

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

9:00 a.m. - 3:00 p.m.  
October 14, 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)
	<b>Downstream Passage</b>
9:15 - 9:30	Schedule, sequencing (Verretto)
9:30 - 10:35	Settlement agreement article development (Feldmann) <ul style="list-style-type: none"><li>• Overall passage settlement schedule</li><li>• Performance standards clarification</li><li>• Decision-making impacts to schedule - FSC modification</li><li>• Evaluation</li><li>• Compensation</li></ul>
10:35 - 10:45	Break
10:45 - 11:45	Settlement agreement article development, cont. (Feldmann)
11:45 - 12:15	Lunch (provided)
12:15 - 2:00	Settlement agreement article development, cont. (Feldmann)
2:00 - 2:30	Stress relief pond size, design, location (Verretto, Eldridge)
2:30 - 2:45	Other Issues (Verretto)
2:45 - 2:55	Evaluate meeting & review assignments (Verretto)
2:55 - 3:00	Long-term schedule, agenda, facilitation (Verretto)



**DRAFT MEETING MINUTES  
BAKER RIVER FISH PASSAGE FACILITIES DESIGN  
FISH PASSAGE DESIGN TEAM**

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

**Project:** Baker River Project  
FERC No. 2150

**Written By:** Ray Eldridge, MWH

**Meeting Date:** October 14, 2003

**Location:** Red Lion SeaTac Hotel

**Attendees:** Arnie Aspelund, PSE                      Ed Meyer, NMFS  
Kevin Brink, PSE                                  Gary Sprague, WDFW  
Ray Eldridge, MWH                              Nick Verretto, PSE  
Cary Feldmann, PSE                              Stan Walsh, SSIT/STC  
Frank Hella, PSE                                  Lyn Wiltse, PDSA

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

***Future Meeting Dates:***

*Oct. 29 –30, 2003              Passage Sites Trip.*  
*Nov. 4, 2003                  Design Team Meeting (FSC & Net) at MWH*  
*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.*  
*Dec. 10, 2003                  Design Team Meeting (FSC & Entrance Module) at Baker.*  
*Dec. 11, 2003                  Design Team Meeting (Net & Net Transition) at Baker.*  
*See handout for additional meeting dates, through license submittal date.*

**New Action Items**

Verretto – Update Settlement Agreement Articles with changes provided during the meeting.  
Verretto – Modify decision matrix to indicate FSC efficiency at 500 and 1,000 cfs flows vs. action.  
Verretto – Provide rationale for fish numbers for stress-relief ponds.  
Verretto – Look at upstream-most likely location of future FSC to confirm LTE 1500' from dam (see p.21, test element 2).  
Eldridge – Update stress-relief pond memo.

**Technical Memos/Reports Distributed**

The items distributed and reviewed at the meeting were: 10/14/03 agenda (PSE), updated long-term schedule (PSE), updated design team list (PSE), 09/09/03 draft meeting minutes (PSE), Baker River Draft Proposed Actions – 4<sup>th</sup> Draft, Section 3.2 and Appendix (PSE), tentative itinerary for October 28-31 downstream sites trip (PSE), downstream fish passage stress-relief pond sizing technical memo (MWH).

**Review Agenda, Minutes & Action Items**

Verretto – Distributed handouts and reviewed general content of each.



Wiltse – Reviewed agenda with the group.

### **Schedule, Sequencing**

Verretto reviewed the schedule and indicated that a third draft of the Settlement Agreement was due on November 1, 2003. He also indicated that the year-by-year phasing of the Upper and Lower Baker FSCs begins in 2007 and that the Settlement Agreement should permit modification to the preliminary phasing plan as agreed by the parties as a result of preliminary testing and logistic issues which may develop.

Sprague noted that the schedule should be in an appendix to the Settlement Agreement and that it should serve as a “yard stick” for measurement of performance, and that some flexibility should be allowed.

### **Settlement Agreement Article Development (Section 3.2)**

Wiltse led a page-by-page review of the fish passage article and appendices. Discussions addressed: overall passage settlement schedule, performance standards clarification, decision-making impacts to schedule - FSC modification, evaluation, and compensation.

The upstream text was edited and accepted. Changes were unsubstantial. The downstream text was substantially modified from the previous version by Kevin and Nick, albeit only to remove the confusing segments of the previous text, rather than to change the substance. This version was presented to the group for editing. Few changes were made until the decision process for moving from the 500 cfs FSC to the 1000 cfs FSC was discussed.

