



BAKER RIVER PROJECT RELICENSE

Aquatic Resources Working Group

April 8, 2004

9:00 a.m. – 3:00 p.m. Puget Sound Energy Summit Ridge Conference Room (next to PSE Building) 10885 NE 4th St., Bellevue, WA

AGENDA

Conference Call Number: 1-866-280-6429, participant code: 144995#

| Comerence Can Number: 1-800-280-0429, participant code: 144995# | |
|--|---------------|
| 1. Review Agenda, Minutes, Schedule | 8:30 - 9:00 |
| 2. Fish Passage Technical Working Group Report | 9:00 – 9:15 |
| 3. Policy Team Meeting(s) Report Instream Flow & Status of new/revised HYDROPS runs Flood Control Aquatic Habitat Restoration Other decisions? Break at 10:30 | 9:15 – 12:00 |
| Lunch (meeting snacks or bring your own) | 12:00 – 12:20 |
| 4. RESOLVE: Draft Proposed Actions 3.1.1 Provide Fish Propagation & Enhancement 3.4.1 Implement Fluvial Geomorphic Management 3.4.3 Shoreline Erosion Management 3.4.4 Aquatic Habitat Restoration | 12:20 – 2:00 |
| 5. Study Updates: A16: Lower Baker River Alluvial Fan Assessment Others to be decided | 2:00 - 2:55 |
| 6. Set Agenda for May 13, 2004 (9:00-3 USFS-Mountlake Terrace) | 2:55 - 3:00 |

April 8, 2004

Park in the Puget Sound Energy Building Parking Garage:

(Summit Ridge Conference Room is actually in next building to the west of the PSE Building-opposite Café Pogacha, but parking is free in the PSE Building Garage with stamp validation)









BAKER RIVER PROJECT RELICENSE

AQUATIC RESOURCES WORKING GROUP MEETING

April 8, 2004 9:00 a.m. – 3:00 p.m. Puget Sound Energy Summit Ridge Conference Room (next to PSE Building) 100885 NE 4th Street, Bellevue, WA

FINAL MEETING NOTES

Team Leader: Arnie Aspelund, PSE (arnie.aspelund@pse.com)

ATTENDEES: Arnie Aspelund and Cary Feldmann, (PSE), Steve Fransen, (NMFS), Ruth Mathews, (TNC), Arn Thoreen, (SFEG), Greta Movassaghi, and Scott Lentz, by phone (USFS), Janne Kaje (Steward & Associates for Skagit County) and Jeff McGowan (Skagit County Public Works), Gary Sprague (WDFW), Phil Hilgert (R2), Lyn Wiltse, facilitator and Mary Jean Bullock, note taker (PDSA Consulting Inc.)

Future 2004 Baker Aquatic Meetings: May 13, June 10, July 8, August 12, September 9, October 14, November 11, December 9.

Next Instream Flows Meeting: April 14 from 9:00 -12:00 at the The Red Lion Hotel Seattle Airport 18220 International Blvd., Seattle, WA (206-248-8188).

Agenda for April 8, 2004 at the PSE Summit Building in Bellevue (Start at 9:00 a.m.)

- 1. Review agenda, notes, actions
- 2. Fish Passage Technical Working Group Report
- 3. Policy Team Meeting(s) Report
 - Instream Flows
 - Flood Control
 - Aquatic Habitat Restoration

- Other decisions?
- 4. Draft Proposed Actions
 - 3.1.1 Provide Fish Propagation & Enhancement
 - 3.4.1 Implement Fluvial Geomorphic Management
 - 3.4.3 Shoreline Erosion Management
 - 3.4.4 Aquatic Habitat Restoration
- 5. Study Updates
 - A16: Lower Baker River Alluvial Fan Assessment
 - Others to be decided
- 6. Set Agenda for May 13, 2004 (9:00-3:00 USFS Building in Mountlake Terrace)

