June 18, 2013 / 9:00 – Noon / Skagit Service Center, Burlington, WA 98233



Baker River Project License Implementation

Recreation Resource Group Meeting Final Meeting Notes

June 18, 2013, 9:00 am – Noon

Team Leader: Pam Garland, PSE (pamela.garland@pse.com)

Facilitator: Lyn Wiltse: 425-890-3613 (call if running late or if your plans to attend the meeting change)

Website: http://pse.com/aboutpse/HydroLicensing/Pages/Baker-River-Licensing.aspx

PRESENT

Pam Garland, Jory Oppenheimer, Tom Flynn, Elizabeth Dubreuil, and Haley Edwards (by phone), Ann Dunphy, Debra Paul, and Carol Gladsjo (USFS); and Lyn Wiltse, facilitator and note taker (PDSA Consulting).

DECISION: None today.

FUTURE RRG MEETING DATES

9:00 – 11:00 am on the third Tuesday of each month is a placeholder for potential meetings or conference calls.

NEXT SCHEDULED IN-PERSON MEETING

Oct. 15, 2013 (RRG in the AM and LEP in the PM) at the PSE Skagit Office in Burlington.

UPCOMING EVENTS

- June 27: Cultural Resources Training from 8:00-4:00 at the PSE Skagit Office in Burlington. Note: There are approximately 5 spaces left open. Make request by Friday, June 21 to reserve any additional spots for your organization.
- July 10: Open day of Sockeye Season (WFDW is predicting a smaller fishery of 25K instead of last year's 47K).
- July 12: Baker Celebration hosted by PSE CEO Kimberly Harris
- July 20: Community event with tours

NEW ACTION ITEMS

- Pam Send out email invitation for June 27 Cultural Resources Training on by June 21.
- Pam Send Baker Rec photos to Elizabeth by February 19, end of day. (*Done!*)
- Rich Check with fish creel staff to provide Ann with a copy of trailer counts for Baker Lake 2012 fishing season. USFS would also appreciate a summary of fishing success data (creel sample), if available.
- Ann Update USFS RAM and I&E Plan and send out for all to consider in advance of the October 15 RRG meeting.

- Elizabeth At August CRAG meeting invite CRAG members to attend RRG meeting on October 15 for USFS presentation of Baker Lake I&E Plan.
- Pam and Ann Work on revising the draft SA 312, Developed Recreation and Monitoring Funding plan, to meet the October submittal date or propose an alternative schedule for this plan.
- Tom Oversee additional analysis and coordinate the additional communication on the proposed change to Aquatics Table 1.

ONGOING ACTION ITEMS

- All In addition to the above dates, please continue to reserve the third Tuesday of each month from 9:00-11:00am for possible additional meetings or conference calls. Pam will send out an email prior to each date asking if anyone sees a need to meet.
- All Let Pam know of any updates to the contact list for your organization. (A recent request was sent out to agencies from Anna Wingfield. Please send the information to her, as requested.)
- Pam Continue to coordinate cross-resource group collaboration (e.g., I&E) ongoing.

REVIEW OF AGENDA AND MEETING NOTES

The February 19, 2013 notes were finalized after the meeting via email and have been posted to the PSE website.

HEARTFELT THANKS

We expressed appreciation for the hard work, dedication, and attention to detail that Capt. Kim Kinville brought to the RRG. For now Jeremy will do the on-the-ground coordination. They hope to have the new replacement by our October meeting. We wish Kim well in her new duties in charge of the USFS Canine Unit in Washington DC!

LICENSE IMPLEMENTATION / BRCC UPDATE

Tom explained the BRCC met on May 21st. Erin Uloth, the new Dist. Forest Ranger was in attendance. PSE conducted a refresher on the Settlement Agreement to help acquaint those who are new to the process with the terms of the agreement. Other updates included a brief description of what is happening in the various resource areas by the team leads from the ARG, TRIP, CRAG, and Pam did an outstanding job of summarizing the work done by the RRG, complete with photos of goats in boats!

Other highlights included:

- The new Lower Baker FSC is up and running. We set a new record of over 750K out migrants this year!
- Unit 4 project at Lower Baker is in commissioning and should be online this summer. Will then be in full license implementation with ramping rates, etc.
- Spawning beach decommissioning will occur July 17 through October of this year. PSE has just selected the contractor.
- Water supply cleaning out the headworks an area prone to slides. Tom reported that this construction has been blessed by good weather and there were no slides during construction. Today they are replacing and repairing rebar, grizzly cages, etc. They will then fill it with rip rack rock and will cap it. This project should be complete by the end of the month.
- The Project Evaluation Protocol was accepted with minor changes. Tom thanked the RRG for "going first" with test driving this. Discussion at the BRCC included adding the name of contractors if known, and also how PSE would pre-vet any projects. This is an administrative function performed by PSE to make sure all the applications are complete after they are received.
- Reporting schedule in the license Tom explained the complexities of the current reporting schedule are akin to the Rubik's Cube! It currently takes 16-17 months before final report is sent to FERC! Tom suggested that since the reports are now becoming more routine PSE looking for ways to condense the schedule without overburdening stakeholders or staff. The USFS will give report recreation information to Pam by March for the previous calendar year.
- PSE also introduced the idea of amending the UB Max Daily Pool Level Change, specifically the 6" rule, found in the Aquatics 1 table. The BRCC asked PSE to vet this issue with the ARG and the RRG.

