

**BAKER R. FISH PASSAGE FACILITIES DESIGN
FISH PASSAGE DESIGN TEAM**

9:00 a.m. - 3:00 p.m.
September 9, 2003

AGENDA

Objective: Develop performance standards and other issues supporting the settlement agreement.

9:00 - 9:10	Review agenda and handouts (Wiltse)
9:10 - 9:15	Review minutes & action items (Wiltse)
	Downstream Passage
9:15 - 9:30	BAG meeting and memo review / summary of FSC Capacity Determination (Sprague / Verretto)
9:30 - 9:45	NMFS performance standards – new, old, where and why employed (Fransen / Eldridge)
9:45 - 10:35	Settlement agreement article development (Verretto) <ul style="list-style-type: none">• PME list• Documentation process• Performance standards• Studies / testing methods• FSC modification decision-making
10:35 - 10:45	Break
10:45 - 11:45	Settlement agreement article development, cont. (Verretto)
11:45 - 12:15	Lunch (provided)
12:15 - 1:30	Settlement agreement article development, cont. (Verretto)
1:30 - 2:00	Discussion of field trip to other surface collectors (Verretto)
2:00 - 2:20	Other Issues (Verretto)
2:20 - 2:25	Evaluate meeting & review assignments (Verretto)
2:25 - 2:30	Long-term schedule, agenda, facilitation (Verretto)



DRAFT MEETING MINUTES
Upstream and Downstream Fish Passage Technical Working Group

Mission Statement: To develop an efficient fish passage design for the Baker River Project.

Project: Baker River Project
FERC No. 2150

Written By: Kate Welch, MWH

Meeting Date: September 9, 2003

Location: Red Lion SeaTac Hotel

Attendees:	Arnie Aspelund, PSE	Gary Sprague, WDFW
	Kevin Brink, PSE	Gene Stagner, USFWS
	Ray Eldridge, MWH	Nick Verretto, PSE
	Steve Fransen, NMFS	Stan Walsh, SSC
	Frank Hella, PSE	Kate Welch, MWH

Purpose: Develop performance standards and other issues supporting the settlement agreement and continue engineering design development.

Future Meeting Dates:

Oct. 14, 2003 9-3 passage design mtg at Red Lion SeaTac Hotel.
Oct. 15, 2004 9-3 technical design mtg at Red Lion SeaTac Hotel.
Oct. 29-31, 2003 Passage site visits.
Dec. 03, 2003 9-3 technical design mtg at Red Lion SeaTac Hotel.
Dec. 04, 2003 9-3 passage design mtg at Red Lion SeaTac Hotel.
Jan. 20, 2004 9-3 technical design mtg at Red Lion SeaTac Hotel.
Jan 21, 2004 9-3 passage design mtg at Red Lion SeaTac Hotel.
Mar 8, 2004 9-3 technical design mtg at Baker Lodge.
Mar 9, 2004 9-3 passage design mtg at Baker Lodge.
See handout for additional meeting dates, through license submittal date.

New Action Items

Verretto – Schedule time/meeting to address stress relief ponds and acclimation facilities.

Verretto – Develop numbers and timing for stress-relief & acclimation facilities.

Verretto – Update the upstream settlement section to reflect standards verification as discussed, then send to Steve for edits.

Eldridge – Develop conceptual designs, preliminary calculations for volumes, sizes for acclimation facilities.

Eldridge – Complete Surface Collector design memo, version 2, for use during the sites visits end of October.

Include UB and LB, Wells, Rocky Reach, Wanapum, Rock Island, Lower Granite, Bonneville #1 & 2, Ice

Harbor, Cowlitz Falls, Green Peter, Howard Hansen, Mayfield, North Fork Clackamas, Pelton Round Butte.

Group – Submit comments on updated documents via Livelink.

Verretto & Welch – Do future copies double-sided, where possible.

Technical Memos/Reports Distributed



The items distributed and reviewed at the meeting were: 09/09/03 agenda (PSE), 07/24/03 draft meeting minutes (PSE), updated long-term schedule (PSE), Downstream Fish Passage Performance Standards Proposal (PSE), 1995 NMFS criteria (MWH), 2003 Draft NMFS criteria (MWH), BAG memo regarding FSC Capacity (BAG).

Review Agenda, Minutes & Action Items

Minutes from the July 24 meeting were distributed and action items reviewed:

Verretto – Check availability of Baker Lodge for March 8-9, 2004 passage and technical design meetings – Completed.

Group – Submit comments via Livelink on updated document tracking memo. – Ongoing

Verretto & Welch – Do future copies double-sided, where possible. – Ongoing.

Nick asked the group to review the minutes and submit comments via Livelink to capture them in the record.

Review of BAG memo regarding flow through the FSC – hydraulic capacity

The BAG met via conference call July 30th and agreed on the phased approach of the FSC and on the hydraulic capacity. The FSC will start at 500 cfs and be “turned up” and tested during the first year of operation to 1,000 cfs (the BAG recognizes that NMFS criteria will be temporarily violated during this testing phase). Based on results of the test, the decision will be made whether to convert the FSC to 1,000 cfs to meet criteria. If collection effectiveness of the 500 cfs capacity FSC approaches the desired results, “tweaking” will occur to determine whether improvements can be made to match the effectiveness of the 1000 cfs FSC. The BAG agreed that maximum installed FSC capacity shall be 1000 cfs if performance of the 500 cfs unit isn’t acceptable.

