination exceeds the fresh water sediment criteria established by Ecology's Sediment Management Unit, cleanup and proper disposal of these material may be needed, in accordance with Chapter 173-340 WAC . Please contact Don Abbott for more information, at (509) 454-7838.
9. Arsenic TMDL (Water Quality Cleanup Plan). Ecology's arsenic Total Maximum Daily Load (TMDL) Detailed Implementation Plan for the Similkameen might be mentioned, although it does not have conditions for the Project (Ecology, 2005).
10. Flood Hazard Zone. The county generally issues the permit. It is possible these may be incorporated into either the FERC license or the 401 certification; further guidance on this is coming. Regardless, the FERC license would still have to meet Federal Emergency Management Agency (FEMA) regulations (see 44 CFR 60.3(c)(13)).

Environmental Parameters

1. Downstream impacts to flow, temperature, DO and fish. The DLA needs to address the impacts of project existence and operation on flow in Section E.2.1.

According to the DLA, the gates would only affect downstream flows during raising the crest gates (E.10-9). This would occur while flows were still high, but during this time (as the time the gates are raised and the pool filled), flows would decrease from their natural levels downstream. The DLA does not identify the magnitude or duration of the impacts, but merely states that an operation plan would be developed to address the impacts (E.10-9). Impacts on temperature and DO, need to be discussed as well.

Under a previous study (HDR, June 1991), results were provided of temperatures as a result of different flows (produced under certain, given circumstances). This may provide some assistance to obtaining estimates of impacts. Otherwise, more detailed studies may be required.

2. TDG. The DLA provides information on TDG which appears to indicate that the project will not cause any TDG exceedances (Table E.2-4). However, estimates of TDG based on 7Q10 flows, with confidence intervals, are needed. It appears that additional data will be needed. For Table E.2-4, it would be helpful to include the associated the spill over the dam (E.2-19).
3. Upstream impacts on temperature. The logic used to determine compliance with water quality temperature standards is incomplete (pp E.2-8, E.2-14). The river may have naturally cooled over this stretch. It is necessary to compare the amount of cooling/reduced heating that occurs with the project compared to what would have occurred pre-project. Slower cooling of a deeper waterbody may be relevant. However, this explanation is not adequate by itself. A semi-quantitative explanation of how the different factors related to cooling or heating water in the project area is needed, at a minimum.
4. Dissolved Oxygen. The DO monitoring presented is not adequate (E.2-19; Appendix E.2.1). As stated in a previous letter (Ecology, 2006), sampling over a 24-hours period during the critical season (generally June through September) is standard. Two days is not adequate.
5. Anti-degradation. If it is determined that the project causes a measurable negative change in the quality of the water (e.g., for TDG), then a Tier II analysis would be required. The PUD would be required to demonstrate that lowering the water quality is necessary and in the overriding public interest (WAC 173-201A-320.)
6. Water rights. As stated in the DLA, 1600 cubic feet per second (cfs) is the proposed water quantity needed by the Enloe Dam project. The FERC application also states that a new water right application will be submitted to Ecology, upon approval of the project license, for 600 cfs. Ecology agrees that additional supply is needed to meet the additional proposed demand. The PUD currently holds water right No.S4-CV1P243 to divert 1000 cfs at a place located on the Similkameen River on Lot 7 of Section 13, T. 40 N., R. 26 E.W.M. for the purpose of hydroelectric power.

There are other uses, consumptive and non-consumptive, that may require an application to appropriate water right if not encompassed in the additional 600 cuffs requested. These uses include, but are not limited to:

- Any additional power production water due to increased head
- Side channel development requiring ground water for fish enhancement project
- Bypass reach effects – water for fish enhancement project
- Irrigation of tree plantings to replace trees that fall into the river as a result of the project
- Water to control anchor ice formation
- Substation and powerhouse uses

If the PUD plans to use water for dust suppression at the site, they must be sure they have a legal right. A water right permit is required for *all* surface water diversions and for any water from a well that will exceed 5,000 gallons per day (Chapter 90.03 RCW and Chapter 90.44 RCW). Short-term permits may be obtainable in a short time-period. The concern of Water Resources is for existing water rights. In some instances water may need to be obtained from a different area and hauled in or from an existing water right holder.

Examples of activities that may require a short-term permit include, but are not limited to:

- Road construction dust abatement water
 - Construction and demolition site dust abatement water
 - Irrigation water for re-establishment of disturbed riparian vegetation
 - Irrigation water for re-establishment of disturbed wetland vegetation
 - Water use for re-establishment of disturbed habitat.
7. Contaminated sediments. There has been extensive mining upstream of the project and contaminated sediments from upstream are likely to have drifted downstream and accumulated in the reservoir and on the banks of the reservoir behind the dam, due to the presence of the dam. The discussion in the DLA about its status and the impacts of the project related to the presence of the mining waste is incomplete.
- a. Active mining operations are addressed on page E.6-8. Inactive mines were minimally addressed (see E.9-5). Please provide more information about the extent of the contamination and its impacts on sediment in the river and reservoir. The metals of special concern include lead, zinc and mercury.
 - b. Please address any impacts the dam may have on aquatic life (e.g., invertebrates) in and adjacent to the reservoir and on humans using the beaches. The metals of special concerns include lead, zinc and mercury. Please address copper as well.
 - c. If sediment contamination exceeds the fresh water sediment criteria established by Ecology's Sediment Management Unit, cleanup and proper disposal of these material may be needed, in accordance with Chapter 173-340 WAC .
 - d. Describe the expected lifetime of the impoundment based on the rate of accumulation of sediment (A-11, C-6). If dredging is expected within the lifetime of the FERC license, this should be address in the License Application.
 - e. The DLA notes the presence of certain trace metals in a sediment sample containing finer organic particles mixed with sand and silt collected from the area of the reservoir where buried sediments are most likely to be disturbed during project construction (E.2-27). An Ecology-approved sediment management plan will be required, in association with a 401 certification.
8. Wetlands. Wetland functions need to be addressed. Impacts to existing wetlands associated with the construction and operation activities will need to be mitigated for and addressed in a 401 certification.
9. Aquatic resources. Ecology generally supports the actions proposed by fish management agencies for protecting aquatic resources, which may include Pacific lamprey and mussels.

Specific

1. There are frequent references to submitting an application for a specific permit "after the Enloe Hydroelectric Project License Application is accepted for filing by FERC" (IS-3 through IS-5). Please be more specific about the proposed timeframes. For instance, is this expected to occur before or after the FERC license is issued?

2. It might be helpful to include either the word "proposed" or "existing" in front of "Enloe Impoundment Storage Volume" (Figure B-8; pB-15).
3. A map and description of the "District's service area" would be useful (B-19).
4. Is it feasible to build the cofferdam in March and April? (Maximum flows over the long term have occurred in May and June.) (Fig C-1; pC-2)
5. Mention is made of surges and waves (E.2-4). It would be helpful to describe the cause(s) of these surges, the frequencies, and the magnitude of the impacts on the reservoir and dam.
6. The information provided on groundwater is very general (E.2-6). It is not at all clear what the relationship of the two aquifers is to the river. Do either or both underlie the river? If so, how thick are they? And, how high is "quite high" (for the permeability and yields of the alluvial/glacial unit)? Also, how little is "very little flow" (order of magnitude, would be helpful) for flow contributions to the river?

Temperature

7. Please clarify who conducted the water temperature monitoring (pE.2-6).
8. Please be consistent in labeling, especially graphs showing monitoring results (figures E.2-7 et al) and the monitoring locations (Figure E.2-12.) It appears that the graphs should have referred to "Head of reservoir" instead of "Shanker's Bend" (RM 10.1).
9. Please provide a more complete (and easy to read) record of the time period when the water cools through this reach (e.g., from July to September) like provided for figures E.2-6 and E.2-7. It would be helpful just to include each day on larger, 11" x 17" piece of paper, in an appendix. ("2006 Temperature Monitoring Results", starting p E.2-7.)
10. It is stated that in early July the temperature highs and lows lag through the reservoir was less than 2 hours (E.2-13) and that the water was moving "quickly" through the reservoir. Could you be more specific about the speed, especially relative to the temperature lags? Please describe how the speed was calculated. If the speed and lag are comparable, this may be a reasonable explanation. If they aren't, it is more likely related to some other cause.
11. It is then stated that in August the temperature highs and lows lagged by 8 hours, with "slower" velocities (E.2-13). Again, could you be more specific about the speed, especially relative to the temperature lags? Please describe how the speed was calculated. If they aren't, it is more likely related to some other cause.
12. Provide plot of temperature data at Shanker's Bend. Hourly during 2006 is desirable. See E.2-6.
13. This river is listed for temperature, and may be subject to a temperature TMDL at some future time (E.2-8).

Dissolved Oxygen

14. As noted in the text, DO concentrations are generally higher (as desired) when the water is colder (E.2-19). Conversely, DO is lower (undesirable) when the water is warmer. Therefore, DO monitoring should occur at these times as well.

Total Dissolved Gas (TDG)

15. Please describe how much TDG the turbines would generate.

Contaminated Sediment

16. Analyses need to be done for contaminants associated with upstream mining, as well. Historical mining, with a brief discussed of contaminated sediments and cleanup, is discussed in Section E.9-5. The DLA should provide more detail, including size of mining areas, locations relative to the project, contaminants of concern (e.g., lead, zinc and mercury), and times and methods of the cleanups.

Turbidity

17. Potential impacts to turbidity should be addressed in this section of water quality. This includes instream work. It also includes the sediment releases and turbidity associated with clearing the bypass sluice for ice and debris and opening it during an outage (A-5).

Fish and Aquatic Resources

18. It is helpful to identify which fish are federally or state- listed (E.3-1) at the beginning of this section. And again at E.3-13.
19. Resident fish should also be identified as either native or non-native (Table E.3-2 and in text).
20. "Historically, there have been significant runs of anadromous Pacific lamprey..." (E.3-4). Please clarify where these runs have occurred, because the DLA then follows with the statement that the falls have been a barrier to fish.... And, later, "Pacific lamprey are not expected to occur upstream of Similkameen falls" (E.3-18). Please identify the source of this judgment.
21. Information is missing on macroinvertebrates (E.3-29).
22. Please address any existing aquatic invasive species and the potential for future impacts, given project existence and proposed operation.
23. Please clarify what is meant by "a five-year program would be conducted once... with yearly contributions of gravel"(E.3-41). Specifically, would the yearly contributions of gravel take place over the life of the license? This seems to be appropriate.
24. Adaptive Management Plan (AMP) (E.3-42). We recommend that all fish resource management agencies and Ecology be included in the development and periodic review of the results of the AMP. A review and update frequency of five years is recommended.

25. The "C" in QA/QC usually standards for "Control" (E.3-42).
26. Riparian forest, riparian shrub and herbaceous wetland is provided on p E.3-62 with proposed mitigation measures on p E.3-65. Note that wetlands will be addressed in association with 401(s); however, it is not yet determined whether it will be for the FERC license or the Corps 404 permits.

Geology and Soils (E.6)

27. On Figure E.6-2, it appears that the geological formation that runs north-south through Enloe dam hasn't been labeled on the map. It appears to be described in the text (E.6-2) as "granitic clast conglomerate", but that description does not seem to appear on the table of lithologic units (Table E.6-1; pE.6-7).
28. Discuss the toxicity of the sediment removed. Where will it be disposed? (E.6-14)

Recreational Resources (E.7)

29. Any impacts of wetlands created by or associated with new or expanded recreational uses (e.g., new parking area, E.7-19) will need to be addressed and mitigated.

Aesthetic Resources (E.8)

30. Aesthetics associated with water in the river should be discussed. From the description, it does not appear that the project will affect the aesthetics associated with water in the river or over the falls, except for reduced flows over the dam. Historical and future interest should be discussed.

Land Use (E.9)

31. Historical mining, with a brief discussed of contaminated sediments and cleanup, is discussed in this section (E.9-5). The DLA should provide more detail, including size of mining areas, locations relative to the project, contaminants of concern (e.g., lead, zinc and mercury), and times and methods of the cleanups. This discussion should be included in Section E.2.6.

Appendix D.1 Environmental Protection, Mitigation and Enhancement

32. This section would need to be re-reviewed by Ecology after the above corrections or clarifications are made to the DLA.

Citations

Ecology, July 27, 2006. "Enloe Dam Water and Sediment Quality Studies' Plan – Comments". Letter to Okanogan County PUD.

Ecology, 2005. "Lower Similkameen River Arsenic Total Maximum Daily Load (Water Cleanup Plan): Detailed Implementation Plan"

HDR, June 1991. "Enloe Hydroelectric Project, Application for License, Volume I of II, Appendix C, Enloe Hydroelectric Project Instream Flow Analysis".

COMMENT LETTER #19

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FEB 04 2008

February 4, 2008

OKANOGAN COUNTY PUD NO. 1
OKANOGAN, WA

Dan Boettger, Okanogan PUD
Enloe Hydroelectric Project
Draft License Application Comments
1331 Second Ave North
P.O. Box 912
Okanogan, WA 98840



www.gcwt.org

Dear Mr. Boettger,

The Greater Columbia Water Trail (GCWT) coalition is pleased to have the opportunity to comment on the Draft Application for Enloe Dam. The GCWT has a 26 member steering committee with additional coalition members representing the state, federal, county and local jurisdictions as well as businesses and paddling enthusiasts. The GCWT mission is to enhance recreation and an appreciation for the Columbia River watershed's natural and cultural resources by developing water trails for flatwater paddle sports. Attached are a few reference items to give you more information about the GCWT.

GCWT has reviewed the draft license application for Enloe Dam, and we offer the following comments.

General Comments

- The proposed Recreation Management Plan should be developed in consultation with stakeholders as a part of a final application. The Management Plan should include detailed site plans for project access, facilities and improvements at Enloe Dam and Shankers Bend, as well as high and low pool levels.
- The Visitor Survey information was helpful in determining types of recreation activities currently occur in the project area, but project improvements should be based on a larger sample taken over a longer period of time. The Recreation Management Plan should address the need for continued monitoring of recreation use and needs, and should be updated on a regular basis.

Specific Comments

Economic Vitality and Economics of Shared Use:

1. Future recreation use should be addressed in the application. A growing local population, development of the Oroville to Nighthawk Trail, as well as the Greater Columbia Water Trail creates greater recreational use. Progress in the Okanogan Region (Similkameen and Okanogan Rivers) has been advanced by a WA Dept of Fish and Wildlife contribution of \$40,000 toward launch site improvements and interpretive signs on the Similkameen and Okanogan Rivers. The last three years has seen a paddling event from Oroville to Tonasket drawing visitors from Canada, Seattle and Idaho. At least two, if not three paddling events are scheduled for 2008.

