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# United States Department of the Interior

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FISH AND WILDLIFE SERVICE

*Upper Columbia Fish and Wildlife Office*
*11103 East Montgomery Drive*
*Spokane, Washington 99206*



March 30, 2007

IN REPLY REFER TO:

USFWS Reference: 13260-2007-FA-0012
Hydrologic Unit Code: 17-02-00-05-01
Re: COMMENTS – Notice of Intent to File License Applications for New License, Pre-Application Document; Commencement of Licensing Proceeding; Scoping; Soliciting Comments on the Pre-Application Document and Scoping Document; Study Requests for the Wells Hydroelectric Project, FERC No. 2149-131
*ER: 07/0080*

Robert W. Clubb
Chief Environmental and Regulatory Service
Public Utility District No. 1 of Douglas County
1151 Valley Mall Parkway
East Wenatchee, WA 98802-4497

Dear Mr. Clubb:

The U. S. Fish and Wildlife Service (Service) has reviewed the subject Pre-Application Document (PAD) and Scoping Document for the Wells Hydroelectric Project (FERC No 2149) (Project) and offers the following comments and recommendations to Public Utility District of Douglas County (Douglas PUD or Applicant), and, via this correspondence, to the Federal Energy Regulatory Commission (Commission). Douglas PUD owns and operates the Project. These comments are provided in accordance with the provisions of the National Environmental Policy Act (NEPA) (42 U.S.C. 4321 *et seq.*), as amended; the Fish and Wildlife Coordination Act (FWCA) (16 U.S.C. 661 *et seq.*), as amended; the Endangered Species Act (ESA) (16 U.S.C. 1531 *et seq.*), as amended; and the Federal Power Act (FPA) (16 U.S.C. 791-828c *et seq.*), as amended.

## GENERAL COMMENTS

Starting in early 2005 and prior to the filing of the PAD in December 2006, the Service has been actively involved in Douglas PUD's stakeholder outreach program. This program has resulted in the development of Resource Working Groups tasked with identifying scoping issues and

developing relevant study plans as identified in the PAD. Through both the stakeholder outreach process and Resource Working Group meetings, the Service has been actively engaged in informal relicensing discussions with Douglas PUD, Federal, State and local resource agencies, interested Indian tribes and local government agencies. While this process has produced an adequate scoping of resource issues and development of accompanying study plans, discussions will also be needed for the formulation of appropriate protection, mitigation, and enhancement measures to address these respective resource issues. To ensure these protection, mitigation and enhancement measures will address subsequent project effects for the term of the new license, we recommend that all appropriate study plans include at least a 2-year timeframe in which to collect baseline data. A 2-year timeframe within the methodologies for these study plans will result in scientific data that is biologically sound and accounts for inherent variability encountered during study plan execution.

CUMULATIVE EFFECTS

The National Environmental Policy Act of 1969 (NEPA), the Commission's regulations, and other applicable laws require that Commission independently evaluate the environmental effects of relicensing the Project as proposed, and also consider reasonable alternatives to the proposed action. Cumulative effects are defined as the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency or person undertakes such other actions (40 CFR §1508.7). Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time within the action area, including hydropower and other land and water development activities. The Commission's geographic scope of analysis for cumulatively affected resources is defined by the physical limits or boundaries of (1) the proposed actions' effect on the resources, and (2) contributing effects from other hydropower and non-hydropower activities within the river basin. The Commission may choose to consider projects within the river basin as the geographic area for evaluation of cumulative effects, because of ongoing activities throughout the basin, such as industry, agriculture, recreational development, and hydropower development. Based on the potential terms for a 30-50 year license, the temporal scope of the Commission's cumulative effects analysis includes a discussion of past, present, and future actions and their effects on each affected resource from reasonably foreseeable future actions. The historical discussion is based on the amount of available information. Present resource conditions are typically based on an applicant's license application, agency comments, and comprehensive plans.

Based upon Douglas PUD's PAD and the Commission's record for the Project, a preliminary list of resource issues was developed in an attempt to assess project-related effects. These issues are divided into categories and include, but are not limited to, aquatic resources, terrestrial resources, threatened and endangered species, recreation, land use, and aesthetics, archaeological and historic resources, and developmental resources.

