MEETING MINUTES Upstream 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: Dawn Schink

Meeting Date: February 4, 2002

Location: WestCoast SeaTac Hotel, Seattle

Attendees: Doug Bruland, PSE Wayne Porter, PSE

Cary Feldmann, PSE
Steve Fransen, NMFS
Mary Lou Keefe, MWH
Kim Lane, PSE
Mort McMillen, MWH
Dawn Schink, PSE
Fred Seavey, USFWS
Gary Sprague, WDFW
Jim Stowe, USFWS
Pon Twinger, PSE

Mort McMillen, MWH

Ed Meyer, NMFS

Ron Twiner, PSE

Nick Verretto, PSE

Stan Walsh, SSC

Purpose: The purpose of the meeting was to continue development of design

alternatives for upstream fish passage facilities at the Baker River Hydroelectric Project in the supports the project relicensing effort. The meeting provides a venue for the evaluation of upstream fish

passage options and development a course of action.

Future meeting dates:

March 5, Tuesday 9 a.m. - 3 p.m. - downstream design at Sea-Tac

March 6, Wednesday 9 a.m. - 3 p.m. - upstream design at Sea-Tac

April 2, Tuesday 9 a.m. - 3 p.m. - downstream design at Sea-Tac

April 3, Wednesday 9 a.m. - 3 p.m. - upstream design at Sea-Tac

May 6, Field Trip to Baker River to see studies

May 7, Tuesday 9 a.m. - 3 p.m. - downstream design at Sea-Tac

May 8, Wednesday 9 a.m. - 3 p.m. - upstream design at Sea-Tac

June 4, Tuesday 9 a.m. - 3 p.m. - downstream design at Sea-Tac

June 5, Wednesday 9 a.m. - 3 p.m. - upstream design at Sea-Tac

ITEM	DESCRIPTION	ACTION BY
Report on	Data collected at the project related to downstream fish	Data analysis
Completed	migration study was distributed by Nick in a digital format.	ongoing –
Action Items:	MWH will examine the data for correlation to natural and	MWH; Mary
	operation variables. They are also working on Upstream Tech	Louise.
	Memo.	Marked groups
	It was suggested there might be value in marked groups, not	set aside for
	including sockeye. MWH will complete analysis with a view	future
	to any seasonal FGE, however there is not time or money to do second study on a marked group	consideration.
Mary Lou's	The proposed schedule for in –field biological studies were	Need to
Study Review:	distributed for review. The schedule provided date of	finalize study
handout was	release, number and type of fish / tagging and release	dates and
given out.	location.	duration in
		order to
	Near field - Early releases with 22 Coho during generation on	integrate with
	and off, 12 fish released in gulper. Late group is Coho and	PSE's
	sockeye, 22 at log boom with generation on & off 10 or so at	operations.
	log boom. At Fred's suggestion, Mary Lou moves 4/29/02,	Nick
	generation off, to one of the three evacuation weeks.	requested a
	Generation On is a five day, 24 hour period with transition	single page
	period, Generation Off then 5 day period with transition. Transition necessity was questioned, but Mary Lou believes it	summary of the study
	is necessary. This study measures depth of fish with generation	plan, with a
	on & off. Study reduces variables. The effect of the b baffles	field trip to
	is not a study goal, so they will remain fully open. Acoustic tag	the site by
	requires fish to be 120 ml long. Currently plan to use migrants,	consultants
	not hatchery fish, with the Coho being obtained at Little Park	next Friday.
	creek. Study should also include a release at the mouth of the	Need any
	gulper. Tag life in general is short, 12 to 15 days.	responses to
		study plan by
	Dates on study may change depending on best days for	early next
	generation. Bob Barnes will determine the pool elevations to	week,
	safely avoid a spill. Also need to include a detailed generation	2/11/02)?
	schedule. Ed worried about how the study and moving the	
	sockeye around will effect their behavior. Draft report will be	
	put out in September with progress reports along the way. Final work plan completed except transition period and dates.	
	Far Field- Test assumes Far Field is not affected by	Study prep
	generation being on or off. Will increase size of array at the	March, study
	log boom. Coho to be taken out of trap, not hatchery.	starts late
		April
		demobilize
		June, draft
		report Sept

