

## **Meeting of the Packwood Lake Hydroelectric Project Fish, Aquatics and Instream Flow Committee**

Date: March 22, 2004

Location: Olympia, WA Department of Fish and Wildlife

Present:

Energy Northwest - Laura Schinnell, Bernice Kasko; Bill Kiel; Dan Ross

EES Consulting – John Blum, Kent Doughty, Janet White

Washington Department of Ecology (Ecology) – Deborah Cornett, Rusty Post

Washington Department of Fish and Wildlife (WDFW) – Lauri Vigue

United States Fish and Wildlife Service (USFWS) – Lou Ellyn Jones

United States Forest Service (USFS) – John Roland, Ken Wieman, Carl Corey, Margaret Beilharz

Cowlitz Tribe – Mike Iyall

Copies of the agenda, brief project description, and Instream Flow and Water Quality draft study protocols were distributed as attendees arrived. Meeting opened with introductions. Not all could attend the meeting; Hal Beecher with WDFW was on vacation and there was no representative from NOAA-Fisheries or the Yakama Nation.

Laura Schinnell of Energy Northwest provided an overview of the Project including photographs, map and schematic. Energy Northwest wanted to start the 401 water quality certification process in advance of the FERC process because of the importance of gathering water quality information, and getting valid data to support the certification application. The intent is to be as collaborative as possible and start the process early. FERC concurred (verbal communication on October 27, 2003) that this could happen outside of the Integrated Licensing Process (ILP). Another factor in starting the 401 certification process early is to have 401 certification should Energy Northwest determine there are economic benefits to applying for certification from the Low Impact Hydro Institute.

Ms. Schinnell explained Energy Northwest's intent to use the Integrated Licensing Process (ILP) and provided copies of the FERC process plan. The Notice of Intent to file an application for a new license and the Preliminary Application Document will be submitted to FERC in November, 2004. The license expires February 28, 2010 and the Packwood Lake Hydroelectric Project will be one of the first projects to file under the new ILP, and is the first in Washington State. Energy Northwest is collecting information on existing conditions and effects of the Project. As shown in the current process plan, the FERC site visit is scheduled for August 27, 2004; the scoping public meeting for January 13, 2005; and study plan submittal for April 1, 2005.

### Communications

Energy Northwest proposed the following communication procedures:

- Energy Northwest will issue draft meeting minutes to attendees with copies to those who could not attend. These will be sent via email (or if email is not available, faxed or mailed).

- Comments and corrections from the participants will be provided back to Energy Northwest within 2 weeks of receipt of the minutes.
- Revised meeting minutes will be sent via email (fax or mail) with approval requested at the next meeting.
- Anyone can request paper copies of notices, meeting minutes or other documents be faxed or sent to them by mail.

The group indicated familiarity with the type of Communications Protocol used in the Alternative Licensing Process (ALP), and asked if a protocol was required under the ILP. Energy Northwest indicated that a protocol is required; and expressed willingness to use the ALP's protocols. Energy Northwest was asked if this committee's meetings would be included in the PAD documentation; the answer was yes, as FERC has asked Energy Northwest to include informal communications in the contact listing. At this time, the communications protocol proposed by Energy Northwest will be followed. After the Project enters the formal FERC process, the protocol may be changed to reflect ILP requirements. (See CFR 18, Part 5.6.c.2.)

Energy Northwest is discussing the possibility of a relicensing website; but as of this time, no decision has been made.

Meeting locations were discussed. Group members discussed holding future meeting at the USFWS office in Olympia.

Questions regarding the 401 certification process and the timing of that process were addressed by Ecology staff.

- Ecology has a year from the time a 401 application is filed to grant, deny, or waive the application.
- Instream flows are usually worked out with all the governing agencies, and should be indicated in the 401 application.