These events and progressively more aggressive marketing activities promoting the Okanogan Region as a destination for paddlers will likely increase use of the Similkameen River corridor by both residents and visitors.

2. Oroville to Nighthawk Trail users are compatible with water trail users. In fact visitors may extend their length of stay in local communities to experience both trails, boosting the economic impact of visitors.
3. When determining location of project improvements, consider how all users can share recreation facilities, such as parking, trail heads, campgrounds, picnic spots, info/interpretive displays, etc. Proper placement will minimize the cost of facility construction, improvement, and maintenance while minimizing the impact on the surrounding environment. A detailed site plan of the project area showing existing resources and proposed improvements would be a valuable planning tool.

Public Access Points and Barrier-Free Travel

4. Access Above Dam: The GCWT Coalition supports development of an improved ramp and parking at the Shankers Bend site. A site plan is recommended for showing proposed site improvements, access road, foot trails, and other amenities. Primitive camping should also be considered at this site, which is currently being used by boaters, and will likely experience more use by flatwater paddlers and possibly hikers. Leave-no-trace sanitation principles could be provided here on signs or brochures. Consideration should be given to a composting toilet or other minimal waste facility.
5. Access at the Dam: The GCWT Coalition supports development of an improved ramp and parking at the Enloe Dam site. A site plan is recommended for showing the intake, fencing, site improvements, access road, foot trails, and other amenities. The ADA vault toilet, picnic tables, and signage are good improvements to the site. Primitive camping should also be considered at this site, which is currently being used by boaters, and will likely experience more use by flatwater paddlers, hikers, and other recreationists. The take-out should be clearly marked and indicated on signs so that boaters exit the river at the appropriate location.
6. Portage and Access Below the Dam: Connections to the paved road from the take-out above the dam, to the put-in below the waterfall, and to the parking area should be considered in the Enloe Dam site design. Improvements to the entire portage trail should be considered during construction of the paved road, taking into account the appropriate surface materials and grade for hand-carrying and wheeling paddlecraft.
7. Water Trail Signs: Carsonite markers should be installed on the shoreline near the boating access ramps at Shankers Bend and Enloe Dam, and at the put-in downstream of the waterfall. These markers have been designed specifically for indicating access points along the GCWT.

8. The "Conservancy Environment" Shoreline designation and associated primitive facilities are appropriate for maintaining the existing shoreline character of the Similkameen River. Take-outs, landings, and put-ins for paddle sport craft as well as picnic, campground, and sanitary facilities should be designed for minimal impact on the surrounding environment. Appropriate grades and surfacing should be considered for access roads and shoreline trails.

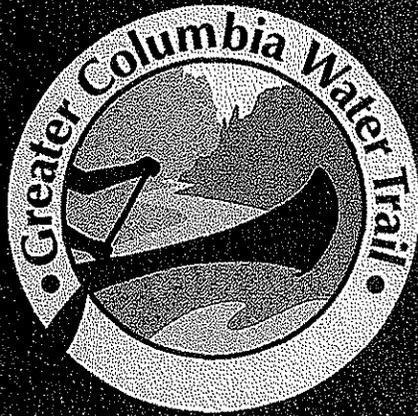
Promote Cultural and Environmental Education

9. Okanogan PUD should work with stakeholders to produce appropriate site information and interpretive signs that provide coordinated recreation information and interpretive messages at river access points, recreation facilities, and the dam. Maps and brochures should be developed that include recreation site information, how to portage around the dam, safety information, regulations, etc.
10. Water trail signs at WDFW access sites upstream from Enloe Dam have been produced for installation in Spring 2008. A water trail information kiosk as also been installed in the community of Oroville to orient residents and visitors to water trail opportunities on both the Okanogan and Similkameen Rivers. Templates for these signs are available for use at other sites along the water trail by site managers.
11. Interpretation of the Enloe Dam, the surrounding landscape, historic use and settlement, etc. would enhance all visitors' experience of the area. Greater Columbia Water Trail partners include Chambers of Commerce, Wenatchee Valley Museum & Cultural Center, members of the Coville Confederated Tribes, educators, and others who may be able to assist with interpretive ideas and development.

Thank you for the opportunity to comment on this Draft License Application. We look forward to working with the Okanogan PUD and stakeholders on the recreational opportunities on the Similkameen, Okanogan, and Columbia Rivers. If you have questions, just give me a call.

Sincerely,

Ron Johnston-Rodriguez
Chairperson-Greater Columbia Water Trail
238 Olds Station Rd, Suite A
Wenatchee, WA 98801
ron@ccpd.com
P 509-663-5159
F 509-662-5151

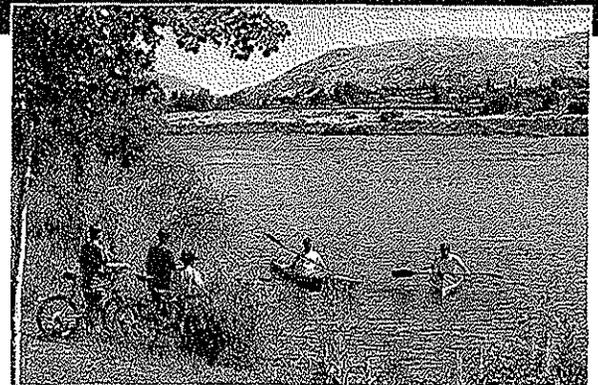


The Greater Columbia Water Trail Coalition

GCWT's mission is to enhance recreation and appreciation of the Columbia River watershed's natural and cultural resources by developing water trails that support flatwater paddle sport recreation for day and overnight excursions. The coalition is working closely with local communities, agencies and organizations to identify and mark public access areas in the greater Columbia River watershed. A National Park Service Rivers and Trails Program assistance grant is helping further the effort.

Goals of the Coalition

- Boost economic vitality by encouraging recreational tourism in the region
- Identify public access points and provide solutions for barrier-free water travel
- Promote cultural and environmental education along water trail corridors
- Encourage healthy, active lifestyles through local programs and activities



A water trail is a route along a river or other body of water for people using small human-powered boats like kayaks, canoes or rowboats.



ccpd.com

GET INVOLVED

Region-specific groups are key to the development of the many reaches of the water trail. Individuals, organizations, agencies and businesses eager to partner in these regional efforts are encouraged to get involved.

For complete information about the Greater Columbia Water Trail visit <http://www.gcwt.org> or call 509-663-5159.

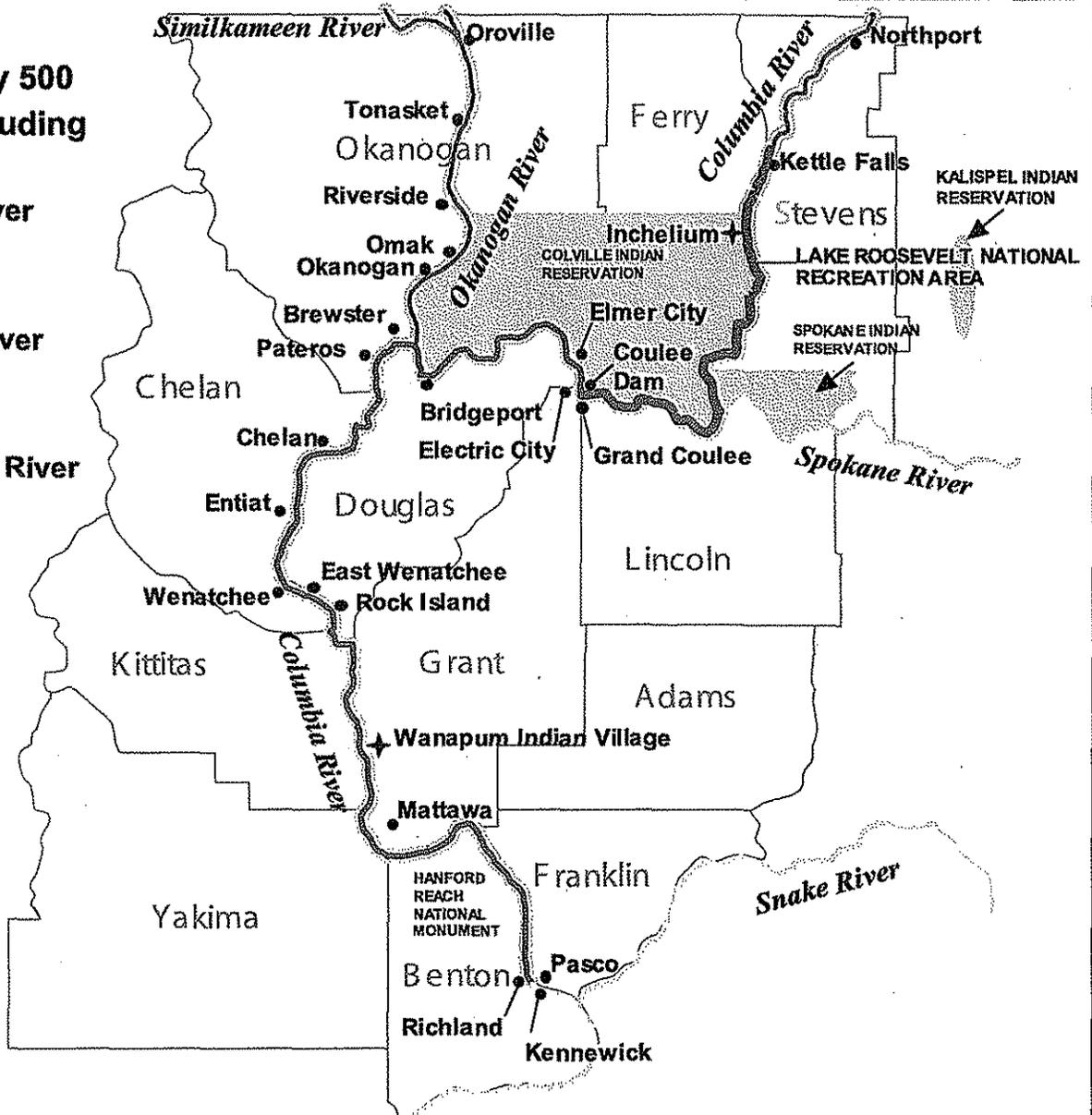
Partners include:

Chelan PUD, Chelan-Douglas Land Trust, citizens of Washington, Colville Confederated Tribes, Coulee Corridor Scenic Byway, Lake Roosevelt NRA, Lake Roosevelt Forum, Complete the Loop Coalition, Douglas County PUD, Grant County PUD, NPS Rivers & Trails Program, NCW Transportation Council, Okanogan County, Extreme Adventures, Columbia Kayak Adventures, various Washington cities, WA Dept of Fish & Wildlife, WA Parks & Recreation, WSDOT, Washington Water Trails Association, Wenatchee Outdoors, Wenatchee Row & Paddle Club, Wenatchee Valley Museum and many others. The Port of Chelan County is leading the effort.

Greater Columbia Water Trail

Approximately 500 river miles including

- Columbia River
400 miles
- Okanogan River
82 miles
- Similkameen River
18 miles



The Greater Columbia Water Trail's diverse features include dramatic geologic formations, mountain views, remote tree-lined shorelines, sandy beaches, wildlife, orchards, salmon runs and historic sites. Communities along the trail provide visitor services, lodging, dining and cultural opportunities.

Water Trail Etiquette:

- Plan ahead and prepare
- File a float plan with family or a close friend
- Make portage plans around all dams before you begin your trip.
- Respect private property
- Put in or take out your boat only at designated public access sites
- Respect fish, wildlife and vegetation
- Take all trash out, whether left by your party or others
- Check weather conditions before launching
- Protect yourself from the sun with a hat and sunscreen
- Use designated restroom facilities
- Always use U.S. Coast Guard approved life vests for all paddlers



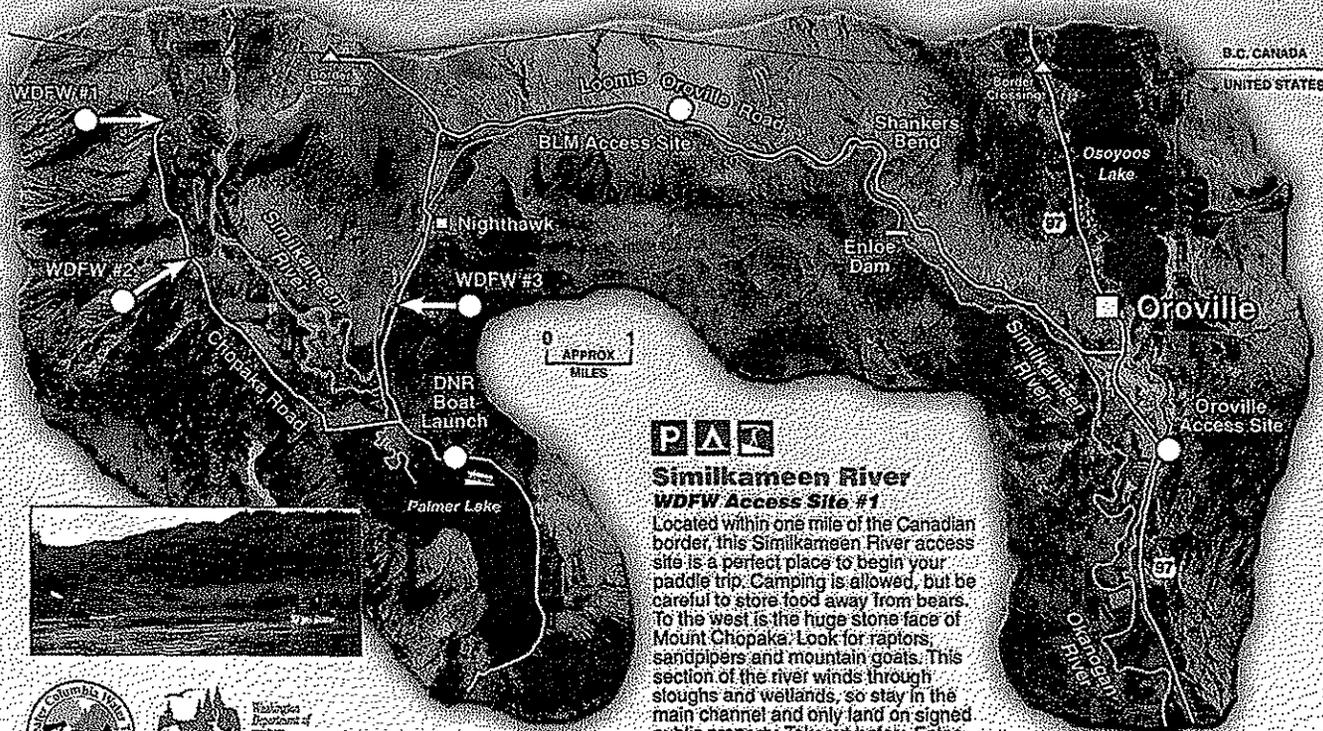
visit www.gcwt.org

An affiliate of the
Wenatchee Valley Museum
and Cultural Center

Design and production of this publication made possible by the National Park Service Rivers and Trails Program, the Port of Chelan County and Grant County P.U.D.



