

BAKER RIVER PROJECT LICENSE IMPLEMENTATION

Aquatic Resources Group

November 13, 2008 (9:00 a.m. - 2:00 p.m.)

**WDFW Mill Creek Office
16018 Mill Creek Boulevard
Mill Creek, Washington 98012-1296
Telephone (425) 775-1311**

Conference Call Line: 1-888-228-0484, ID: 6058, Password: 12345

Please tell Arnie (425-462-3442 (w) or 206-276-0316 (c)) if you plan to call into meeting

AGENDA

1. Review notes/agenda/action items from October 14th, 2008 meeting	9:00 - 9:10
2. Recent Baker Project Flow Releases (schedule another day for discussion)	9:10 - 9:40
3. Smolt Capacity Study Teamlet Update	9:40 – 10:00
4. Decisions Required at Today's meeting (Detailed Information Attached (if needed)) [this is a placeholder for license implementation level decisions]	
5. BRCC conference call - licensing review updates; 10/22 BRCC meeting update Conference Call Line: 1-888-228-0484, ID: 6058, Password: 12345	10:00 – 11:00
6. Smolt Capacity Study Teamlet Update (cont.-if needed) <i>Break at 11:00</i>	11:00 – 11:30
7. Brief Updates Fish Facilities Operations Topics <ul style="list-style-type: none"> • Sockeye Spawning Beach and AI Operations (WDFW/PSE) • Fish Rearing Inventories & Releases (PSE-Bruland) • Adult Trap Protocol Update or Changes 	11:30 – 12:00
8. Hatchery Update <i>Lunch Provided at 12:00</i>	12:00 – 12:30
9. Fish Passage Update	12:30 - 1:00
10. Other License Implementation Planning	1:00 - 1:55
11. Evaluate meeting, set agenda for next meeting (December 9 th , 2008 at Mill Creek)	1:55 – 2:00

Baker River Project License Implementation

Aquatics Resource Group Meeting Final Meeting Notes

November 13, 2008 ~ 9 am – 2 pm
WDFW Office ~ Mill Creek, WA

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

PRESENT

Arnie Aspelund, Cary Feldmann, Jacob Venard, Dave Jenness (by phone), Doug Bruland, and Nick Verretto (by phone) (PSE); Phil Hilgert (R2 Resource Consultants); Brett Barkdull, Kevin Kurras, Kevin Clark, and Rich Johnson (WDFW); Jon-Paul Shannahan (Upper Skagit Tribe); Chuck Ebel (USACE); Arn Thoreen (Skagit Fisheries Enhancement Group); Steve Fransen (by phone) (NMFS); Stan Walsh (SRSC); Bob Helton (Citizen); Craig Olson (NW Indian Fisheries), and Lyn Wiltse (PDSA Consulting, Inc.).

NEXT ARG MEETINGS: Dec. 9, 2008

2009 Meetings: 1/13, 2/10, 3/10, 4/14, 5/12, 6/9, 7/14, 8/11, 9/8, 10/13, 11/10, 12/8

ANNOUNCEMENT

Cary announced that PSE will send out a letter to all parties in the next week asking them to formally designate who their representatives will be for each resource group. As per Article 601, designees and alternates will be officially informed of relevant upcoming decisions prior to each team meeting. Others will be included on a general information basis.

NEW ACTION ITEMS

- Cary: Be prepared to give an Instream Flows update at the next BRCC meeting (re. 3200 cfs).
- Cary: Attach pdfs of all letters to these meeting notes.
- Cary: Invite Steve Hocking (FERC) to phone into the next BRCC meeting.
- Arnie: Add WDFW Skagit River Fish Report to ongoing agenda items for ARG.
- Arnie: Set up Smolt conference call prior to next ARG meeting and see that teamlet selection evaluation information on top 4 options is sent out to ARG members before next ARG meeting.
- Arnie: Remind Cary about counter options and get out prior to next ARG meeting if possible.
- Kevin: Work with Doug to make AI data available to all.
- Kevin: Share counter data with Bob Helton.
- Jacob: Look into setting up the cross-resource wetlands teamlet (by year end).

PREVIOUS, STILL RELEVANT, ACTION ITEMS

- Jed: Report on fry allocation between the 2 reservoirs (in spring)
- Jed: Look into disease policy issues re: WDFW's request to plant Rainbow in Grandy and Vogler
- Arnie: Schedule a reliability / mid-C study / climate change dialogue for an upcoming ARG meeting

- Brett: Set up meeting w/ co-mgrs to address holding early returns for lake plants of sockeye adults

RECENT BAKER FLOW RELEASES

The IPP has a drafting goal of 115 K acre feet as of Nov. 15. It also calls for not generating above 3200 cfs from Nov. 15 to the end of the year. The ACE took control of the reservoir at midnight Nov. 10. PSE increased generation out of Lower Baker in anticipation of the recent storm event. This created space to handle extra flows from Upper Baker. This served to protect both people and Chinook as it reduced the overall magnitude of the flood.

