

*Baker River Project License Implementation*

## **Aquatic Resources Group**

**Team Leader:** Arnie Aspelund (PSE), [arnie.aspelund@pse.com](mailto:arnie.aspelund@pse.com)

### **PRESENT**

Arnie Aspelund, Cary Feldmann, Irena Netik, Jacob Venard and Nick Verretto by phone, Doug Bruland, Jory Oppenheimer, Lynda Kupfer, and Lynn Thompson (PSE); Bob Helton (Citizen); Stan Walsh (SRSC); Robert Franklin (Sauk-Suaittle); Steve Fransen (NMFS); Dan Berentson and Kara Symonds (Skagit County); Greta Movassaghi by phone, and Jeremy Gilman (USFS); Jed Varney, Brett Barkdull, Kevin Kurras and Brock Applegate (WDFW); Lyn Wiltse and Jamie Riche (facilitators, PDSA).

**DECISIONS** – none today.

### **HOT TOPICS**

None today.

**ARG MEETING DATES:** Assume Tuesdays, alternating in-person and phone/web meetings: July 10, Aug. 14, Sept. 11, Oct. 9, Nov. 13, Dec. 11. July will be in-person due to planned agenda content. August may become a conference call.

**Technical Working Group:** June 26, 9:30 am – 3 pm, Spawning Beach Decommissioning (Burlington)

**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>

### **ANNOUNCEMENTS / SAFETY MINUTE**

No announcements. Safety moment was provided by Lyn, Lynn and Arnie.

### **NOTES**

Changes to the notes were reviewed. Meeting notes of the May 8 meeting were approved. They will be posted on the Baker website.

### **ACTION ITEMS**

- All Send any comments on the spawning beach decommissioning to PSE's project manager, Lynn, at [Lynn.Thompson@pse.com](mailto:Lynn.Thompson@pse.com) or 425.456.2801.
- Jory Confirm the difference between the old and new gages for purposes of the Flow Implementation Plan.
- Jed Work with Craig Olsen to provide a report of IHN sampling process and this year's outbreak.
- Stan Coordinate co-managers to update the Adult Trap Protocol for sea-run cutthroat.

### **PREVIOUS - STILL RELEVANT - ACTION ITEMS**

- Co-Mgrs Send a draft Fish Production Plan to Arnie ASAP, as per FPDF. (Co-managers report they continue to make progress; discussions taking place, report in the works.)

- All      Review / update the ARG representation list for your organization (ongoing).

### **UPDATE ON PREVIOUS ACTION ITEMS**

Dan B. reported that there was a conference call between Skagit County, the USACE, and PSE last week for the technical folks to talk about possible storage options and costs. At this time, the county is waiting to hear back from the Corps.

PSE sent out finalized report on repairs made and lessons learned for Upstream Fish Trap.

PSE is updating a single schedule that spans all Baker License Implementation Resource Groups.

### **BRCC UPDATE**

The fourth Wednesdays will continue to be reserved for BRCC conference calls as needed. In-person meetings are scheduled semi-annually (spring and fall). The most recent BRCC meeting was May 30 in Burlington; Cary gave a brief update on resource actions since that meeting.

The CRAG is providing cultural / historical reviews of acquired properties and is working on a Memorandum of Understanding (MOU) outlining mitigation for projects that impact cultural / historic resources (like the old spawning beaches and old floating surface collector). The TRIG has been moving along, developing management plans for acquired properties. The Recreation Group will be meeting next week to work on the Law Enforcement Plan for this summer. Additionally, all the major construction projects are clicking along on schedule and on budget. PSE will be coming back to this group to share the commissioning plan for the new powerhouse, which should come online in late summer or early fall of 2013.

### **OPERATIONS UPDATE – JUVENILE OUTMIGRATION**

Doug B. walked the group through the spreadsheet showing the sampling of the Upper Baker juvenile fish trap data. The highest daily total was 94,244, with a sampling rate of 28% that day, organized in groups of 6k sampled at multiple times throughout the day. (For all but that day and one other, the sampling rate was 100%) Most of them are sockeye. Doug noted that this year's total is on pace to match or exceed our 'big year' of 2010, and operations are going well.

Doug directed attendees' attention to the numbers for the Coho and Sockeye marked groups. We have 54% recovered of the Left N freezebrand group (blue tarp release) and have 78% recovered for the Right N group (released at west pass dyke near the boat launch), 69% recovered for sockeye freezebrand group (blue tarp release), 50% recovered for sockeye ad-clip group released last fall (anything over 25% is considered a good return for this group). Doug noted that we typically do get good survival in this fall-release group.