UPDATE ON LAW ENFORCEMENT PREPAREDNESS

Contracts

Pam reported that PSE has both contracts in place with Whatcom County and WDFW. Carol reported the USFS also has agreements in place for WDFW and Whatcom County. She also reported a slight schedule change. Mason Stafford is working Friday through Monday and the OT deputies will be there Thursdays instead of Mondays. The FS LEOs will be doing OT on Tues and Wed. During the Sockeye season WDFW will do additional patrols midweek. All billing has to be to PSE by November 1, 2013.

Hazard Monitoring

Pam will be going out with a journeyman June 27, by boat, to do hazard monitoring. They will be checking for debris or anything broken. Swim lines look to be in good condition and writing correctives as needed. Ann reported the swim lines at Swift Creel delineate an area that still seems a little small. She will get feedback from the campground hosts on that this year. Ann suggested she also check boat launches. A large root wad has been observed to the right of the boat launch at Swift Creek. Shannon always needs attention. PSE will be putting a boom by the sea plane launch to collect large woody debris. This should be installed by the end of July.

Cultural Resource Training

Elizabeth announced there will be space for 40 participants and approximately 35 spots are already confirmed. PSE will sponsor this training on June 27 at their Skagit office. The intended audience is LEOs. The license requires this training to be offered at least every two years. All were asked to consider who from their organizations to invite to the training. This training will be held again in two years. Elizabeth said they would likely get a crime scene specialist to present at that time.

REVIEW OF DRAFT INTERPRETIVE AND EDUCATION (I&E)

Debra started by explaining the context of the Baker Lake Interpretation and Education Plan – that PSE is obligated to fund the USFS for "the purpose of contributing to the planning, staffing, and production of materials to provide interpretive services to the Project area, with an emphasis on Baker Lake". Themes of I&E include local culture and history, aquatic, terrestrial, and other natural resources, and stewardship and Project features. The plan calls for a list of relevant topics for I&E on a site-by-site basis. Debra walked us through an overview of the Plan, explaining it in terms of Who, What, Why, How and When.

A main theme the Forest is putting forward is "Valuing people and place". They are layering their development of I&E under these four big messages:

- Nature matters
- Nature provides
- For the greatest good
- In Community

The aim of the plan is to create intellectual and emotional connections between people and their natural and cultural heritage, thereby instilling respect and appreciation for America's public land sand fostering their protection and stewardship through time. They have developed a template for 3-panel campground entrance Kiosk Boards. They are considering restructuring the template to have the fee information in more closely to the pay station. They always leave free posting space for other issues that come up from time to time.

There are lots of new opportunities to share information through technology e.g., QR codes. Debra explained they gathered all the information in house and then went to an outside service provider for the final layout and construction. She showed a large laminated map used for the Skagit Wild 4 Scenic River System. They are working to be complimentary to the river and also the boat launch maps produced by PSE. There was a color palate in the aesthetics plan – designated for exterior buildings. Between that and the colors including the current signage, we have some good touch points for the I&E signing. Ann suggested we include this in the plan where we discuss the various signage templates. She also suggested we ensure we have the right information on the "You are here" signs. All are invited to provide relevant information and feedback.

This is a 5-year action plan to develop these pieces or orientation and interpretation at various sites through the basin and portals into the basin. It prioritizes the development if interpretive media, programs, and services. The successful implementation of the Baker Lake Interpretation and Education Plan includes a collaborative approach between the Forest Service and other groups.

Visitor information services and I&E services are called for in the license. These types of messaging are complimentary. The Visitor information service is more focused on the contact information the campground hosts, annual training with them with info on speaking to the public there. Publications would also be included. There is a lot of crossover with I&E. There is a design choice about how much interpretive messaging to mix in with purely informational messaging. Elizabeth explained that those signs at Snoqualmie had different designs – more stark than the other signs. She checked to ensure the cultural heritage piece is being discussed with the Forest Service and clarified that her role as the leader of the CRAG is to review what is put forth by the Forest Service, rather than to draft it for Forest Service review.

All were supportive of the FS moving forward with the orientation panels. Pam will work with Haley and Elizabeth on colors, signage, etc.