Acclimation Facilities and Stress Relief Ponds

The group discussed when/how to incorporate stress relief ponds and acclimation facilities. Size of the acclimation facilities must be estimated for the settlement agreement, but design won’t start until 2005. Nick will take a look at data and estimate potential size – approximately 200,000 fish (roughly triple the size). Size escalation will occur over observed numbers to accommodate expected increases in facility effectiveness, run size, seeding at Upper and Lower Baker, 48-hr. holding time, separation of daily transport groups, and possibly other factors.

NMFS performance standards – comparison of old and new draft

Ray Eldridge highlighted several examples of the new NMFS criteria where the proposed Baker River Downstream facilities will meet or exceed the NMFS standard criteria. The synopsis of the discussion was that the FSC design is on target to comply with most of the criteria.

Performance standards and settlement agreement article development

Lengthy discussion occurred involving the settlement agreement language. Some of the points covered were: upstream standards verification using FTOT criteria (monitor for post-handling injury and mortality, monitor trap ops for descaling & bruising, etc) – Nick will update and send to Steve; Gary Sprague noted that there is a note in the upstream passage section noting the possibility of having another agency operate the upstream passage facility (the same note should be added to the downstream passage section); Stan noted that he would like to see the outside entrance velocities and acceleration criteria specified in the settlement – it was decided that they would be included in the prescription criteria and in the 30% design memo;

Schedule overview & technical design mtgs. agenda

Nick reviewed the upcoming technical design meetings and the long-term schedule.

Downstream Passage Facility Site Visits

The field trip is scheduled for October 29-31, 2003. The following sites will be visited (tentative):

October 29 – Wells Dam, Rocky Reach Dam



October 30 – Lower Granite Dam, Wanapum Dam
October 31 – Bonneville Dam

Preliminary schedules were verified with each participant. More information will follow at the October 15 meeting.

Meeting Evaluation & Assignments Review

The group elected to forego the opportunity to evaluate the meeting.

Long-Term Schedule, Agenda, Facilitation

Oct. 14, 2003 9-3 passage design mtg at Red Lion SeaTac Hotel.
Oct. 15, 2004 9-3 technical design mtg at Red Lion SeaTac Hotel.
Oct. 29-31, 2003 Passage site visits.
Dec. 03, 2003 9-3 technical design mtg at Red Lion SeaTac Hotel.
Dec. 04, 2003 9-3 passage design mtg at Red Lion SeaTac Hotel
Jan. 20, 2004 9-3 technical design mtg at Red Lion SeaTac Hotel.
Jan 21, 2004 9-3 passage design mtg at Red Lion SeaTac Hotel.
Mar 8, 2004 9-3 technical design mtg at Baker Lodge
Mar 9, 2004 9-3 passage design mtg at Baker Lodge
See handout for additional meeting dates, through license submittal date.

Tuesday, Oct. 14, 2003, 9-3 passage design mtg at Red Lion SeaTac Hotel.

Objective: Develop performance standards and other issues supporting the settlement agreement.

Review agenda and handouts (Wiltse)

Review minutes & action items – N/A (Wiltse)

Schedule, sequencing (Verretto)

Settlement agreement article development (Feldmann)

- *Overall passage settlement schedule*
- *Performance standards clarification*
- *Decision-making impacts to schedule - FSC modification*
- *Evaluation*
- *Compensation*

Settlement agreement article development, cont. (Feldmann)

Settlement agreement article development, cont. (Feldmann)

Stress relief pond size, design, location (Verretto, Eldridge)

Other Issues (Verretto)

Evaluate meeting & review assignments (Verretto)

Long-term schedule, agenda, facilitation (Verretto)

Wednesday, Oct. 15, 2003, 9-3 passage technical design mtg at Red Lion SeaTac Hotel.

Objective: Continue engineering design development of Upper Baker FSC and guidance net system.

Review agenda and handouts (Wiltse)

Review minutes & action items – N/A (Wiltse)

Downstream Passage

Overall schedule review (Verretto)

Trip planning – itinerary, logistics (Welch)

Reservoir numerical model update (Verretto, Eldridge)

Guide net design development, schedule (Brink, Hijazi)

FSC design development, schedule (Dorratcague, Postlewaite)



Surface collectors review (Eldridge)
Stress relief pond size and design (Verretto, Eldridge)
Other Issues (Verretto)
Evaluate meeting & review assignments (Verretto)
Long-term schedule, agenda, facilitation (Verretto)

Facilitation: Will be provided for future passage meetings (not technical design meetings), unless otherwise noted.

Baker Agency Group (BAG)
BAG Fish Passage subgroup
Gary Sprague - WDFW
30 July 03

Draft Summary of BAG July 30th conference call.

Participants:

Stan Walsh SSC
Jim Stow USFWS
Ed Meyer NOAA
Steve Fransen NOAA
Gary Sprague WDFW

Note: These notes have not yet been reviewed by the participants.

The new floating surface collectors for the Baker River Project should be designed and built to:

- 1) Meet criteria (screening, attraction, trapping, etc.) at a flow of 500 cfs, with the capability of increasing flow up to 1,000 cfs.
- 2) In the first year be able to physically and biologically test the facility at 500 cfs and 1,000 cfs.
- 3) Depending on the results of the testing, add a section on to the front of the surface collector to test different entrance configurations. It may be necessary to use flows above 500 cfs to keep certain variables constant (e.g. entrance velocities)
- 4) Depending on results, expand the facility to meet criteria at a flow of 1,000 cfs.
- 5) Modify and test configuration of entrance of 1,000 cfs floating surface collector.

The testing and modification schedule will need further discussion. We will need to identify all of the variables that need to be tested, before we can finalize the testing order and schedule. There is a desire to test multiple variables within a single migration season. For example, using acoustic tags we can observe differences in fish behavior between 500 cfs and 1,000 cfs.