



Baker River Project License Implementation **Aquatic Resources Group**

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

PRESENT

Arnie Aspelund, Doug Bruland, Nick Verretto, Cary Feldmann, Jacob Venard, and Scott Williams (PSE); Bob Helton (Citizen); Stan Walsh (SRSC); Steve Fransen (NMFS); Chuck Ebel (USACE); Greta Movassaghi and Jeremy Gilman (USFS); Brett Barkdull and Brock Applegate (WDFW); Lyn Wiltse (facilitator, PDSA Consulting).

DECISIONS – none today

ARG MEETING DATES: Assume Tuesdays, alternating in-person and phone/web meetings: Feb. 14 (conference call), Mar. 13 at Skagit Service Center, combined with ARHWG (ARG-TRIG 505) Meeting, Apr. 10 (FPTWG meeting at PSE LB Office in Concrete with field trip), Apr. 25 at Skagit Service Center, combined with BRCC Meeting, May 8, June 12, July 10, Aug. 14, Sept. 11, Oct. 9, Nov. 13, Dec. 11.

Website: You can find Baker River documents available to the resource groups such as resource group plans, reports, meeting notes, etc., via PSE.com:
<http://pse.com/aboutpse/HydroLicensing/Pages/Baker-River-Licensing.aspx>

ACTION ITEMS

- All Let Nick know if you plan to attend Apr. 10 field trips of gulper and LB FSC construction.
- Doug Share historical information on gulper.
- Jed Set up high density discussion with operators, PSE, Kevin, and others to ensure hatchery does not become overloaded.
- Cary Check with BRCC and ARG members to see if the April 25 date needs to be moved to accommodate people's schedules.

PREVIOUS - STILL RELEVANT - ACTION ITEMS

- Co-Mgrs Send a draft Fish Production Plan to Arnie ASAP (as per FPPF). (Progress has been made.)
- All Review / update the ARG representation list for your organization (ongoing)

ANNOUNCEMENTS

- Greta introduced Jeremy Gilman Mt Baker Dist. Fish biologist. Jeremy recently worked in Neah Bay with the Makah Tribe and also has experience in the Nooksack. Welcome Jeremy!
- The General Investigation has received additional funding and is going again.
- Chuck reported that no bull trout were found on redds in the drawdown zone. He will share the results of the study when they become available.
- Doug reported PSE will be interviewing for a new biotech (now called "fish and wildlife specialist") in early February to replace Gabe who has moved over to HDR.

HGMP

Steve reported that he spoke with the ESA coordinator at WDFW. They have 100 actions pending with the

HGMP. Baker is a tiny piece that is folded into a very large process. We are not working with listed species at the hatchery, so we are fine continuing as we are. He and WDFW reps will keep us posted as this continues.

BRCC UPDATE

Cary reported the TRIG was the only group that met in December. The fourth Wednesdays will continue to be reserved throughout 2012 for BRCC conference calls as needed. In-person meetings are scheduled semi-annually (spring and fall). We anticipate the next BRCC to be held jointly with the ARG meeting on April 25. Cary is investigating whether a different April date works better with participants' schedules.

DECOMMISSIONING OF SPAWNING BEACHES 1-3

Scott reported that an RFP for contractors to prepare the conceptual plan for the decommissioning of Spawning Beaches 1-3 has been sent out. No responses were received by the Nov. 18 due date. They now have 5 firms interested and are pursuing an informal RFP process in anticipation of having someone on board in the next few weeks. The contractor will prepare a conceptual plan based on the Statement of Work circulated by the USFS last spring. The plan will be prepared in a way that meets those requirements as well as those called out in the Settlement Agreement. The initial work product will be at a 30% design and will be presented to the ARG to review.

FISH PASSAGE

Nick provided an update of the ongoing construction of the Lower Baker Floating Surface Collector (FSC). The schedule remains the same with launch the end of this June and start-up on March 1, 2013. They have started work on the monorail structure and evaluation station field fabrication.

He walked us through some photos of the construction in progress, including:

- Floor of the holding pond
- Hawse pipes for ballast chains on the front end of the FSC
- Pre-fab building components being delivered to site
- Pumps being ready for shipment at Jesse Engineering in Tacoma
- NTS test-fit at Jesse Engineering (fitting it up). Note: No schedule change for the NTS.
- Framing for port side of the electrical building
- Hawse pipe assembly
- Fish-way super structure on which the decking will be placed.

Nick reviewed the document he had previously sent to all to review outlining plans for Lower Baker FSC evaluations:

- 2013: flow preference test by daily gate switching from 500-1,000 cfs, no tags
- 2014: performance evaluation at preferred flow based on 2013 results, with PIT tags
- 2015: performance evaluation at preferred flow based on 2013 and 2014 results with PIT tags

He reviewed spreadsheet data for the Lower Baker migration studies. We have freeze-branding study data on coho for 20 years. They were released at the upstream end of the reservoir (each 5K). We have had a range of 7.2 and 56.8 with a mean of 21.9% recovery on these coho releases. The acoustic study was conducted in 2009.