Next Steps: Debra will develop a more detailed plan with signage on a site-by-site basis. What should be the next project that we want to focus on? We need to know if there is a driving need to present specific information across all of the various resource areas to enhance the visitor experience. It is all about developing stewardship in the basin. We will need to be proactive in ensuring the various resource groups provide feedback to the Forest Service. Debra will describe this process better in the summary of the Plan with the aim of having something for resource groups to give input on by February, 2014.

BAKER LAKE MAXIMUM DAILY POOL LEVEL CHANGE

Jory Oppenheimer walked us through a PowerPoint that supplemented the memo he emailed out to all to review in the advance of the meeting. He provided background on Baker Lake Levels, how they have been operating recently and how operations would change under the constraints outlined in Aquatics Table 1. Under the terms of the settlement agreement and license PSE is to begin operating in accordance with Aquatics Table 1 after the commissioning of the Lower Baker Powerhouse must be within 6 years of license issuance by October, 2014). Commissioning is expected later this summer.

Procedures to implement the Aquatics Table 1, including modifications to the table, are specified in the Project's Flow Implementation Plan (approved by ARG and FERC). It addresses how to monitor and determine compliance and how the table can be modified. This plan is available on the PSE website.

Currently, there aren't any restrictions on daily pool level changes. Once Aquatics Table 1 takes effect, the maximum daily pool level change at Baker Lake during the recreation season (May 23 - Sept 9) will be limited to 0.5 foot per day, measured on a rolling 24-hour basis. PSE Is concerned that they would not be able to maintain the pool level within those limits due the relatively large uncertainty of the Baker Lake inflow forecasts, the infrequent availability of the inflow data, and the indirect way the actual inflows must be estimated.

PSE proposes changing the limit from .5 ft. to 1.5 foot per 24-hour period. They vetted this proposal at the BRCC meeting on May 21 and at the ARG meeting on June 11, and also at this meeting. When Jory reviewed notes from the settlement agreement process he found that the 0.5 foot per day constraint had been requested by USFS within the context of recreational use of the reservoir.

PSE does not suggest any changes to minimum and maximum reservoir elevations (which must remain within a three foot range, roughly $725^{\circ} - 728^{\circ}$, during the recreation window). Allowing up to 1.5 foot per day would typically result in a change of 3/4 inch per hour. This is the maximum change possible but the change would normally be less than that and lake elevations would vary within a two foot ranger most of the time. The maximum range in reservoir fluctuation is 48 ft. per year, but during the recreation season, PSE would be limited to 3ft.

between the minimum and maximum range.

PSE needs some buffer for operating within those constraints. Elevation of 720 ft. or above supports use of the boat ramps. PSE would be operating above it. There is also a concern with swim beach usability and dispersed rec sites. Pam noted that last year *PSE* voluntarily maintained the reservoir at 719 ft for Labor Day at Labor Day, That elevation accommodated Horse Shoe Cove swim area. She didn't know its impact at Swift Creek. Ann noted that level was sufficient but was not optimal at Horseshoe Cove.

PSE is seeking to amend only the rate of change to the reservoir level as they are not certain about the inflows. PSE would still have to stay within the prescribed elevations (the min – max pool). When asked why PSE didn't anticipate its inability to meet the .5ft. fluctuation level constraint during the relicensing process, Jory explained that this specific constraint not assessed as part of the HYDROPS modeling. PSE can only let out water at about 3/4" per hour. There is not a good way to predict how much water will be coming into the reservoir from snow melt and rain. It is also difficult to estimate the actual inflows because it's a huge watershed with a lot of different streams. PSE cannot get an accurate idea of the inflow on a daily basis, especially not on an hourly basis. They have forecasted data they get for the Northwest River Forecasting Center (operated by NOAA). These are provided once a day every six hours. Their outflow data measurement is very accurate and available on short-time intervals. This is not the case with the inflow data, as it has been off by 50-75 percent.

The early and late recreational season drop-off won't happen once PSE starts operating in accordance with Aquatics Table 1. They are not requesting any changes to the band within which they have been operating. PSE is required to track and report any deviation from the constraints to the ARG and to FERC, regardless of the magnitude, or whether they had any control over the reason for the deviation. In many cases the reason would be due to the inaccuracies of the inflow forecast. Other reasons could be errors in estimating the actual hourly inflows. There are also errors in the gage instruments that record pool levels.

Recreational Issues Include:

- Stranding boats
- Changing swim beach access
- Qualitative aesthetic aspect
- Minimizing erosion along the shores within developed and dispersed sites
- Exposing stumps and hazards by making large and/or rapid changes in lake levels
- Exposing large amounts of lakebed and stumps during the recreation season
- Impact on dispersed recreational camping
- Access to boat ramps

Most of these issues are mitigated by the required minimum Baker Lake Pool Level because:

- High minimum pool levels will be required (724.8 ft.) during the summer. Often, about 9-10 ft. higher than the past unrestricted levels.
- Small rate of pool change about ¾ inch/hour. (The rate of change is limited by the generation capacity at Upper Baker about 5,000 cfs- ¾ x 24 hours=1.5 feet). This fluctuation rate could cause the lake level to change 3'pool in two days (48 hrs.) verses 3' in 6 days with the 6" fluctuation rate.