Given the above information, the geographic scope of the Scoping Document's cumulative effects analysis seems unduly restrictive. Instead of defining the physical limits or boundaries of the document's cumulative effects analysis as the entire Mid-Columbia River from the tailrace of Chief Joseph Dam downstream to the beginning of the McNary reservoir, the document limits

the analysis to only that portion of the river bounded by the Project from the tailrace of the Chief Joseph Project to the downstream end of the Wells Project tailrace (i.e., the beginning of the Rocky Reach reservoir).

By restricting the geographic scope of the cumulative effects analysis to the immediate Wells project boundary, the Scoping Document does not adequately evaluate and discuss the potential cumulative environmental impacts posed by the proposed action. The geographic boundary of the analysis should be based on all of the actions that may contribute, along with the project effects, to cumulative impacts. Accordingly, we request that the Scoping Document's cumulative effects analysis be revised to include the entire geographic area of the Mid-Columbia River and not just that portion of the river within the project boundary.

FISH RESOURCES

Bull Trout

On June 21, 2004, the Commission issued orders amending the license for the Project in order to implement the terms of the Anadromous Fish Agreement and Habitat Conservation Plan (Wells AFA/HCP). The Service issued a biological opinion (BO) pursuant to section 7 of the Endangered Species Act (ESA) to assess the effects of the Wells AFA/HCP on ESA-listed bull trout and other listed species under the jurisdiction of the Service. The BO included reasonable and prudent measures (RPMs) and associated terms and conditions for implementing the RPMs for bull trout. The Commission order approving the Wells HCP added Article 61 to the Project's license.

Article 61 of the license required Douglas PUD to file with the Commission a Bull Trout Plan for monitoring take associated with the operation of the Project. Article 61 further required that Douglas PUD prepare the Bull Trout Plan in consultation with the Service, National Marine Fisheries Service (NMFS), Washington Department of Fish and Wildlife (WDFW) and interested Indian Tribes (Colville Confederated Tribes and the Yakama Nation).

Following consultation with the Service, NMFS, WDFW, Colville Confederated Tribes and the Yakama Nation, Douglas PUD filed the Bull Trout Plan with the Commission on February 28, 2005. The Commission on April 19, 2005 approved the Bull Trout Plan, which is more commonly referred to as the Bull Trout Monitoring and Management Plan (BTMMP).

The BTMMP is intended to monitor and evaluate bull trout presence in the Wells Reservoir and quantify and address, to the extent feasible, potential project-related impacts on bull trout from the Project's operations and facilities. Implementation of the BTMMP began in May 2005 and will continue until July 2008. The specific objectives of the BTMMP for the Project (Douglas PUD 2004) are:

1.) Monitor adult upstream and downstream passage at Wells Dam and implement appropriate management plans to monitor any incidental take of bull trout through the use of telemetry studies, analysis of passage timing with operational data, and monitoring of off-season bull trout passage through the adult fishway.

2.) Assess Wells Project-related impacts on upstream and downstream passage of sub-adult bull trout through PIT tagging and off-season passage monitoring.

3.) Investigate the potential for sub-adult entrapment or stranding in off-channel or backwater areas of the Wells Reservoir through the evaluation of reservoir elevation and bathymetric data.

4.) Identify the core areas and local populations of bull trout utilizing the Wells Project area through genetic analysis.

Currently, the Commission appears to exclude the continuation of the BTMMP as a proposed protection, mitigation, and enhancement measure for the duration of the Project's new license within its Scoping Document. The BTMMP has proven to be a collaborative tool in which the Service and Douglas PUD analyze the results of its implementation. The implementation of this management plan has resulted in an effective means to assess project-level impacts on bull trout. Therefore, the Service recommends that the Commission include the continued implementation of the BTMMP for the duration of the Project's new license term in its Scoping Document and other associated documents.

Pacific Lamprey

Pacific Lamprey are present in most tributaries of the Columbia River and in the mainstem Columbia River during their migration stages. They have cultural, utilitarian, and ecological significance in the basin. Native Americans have historically harvested them for subsistence, ceremonial, and medicinal purposes (Close *et al.* 2002). As an anadromous species, they also contribute marine-derived nutrients to the basin. Little specific information is available on the life history or status of lamprey in the mid-Columbia River watersheds. However, they are known to occur in the Methow, Wenatchee, and Entiat rivers, although there are no indications that they currently use the Okanogan River system (NMFS 2002).