Feldmann asked what would happen if we were getting better FSC/system performance than the standards in one area, and could we trade that better performance for an area that had lower than target performance? Meyer noted that he had not encountered that before and that he would defer to Steve Fransen for a decision.

Sprague suggested a decision matrix showing efficiency vs. flow to aid the process, which the group developed to try to show how a decision might be taken to progress from the (Phase 1) 500 cfs FSCs to the (Phase 2) 1,000 cfs FSC. The matrix was recorded by Verretto and is attached to these minutes. Verretto was to edit the matrix to ensure its accuracy.

### **Stress-Relief Pond Size, Design, Location**

Eldridge led a discussion of the draft TM for the stress-relief ponds that would be located near the confluence of the Baker and Skagit Rivers. The facility was sized for a maximum of 150,000 fish per day. Nick will provide the rationale for this number to Ray for inclusion in the TM.

The group requested that the estimate of numbers of fish be expanded in the TM as well as looking at methods of water to water transfer of fish from the hauling trucks to the ponds. The intent is to place as little stress on the fish as possible. There was also a request to look into the cycle timing of how lots of fish would be placed into the ponds and the holding times that would be provided.

Meyer requested the development of a fish-friendly method of fish release from the trucks or trailers into the ponds, such as backing the truck into the water or by using suction hoses or chutes.

It was agreed that PSE/MWH would expand the TM and address the comments made.

### **Other Issues**

None identified.

### **Meeting Evaluation**



Agreed to forego opportunity.

**Long-Term Schedule, Agenda, Facilitation**

*Oct. 15, 2004 9-3 technical design mtg at Red Lion SeaTac Hotel.*  
*Oct. 29-31, 2003 Passage sites trip.*  
*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.*

***Wednesday, Dec. 04, 2003, 9-3 passage design mtg at Red Lion SeaTac Hotel.***

Review agenda and handouts (Wiltse)

Review minutes & action items (Wiltse)

Schedule, sequencing (Verretto)

Settlement agreement article development (Feldmann)

- Stress-relief ponds
- Performance standards/testing
- Appendix details
- Compensation

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.

<b>FSC Performance Evaluation Matrix</b>					
<i>Year One</i>					
			<b>500 cfs FSC</b>		
	<b>% Capture</b>	<b>&lt;70</b>	<b>70-80</b>	<b>80-90</b>	<b>&gt;90</b>
	<b>&lt;70</b>	discuss	keep 500, modify & test	keep 500, modify & test	keep 500, modify & test
<b>1000 cfs FSC</b>	<b>70-80</b>	keep 500, modify & test	keep 500, modify & test	keep 500, modify & test	keep 500, modify & test
	<b>80-90</b>	build 1,000	keep 500, modify & test	keep 500, modify & test	keep 500, modify & test
	<b>&gt;90</b>	build 1,000	build 1,000	keep 500, modify & test	keep 500, modify & test
<i>Year Two</i>					
			<b>500 cfs FSC</b>		
	<b>% Capture</b>	<b>&lt;75</b>	<b>75-85</b>	<b>85-90</b>	<b>&gt;90</b>
	<b>&lt;70</b>	discuss	keep 500, modify & test	keep 500, modify & test	keep 500, modify & test
<b>1000 cfs FSC</b>	<b>75-85</b>	test 1 more year	keep 500, modify & test	keep 500, modify & test	keep 500, modify & test
	<b>85-90</b>	build 1,000	test 1 more year	keep 500, modify & test	keep 500, modify & test
	<b>&gt;90</b>	build 1,000	build 1,000	test 1 more year	keep 500, modify & test
<i>Year Three</i>					
			<b>500 cfs FSC</b>		
	<b>% Capture</b>	<b>&lt;75</b>	<b>75-85</b>	<b>85-90</b>	<b>&gt;90</b>
	<b>&lt;70</b>	discuss	keep 500	keep 500	keep 500
<b>1000 cfs FSC</b>	<b>75-85</b>	test 1 more year	discuss	keep 500	keep 500
	<b>85-90</b>	build 1,000	test 1 more year	discuss	keep 500
	<b>&gt;90</b>	build 1,000	build 1,000	test 1 more year	discuss