



Baker River Project License Implementation

**Aquatic Resources Group
Final Conference Call Notes**

January 11, 2011 ~ 9:00 a.m. - 11:00 a.m.
with WebEx

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

PRESENT

Arnie Aspelund, Doug Bruland, John Chandler, Cary Feldmann, and Mark Killgore (PSE); Steve Fransen (NMFS); Hannah Hadley (USACE); Kara Symonds and Lorna Ellestad (Skagit County), Greta Movassaghi (USFS), Tom Van Gelder (Trout Unlimited); Bob Helton (Citizen); Kevin Kurras (WDFW); Stan Walsh (SRSC); Ashley Rawhouser (NPS); Phil Hilgert (R2), Jay Smith (Tetra Tech), Chal Martin (Burlington), and Lyn Wiltse (PDSA Consulting)

DECISIONS – none today

2011 ARG MEETING DATES: Feb. 8 Conf. Call (9-11 am); Mar. 8 Mtg. (9-3 pm with regular ARG meeting followed by Beach 1-3 decommissioning workshop with the CRAG); Apr. 12 Mtg. (9-3 pm); May 10 Conf. Call (9-11 am); June 14 Mtg. (9-3 pm); July 12 Conf. Call (9-11 am); Aug. 9 Mtg. (9-3 pm); Sept. 13 Conf. Call (9-11 am); Oct. 11 Mtg. (9-3 pm); Nov. 8 Conf. Call (9-11 am); and Dec. 13 Mtg. (9-3 pm).

FPTWG: January 19 at Lacey, w/ WebEx and Conference Call capability

ACTION ITEMS

- Jacob By Jan. 14 send out email to ARG and TRIG members asking for suggestions for protocols pertaining to the distribution of stockpiled LWD.
- Arnie Send out Tetra Tech PowerPoint presentation on Imminent Flood Drawdown with ARG draft meeting notes. Include Hannah Hadley from the Corps and Chal Martin from Burlington.
- All Note that March 8 will be a face-to-face meeting at the PSE Skagit office in Burlington instead of being a conference call as previously scheduled. It will include an afternoon workshop with CRAG members re. beach decommissioning.

PREVIOUS - STILL RELEVANT - ACTION ITEMS

- Arnie Check with Nathanael re. providing an update on Article 104: Connectivity between Lake Shannon and Baker Lake at February and/or March ARG meetings.
- Chuck Ask Linda Smith to give update on GI progress at upcoming ARG meeting.
- Mark Add links to source data in future flood forecast advisories (in process).
- Steve Identify the Olympia contact to coordinate re. HGMP with WDFW (in process).
- Co-Mgrs Send a draft Fish Production Plan to Arnie ASAP (as per FPPF).
- All Review / update the ARG representation list for your organization (ongoing).
- Arnie Add an IPP / 106 refresher to the July, 2011 ARG meeting agenda.

REPORT ON PAST ACTION ITEM

- Doug reported that PSE will continue this year with freeze branding and pit tag study protocols as they have done in the past.

BRCC UPDATE

Cary reported that the BRCC has not met since our last meeting and he will be sending out a summary of license implementation working groups before the end of January. The fourth Wednesdays will continue to be reserved throughout 2011 for BRCC conference calls as needed. They are anticipating in-person meetings semi-annually (spring and fall).

FISH PASSAGE TECHNICAL WORKING GROUP UPDATE

Arnie reported that PSE is currently interviewing construction contractors for the Lower Baker FSC. Interviews should be complete by Jan. 14. FPTWG members will receive the third and final design submittal (CD and hard copy) by January 13 in preparation for the next FPTWG meeting in Lacey on Jan. 19. ARG representatives will receive a CD of the design submittal.

ARTICLE 108 (Gravel Management)

Jacob noted appreciation for comments received. Comments were received from four people. Phil walked us through each comment and explained how each had been addressed / incorporated into the final plan. The plan will be submitted to FERC by the end of this month (January). Monitoring is to begin within one year of FERC approval of plan. FERC typically takes about three months to approve the plan. Stan noted that SRSC looked forward to being involved in development of the implementation details.

ARTICLE 109 (Large Woody Debris)

Phil reported that they received responses from five people. He walked through the comments and responses. He explained that this article commits PSE to collecting, transporting, and stockpiling (in a secure manner and location) the wood. Subsequent use of the wood (prioritization, etc.) is beyond the scope of the article so it is not included in the plan. Use of the stockpiled wood will be as directed by the ARG and the TRIG.

The ARG in coordination with the TRIG will develop an implementation plan / protocol for how the wood is prioritized and utilized for projects after it has been stockpiled. By the end of the week Jacob will request suggestions from ARG and TRIG members on what should be included in a “straw person” protocol that he will draft for ARG and TRIG review.

Phil further explained that PSE is committed to transport and stockpile certain numbers of pieces of wood. In response to a request from Jon-Paul, PSE will collect and transport LWD if it is within 2 feet of full pool if the wood can be moved without undue impacts to the shoreline. If there is a specific piece of wood the ARG and TRIG prefer be left in place for environmental reasons (e.g., bird nesting habitat), then that piece would be marked and left in place. It would not count as accumulated wood for lake storage.

