



BAKER RIVER PROJECT RELICENSE

Aquatic Resources Working Group

April 10, 2003

8:30 a.m. – 3:00 p.m.
WA Department of Ecology
Room 1B/1C
3190 160th Ave. SE, Bellevue, WA

AGENDA

1. Review Agenda, Minutes, Schedule	8:30 – 8:45
2. Settlement Process- Status of 2 nd Draft PME's	8:45 – 10:00
<i>Break</i>	10:00 – 10:15
3. Fish Passage Technical Work Group Report	10:15 – 10:30
4. Report from Instream Flow Technical Working Group (A09a,c,d)	10:30 – 11:30
5. Review Study Plans/Requests: updates on A01a/b (A26b)	11:30 – 12:00
<i>Lunch (meeting snacks or bring your own)</i>	12:00 – 12:30
6. Review Study Plans/Requests: updates on A2, A5, A14, A15, A16, A17, A20, A24, A25, A26a, A36, A37, A38, Others?	12:30 – 2:30
7. Action Items	2:30 - 2:35
8. Update from Solution Team Meeting	2:35 - 2:40
9. Additional Issues	2:40 - 2:50
10. Set Agenda for May 8 th 2003 (WA DOE, Bellevue)	2:50 - 2:55
11. Evaluate Meeting	2:55 – 3:00



April 10, 2003

Driving Directions to Dept. of Ecology Office (Bellevue):

- 1) Eastbound on I-90 from I-5 or I-405: Take exit 11A, Keep left, drive past the 150th Ave. SE exit and take the 156th Ave. SE exit.**
 - 2) Cross over the freeway and move one lane to the left to avoid the 'exit only' lane.**
 - 3) At the first light, turn right onto Eastgate Way. Follow Eastgate to 160th Ave. SE (3rd light) and turn left.**
 - 4) Once on 160th Ave. SE, turn into the third driveway on the right. Beige two story building. Parking in front of the building or one block on the opposite side of 160th Ave. SE.**
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April 10, 2003
8:30 a.m. - 3:00 p.m.
Department of Ecology, Bellevue - Eastgate

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

PRESENT: Arnie Aspelund, Nick Verretto, Doug Bruland, Cary Feldmann (PSE), Arn Thoreen (Skagit Fisheries Enhancement Group), Phil Hilgert and Sue Madsen (R2), Bill Reinard (Wildcat Steelhead Club), Steve Fransen (NMFS), Stan Walsh (Skagit Systems Cooperative), Greta Movassaghi and Scott Lentz (USFS), Bob Wright (DOE), Marc Daily (Meridian Environmental) on phone, Gene Stagner (USFWS), Chuck Ebel (USACE), Ruth Mathews (The Nature Conservancy), Dee Endelman (Agreements Dynamics), Lyn Wiltse, facilitator and Mary Jean Bullock (PDSA Consulting, Inc.).

NOTE: We will have a conference call to discuss the form of the second draft proposed actions April 21 from 3:00 – 5:00. Dial 1-866-280-6429. Enter participant code 144995#.

The next CROSS RESOURCE WORKSHOP MEETING will be MAY 14, 8:00 – 5:00 at the EMBASSY SUITES in LYNNWOOD. Stay tuned for details. Potential presenters: Steve or Arn?

FUTURE WORKING GROUP DATES AND LOCATIONS (2nd Thursday of each month):
May 8 (WA Ecology, Bellevue - Eastgate), June 12, July 10 (WA Ecology, Bellevue - Eastgate), August 14, September 11 (TBD), October 9, November 13, December 11, 2003 from 8:30-3:00 at USFS Office in Mountlake Terrace.

April 10, 2003 Agenda

8:30 – 3:00 p.m. at *WA Dept. Ecology, Bellevue-Eastgate*

1. Review Agenda and Minutes
2. Review Relicensing Schedule
3. Settlement Process – Workshop debrief
4. Fish Passage Technical Working Group Report
5. Instream Flows Update (A9)
6. Studies:
 - A9d - Skagit River Flow & Habitat Assessment
 - A14 - Reservoir Shoreline Erosion
 - A16 - Lower Baker Delta/Channelization
 - A17 - Tributaries Surveys Upstream of Barriers
 - A25 – Inventory of Unnatural Predation Opportunity
 - A26 - Reservoir Production Potential
 - A29 - Sockeye Smolt Incubation Origin Otolith
 - A36 - Native & Wild Inland Fish Population Assessments
 - A37 - Evaluation of Aquatic and Riparian Habitat under Without Project Alternative
 - A38 - Bull Trout Population Assessment
 - A39 – Native Non-Salmonid Fish
 - A40 (?) – Chinook-related Study
7. Action Items
8. Update from Solution Team Meeting
9. Additional Issues?
10. Set agenda for May 8, 2003 meeting (@ WA Ecology, Bellevue-Eastgate)
11. Evaluate meeting

INTRODUCTIONS

Nobody was new. Well, Scott is kind of new, but not new enough to introduce!

