

## **BAKER RIVER PROJECT RELICENSE**

### **Aquatic Resources Working Group**

July 11, 2002  
8:30 a.m. - 3:00 p.m.

Department of Ecology's Bellevue office  
3190 160th Ave., Bellevue, Washington  
Conference room (Room 2A and 2B)

### **FUTURE DATES AND LOCATIONS**

***Note: There will be no June meeting***

July 11, (Dept. of Ecology, Bellevue office) from 8:30 to 3:00,  
August 8 and September 12 from 8:30 to 3:00 at USFS Office in Mountlake Terrace unless  
otherwise specified.

### **Tentative Agenda for Next Meeting July 11, 2002 at Dept. of Ecology, Bellevue 8:30a.m. – 3:00 p.m.**

1. Review Agenda and Minutes
2. Framing Issues for Settlement
3. Update on Instream Flows meeting and Studies Prioritization model
4. Review Study Plans /Requests: A15, A26A, any new requests
5. Action Items
6. Update from Solution Team Meeting and Public Meetings
7. Reports from Fish Passage Technical Working Group
8. Additional Issues?
9. Set agenda for August 8, 2002
10. Evaluate Meeting



## BAKER RIVER PROJECT RELICENSE

### Aquatic Resources Working Group

July 11, 2002  
8:30 a.m. – 3:00 p.m.  
Department of Ecology  
Conference Room 2A/2B  
3190 160<sup>th</sup> Ave., Bellevue, WA

### MEETING NOTES

***Aquatics Working Group Mission:** “To identify issues and develop solutions and recommendations addressing fish and aquatic resource interests related to the Baker River Project and its operations, leading to a settlement agreement.”*

**Fish Team Leader:** Arnie Aspelund, 425-462-3442, [arnie.aspelund@pse.com](mailto:arnie.aspelund@pse.com)

**PRESENT:** Arnie Aspelund (PSE), Nick Verretto (PSE), Stan Walsh (Skagit System Cooperative), Arn Thoreen (Skagit Fisheries Enhancement Group), Emily Greenberg and Phil Hilgert (R2), Thom Hardy (Utah Water Research Laboratory), Rod Sakrison (Dept. of Ecology), Ruth Mathews (Nature Conservancy), Brady Green (U.S. Forest Service), Greta Movassaghi (U.S. Forest Service), Gary Sprague (WDFW), Rod Mace (USFS), Bob Barnes (PSE), Lyn Wiltse and Mary Jean Bullock (PDSA Consulting, Inc.), Dee Endelman of Agreement Dynamics.

**NOTE:** Re: Baker River Hydroelectric Project No. 2150 Application for Amendment of License, Draft Biological Assessment and Notice of Application for Amendment of License and Soliciting Comments, Motions to Intervene, and Protests were submitted to the FERC on June 13, 2002.

**Travel Reimbursement Policy:** At the June Solution Team Meeting PSE announced that they have established a Travel Reimbursement Policy for NGOs participants. If you have questions, ask your Team Leader.

**FUTURE DATES AND LOCATIONS:** Aug. 8, Sept. 12, from 8:30-3:00 at USFS Office in Mountlake Terrace, **Oct. 10 and 11, (TBD)**, Nov. 14 from 8:30-3:00 at USFS Office in Mountlake Terrace unless otherwise specified.

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**AGENDA**  
**July 11, 2002**  
**8:30 p.m. – 3:00 p.m.**  
**Department of Ecology**  
**Conference Room, 2A/2B**  
**3190 160<sup>th</sup> Ave., Bellevue, WA**

1. Review Agenda and Minutes
2. Framing Issues for Settlement
3. Report from Instream Flows Technical Working Group (A9)
4. Report from Fish Passage Technical Working Group
5. Review Study Plans/Requests: A1a, A26a
6. Action Items
7. Update from Solution Team and Public Meeting
8. Additional Issues?
9. Set agenda for August 8, 2002
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**NEW ACTION ITEMS**

- ALL: Review Brady's Study Request "A37: Evaluation of Aquatic and Riparian (low gradient) Habitat Occurring under the "Without Project Alternative."
- ALL: Give Nick name of who might provide a more directed approach to A26a
- ALL: Review initial draft of the 8 issues
- Ruth: Draft Interest statements and accompanying issues for the Nature Conservancy.
- Nick: Pull together a teamlet to re-stratify, commonality of the issues and select a starting point for brainstorming solutions and creating a draft list of obvious potential PMEs. The group may include Ruth, Rod, Phil, Dee, Brady, or Bruce? Dee will facilitate..
- Brady: Contact National Park Service re: The possibility of the Park Service assisting Emily in investigating the stream above Tributary 13 to Picket Creek
- Thom: Give Nick contact for compiling water quality data.
- Nick: Get with Phil, Brady, Gary, Stan re: A26a
- Arnie: Check to see if Baker Lodge is available for October 10 and 11<sup>th</sup>
- Brady: Send D. Drake subject and contact information to members.
- Sue: Talk to Stan re: scour monitoring.