Current information related to fishway counts at hydroelectric projects suggests that although adult lamprey counts have increased at Columbia River dams in recent years, their populations are still considered to be well below historical levels (Close *et al.* 1995; BioAnalysts, Inc. 2004a). For example, counts at the Rocky Reach Dam, located above the Project, have shown a decline from more than 17,000 adult Pacific lamprey in 1969 to an average of 330 between 1983 and 2001. However, counts increased to 1,842 and 2,521 adult Pacific lamprey in 2002 and 2003, respectively (BioAnalysts, Inc. 2004a). Increased numbers of lamprey in recent years may be an artifact of increased sampling or due to increased food abundance in the ocean (BioAnalysts, Inc. 2000). Adult upstream passage data presented in the subject PAD also suggest an inconsistent rate of passage at the Project. Between the years of 1998 and 2005, the numbers of adult lamprey passing Wells Dam annually has averaged 401 fish and ranged from 73 fish in 1999 to 1,417 fish in 2003. Overall, these data appear to demonstrate a significant effort on the part of adult Pacific lamprey to migrate above hydroelectric projects.

In addition, while information related to the downstream passage of juvenile Pacific lamprey at the Project is limited, successful out migration of juvenile lamprey is dependent upon safe passage through dams. Parallel analysis conducted by the Commission for other relicensing proceedings has concluded that, "...available information suggests that experimentation to develop methods to assess juvenile lamprey survival would be unnecessary since the current Project has little to no effect on juvenile lamprey." (i.e., refer to Priest Rapids Hydroelectric Project, FERC No. 2114). There is no project-specific data on record for the subject Project that lends support to this conclusion. Further, the Service is not aware of information that suggests there is or is not an impact to downstream passage of juvenile Pacific lamprey, specifically from the Project. What current evidence does suggest is that juvenile Pacific lamprey out migrate through hydroelectric projects on the Columbia River (Hawkes *et al.* 1991 and 1992), and the entire scope of impacts of operations at the Project are unknown.

The associated information that the Commission has relied upon in other relicensing proceedings does not consider all possible effects on juvenile Pacific lamprey (i.e., refer to Priest Rapids Hydroelectric Project, FERC No. 2114). For example, the Commission refers to existing literature in analyzing the effects of turbine passage on juvenile lamprey during simulated trials and explains, "Moursund *et al.* (2000; 2001) simulated the effects of turbine passage on lamprey and reported no injuries or deaths from exposing lamprey to either high shear stress water velocities or abrupt pressure spikes. These results support the possibility that juvenile lamprey experience high turbine passage survival rates." Although the information presented in Moursund *et al.* (2000; 2001) is encouraging, the Commission's analysis of these studies appears to exclude the effects of blade strikes or other sublethal effects, such as increased vulnerability to predation, which are not known at this time (PNNL 2004). Long (1968) also suggests that bypass systems may not be the most appropriate strategy in which to expedite out migration of juvenile lamprey through hydroelectric projects, considering migrants enter turbine intakes deep within the water column. These data suggest that there is risk to juvenile Pacific lamprey as they approach and out migrate through the Project during the early spring and mid-summer timeframe.

Accordingly, the Service recommends the Commission endorse any study plan related to examining the effects of the Project on adult lamprey migration and dam passage. We also recommend that any Pacific lamprey protection, mitigation, and enhancement measures developed for the Wells Project include a component that requires Douglas PUD to assess this environmental issue when appropriate technologies have been developed.

Fish Passage

Authority is reserved for the Department of the Interior, as delegated to the Service, to prescribe the construction, operation, and maintenance of fishways at the Project, as appropriate, including measures to determine, ensure, or improve the effectiveness of such fishways, pursuant to Section 18 of the Federal Power Act, as amended. This reservation includes, but is not limited to, authority to prescribe fishways for spring, summer, and fall Chinook salmon, sockeye salmon, coho salmon, steelhead, bull trout, Pacific lamprey, white sturgeon, and any other fish to be managed, enhanced, protected, or restored to the mid-Columbia River during the term of the

license. The NMFS also has authorities for prescribing fishways for anadromous fish under Section 18.