Greater Columbia Water Trail



Similkameen River WDFW Access Site #1

Located within one mile of the Canadian border, this Similkameen River access site is a perfect place to begin your paddle trip. Camping is allowed, but be careful to store food away from bears. To the west is the huge stone face of Mount Chopaka. Look for raptors, sandpipers and mountain goats. This section of the river winds through sloughs and wetlands, so stay in the main channel and only land on signed public property. Takeout before Enloe Dam at BLM access site.

Visit www.govt.org for more water trail information.



This map serves as a guide. Access sites are approximate.

— Similkameen River Water Trail
 ○ Access Sites — WDFW Property



Welcome to the Greater Columbia Water Trail

The Greater Columbia Water Trail is an invitation to explore and discover north central Washington's remarkable geologic features and natural resources that mark the journey of the mighty Columbia River and its tributaries. Expect to encounter a wide variety of plant and animal species as well as historic sites and geology. The water trail encourages freshwater paddle sport recreation by providing access to this extraordinary waterway through public launch, landing and camping sites.

The Greater Columbia Water Trail is a network of water trails within the Columbia River watershed, from Canada on the Similkameen River, Okanogan River and Columbia River all the way through the Hanford Reach National Monument, where it joins the Northwest Discovery Water Trail. Public launch and landing sites have been marked to identify public access areas. There are eight dams located along the trail. Use caution near all dams and make portage plans before you leave home.

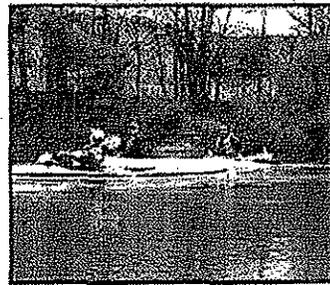
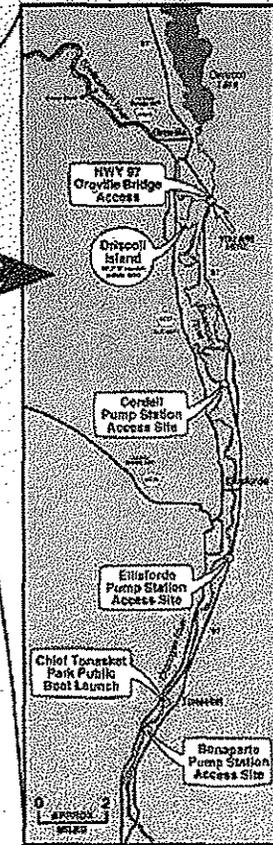
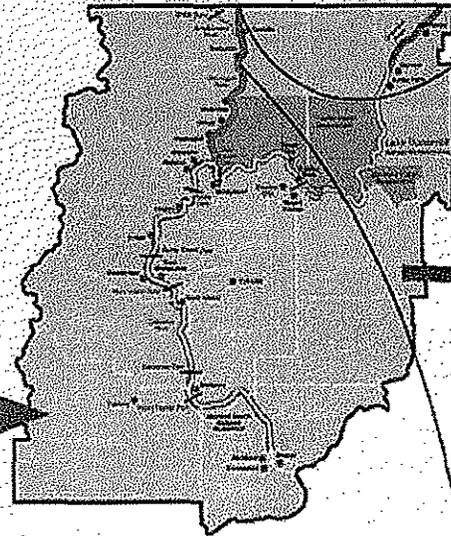
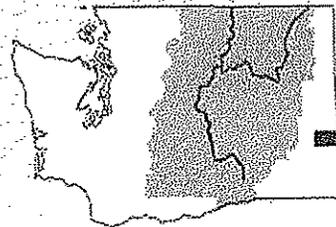
What is a water trail?

A water trail is a route along a river or other bodies of water for people using small boats like kayaks, canoes, day sailers or rowboats. Water trails are most often identified by the land facilities that support water travel. These include launch and landing sites, campsites, rest areas and other points of interest. Land trails have distinct roads or walkways. Water trails are the entire water surface, including lakes and streams which dynamically change with flow, current, wind, boat wakes, rocks, falls, whirlpools, snags, snags, logjams, gravel and sand bars.

Water Trail Guidelines:

- Plan ahead and prepare
- File a boat plan with family and a close friend
- Respect private property
- Be cautious of all water hazards such as stumps, rocks, rapids and dams
- Check weather conditions before launching
- Protect yourself from the sun with a hat and sunscreen
- Put in or take out your boat only in designated public access sites
- Respect fish and wildlife
- Boat in it, boat it out. Take as trash out, whether left by your party or others
- Avoid trampling vegetation
- Use designated restroom facilities
- Always use U.S. Coast Guard approved life vests for all paddlers

Visit www.gcwt.org for more trail information.



From Highway 97 Oroville Bridge Access, you can boat downstream to several public access sites, including the Cordell Pump Station (9 river miles), Ellsforde Pump Station (15.4 river miles), the City of Tonasket's Chief Tonasket Park public boat ramp (20.5 river miles) or farther downstream to the Town of Riverside at the WDFW Public Access boat ramp (39 miles). There is also public access located at the confluence of the Okanogan River and the Columbia River's Wella Recreation, located on both the right and left banks adjacent to Highway 97.

The Similkameen River offers some incredible floating opportunities. Follow the Loomis-Crowley Road westerly of Oroville, paralleling the Similkameen River to Old Chopaka Road (County Road #497) and proceed about 7 miles north to the WDFW Similkameen River Access Site #1, or WDFW Similkameen River Access Site #2, about 5 miles and float downstream to WDFW Similkameen River Access Site #3 for an exciting water trail trip. If you are going to float beyond the BLM Access Site, plan your trip to allow adequate time to get off the river before getting too close to Enke Dam. There is no easy access below the BLM Access Site about 12 miles downstream from WDFW Similkameen Access Site #1.

If you plan to camp, be prepared to protect your campsite from bears and limit outdoor cooking to camp stoves only (no fires allowed). Be sure you are camping on public land. Maps showing public ownership can be obtained from BLM, USFS, and Washington DNR.

From: "Aimee Pope" <aimee@ccpd.com>
To: <enloe@okpud.org>
Date: 2/4/2008 3:37 PM
Subject: Comments on Draft Application for Enloe Dam Licensing
Attachments: Enloe Dam Comments.pdf; GCWT_Flier11_07.pdf; Okanogan signs.pdf

CC: <Sue_Abbott@nps.gov>, "Ron Johnston-Rodriguez" <ron@ccpd.com>, <reed@wwt...

Please see the attached letter Enloe Dam Comments.pdf with comments on the draft application. The other two attachments are for your reference on the Greater Columbia Water Trail.

The signed hard copy is being sent through the US Postal Service.

Thank you,

Aimee

Aimee Pope

Assistant to Economic Development Director

Port of Chelan County

238 Olds Station Rd, Suite A

Wenatchee, WA 98801

P (509) 663-5159

F (509) 662-5151

aimee@ccpd.com

www.PluginCenter.com Advanced Vehicle Innovations

www.ccpd.com Port of Chelan County

COMMENT LETTER #20



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
1201 NE Lloyd Boulevard, Suite 1100
PORTLAND, OREGON 97232-1274

F/NWR5

February 4, 2008

RECEIVED

Dan Boettger, Director
Regulatory & Environmental Affairs
Public Utility District No. 1 of Okanogan County
1331 Second Avenue North
P.O. Box 912
Okanogan, WA 98840

FEB 04 2008
OKANOGAN COUNTY PUD NO. 1
OKANOGAN, WA

RE: Comments on the Draft License Application for the Enloe Hydroelectric Project (FERC No. 12569)

Dear Mr. Boettger:

The National Marine Fisheries Service (NMFS) has reviewed the Draft License Application (DLA) for the proposed Enloe Hydroelectric Project (Project No. 1212569) on the Similkameen River near Oroville, Okanogan County, Washington. The enclosed comments are provided in accordance with the Fish and Wildlife Coordination Act, as amended; the Endangered Species Act, as amended; the National Environmental Policy Act, as amended; and the Federal Power Act, as amended.

The purpose of our comments is to ensure the Final License Application contains information necessary for NMFS and the Federal Energy Regulatory Commission to make reasonably informed decisions on the merits of the Project and to discuss any remaining areas of concern. The decision of whether to issue a new license, and the conditions under which the Project would operate, are critically important to the ecological integrity of the Similkameen and Okanogan River basins.

We appreciate the opportunity to comment on the DLA and look forward to working with you and other stakeholders through this licensing process. Any questions you may have regarding the enclosed comments should be directed to Scott Carlon of my staff at 503.231.2379 (email: Scott.Carlon@noaa.gov).

Sincerely,

Keith Kirkendall, Chief
FERC and Water Diversions Branch
Hydropower Division



Enclosure

Cc: Steve Lewis, USFWS – Wenatchee, WA
Dennis Beich, WDFW – Ephrata, WA
Joe Peone, Collville Tribes – Nespelim, WA
Steve Parker, Yakama Tribes – Toppenish, WA
Bob Heinith, CRITRC – Portland, OR

**Comments of the National Marine Fisheries Service
on the
Draft License Application
Enloe Hydroelectric Project, FERC Project No. 12569
Public Utility No. 1 of Okanogan County, Washington**

Introduction

The National Marine Fisheries Service (NMFS) has reviewed the Draft License Application (DLA) for the proposed Enloe Hydroelectric Project (Project No. 1212569), owned by the Public Utility District No. 1 of Okanogan County (Okanogan PUD). NMFS appreciates the opportunity to participate in the pre-filing consultation process and to review the DLA. Our comments pertain to NMFS' statutory responsibility for the protection and enhancement of anadromous fishery resources.

The Enloe Hydroelectric Project (Project) is located at approximate river mile (RM) 8.8 on the Similkameen River in Okanogan County near Oroville, Washington. The Okanogan River drains into the Columbia River about 5 miles east of Brewster, Washington. Nearly 75 percent of the Okanogan River's flow volume is supplied by the Similkameen River. At present, summer steelhead and summer Chinook salmon spawn and rear in the lower Similkameen River (below the Project). The Washington Department of Fish and Wildlife maintains a summer Chinook rearing and acclimation facility on the Similkameen at about RM 1. These facilities are mitigation for the loss of summer Chinook salmon adults that would have been produced in the Okanogan River basin in the absence of Wells, Rocky Reach, and Rock Island hydroelectric projects.

The summer steelhead that occur in the Similkameen River are included in the Upper Columbia River (UCR) distinct population segment (DPS). This DPS was listed as endangered under the Endangered Species Act (ESA) on August 18, 1997; its status was upgraded to threatened on January 5, 2006, and reinstated to endangered status per U.S. District Court decision in June 2007. The lower Similkameen River is designated as critical habitat for this species.

The following remarks are organized by issues of concern as opposed to a page-by-page commentary. In places, we found the DLA to be somewhat difficult to follow. For instance, we had some trouble understanding the relationship between certain water quality readings and specific locations where the data was collected. We address this more specifically below.

Comments

Water Temperature

Appendix B of Appendix E.2.1 provides a table listing the 7-DADMax¹ water temperatures recorded in the Similkameen River above and below the Project. While the DLA, Appendix E.2.1, provides an adequate narrative of the locations where the data was collected and shows these points on a map, the table does not. In other words, the locations of where the specific readings were taken are given in the table as *river 1*, *river 2*, *river 4*, and *river 6* but these "river

¹ 7-Day average of the daily maximum temperature.

reaches” are not identified or associated with the locations described in the text in Appendix E.2.1. We assumed that “river 1” was the furthest upstream reach and “river 6” was the most downstream reach. Nevertheless, this should be clarified.

The DLA explains (at E.2-8) that the Project does not violate the Washington State water quality standard for temperature because it does not cause a rise in temperature of more than 0.3° Celsius (C) above background levels. However, we were confused by this statement because the list of 7-DADMax temperatures provided in Appendix B of Appendix E.2.1 show numerous exceedences of the 0.3°C standard as you move downstream (we assume) from *river 1* to *river 6*. We may be misinterpreting the table. A short description of where the river reaches are located should be provided to help the reader correctly interpret the table.

Finally, the DLA states that there are a couple of deep pools in the reservoir and that these pools do not stratify during the summer months, i.e., there is adequate mixing in the reservoir. The DLA did not explain if this condition would change or not with installation of crest gates which are intended to raise the reservoir 4 to 5 feet. The unintended development of an epilimnion during the summer months, combined with a shallow powerhouse intake, would supply extremely warm water to the lower Similkameen River. This should be addressed in the Final License Application.

Dissolved Oxygen

The same comment given in the first paragraph above under the *Water Temperature* discussion applies here as well. The table in Appendix A of Appendix E.2.1 lists the dissolved oxygen (DO) readings and gives the associated locations as *DO#1*, *DO#2*, *DO#3* and *DO#4* at the top of the table. Again, we assumed that this went from upstream to downstream but could not be sure. In addition, DO readings should have been recorded during the period of highest temperature recordings as well as the period of lowest flow.

We agree that during periods of high water temperatures (July and August), the reduction or elimination of spill over the dam could reduce DO in the lower river. Monitoring plans for measuring changes in DO from above and below the Project should be included in the Final License Application. The Final License Application should also include a contingency to minimize reductions in DO should it be found to occur due to the new configuration of the Project (i.e., no spill).

Total Dissolved Gas

We agree with statements in the DLA that operation of the Project under its new configuration may reduce total dissolved gas (TDG) in the lower Similkameen River. This is because most of the flow would be diverted through the powerhouse and not spilled over the dam, eliminating a significant amount of aeration. We also agree that TDG should be monitored. However, the Final License Application should contain plans for monitoring for the life of the license and not just 1 year. Monitoring does not have to be done every day year round, but the capability should be provided so that it can be measured during periods of spill or other times as necessary.

Instream Flows and Emergency Powerhouse Shutdown

We agree that the capability to automatically lower the crest gates to bypass flow during an emergency shutdown of the powerhouse should be installed. It was unclear in the DLA how such a system would work. The Final License Application should provide an account of how flows in the lower river will be maintained during an emergency powerhouse shutdown.