**REPORT ON OLD ACTION ITEMS**

(Brief report, due to lack of time for this.)

- Arnie: Distributed CD-ROM "Upstream Passage Alternatives" with files containing Fish Passage Technical Group documentation re: upstream options to members to review.
- Arnie: Distributed CD-ROM "Compilation of Aquatic Data" with files of existing PSE data related to A26.
- Arnie: Distributed handout of draft studies prioritization model for all to review.
- Thom: Sent Phil report on nutrient modeling approach for A26a.
- Phil: Developed study approach listing available methodologies related to A26a and distributed at July meeting.

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## **FRAMING ISSUES FOR SETTLEMENT**

Dee Endelman, of Agreement Dynamics presented the Solution Team's request that she start working with the Working Groups (approximately 90 minutes each meeting to begin coming up with a very sketchy draft of potential aquatics-related PME's. She distributed a draft outline of the process along with an initial framing of the 52 Issues this group originally defined. Prior to this meeting, Arnie reviewed the issues and came up with 8 Issues (framed as problems to be solved).

All were asked to review this list of eight to see that the interests of their organizations are represented. We did a consensus check about going forward with this process, in hopes of having a preliminary list of PME's - or areas flagged where we need study data before considering PME for the Solution Team by October, 2002. All were at least grudgingly agreeable to move forward, with the greatest concern being limited time to come up with anything of real value for the developing and time it might detract from discussing/developing Studies.

Dee will meet with a teamlet between now and our next meeting to create a matrix to help us through the complexity of this process.

A list of issues regarding this process was discussed:

- Cross pollination of Working Group ideas
- Definition of PME's
- Identify as soon as possible, the NEPA alternatives
- Submit comments on Scoping Document #1, in particular, make sure it is consistent with Process Document re: alternatives
- Flag technical issues as we get to "solutions" – so we don't create problems for other groups
- Two-day discussion of technical representatives of Working Groups to see how it all fits together (this Winter.)

## **INSTREAM FLOWS TECHNICAL WORKING GROUP (A9)**

Phil walked us through the notes from the July 8 Technical Working Group meeting. He also reviewed the Draft Outline of the Middle Skagit River Instream Flow Study.

## **REPORT FROM FISH PASSAGE TECHNICAL WORKING GROUPS**

From end of April to 3<sup>rd</sup> week in June conducted near field studies in forebay. We tracked individual fish, 24 hr/day, under different operating conditions.

We also conducted radio tagging far field testing on individual fish throughout the reservoir (also under different operating conditions).. The 3<sup>rd</sup> Study involved radio tagging of 10 kelts throughout the reservoir. There were 2 casualties out of the 10 steelhead kelts tagged, one believed to be due to fisherman catch and the other positively attributed to an eagle. Some kelts moved right to the gulper and others hung out above.

The 4<sup>th</sup> Study was pit tagging.

We will be using data from these studies to determine studies for next year. Early results will be in August. Final results will be in September.

The next meeting will be August 6<sup>th</sup>. They will be discussing the footprint for upstream passage alternatives they have advanced (trap-and-haul for Lower Baker)