The Project is currently operating under the Wells AFA/HCP for the upstream and downstream passage of spring, summer, and fall Chinook (*Oncorhynchus tshawytscha*), sockeye salmon (O. *nerka*), coho salmon (O. *kisutch*), and steelhead (O. *mykiss*). As mentioned previously above and inherent to the subject PAD, bull trout and Pacific lamprey alos use the project area (BioAnalysts, Inc. 2004b). Therefore, it is the intent of the Service to craft a fishway prescription for the Project for salmon and steelhead, bull trout, Pacific lamprey, and any other applicable species in close collaboration with Douglas PUD and other fishery resource entitities that is consistent with the Wells AFA/HCP and based upon baseline information developed during this relicensing proceeding as well as other relevant information. Accordingly, we request the Commission to adopt all study plans relevant to the development of the Service's fishway prescription for the Project. This action will ensure that the Project's fishway prescription is based upon the best available scientific data.

SPECIFIC COMMENTS ON THE PRE-APPLICATION DOCUMENT

A. *5.4.3.4 Management Plans, Wildlife Mitigation-WDFW (p. 162, 1st complete paragraph).* The Wells Wildlife Area (WWA) was originally managed solely for game species, the release of upland game birds, and recreational hunting. Over the years, WDFW's wildlife management goals have changed to include non-game species and their habitats, managing for species diversity, and non-consumptive recreation i.e., bird watching. The Service supports this change and recommends that future management of non-game species also emphasize bald eagles, shorebirds, and nesting migratory songbirds.

B. *5.4.3.4 Management Plans, Wells Reservoir Level Fluctuations and Wildlife (p. 167, 1st paragraph, 1st sentence).* "Changes in water surface levels of 1 foot or less are typical of many large lakes and rivers and would not be expected to impact associated wildlife or the vegetation on the Wells Reservoir." The periodic sediment flushing operations at the Methow River confluence lowers the reservoir significantly for approximately 2 weeks, which may create noticeable effects to plants and wildlife.

C. *5.4.3.4 Management Plans, Wells Reservoir Level Fluctuations and Wildlife (p. 167, 2nd paragraph, 1st sentence).* "The impacts of project operations on wildlife, including Wells Reservoir fluctuations, are limited and to the extent practicable have been mitigated by the funding of the WWA." If the effects analysis identifies effects from the Methow River confluence sediment flushing operations to riparian or wetland habitats and associated wildlife, additional mitigation may be warranted.

D. *5.4.3.4, Management Plans, Predator Control Program (p. 168, 1st paragraph, last sentence).* The sentence would be accurate if changed to the following: "When hazing and access deterrents fail, options for lethal removal of a few birds may be implemented by USDA Wildlife Services."

E. *5.5 Rare, Threatened and Endangered Species (RTE) (p. 171, last paragraph, 4th sentence).* "Based upon these studies, project operations, including reservoir elevation changes, do not appear to have impacts on RTEs." Erosion related to Wells Project operations is ongoing and results in the loss of vegetation, including large trees. Large trees are important nesting and perching habitat for bald eagles, a federally listed ESA species. Therefore, project operations including reservoir elevation changes have impacts on the bald eagle.

*F. 6.4.3.10 Terrestrial RWG, Issue Determination Statement (p. 254, 1st paragraph, last sentence).* "There is no evidence that this practice is impacting specific wildlife species." The periodic Methow River confluence sediment flushing operations lower the reservoir during the critical breeding period for waterfowl, shorebirds, migratory songbirds, and amphibians. Wetlands may be dewatered as a result of this operation, thus affecting plant growth and wildlife breeding activities.

SPECIFIC COMMENTS ON THE SCOPING DOCUMENT

*A. 3.1.2 Douglas PUD's Proposed Action, Description of Existing Project Operation (page 9).* There is no description of Douglas PUD's periodic operation that lowers the reservoir during spring run-off to flush accumulated sediments at the confluence of the Methow River. The operation is conducted to prevent excessive sediment buildup and facilitate boat navigation. A full description of this operation should be included in this section.

