BAKER RIVER PROJECT RELICENSE

Aquatic Resources Group

November 17, 2005

9:00 a.m. – 2:00 p.m.
Puget Sound Energy
Summit Ridge Conference Room (next to PSE Building)
10885 NE 4th St., Bellevue, WA
(425) 462-7252

Conference Call Procedures-Dial In Info :
1-866-297-7238 (toll free number)-Dial in at the designated date and time –
Conference ID: **225370**
Conference Password: **5553**

DRAFT AGENDA

1. Review Agenda, Notes, Actions	9:00 – 9:15
2. Operations Topics • Sockeye Spawning Beach & Artificial Incubation Operations • Fish Rearing Inventories & Releases • Adult Trap Protocol Update or Changes *Break at 10:00*	9:15 – 10:00
3. Update on Early Implementation Activities • Fish Propagation Facilities • Fish Passage Technical WG Report	10:00 - 12:00
Lunch (provided)	12:00 – 12:30
4. Relicense Studies Update • A-38 Native Char Investigations (prelim. 2005 field results) • A-09 Instream Flow (draft report progress update)	12:30 - 1:15
5. BRICC Report • Revisit Meeting Norms for ARG	1:15 - 1:45
6. Confirm Date (January 06) & Agenda for Next Meeting, Evaluate the Meeting	1:45 - 2:00
7. FSC Biological Evaluation Planning	2:00 - 4:00

Baker River Project License Implementation

Aquatics Resource Group Meeting
Final Meeting Notes

November 17, 2005
9:00 am - 2:00 pm
Puget Sound Energy, Summit Ridge Conference Room

FINAL MEETING NOTES

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

PRESENT
Arnie Aspelund, Cary Feldmann, Ed Schild, Doug Bruland, and Nick Verretto (PSE); Phil Hilgert (R2 Resource Consultants); Steve Fransen (NOAA Fisheries); Stan Walsh (SRSC); Jeff McGowan (Skagit County); Craig Olson (NWIFC); Rich Johnson, Mike Muller, Gary Sprague, Bret Barkdull, Ted Thygesen, Jed Varney, and Kevin Kurras (WDFW); Jon-Paul Shannahan (Upper Skagit Indian Tribe); Lou Ellyn Jones (USFWS); Bob Helton (Citizen); Mike McGowan (HDR) and Chris Beasley (Quantitative Consultants); Scott Lentz by phone (USFS); Lyn Wiltse, facilitator, and Jamie Riche, note-taker (PDSA Consulting, Inc).

NEXT MEETING DATES
January 10, 2006, 9:00 – 3:00, ARG (USFS, Mountlake Terrace)
March 14, 2006, 9:00 – 3:00, ARG (USFS, Mountlake Terrace)
June 6, 2006, 9:00 – 3:00, ARG (USFS, Mountlake Terrace)
***September 12, 2006**, 9:00 – 3:00, ARG (location TBD)

AGENDA TOPICS
9:00 – 9:10 Review Notes, Agenda
9:10 – 9:15 BRICC Update
9:15 – 10:00 Operations Topics
- Sockeye Spawning Beach
- Artificial Incubation Operations
- Fish Rearing Inventories & Releases
- Adult Trap Protocol / Changes

10:00 – 10:15 Break
10:15 – 12:00 Update on Early Implementation Activities
- Fish Propagation Facilities
- Fish Passage TWG

11:30 – 12:00 Working Lunch
12:00 – 12:45 License Studies Update
- A-38 Native Char (2005 Field Results)
- A-09 Instream Flow

12:45 – 1:00 Confirm meeting schedule; evaluate meeting
1:00 – 3:00 FSC Biological Eval. Planning

NEW ACTION ITEMS

- Jon-Paul – Investigate whether we can use Upper Skagit facilities as additional imprinting and release site *(upon further consideration, this option involving the facilities at Red Creek presented some problems in the way of chinook suitability, therefore Jon-Paul is exploring other potential solutions as are Stan and Brett)*
- Stan – Report on the residualizing in trap by the Chinook indicator stock group to the SRSC
- Brett – Talk to initiators of study about above issue
- Arnie – Set up an on-site teamlet meeting with Kevin, Jed, Craig and HDR to work on hatchery design (specifically spawning needs)
- Jed – Look at adult pond designs

