# BAKER RIVER PROJECT RELICENSE

**Aquatic Resources Working Group**
**RESOLVE**

**January 23, 2004**
**9:00 a.m. – 2:30 p.m.**
**U.S. Forest Service**
**Conference Room A/B (425-775-9702)**
**21905 64th Avenue West, Mountlake Terrace, WA**

## DRAFT AGENDA

**Conference Call Number: 1-800-280-6429, participant code: 144995#**

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|---|---|
| 1. Review Agenda, Schedule | |
| 2. Review Comparison Table of Effects of Instream Flow Scenarios (are there additional runs needed?) | |
| 3. Revised Draft Proposed Actions & PME Status: | |
| 3.1 | Aquatic Species Management Plan |
| 3.1.1 | Provide fish propagation and enhancement programs and facilities |
| 3.2.1 | Provide upstream passage continuity for migratory fish species (anadromous, adfluvial, fluvial, resident) |
| 3.2.2 | Address connectivity between Baker Lake and Lake Shannon |
| 3.2.3 | Provide downstream passage continuity for migratory fish species (anadromous, adfluvial, fluvial, resident) |
| 3.3.1 | Implement flow regime for the Baker River Project |
| 3.4.1 | Implement fluvial geomorphic management |
| 3.4.2 | Implement large woody debris management |
| 3.4.3 | Shoreline erosion management |
| 3.4.4 | Implement aquatic habitat restoration and conservation measures |
| 3.5.1 | Water Quality Protection Plan – Operational Compliance with Standards |
| 3.5.2 | Water Quality Protection Plan – Water Pollution Protection Plan |
| 4. Next Steps | |

**Driving Directions to US Forest Service Office:**

**1) Driving North from Seattle (or South from Everett) on I-5, take the 220th St. SW exit (exit 179).**
**2) Turn west (right if from southbound I-5, left if from northbound I-5) onto 220th St. SW.**
**3) Drive west about a block and turn right onto 64th Ave W.**

**4) The office building is about ¼ block down the street on the right side of the road.**

**BAKER RIVER PROJECT RELICENSE**

**Aquatics Working Group**
**RESOLVE Meeting**
**Final Notes**

January 23, 2004
9:00 a.m. – 2:30 p.m.
USFS Office, Mountlake Terrace

## MEETING NOTES

**Team Leader:** Arnie Aspelund, PSE

**Attendees:**

Arnie Aspelund, Paul Wetherbee, Cary Feldmann, PSE
Steve Fransen, NMFS
Jory Oppenheimer, HDR
Scott Schuyler and Cliff Edwards, Upper Skagit Indian Tribe
Stan Walsh, Skagit River System Cooperative
Stuart Beck, R2
Ruth Mathews, TNC
Bob Wright, DOE
Arn Thoreen, SFEG
Greta Movassaghi, USFS (by phone)
Irena Netik, Powel Group (by phone)
Jeff McGowan, Skagit County Public Works
Lyn Wiltse, PDSA Consulting Inc., notes
Dee Endelman, Agreement Dynamics, facilitator

**Final RESOLVE Meeting will be during a portion of the February 12 Aquatics Resources Working Group Meeting!**

**January 23, 2004 Agenda**

- Review agenda, notes, actions
- Review comparison Table of Effects of Instream Flow Scenarios
- Revised Draft proposed actions &PME Status
    - 3.1 Aquatics Species Management Plan
    - 3.1.1 Provide fish propagation and enhancement programs and facilities

- 3.2.1 Provide upstream passage continuity for migratory fish species
- 3.2.2 Address connectivity between Baker lake and Lake Shannon
- 3.2.3 Downstream Passage
- 3.3.1 Implement flow regime for the Baker River Project
- 3.4.1 Implement fluvial geomorphic management
- 3.4.2 Implement large woody debris management
- 3.4.3 Shoreline Erosion management
- 3.4.4 Aquatic Habitat Restoration
- 3.5.1 Water Quality protection plan

