



Baker River Project License Implementation

**Aquatic Resource Implementation Group
Final Meeting Notes**

July 13, 2010 ~ 9:00 am – 10:40 am
Conference Call

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

ATTENDEES

Cary Feldmann, Kim Lane, Arnie Aspelund, Mark Killgore, Doug Bruland, and Nick Verretto (PSE); Stan Walsh (SRSC); Lorna Ellestad (Skagit Co.); Phil Hilgert (R2 Resource Consultants); Jay Smith (Tetra Tech), Lyn Wiltse (PDSA Consulting)

DECISIONS

- None today

2010 ARG MEETINGS: Aug. 10 (9-3pm meeting at Snoqualmie Ops Center), Sept. 14 (9-11am conference call), Oct. 12 (9-3pm meeting at Snoqualmie Ops Center), Nov. 9 (9-11am conference call), Dec. 14 (9-3pm meeting at Snoqualmie Ops Center)

NEXT FPTWG MEETINGS: August 24 at Sea-Tac. Note: the July 14 meeting was canceled for lack of content. PSE is still conducting a review of value engineering session concepts, as well as preparing a design package more similar to the Upper Baker FSC than had originally been planned.

NEW ACTION ITEMS

- All Let Arnie know if you have people in your organization who are joining the Baker license implementation process who would benefit from a walk-through of the license this Fall.
- Arnie Attach updated 107 (c) draft PowerPoint presentation to these notes for distribution to the ARG.
- Cary Send the spreadsheet showing trend analysis of 20 years adult sockeye return data to Stan, Jon-Paul, Rebecca, and Bret ASAP.
- Steve Before the July 13 ARG conference call, check with the co-managers and PSE about requirements for the HGMP for the Baker Hatchery. (Note: Doug gave relevant coho data to Kevin Kurras.)
- Kim See that ARG members are kept informed re decommissioning of Spawning Beaches 1, 2, 3.
- Arnie Send out draft August 10 ARG Meeting Agenda by July 27, 2010.

PREVIOUS - STILL RELEVANT - ACTION ITEMS

- All Let Arnie know if you would like a tour of the new watered-up facilities.
- All Let Kim know if you want additional information on the new Baker powerhouse plans or proposed license amendment.
- Jon-Paul/Jed Reconvene teamlet to address sockeye fry release strategies (to begin February of 2011).
- Kim Send information about the Flow Continuation Study to Chuck at the Corps.
- All Review the ARG representation list for your organization. This directs where reports are sent for official review.

BRCC / LICENSING UPDATE

The BRCC last met on the heels of the ARG meeting last month at the Baker Lake Lodge on June 8. The meeting was followed by a tour of the FSC, new hatchery, and adult fish trap. Cary will send out a monthly update of various resource group implementation activities by the end of this month. The next BRCC meeting is scheduled for October 27 at a location to be determined.

We will start checking with folks at each of the resource groups and the BRCC to see if a license walk-through this Fall is warranted. The aim of this would be to bring new members up to speed on the content of the license and to review its terms and conducts for existing members who want a refresher.

BAKER ADULT FISH TRAP UPDATE

Doug reported that July 11 and July 12 over 3K (1,500 each day) sockeye returned to the trap and there are between 600 and 1000 in the trap today. His crew is working the trap all day today. They have received 6785 sockeye so far with only 3 morts. Three of the four AI ponds are full to the allocation goal set this year (950 fish to each of the 4 ponds). It was decided not to top off the last brood stock pond (AI 4) until next week. There are 100 in that pond currently. Doug reported that Brett has requested that pond to be filled by next Friday, July 23.

Cary showed a spreadsheet that showed that if you take the last 20 years, 10% of the run has been coming in consistently later and later each year. According to the trend defined by past data, we should be at 10% of the run on 7/14 this year. Cary noted that when you look at the trend the midpoint of this year's run is projected out to 7/24. This shows we may still be on the front end of the run. If the run materializes according to these projections, there could be a need to relocate some of the fish from the ponds. The cumulative average for all the years is 5.3% juvenile to adult survival. 5% projects out to 12-18K adults coming back this year. We may well be heavily loaded on the front end of the run. Since the ponds are segregated by date, we may want to swap some out to make more room for later. Cary will send the spreadsheet to Stan, Jon-Paul, Rebecca, and Brett for analysis and recommendations.

Doug announced we still have 800 fish to put into the last raceway. We will do this by July 23rd. It would also be possible to hold off completely this week and start metering them into the pond next week so full by July 23. The co-managers will dictate the course of action.