Greta noted that the Forest Service doesn't believe that all wood remaining in the reservoir is advantageous from an environmental standpoint. She pointed out that the FS does not have the ability to clear shorelines of strategic recreation sites (e.g., boat ramp and swimming beaches) and would like to work with PSE to manage wood removal at those areas. Cary explained that in the past there was wholesale removal of wood by project personnel that they considered to be deleterious to the project, but that process may not continue in the future. There will be further offline discussions between PSE and the FS on this issue as it is outside the scope of this license article and is separate from the plan being submitted to FERC.

FISH OPERATIONS UPDATE

Sockeye Incubation: Kevin reported that are currently picking eggs. It looks like the loss is fairly good (low). The prior green egg estimate ended up being a little light. The estimated total green eggs is 5,170,032 and the estimated total eyed eggs is 2,304,424. Kevin also explained that they ended up surplus about 18 females after they did not ripen.

Coho Incubation: Doug explained they have completed the spawning of coho – new facility is working out well. The coho eggs are now in the 20K incubation room. They collected an estimated total of 318,667 green eggs. The total estimated eyed eggs are 110,564. Doug reported they ended up with low pre-spawn mortality. They have stopped taking brood stock. They are currently conducting shocking and picking of eggs every week as they are doing with sockeye.

Fry hatching will occur shortly. There will be future holding and releasing for fry in the reservoir for sockeye and coho. Unless PSE receives direction to do otherwise from the co-managers, PSE will continue with status quo – meaning coho fry will be placed in Lake Shannon, sockeye fry in Baker Lake.

Fish Inventory: Juvenile sockeye and coho are still being held in raceways 1 and 2 (not part of the new hatchery as some final punch list items are still being completed and a proposal is being brought forward for prescreening water at the intake).

Sockeye and coho study fish are being pit tagged and held in the new hatchery. On March 9 they will be moved to net pens. They will then be released into Baker Lake as part of the study. They anticipate starting freeze branding by end of January (in keeping with protocols of the past). There will likely be 2 groups of 5K coho in Baker Lake (one in the upper end and the other in the lower end) and one group of 5K in Lake Shannon. A sockeye group of 5K would be released at Blue Tarp in Baker Lake. PSE looks forward to hearing from the co-managers the value of and expectation for conducting freeze branding study for this year.

IMMINENT FLOOD ANALYSIS (Article 107 (c))

Mark introduced Jay Smith of Tetra Tech and reminded all that the aim of this presentation is to roll out preliminary methodology used to simulate Article 107(c) conditions. The report is due to FERC in October of this year. It will describe operational changes as a result of ongoing consultation with the ARG, Skagit County, and the USACE. This may include additional reservoir drawdown below the maximum established flood pool (711.57 from Nov. 15 – Mar 1). Jay's methodology used Article 107 and the Corps' Water Control Manual as a framework within which he initiated his modeling. Article 106 also has environmental constraints that are being addressed in this model.

Jay walked us through the PowerPoint that included the objectives of the study, general approach, models used in the study, and the preliminary analysis results for the December Post IPP period.

He emphasized that the timeframe for the forecast is days (not weeks or months) prior to a high water event. Reservoir elevation targets for Baker Lake 704.92 and for Lake Shannon 423.66 ft. The drawdown modeling and flood operation modeling were consistent with the Water Control Manual, license articles 106 and 107 and other associated alternative operations. The analysis evaluates the flood benefits of reduced peaks on Skagit River.

Analysis assumptions include:

- Drawdown Analysis
 - Reservoir elevations at start of drawdown = rule curve elevations
 - 4 day duration drawdown
 - 18-hour period on rising limb where hydrologic conditions would allow lifting of constraints during the “constrained” drawdown scenario
 - Assume *dry* (75% exceedance), *average* (50% exceedance) and *wet* (25% exceedance) antecedent conditions
- Flood Analysis
 - Operation of Baker Project as per Water Control Manual and License

Next Steps:

- Conduct analyses for remaining periods for Post IPP
- Present results to ARG at March meeting
- Conduct analysis for all periods of IPP
- Present results to ARG at April or May meeting

DRAFT AGENDA TOPICS FOR FEBRUARY 8 MEETING

- Update on Connectivity article (Nathanael Overman)
- FPTWG Update (Nick Verretto)
- Fish Ops Updates (Doug Bruland and Kevin Kurras)

DRAFT AGENDA TOPICS FOR MARCH 8 MEETING (previously scheduled as conference call)

- Update on Connectivity article (Nathanael Overman)

- 107(c) update (Mark Killgore)
- FPTWG Update (Nick Verretto)
- Fish Ops Updates (Doug Bruland and Kevin Kurras)
- Spawning Beaches 1-3 decommissioning (Scott Williams - Workshop with CRAG)

Well Done

- Great attendance
- Excellent presentation (though a bit rushed) on Imminent Flood Analysis by Jay
- Web-Ex worked well
- Speaker phone volume was good

Do Differently

- Schedule 3 hour long meeting instead of 2 hours when planning to have a lengthy presentation
- Consider putting long presentations at start of the meeting instead of at the end
- Ran an hour late (see first 2 bullets as ways to address this in future)
- If at all possible send presentations out for preview prior to presentation (at least a day ahead and preferably a week)
- Be mindful of protocol for review of PowerPoint presentation and whether previously distributed to members and if the version being presented has been updated from what has been distributed