



BAKER RIVER PROJECT RELICENSE

Aquatic Resources Working Group

August 9, 2001

9:00 a.m. – 2:30 p.m. U.S. Forest Service Conference Room A/B (425-775-9702) 21905 64th Avenue West, Mountlake Terrace, WA

AGENDA

1.	Review agenda and minutes
2.	Review action items
3.	Wild & Scenic River Presentation (Jim Chu, USFS)
4.	Continue review of study plans and requests
5.	Additional Issues
6.	Set agenda for September 13 meeting (location TBD)
7.	Evaluate meeting

August 9, 2001

Driving Directions to US Forest Service Office:

- 1) Driving North from Seattle (or South from Everett) on I-5, take the 220th St. SW exit (exit 179).
- 2) Turn west (right if from southbound I-5, left if from northbound I-5) onto 220th St. SW.
- 3) Drive west about a block and turn right onto 64th Ave W.
- 4) The office building is about $\frac{1}{4}$ block down the street on the right side of the road.





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August 9, 2001 9:00 a.m. – 2:30 p.m. USFS Office, Mountlake Terrace, WA

MEETING NOTES

Aquatics Working Group Mission: "To identify issues and develop solutions and recommendations addressing fish and aquatic resource interests related to the Baker River Project and its operations, leading to a settlement agreement."

Fish Team Leader: Arnie Aspelund, 425-462-3442, aaspel@puget.com

PRESENT: Arnie Aspelund (PSE), Gary Sprague (WA Dept. Fish & Wildlife), Jon Vanderheyden (U.S.F.S.), Doug Bruland (PSE), Nick Verretto (PSE), Marcus Appy, Sue Madsen and Phil Hilgert (R2 Resource Consultants), Chuck Ebel (U.S. Army Corps of Engineers), Stan Walsh (Skagit System Cooperative), Dick Raisler (Fidalgo Fly Fishers, WA Council-Federation Fly Fishers), Don Schluter (Trout Unlimited, by phone), Lyn Wiltse (facilitator - PDSA Consulting)

Note: If unable to attend meetings, please notify Team Leader.

AGENDA August 9, 2001 9:00 a.m. – 2:30 p.m. USFS Office, Mountlake Terrace, WA

- 1. Review Agenda and Minutes
- 2. Review Action Items
- 3. Continue Review of Study Plans & Requests
- 4. Additional Issues
- 5. Set Agenda for September 13 meeting (USFS Office, Mountlake Terrace, WA)
- 6. Evaluate Meeting

INTRODUCTIONS:

The group welcomed Marcus Appy, newly hired with R2 Resource Consultants, attending for the first time.

FUTURE DATES AND LOCATIONS Thursday, Sept. 13, 9:00 a.m. to 2:30 p.m. at Mountlake Terrace USFS Office. October 11, November 8, meetings – location to be announced.

NEW ACTION ITEMS

- ALL: Consider 2002 field season study requests.
- ALL: Get A15 comments to Sue by August 23!
- **ALL:** Review Jim Chu's handout (to be distributed by Nick) and be prepared with questions for his presentation (presentation will be rescheduled cancelled 7/12 due to small audience
- **Brady:** Try to reschedule Jim Chu to September or October meeting and give his handout to Arnie to distribute to team members.
- **Arnie:** Contact Bill Ryan/EPA Hydro at 206-553-8561 to invite him to these meetings.
- Fred: Talk with Terrestrial Group re: wetlands that are hydrologically but not directly connected to the river
- Nick/Bob: Provide update on PSE plans for gaging of Baker River.
- **Don:** Provide references on information on cutthroat and char passage through Cascades to Arnie.
- **Arnie:** Check with Fred re: ESA presentation at September/October meeting.
- **Phil:** Touch base with Fred Seavey (U.S. Fish & Wildlife) and Bruce Freet (National Park Service) re: potential habitat disturbances during A1.
- Sue: Send "final" study plans to Fred and Steve for feedback.
- **Bob:** Summarize current water quality data
- **Stan:** Invite Bob Hayman to present in November (update of Lower Skagit, fall Chinook, etc.).
- Fred: Conduct ESA presentation at upcoming Aquatics WG mtg.
- Nick: Coordinate with DOE and Forest Service re: A-13
- Nick: Update on new boat and new hip and chest waders for Doug
- **Jon:** Check availability of new USFS Office in Sedro-Woolley for October 11 meeting.

REPORT ON OLD ACTION ITEMS

- **Phil:** Put together a timeline for all study plans.
- Nick: Brought Study Request A22 to the Recreational Working Group.
- **Nick:** Set up a Technical Working Group to address development of instream flow management agreement.
- Nick: Brought color copies of Forest Service land ownership map to the meeting.
- **Brady:** Reserved our September 13th meeting at the Forest Service Office in Mountlake Terrace.

