



Baker River Project License Implementation

**Aquatic Resource Group
Final Meeting Notes**

September 14, 2010 ~ 9:00 am - 1:00 pm
PSE Snoqualmie & Skagit/Burlington Offices, w/ WebEx & video-conferencing

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

PRESENT

Snoqualmie: Arnie Aspelund, Cary Feldmann, Scott Williams, Jacob Venard, and Nick Verretto (PSE); Phil Hilgert and Tim Sullivan (R2); Lyn Wiltse and Jamie Riche (PDSA). **Skagit/Burlington video-conference:** Doug Bruland (PSE); Brock Applegate and Brett Barkdull (WDFW); Jon-Paul Shannihan (Upper Skagit); Bob Helton (Citizen); Lorna Ellestad (Skagit Co.). **Phone:** Lou Ellyn Jones (USFWS); Steve Fransen (NMFS); and Kevin Kurras (WDFW).

PROXIES: Arnie Aspelund for Stan Walsh (SRSC)

Lyn confirmed that a quorum is present, noted that Arnie is standing in as Stan Walsh's proxy and Steve Fransen holds Lou Ellyn Jones' proxy since she had to step off the call.

DECISIONS

- "Shall the deadline to complete the final report on the Sockeye Smolt Production Capacity Study be extended to November 15, 2010?"
- "Shall the deadline to file Article 108 Baker River Gravel Management Plan, based on an alternative schedule, be extended to January 31, 2011?"
- "Shall the deadline to file Article 109 Large Woody Debris Management Plan, based on an alternative schedule, be extended to January 31, 2011?"

DECISION MADE: "Shall the deadline to complete the final report on the Sockeye Smolt Production Capacity Study be extended to November 15, 2010?" The Consensus answer was *YES*.

DECISION MADE: "Shall the deadline to file Article 108 Baker River Gravel Management Plan, based on an alternative schedule, be extended to January 31, 2011?" The Consensus answer was *YES*.

DECISION MADE: "Shall the deadline to file Article 109 Large Woody Debris Management Plan, based on an alternative schedule, be extended to January 31, 2011?" The Consensus answer was *YES*.

NEXT ARG: October 12 conference call (9 a.m. – 11 a.m.) and November 9 (9 a.m. – 3 p.m.) at PSE's Snoqualmie and Skagit/Burlington offices with video-conferencing

FPTWG: October 6 and December 1 at NMFS Lacey Office

ACTION ITEMS

- All Tell Cary what agenda items you would like the upcoming BRCC meeting.
- Co-mgrs Send a draft Fish Production Plan to Arnie by Sept. 30.
- Arnie Add an update on the 107c teamlet to the next ARG meeting.
- Doug Talk with Jon-Paul about Baker Lake fish surveys.

PREVIOUS - STILL RELEVANT - ACTION ITEMS

- All Review / update the ARG representation list for your organization.
- Steve Check with the co-managers and PSE about requirements for the HGMP for the Baker Hatchery
- Nick Email Brett for interpretation of catch numbers to update the PSE data to reflect total fish returns
- Chuck *Update the ARG on the status of the GI*

BRCC / LICENSING UPDATE

PSE provides monthly email updates on Working Group activities to members of the BRCC. The fourth Wednesdays are reserved for BRCC conference calls as needed. They are anticipating in-person meetings semi-annually; October 27 is being held as a possible meeting date (location TBD). Cary solicited agenda items for this meeting.

SOCKEYE SMOLT PRODUCTION CAPACITY STUDY

Tim Sullivan (R2) provided an interim report on the sockeye smolt production capacity study. R2 started by reviewing and checking the euphotic zone depth to Secchi disk transparency relationship and found a strong relationship between Secchi disk transparency depth and euphotic zone depth for Lake Shannon, but only a weak relationship for Baker Lake. They also compared 10-meter tows with full-depth tows and found that the zooplankton abundance in 10-meter tows was not significantly less than in full-depth tows, suggesting that historic zooplankton samples adequately represented the biomass of zooplankton in the water column. They found that zooplankton densities in Baker Lake were generally lower and included a lower proportion of preferred prey items in 2009 than historical data indicated. Tim noted and Steve agreed that the 2010 sockeye smolt outmigration was the largest on record, which may have contributed to the reduced number of preferred prey items found in 2009.

