Packwood Lake Hydroelectric Project
IFIM Meeting
June 28, 2007
Lacey, Washington – USFWS Office

Meeting Summary[1]

ATTENDANCE

Name	Organization
Laura Schinnell	Energy Northwest
Dan Ross	Energy Northwest
Bill Kiel	Energy Northwest
Bernice Kasko	Energy Northwest (by conference line)
John Blum	EES Consulting
Cory Warnock	EES Consulting
Brian Peck	USFWS
Ruth Tracy	US Forest Service
Karen Thompson	US Forest Service
Ken Wieman	US Forest Service
Margaret Beilharz	US Forest Service (by conference line)
Charlene Andrade	WDFW
Aaron Liberty	FERC (by conference line)
Ken Hogan	FERC (by conference line)
George Lee	Yakama Nation

PRESENTATIONS (available on Energy Northwest's website)

Lake Creek Instream Flow Study Status Update
Tailrace Slough Instream Flow Study

HANDOUTS

There were no handouts.

SUMMARY OF DISCUSSIONS

- Lake Creek IFIM

John Blum provided a presentation summarizing the information in the Lake Creek IFIM report that was issued earlier in June. Comments on the report are due to Energy Northwest on July 16. John noted that there is an error related to winter rearing; this will be corrected in the final report. Table 5.1.1 will be revised. Study Site 1 was split into

[1] These meeting summary notes are not verbatim. They do not reflect formal decisions by Energy Northwest, any agency, tribe, non-governmental organization, or interested stakeholder.

Transects 1-4 and 5-9 because of distance, drainage area and habitat differences; however it did not really matter in the analysis. Clarification is needed between wide run and wide glide.

The population of rainbow trout in Packwood Lake was discussed. Previous accounts indicated that fish could be caught by the sackfuls. EES Consulting's data suggests that this could still be the case, as the population appears to be healthy. EES reminded everyone that the lodge, cabins and boats no longer exist at the lake creating a situation in which fishing is primarily done from the shoreline.

There was discussion on whether Lake Creek was typical of creeks in the upper Cowlitz basin. Most are high gradient streams, similar to Lake Creek, with coarse substrate. However, anadromous salmonids only have access to the first one mile (coho, Chinook) or two miles (steelhead) in Lake Creek. In other streams they may have access for a greater distance upstream.

Discussion on where we go from here was conducted. It is important that decisions be made as a group. There is a need to decide which species and life stages are important. An ideal flow could be determined; however,the ultimate goal should be determining the best way to increase habitat quality to standards necessary for anadromous salmonids in lower Lake Creek. It was suggested that the model should be run with improved habitat (gravel) in Reaches 1 and 2. Pictures of the two barriers at RM 1.03 and RM 1.95 are available in the Fish Passage Barriers study report; there is also a file located on the Energy Northwest server that shows lower Lake Creek every 100 feet. Rainbow trout are located throughout lower Lake Creek. There are approximately 13 natural barriers on lower Lake Creek. Transects did include large wood. If structure is provided, such that a large pool is created, the pool would help with rearing habitat. It was noted that Tacoma Power is being encouraged to transport more fish to the Franklin Bridge.

- Tailrace Slough IFIM

John Blum provided a presentation summarizing the Tailrace Slough IFIM report. It was noted that this does not provide an answer, but is a useful tool to understand how habitat may respond to different flows. There is rearing past the end of the lined tailrace, but no spawning; however, the model was run for spawning as well as rearing. When asked why flow was not used, the response was that the idea was to find out what flow would be needed to protect the anadromous redds. EES Consulting will make sure that the periodicity charts used in the two reports are the same. It was explained that when the Cowlitz River flow is low, inflows to Packwood Lake are generally also low. There are times when the project could not add flows to the tailrace slough because of lake level restrictions in the current license. It was suggested that plant operational flows could be included in Table 4.6-9. A question was asked, if the project was not present, how much habitat would be lost naturally, and what is the benefit of the project. Lake Creek flow to the Cowlitz should be considered, if a without project scenario is considered. Energy Northwest may look at moving the outage to some other period, with winter months not an option because of lake access issues. Outage activities typically take three weeks,

with one week for testing. The longest, most important activity is the turbine runner welding repairs. Other activities include electrical checks, calibrations, inspections of the tunnel and pipeline, and filtering of oil; generally work that cannot be done when the plant is on-line. It is more efficient to conduct the activities all at once, but Energy Northwest could consider a shortened outage. The Forest Service noted that it is not reasonable to come up with license terms that depend on the Cowlitz River. The location of the habitat in the tailrace slough may have changed, but the proportion of the various habitat characteristics have not changed with the channel changes. The group was asked to consider the option of buying land in the area; however, concern was raised as to how this would protect spawning and rearing salmonids. Alternative water sources were discussed. An idea to route the tailrace to Hall Creek was mentioned, as this means there would be no project influence on the tailrace slough. It was suggested that we need to look at all the options. The hydraulic capacity of the project is 230-235 cfs. There was discussion on the use of minimal flow turbines; this is not an option because Energy Northwest is required to drain the pipeline for internal inspection of the penstock.

- General Discussion

Concerns about transportation and/or entrapment as a potential issue in the tailrace slough and at the mouth of Lake Creek were discussed. Would management of flow of Lake Creek affect the mouth? The potential for entrapment will be reviewed.

There is a need to look at peak flows and/or optimum flows needed for the fish. Preferred species need to be determined by consensus. Energy Northwest would like to look at improving the quality of habitat, because peak flows may not be economical for the project. The Forest Service noted that there is not much water to put anywhere, and suggested that Energy Northwest should start the next meeting by describing what the project can and cannot do from a physical and financial standpoint.

Possible meeting dates were discussed. It is important to have Blane Bellerud and Hal Beecher present at the meetings. Because of the conflicts in schedules, the following dates were selected: July 19, August 9, and August 23. The July 19 meting will be at the USFWS offices. Other locations such as Randle and Vancouver were discussed, and may be a possibility for the August meetings.

ACTIONS FROM THE MEETING

1. Correction will be made on winter rearing in the Lake Creek IFIM report.
2. Table 5.1.1 in the Lake Creek IFIM report will be revised.
3. Prior to the next meeting, EES Consulting will model with increased gravel in Reaches 1 and 2 to see what happens.
4. Check periodicity charts in the two reports to ensure they are correct and the same one is used in both reports.
5. Include plant operational flows in Table 4.6-9 in the Tailrace Slough IFIM report.
6. The potential for entrapment at the mouth of Lake Creek and in the tailrace slough will be reviewed.

7. Send out meeting notice for the July 19 meeting, checking availability (done, Blane Bellurud is available on all three dates; no work from Hal Beecher). The notice also asked that August 9 and 23 be reserved on participants' calendars.