STUDY REQUEST SUBMITTALS/STUDY PLAN DEVELOPMENT

Study # Title	Notes/Next Steps
A01.A Reservoir Tributary Habitat Surveys	Finalized study plan after conference call with Technical Working Group. Ready to mobilize, starting tomorrow. Anyone interested in helping out should see Sue. R2 will be doing tributaries that drain into the reservoir (smaller tributaries) in August. They will begin larger tributaries September 7 – 14.
A01.B Reservoir Tributary Biological Surveys	Phil reported that R2 has been compiling lots of existing data. R2 provided a one – page summary sheet listing incremental levels of biological data. Streams will be categorized using habitat information. That information forms the basis for production potential and will be used in decision making for relicensing. The biological information is anecdotal. We also have data reflecting electrofishing efforts. In 2002 R2 will do presence/ absence surveys to confirm barriers (by snorkeling and maybe electrofishing) above and blow barriers. They are not proposing to do any basin-side snorkleing/electrofishing this year. They may decide to do more intensive biological information gathering down the line, (on a stream-specific basis)
A01.C Reservoir Tributary Delta Surveys	Sue of R2 reported they have received and incorporated comments on the Study Plan. There is nothing else new. Will finalize Study Plan and give updates as we move forward.
A02 LB River Habitat Mapping	R2 has set a schedule to do this survey September 19 to 21. They must work with PSE to identify when the plant will be off-line so they can conduct the survey. R2 will keep the agencies posted as to what's happening and when.
A03 Reservoir Fish Population Characteristics	R2 will be checking with WDFW re: variable mesh gill net data. They are also seeking other data from PSE.
A04 LB/Skagit River Flow, Gaging	Sue and Doug verified last weekend that the gages were still operational. They chose two additional locations for water surface elevation areas with broad bars on both banks. These data will supplement the data gathered at the gage sites. Sue will plot the data for review at our September meeting She will continue with

		the gages as long as possible (past September).
4.05	W. O. 1'. O. 1'	She'll also update the map of the sites.
A05	Water Quality Sampling	Nick is still drafting this request. He will
100	LID Dance - Danie - Daffi	coordinate with Ecology and USFS.
A06	UB Passage Design Baffle	Complete!
	ication	The last Fish Passage Technical Working
A08	UB Passage System Evaluation	Group was August 1. The next meetings are
		9/5 and 10/15. All meetings are from 9:00 to
		3:00 p.m. at Sea-Tac. At the last meeting, the two discussions were: Initial discussions
		around upstream fish passage, and Review all
		existing passage data and evaluate conceptual
		alternatives (26 so far!) All upstream passage
		alternatives will be looked at. Chuck suggested
		they contact John Nessler as a reference. They
		are currently setting up a baffle study design
		for 2002. 2001 data were inconclusive. Nick
		will share the completed study results with this
		group at our September meeting.
		We are lacking good data on fish behavior.
		We will be doing tagging studies in 2002.
A07	Lower Baker Forebay Bathymetric	Complete! Conceptual designs, modeling and
	Survey	cost estimates are underway. PSE will
		eventually produce maps from these data.
		These data will be utilized by the Fish Passage
		Technical Working Group.
A09	Skagit River Flow and Habitat	Conducting hydrologic and operations
	Assessment (HIGH PRIORITY)	analyses. Internal discussions within PSE are
		underway. The idea is to come up with a
		negotiated settlement on instream flows. The
		"light at the end of the tunnel" on this needs to be clear by this fall. (Will be looking at hourly,
		daily, and seasonal flows) Need to identify/
		compartmentalize out- standing issues e.g.,
		needing more data in rearing habitat
		availability at varying stages.
A10	Baker River Delta Habitat Assessment-	Complete! Chuck has summarized these data.
	Char	He will present the results at our September
		meeting re: 1) Tributary passage survey (no
		obvious passage problems); 2) Actual potential
		spawning habitat survey of delta; and 3) US
		Fish & Wildlife char snorkling surveys (found
		8 char - all above the flood control drawdown
		area). The Corps' opinion is that no char are
		spawning in the flood control drawdown zone.