B. *4.2.1 Aquatic Resources (page 13).* The Commission presented a preliminary list of environmental issues to be addressed that include, "*Effects of the project on water temperature, dissolved oxygen, pH, and turbidity.*" The Service recommends that this environmental issue include an examination of aquatic habitat temperatures situated along the fringes of the Wells Reservoir. Accordingly, this environmental issue would be rephrased to read as follows: "*Effects of the project on water temperature (i.e., including aquatic habitats located along the fringes of the Wells Reservoir), dissolved oxygen, pH, and turbidity.*"

C. *4.2.1 Aquatic Resources (page 13).* The Service recommends that the Commission provide clarity in the environmental issue stated, "*Effects of the project and ongoing actions, including the Habitat Conservation Plan, on salmon and steelhead.*" The Service assumes the Commission is referring to the Wells Hydroelectric Project Anadromous Fish Agreement and Habitat Conservation Plan (Wells AFA/HCP). The Wells AFA/HCP is a multiple agency and tribal agreement that includes measures to ensure effective upstream and downstream passage of salmon and steelhead, hatchery provisions, and tributary restoration. The Service recommends that Douglas PUD's obligations under this agreement continue for its duration. The Service suggests modifying this environmental issue as follows: "*Effects of the project and ongoing actions on salmon and steelhead, including the continued implementation of the Wells Anadromous Fish Agreement and Habitat Conservation Plan.*"

D. *4.2.1 Aquatic Resources (page 13).* Juvenile Pacific lamprey are identified in the Commission's environmental issue, "*Effects of the project on juvenile lamprey dam passage and reservoir survival.*" This environmental issue does not include juvenile Pacific lamprey habitat.

The Service recommends modifying this environmental issue as follows: *"Effects of the project on juvenile lamprey dam passage, reservoir survival, and project area habitat."*

E. *4.2.1 Aquatic Resources (page 13).* The Commission mentions adult Pacific lamprey in its environmental issue, *"Effects of the project on adult lamprey habitat use and upstream passage."*

This environmental issue fails to encompass all project-related effects on adult Pacific lamprey. We recommend including downstream passage of adult Pacific lamprey in this environmental issue. This environmental issue would read as follows: *"Effects of the project on adult lamprey habitat use and upstream and downstream passage."*

F. *4.2.1 Aquatic Resources (page 13).* White sturgeon are discussed in the Commission's environmental issue, *"Effects of the project on white sturgeon spawning, rearing, recruitment, movements, and abundance."* The Service recommends including analysis of upstream and downstream passage effects at the Project. Therefore, this environmental issue should read as follows: *"Effects of the project on white sturgeon spawning, rearing, recruitment, movements (i.e., upstream and downstream passage), and abundance."*

G. *4.2.1 Aquatic Resources (page 13).* The Commission identified bull trout as one of its environmental issues: *"Effects of the project on bull trout survival and habitat."* However, the Commission appears to exclude an accompanying protection, mitigation and enhancement measure to address this issue. We suggest the Commission include a proposed protection, mitigation and enhancement measure that continues implementation of the BTMMP for the duration of the Project's new operating license.

H. *4.2.2, Cumulative Effects, Terrestrial Resources (p. 14, 5th bullet).* In the Commission's environmental issue, *"Effects of the frequency, timing, amplitude and duration of reservoir fluctuations on waterfowl and on riparian and wetland habitats,"* we suggest the effects analysis in the EA also include a discussion on the effects of the Methow River confluence sediment flushing operation on these resources.

I. *4.2.3 Threatened and Endangered Species (page 15).* The Commission's list of environmental issues appears to exclude effects to potential pygmy rabbit habitat in the project area. The Service suggests including the ESA-listed pygmy rabbit in the Commission's following environmental issue, as modified by the Service: *"Effects of project operations (reservoir fluctuations), land management practices, and project-related recreation on the following state-listed rare species: little bluestem, chaffweed, northern sweet grass, brittle prickly-pear, American white pelican, sharp-tailed grouse, and pygmy rabbit"*

SUMMARY COMMENTS

The Service appreciates the opportunity to review and comment on the PAD and the Scoping Document for the proposed relicensing of the Wells Hydroelectric Project. We look forward to working with the Commission, the Applicant, and other parties involved in the licensing process to produce a new license that provides for the conservation and development of existing fish and wildlife resources and other environmental values.

Please contact Mark Miller, Supervisor, U.S. Fish and Wildlife Service, Central Washington Field Office, 215 Melody Lane, Suite 119, Wenatchee, Washington 98801, telephone: (509) 665-3508, ext 12, email (Mark_Miller@fws.gov), if you have any questions regarding these comments and recommendations.

Sincerely,

Susan B. Martin

Supervisor

cc:
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