## STUDY REQUEST SUBMITTALS/STUDY PLAN DEVELOPMENT

Study #	Title	Notes/Next Steps
A01.A	Reservoir Tributary Habitat Surveys	Emily will be combining the results of this survey with the results of A26b into a single report (stream catalog) Folks were comfortable with the survey methodology that called for investigating all streams designed as priority level 1 or 2. We upgraded the mainstream Baker River above tributary 13 to a priority level 2 with the condition that the National Park Service will assist.
A01.B	Reservoir Tributary Biological Surveys	Not discussed at this meeting. We will have a draft report this spring.
A01.C	Reservoir Tributary Delta Surveys	Emily noted that, for the most part, the reservoirs refilled before the tribs warmed up enough for trout to commence spawning. The results of the spring 2002 field efforts will be incorporated with A-01a, A-01b and A-26b into a single report.
A02	LB River Habitat Mapping	No changes since last meeting.
A03	Reservoir Fish Population Characteristics	No changes since last meeting.
A04	LB/Skagit River Flow, Gaging	No changes since last meeting.
A05	Water Quality Sampling	No changes since last meeting.
A06	UB Passage Design Baffle Modification	Complete.
A07	Lower Baker Forebay Bathymetric Survey	Complete.
A08	UB Passage System Evaluation	The study report from R-2 is complete.
A09A	Skagit River Flow and Habitat Assessment (HIGH PRIORITY)	Phil reviewed the approach that the Technical Working Group members have agreed to. The aim is to collect data to understand flow effects under different operating regimes (Baker alone, Baker and Skagit, and Baker, Skagit and Sauk). We will be looking at compensatory and additive effects in the varial zone (size, elevation, frequency of inundation, etc.) The formalization of this Study Plan will follow the initial work of transect selection (to take advantage of summer low flows, etc.)
A09B	Salmonid Redd Selection and	There has been no movement on this since

Maintenance in the Middle Skagit in Response to River Fluctuation from Hydropower Peaking	Stan submitted it. Stan and Gary will follow up with Phil re: suggested methodology.
A09C Distribution, Timing and Depth of Salmonid Redds	Adam Weybright (R2) had prepared a PowerPoint slide show that summarized the results of the 2002 steelhead surveys. Phil walked us through the results of that survey. Visibility was a challenge during the spring. We will look at integrating tributary spawning data (WDFW) on timing and distribution into the final report. For the fall 2002, Phil suggests 3 levels of survey effort: aerial, jet boat, and a combination platter (“full meal deal” which includes all of the above plus a cat-a-raft). He distributed a proposal that included the timing and estimated costs associated with each level. If differences in spawning from Hamilton to Concrete and Hamilton to Sedro Woolley are noted, we would expand the survey effort accordingly. Phil agreed to add a “full meal deal” in December. If a lot of redds are observed (defined as 20-30), the survey effort will be expanded to measure characteristics of those redds. Question for fall survey: Do we measure redds between Baker and the Sauk?
A09D Distribution, Timing of Salmonid Fry	Still waiting for NMFS collection permit. We have lost our window for studying juvenile chinook – but we could set up study sites for next year – maybe do some brief electro-fishing and confirm presence/absence of juvenile chinook in the meantime.
A10 Baker River Delta Habitat Assessment-Char	Complete. Note: USFW is concerned with impacts to char and indirectly to bald eagles through chum and also to cutthroat.
A11 Nutrient Addition	Not discussed at this meeting. Parking Lot.
A12 Instream Flows for Bio-diversity	Not discussed at this meeting. Split between R-A21 & R-A09.
A13A Water Quality Impacts of Human Uses of the Reservoir and Adjacent Shorelines.	Moved to Parking Lot.
A13B Water Quality Impacts on Aquatic Habitat	Not discussed at this meeting. Nick and Arnie will discuss this offline.
A14A Reservoir Shoreline Erosion	Not discussed at this meeting.
A15 UB Delta Scour	Not discussed at this meeting.

A16 Lower Baker River Alluvial Fan Assessment	Not discussed at this meeting.
A17 Tributaries Surveys Upstream of Barriers	Not discussed. Study request pending from USFS.
A18 Baker River Survey Upstream of 1 km.	Not discussed at this meeting. Status as of October meeting: Merged into A-01.a, habitat surveys conducted Aug & Sept 2001 with follow-up surveys in selected reaches Aug and Sep 2002.
A19 Review Limnological Information	We decided to try to move forward on analyzing existing data. Resources to do this need to be determined.
A20 Large Woody Debris Management	Not discussed at this meeting. Draft report scheduled for November meeting.
A21 Skagit Wild & Scenic River Values	Not discussed at this meeting. Status as of October meeting: Study Request is under review.
A22 Baker Lake Trout Impacts Evaluation	No longer necessary due to change in management direction in favor of cancellation of non-native trout stocking in the reservoirs.
A23 Baker River Wild & Scenic River Values	Not discussed at this meeting. Status as of October meeting: Study Request needs clarification from USFS.
A24 Hydrologic and Geomorphic Analysis	Not discussed at this meeting. R2 reviewed and provided a response to Stetson Engineer's comments to final study plan.
A25 Unnatural Predation	Not discussed at this meeting.
A26A Reservoir Limnology-Production Potential	Phil distributed an updated version of this Study Plan. It included various alternatives for doing a phased approach to this study. No consensus was reached re: how to proceed. In the meantime, we will begin to analyze existing scale and limnology data (A19)
A26B Tributary Production Potential	Emily will be combining the results of this survey with the results of A1a into a single report (stream catalog). Folks were comfortable with the survey methodology.
A27 Middle Skagit Incubation Flows	Not discussed at this meeting. Status as of October meeting: Covered in A9.
A28 Fish Passage-Reservoir Management	Not discussed at this meeting. This is being further developed in the Fish Passage Technical Working Group.
A29 Estimate Sockeye Production from Different Incubation Sources	Not discussed at this meeting.