	Kelts Study- Hoping to find behavioral patterns. Will be	
	followed for duration of study, tracking them through out.	
	Steelhead still coming into adult trap will be brought up and	
	need to be spawned before tagged. May want 30 fish for this	
	study. Use 75% female, and expect 50% mortality.	
	PIT Tags Study- Propose to perform a study using PIT tags in order to determine the efficiency of the trap and fish guide. To minimize stress, the fish will be tagged and released on same	Arnie is to examine the need for a
	day, planning on tagging about 200 a day. Draft report due out in October.	collection permit. and if required to
	Additional comments on studies: Mary Lou will keep in	submit an
	touch while studies are going on, and will call in people if results are not what is expected	application.
PSE	Presented by Dave Eales and Ron Twiner. The bid	Have ready by
Replacement	specification for a replacement truck was distributed for	Sockeye run,
Fish Truck	review. This truck is viewed as replacement and a very much a	in May or
Specification	safety issue. PSE plans to obtain bids from manufactures with	June. Nick
	proposed details, then after the bid is awarded, the	will continue
	manufacturer is to provide specific drawings and specs, which	to run specs
	would be available for review by agencies. The truck will be	by agencies
	virtually the same size, with a larger tank. Hopper will be	
	heavy than it is now, which may run the risk of overloading	
	the trucks. Stan wants us to go ahead with bid, and update	
	agencies with the specs. Doug mentioned that on the	
	maintenance side, it is much better to have new truck and new	
	tanks.	
Review List of	Mort reviewed format, which will be used in the rest of the	
Filter #1	process. It will contain background, description, design	
Alternatives	criteria, layout of the ladder and alternative's analysis based on	
	discussions. Draft will be cleaned up, impute added, and sent out. U1.2 has a fixed pool.	
	Don Schluter does not agree to decision at the previous	
	upstream passage meeting to consider fish ladders as a fatally	
	flawed alternative for upstream passage. He objects to the	
	handling of the fish that other options entail and requires	
	volitional passage. Gary asked Don to again review the	
	documented concerns of fish ladders. Don stated that he	
	believes the ladders could be built up the side of the dam, and	
	does not see landslides, or previous failures of large ladders,	
	as a reason to eliminate this alternative. Mort, Ed & Jim	
	consider ladders of this size a detriment to the fish passage,	
	with a high likelihood of harm to the fish. Don also believes	
	some type of new technology would provide a means for	
	ladder construction. It was pointed out that other options, such	
	as a fish tram, are still being considered. As no agreement was	
	as a fish dam, are sum being considered. As no agreement was	

	reached on this issue Don and others agreed to discuss this	
	issue at the Solution Team level.	
Review List of	Locks, elevators and tramways alternatives were reviewed at	
Filter #2	the conceptual level, with examples of such facilities being	
Alternatives	presented. Elevators are designed for upstream passage; not	
	downstream passage Pelton Round Butte Dam has tramway	
	that is being studied. Sorting capabilities are more difficult	
	with such a facility, however this option should not be listed as	
	fatally flawed for this reason. Since existing examples of this	
	type of facility are on smaller structures, scaling issues to the	
	size of the Baker structures must be considered	
Temperature	Temperature data at various locations at the Baker facility was	
Sampling	distributed. This hourly data is summarized to daily averages	
Summary	and then compared to the adult trap to determine the amount of	
	temperature differences between the trap and other release	
	locations. Erroneous information is present due to dry	
	temperature sensors. Since transport time is short, 45 minutes,	
	so there is little temperature increase during transport. Jim	
	suggested finding maximum temperature days and using these	
	for a basis of comparison.	
Project	Schedule now includes the study dates. Upstream resolution	
Schedule	by middle 2003. Up and downstream are now moving along	
	nicely, however overall schedule will require	

New Action Items:

- Take a video of trap operation Doug Bruland
- Consider placing this video and/or pictures of trap operation on website
- Ongoing resolution of temperature and flow study Kim
- Sorting Adult Fish & number of containers needed Nick
- Email Upstream Passage Matrix Kim

March 6th Agenda

- Review notes
- Action Items
- Studies Schedule Refined
- Discussion on trams, elevators alternatives
- Project schedule
- Set agenda next meeting