NEW ACTION ITEMS

- Scott: Email copy of Habitat Restoration/Conservation PME to Arnie to distribute to Working Group members by April 18.
- Cary: Put together conference call to discuss new language for second draft proposed actions (April 21 from 3:00 to 5:00).
- Cary: Send out electronic version of a red-line draft of the 2nd draft proposed actions on April 1.
- Arnie: Email out Greta's erosion control PME.
- ALL: Send Arnie your comments on 2nd draft actions by April 17.
- Arnie: Send out summary of everyone's comments on draft actions prior to the April 21 conference call. Use this list as agenda for the conference call.
- ALL: Plan to phone in for the April 21 conference call!
- Sue: Send Arnie sediment proposed actions to distribute.
- Scott: Send comments to Arnie on A39.
- ALL: Review A24 *Part 1* report and get comments to Sue by end of April.

- Mark: Send out the revised Study Request on A36: Native & Wild Inland Fish Population Assessments (prior to our February meeting) for discussion at our March meeting.

ACTION ITEMS CARRIED OVER FROM APRIL 1 AND 2 RETREAT

- Tung: Make available a list of assumptions used by the HYDROPS model.
- Tung: Talk with PSE re: additional enhancement to model (as per Lorna's suggestion re: switching timing based on different priorities).
- Tung: Make sure new version of HYDROPS model is functional and available by April 15.
- Paul: Get folks results from the 11 runs. Need to verify input data, along with corresponding explanation.
- All: Review Study Report for A9c. Be ready to discuss at our May 8 meeting.
- Stan (Gary): Set up a meeting of BAG (Baker Agency Group) to address goals for fish passage (May 6).
- All: Send Stan your ideas on goals for fish passage by April 15.
- Sue: Put together draft study plan for alluvial fan (A16) along with draft PME language by May 1.

SETTLEMENT PROCESS – STATUS OF 2nd DRAFT ACTIONS

Concern was expressed that technical decisions about what to include in the second draft actions. We want to resolve all we can at the working group level. We also want folks at the Solution Team to have the authority to speak for their organizations on issues of settlement. Cary assured us that Ed Schild has that authority.

We reviewed the edits made to the initial draft proposed actions at and since the April 1 and 2 retreat. Cary fleshed out the pieces he was asked to (fish propagation, etc). Scott Lenz brought language on habitat PME and Greta Movassaghi brought language on erosion. We agreed to change 3.4.3 to be Erosion Control. Within this section, we will call out specific components within the arena of erosion. Each area will have its own management plan.

As we walked through the draft proposed actions, we noted where we have strong agreement and where we don't yet have specifics to pass on to the Louis Berger for evaluation in the PDEA.

We are in pretty good shape on these draft proposed actions:

- 3.1.1 HERC Fund (Concern was expressed that the size of the fund has not been called out). Cary explained that this is still fluid as several issues that were originally slated to be handled through that fund are being defined separately. To the extent that this continues to occur, the size of the fund will be reduced accordingly.
- 3.2.1 Upstream Fish Passage (should address which species the facility will and will not work for.) TNC is interested in how we will address migrating species that it won't work for.
- 3.3.2 Implement Flow Release Water Quality Management
- 3.4.2 Implement Large Woody Debris Management
- 3.5.1 Implement Reservoir Water Quality Management

FERC RELICENSING TIMELINE FOR AQUATICS TASKS

Proposed Actions

- 2nd Draft Proposed Actions are due May 1, 2003.
- 2nd Draft Proposed Actions will be out for review by May 7, 2003
- Cross Resource Workshop will be on May 14, 2003 (8:00-5:00 at the Embassy Suites in Lynnwood)
- Complete revisions are due June 1, 2003 (for PDEA)

FISH PASSAGE TECHNICAL WORKING GROUP REPORT

There was nothing new to report. They are meeting again April 28. We will get an update at our May 8 meeting.

INSTREAM FLOWS UPDATE (A-9)

Phil distributed a diagram outlining R2s Fish Habitat Model of the Middle Skagit River. He reported that on March 16, 17 they were able to get the remaining transect data for high flows. We are currently awaiting data from Pacific International Engineering. In the meantime, R2 is beginning to develop the hourly hydrograph.