Tailrace Barrier

Tailrace barriers are installed at various hydropower projects where hydraulic conditions are such that returning adult salmon and steelhead swim into draft tubes and run into the turbine blades. This can result in serious injury or mortality. NMFS appreciates that the DLA recognizes that this condition will likely exist at the Project. Tailrace barrier designs have been discussed during pre-consultation meetings between NMFS and Okanogan PUD. NMFS is cognizant that installing a traditional barrier could be very costly at this Project. The DLA proposes that the Project be designed such that the water velocity exiting the turbines will prevent adult salmon and steelhead from entering the draft tubes. At this time NMFS is very cautious about such a design and strongly recommends that Okanogan PUD continue to consult with NMFS fish passage engineers. In NMFS' view, it is likely that upon start-up and ramp-down of turbine units, velocities will exist that allow adult salmon and steelhead to ascend the draft tubes and potentially be struck by the turbine runners, especially when fish are staging below the powerhouse. The tailrace barrier design should be developed in consultation with NMFS before a final license application is filed.

Anadromous Fish Passage

Regional disagreement regarding the historic presence of anadromy above Similkameen Falls, located about 370 feet downstream of the dam, and whether fish should be passed regardless of historic presence or not, has resulted in the Federal Energy Regulatory Commission rejecting a license in two previous attempts to permit the Project. NMFS has supported fish passage in those previous proceedings. In the absence of a recovery plan for listed UCR steelhead, and not knowing what measures a final recovery plan might advocate to recover this species, NMFS felt it prudent to require passage during the last proceeding in order to not foreclose any opportunity or measures to promote recovery.

In August 2007, NMFS issued a final recovery plan for UCR spring-run Chinook salmon and UCR steelhead. This plan does not cite passage at Enloe Dam as a recovery measure. Therefore, given the lack of consensus regarding historical presence above Similkameen Falls, the opposition to passage by Canadian Tribes, and the general non-consensus among region fish managers in the U.S. and Canada, NMFS believes that it is prudent to reserve its authority for upstream and downstream fish passage in this proceeding. NMFS may prescribe a tailrace barrier to protect adults staging below the Project. Should NMFS determine at a later date that passage is necessary to recover anadromous fish species, it will engage regional managers, including Canadian Federal and Provincial governments and affected Canadian and US Tribes, to determine how best to use its reserved fish passage authority.

Conclusion

NMFS appreciates the opportunity to comment on the DLA for the Enloe Hydroelectric Project. We look forward to working with Okanogan PUD and other stakeholders as this licensing process progresses. If you have any questions or concerns with these comments, please contact Scott Carlon of my staff at 503.231.2379 (email: Scott.Carlon@noaa.gov).

From: "Scott.Carlton" <Scott.Carlton@noaa.gov>
To: <enloe@okpud.org>
Date: 2/4/2008 4:38 PM
Subject: NOAA Comments, Draft License Application
Attachments: Enloe DLA Comments 02.04.08.pdf; Scott_Carlton.vcf

Attached are the National Marine Fisheries Service's comments on the Draft License Application. If you have any question, please contact me at 503.231.2379 or reply to this email.

Thank you,

Scott Carlton

--- M+ ---

COMMENT LETTER #21



Washington Water Trails Association

4649 Sunnyside Avenue N. Room 305 • Seattle, WA 98103-6956

Phone: 206.545.9161 • Fax: 206.547.0350 • E-mail: wwta@wwta.org

RECEIVED February 4, 2008

Dan Boettger, Okanogan PUD
Enloe Hydroelectric Project
1331 Second Ave North
Okanogan, WA 98840

FEB 04 2008

OKANOGAN COUNTY PUD NO. 1
OKANOGAN, WA

Board of Directors:

Jim Emery,
President
Judy Moyer,
Vice President
Diane Leavy,
Secretary
Carmelita Logerwell,
Treasurer
Kari Anderson
Don Crook
Janice Raymond
Fran Rehrmann
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Honorary Trustees:

Mike Lowry
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Legal Advisors:

Heller, Ehrman

Staff:

Reed Waite,
Executive Director
Sarah Krueger,
Outreach Director
Amy Popp, Membership and
Office Manager
Emily Slotnick, Community
Involvement Coordinator

Bookkeeping Services:

Julie Russillo

Dear Mr. Boettger,

Thank you for the opportunity to comment on the Draft License Application for the Enloe Dam (FERC #12569) dated November 7, 2007.

The mission of Washington Water Trails Association (WWTA) is "to promote advocacy, education, and stewardship of public access to Washington's waterways for people in human and wind powered beachable watercraft." Last spring the State Interagency Committee for Outdoor Recreation (IAC) completed a recreation participation study. The study showed that 18% of (nearly 1 in 5) Washington citizens participates in canoeing, kayaking, row boating, or other hand-powered boating each year.

In the latter half of 2007 two studies showed the need for public water access for boaters. The first was the WWTA Northwest Paddler's Survey completed by 'involved paddlers.' 83.9% of the respondents answered the question "What do you want more of?" with 'public access to the water.' The Recreation and Conservation Office Boater Need Survey, conducted for the legislature under SHB 1651 and accepted by the Recreation and Conservation Funding Board at its January 15th meeting this year, reported public water access as the top ranked recreational need called for by people in all types of boats.

The Similkameen is a part of the Greater Columbia Water Trail, a planned 500+ mile water trail system from the Canadian border through the Hanford Reach. Other rivers on the trail are the Columbia and Okanogan Rivers. Development of this water trail will increase awareness and use of this area for its boating and wildlife viewing opportunities.

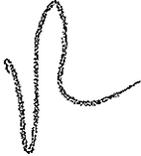
It is important to work to identify access points (including put-in, take-out, rest-stops, portage routes, and camping sites) to enhance recreational use of the Similkameen before, in, and downstream of the Enloe project.

Identifying these important access sites is the first step to planning for signage, parking, appropriate vehicle and pedestrian connections, and other recreational facilities like safe portage routes, toilets, and camping areas.

The Okanogan PUD's proposal to develop a map of the recreation sites and access is greatly appreciated.

The initial visitor study showed the importance of the river as the survey team found traveling by water useful in their work. Recreation studies or monitoring must continue as participation in kayaking has been increasing by a minimum of 20% each year according to the annual Outdoor Industry Foundation Participation Survey.

Thank you,

A handwritten signature in black ink, appearing to read 'Reed Waite', with a stylized flourish at the end.

Reed Waite
Executive Director
reed@wwta.org

From: "Reed Waite" <reed@wwta.org>
To: <enloe@okpud.org>
Date: 2/4/2008 4:35 PM
Subject: Comments from Washington Water Trails Association
Attachments: WWTA Okanogan Enloe Dam Hydro comments.pdf

Thank you for the opportunity to comment. Please see the attached pdf.

Reed Waite
Executive Director
Washington Water Trails Association
206.545.9161 ext. 205
206.547.0350 (fax)
www.wwta.org

--- M+ ---

COMMENT LETTER #22



COLUMBIA RIVER INTER-TRIBAL FISH COMMISSION

729 NE Oregon, Suite 200, Portland, Oregon 97232

Telephone 503 238 0667

Fax 503 235 4228

RECEIVED

February 4, 2008

John Grubich, General Manager
Public Utility District No. 1 of Okanogan County
P.O. Box 912
Okanogan, WA 98840

FEB 04 2008
OKANOGAN COUNTY PUD NO. 1
OKANOGAN, WA

RE: **Comments on the Draft License Application for the Enloe Hydroelectric Project
(FERC No. 12569)**

Dear Mr. Grubich:

The Columbia River Inter-Tribal Fish Commission (CRITFC),¹ has reviewed the November 7, 2007 Draft License Application for the Enloe Hydroelectric Project (FERC No. 12569; herein "DLA"). We offer the following general and specific comments on the DLA.

General Comments

The Yakama Nation and Confederated Tribes of the Umatilla Indian Reservation aboriginally used and occupied lands in what is today the Mid-Columbia region in Washington State. The Columbia River and its tributaries are a part of those lands. Protection of rivers and flows for anadromous fish and wildlife populations, as well as cultural and other resources are critically important to the Tribes.

Anadromous fish, including Pacific lamprey, have significant cultural and religious significance to tribal members, provide members with subsistence for health and well-being, and contribute to a critical share of tribal commerce in an area of limited economic opportunity. The Tribes actively co-manage the fishery resource along with federal and state authorities, including implementation of management plans developed through the United States v. Oregon process. Additionally, the Tribes are actively involved in State of Washington and federal salmon recovery planning and the implementation of protection and restoration projects throughout its ceded lands.

The reconfiguration and operation of the proposed Enloe Hydroelectric Project would impact the treaty-reserved and federal trust resources of the Tribes. Many of the fish stocks that would be by the presence and operation of the Project support ceremonial, subsistence and commercial

¹ CRITFC was formed in 1977 per formal resolution of the governing bodies of the four Columbia River treaty tribes: the Yakama Nation, the Confederated Tribes of the Umatilla Indian Reservation, the Confederated Tribes of the Warm Springs Reservation of Oregon and the Nez Perce Tribe. The Commission is comprised of elected and appointed tribal officials who are members of their respective fish and wildlife committees. The Commission has technical and legal resources that provide assistance to the tribes in protecting and enhancing their federally-reserved trust resources.

treaty fisheries in Zone 6 of the Lower Columbia River. The Tribes are a co-manager of the anadromous fish resource, are directly involved with and concerned about the protection and enhancement of Mid-Columbia stocks, and have a treaty-secured interest in the outcome of this licensing process.

On January 9, 2006, CRITFC filed formal and specific comments with respect to fish resource, hydrologic and socioeconomic studies to the applicant on the Supplement to the Initial Consultation Document for this Project (ICD). We incorporate those comments into these by reference. Most of the CRITFC recommendations and requests for studies and investigations were not addressed without adequate explanation in the DLA. For example, CRITFC requested that the applicant conduct fish passage studies. No studies or information are presented in the DLA to address these issues.

CRITFC finds that the DLA lacks an ecosystem perspective as offered by Williams et al. (1996), NRC (2002), Lichatowich and Mobrand (1995) and Bunn and Arthington (2002). Dams and impoundments significantly alter ecological and trophic systems within their boundaries, and also below their boundaries (Power et al. 1996). These effects are immediate and obvious and gradual and subtle (Power et al. 1996). The applicant must analyze these effects and place the licensing into an ecological framework.

We do not believe that the applicant has properly balanced environmental and power resources in the DLA as is required under the Federal Power Act. Further, we find the DLA seriously deficient in detail, analyses and presentation of alternatives. The applicant must step up and provide funding, studies and analyses for these issues in order to have a complete license application that properly and comprehensively describes the environmental effects of the project. This is critical for the applicant and affected fishery managers to construct protection, mitigation and enhancement measures and for FERC in order to conduct a thorough environmental analysis on different licensing alternatives.

We find the DLA deficient in several respects:

- Operational flow regimes below the proposed project are not specified, but the DLA speculates that the project will always be operated as a exact "run of the river" project. Among other things, ramping rates are not provided.
- Fish passage is not adequately considered. No upstream or downstream fish passage facilities are proposed.
- Water quality information is deficient and is considered only under existing conditions without the proposed project.
- Historical salmon anadromy is not considered. The applicant assumes that no salmon ever ascended over Enloe Falls which is located downstream of the dam. However, there are historical accounts of salmon above the dam, and the applicant has been approached to provide funding for a historical assessment of anadromy.

- Mitigation for proposed project impacts on critical habitat for ESA listed salmon is not adequate.
- The proposed project does not conform with the Northwest Power and Conservation Council's 2000 Fish and Wildlife Program.
- The cumulative and synergistic impacts of the proposed project and climate change are not considered.
- The potential impact of the Enloe project with the proposed Shanker's Bend project.

Enloe Dam is a 54 foot high, gravity concrete structure, originally constructed in about 1917, located on the Similkameen River on 144 acres of Bureau of Land Management (BLM) property (Figures 1, 2 and 3). The dam impounds a 400 acre reservoir that is largely filled with sediment. The Similkameen is the major tributary to the Okanogan River. The license applicant is engaged in its third effort in three decades to license the dam.

The dam has not generated hydropower since the 1960s, and remains mothballed. In 1976, Congress authorized the Secretary of Interior to provide for fish passage. About \$40 million was appropriated to install fishways or remove the dam. The decision was made to remove the dam, but before this could occur, in 1981, Okanogan PUD filed an application to license the dam with FERC.

In 1983, FERC issued a license, which was subsequently appealed by the Yakama Nation. The appeal was based upon a detailed BPA study that determined the 320 miles of good habitat above the dam would produce 98,000 adult steelhead and 55,000 adult Chinook salmon (IEC Beak 1985). The study found that dam removal was the least costly means to sustain natural production of anadromous fish above the dam. FERC subsequently withdrew the license in 1986 stating that it was clear that anadromous fish issues must be resolved before a license is issued.

Okanogan PUD attempted to secure a hydro license from FERC in the 1990's without fish passage, only to have NMFS require fish passage in a Biological Opinion, since ESA listed upper Columbia spring chinook and steelhead would be blocked from access to critical habitat. CRITFC intervened and provided comments before FERC on the last attempt to relicense the defunct Enloe Dam during the 1990's. The CRITFC and the Yakama Nation supported fish passage during this licensing proceeding with dam removal the preferred action. Fish passage made the project uneconomical for Okanogan PUD, so they withdrew their application for licensing in 2000. Now the applicant is attempting for the fourth time to license this project without fish passage.

Specific Comments

Exhibit B2. The applicant does not propose installing State and federal criteria screening in the intake facility. This would subject fish to turbine entrainment, causing high levels of direct and

indirect mortality. In general, direct mortality for juvenile salmonids passing through Kaplan turbines is about 11% (Whitney et al. 1997). With respect to delayed mortality, Kostecki et al. (1987) found that juvenile Atlantic salmon that has passed through turbines suffered selective descaling and microscopic brain and muscle lesions. Both of these impacts contributed to increased delayed mortality over an 8 day period. Of 30 fish that were examined with brain lesions, only 13 survived when held over 48 hours. In addition, abdominal descaling from turbine passage was found to cause lowered survival than descaling in caudal or dorsal zones. Ferguson et al. (2006) noted that fish passing through Kaplan turbines suffered from 46-70% delayed mortality.

B. 4 Storage Capacity and Stream Flow

The DLA states:

The District proposes to operate the Project in the run-of-river mode using a water level sensor in Enloe Reservoir that will regulate the flow through the powerplant to balance reservoir inflow and outflow, keeping the reservoir near full.

Actual powerhouse operation will depend on loading of turbines within certain efficiency ranges and power demand. Because the applicant is not proposing spill as a way to balance inflows and outflows it is not likely that inflows will always equal outflows because operation of the powerhouse will drive downstream flow levels. This will be most evident when the project load-follows demand. Ramping rates under such conditions were not provided in the DLA.