NEW ACTION ITEMS

- Cary: Verify that SNF.03 and .04 have been run with Skagit County's flood control storage of 150K acre feet. When these runs are complete, share the results.
 - -Irena confirmed that SNF.03 was run with Skagit County's (prior) flood proposal of 140 K acre-feet, but it failed due to violating recreation reservoir levels and exceeding the flood rule curve in 1996.
- Lyn: Check with the Cultural Working Group re: flexibility of water levels to protect cultural resources
- Greta: Check with Jan Hollenbeck re: heritage resources Is there overlap with HPMP and shoreline erosion?
- Arnie: Follow up on who is issuing shoreline permits. Are they required for CZMA and 401?
- Arnie: Send out Instream Flows announcement of April 14, meeting from 9:00-12:00, including location asap.
- Arnie: Make changes to PME purpose statements and send to Legal Working Group to refer to for License Article language.
- Ruth: Email IHA handout to Arnie so he can include it with draft notes of this meeting.
- Cary: Re-visit the widest operating range possible (with new runners etc.) with Joel.
- Gary: Work on "back of the envelope" costs of proposed 3.1 PME by March 19th.
- Stan: Review 3.4.1 and suggest wording changes and send to Arnie to distribute by March 15.

INTRODUCTIONS

We welcomed Janne Kaje of Steward & Associates, on behalf of Skagit County, who joined us for the first time today.

OLD ACTION ITEMS

- Steve: Checked with Ed M. re: height requirement for barrier dam. He reported that NMFS can rewrite this section and build in a variance to the 10 ft. height criteria. This means we may not necessarily have to raise the height of the barrier dam.
- ALL: Got comments on license article language to Arnie by March 16 so they could be passed on to the Legal Team.
- Lyn: Talked with Dee re: Legal Working Group meetings conflicting with other meetings, so that Solution Team members could attend.

- Margaret: Put together purpose statement and detail of new HYDROPS run. Got to Paul by Tuesday, March 16.
- Arnie: Posted A25 on website.
- Paul: Emailed out L1, L2 and L3 and summary by Friday, March 19.

FISH PASSAGE TECHNICAL WORKING GROUP REPORT

The group met at the Lodge on March 8 and 9th. A 30% design memo was distributed and reviewed. A new guide net is being deployed and positioned in the forebay. It is not yet attached to the Net Transition Structure. Divers are working on this. There will be an update on progress at their meeting next week.

POLICY TEAM MEETING(S) REPORT

Instream Flow & Status of new/revised HYDROPS Runs

Ruth reported that the data from the SNF.03 and .04 runs are being reviewed by the parties. The SNF series was put together in response to the high capital costs associated with the NMF runs. The aim behind this series was to find the ideal fit that addresses the core interests of all the stakeholders in the process.

<u>SNF.01</u> – Had one small turbine plus the existing turbine and modified operation range of 2.7K to 4.1K cfs. It had a lower maximum spawning flow with the same incubation flow as TNC.26. <u>SNF.02</u> - Had one small turbine and an escape hatch/high flow trigger. If Baker hits less than 80% exceedence, it resets the minimum flow (varies by month).

SNF.03, 04 – Added two small turbines (700-750 cfs capacity). The minimum range was from 600 to 1200 cfs, depending on the month. The maximum ranged from 3.2K to 5.6Kcfs. These runs provided similar fish protection along with improved economics. The capital costs exceeded PSE.02 by \$13 million. There wasn't much change in generation, etc. Dependable Capacity is diminished somewhat in .03. It has not been calculated for .04 yet.

SNF.03 has an escape hatch, where as .04 does not. There is a lot of uncertainty around execution of an escape hatch. Cary suggested that maybe we focus future efforts around .04 because it doesn't include an escape hatch provision.

Ruth would like to suggest some refinements to these runs based on the IHA analysis. Ruth distributed a handout she put together to explore impact on IHA factors. The goal of her analysis was to reduce the size of the hydrologic alteration numbers in certain places.