At the May 2 Instream Flows Technical Working Group, he will propose Varial Zone and Spawning Incubation as the two highest priority models to develop. Other models will include habitat indices for side channels, backwater sloughs, *mainstem and off-channel surface area, PHABSIM outputs and possibly spatial niche analyses.*

Some HYDROPS runs will warrant further investigation. These will be the ones we run through the habitat models (starting with varial zone and spawning incubation). Results of the May 2 Technical Working Group meeting will be presented at our May 8 meeting.

All Working Groups should be considering HYDROPS scenarios they would like to see run - NOW!

STUDY REQUEST SUBMITTALS/STUDY PLAN DEVELOPMENT

Study #	Title	Notes/Next Steps
A01.A	Reservoir Tributary Habitat Surveys	Phil reported that he is in the process of reviewing this report. He will send it out for our review by May 2.
A01.B	Reservoir Tributary Biological Surveys	See report for 101.A. ACTIVE
A01.C	Reservoir Tributary Delta Surveys	See report for 101.A. ACTIVE
A02	LB River Habitat Mapping	Sue is reviewing this report. She will get it out by our May 8 meeting..
A03	Reservoir Fish Population Characteristics	Not discussed. No action yet. PSE will review existing information for the PDEA.
A04	LB/Skagit River Flow, Gaging	Not discussed. Last meeting Phil reported that they downloaded pressure sensors last and are still in the process of collecting data. Links to A9. ACTIVE
A05	Water Quality Sampling	Nothing new to report.

A06 UB Passage Design Baffle Modification	Complete.
A07 Lower Baker Forebay Bathymetry	Complete.
A08 UB Passage System Evaluation	Complete.
A09A Skagit River Flow and Habitat Assessment	See Instream Flows Update above.
A09B Salmonid Redd Selection and Maintenance in the Middle Skagit in Response to River Fluctuation from Hydropower Peaking	Phil reported that this draft report is complete. He is reviewing it and will send it out for our review by April 28. Prepared by Adam Weybright.
A09C Distribution, Timing and Depth of Salmonid Redds	This draft report (prepared by Adam Weybright) was distributed at the April 1,2 retreat. All were asked to get comments to Arnie by April 21. <i>Steelhead surveys are continuing. Not many have been seen.</i>
A09D Distribution, Timing of Salmonid Fry	Phil reported that he is in the process of reviewing this draft report. He'll get it out for our review by April 21. He distributed a summary table of middle Skagit River juvenile salmonid life history dynamics. All were asked to review the draft report to identify any additional field survey work that needs to be done. Be prepared to discuss at our May 8 meeting. .
A10 Baker River Delta Habitat Assessment-Char	Complete. Note: USFWS is concerned with impacts to char and indirectly to bald eagles through chum and also to cutthroat.
A11 Nutrient Addition	Tie to A26.
A12 Instream Flows for Bio-diversity	Split between R-A21 & R-A09.
A13A Water Quality Impacts of Human Uses of the Reservoir and Adjacent Shorelines.	Not discussed. Removed from list of studies this group will address, reported by Brady in September. Greta reported the USFS will pursue this in the recreation working group.
A13B Water Quality Impacts on Aquatic Habitat	Removed from list of studies we will address. Tabled for now. Awaiting results of A14a.
A14A Reservoir Shoreline Erosion	The report is out. All were asked to give comments by April 30 to Arnie.
A15 UB Delta Scour	Sue is in the process of writing this report. Stay tuned....
A16 Lower Baker River Alluvial Fan Assessment	Sue is reviewing this Study Plan with Stan./Devin. She will distribute the Study Plan by April 24 for folks to read and be ready to discuss at our May 8 meeting.
A17 Tributaries Surveys Upstream of Barriers	Nothing new to report.