Nick explained the first year would be preference only and would mirror the 2010 study at Upper Baker. The new proposal is for additional release sites: upstream, and downstream or mid-way up the reservoir. He would like to bracket the releases somehow. He suggests tagging 1.5K of sockeye and coho at each release site (6K total). These discussions are on the agenda for the Fish Passage Technical Working Group.

Nick explained the next FPTWG agenda (Apr. 10) will include the following:

- Lower Baker FSC Construction update, 2012 releases, 2013 study plan and 2009 acoustic study report
- Upper Baker FSC 2011 study report, net replacement, ops coordination and sub-sampling plan, and stress relief ponds protocol
- Lower Baker gulper (last chance!) and FSC site visit

HATCHERY OPERATIONS

Fish Inventory:

Doug explained there are currently 11K sockeye at the hatchery. They are starting freeze branding today. We have one 5K fish group we will put into Baker Lake. The biological study calls for putting two groups of 1,500 pit-tagged fish into Lake Shannon next month. This will be preliminary baseline for recovery in the old gulper (if they go out in 2012). PSE may freeze-brand the extra sockeye and put them to Shannon as well to supplement the biological study.

There are nearly 60K coho. Two groups of 5K will be put into the upper and lower ends of Baker Lake. One group of 5k is to go to Shannon.

The rainbow trout are still in the circulars, and as the density increases, we will spread them out. The Upper Skagit Tribe will be taking some in April. The rest will go into Depression Lake. The total fish inventory (excluding adults) is at 90K.

The AI ponds and spawning beaches are empty now. Today is the final day of broodstock collection. We have 180K coho green eggs now. Steve suggested having a teamlet to reconsider the coho fry release into Shannon (how many and what fish will be in Shannon once the LB FSC is up and running). This should be addressed in the plan the co-managers are putting together.

Incubation worksheet for Sockeye broodyear 2011:

Green eggs: 5,283,605, Eyed eggs: 4,102,712 (rough estimate)

2 million will be released into Shannon and 3 million into Baker Lake. The plan is to not put fish in the AI ponds, but to hold them in the swim-up troughs for 2 weeks. We should be able to accommodate up to 10 million sockeye this way.

Coho Incubation:

Doug explained this is the last day of the coho spawning. He anticipates with the final take, reaching the program goal of 200,000. They are in the 20K incubation building. We will employ the same process: shock 'em and pick 'em. Estimated totals now are: 179,656 green eggs and 44,271 total eyed eggs. We are still taking every 5th fish for the head for the CWT.

Spawning Beaches and AI Ponds:

We reviewed Kevin's table showing pre-spawn mortality, etc. There is an indication of predation (more prevalent in spawning beaches than in AI ponds). PSE has two people doing separate counts. They also inspected the upstream fish trap to see if fish might be escaping from the holding ponds.

ARTICLE 505 AQUATIC RIPARIAN HABITAT WORKING GROUP

Jacob explained that the March 13 ARG meeting will be combined with an ARHWG meeting for formal proposals. The April 5 TRIG meeting will also be a joint meeting with the ARHWG where members will make the determination of which proposal(s) to fund.

PROGRESS ON PLANS AND REPORTS

Arnie reported that all the 2010 annual reports have been completed and will be rolled up into 102 Overall Report by end of January to the ARG. A draft plan for SA106 Flow Implementation is anticipated to be out by March and is due to FERC in October of this year. Distribution of drafts of the Downstream Fish Passage

Plans for Upper and Lower Baker FSCs is scheduled in October 2012. The first of the 2011 annual reports (the 108 Gravel article and 109 LWD reports) will be to the ARG also by the end of March.

107c Imminent Flood Drawdown: Steve mentioned that Lou Ellyn (USFWS) and he received an email from Chal Martin of Burlington wanting to talk about this topic. As a result, he will be meeting with Chal on the afternoon of the January 24. Chal will also be meeting with WDFW that morning on the same topic and intends also to meet with Ecology on this topic.

NEXT ARG MEETINGS

February 14: Due to a light schedule, we agreed that this meeting will be a conference call, rather than a face-to-face meeting. Arnie will send out an agenda in advance.

March 13: Agenda will include Update on Spawning Beach Decommissioning, Update on Lower Baker FSC construction, and preview of ARHWG proposals.

MEETING EVALUATION

- Phone and Web-Ex technology worked well
- Good attendance
- Happy to have Jeremy with us!
- Kept to schedule
- Out on time