- Determine Next Steps

**ACTION ITEMS**

- Stan: Follow up with R-2 re: additional information requests.
- Stuart: Translate stage change to inches at the Baker Gage to tie the relationship together with the (stable) Skagit gage.
- Cary: Follow up with Joel about putting out an email re: how PSE plans to meet State ramping guidelines.
- Arnie: Send out announcement that the next Instream Flow Technical Working Group meeting will be at the USFS Mountlake Terrace Office on January 30 from 9:00 to 3:00.
- Paul: Coordinate additional HYDROPS runs: DWF.01a and TNC.22a
- Paul: Work with Steve (on Jan. 26) to flesh out his suggested run: NMF.01∞ and share output prior to the 1/30 meeting of the Instream Flows Technical Working Group Meeting. Summary of this run follows:
  - 300 cfs MIF in years with wet summer/fall periods
  - 600 cfs MIF in years with dry summer/fall periods
  - Daily amplitude constraint: daily minimum must be 50% of the daily maximum as measured at the Baker River gage
  - Assumes existing flood control regime.
  - Reservoir refill dates would be run the same as other alternatives and then also by June 30.
  - Max flow would be during mid Sept. 15 to end of Dec. 30. 0 and <4000 and more likely than not would fall within the ranges that the other alternatives specify so the flow from Jan 1 through April will protect incubation.
  - To increase project flexibility, when Skagit flow is greater than equal to the incubation flow required for the Skagit, there wouldn't be a maximum flow limit on the Baker River.
- Stan: Will draft suggested language for 3.2.1 that would meet the interests of the tribes he represents.
- Dee: Re-write rationale under 3.2.2 (second paragraph) to clarify meaning.
- Greta: Work up alternate cost estimate for erosion PME (3.4.3) and get to Arnie by the end of the month.
- Arnie: Add language that includes water quality to 3.4.3 (erosion)
- Cary: Button up with Bob Wright re: agreement with water quality PMEs

**TST Report/Comparison Table of Effects of Instream Flow Scenarios/Additional Data Requests**
At the January 16 TST meeting, Phil presented a table that he had put together at the request of the Instream Flows Technical Working Group. This table is in the process of being edited (in terms of ramping and varial zone calculations) to serve as a more useful tool to compare and contrast various flow regime scenarios. Paul briefly walked us through this table.

Stuart explained the additional analyses he performed in response to requests made at the TST meeting. He explained that in the flow routing model, we accounted for ramping events for each month of the year, for each of the 23 transects. The number of events were weighted in accordance with the transect weighting factors that were revised after the 10/03 flood. There were more events at the upper end of the study reach and fewer at the lower end, so the weighted average represents all these. A transect-weighted, reach-averaged number of down-ramping events was determined for the Middle Skagit River study reach by applying transect-weighted factors to the 23 transects.

He walked us through graphs showing the flow ramping restrictions in the Baker River, based on flow from the Skagit River below the Baker River confluence and stage ramping criteria at Transect 1 of the Middle Skagit River; and the Stage ramping rate in Skagit River at USGS gage near Concrete, based on flow in the Skagit River below Baker River confluence and stage ramping criteria at Transect 1 of the Middle Skagit River.

R-2 originally had looked at varial zone for 12 hrs for the upper extent and previous 14 days for the lower extent of the varial zone. Since the rate of colonization is somewhat variable, TST members requested that Stuart re-run these numbers extending the period for the lower extent to 30 days. Stuart showed us a table with these new numbers, showing the expanded varial zone.

He also discussed a table of transect-weighted, reach averaged effective Chinook spawning width under with and without the effects of scour and de-watering two tables of the spawning/incubation analysis. He pointed out that in energy year 1996, you can see the effects of the November 1995 flood, which caused a drop in spawning width. He stated that scour has a bigger impact on spawning, but the ability to control this at the project is very limited. Nor does it have much effect on available water for de-watering, as their contribution to flow is very little in comparison with what comes in from the Upper Skagit. There was not much difference in effective spawning width among the various flow scenarios.

The final table he reviewed with us showed Chinook spawning/incubation looking only at flow releases from the Baker Project itself. Assuming Chinook would need 50% of spawning flows for successful incubation, the Draft Action provides the best chance for survival.

The deadline for an operational model to be submitted to the Louis Berger Group for inclusion in the next version of the PDEA is Monday, January 26. If we don't reach settlement, the PDEA will include analysis of PSE.01, PSE.02 and DFW.01. PSE.02 and DFW.01 would be considered the bookends of the analysis. It was suggested that DFW.01 be run with some adjustments.

It is the intention of the team to replace these with a consensus flow regime that meets the interests of the stakeholders. We will work to come up with a plan that has maximum flexibility (in terms of optimizing economic and biological effects).

Note: Margaret shared that the USFS participants in this process will be meeting with Thom Hardy on January 27 to discuss what flow regime they would like to recommend. They aren't ready to do so today.