A18	Baker River Survey Upstream of 1 km.	Merged into A01a and A01b. ACTIVE.
A19	Review Limnological Information	This study has been combined with A26.
A20	Large Woody Debris Management	This was largely handled through PME discussions at the April 1, 2 Retreat. R2 is ready to finalize the report. Comments will be appended to the report and addressed as appropriate. All comments must be in by April 21.
A21	Skagit Wild & Scenic River Values	This is being addressed by A9 and A24.
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. Removed from list of studies we will consider.
A23	Baker River Wild & Scenic River Values	This is being addressed through A15.
A24	Hydrologic and Geomorphic Analysis	All were asked to get comments on Part 1 (hydrologic) by April 30. Part 2 (geomorphic) is nearly complete. Sue <i>will try to get it out by April 18</i> . All were asked to come to our May 8 meeting with questions/comments for discussion.
A25	Unnatural Predation	Nick reports that we have conducted 28 field days of monitoring (visual observations, transparency, hook and line, snorkeling, etc.) at Blue Tarp and the seaplane launch. Captured fish include 3 sculpin, 2 chinook, 2 sockeye and 10 char. Stomach contents have included 35 sockeye fry, including a 70 mm. sockeye removed from the stomach of a 129 mm. sculpin. Native trout and char tagging are being conducted in support of those studies.
A26A	Reservoir Limnology-Production Potential	Nick reported that we have received part of this report. He hopes to send the draft report out for review by April 24. All were asked to come to the May 8 meeting with your comments. Concern was expressed about the researchers lack of familiarity with our local West Coast situation.
A26B	Tributary Production Potential	Results combined in the report for A01a and A01b and expected by the April 10 meeting.
A27	Middle Skagit Incubation Flows	Addressed in A9.
A28	Fish Passage-Reservoir Management	Now addressed in Fish Passage Studies A30 to A34. ACTIVE
A29	Estimate Sockeye Production from Different Incubation Sources	This year, we have sockeye emerging out of Beach 3 and 4. For now, we have agreed to collect and preserve 100 samples. We can determine what to do with them latter on (otolith analysis).

R-A30 Near-Field Smolt Behavior	Completed. Coordinated through Fish Passage Tech. Group.
R-A31 Fish Passage-Far Field Smolt Migration	Completed. Coordinated through Fish Passage Tech. Group.
R-A32 Fish Passage-Kelt Radio telemetry	Completed. Coordinated through Fish Passage Tech. Group.
R-A33 Fish Passage-PIT Tag Migration	Completed. Coordinated through Fish Passage Tech. Group.
R-A34 Fish Passage-Downstream Run-Timing Correlation	Completed. Coordinated through Fish Passage Tech. Group.
R-A35 Fish Passage-Upstream Run-Timing	Completed. Coordinated through Fish Passage Tech. Group.
R-A36 Native & Wild Inland Fish Population Assessments	WDFW is collecting native trout fish samples. We are participating in this sampling in our other surveys, taking tissue samples in support of this study. Stay tuned...
R-A37 Without Project Alternative (evaluation of Aquatic & Riparian Habitat)	Sue reported that work is ongoing. She is doing a review of the maps, etc. for this study. She will bring a final map to our May 8 meeting for discussion.
R-A38 Bull Trout Population Assessment & Risk Analysis	Phil received the <i>draft</i> Study Plan <i>and is reviewing it</i> . He will send it to Gene the week of April 30. Pending Gene's approval, the plan will be sent out to Working Group members.
R-39 Native Non Salmonid	Phil prepared a paper on what species are in the Baker River Project basin and what their habitat is. We will look at linking this to A1, 2, 9, 15, 16, 24, 37, 17, 26b and fish passage. Sue and Phil will follow up with Ruth and Scott on how to handle this.

REPORT ON OLD ACTION ITEMS

- ALL: Considered additional data needs for April 1,2 retreat and let Arnie know ASAP
- Cary: Got HYDROPS runs (Stage, 6", Amplitude, cycling) out to Working Groups by week of March 24th)
- Arnie: Sent out list of all requested HYDROPS runs to Working Group members along with a recommendation of how to prioritize the runs by March 14 (completed list of initial runs March 26th)
- Brady: Brought Forest Service mosaic of aerial photos of low reservoir levels
- ALL: Brought musical instruments
- ALL: Let Sue know how you preferred to get the reports (hard copy, CD, etc.)
- Arnie: Checked with Asit re: incorporating Resident trout into his analysis (in reference to studies A26a/b). Further discussions need to occur on this issue.
- Sue: Worked on producing map including above barriers habitat in time for the retreat (in reference to studies A37 and A17).

- ALL: Sent Stan comments on E03 (Examination of Spawning and Incubation Flows in the Skagit River below the Baker confluence in the Brood Year 2000) by January 31. The Economic Working Group will discuss this in April.
- ALL: Got comments on Large Woody Debris report (A20) to Phil by April 1st.
- Scott: Send comments on A-39 to Arnie week of April 11.