B. 6 Shanker's Bend Project

The applicant has filed for a preliminary permit with FERC for this project. The applicant has not provided any information regarding the cumulative and/or synergistic effects of the Shanker's Bend project with the Enloe Project with respect to resources impacted by both.

D.1 Construction Costs

There is no assurance that the Department of Ecology will issue the applicant a new water right. Most of the instream water in central Washington is already over appropriated with respect to water resources.

D.6 Alternative Power Sources

The applicant has not included other power sources other than purchases from BPA. The potential for conservation for the applicant's use area was not explored in the DLA.

D.7 Consequences of License Denial

A potential consequence of license denial would be removal of the dam, or providing fish passage over the dam by the federal government through the BLM. This was not addressed in the DLA.

E.2.5 Water Quality

Figures E.2.1 and E.2.8 indicate that temperatures are cooler in the lower portion of the reservoir than the upper portions at times in excess of 3 degrees C, which is probably due to some temperature stratification in the reservoir. Unfortunately, the applicant provided only daily maximum temperatures, so it is not known if there is a significant diel temperature regime. The applicant should seriously investigate if there is a potential for temperature regulation using the Enloe impoundment.

In our January 9, 2006 comments on the ICD, we recommended that the applicant employ a tri-level thermograph system to develop thermal profiles in the river above the reservoir, in the reservoir proper and in the river below the dam, similar to that used by Karr et al. (1998). This would allow a detailed assessment of the project effects on river thermal regimes. We suggested that the data loggers be assessed weekly for proper functioning; once a month checking risks considerable lost opportunity if there is a malfunction in the equipment. Dissolved oxygen should also be obtained at these sites. The applicant only measured DO at one site for just 2 days for baseline data.

We also recommended that the applicant obtain temperature data through the fall, winter and spring periods to assess the possibility that the reservoir may be affecting river temperatures during these periods. The applicant has not provided this approach or data. We recommend the applicant proceed with obtaining this baseline data as important to evaluate the environmental impacts of the proposed project.

The applicant has not provided any modeling or data that indicates how the present cooling temperature regime of the river would be affected by the operation of the large intake proposed for the powerhouse or increased reservoir size and thermal capacity due to flashboards. If temperatures from the outflow of the powerhouse are increased, this would have a negative effect on the beneficial biota use below the dam and falls. Again, the impact of the proposed Shanker's Bend impoundment needs to be considered in context of the Enloe Project.

Total Dissolved Gas

The applicant only secured a few TDG measurements in a below average flow year. Powerhouse rejection and/or high flows could cause significant elevations of TDG that would be harmful to the beneficial biota downstream of the proposed project. Since 2008 is likely going to be an above average runoff for the Similkameen, the applicant should install TDG monitors above and below the dam and acquire additional data this spring. Further, the applicant should investigate structural means to reduce TDG in the event of load rejection or high flows that cause spill.

Exhibit E. Environmental Report

Historical Anadromy

The applicant states that no salmon ever ascended Similkameen Falls below the dam, but the evidence for this statement is highly speculative. Historical accounts are contradictory but some

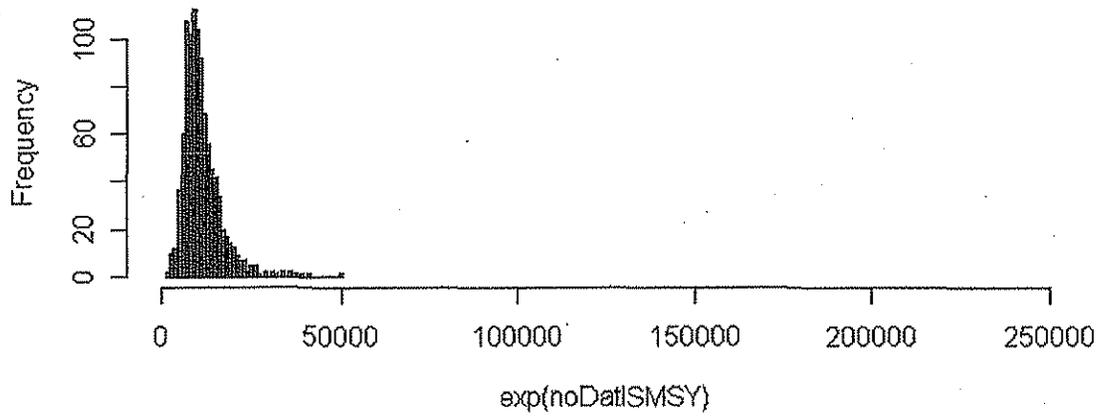
indicate that salmon were found in the sloughs of Palmer Lake which is well above Enloe Dam (Russell 1942). The applicant should conduct a historical survey of archeological findings as suggested by V. Butler of Portland State University in her proposal to the applicant. Further, the applicant should fund paleolimnological studies consistent with that provided by Ford (2007). This approach evaluates core sediments of a watershed above a dam for stable nitrogen isotope signals, indicative of salmon presence.

Fish Passage

The watershed above Enloe Dam is extensive and could provide significant production potential for both summer steelhead and spring Chinook, which are ESA listed and summer Chinook, which is in a depressed status. IEC Beak (1985) conducted an extensive habitat and spawning potential assessment and estimated that the area above the dam could support 55,000 adult Chinook and 98,000 steelhead. A Chinook spawning production potential assessment (optimum spawning size) by CRITFC was conducted using a hierarchical model analysis (Liermann et. al. in prep) and the data compiled by Parken (et al. 2004).

The results for Spring and Summer Chinook are shown below:

Similkameen Spring



Similkameen Summer

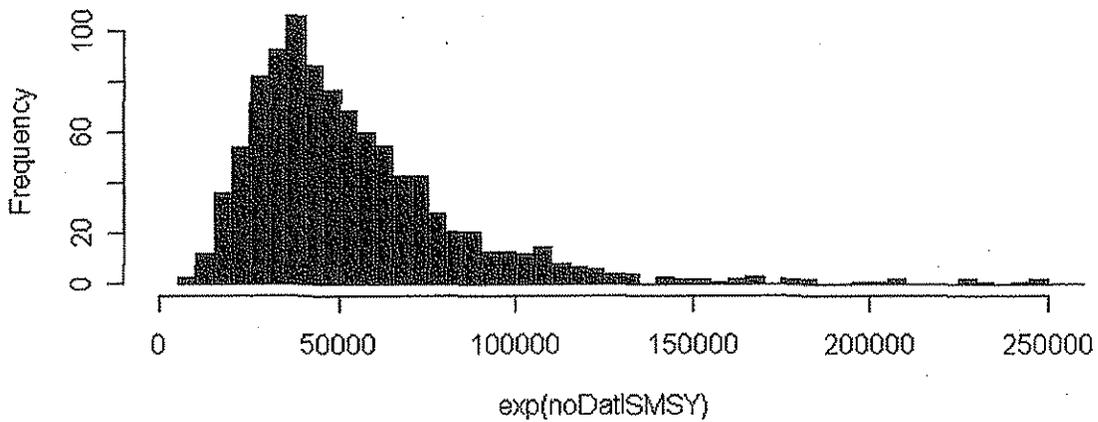


Figure 1: Spring and Summer Chinook Optimal Spawning Stock Escapement Goals based on Similkameen Watershed Area

Table 1: Quartiles of distribution for Spring and Summer Chinook escapement goals

Stock	5%	25%	50%	75%	95%
Similkameen Spring Chinook	4764	7215	9608	12660	19992
Similkameen Summer Chinook	19941	33488	46559	67135	113779

The 50% quartile spawner estimate for both spring and summer Chinook, 56,167 spawners, is very close to the IEC Beak estimate of 55,000 total Chinook spawners. Thus, the two analytical methods produced fairly similar results, producing multiple lines of evidence that fish passage over Enloe Dam could provide significant salmon production. The DLA fails to consider this potential or any sort of fish passage alternative.

CRITFC engaged in a conference call with the applicant in the summer of 2007. At that time, and in all of these filings and junctures, CRITFC has consistently maintained that there is a need to provide fish passage studies as an integral part of the licensing process. The applicant has responded to this position in the DLA by stating that there is "regional consensus" not to provide fish passage, and the applicant has refused to include fish passage studies in the DLA.

Obviously there is no regional consensus not to provide fish passage at Enloe Dam. The CRITFC treaty tribes continue to support examination of fish passage over Enloe Dam.² Enloe Dam continues to block hundreds of miles of critical habitat for steelhead, summer chinook, coho, sockeye and likely Pacific lamprey, both in the U.S. and British Columbia. These fish stocks represent living cultural and treaty trust resources to which CRITFC's member tribes depend and are duty bound to protect and restore.

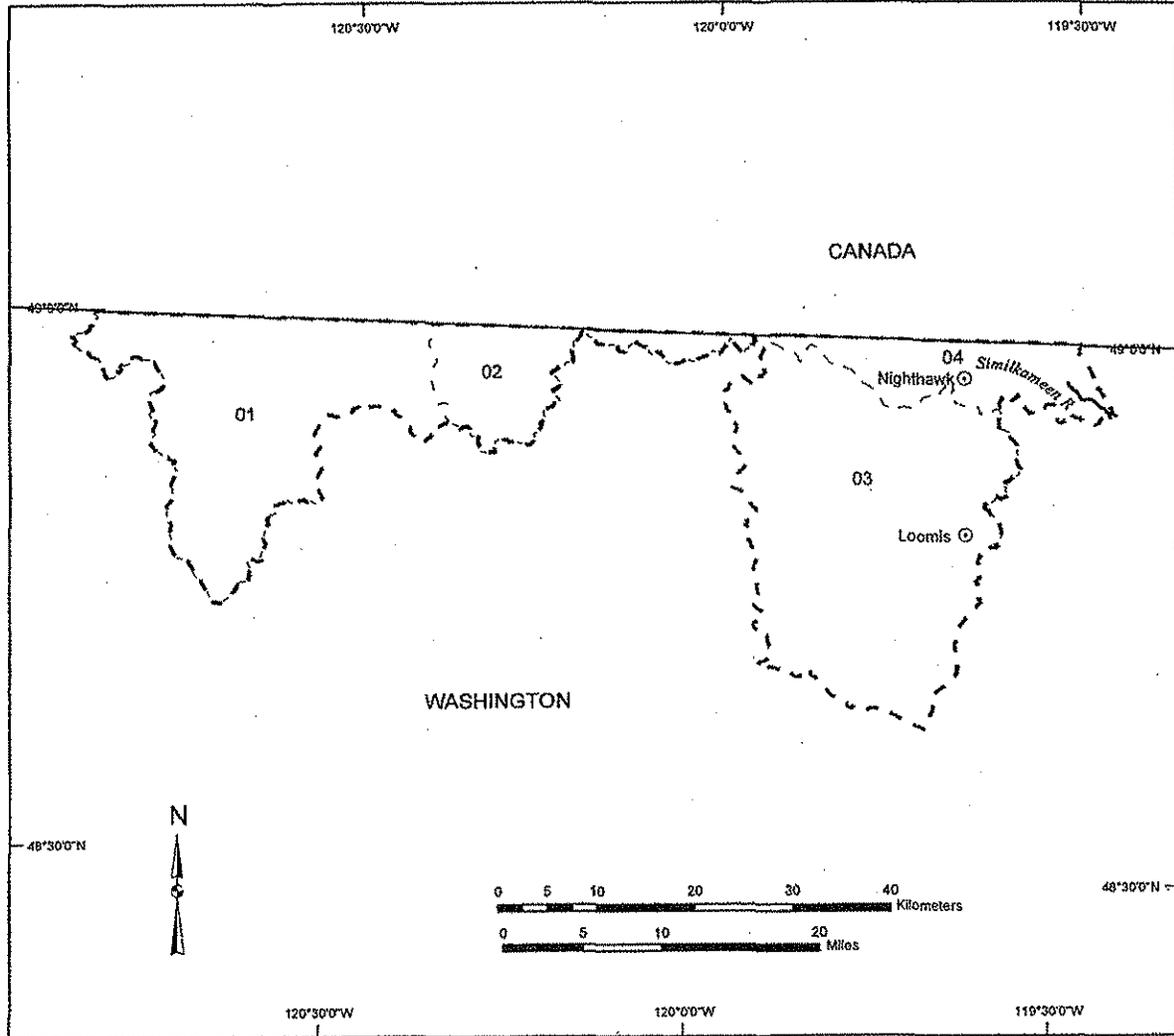
We recommend that the applicant investigate fish passage designs and structures contemplated in the past under other Enloe licensing attempts and those presented in IEC Beak (1985).

Further, the salmon and steelhead habitat below Enloe Dam is designated critical habitat under the ESA as noted in the NOAA Fisheries figure below (from **Federal Register** / Vol. 70, No. 170 / Friday, September 2, 2005 / Rules and Regulations **52763**).

² Elsewhere in the DLA the Colville Tribes are stated to be a treaty tribe. This is not correct, as the CCT are a federally recognized tribe that did not enter into a formal treaty with the United States.