At Lower Baker, Doug reported that the net went in easier than usual thanks to the lower water level in the reservoir this year. He noted that this is the last year with the existing gulper. Arnie pointed out that sockeye fry were captured, apparently from releases at the hatchery and demonstrate that fry distributed the length of the Shannon reservoir. There were interesting questions about the data that need to be resolved. Expect more details at the July meeting. In short, it has been a good season.

### **LOWER BAKER FSC CONSTRUCTION UPDATE**

Nick called in to give an update on the LB FSC construction. The construction is on schedule; Nick walked the group through photos. The FSC will be launched over two days, starting July 23<sup>rd</sup>; the NTS will take another two days to launch. It then takes another couple of weeks to fine tune the deployment. It should be all set up by mid-August.

The screens balancing plan should be available any day. That work will be conducted in November 2012. Nick will send that out only to those involved in the hydraulic balancing plan development. Others will be able to review the plan when the post-construction evaluation plan (PCEP) is submitted for 30-day review and comment. The PCEP will also include the first-year (2013) FSC evaluation plan. Jacob Venard has taken over responsibility for testing the Lower Baker FSC, and will be submitting the 2013 plan for preliminary comments prior to the formal post-construction evaluation plan review process.

## **SPAWNING BEACH DECOMMISSIONING UPDATE**

The group welcomed Lynn Thompson, PSE Project Manager, to her first in-person meeting with the ARG. She reported on the work to date on the decommissioning project. The contractor, Anchor QEA has provided four draft scenarios, representing a range of management approaches and channel modification. All of the scenarios entail the removal of all man-made structures. The scenarios differ mainly in the level of human engineering applied vs. planning for natural processes. The timeline is to complete the design work so construction can commence in 2013. Cary pointed out that the construction timing will need to be very specific since there are eagles, owls and murrelets (oh my!) to coordinate the work around.

Jed emphasized the importance of having multiple release sites available for sockeye fry; his biggest concern is that there be some place for fry dispersal if needed as a back-up when the blue tarp site is dewatered or otherwise not workable. Lynn pointed out that PSE will not be maintaining the road to beach three, and Jed confirmed that – once the USFS road work is complete – there will still be other access near the bridge. Jeremy noted that the road will be closed soon (June 14) for that construction to start.

Jed offered to take Lynn on a field trip to describe the interests related to fry release sites. Robert was invited to join them. Anchor QEA will be present at the working group meeting June 26 to discuss the technical merits of the draft scenarios. Please send any questions or comments about the decommissioning process or the draft plans to Lynn at [Lynn.Thompson@pse.com](mailto:Lynn.Thompson@pse.com) or 425.456.2801.

## **FLOW IMPLEMENTATION PLAN (FIP)**

Jory reminded attendees that SA Article 106 is about balancing the flow and reservoir management related to non-generation interests. 106(b) calls for a plan within four years of the license, which is this October. The FIP includes four elements: construction schedule, implementation of Aquatics Table 1 or 2, process for modifying Aquatics Table 1, and process for modification of FIP.

Construction of the new Powerhouse began in December 2010 and is required to be online by October 2014. Jory reported that PSE is currently about a year ahead of schedule on this project. Once Powerhouse Unit 4 is online, PSE will no longer be operating under the Interim Protection Plan and Interim Operations outlined in 106(a) and will instead be operating under Aquatics Table 1 per 106(c).

Jory projected Aquatics Table 1 and then walked the group through a PowerPoint that highlighted elements of the proposed FIP, including constraints on reservoir elevations, instream flows, and down-ramping rates, equipment limitations, temporary exemptions, monitoring, reporting, and proposed processes for modifications. He noted that any ARG member can request modifications through the ARG and the SA 601 decision-making process. Modifications could not result in additional costs to PSE or negatively impact generation or capacity, and – depending on the proposed modification – may require amending the SA, FERC License, WQC, Section 4(e) conditions, and / or ESA consultation.

He showed a map of the USGS gage locations at Baker Lake, Lake Shannon, Baker River and the Skagit River. Jory noted that PSE proposes to use its new penstock flow meters for monitoring and reporting compliance because they are more accurate than the Baker River USGS gage and resolve the lag created by measuring flow downstream. As the units are commissioned, PSE proposes a study to develop relationships between the flow from the penstock flow meters and the stage readings at the Baker River USGS gage.

The annual reporting period is aligned with each water year (Oct. 1 – Sept. 30). In addition to the annual Flow Implementation Report (FIR), PSE is required to report instream flow and downramp rate excursions within 24 hours of any incident, with a more detailed follow-up report within two weeks.

Next Steps: Please submit initial comments on the preliminary draft FIP by July 26. PSE will submit a draft FIP for formal ARG review August 16, with formal comments due by September 21 and PSE will submit the revised (final) draft to FERC October 17.