REPORT ON ACTION ITEMS FROM APRIL 1 AND 2 RETREAT

- Paul: By April 15, set up Technical Scenario Teamlet (TST) to include Margaret, Scott, Stan, Ruth, and possibly Gary. Initial tasks: come up with definitions around spawning flows (use those called out by Seattle City Light as a starting point?). Consider QC, etc.
- Paul: Outlined charter and roles/responsibilities for the Scenario Technical Working Group.
- Paul: Saw that all possible parameters are listed on HYDROPS request form and show how prioritization works.
- Sue: Get timeline for R-2 habitat Model by April 10 Aquatics Working Group meeting.
- Cary: Set up meeting of instream flows teamlet to address process for coming up with instream flows schedule (identify plan components).
- All: Let Bob W. know if you want data from the Water Quality teamlet study.
- Arnie: Found out the status of new fish passage truck. It is in the shop with the tank being mounted this week. It should be fully functional by the end of May.
- Greta: Drafted Shoreline Erosion Management Plan—aim for April 10.
- Scott: Put together language for habitat mitigation for what has been lost—by April 10? (Button up with Sue re A 17).
- Sue: Drafted Sediment Plan by April 10. (Brought along with studies).
- All: Considered supplementation language for Fish Propagation section, especially around aim, to address on April 10.

UPDATE FROM SOLUTION TEAM MEETING

They spent most of the last meeting discussing the process for settlement and the ongoing issue of flood control. Skagit County has commissioned PIE to do a reconnaissance-level study to determine the potential benefits of additional flood storage. Skagit County is inviting representatives from the USACE and PSE to walk through the findings of this study on April 15. They will then review this study also with the executive committee May 1 and determine the next steps. Stay tuned!

FUNDING, ETC.

Arn lunched with Maria Cantwell, who asked how she can help with our re licensing process. All should let Arn know of funding needs so he can discuss opportunities with Maria. Thanks Arn!

HANDOUTS

- Agenda for 4-10-03 meeting
- Updated Participant Contact List
- Final Minutes from 3-13-03 meeting
- Long-term Aquatics Schedule
- Updated Aquatics Study Request Index

- Updates Aquatics Study Index
- Settlement Process Discussion – Desired Outcome: A way to develop 2nd draft PME's by May 1, 2003 (Dee/Agreement Dynamics)
- Draft 04-10-03 – 3.4.? Implement Aquatic Habitat Restoration and Conservation measures for impacts to public lands administered by the USFS (Scott/USFS)
- 3.4.3 in Draft Proposed Actions) – Reservoir Shoreline Erosion Control Plan (Greta/USFS)
- Typical License Article Language (R2)
- Proposed language for 3.4.1 Implement Fluvial Geomorphic Management (R2)
- Fish Habitat Model of the Middle Skagit River
- Table – Summary of Middle Skagit River juvenile salmonid life history dynamics. (Study A-09d)
- Comments on Baker River Hydropower Project, Draft Study A-20 Large Woody Debris (USFS 3/27/2003)

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
- Create Overall “Study Plan” for Studies that will drive the Relicensing Process
- Address Trap & Haul – other species
- PSE agreed to take over the Little Park Creek smolt trapping effort this year. Implementation is underway.

EVALUATION OF MEETING

Well-Dones

- Thanks to DOE for hosting!
- Got out early
- Great food
- Good presentation
- Getting studies done
- Adequate facilitation

What Needs to Be Changed

- Location (Bellevue)
- Not enough good puns
- Only one analogy

What's Hot?

- Missing some critical information for the Settlement Agreement
- Definition of HYDROPS scenarios
- Downstream fish passage is a potential “deal breaker”

Studies Update for Solution Team

- Downstream Fish Passage Progress (range of costs of alternatives is \$20 – 200 million!)
- Instream Flows/Technical Scenario Test (TST)

Tentative May 8, 2003 Agenda

8:30 – 3:00 p.m. at WA Dept. of Ecology, Bellevue – Eastgate

1. Review Agenda, Minutes, Schedule
2. Settlement Process – Status of 2nd draft proposed actions after April 1, 2 Retreat
 - Prep for May 14 Cross-Resource Workshop
3. Fish Passage Technical Working Group Report
4. Instream Flows Technical Working Group Report (A9)
5. Studies
 - A01a, b, and A26 (b) – Reservoir Tributary Surveys
 - A9 (a, b, c, d) - Skagit River Flow & Habitat Assessment
 - A14a - Reservoir Shoreline Erosion
 - A16 - Lower Baker Alluvial Fan Assessment
 - A17 – Tributaries Surveys Upstream of Barriers
 - A20 – Large Woody Debris Management
 - A24 - Hydrologic & Geomorphic Analysis
 - A25 – Inventory of Unnatural Predation Opportunity
 - A26 (a) - Reservoir Production Potential
 - A37 – Evaluation of Aquatic/Riparian Habitats (Without Project Alternative)
 - A38 - Bull Trout Population Assessment
 - A39 – Native Non-Salmonid
6. Action Items
7. Update from Solution Team Meeting
8. Additional Issues?
9. Set agenda for June 12, 2003 meeting @ USFS Building in Mountlake Terrace
10. Evaluate meeting