R2 also studied the concentrations of nitrogen and phosphorous. Phosphorous concentrations were low, and the molar ratio of Total Nitrogen to Total Phosphorus indicated that phosphorous is the limiting nutrient in both reservoirs. They had difficulty replicating Dr. Mazumder's (2004) estimates of production capacity using the equations provided and Phil noted that translating biomass into an estimated number of smolts is tricky since a number of factors (ex: estimated average length and age-class composition) are involved. Selecting a target smolt length is required to convert estimates of production capacity from smolt biomass to smolt numbers. R2 is proposing a target smolt length of 100 mm and will provide estimates of sockeye smolt production in terms of 100 mm smolts to compare the results of various smolt production models.

Phil and Tim noted that they are in the process of double-checking their data and methodologies and proposed the following modification to the report schedule:

- Draft report October 1
- ARG 30-day review October 1-31
- Discuss at ARG conference call October 12
- Respond to ARG comments November 1-14
- Report complete November 15

DECISION #1: "Shall the deadline to complete the final report on the Sockeye Smolt Production Capacity Study be extended to November 15, 2010?"

Lyn confirmed that a quorum is present, noted that Arnie is standing in as Stan Walsh's proxy, and confirmed concurrence from attendees at Snoqualmie, Skagit/Burlington, and on the phone. The new schedule was approved via consensus.

SPAWNING BEACH UPDATE

Scott reported that substantial work at Spawning Beach 4 is complete. The sand is going into section A, new weirs have been installed, and the aprons are going in next. Kevin reports that the work is going along well. As of late last week, the work was paused to allow for paving around the hatchery and at other places where heavy trucks turn around and load / unload. Scott noted that these changes should further improve operations.

Scott reported that Greta (USFS) has put together a scope of work for the decommissioning of Spawning Beaches 1-3. PSE will use this scope of work as a conceptual basis to hire a consultant to do the work. Cary noted that PSE

is working closely with the USFS, which owns the land, as it implements these license-related activities. An approval from the USFS is required before decommissioning can occur. The USFS will be seeking input from the ARG. The scope of work will be discussed at the October 12th ARG conference call and circulated to the ARG in the next several weeks.

FISH OPERATIONS UPDATE

Doug and Scott reported that the modifications to the upstream fish trap that Nick outlined at the last ARG meeting have been substantially completed. There seems to be less jumping, and there seems to be better protection for those that do jump, although the effectiveness of measures to reduce jumping, will be known only when the coho migrant numbers increases to a level enabling behavioral observations. Doug says that crowder modifications also appear to have been successful in preventing fish from bypassing the system.

Doug reported that he has been trained on how to post files (trap spreadsheets, etc.) to PSE's website. PSE is still testing the upload / download process. Doug will continue to send out the daily emails until the website process is ready to go, and he will let folks know when PSE is ready to transition over to the new, web-based process.

Nick noted that primary representatives should have received the final emergency response plan for the upstream trap for 30-day review and comment, due October 11. This plan outlines the response to a variety of potential failures on the upstream trap. He noted that there have not been many changes since the preliminary plan was distributed last Spring.

FISH PASSAGE TECHNICAL WORKING GROUP

Nick reported that 11 contractors expressed interest in the Lower Baker FSC construction; PSE's Dan Koch interviewed them and narrowed the field to 4 who will be invited to submit bids. The idea is to mobilize on-site in early April 2011 and start construction shortly thereafter.

While incorporating lessons learned from the Upper Baker FSC, some of the design modifications proposed at the 30% design level are being pulled back based on the Value Engineering process. Cary noted that the proposed changes affected the operations side, not biological function and performance. The next FPTWG meetings are October 6 and December 1 at the NMFS Lacey office where the group will review the 90% and 100% design documents.

HATCHERY OPERATIONS UPDATE

Doug reported that Coho, Sockeye and Rainbow are currently at the hatchery. The crew are diligently working on clipping the Coho adipose fins, and will work on Sockeye next (they started with Coho since they are larger). They are hoping to be done with both by early October. Sockeye will be released in the fall, while retaining about 5k as needed for studies. Coho will be held till spring. About 20,000 Rainbow trout are in the new hatchery raceways.