OLD ACTION ITEMS

- All – Review the Attendee List to ensure your organization has a designated primary and back-up representative listed
- Gary – Pull together research done on sockeye juvenile survival related to size.
- Gary – Come up with directive to handle brook trout, coordinate with other co-managers and bring back to the group
- Kevin – Talk with counter supplier about ability to sandwich counters together to create double-counters. We need to know deliver times and modification requirements. **DONE!** Report: Kevin's research indicates that *sandwiching counters in the existing layout will be expensive and will not appreciably increase accuracy*. The recommendation is to wait until the spawning beaches are redesigned and revisit increasing counter accuracy at that time. Cary reports that PSE is looking at the feasibility of fish counters by Vaki Aquaculture Systems, you can go to praqua.com distributor for Vaki micro/macro fish counter…scanning camera and computer vision technology.

BRICC UPDATE

Nothing new here. Lyn let the group know that the BRICC (Baker River Interim Coordinating Committee) has not met since June because they are still awaiting the DEIS from FERC. FERC says the DEIS will be out in November. The next BRICC meeting will be Dec. 13. The purpose of that meeting will be to walk through the DEIS and formulate initial comments. Stay tuned.

FISH FACILITIES OPERATIONAL TOPICS

Sockeye Spawning Beach

Kevin Kurras (WDFW) reported that they did not put sockeye adults into Beach 3 and did eventually run

out of adequate water to supply Beach 3. At Spawning Beach 4, as a result of a lesser than anticipated adult sockeye return, they filled Beach 4 to about 60% full. They are about 2/3 through spawning (see the "Baker Spawning Beach Update" handout for details). Still attempting to empty the beaches. We are intending to empty the beaches November 28 and 29; Kevin asked if the group would like them to spawn any ripe females at that time and put them into the artificial incubation program … ARG consensus was to do that. They recovered 103 ad-clipped sockeye from this year's spawning population.

Artificial Incubation Operations
Kevin reported they spawned 556 sockeye out of artificial incubation group; egg take now at 891K (as of Nov. 16). Doug Bruland reported on the coho artificial incubation group (Circular 3): got 14k eggs from 5 females spawned thus far. First coho spawning began on 11/16. This program will peak in mid-late *December*.

Fish Rearing Inventories & Releases
Doug Bruland (PSE) walked us through the fish rearing/release data (see the Baker River Fish Inventory handout). The mark/recapture activities are going as planned (raceway 2). They added an extra circular to help with the density issues they'd had in the past. The same derby and festival events are planned as usual for next summer.

Adult Trap Protocol / Changes
After October 1, Chinook were returned to Skagit River, since Marblemount broodstock needs were met. Kevin asked what to do with the coded-wired tagged Chinook juvenile fish that won't leave the adult trap; he estimates that there are still 20 – 25% (~25K-30K) of the original group of acclimation ponded fish from last June, found residualized in the trap. As a result these fish have incidentally been distributed in the Baker system during the course of normal adult fish hauling. This problem needs to be reported to the initiators of the acclimation study. It looks like the Chinook program needs another imprinting and release site. An alternative would be to release them at the mouth of the river. Davis Slough is another option as is the Upper Skagit Facilities.

Lastly on the adult sockeye return- IHN sampling from Beach 4 and artificial incubation have produced negative results this year! Note: also, seeing more "jack" sockeye in the return this year.

UPDATE ON EARLY IMPLEMENTATION ACTIVITIES
Fish Propagation Facilities
Chris Beasley (Quantitative Consultants) and Mike McGowan (HDR) walked the group through the progress that has been made toward the fish propagation facilities since the last meeting. See the "Update on Renovations of the PSE Baker River Hatchery" handout.

The group discussed maximum vs. normal densities, and the reference materials used to determine density planning for the facility design. The group also discussed design issues in terms of spawning efficiency. Arnie will arrange a teamlet meeting between members of this group and HDR to discuss spawning needs in the design. The group's interest is to minimize fish stress (and therefore disease) while gaining maximum flexibility in this design to give us the ability to achieve our goals. Chris and Mike made notes of the group's input and feedback throughout the presentation and will use this feedback as they continue their work.

The graphs for Baker Hatchery Space Usage and Baker Hatchery Production were not available in the hard-copy meeting handout; but they were included in the electronic presentation file Arnie e-mailed to the group prior to the meeting. Let Arnie know if you did not receive this.