### Instream Flow Study Plan

John Blum of EES Consulting discussed the Instream Flow Study Plan. The intent is to begin with the habitat assessment and selection of preliminary transects. Lake Creek area will be divided into at least four reaches. In the summer of 1993 the USFS conducted a study of Lake Creek; their report is a basis for EES Consulting data collection.

John stated that EES Consulting would like to get this preliminary assessment work done in early April, before the spring flows. John asked for input from USFWS about the status of the reintroduction efforts in the Cowlitz River – whether they are done introducing Chinook, coho and steelhead, and if the efforts were targeting Lake Creek. Lou Ellyn Jones stated that Gene Stagner is the individual who has been working on the Cowlitz relicensing but that she will provide EES Consulting with that information. Ken Wieman clarified that the restoration of salmon/steelhead to the upper Cowlitz is an ongoing effort as part of the FERC license for the Cowlitz River Project. Anadromous fish may be present in lower Lake Creek. John Blum described known information on barriers to upstream fish passage, which includes several

waterfalls on Lake Creek. Locations will be confirmed. Snorkel surveys and electrofishing will be completed, subject to permitting requirements to conduct these studies. EES intends to video the habitat assessment to share with committee members.

Energy Northwest would like to have approval of the study protocol in time to do the instream flow study this year, with habitat assessments beginning in April 2004. The habitat assessment information will be presented to the committee as part of the review needed for the instream flow protocol approval. Depending upon snow conditions and run-off, if possible, they would like to have the ability to take the high flow measurement May or June.

There was discussion on the proposed calibration flows, particularly the high flow proposal of 18-22 cfs. Margaret Beilharz, USFS asked about how high we could release flows, and why a higher number wasn't selected as historically higher flows have occurred. The high flow measurement proposed is based upon Energy Northwest's valve size that releases water to Lake Creek; which allows a maximum release of around 20 cfs. A question was asked on modeling, and how high could the flow be modeled. The answer was approximately 2.5 times the high flow calibration measurement, depending upon how well the system models hydraulically. Questions were asked about spring surges, and when overtopping of the drop structure occurs. The answer was that it depends, there have been spills in November – June. It's different every year. Some years there is spill, other years there is none. EES Consulting and Energy Northwest stated that they would provide hydrology data. A question was asked about whether the study would look at the tributaries to Packwood Lake. The study plan will be modified to address this.

Energy Northwest has proposed a protocol for evaluating the effects of ramping rates on the backwater slough downstream of the Project tailrace (i.e., situated between the tailrace and the confluence of the Cowlitz River). The slough was formed when the Cowlitz River changed channel; first taking a portion of the tail race out, and then changing back to the original channel, leaving the slough. The ramping rates in effect for the Cowlitz River Project are provided in the draft protocol.

### Water Quality Study Plan

Kent Doughty of EES Consulting discussed the water quality study plan. The intent is to document existing conditions and current project effects. There is some information but it is mostly anecdotal or otherwise limited. Temperature in Lake Creek has been reported as not exceeding 15.7°C but we plan to verify temperature. Two previous studies (1989 and 1994–Lake Water Quality Assessments) were conducted by the Department of Ecology.

The study was designed so that data are compatible with any long-term monitoring needs if any are identified, and to be compatible with long-term data collection and storage that Ecology may have. Modeling is not specifically a component of the study plan at this time but the study has been designed to accommodate water quality modeling should it be considered necessary to evaluate project effects.

Discussion was held on project operations. The project is operating now at about 5 MW. Generation depends upon inflows. The project outage is in October of each year. It takes about

10 minutes to go from not generating to generating, and vice-versa. Air entrainment was discussed, as the plan did not have an emphasis on total dissolved gases (TDG). Energy Northwest stated that the tailrace and spillway configuration are not conducive to gas saturation. Lack of a stilling pool below the drop structure at the lake outlet may make it difficult to get a good dissolved gas measurement at that site. The intent is to document if a TDG problem exists. Gas entrainment can occur during ramping so Ecology asked for that to be considered when scheduling TDG measurements in the tailrace.