There was some discussion about the gages, flow rates and generation control systems. Irena emphasized that PSE welcomes your questions and insights. These are complicated, detailed processes and they want to be sure they aren't missing anything.

## **BAKER FISH HATCHERY OPERATIONS**

Kevin and Doug walked the group through the final incubation sheet. After sampling 5 times for IHN, Kevin reports that they will end up with enough viable, IHN-free fry: 2 million fry went into Shannon; 2.4 million fry went into Baker Lake, 155K went into the rearing program and will be held for a later release. 1 million fry from Spawning Beach 4 were released into Baker Lake. Kevin has good confidence in the hopper counter. They are in the midst of their first annual hatchery and spawning beach shut-down for maintenance; he and Doug have been updating the Standard Operating Procedures (SOPs) accordingly to improve the process for future years. They conducted the dye test for flow distribution yesterday and confirmed that everything is working perfectly (as expected). Kevin reported that Brett and the co-managers have supplied them with the loading protocol.

### Artificial Incubation Numbers (final numbers by Kurras):

Release to Baker Lake: 2,400,239

Release to Shannon: 2,000,010

Delayed rearing: 155,610

### Spawning Beach Fry (final numbers by Kurras):

Release to Baker Lake: 1,160,105

(about 20K residual fry into Shannon following beach emptying and shutdown)

Doug reported that outdoor rearing raceway 1 (RR1) has 154,716 Sockeye, which are still clear, with mortality dropping and Doug says they are hopeful that this group will not have any IHN problems. 116,000 Coho fry went into Shannon; and 65,336 Coho fry remain (RR3) and will be released in Spring 2013.

Steve F. noted that these numbers (2 million sockeye, plus 116,000 coho) represent the largest stocking of Lake Shannon to date.

Kevin said that none of the smolts show any incidence of IHN (evidence of good protocols). Jed noted that they will maintain elevated IHN sampling protocols awhile longer since IHN can take 4-6 weeks or more to become detectable. As soon as they are done sampling, he and Craig will compile a report for the ARG. If there is another outbreak in future, he suggested that they may want to consider running ICR tests (a more sensitive test for viral DNA markers).

## **ADULT SOCKEYE FORECASTS**

Doug reports that there are no returning sockeye into the upstream trap, yet. He reports that his team is ready and waiting for their arrival, though. They are expected any day.

The Adult Fish Trap protocol (provided by the co-managers) calls for sea-run cutthroat to be put into Baker Lake. Doug's crew had a question about what constitutes sea-run cutthroat. There was some discussion, with a general agreement that assessors know it when they see it, based generally on size. There was also a question about what should be done with them when they are found. Stan suggested putting cutthroats back into the river and he will coordinate the co-managers to update the protocol so PSE has a written confirmation of the updated protocol.

## **PLANS AND REPORTS**

Arnie shared the "Baker Aquatic Reports and Plans Status" document, highlighting upcoming deadlines. Jacob shared updates on the following:

- Article 108: Baker River Gravel Management Plan
  - This Plan for this went out for review in March and received no comments. Monitoring work will begin this low-flow season (late summer, early fall).
- Article 109: Large Woody Debris Management Plan
  - PSE is still in conversations with the owner of the land targeted for wood storage. Once the site is resolved, they will distribute a methods and procedures document for ARG review.

- Article 110: Reservoir Shoreline Erosion Control Management Plan
  - They are at the 60% design level on the erosion control work associated with this Plan.
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### **ARTICLE 505 UPDATE**

The ARG and TRIG approved three projects for 505 funding and Jacob reported that they are in the process of getting contracts in place for the work.

Jacob also reported that he has asked for feedback from ARG and TRIG members to support process improvement in advance of the next funding cycle. No comments have been received to date; please provide input by this Friday. Stan pointed out that the ARG and TRIG have about \$2 million to spend over the next five years, some of which is specifically targeted for acquisition. He noted that the article is intentionally open-ended, which is great for allowing current ARG / TRIG members to determine the best use of the resources. It also creates challenges for potential project sponsors. He suggested that 505 ARHWG group may want to provide more specifics about the types of projects that would be viewed most favorably. Robert asked how criticism from project sponsors in the last round will be incorporated; Jacob confirmed that those comments will be brought forward and included with other feedback.

### **PARKING LOT**

- Sampling rate for Baker Hatchery Coho needs to be addressed.
- PSE will propose a sub-sampling protocol.
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### **MEETING EVALUATION**

- Got out early
- Great discussions, focus
- No cookies.
- **Note:** the July meeting will also be an in-person meeting in Burlington