At the last Policy Team meeting, Mike Stansbury (Skagit County) walked us through some manually calculated charts showing how their proposed flood regime would overlay with SNF.02. He did not include the 8 foot flood buffer that PSE uses to manage their adherence to flood control requirements. Folks expressed concern about some of the assumptions he used to illustrate the effects of increased flood control and agreed that it would be better to review HYDROPS run results to understand these effects.

Phil distributed a table of volumetric numbers for monthly flows for Baker River at Concrete, synthesized unregulated conditions, Energy Years 1926-2002. To achieve 74K acre feet *of available flood control storage*, you'd need to run 1244 cfs over a 30 day period *in addition to inflow*.

After some discussion, we agreed that good progress has been made and it is now time to reconvene the Instream Flows Technical Working Group with PSE's participation. This will allow us to work together to conduct a few more runs and analyze impacts on participant interests. Once we agree on a run, we will see how Skagit County's flood control proposal works with it.

We set the next Instream Flows Meeting for Wednesday, April 14th from 9:00 -12:00 (location was determined later to be at the Seattle Airport Red Lion).

RESOLVE: DRAFT PROPOSED ACTIONS

We deferred discussion of these PMEs as they have passed into the realm of the Policy Team.

3.1.1 Provide Fish Propagation & Enhancement

Not discussed.

3.4.1 Implement Fluvial Geomorphic Management

Not discussed. Stan is still reviewing this and might suggest some alternate wording.

3.4.3 Shoreline Erosion Management

Greta will check to see if there is overlap in scope between this PME and protection of heritage resources as called out in the Historic Properties Management Plan.

3.4.4 Aquatic Habitat Restoration

Not discussed.

STUDY UPDATES

A16: Lower Baker River Alluvial Fan Assessment

Phil reported that this study is in progress. It was suggested at our last meeting that we look at modifying project operations in an attempt to reduce scour. Phil said this would conflict with the USACE flood control operations. He expects the report to be out in June.

A handout updating the schedule of studies, reports and relevant file names was distributed. We will look at this for setting the studies updates needed for the May Aquatics meeting.

LEGAL TEAM

We were told that the Legal Team requested purpose statements explaining the purpose or intent of the articles and which are to accompany the license article language they are reviewing. Arnie distributed proposed purpose statement language for each of the Aquatics draft license articles the Legal Team will be reviewing. We reviewed the proposed language, modified it and approved it for distribution to the Legal Team.

HANDOUTS

Meeting notes, Aquatic Resources Working Group, April 8, 2004

- Aquatic Resource Final Notes, March 11, 2004
- Aquatic Resources Draft Proposed Actions
- Instream Flow Conference Call final Notes, March 5, 2004
- Aquatic Working Group List, March 15, 2004
- Long term schedule Aquatics, April 8, 2004
- Milestone Dates December 19, 2003
- Draft Proposed Actions.doc, March 11, 2004
- Aquatic Appendices.doc
- Shoreline Erosion PMEedit.doc
- Baker River project Purpose Statements-Draft License Articles, Aquatic Resources
- Schedule of Study Plans/Reports and Relevant Filenames
- Comments on IHA Analysis of HYDROPS Runs, SNF.03 and SNF.04, authored by Ruth Mathews, The Nature Conservancy
- Table 1. Monthly flows (cfs) for Baker River at Concrete at RM 0.7, synthesized unregulated conditions, Energy Years 1976 through 2002 (Puget Sound Energy, Inc. 2003, Master Hydrology CDs).

Tentative Agenda for May 13, 2004 (9:00-3:00 p.m. USFS Building in Mountlake Terrace)

- 1. Review agenda, notes, actions
- 2. Fish Passage Technical Working Group Report
- 3. Instream Flows Technical Working Group Report
- 4. Policy Team Meeting(s) Report
- 5. Draft Proposed Actions
- 6. Study Updates:

A01a: Reservoir Tributary Study

A5: Water Quality Sampling

A15: Upper Baker Delta Scour

A24, Part 1: Hydrologic Analysis

A37: Without Project Alternative

- 7. Set Agenda and confirm location for June 10 meeting
- 8. Evaluate meeting