Concern was expressed about taking actions that differ from interim conditions based on a forecast. Contrary to the forecast, the flows in the Skagit were not (or were only minimally) scour flows – which usually occur at about 70K cfs. A forced outage during the period also impacted operations.

At our Dec. 9 ARG meeting we will discuss PSE's responses to the recent event when we get the official data from Gene Galloway. 3200 cfs should be the maximum flow unless we hit one of the high flow triggers. Chuck will ensure the appropriate ACE rep attends our next meeting for this discussion. PSE will give an update on future actions relative to the 3200 cfs at the BRCC.

BRCC / LICENSE UPDATES

There was a brief BRCC conference call from 10:00 – 10:40 during this meeting. Joining by phone were Jon Vanderheyden and Greta Movassaghi (USFS), Steve Fransen (NOAA Fisheries), Jim Michaels (USFWS) and Lynda Kupfer (PSE). This was to give BRCC members a forum to discuss any red flags any of them observed in comparing the recently issued FERC license to the Settlement Agreement. All participants agreed with PSE that the license was consistent with the Settlement Agreement so both requests for rehearing and letters of support to FERC would be unnecessary. The next BRCC meeting is scheduled for November 19 at our Mill Creek location. Cary will invite Steve Hocking (FERC) to attend by phone. Ex-parte rules will no longer apply as the license review period will have expired on November 17.

SMOLT CAPACITY TEAM UPDATE

Article 101 calls for studies in the areas of smolt capacity. Arnie explained that the teamlet (Arnie, Stan Walsh, John-Paul, Peter Kiffney (NOAA), R2-Phil Hilgert, and Tim Sullivan) has met twice now. Arnie explained that at the initial meeting they discussed the study options presented in the PowerPoint at our May 2008 ARG meeting. At the second meeting (Oct. 30) they generated a decision matrix to guide the selection of the most appropriate study approach to quantify smolt capacity. Nine methods have been identified. Evaluation criteria on the matrix are:

1. Quantify smolt production capacity (smolt #s)
2. Robust answer in two years
3. Increases confidence in fry stocking densities
4. Cost
5. Supports established smolt production methods
6. Results not affected by operation of new passage facilities
7. Results for both reservoirs.

Phil walked us through the nine methods being considered. According to the matrix, the top 2 options

were: 1. Photosynthetic Rate
2. Spring Summer Fall Macrozooplankton.

There had been much discussion re the ratings. For example, the photosynthetic rate data are from Canadian lakes and may not be applicable to reservoirs (one draws from the top and the other from the bottom). There was also discussion around the sufficiency of two years for the zooplankton data. We already have 18 years of Baker Reservoir data from the top 30 feet.

Phil explained that the aim of this measure is to help us define how many additional fry to put in the system. A zooplankton crash would translate into a sockeye crash. The plan is to continue to incrementally add sockeye each year. We will watch the correlation between how many we add and use the size and number of sockeye smolts as a feedback mechanism.

At the December ARG meeting we need to make a decision about how to proceed as far as collecting data in spring of 2009. The teamlet will share its notes re the top four options (1. photosynthetic rate; 2. Spring Summer Fall Macrozooplankton; 3. Nutrient availability; 4. Translate Mazumder kg/km^2 estimates) with ARG members and we will aim to make a decision about how to proceed at the next ARG meeting.

HATCHERY UPDATE

Dave Jenness stated that they secured the Whatcom County permits and are targeting to start construction March 2009. They submitted the storm water preparation plan to DOE. They are working with USFS on MOA/SUP to be complete by December 18. Full speed ahead.

The 100% submittal plans were out to the ARG in October. The Issaquah Hatchery style raceways will be incorporated into the design as the model for the AI spawning.

Craig cautioned that discussion on bird netting for the spawning beaches is warranted.

FISH PASSAGE REPORT

Nick reported that the Upper Baker FSC is in raised position. They are performing maintenance functions on it and expect to have these complete by the end of November.

- Modifications are being made to holding tank
- The dewatering screen is at the fabrication shop for a couple more weeks.
- Sample plates from the secondary screen are being re-fabricated

They are discussing the schedule to rebalance the screens – the rebalancing will likely occur in December or January, in time for a March 1 start-up.

