



BAKER RIVER PROJECT RELICENSE

<p>FISH PASSAGE TECHNICAL WORKING GROUP LOWER BAKER FISH PASSAGE FACILITIES DESIGN</p>

<p>March 1, 2000</p>

<p>9:30 a.m. - 4:00 p.m. West Coast Sea-Tac Hotel 18220 Pacific Hwy. S. Seattle, WA 98188</p>

AGENDA

Item	Time
Introductions/Agenda	9:30-9:40
Baker Project Re-licensing Overview	9:40-10:00
Juvenile Passage Project overview and goals	10:00-10:10
Fish Facility Study Overview	10:10-10:15
Break	10:15-10:20
Review Passage Alternatives discussed in Study	10:20-12:00
Lunch - One Hour	
Additional Alternatives	1:00-3:00
Other Issues	3:00-3:30
Develop Goals for Month and Next Agenda	3:30-4:00

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March 1, 2000

9:30 a.m. – 4:00 p.m.
West Coast Sea-Tac Hotel
18220 Pacific Hwy. S.
Seattle, WA 98188

MEETING NOTES

Attendees:

Arnie Aspelund, PSE	Ed Meyer, NMFS
Ken Bates, WDFW	Wayne Porter, PSE
Kevin Brink, PSE	Gary Sprague, WDFW
Doug Bruland, PSE	Nick Verretto, PSE
Cary Feldmann, PSE	Stan Walsh, SSC

Purpose: The purpose of the meeting was to initiate design activities for replacement of the Lower Baker juvenile fish passage facilities.

INTRODUCTION

The meeting began about 9:45 a.m. with an introduction of all participants by Cary Feldmann. The agenda was passed out to all participants.

BAKER PROJECT RE-LICENSING OVERVIEW / JUVENILE PASSAGE PROJECT OVERVIEW

Cary Feldmann gave a brief review of Puget Sound Energy's (PSE) re-licensing effort.

- PSE performed a study with Montgomery Watson in 1999 that resulted in a report titled Fish Facility Modernization Study. This study has been distributed to all members of the Fish Passage Technical Working Group (FPTWG).
- PSE will launch the full re-licensing effort with two initial public meetings each scheduled for March 30, 2000. Each participant has been invited under separate letter.
- PSE wishes to conduct the re-licensing project in a collaborative manner whether the process used is the traditional 3-stage process or the new alternative process.

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- The work performed for this juvenile passage design will be rolled into the overall re-licensing project later. PSE saw a need to get started on this work early and hopes to receive Section 18 agreement to proceed with building new passage facilities ahead of receiving the new project license from FERC. Each representative from organizations outside PSE felt that the process would be helpful and is in favor of proceeding in this manner to accomplish new facilities earlier rather than later. They each advised that they want to avoid restricting the decision process of the greater re-licensing effort by decisions that will be made during this project. Gary Sprague advised that he would like to see a mid-license review of the fish facilities provided in the new license documentation.
 - Cary Feldmann explained that the re-licensing project will be steered by the Baker Solutions Group made up of people from PSE, the state and federal agencies, non-governmental organizations, and the public. Under this Group will be six work groups in the following areas: Fish/Aquatic, Terrestrial/Wildlife, Hydrology, Cultural, Economics, Recreation. The FPTWG is a subgroup of the Fish/Aquatic working group.
 - Gary Sprague asked about the legal issues that prevented an agreement from occurring in the past concerning replacement of the Lower Baker Juvenile Passage facilities. Cary Feldmann advised that this time, due to the re-licensing process timing, there exists a real chance to accomplish the replacement without the risk that PSE will need to build the facilities twice.

Kevin Brink passed out a preliminary schedule that outlined one scenario for replacing the existing Lower Baker juvenile passage “gulper” barge. The major assumptions of this schedule scenario are that the chosen passage scheme would be an updated version of a gulper barge and that Section 18 agreements would be finalized in October or November of 2000. The goal of this scenario would be to have the new facility in operation for the spring 2002 out-migration. Ed Meyer advised that he would like this or other schedules to show 30, 60, and 90 percent complete agency design review points. (Schedule attached.)

FISH FACILITY STUDY OVERVIEW / REVIEW PASSAGE ALTERNATIVES

Dennis Dorratcague gave a quick overview of the study that Montgomery Watson conducted last year. This study is in support of the entire Baker re-license study and covers all the fish facilities at the Baker project. The purpose of the study was to evaluate the physical and operational conditions of the existing fish facilities and to brainstorm and develop concepts for updating or replacing the facilities for the new license period. All parties have received copies of this report.

Dennis continued by reviewing in detail each of the Lower Baker downstream passage alternatives and options that were developed within the study. (See Fish Facility Modernization Study for descriptions and drawings of each alternative.) He described the criteria, the characteristics, and the decision making process behind each alternative. Discussions surrounded each alternative as questions were asked and answered. Key points have been listed below.

- Ed Meyer asked whether the study included any information regarding fish passage efficiencies. Cary Feldmann advised that it did not address this directly. PSE conducts annual experiments with marked fish to see how many exit the system. However, these fish are released upstream from the barge several months ahead of migration season. Therefore, the number of fish exiting is influenced by survival and their choice whether to migrate.

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- During review of the barge alternatives there was a discussion concerning the existing guide nets. Doug Bruland sketched a section view of the net system. It is composed of panels ranging from 50' in depth to 200' in depth with ¼" size mesh. They are arranged to mimic the underwater contour of the canyon. They do not extend to the bottom in the narrow canyon portion of the lake bed which is approximately 285' feet deep. The net system extends 600' across the lake from each side of the gulper barge and totals 70,000 square feet of coverage.
 - Under a new barge scheme, Ed Meyer felt it may be more effective to move the guide net ends further upstream to make them more funnel-like. Doug Bruland sketched a drawing of the existing locations of the nets. He felt that the lake contours and net locations already form a good funnel. Moving the net ends upstream is difficult due to the shape of the lake upstream where it becomes considerably wider.
 - Ken Bates had some concern that the deep barge alternative may not provide trapping velocity for the fish. He felt that a slot and ramp may be more effective than the alternative presented.
 - Ken Bates asked whether the current bypass pipe configuration meets current NMFS criteria. Ed Meyer indicated that it did not. He stated that current pipeline criteria is 5-10 fps velocity, open channel flow, and 9" minimum depth.

ADDITIONAL ALTERNATIVES

After reviewing the alternatives developed in the Fish Facility Modernization Report, PSE asked the agency participants whether there are any other alternatives that they have been thinking about to add to the list. PSE advised that they would like to collect all the ideas out there so that they may be considered.

- Ed Meyer stated that he did not believe that any of the tower alternatives met NMFS criteria. He advised that he would like PSE to investigate an intake that fully screens the flow through v-screens similar to the White River project. Several concepts utilizing this scheme were discussed. These included structures both on land and floating. Ken Bates advised that PSE should get copies of a study done for Howard Hanson dam concerning a floating screen structure.

OTHER ISSUES

- Ed Meyer wanted to know how many more fish would be trapped utilizing a fully screened inlet as opposed to a barge and net concept. Cary Feldmann advised that PSE does not know but believes that it would not change significantly. He believes that PSE's system successfully intercepts a large majority of the fish that survive and choose to migrate.

GOALS FOR MONTH / NEXT MEETING

PSE and MW will perform conceptual engineering and estimating for a White River style v-screen intake structure.

A site tour was scheduled for April 5, 2000. Times were left to be determined later. The next meeting was scheduled for April 6, 2000 at the same time and location.