After considerable discussion, we agreed that we would meet again in the form of the Instream Flow Technical Working Group on January 30 to review the output from additional runs:

TNC.21 with modifications (TNC.21a)
DFW.01 with modifications (DFW.01a)
NMF.01∞ (new, as described in the Action Items above)

**REVISED DRAFT PROPOSED ACTIONS & PME STATUS**

**3.1 Aquatics Species Management Plan**

We agreed that we were good to go on this! We will send it to Louis Berger to be drafted into License Article language.

**3.1.1 Provide Fish Propagation and Enhancement Programs and Facilities**

Scott explained that he had discussed this with PSE and the agencies and that the replacement language the Upper Skagits are proposing represents the interests of all parties.

Stan said that SRSC and WDFW have concerns with apparent limitations of fry output, want to see an accelerated timing schedule, and they want to see an Alaska method of incubation as opposed to Beach 5. They want to see incubating more eggs and fertilizing the reservoir, if studies show it is appropriate.

Cary explained that the numbers are not capped. They are only what PSE would contribute to the system. The number was empirically derived and yields an outcome that is supportable. The spawning beach system works well. One third of the production would be from hatchery.

Arn suggested we might also consider more sites. Might the FS want to partner with PSE on this?

Steve is fine with the sockeye production methodology described in the new wording, but would like to see a placeholder for Chinook and Coho as described in the original 20,000 lb production facility.

We will elevate this to the Solution Team on January 27.

**3.2.1 Provide Upstream Passage Continuity for Migratory Fish Species**

The Draft License Article Language will be reviewed by the Solution Team on January 27.

**3.2.2 Address Connectivity between Baker Lake and Lake Shannon**

The Draft License Article Language will be reviewed by the Solution Team on January 27.

**3.2.3 Provide Downstream Passage Continuity for Migratory Fish Species**

The Draft License Article Language will be reviewed by the Solution Team on January 27.

**3.3.1 Implement Flow Regime for the Baker River Project**
We will report progress on this to the Solution Team on January 27. If they agree, it will be discussed at the next Instream Flow Technical Working Group meeting on January 30 as this is a technical issue.

**3.4.1 Implement Fluvial Geomorphic Management**
We agreed to change the wording on this to provide for a plan to address this and float it to the ARWG members to get their reaction. We will report progress on this to the Solution Team on January 27 and address it in the RESOLVE portion of the Feb. 12 ARWG meeting as this is a technical issue.

**3.4.2 Implement Large Woody Debris Management**
The Draft License Article Language will be reviewed by the Solution Team on January 27.

**3.4.3 Shoreline Erosion Management**
Greta reported that the FS feels like the dollars shown here are too low. She will be working up a cost estimate by the end of the month. We agreed to include the additional language she submitted on this and that the detail in the appendix will be reflected. We will include water quality. We will report progress on this to the Solution Team on January 27 and address it in the RESOLVE portion of the Feb. 12 ARWG meeting.

**3.4.4 Aquatic Habitat Restoration**
We will report progress on this to the Solution Team on January 27 and address it in the RESOLVE portion of the Feb. 12 ARWG meeting as this needs to be reviewed by the technical working group members. The funding component was only recently added.

**3.5.1 Water Quality Protection Plan – Operational Compliance with Standards**
Barring any objection from PSE, this will be sent to Louis Berger to be drafted into license article language.

**3.5.1 Water Quality Protection Plan – Water Pollution Protection Plan**
Barring any objection from PSE, this will be sent to Louis Berger to be drafted into license article language.

**NEXT STEPS**
The Instream Flows Technical Working Group will be meeting on January 30 to continue to work on 3.3.1. On January 27, we will report progress to the Solution Team and, if they agree, continue to resolve technical issues for 3.1.1, 2.3.1 (if not already resolved), 3.4.1, 3.4.3, and 3.4.4 at our Feb. 12 ARWG meeting.

Note: In this meeting, we worked from the 5th draft PMEs dated January 21, 2004.

**Notes from RESOLVE Meetings**
To permit the greatest degree of open dialogue, the group agreed that notes for the RESOLVE sessions will be less formal than regular working group meetings. We will primarily document agreements and

action items.

**RESOLVE Groundrules**

- Work at understanding one another.
- Use airtime wisely.
- Speak honestly and respectfully.
- Examine assumptions.
- Make tentative agreements, then look at the whole package together.
- One meeting review rule: We have one meeting to review and change the tentative agreements of the previous RESOLVE session.[1]
- Document our agreements.
- Caucuses are okay.

[1] All agreements are tentative even after the "one meeting review rule". However, the one meeting rule gives regular participants an opportunity to bring an agreement back to the table while assuring that tentative agreements are not forever reopened. It also accommodates regular participants who must miss a meeting and may want to weigh in on a decision.