Fish Passage TWG

Nick Verretto (PSE) reported that the next FPTWG meeting is Dec. 9th. The last meeting was in October; prior to that it was March since the group had come together. The reason for that gap was a re-design effort due to cost estimates doubling (from ~$20M to ~$40M). PSE hired an engineering design firm to review all designs, as well as an independent consultant to conduct a similar review. They also hosted a 2-day value engineering design workshop in August. Emphasis was on how to maintain operational function while reducing costs. They spent the next 6 weeks developing design details of alternatives brought forth at that session. They recently held a 3-day workshop to review/refine those designs. The new proposed FSC is a third the size of the original design. Nick walked us through the revised design (see the "Upper Baker Dam Site Plan" handout).

No longer planning to use the graving dock. Instead they plan to construct the FSC in small, independent modules. The current view is that this is a better design from a construction as well as operation standpoint.

FLOOD CONTROL

Ed Schild shared that he has been in ongoing discussions with Skagit County on the topic of flood control. He asked for preliminary feedback/concerns members of this group might have around the idea of creating flood storage space by spilling water immediately in advance of a flood event. The idea would be in lieu of creating 29,000 acre-feet storage the entire flood season as proposed in Lake Shannon. For either the existing proposed 29,000 acre-feet or this new operational plan, additional spillway capacity would be needed, but it might take on a different approach.

Concern was expressed for process - being rushed to meet a deadline without a good understanding of the impacts. A first cut would be to involve TetraTech in modeling the ability to pass water in various scenarios with the proposed spillway and seeing what happens in Skagit downstream of the confluence before, during, and after a flood event. We might also want to consider modeling based on other flood events.

Next Steps: Ed will continue to keep us informed of talks with the county on this topic.

LICENSE STUDIES UPDATE

A-38 Native Char (2005 Field Results)

Phil Hilgert (R2) walked us through a presentation of the native char study (A38) field results - Jan. – Nov. 7, 2005 (see the "Native Char Investigations at the Baker River Hydroelectric Project" handout). Phil reported that they re-captured or observed 12% of the originally tagged or captured fish. For the first time they observed char originally captured and tagged at the Lower Baker adult fish trap in the upper Baker River. From snorkel surveys, 78 char were observed in the upper Baker River. This is a much greater number than in the previous four years of study. Phil reminded us that snorkel surveys are not good indicators of total population. He also reported that low flow conditions probably affected the distribution of char in the upper Baker River. These surveys will continue through mid-December. Phil

will update us at our next meeting.

A-09 Instream Flow
We are continuing the middle Skagit River salmon spawning surveys. We have been lucky in the past to have years that made data collection easier; this year wasn't one of them due to water clarity conditions in the Skagit. We typically do an aerial survey to find salmon redds, followed by a boat survey. The Skagit River got cloudy after an autumn storm, and it hasn't cleared up since. In summary, we haven't got a lot of Chinook measured this year. We will continue surveys through mid-December and follow-up with an updated report in January. We will stay tuned for the full report on the Instream Flow A09 study.

FSC Biological Evaluation
At the conclusion of the ARG meeting –attendees were invited to stay for the first of a series of planning presentation/meetings on developing the FSC Biological Evaluation methodology.

HANDOUTS
- Agenda
- Spawning Beach Update
- Baker Project Fish Inventory
- Baker Adult Fish Protocol
- PSE Upper Baker FSC Plans
- Update on Renovations of the PSE Baker River Hatchery & Proposed Site Plan
- Native Char Investigations at the Baker River Hydroelectric Project

MEETING EVALUATION
What Went Well
- Scott Lentz hung in there on the phone … and had all handouts
- Good food … mmm, salmon! (Thanks, Nick!)
- Stan's improving attitude about Bull Trout
- Lively hatchery discussion
- Good timing on the breaks … allowed for good conversations
- Great participation
- Got out early

What to Do Differently
- Technical glitches with the conference phone dial-up
- Parking
- Facility

AGENDA FOR NEXT ARG MEETING
January 10, 2006 at Mountlake Terrace
9:00 a.m. - 3:00 p.m.
1. Welcome, review notes, action items, agenda
2. Fish Facilities Operational Topics
3. Discuss imprinting/release sites
4. BRICC/FERC DEIS update

5. Early Implementation Activities Update (Fish Passage/Fish Propagation Facilities)
6. Relicense Studies Update
7. Evaluate meeting, set next meeting (March 14, 2006) agenda