**Final Critical Habitat for the
Upper Columbia River Steelhead ESU**

**SIMILKAMEEN SUBBASIN
17020007**



Legend

- ⊙ Cities / Towns
- State Boundary
- ~~~~ Critical Habitat
- - - Subbasin Boundary
- - - Watershed Boundaries

01 - 04 = Watershed code - last 2 digits of 17020007xx

Area of Detail



There are no supporting references to tables E.3.6 and E.3.7 which provide undocumented data on fish survival through turbines. As noted in the above comments, direct mortality through Kaplan turbines is about 11% with substantially increases of indirect mortality. Adult salmon mortality through turbines has been documented in the range of 50%, probably through turbine blade strike (2000 FCRPS Biological Opinion).

The increased impoundment of the proposed project with flashboards could reduce turbidity and sediment movement to downstream salmon critical habitat. We recommended in our January 9, 2006 comments on the ICD that the applicant obtain turbidity measurements in the free flowing river above the reservoir, at several points in the reservoir and downstream of the dam. Turbidity is an important parameter affecting fish production (Junge and Oakley 1966; Williams et al 2005) and the existing summer Chinook production in the Similkameen River may be dependent on the river's turbidity regimes. The applicant has neither obtained baseline turbidity data nor conducted an investigation as to how turbidity levels may change from the proposed increased impoundment.

The bypass reach, which is critical habitat, is lost to biotic production under the DLA. Again, it is unknown whether or not salmon or steelhead could ascend the fall to potentially utilize this reach. The applicant fails to consider any mitigation for this loss of river habitat.

The applicant does not propose turbine intake or tailrace barriers to prevent fish from entering turbine draft tubes. This is unacceptable. Fish have been demonstrated to achieve burst speeds greater than cited in the DLA. Pacific lamprey have been found in turbine draft tubes after they are shut down for maintenance at other Columbia Basin dams. Load rejection or other shut down could provide opportunities for fish to enter draft tubes, some which are ESA listed. This would result in a direct take of these animals.

The applicant should develop state-of-the-art fishway designs in consultation with NMFS, USFWS and other affected parties including CRITFC. Conventional screen criteria should be met for downstream passage for juvenile salmon and fry and adult anadromous and resident fish. Upstream passage criteria should be developed considering advanced fishway designs offered by Orsborn (1987). Upstream passage criteria should also be developed to assist the passage of adult lamprey.

Socioeconomics

The DLA fails to adequately address socioeconomic impacts. The potential impact of the project on anadromous fish resources to which the CRITFC tribes and other fishers and the fishing industry depend upon from the Similkameen River to SE Alaska should be put in context with the power generation value of the proposed project.

Consistency with the Northwest Power Act

The DLA is not consistent with the NPCC's 2000 Amendments to the Fish and Wildlife Program which recommend:

- Consultation with the fish managers and the Council throughout study design of the project.
- Specific plans for flows and fish facilities prior to construction.
- The best available means for aiding downstream and upstream passage of anadromous and resident fish.
- Flows and reservoir levels of sufficient quantity and quality to protect spawning, incubation, rearing and migration.
- Assurance that the project will not degrade fish habitat or reduce numbers of fish in such a way that the exercise of treaty or executive order tribal rights will be diminished.

Climate Change

The DLA failed to address the impacts of climate change on the impacts of the proposed project on fishery populations. The applicant should consider the affect of these changes on the project operation and its effect on fisheries resources (see Cohen et al. 2002).

Proposed PME's

The applicant proposed only two PME's for impacts to fish and critical habitat. One is a proposed gravel placement project and the other is a pilot habitat improvement project downstream of the dam. The impacts of flow changes, temperature, DO, TDG and upstream and downstream entrainment into the powerhouse turbines are left unmitigated.

Conclusion

CRITFC appreciates the opportunity to provide these comments on the DLA. We strongly recommend that several water quality, fish passage and fish habitat investigations and studies be conducted by the applicant for the final license application. As it stands the DLA fails to provide an adequate assessment of proposed project impacts to fishery resources that are treaty trust resources for CRITFC's member tribes. We look forward to further engaging with the applicant in the licensing process and commenting as appropriate on future submittals by the applicant and FERC. Should you have questions regarding these comments, please contact Robert Heinith at (503) 238-0667.

Sincerely,

/s/

Olney Patt
Executive Director

Cc: K.D. Rose
Secretary
Federal Energy Regulatory Commission
Washington, D.C.

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COMMENT LETTER #23



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Central Washington Field Office
215 Melody Lane, Suite 119
Wenatchee, Washington 98801
Phone: (509) 665-3508 FAX: (509) 665-3509



IN REPLY REFER TO:

February 4, 2008

USFWS Reference: 13260-2008-FA-0006
USFWS Cross Reference: 2007-B-0005; 05-0344
Hydrologic Unit Code: 17-02-00-07-04
Re: Draft License Application Comments
Enloe Hydroelectric Project, FERC Project No. P12569

RECEIVED

FEB 06 2008

OKANOGAN COUNTY PUD NO. 1
OKANOGAN, WA

Dan Boettger
PUD No. 1 of Okanogan County
1331 Second Avenue North
P.O. Box 912
Okanogan, WA 98840

Dear Mr. Boettger:

The U.S. Fish and Wildlife Service (Service) has reviewed Public Utility District No. 1 of Okanogan County's (Applicant) Draft License Application (DLA) for the proposed relicensing of the Enloe Hydroelectric Project (FERC Project No. P12569-000). Parties have been requested to submit their comments on the subject DLA to the Applicant between November 7, 2007 and February 4, 2008.

The Applicant proposes to renew its efforts to obtain a Federal Energy Regulatory Commission (Commission) license to restore its Enloe Hydroelectric Project (Project). The Project entails the restoration of the hydroelectric power plant located on the Similkameen River approximately three miles northwest of Oroville.

The following comments on the subject DLA are provided for inclusion in the Service's response to the Applicant pursuant to the Fish and Wildlife Coordination Act, as amended; the Endangered Species Act, as amended; the Migratory Bird Treaty Act, as amended; the National Environmental Policy Act (NEPA); as amended; and the Federal Power Act (FPA), as amended.

GENERAL COMMENTS

The Service has been an active participant in the Enloe Dam relicensing proceeding and, as such, has provided comments to the Applicant through various avenues for the purposes of developing a new license for the Project. These comments have focused primarily on the

development of baseline relicensing studies that were ultimately specified in the Project's Initial Consultation Document. Other comments were related to crafting appropriate protection, mitigation, and enhancement (PME) measures designed to minimize the Project's footprint on aquatic and terrestrial resources. Recently, our staff met with the Applicant and its consulting agency, Entrix, on April 26, 2007, and more recently on January 16, 2008 to examine the efficacy of the subject DLA. This discussion included a summary of the project description, information on operations and resource utilization, construction schedule, project history, cost and financing, and detailed environmental report. After review of the DLA, the Service is encouraged to see the Applicant has incorporated many of our suggestions related to this document. However, the DLA lacks an appropriate level of detail regarding the scope of project effects, implementation of the PME measures, as well as associated effectiveness monitoring measures.

For example, the DLA relies heavily on the implementation of a proposed Adaptive Management Plan (AMP) to determine changes in implementation of proposed PMEs and assess the effectiveness of the proposed PME measures. While the Service does advocate the use of the adaptive management concept, we note that it would appear to be more productive to include thresholds and timelines related to changes in PME implementation over the course of the proposed Project's new license term.

In a related matter, a notice of a preliminary permit for the proposed Shanker's Bend Hydroelectric Project (Shanker's Bend Dam)(FERC No. 12804-000), located at river mile 7.3 upstream of the Project, has been brought to the attention of the Commission and is being considered by the Applicant. Since the Project is currently undergoing relicensing and the proposed Shanker's Bend Dam would be located immediately upstream of the Project the Service recommends that the Applicant develop and implement baseline aquatic and terrestrial studies as part of its proposed AMP to determine how the proposed Shanker's Bend Dam would affect the Project from a resource impact standpoint (i.e., inundation of sites contaminated with heavy metals). At this time the DLA does not include this analysis. This action would result in a more efficient formulation of appropriate PME measures that are consistent with these two proceedings, in the event a license application is filed for the proposed Shanker's Bend Dam.

The Service offers the following specific resource comments for the record related to the proposed relicensing of the subject Project.

THREATENED AND ENDANGERED SPECIES

Relicensing of the Project could impact habitats occupied by federally-listed, proposed and candidate species. These potential impacts need to be considered in the planning, environmental review, and implementation of this Project. In addition, some of the activities associated with the implementation of the Project may involve ground-disturbing activities that could impact federally-listed species. A waiver of requirements for federally-listed species affected by the Project would be inappropriate based on the information available to us at this time. The Commission has an obligation to evaluate impacts to all federally-listed

species in all phases of their permitting process pursuant to section 7 of the Endangered Species Act (ESA) of 1973, as amended.

The presence of federally-listed, endangered, or threatened species in the project area should be investigated and documented. The Applicant can obtain a list of federally-listed and proposed species from the Service. For your convenience, updated countywide species and habitat listings are now available on our website at <http://www.fws.gov/easternwashington/county%20species%20lists.htm>. To view the listings in your area of concern, select "county species lists" within the ESA programs page, and then select the county of interest. A request to update this list should be submitted to my office when more information about the Project, its exact location, and likely sphere of impact are identified.

The Applicant should be made aware that species lists used for project planning should not be older than 90 days. If endangered or threatened species are determined to be present, then the Commission, as well as the Service, should be notified. The Applicant should then request designation as the Commission's non-Federal representative for purposes of ESA consultation. If an endangered or threatened species may be affected, the Commission must initiate consultation with the Service to determine if the proposed actions would jeopardize the continued existence of the listed species or destroy or modify critical habitat. Federal agency responsibilities for complying with the Endangered Species Act are available at <http://www.fws.gov/endangered/consultations/index.html>. The Applicant should refrain from disturbing the project area (e.g., road construction, drilling) until consultations are completed.

SPECIFIC COMMENTS

- 1.) Section E.2.5 Existing Water Quality (Water Temperature, page E.2-6): The discussion contained in this section appears to lack an analysis of water temperature effects resulting from the proposed powerhouse to be located on the left-bank of the Similkameen River. The Service suggests adding this analysis into this section.
- 2.) Section E.3.2.2 Impacts; Downstream Impacts (Instream Flows, page E.3-30): This section would benefit from a discussion regarding how the proposed implementation of the crest gates would be operated to minimize downstream flow fluctuation impacts resulting from project load following and periodic powerhouse outages. Currently, the Applicant's proposed operational plan does not provide specific detail for minimizing these fluctuation impacts. Project load following has the potential to ramp river levels up and down in short time periods. These actions can directly impact fish by stranding juveniles and dewatering redds (Anglin et al. 2005). These actions may also dewater macro-invertebrate habitat and populations upon which fish depend (Gislason 1985). The Service and Washington Department of Fish and Wildlife have developed ramping criteria that restrict hydroelectric project flow changes to no more than two inches per hour and in some cases, require flat flows (Hunter 1992 and DOI 1992). The Applicant should develop the final license application within these criteria.

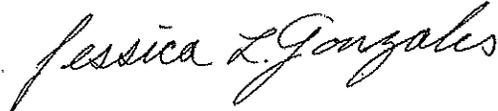
- 3.) Section E.3.2.3 Protection, Mitigation, and Enhancement Measures (Operational Impacts at the Project Powerplant – Entrainment of Fish at the Project Intake, E.3-35): This section does not contain a PME measure designed to salvage fish in the vicinity of the Kaplan turbines, during unscheduled outages and/or scheduled maintenance activities. The Service recommends tailoring a proposed fish salvage measure to maximize the survival of fish entrained into the Project's turbines.
- 4.) Section E.3.2.3 Protection, Mitigation, and Enhancement Measures (Operational Impacts Upstream of the Dam – Loss of Fish to Reservoir Population, page E.3-36): In order to gain an understanding of the magnitude of the entrainment impact at the Project, the Applicant specifies it will be necessary to examine fish entrainment seasonally. The Applicant proposes to conduct quarterly sampling over a one year period. The Service recommends incorporating flexibility into the timeframe in which to assess the impact of entrainment at the Project, to account for inherent variability in flow hydrology and species abundance in the project area over time. We suggest assessing entrainment effects at numerous points over the course of the Project's subsequent license term.
- 5.) Section E.3.2.3 Protection, Mitigation, and Enhancement Measures (Downstream Impacts – Bypass Reach Impacts, pages E.3-39 and E.3-40): The Applicant specifies, as a project impact, that the proposed bypass reach (the area that lies between the foot of Enloe Dam and the pool below Similkameen Falls where the powerhouse outflow rejoins the river) would experience reduced flow and could be dewatered during low flows. The Service recommends that the Applicant, as a proposed PME measure, develop and implement studies over the course of the proposed Project's license term that would assess the impact of project operations on aquatic resources during low flow periods (i.e., water quality impacts).
- 6.) Section E.3.2.3 Protection, Mitigation, and Enhancement Measures (Adaptive Management Plan) (AMP)(page E.3-42): The AMP proposes to examine trends and make decisions regarding the adaptation of PME measures designed to protect aquatic resources. Development of the AMP is expected to be \$60,000. Implementation of the plan on an annual basis is expected to be \$10,000 a year. However, details linked to the systematic implementation of the AMP are not included in this section for the proposed aquatic PME measures. The Service recommends inserting appropriate timelines and criteria for establishing success in determining when and how the proposed PME measures are adapted within the AMP. The Service also suggests closely coordinating all relevant study reports with federal, state, and tribal parties.

SUMMARY COMMENTS

We appreciate the opportunity to assist the Applicant with improving the DLA for the proposed relicensing of the hydroelectric facilities located at the Enloe Dam site. The Applicant should understand that the Service is interested in seeing these comments utilized in the creation of an environmentally acceptable project. After all pertinent comments are compiled for the proposed hydroelectric project, the Applicant should contact the Service to

discuss these comments in more detail. Consultation and technical assistance requests, questions, comments, documents, and required progress reports related to the proposed project should be directed to Stephen Lewis at the Service's Central Washington Field Office; by mail to the address listed on the front page by telephone at (509) 665-3508, extension 14; or via e-mail: Stephen_Lewis@fws.gov.

Sincerely,



Jessica L. Gonzales
Division Manager

cc:

Susan Martin, Upper Columbia Fish and Wildlife Office, USFWS, Spokane, WA
Mark Miller, Upper Columbia Fish and Wildlife Office, USFWS, Spokane, WA
Estyn Mead, Region 1 Headquarters, USFWS, Portland, OR
Jeff Thomas, Yakima Sub-Office, USFWS, Yakima, WA
Carmen Andonageau, WDFW, Ephrata, WA
Susan Rosebrough, NPS, Seattle, WA
Rosemary Mazaika, BLM, Portland, OR
Bob Rose, Yakama Nation, Toppenish, WA
Kimberly D. Bose, FERC, Washington, D.C.

LITERATURE CITED

- Anglin, D.R. et al. 2005. Effects of hydropower operations on spawning habitat, rearing habitat and stranding/entrapment mortality of fall Chinook salmon in the Hanford Reach of the Columbia River. Final draft report. U.S. Fish and Wildlife Service. Columbia River Fisheries Program Office. Vancouver, Washington.