A11	Nutrient Addition	Nothing new. Is Brady working with Bill
		Reinard on this? We'll get an oral review of
		this in December?
A12	Instream Flows for Bio-diversity	Check negotiated settlements if they don't
		address your interests/concerns. A12 is a
		placeholder to ensure your concerns are
		addressed.
A13	Water Quality Assessment	Nothing new.
A14	Reservoir Shoreline Erosion	Nothing new.
A15	UB Delta Scour	Making progress. R2 distributed a Draft Study Plan for the group to review. Sue walked us through the Study Plan. This considers the entire delta area and how operations are affecting scour. This is very complex because we are on a delta landform (always contains depositional areas). Lateral mobility of the channel and incision as the reservoir levels drop are the scour issues on the delta. R2 will do longitudinal profiles and check for scour hoping to capture change at approximately 5 ft. intervals. It's hard to trace scour back to flood events because there are so many interdependencies. Won't be able to quantify the effect of scour on redds. R2 will also consider data from A24 and hope to come up with an assessment of the relative risk between a regulated and unregulated system. They will have to do a literature review to assist in this analysis of risk assessment. Sue walked through the individual tasks suggested in the study. She anticipates giving an oral report in May. The questions this report will answer are narrowly defined: 1. Does incision occur in response to reservoir drawdown? If so, how deep? 2. Is scour that occurs sufficient to affect redds? 3. Is the proportion of fish using this habitat different from unregulated conditions?
A16	LB Delta/Channelization	Pending – Not for 2001. Will develop study Plan based on A24
A17	Tributaries Surveys Upstream of Barriers	Still pending.
A18	Baker River Survey Upstream of 1 km.	Merged into A-01
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A19	Review Limnological Information	Pending with A13
A20	Large Woody Debris Management	Expect to have outline and an issue
		identification discussion at our September
		meeting.
A21	Skagit Wild & Scenic River Values	Pending.
A22	Baker Lake Trout Impacts Evaluation	Current management direction of this program
		is changing. More stocking is shifting back to
		Depression Lake and may be eliminating
		stocking of Baker Lake altogether. Stay tuned.
A23	Baker River Wild & Scenic River	Pending
	Values	
A24	Hydrologic and Geomorphic Analysis	Sue of R2 got field data to support sediment
		transport analyses. Sue will button up with
		Brady on this. Will also check out photos
		available in Olympia. The extent of the
		analysis is varied - Hydrology: Baker and
		Skagit (down to Sedro Woolley)
		Sediment transport: historic/current Baker R.
		Photo analysis: Baker and Skagit

LIST OF MEETING HANDOUTS

- Skagit Wild & Scenic River Corridor below Baker River (color map. June 13, 2001 USDA Forest Service, Mt. Baker-Snoqualmie National Forest, Geographic Information Resource Team)
- Master Schedule of Hydrology and Aquatic Resource Tasks, Baker River Project (FERC No. 2150)
- Material Safety Data Sheet on Chemical Grout compound used at Lower Baker
- Draft Study Plan for A-15 Upper Baker Delta Scour and Fill Study
- Summary of Incremental Level of Biological Information pertinent to addressing A01b-Reservior Tributary Biological Surveys
- WAC rule defining Best Available Science

ADDITIONAL ISSUES

2002 Field Season Study Requests:

- Areas of Unnatural Predation Opportunity
- Reservoir Limnology Study (sockeye/coho production potential)
- Effects of reservoir management on downstream passage
- Miscellaneous tagging studies
- Location and depth of Middle Skagit spawning

Ramping rates:

The new runner installed at Lower Baker is less flexible in terms of ramping than the previous unit. In 1978, PSE agreed to provide limits on ramping at Lower Baker. Discussions are

ongoing. PSE has just finished testing limitations of the new runner. We will get an update on this at our September meeting.

Grouting Compound:

Dick distributed a handout outlining additional research he conducted re: the ingredients of the grouting compound PSE was using. Subject: Documentation of material used to repair a leak in Lower Baker Dam. Copies of the Material Data Safety Sheet provided by 3M Manufactures. Doug stated that test fish in cages had no toxic reaction to the compound (they lived).

Best Available Science:

Phil provided a handout of the State definition of Best Available Science.

PARKING LOT

- Presentation on Northwest Forest Plan including Wild and Scenic Rivers Act (USFS) in fall?
- Presentation on ESA (direct relationship to 4(d)) Fred/August
- State agency presentations re: mandates (agency direction)
- Create a master list of possible studies across all working groups and share with all
- Access to the Baker River Project hourly operational model

EVALUATION OF MEETING

Well-Dones

- Food and drink outstanding
- Smoked salmon from Sue
- Studies Timeline was terrific
- Finished early
- Scour discussion
- Laughter

Opportunities to Improve

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Tentative Agenda for Next Meeting September 13, 2001 9:00 a.m. - 2:30 p.m. US Forest Service Office Sedro-Woolley, WA

- 1. Review Agenda and Minutes
- 2. Review Action Items
- 3. Report from Fish Passage Technical Working Group
- 4. Start Review of Study Requests/Plans
- 5. Presentations
 - Char Delta Survey Results Chuck
 - ESA Fred Seavey?
 - Wild and Scenic Rivers Jim Chu?
- 6. Additional Issues
 - Update on ramping rates

- Others?
- 7. Set Agenda for October 11 meeting (USFS Office in Sedro-Woolley?) and determine location for November meeting
- 8. Evaluate Meeting