They are purchasing a vacuum system for the ponds, as well as additional screens with appropriate hole sizes for the new raceways. The new hatchery is watered up and working well, so Coho and Sockeye will be moved over to the new hatchery as soon as the crews are done with ad-clipping.

Kevin reported that they are currently treating with formalin twice a week, will increase to three times a week starting next week. He noted that sockeye pre-spawn mortality has been good (low). They are taking their first Coho broodstock today. Spawning preparations are well underway and Kevin noted that the crews are excited about the work, the new facility, and are thinking it is going to be a good year.

Doug noted that they are also working to document operations at the new facility.

ANNUAL FISH PRODUCTION PLAN

Now that the hatchery management has been codified in the Baker license, PSE has asked the co-managers to document an annual fish production plan. Arnie sent an email to the fish co-managers August 12 outlining this request. Cary noted that at this point, work is proceeding in a status-quo mode; this is an opportunity to proactively direct work at the hatchery and is important to ensure that everyone involved has the same expectations. Cary clarified that PSE isn't asking for a harvest plan, and the group talked through what PSE needs from the co-

managers. With that clarification, the co-managers thought that they could use the future brood documents they already have and will provide a draft fish production plan to Arnie by the end of the month.

DEADLINES RELATIVE TO ARTICLES 108 & 109

The license calls for management plans for gravel and large woody debris to be completed within two years of license issuance. Both of these plans also call for a 60-day review period. Jacob noted that the plans are in development but are not yet done. Cary pointed out that activities related to both of these plans have a long time horizon (no activities due in the near future). He noted that PSE has been dedicating its resources to the articles that have been on more pressing timelines. PSE is requesting an extension of the timeline for submitting these plans to FERC. If approved today, the extension would provide an additional three and a half month months.

DECISION #2: “Shall the deadline to file Article 108 Baker River Gravel Management Plan, based on an alternative schedule, be extended to January 31, 2011?”

DECISION #3: “Shall the deadline to file Article 109 Large Woody Debris Management Plan, based on an alternative schedule, be extended to January 31, 2011?”

Lyn confirmed that a quorum is present, noted that Arnie is standing in as Stan Walsh’s proxy and Steve Fransen holds Lou Ellyn Jones’ proxy since she had to step off the call, and confirmed concurrence from attendees at Snoqualmie, Skagit/Burlington, and on the phone. The new schedules were approved via consensus.

ARTICLE 505 UPDATE

Jacob reported that the 505 plan and implementation document are complete; the plan will go to FERC this week. PSE is sending out a solicitation for projects. Pre-proposals are due in early October and will be distributed to the ARG and TRIG for consideration. Since this is the first time through the process, he anticipates there to be fine-tuning along the way, but is expecting the process to work well.

AQUATIC PLANS & REPORTS UPDATE

Arnie projected the spreadsheet showing the status of the ARG-related plans and reports currently underway. Several plans and reports are already complete; Article 101 plan is done, the 2009 annual report is due to the ARG for draft review in October and the 106 annual report is coming November 30. Cary noted that all the 2009 annual reports will be compiled and a summary document (with all the reports, comments and responses to comments) will be sent out via CD in January. There will be an agency review period and it will all go to FERC in April. Lorna asked for an update on the 107c teamlet’s work. Arnie reported that work continues on the analysis of historic floods and PSE is awaiting synthetic hydrographs from Northwest Hydraulic Consultants to proceed with the heart of the analysis. We’ll request Mark Killgore to provide a possible update for October’s ARG meeting.

Handouts:

- 9/14/10 Meeting Agenda, 8/10/10 Notes, ARG Schedule and Participation List

MEETING EVALUATION

What worked well:

- Aside from some early disconnection issues, technology worked well (nothing is as good as face-to-face, but this certainly “beats the long drive” and is a workable compromise)
- Humor

Do differently:

- Ask Mark Killgore to provide copies of 107(c) documents in advance of 10/12 call, if possible
- Looking forward to Doug’s video

DRAFT AGENDA 10/12/2010 CONFERENCE CALL

- Capacity Study Report
- Spawning Beaches 1-3 Decommissioning Scope of Work

- FPTWG update from 10/6 meeting
- 107(c) Update
- Sockeye spawner surveys discussion