After much discussion of the reasons for and potential impact of the suggested change to the table, PSE was asked to provide more specific information on its potential impact. Many of the questions were around concern over the complexity of the reservoir operations. The constraints in Aquatics Table 1 were well analyzed, fully vetted during the relicense process and agreed to by all stakeholders. Though the request for the 0.5 ft. "reservoir ramp rate" or maximum daily pool fluctuation came from the Forest Service with recreational concerns. All resource areas had input into these constraints but may have not been explicitly noted if mitigated. Since the FEIS effects analysis, mitigation measures, articles and project economics (including the total value of the mitigation and enhancement package) were based on the current Aquatics 1 Table, effects to other resource groups with this new proposal are

not clearly stated. Resource concerns that may have been mitigated by the 6" limitation on pool level changes may not be mitigated by the 1.5' daily fluctuation proposed. Ann and Carol encouraged PSE to provide the opportunity for all the resource groups (including the CRAG and TRIG) to contemplate possible effects of the proposed change.

Next Steps:

PSE to pull together additional data as requested by the RRG:

- Conduct "What if" scenario, what are most likely daily fluctuations? PSE could operate under this rule for a time to see if it could be done? With what consequences? Are the inflows more predictable in the summer when the weather tends to be less variable?
- Pam to get photo records out of previous elevation levels and see if we can see the elevation lines and discern impacts of the suggested rule change
- Sensitivity analysis how close can PSE come to meeting the current 6"constraint since this level of constraint has been done before for other reasons? If the 6" constraint cannot be met (resulting in an unreasonable amount of violation notices to FERC) then what is the closest reasonable level that can be met? What is the estimated number of violations at this new level (s)? What would be the economic impact of this change (from 6" maximum to the new proposal)?
- Estimate what percentage of the time they believe they could operate within a 2' range (operating with a voluntary 6" buffer on the upper and lower pool elevation limits to minimize violations (80% of the time?)). What has the norm been during various water years?
- Carol to follow up by forwarding this information to the regional *hydro* specialists and let PSE know of their response
- Carol to discuss this topic at July 1 monthly meeting and get a sense of FS reaction
- PSE to provide overview of this discussion with the ARG (as requested by the ARG).
- PSE to facilitate discussion of the at TRIG, and CRAG meetings as well.
- Carol noted that this would be a Regional Forester decision.
- The installation of one turbine on Lake Shannon verses the two turbines approved in the license did not influence this request to change the pool fluctuation rate.

2013 RECREATION IMPLEMENTATION PLAN

SA 305 – Lower Baker Developed Recreation

Draft plan was sent out for formal 30-day review on April 30, 2013. Review period ended on May 31, 2013. Comments and Review section will be added to the plan.

SA 308 – Dispersed Recreation Management funding

Ann reported they are partnering with the North Cascades Institute to install bear resistant food boxes for the 2013 season. They are slated to finish drawings in 2015 and construct in 2016.

SA 304 – Water Safety

Water Safety information sheets were adjusted to include the new Loon platform location on Lake Shannon. Baker Lake Water safety maps were ordered and have been distributed to the USFS for use at boat access areas and campgrounds.

Recreation hazard monitoring is scheduled to be done by boat on June 27.

SA 318-Law Enforcement

Contracts are in place with WDFW and Whatcom County Sheriff's Office

MEETING EVALUATION

Well Done:

- Still had trouble with the Technology (Link sys and phone)
- Needed more time than allowed
- Great presentation on I&E Plan
- Good exchange of information regarding the Maximum daily pool level change
- Fruit and chocolates are always appreciated

Do Differently:

- Ran late
- Missed Corrina and Brock

OCTOBER 15, 2013 RRG MEETING TOPICS

- Review of Recreational Season
 - o What went well?
 - O What should we change / improve for the 2014 season
- Update on Dispersed Recreation Plan
- Update on Draft Interpretive & Education Plan (?)
- Suggestions for future use of RAM Funding
- Review of 2013 Implementation Schedule
- Evaluate Meeting

HANDOUTS

- February 19, 2013 RRG Meeting Notes
- Draft Meeting Agenda for June 18, 2013
- Draft USFS Interpretive & Educational (I&E) Plan and corresponding PowerPoint
- PowerPoint of Baker Lake Maximum Daily Pool Level Change Proposal
- June 12, 2013 Baker Lake Maximum Daily Pool Level Change email from Jory Oppenheimer to Erin Uloth, Carol Gladsjo, and Ann Dunphy (with attachments)