- DOI (Department of Interior). 1992. April 2, 1992. Comments and recommendations to FERC on the application for major license for Enloe Dam, Okanogan County, Washington. Portland, Oregon.
- Gislason, J.C. 1985. Aquatic insect abundance in a regulated stream under fluctuating and stable diel flow patterns. *North American Journal of Fisheries Management*. 5:39-46.
- Hunter, M.A. 1992. Hydropower flow fluctuations and salmonids: A review of the biological effects, mechanical causes and options for mitigation. Technical Report No. 119. Washington Department of Fish and Wildlife. Olympia, Washington.

COMMENT LETTER #24

RECEIVED

From: Ken Farquharson <ken.farquharson@shaw.ca>
To: <Enloe@okpud.org>
Date: 2/8/2008 12:51 PM
Subject: Enloe Hydroelectric Project FERC No 12569

FEB 08 2008
OKANOGAN COUNTY PUD NO. 1
OKANOGAN, WA

CC: tom brucker <thsbrucker@comcast.net>, tom perry <tperryjr@shaw.ca>, deni...

Dear Sirs,

Word of your proposals on the Enloe Dam and possible subsequent Shanker's Bend project only reached me today. I appreciate that the period of public comment ended on 4 Feb 08, but as the request for comments was not advertised in BC, I trust you will accept my late comment.

As a Canadian I stongly support the provision of fish passage at Enloe Dam. The original construction has had severe impacts on the aquatic environment of the Similkameen River in Canada.

I believe that the impacts of the Shanker's Bend project in Canada are high and the extensive flooding of valley bottom proposed in BC will not be acceptable to Canadians. Please be advised that this project will be strongly opposed by many of the same groups that formed the ROSS Committee which successfully opposed Seattle City Light's High Ross project.

Ken Farquharson, Secretary, ROSS Committee

--- M+ ---

COMMENT LETTER #25

**AW AMERICAN
WHITEWATER**
PO Box 1540 Cullowhee, NC 28723

SALT LAKE CITY UT 84119



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Chuck Berrie, Manager
Okanogan County Public Utility District
PO Box 912
Okanogan WA 98840-0912





Thomas O'Keefe
Pacific Northwest Stewardship Director
3537 NE 87th St.
Seattle, WA 98115
okeefe@amwhitewater.org

February 5, 2007

Dan Boettger, Okanogan PUD
Enloe Hydroelectric Project
Draft License Application Comments
1331 2nd Avenue North
P.O. Box 912
Okanogan, WA 98840

RECEIVED

FEB 11 2008

OKANOGAN COUNTY PUD NO. 1
OKANOGAN, WA

RE: Enloe Hydroelectric Project, Project No. 12569
Comments on the Draft License Application

Dear Mr. Boettger:

On November 7, 2007, Public Utility District No. 1 of Okanogan County (Okanogan PUD) issued for public comment its draft license application (DLA) for the Enloe Hydroelectric Project. American Whitewater is currently reviewing this application and the implications for recreational opportunities on Similkameen River.

Interest of American Whitewater

American Whitewater is a national non-profit 501(c)(3) river conservation organization founded in 1954. We have over 6,500 members and 100 local-based affiliate clubs, representing approximately 80,000 whitewater paddlers across the nation. American Whitewater's mission is to conserve and restore America's whitewater resources and to enhance opportunities to enjoy them safely. As a conservation-oriented paddling organization, American Whitewater has an interest in the rivers throughout the Columbia River drainage. A significant percentage of American Whitewater members reside in the region and enjoy the recreational opportunities these rivers provide. The Similkameen provides great whitewater recreation opportunities from its headwaters in British Columbia upstream of the proposed Enloe Project, and whitewater and flatwater paddling opportunities from the proposed site downstream to its confluence with the Okanogan River.

Comments

The DLA fails to clearly describe project operations for the Enloe Hydroelectric project. Of particular interest to our membership, we are not able to determine what the flow regime will be in the Similkameen River. Modifications to the flow regime will have impacts on recreational opportunities on the river. This river is part of a water trail that is being developed and a more complete description of impacts to the flow regime is required to fully evaluate recreational and aesthetic impacts.

Prior to licensing of this project, the State of Washington would need to issue water quality certification under Section 401 of the Clean Water Act. Evaluation of water quality standards must include beneficial uses which on this project include primary contact recreation, navigation, and boating. Additional information on the proposed project and the impact of a modified flow regime to recreational opportunities must be provided.

The nexus to the proposed Shankers Bend Hydro Project (FERC P-12804) is not adequately described. Each project would substantially change flow and recreational opportunities on the Similkameen River, and there would clearly be cumulative impacts. Shankers Bend will impact miles of whitewater, and the two projects together will have significant recreational impacts on the river.

In addition to potential impacts to recreation our members have an interest in environmental impacts of the project on the Similkameen River. In this regard, we have the same questions and concerns expressed by American Rivers, the Center for Environmental Law and Policy, the Selkirk Conservation Alliance, the North Cascades Conservation Alliance, the Cascade Chapter of the Sierra Club, and the Columbia River Bioregional Education Project (collectively, the Conservation Groups) in their comments on the DLA.

Conclusion

We will be conducting additional review of this DLA and the proposed project in the coming months and will provide additional comments as we learn more about this project and potential impacts to recreation.

Sincerely,



Thomas O'Keefe, PhD
Pacific Northwest Stewardship Director

COMMENT LETTER #26

February 13, 2008

Enloe Hydroelectric Project
Draft License Application Comments
1331 Second Avenue North
P.O. Box 912
Okanogan, WA 98840

Subject: Comments - Draft Application for
Enloe Hydroelectric Project, FERC #12569

To whom it may concern:

I was not aware of this comment period until I received notice with my PUD bill that the comment period was closed, and was advised that I still may comment on the subject project for about two weeks after February 4, 2008. I appreciate this opportunity. Please include my comments with your packet for this comment period.

Reading through the notebook that was delivered to Twisp library February 11, 2008, it appears that very little has been done to substantiate the value of this project, and that there are substantially prohibitive restrictions and drawbacks to each facet of going forward with this project regarding each issue regarding it. Also, the benefits of doing so are outweighed by the negative aspects of such a project, not the least of which are the costs of moving forward with such a project which is grossly underestimated in dollars, time, and environmental and wildlife degradation.

It is my desire that this dam be removed, rather than rebuilt/changed/restored.

Sincerely,

L. Simpson
19989 SR 20
Twisp, WA 98856

Also, the water source is questionable due to intermittent water flow, and is inadequately categorized leading to a lack of requirement to qualify the value of the dam.

COMMENT LETTER #27

From: "Bev Ramey" <bevramey@telus.net>
To: <Enloe@okpud.org>
Date: 2/18/2008 11:37 AM
Subject: Enloe Dam and proposed Shanker's Bend project

CC: "Maria Hamann" <FBCN@telus.net>
To Enloe Dam Public Utility

RECEIVED

FEB 19 2008

OKANOGAN COUNTY PUD NO. 1
OKANOGAN, WA

BC Nature (Federation of BC naturalists) has only recently learned of your proposals on the Enloe Dam and possible subsequent Shanker's Bend project. I appreciate that the period of public comment ended on 4 Feb 08, but as the request for comments was not advertised in BC, I trust you will accept these comments.

As a Canadian provincial organization, representing 50 local natural history clubs throughout BC, we strongly support the provision of fish passage at Enloe Dam. The original construction has had severe impacts on the aquatic environment of the Similkameen River in Canada.

In addition, the impacts of the Shanker's Bend project in Canada are high and the extensive flooding of valley bottom proposed in BC will not be acceptable to Canadians. Please be advised that this project will be strongly opposed by many Canadian groups. As a provincial organization, we request intervener status.

Bev Ramey

President

BC Nature (Federation of BC Naturalists)

--- M+ ---

COMMENT LETTER #28



RECEIVED

FEB 22 2008

OKANOGAN COUNTY PUD NO. 1
OKANOGAN, WA

February 15, 2008

Dan Boettger, Okanogan PUD
Enloe Hydroelectric Project
Draft License Application Comments
1331 Second Avenue North
P.O. Box 912
Okanogan, WA 98840

SUBJECT: Review and Response for Draft Application for a new License for the Enloe Hydroelectric Project, FERC Docket No. 12569.

Dear Mr. Boettger:

Thank you for providing the Washington State Department of Natural Resources with a copy of the Enloe Draft License Application (FERC #12569), dated November 7, 2007, submitted pursuant to 18 C.F.R. Section 16.8(b)(4).

The Enloe dam structure and associated reservoir are located on state-owned aquatic lands. To date, DNR has never developed a use authorization for this hydroelectric project.

Authority

Washington Department of Natural Resources (DNR) management authority derives from the state's constitution, law, and regulations.¹ As proprietary manager of state-owned aquatic lands, the DNR has been directed to manage these lands "...for the benefit of the public..." in a manner that provides "...a balance of public benefits² for all citizens of the state..." that includes: "(1) Encouraging direct public use and access; (2) Fostering water-dependent uses³; (3) Ensuring environmental protection; and (4) Utilizing renewable resources." (Revised Code of Washington, 79.105.030).

¹ Articles of the constitution (XV, XVII, XXVII), Revised Code of Washington (RCW) 79.02, 79.10, 79.14 and, 79.105 to 79.145, Washington Administrative Code (WAC) 332-30.

² WAC 332-30-106 defines public benefit as "...that all of the citizens of the state may derive a direct benefit from departmental actions..."

³ Water dependent uses are those uses that "...cannot logically exist in any location but on the water." (RCW 79.90.465).

Comment – page B-22

“The District has filed an application with the Federal Energy Regulatory Commission for a Preliminary Permit under Section 4(f) of the Federal Power Act (FPA). If the State’s appraisal study of the Shanker’s Bend site is positive the District would consider whether to proceed with seeking a license for the hydroelectric capability of the project from FERC.”

DNR encourages Okanogan PUD to include as much detail as possible, as early as possible, about the relationship between these two projects, particularly the amount of state-aquatic lands affected. This will improve the timeliness by which DNR can respond to both Enloe and Shanker’s Bend.

Comment – page E.9-15

“The District did not receive ICD Comments from DNR....DNR staff attended one of the informational meetings, on February 1, 2007. DNR Staff have not finalized a request to the District regarding use of the State’s lands.”

DNR encourages Okanogan PUD to complete its application to use state-owned aquatic lands, and work with District Staff to resolve any questions.

“DNR Staff have not finalized a request to the District regarding use of the State’s lands.”

The DNR’s interest in the project pertains to areas where State Owned Aquatic Lands may be or currently are impacted and. Okanogan Public Utility District will need to contact the District Office where the project is located (address below) and complete the required forms to request use of state-owned aquatic lands. The services of a registered land surveyor is then required for platting the location. The application must be accompanied by a plat, technical data sheet, and State Environmental Policy Act (SEPA) checklist. To date, DNR has not received an application to use state-owned aquatic lands.

Comment – page E.9-14

“The District proposes that the WDNR treat the Project as a renovation with the accompanying restoration of wetlands and shoreline habitat.”

The DNR has no basis to conclude that the proposed project is anything other than a hydroelectric project. DNR has not discussed this project with the applicant as being anything other than a hydroelectric activity.

“The cost implementation of the agreement will be determined in consultation with WDNR after the licensing decision.”

Dan Boettger, Okanogan PUD
February 15, 2008
Page 3 of 3

The DNR encourages Okanogan PUD to apply for use of state-owned aquatic lands as early as possible.

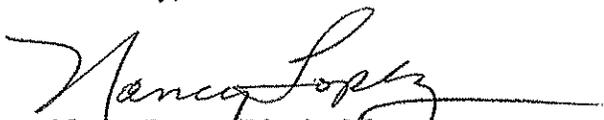
Other - Public Use --

The DNR would like to support comments made on Feb. 4, 2008 by the National Park Service and on Feb. 5, 2008, by American Whitewater Association. Both letters clearly state concerns surrounding potential impacts to public access and recreational opportunities. As manager of state-owned aquatic land, DNR adheres to the Public Trust Doctrine, which holds that navigable waters and the beds beneath are owned by the state, but held in trust for public use. The DNR asks the following questions with respect to public use and access:

- (1) What would the impact be to recreational and aesthetic opportunities provided by the planned Greater Columbia Water Trail be if the flow regime is modified?
- (2) Is the public access going to be modified in such a way so that recreational opportunities – planned or current – are significantly impacted?
- (3) Will further state-aquatic lands need to be inundated, thus restricting even more state-owned aquatic land available for public access?
- (4) In order to evaluate the full impacts on public use and access, DNR will also need information on the cumulative impacts of hydroelectric and other activities on the Similkameen River.

I hope this information will be of assistance to you. If you need further assistance, please feel free to contact me at (360) 740-6819.

Sincerely,


Nancy Lopez, District Manager
Aquatics Region/Rivers District

cc: Region File
Environmental Review, Division File

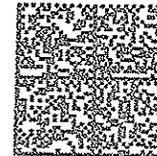


WASHINGTON STATE DEPARTMENT OF
Natural Resources

PO BOX 280
CASTLE ROCK WA 98611-0280



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DAN BOETTGER OKANOGAN PUD
ENLOE HYDROELECTRIC PROJECT
DRAFT LICENSE APPLICATION COMMENTS
1331 SECOND AVENUE NORTH
PO BOX 912
OKANOGAN WA 98840

LXJ1551 98840



COMMENT LETTER #29

RECEIVED



United States Department of the Interior AUG 01 2008

OKANOGAN COUNTY PUD NO. 1
OKANOGAN, WA

BUREAU OF LAND MANAGEMENT
Spokane District
Wenatchee Field Office
915 Walla Walla Avenue
Wenatchee, Washington 98801

IN REPLY REFER TO:
2320 (134)

July 31, 2008

Dan Boettger
Okanogan Public Utility District
Post Office Box 912
Okanogan, Washington 98840

Re: Draft License Application for the Enloe Hydroelectric Project, FERC Project No. 12569

Dear Mr. Boettger:

Thank you for joining my staff at the Enloe Dam on July 1, 2008 and for the opportunity to review revised plans, maps and documents for the Enloe Dam licensing. It was important for my staff to meet with you at the site to review revised maps for the camping/parking area near the dam. Based on our discussions that day my staff has additional comments in response to the Draft Licensing Application (DLA). Comments submitted previously remain relevant. The Bureau of Land Management (BLM) understands that the timeframe of the Federal Energy Regulatory Commission (FERC) proceeding in which Okanogan Public Utility District (PUD) is involved may not allow further consideration of these revised comments. Nevertheless, the BLM believes it necessary to submit these comments to complete the agency's administrative record of involvement in this proceeding.

Reservation of Authority

The Enloe Hydroelectric Project (Project) occupies public domain lands administered by the Department of the Interior (Interior), BLM, that have been withdrawn for waterpower purposes. Pursuant to Section 4(e)¹ of the Federal Power Act, the BLM is responsible for the adequate protection and utilization of reserved lands and purposes for which these were established. Consistent with this administrative responsibility, the FERC shall include, as necessary, such conditions, as identified by the Secretary of the Interior, to ensure the protection and utilization

¹ Section 4(e) of the Federal Power Act defines "reservation" to include "...national forests, tribal lands, embraced within Indian reservations, military reservations, and other lands and interests in lands owned by the United States, and withdrawn, reserved, or withheld from private appropriation and disposal under the public land laws; also lands and interests in lands acquired and held for public purposes; but shall not include national monuments or national parks."

of the BLM reservation and purposes for which BLM lands are administered. BLM's reservation of authority accommodates consideration of additional data and information as it becomes available throughout the licensing proceeding.

BLM Comments and Questions by Resource:

Recreation

General

- The PUD recreation study, while helpful, only considered recreation use at one time of the year, and for only one year. The BLM believes the analysis is inadequate for evaluating recreation use and potential impacts from the proposed Project. The study needs to be performed over a minimum of three years, considering different times of the year (e.g., spring, fall and winter in addition to the summer survey). Additional analysis is necessary to accurately assess and evaluate current recreation use and potential affects consequent of Project operations.