Discussion was held on the study timing; that lake samples would not be taken in the winter. The study for Packwood Lake is scheduled for April – October, or maybe November, weather permitting. A question on how often the lake freezes was asked. The answer is it varies; this year it froze, last year it did not.

The agencies were asked to indicate in their comments if there were water quality parameters not in the study plan that they want included. EES Consulting explained that the water quality studies will not fully address some narrative standards such as recreation and aesthetics other than evaluating if numeric water quality conditions impair these designated uses. Recreation studies will be addressed later in the relicensing process.

EES Consulting asked if committee members think a sample station above Lake Creek on the Cowlitz River is necessary. The draft protocol includes a sample station above Lake Creek. Discussion was held on whether sampling stations should be included on the tributaries above Packwood Lake.

Discussed whether phytoplankton monitoring is needed monthly given the low likelihood of nuisance level algal growth. Suggested June and August phytoplankton sampling in the lake may be sufficient. The draft protocol includes monthly samples, April – October or November. If we see invasive non-native aquatic plant growth in the lake while conducting water quality studies, we will set up a study plan for that.

Some sampling of fecal coliform will be done at the dispersed campsites around the lake but it is not anticipated to be a problem.

### General Discussion

Discussed schedule for comments on the study plans. Set a comment period of three (3) weeks. **Deadline to provide comments to Energy Northwest for drafts presented to agencies is April 15.**

USFS requested a short list of what will be in the next draft. EES Consulting will provide that list to all of the participants.

Feedback is requested from USFWS and WDFW on the desired target fish species. Energy Northwest is proposing rainbow trout as that is the species identified from previous studies.

Discussed whether Energy Northwest intends to change operations in the new license term. The only change currently being discussed is moving the date at which the reservoir has to be filled for the summer recreation season from May 1 to later, possibly June 1.

Discussed access to the lake. Access includes a four-mile hike in from the road/parking lot provided for the public to access the lake. In the winter, access is difficult for plant personnel; may include snowmobiles and/or snow shoeing.

Discussion on when and where the next meeting should take place was conducted. It was decided that the next meeting should be in Packwood so that committee members could at least see the power plant area and the mouth of Lake Creek. Videos and/or pictures of the Lake Creek habitat assessment would be available at the meeting. To allow for potential start of the studies before spring runoff, a meeting date of April 22 or 23 was proposed, with April 22 preferred by most members present.

#### Action Items

Energy Northwest will distribute draft meeting minutes for review that will include the meeting attendance list as a scanned file.

Comments on the study plans and minutes are due back April 15.

EES Consulting will conduct physical habitat surveys on Lake Creek and will notify the natural resource agencies and tribes prior to conducting the survey.

Energy Northwest will distribute final study plans for use at the next meeting.

EES Consulting will assemble a list of other things that will be included in the next draft. A summary of hydrology in Lake Creek will be circulated.

USFWS will provide input on the status of Cowlitz River fish reintroduction.

Energy Northwest would like feedback from USFWS and WDFW on the desired target fish species.

Energy Northwest will address lake tributary-spawning fish in the next draft protocol for instream flow studies.

EES Consulting would like feedback on whether a sample station above Lake Creek on the Cowlitz River is necessary, and how much phytoplankton sampling should be conducted (monthly or only June and August).

Energy Northwest will poll members to see determine if the next meeting will be April 22nd or the 23rd.

### Tentative Date(s) for Next Meeting

The group will meet April 22 or 23 in Packwood. At a minimum, the meeting will include a tour of the power plant generation buildings and field visit to the mouth of Lake Creek.

### List of Handouts Provided

#### Agenda

Packwood Project Description

Draft Study Plan Documentation of Existing Water Quality Conditions and Their Relationship to Project Operations

Draft Study Plan Lake Creek Instream Flow Study and Habitat Assessment

Aerial photographs and schematic of project

FERC Packwood Lake Draft Process Plan (updated 3/1/04)