The trap is operating well. They are continuing to work a punch list of items to be addressed. Each day they are seeing the fish jump more than anticipated. They are installing some netting to deal with this around the holding raceways to keep them from jumping out onto the walkway around the raceway. They will also be adding screens to address this issue. Doug reported that, for the most part, the trap is working really well – beyond expectations! The fish meter themselves through so there is much less handling than before. The lock control is really nice. The hopper works great. The transition and bail works really well. Can adjust the flow of the false weir to get the fish to take their turn and the sockeye come down the flume one at a time.

HATCHERY UPDATE

Doug reported that the hatchery is now operational. They are working through the punch list for this project as well. By and large it is complete. No juvenile fish are there yet. The series of 16' circulars are being prepared to receive 20K rainbow trout tomorrow – they will put them in one of the circulars. The new fish truck should be able to back up to the circular and release them directly into the circular (raceway is a back-up if there is problem loading them into the circular).

They plan to move coho and sockeye juveniles from old rearing facilities to the new hatchery by end of July.

Upper Baker FSC

The FSC is still in operation. Doug announced we are now down to between 100 and 200 fish/day. The biological study is complete so there is no more switching between 500 and 1000 cfs entrance flow. We will continue to operate the trap through the end of the month. There doesn't seem to be any reason to extend operation of the trap past the end of July, 2010. At that time they will perform annual maintenance and prep for the winter season.

There are plans to shut down the Lower Baker gulper and do guide net repair and other winter preparations.

Total number (all species) of outmigration from Upper Baker is over 1/2 million!
Coho juvenile count is at 71K.

Marked fish recovery at the Lower Baker gulper is 8.1%. Doug reported they haven't caught many fish this year. This is evidence that the guide nets are working well at Upper Baker. The total coho outmigration is about 86K (marked and unmarked combined).

Baker Hatchery Fish Inventory:

- Sockeye fry – 65,549
- Coho fry - 67,914

Doug announced they will start controlling fungus with Formalin on sockeye broodstock this week.

DECOMMISSIONING OF SPAWNING BEACHES 1, 2, and 3

Greta Movassaghi sent Arnie an email re: decommissioning process for Spawning Beaches 1, 2, and 3. This project is to be completed by the end of 2013. Kim reported that Pam Garland (team lead for the Recreation and Aesthetics Resource Group) is setting up a meeting at the site to begin the process of scoping the work for this project. Scott Williams will be Project Manager for this. Kim will see that ARG members are kept involved.

ARTICLE 107(c)

Jay Smith of Tetra Tech reviewed the objectives; the tools and data; and summarized work completed to date for the imminent flood drawdown study and described some next steps.

Objectives: Tetra Tech will work with PSE to develop tools for feasibility evaluation. This includes:

- Developing approach for and conducting a hydrologic / reservoir operations analysis
 - Synthesized and historical hydrographs will be used
 - Hydrologic data record will be used
- Consulting with the ARG on testing potential protocols

Key questions the study is intended to address:

- Is there a threshold event(s) for which imminent flood drawdown could moderate flood impacts?
- Is the threshold event(s) seasonally dependent?
- Which NWS river forecast station should be used to monitor for imminent flood? (answered once the analysis is completed)
- How many hours / days before forecasted Skagit River flood stage could imminent drawdown start?

Completed tasks to date:

- Data Collection: Hydrologic data (flow duration curves) and historical hydrographs
- Model development: Reservoir drawdown model and reservoir operations model

Next Steps:

- Obtain final FIS hydrographs from USACE Seattle District
- Conduct bounding condition reservoir operation modeling for each analytical period
- Determine operating elevations at the 2 projects that will allow for imminent flood drawdown to be attained within the Lower Baker flow constraints. This will be conducted for each analytical period and for specific forecast period(s)

There will be final report and recommendation. This draft presentation will be sent out to ARG members along with the draft meeting notes.

OTHER LICENSE IMPLEMENTATION ACTIVITIES / REPORTS

- Article 103: Upstream Passage and 104 Connectivity draft article report is due Aug. 31, 2010 to the ARG for 30 day review.
- Article 110: Shoreline Erosion draft article report is out for 30 day review with comments due July 30.
- Article 505: ARHWG met after the TRIG meeting on July 1 – the notes are out for review.
- Article 101 (c) Reservoir Sockeye Capacity Study will be completed Oct 1, 2010. Look for the draft report to be out in late August for 30 day review.

HANDOUTS

- 7/13/10 Meeting Agenda, 6/8/10 Notes, ARG Meeting Schedule and Participation List
- BRCC meeting notes
- UB and LB Juvenile fish trap data
- Baker Adult Fish trap return data
- Trend analysis of 20 years adult sockeye return data
- Recent photos of adult fish trap operation
- Baker River Hatchery Fish Inventory
- Imminent Flood Analysis Article 107(c) Presentation – Tetra Tech
- Greta Movassaghi's memo dated July 13, 2010