- The Recreational Resources portion of the DLA only addresses current recreation use and does not incorporate estimates of projected use over the next 30 to 50 years based on regional trends and changing demographics. Trends in recreation use across the United States, in Washington and in Okanogan County, reflect an increasing demand for use of existing sites and a need for new recreation sites and sites highlighting particular recreation opportunities. Current nearby recreation opportunities such as the Greater Columbia Water Trail (GCWT) and the Oroville-Nighthawk Rail Trail (part of the proposed Pacific Northwest (PNW) National Scenic Trail) are anticipated to draw more visitors to the Similkameen and Okanogan valleys. BLM understands the PUD is applying for a 30-year license to operate the Project. The recreation analysis should account for affects over the 30-year period of licensure, incorporating statements of affect relating Project operations to changing demographics and changes in recreation use.
- The PUD must consult with BLM on proposed Recreational Use Plan, and all activities proposed for BLM-managed areas. BLM responsibilities pursuant to the National Environmental Policy Act (NEPA) dictate that the PUD consult with the agency for all activities that would result in an irreversible or irretrievable commitment of resources on BLM-administered lands.
- The PUD should include the details of a maintenance and administration schedule for all recreation sites and for BLM-administered lands at Shanker's Bend and the Project. Specifics should include: proposed facilities, maintenance, enforcement schedule, implementation, and the PUD's long-term operation and maintenance plans for these sites. PUD should also re-evaluate the size of the proposed recreation site at Enloe Dam. In light of future expanded recreation opportunities in the area, increased population and visitor interest in developed recreation sites, the proposed recreation area should be expanded to include additional day use parking places and campsites.

Road Access to Enloe Dam and Immediate Vicinity:

- The access road to the Project including the new road segment should be constructed with an adequate number of turnouts and sight clearance to allow vehicles to safely pass along this road.
- The old road segment should be gated or blocked with rocks at both ends to restrict access.
 - Spur roads leading from the access road should be closed to vehicles. Portions of these roads could be modified for turn arounds or blocked.

Access to the River Corridor Below Enloe Dam (East Bank):

- The Enloe Initial Consultation Document and 1992 Environmental Assessment (EA) refer to a “new access site” to be located below the Dam. One of the key findings of the 2006 visitor intercept survey was that “access to the river corridor below the dam is important to visitors.” However, the DLA does not include provisions for access below the dam, mentioning only improved recreation facilities at Enloe Dam and Shanker’s Bend sites, and that “Access below the dam would be limited to existing “informal, unimproved user trails.” Since access below the dam is important to visitors, the DLA should include provisions for signing, improving, maintaining, and providing safe access to the river below the dam.
- If the Oroville/Nighthawk trail, as a segment of the PNW National Scenic Trail, is completed, the Okanogan PUD should consider the possibility of reconstructing the pedestrian bridge which crossed the river below the dam. This bridge would provide one-of-a-kind access from the campground and highway on the east side of the river, to the trail opportunities on the west side of the river. The bridge would also create additional trailhead and staging opportunities for the PNW Trail and the GCWT, as well as becoming a regional tourist attraction. PUD should explore possibilities of grant funding to help make this trail connection a reality. BLM recommends that PUD work with the BLM, U.S. Fish and Wildlife Service (USFWS), National Park Service (NPS), the Greater Columbia Water Trail Group, the Pacific Northwest Trail group and Okanogan County to identify water and trail access points that are likely to become popular as the water and rail trails are developed in this area. Although discussions and plans for this trail have been in development for several years, the PUDs DLA fails to mention this or other recreation amenities of a regional scale. The BLM views this as a significant oversight of the PUD analysis.

Access to the river Corridor above Enloe Dam

- It is unclear whether recreation access in the vicinity of the dam will be allowed for reasons of security, public health, and/or safety. In the event recreation access is restricted, alternative locations for recreation mitigation must be developed. Recent

relicensings have included provisions for recreation access in the proximity of the Project. A change in the case of the Enloe Project could constitute a regulatory precedent which heretofore has not been established by other proceedings.

- Currently Similkameen river users take out their boats or rafts at the Shankers Bend water access to avoid the flatwater stretch above the Enloe Dam. The crest gates proposed for the Project will impound water further upstream and at a higher surface water elevation of the pool behind the dam. The approximate new location of the flatwater pool is at the BLM Miner's Flat boat access that currently receives primitive camping and some boat use. Though outside of the Project boundary, change in surface water elevation of the upstream impoundment will affect the Miner's Flat recreation site. The BLM maintains that the river visitors who currently use Shanker's Bend as a take out will be displaced to Miner's Flat once the new crestgates are in operation. The BLM believes it appropriate that the PUD mitigate for this affect by improving the Miner's Flat area to accommodate changes in river access.

Enloe Dam Public Access:

- Fencing:
 - The DLA lacks detailed diagrams or illustration of fencing necessary to limit or restrict access of cattle in the Project area. Cattle should be excluded from any recreation areas or Project facilities. See grazing section for more specific detail. If fencing is needed in the immediate vicinity of the recreation areas, it should incorporate smooth wire fencing or post-and-rail type construction. The PUD should provide details on maintenance of repair of Project fencing as it constitutes a facility or Project infrastructure.
 - The safety fence at the dam should be replaced and extended about 30 feet upstream and downstream to prevent public access to the cliff areas.
 - Any proposals for fencing on Federal land would require the necessary environmental clearances and be developed in consultation with the BLM and the grazing lessee who holds a grazing permit for lands adjacent to the Project.
- Interpretation:
 - The DLA lacks a detailed discussion of proposals for development, maintenance, repair, or reconstruction of interpretive facilities. Any proposals for developing interpretive facilities will require the necessary environmental clearances developed in consultation with the BLM. The DLA lacks a discussion of the detail that must be considered in the development of interpretive facilities including content, signage, public information and location of these facilities. The PUD must involve BLM in the development of signs. BLM suggests development of provisions for the following interpretive details in the DLA.
 - Project Map of Enloe Dam and Vicinity: The PUD should develop a map of the Project, including river access, portage information, road access including closures, recreation amenities and safety considerations within and adjacent to the Project boundary and post the map at the Enloe Dam area, Shanker's Bend,

Miner's Flat, Similkameen Camp and other waysides where the public gains access to the Similkameen/Enloe area.

- Brochure of the Enloe Dam and Vicinity. The PUD should develop a brochure depicting Project features, including river access, portage information, road access including closures, recreation amenities, and safety considerations within and adjacent to the Project.
 - The PUD should construct information kiosks including details of history, river access, road access including closures, and safety information at the Enloe Dam.
- The DLA lacks adequate detail regarding public health and safety including specifically provisions for video surveillance.
 - The PUD must remove, decommission and/or remediate old buildings that remain at the proposed recreation site consistent with the cultural resources recommendations. The buildings present a risk to public health and safety and encourage vandalism. The structures are located immediately north of the proposed recreation site and will detract from the improvements PUD is planning for the site. The PUD must also address the old powerhouse and associated facilities to provide for public safety and consider interpretive and recreation opportunities.
 - BLM agrees a Recreational Use Monitoring and Use Plan should be developed for the Project.
 - BLM agrees a cooperative, non-motorized public access trail along the old railroad grade from Oroville to Nighthawk should be developed.

Aesthetic Resources

- The Key Observation Point (KOP) discussion in the DLA fails to analyze the improved recreation area at Enloe, the access road including a new portion thereof, riparian fencing and Shanker's Bend recreation improvements. These improvements will be visible from several of the KOPs, and should have been analyzed.
- The DLA lacks a discussion of aesthetics of de-watering the spillway and rocky area below the dam or consider the alternative of spilling water over the spillway all year.

Fisheries:

BLM's primary concern with fisheries and fish habitat is that the spawning habitat below the Enloe falls be maintained and possibly improved. The steelhead spawning in the Similkameen River below Enloe Dam comprises approximately 15% of the steelhead population in the Okanogan Basin. Summer Chinook comprise 50% of the basin population. The plan to build a new spawning channel with gravel down stream of the falls has the potential to improve spawning habitat. However, the location of the proposed channel has not been identified or analyzed. Mitigating actions are incomplete in detail and, therefore, cannot be analyzed for magnitude of affect. The analysis of both affect and mitigating activity should consider areas of the Similkameen where natural anadromous spawning occurs.

The BLM is concerned about the location, timing, and potential impacts of blasting for Project construction and believes the PUD should make every effort to control flow fluctuations to prevent dewatering of downstream spawning gravels. Elevated summer water temperatures that may result from Project operation are also of concern and have not been analyzed. It is possible that the increased surface area of the reservoir could elevate water temperature as a result of exposure to the sun. The PUD should model potential temperature effects of diverting flows from the Similkameen to the penstock for power generation and not spilling water over the dam. The PUD should also analyze high flows over the dam in excess of the capacity of the turbines and subsequent effects on dissolved oxygen (DO). The BLM anticipates that the Washington Department of Ecology, that will issue the 401 water quality certification for the Project, would require such an analysis.

The DLA lacks adequate discussion of the potential warm-water bass and perch recreational fishery upstream of the dam. Given the increased popularity that warm-water bass and perch fisheries have had in nearby Palmer Lake, BLM anticipates increased public interest in recreational fisheries in the reservoir above Enloe Dam. Developing hiding structures (logs, trees, root wads) along the bank may enhance conditions for the bass and perch populations. (Pers. con. B. Jateff, Fisheries Biologist, WDFW)

Wildlife:

The DLA fails to analyze affects to wetland and riparian areas or include appropriate mitigations or enhancements resulting from increased surface water elevation of the reservoir (e.g. wetlands above the ordinary high water line of the reservoir may function more properly than those connected to the river). PUD should mitigate to maintain off-channel wetlands or ponds that are isolated from the new pool. These could provide breeding habitat for amphibians. Ideally these ponds would not be accessible by warm water fish in the new pool.

The DLA did not identify livestock control structures that will be installed to protect wetlands and riparian habitats.

Botany:

Include a statement about future development of a restoration plan, including goals, the species to be used, methods and benchmarks of success. The restoration plan would be reviewed and approved by the agency prior to implementation. The plan needs to address abandoned roads, including details for surface preparation to deal with compaction issues, seeding, mulching, and replacing shrubs, should be proposed. In preparing a more detailed restoration plan, vague statements like "replace planting if survival is low" should be clarified and include specific standards like 50% survivorship,

The discussion of noxious weed control and management is vague and needs more specifics, including, but not limited to, timeframes, species, and methods of control, etc.

Realty

The DLA points out that the PUD is aware of the need to obtain an amended right-of-way (ROW) from BLM to authorize new construction and refurbishment activities at Enloe Dam. Ideally, the PUD's application to amend the ROW should be submitted soon after the PUD's final license application is filed with FERC. BLM recommends the PUD do the NEPA for the ROW at the same time as the FERC license NEPA. The ROW application must include all projects or activities proposed on BLM lands. This includes the new hydroelectric facilities, the existing powerhouse and other building and facilities, reconstruction activities, recreation enhancements, access roads, powerlines, mitigation projects, and any other improvements. The existing powerhouse and associated facilities on the west bank must be remediated consistent with the Cultural Resources report and consider public safety concerns and recreational opportunities. The application to amend the ROW would be processed concurrent with FERC's review of the license application.

The BLM noted previously that the legal description shown in item #7 "Lands of the United States Affected" is not complete.

Because the BLM is the underlying landowner for the property crossed by the Oroville Tonasket Irrigation District easement, a request for construction and use of an access road along the abandoned canal must also be included in the PUD's ROW application to BLM.

Cultural:

Cultural resource issues regarding the Enloe Dam project are being addressed through participation in the Cultural Resources Work Group (CRWG). The CRWG meets regularly to advise the PUD regarding National Historic Preservation Act Section 106 requirements for the licensing process.

The cultural resource inventory reports and evaluations for the project are in draft. The District will continue to advise the PUD regarding cultural resources via the CRWG. Following completion of all cultural property evaluations and inventory documents, the reports will be reviewed and submitted for concurrence from the State Historic Preservation Office, the Spokane District BLM, consulting Tribes, and the FERC. An historic properties management plan (HPMP) will be developed by the PUD in consultation with the CRWG and implemented by the PUD should project application be approved by FERC.

It is our expectation that the CRWG will continue to review and guide the Section 106 review process through implementation of the HPMP. The HPMP would guide future management of historic properties in the project area. The CRWG requested Okanogan County PUD consider options for stabilizing and conserving the historic powerhouse and facilities. The property is eligible to the National Register of Historic Places and as a historically significant property options to complete demolition and removal should be considered in consultation with the CRWG and interested parties. Should studies by PUD indicate that preservation of the Historic facility in whole or in part is infeasible or impractical, appropriate mitigations for adverse effects to the property will be completed in consultation with the CRWG.

Grazing:

There are three BLM grazing allotments within the Enloe Dam FERC project area. The affected grazing lessees need to be consulted concerning the impacts of the Enloe Dam project on their livestock operation. BLM has concerns about areas that may be fenced for recreation, riparian mitigation, facility protection and other purposes. The PUD should consider the interactions between livestock and the public due to the potential changes in recreational use of the project area that may result from the recreation site development.

Concerns with fencing include loss of grazing access to water and forage. Two year notice to the grazing lessees is required if grazing has to be reduced due to loss of land available for grazing. Access to water at the Similkameen River is necessary for the livestock operations leasing the BLM lands within the project area. BLM will need to review the specific plans for fencing that may exclude livestock.

At the July 1, 2008, on-site meeting, BLM suggested that the PUD meet with Dale Devon, the permittee most likely to be affected by the cattle being fenced out of the recreation site between the current dam and Shanker's Bend. According to the Department of Ecology, the lessee has a legal water right which must be maintained. It was also suggested that the PUD could provide water up above the fence on the plateau to meet Devon's water needs, if the cattle are excluded from the area up stream to Shanker's Bend. The PUD plan must include mitigation measures to address any impacts to the grazing lessee's livestock operation and water rights.

The BLM appreciates the opportunity to submit these comments and looks forward to our continued work with the PUD through this process. If you have specific questions or require additional information, please contact Joe Kelly or Diane Priebe of my staff at 509-665-2100.

Sincerely,



Karen Kelleher
Field Manager

cc: Robert Towne, District Manager, Spokane District BLM
Rosy Mazaika, OR-932, Oregon State Office
Allison O'Brien, Department of Interior, Office of Environmental Policy Compliance
Frank Wilson, Department of Interior, Regional Solicitors Office