For the Lower Baker FSC, they met 9/26; the meeting on November 18 has been deferred until bathymetric survey results are in for the preferred construction site. They are waiting for high flows to abate to complete the survey.

They are also awaiting a Project Review from the Upper Baker FSC.

Nick anticipates the next FPTWG meeting to be held in mid-December. They recently concluded preliminary information gathering for the conduct of an acoustic study in 2009.

Connectivity: The contract for tissue analysis of samples went to WDFW. The results should be complete early in December. We will determine next steps from there. We'll get an update at our January ARG meeting.

Adult Trap: 2-year construction window. The License provides a two-year construction window. Construction is set to begin May 2009. Over the last 3 months they have started fabrication and staging of equipment. They are performing a detailed review of sample area and logic for controls.

FISH OPERATIONS

Doug announced we are currently spawning Sockeye adults weekly and will continue doing so into early December. We are scheduled to pull all fish out of the beaches on December 1. We will re-evaluate this date as it gets closer. We will have our first Coho spawn on November 19.

Total incubation numbers: Sockeye – just over 50% of spawning morts were removed. Virology samples have been taken. Otolith sampling should be complete the end of November. We need resolution on where to place the counters at our December 9 ARG meeting.

The AI sockeye broodstock are held in the Trout Pond. The sockeye male / female ratio is skewed this year. There are currently almost twice as many females as males. This means we have to live spawn them to make up for this imbalance. Fecundity and egg size are slightly smaller than normal.

On November 19 & 20 we will be releasing Fall release juvenile sockeye to Baker Lake. Rearing inventory numbers are provided in handouts and summarized below:

- Raceway 1: Contains 65K Sockeye juveniles – Fall release scheduled for November 20. Retain approximately 3700 fish for 2009 Bio study (PIT tagged), and 5k for mark recapture study (freeze branding).
- Raceway 2: Contains 60K Coho juveniles – Two groups for Baker, one for Shannon. Approximately 3700 fish will be PIT tagged for 2009 Bio study. Approximately, 5K freeze brand for Blue tarp, 5K freeze brand for West Pass Dike, and 5K for Sulphur Creek (Lake Shannon). Branding and tagging will begin in January. The remaining fish will be released to Skagit River spring 2009.
- Circular 3: Contains 161 Coho broodstock–Next week will spawn any ripe females; may not have any. Spawning is scheduled to begin mid November.
- Circulars: Three contain 19,800 Rainbow trout total held for spring releases into Depression Lake.

ADULT FISH TRAP PROTOCOL

Doug reported that as requested we went from a 20% to 100% transfer of ad-clipped, coded wire tagged Chinook and 100% of the wild Chinook to Marblemount. The protocol will remain unchanged going

forward.

OTHER LICENSE ACTIVITIES

TRIG has been taking the lead in creating a general format we can use to submit plans to FERC.

Phil reported a mid-Skagit aerial survey took place October 27, followed by a jet boat survey on October 29. A total of 195 redds were measured. If not for problems with turbidity and fog, more surveys would have been conducted.

The Instream Flow Summary Report is now complete. (There was great rejoicing.) Hard copies and CDs were distributed.

HANDOUTS

- Agenda, Notes, 2008 – 2009 Meeting Schedule and ARG Representative List
- Draft ARG Norms
- Draft Resource Group Decision Process: Article 601 of Settlement
- Baker Project Hatchery Fish Inventory, November 11, 2008
- Incubation Worksheet
- Baker River Adult Trap Data, June 2008 – May 2009 Season Totals
- Baker River Adult Trap Protocol, Revised Sept. 2, 2008
- Smolt Capacity Study Evaluation Matrix – October 30, 2008
- Correspondence from (and in response to) Skagit County re Baker License

MEETING EVALUATION

Worked Well:

- Got out early
- Chicken Soup (for the soul)
- Smolt Capacity
- Teamlet Matrix
- Instream Flow Report
- Spawn-‘Till-You-Die Website

Do Differently:

- Missed Skagit County – wish they had been here for the Baker License discussion
- Phone system continues to cut out

AGENDA FOR NEXT ARG MEETING

December 9, 2008; Mill Creek WDFW Office

1. Welcome, review notes, action items, agenda
2. BRCC and License Process Updates
3. Baker Flow Releases
4. Fish Operations Topics
5. FPTWG Updates
6. Other License Implementation Updates
 - Smolt Capacity Teamlet Update

7. Evaluate meeting, set next meeting agenda & location