R-A30 Near-Field Smolt Behavior	Coordinated through Fish Passage Tech. Group. 2002 Field effort completed, data analysis underway-preliminary results expected in August.
R-A31 Fish Passage-Far Field Smolt Migration	Coordinated through Fish Passage Tech. Group. 2002 Field effort completed, data analysis underway-preliminary results expected in August.
R-A32 Fish Passage-Kelt Radio telemetry	Coordinated through Fish Passage Tech. Group. 2002 Field effort completed, data analysis underway-preliminary results expected in August.
R-A33 Fish Passage-PIT Tag Migration	Coordinated through Fish Passage Tech. Group. 2002 Field effort completed, data analysis underway-preliminary results expected in August.
R-A34 Fish Passage-Downstream Run-Timing Correlation	Not discussed at this meeting. Coordinated through Fish Passage Tech. Group.
R-A35 Fish Passage-Upstream Run-Timing	Not discussed at this meeting. Coordinated through Fish Passage Tech. Group.
R-A36 Native & Wild Inland Fish Population Assessments	Not discussed at this meeting.

## MEETING HANDOUTS

- Agenda, May 9, 2002 meeting notes, updated mail list, revised study request index.
- Handouts relating to PME Scoping for Settlement: e.g., Framing Issues for Collaborative Problem Solving, How to RESOLVE Issues Jointly, Baker Solutions Team PME Process chart, Aquatic Resources Group Interests/Issues/Solutions List (12/12/00), Draft list of Issues framed in Questions for Problem Solving
- Draft Meeting Notes, July 8, 2002, of the Technical Sub-committee on Instream Flows, Technical Sub-group
- Draft Outline of Study Approach: Middle Skagit River Instream Flow Study (A9), version 7/11/02
- Fall 2002 Proposed Study Effort Middle Skagit River Salmon Spawning Surveys
- Draft Study Plan A-26a and USFS Comments regarding A26 (a,b)
- Draft Aquatic Studies Prioritization Matrix
- Study Request –Evaluation of Aquatic & Riparian Habitat Occurring under the “Without Project Alternative” (assigned now as A37) submitted by the USFS -Brady Green

## PARKING LOT

- State agency presentations re: mandates (agency direction)
- Create a master list of possible studies across all working groups and share with all
- Access to the Baker River Project hourly operational model (Charles Howard)
- Participate in Lower Skagit Work Group for native char



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- Create Overall “Study Plan” for Studies that will drive the Relicensing Process
  - Address Traps & Haul – other species

## **EVALUATION OF MEETING**

### **Well-Dones**

- Thanks Phil for the large and legible maps
- Great food!
- Location/traffic
- Lyn’s small accomplishment

### **Opportunities to Improve**

- Ran over
- Not enough time for studies discussions
- We’ve lost time for A26a
- Warm room
- Huge work load (and it’s going to get worse)
- Location/traffic
- Side bar conversations (violated norms)
- All Star games shouldn’t end in ties

**Tentative Agenda for Next Meeting**  
**August 8, 2002 at USFS Building in Mountlake Terrace, WA**  
**8:30a.m. – 3:00 p.m.**

1. Review Agenda and Minutes
2. Settlement Process
3. Report from Fish Passage Technical Working Group
4. Report from Instream Flows Technical Working Group
5. Review Study Plans /Requests: A37 (new!), A19, A26a, A24
6. Action Items
7. Update from Solution Team Meeting
8. Set agenda and confirm location (Mountlake Terrace) for September 12, 2002- October 10,11 for a two day meeting. (Day 1=Studies; Day 2= Draft PMEs)
9. Evaluate Meeting