



BAKER RIVER PROJECT RELICENSE

Wildlife and Terrestrial Resources Technical Working Group Meeting

September 18th, 2003 (8:30 a.m. - 2:00 p.m.) (Bring Sack Lunch)

U.S. Forest Service Office 21905 64th Avenue West Mountlake Terrace, WA 98043 425-744-3236 (office # 425-775-9702) Conference Call Line: 1-866-280-6429, code 144995# (Please tell Tony or Lyn (425-890-3613) if you plan to call into meeting)

AGENDA

Review notes/revise agenda/action items (including Stan's Alaska report)
TST and Adaptive Management Updates
Reaction to A14 (Shoreline Erosion) cross Resource Concerns (Greta's Next Steps e-mail)
Technical discussion of data from studies: T21 (Elk), T12 (Grizzly), T19 (HEP), T17 (Amphibians), T6 (Noxious Weeds), T16 (Rare Plants), T4 (Finalization of Analysis Species Reports), T2 database (overlay of dispersed recreation sites with disturbance codes indicating fire ring).
Review new PME (MAPS) proposal
Set agenda for October 16th at Mountlake Terrace (next Technical WG meeting)
Evaluate meeting





BAKER RIVER PROJECT RELICENSE

Wildlife and Terrestrial Resources Working Group

September 18, 2003 8:30 a.m. – 2:00 p.m. USFS Office

Mountlake Terrace, WA

FINAL MEETING MINUTES

Mission: "To develop alternative solutions and recommendations, addressing terrestrial and wildlife resource interests for the Baker River Project and its operations, leading to a settlement agreement that:

- accurately defines and describes the existing environment in relationship to the previous environment:
- identifies project effects (existing and proposed) leading to development of protection, mitigation, and enhancement options."

Team Leader: Tony Fuchs, (Phone) 425-462-3553, tony.fuchs@pse.com

ATTENDEES

Marty Vaughn (Biota Pacific), Paul Wetherbee and Tony Fuchs (Puget Sound Energy), Lauri Vigue (Washington Dept. Fish & Wildlife), Gene Stagner (USFWS), Scott Schuyler (Upper Skagit Tribe), Bob Kuntz (NPS), Carl Corey by phone, Bob Nelson (Rocky Mt. Elk), Laura Potash, and Don Gay (USFS), Kathy Smayda (Smayda Environmental for the Louis Berger Group), Tom Hamer (Hamer Environmental), Ron Tressler (EDAW), Stan Walsh (Sauk-Suiattle Indian Tribe/Swinomish Tribal Community), Lyn Wiltse, facilitator, and Mary Jean Bullock, notetaker, (PDSA Consulting, Inc.)

SCHEDULE FOR REGULAR TECHNICAL WORKING GROUP MEETINGS (At USFS Building in Mountlake Terrace from 8:30 to 2:00 unless otherwise specified)
Oct. 16, Nov. 20 (location?), December 18

SCHEDULE FOR RESOLVE WORKING GROUP MEETINGS

September 30, October 17 (and possibly Oct. 16 as well, in lieu of the regularly scheduled Working Group meeting). These meetings, except where otherwise indicated will be at the USFS Office in Mountlake Terrace.

THE CONFERENCE CALL LINE WILL BE OPEN DURING ALL THESE MEETINGS. PLEASE CALL 1-866-280-6429 AND ENTER PARTICIPANT CODE: 144995 #. Let Lyn (technical meetings)

know before the meeting starts if you are planning to call in (call her at 425-890-3613). Let Dee (RESOLVE meetings) know before the meeting starts if you are planning to call in (call her at 206-271-9750).

Agenda for September 18, Technical Meeting USFS Office in Mountlake Terrace 8:30 a.m. - 2:00 p.m.

Bring a sack lunch and we'll work through!

- 1. Review notes/agenda/action items (including Stan's Alaska report)
- 2. TST and Adaptive Management Updates
- 3. Reaction to A14 (Shoreline Erosion) cross Resource Concerns (Greta's Next Steps email)
- 4. Technical discussion of data from studies: T21 (Elk), T12 (Grizzly), T19 (HEP), T17 (Amphibians, T6 (Noxious Weeds), T16 (Rare Plants), T4 (Finalization of Analysis Species Report.), T2 database (overlay of dispersed recreation sites with disturbance codes indicating fire ring)
- 5. MAPS PME proposal
- 6. Set November 20, agenda (location?)
- 7. Evaluate meeting

NEW ACTION ITEMS

- Ron: By October 2nd on Grizzly study, list which species are included in tuberous vegetation, also show change in bio-mass by date by habitat type. Also document species % cover by cover type.
- Ron: Re-work Table 3 of Grizzly Study (not user friendly). Separate federal from non-federal roads, closed from open, seasonally. Also, change hectors to acres throughout.
- Tony: Put together A14 (mylar), T2, T5, nests, T16, T6, map overlays for review by Working Group members at our October 16 meeting.
- ALL: Consider how best to manage erosion (shared PME?)
- Tony/Marty: Discuss who owns erosion issue at Team Leaders Meeting.
- Scott: Send Tony by September 26th elk composition data to distribute to Working Group members.
- Don: On September 19, put together an approach for Elk teamlet mapping convention and email to teamlet members to discuss on conference call prior to the 30th RESOLVE Meeting. Set up conference call
- Tony: At September 30 meeting, give report from project impact meeting between Ed and Jon V. on September 24.
- ALL: Consider whether additional Terrestrial HYDROPS runs should be done. Let Tony/Paul know.
- Bob K. Distribute background information on MAPS.
- Tom/Tony: Distribute T4 CD by October 15
- Tom: Send out T17 addendum by September 24.
- Don: Checked with Skagit County/Fire Department re: residence maps.
- Tony: Give new heron information to Julie at WDFW. All existing eagle, osprey, and heron nest information is currently being put into a database by Joetta.
- Tony: Sent out tadpole photos (with site reference #s) to Lauri, Gene, Don, Marty, and Tom or made available on PSE website.

REPORT ON OLD ACTION ITEMS

- ALL: Got any comments on "final" T7b Study Plan to Marty by the end of July.
- ALL: Let Tony know if you'd like Master CD #1 (from R2 showing official project elevations and daily flows).
- ALL: Touched base with Andy Hatfield (Team Leader for Recreation Working Group) if you want to attend trail field trip August 5, or dispersed sites field trip August 18.
- ALL: Reviewed A14a report (on FTP website). Noted erosion levels around shorelines. Considered terrestrial concerns/interests.
- Tony: Got copies of most current maps for August 5 (trails) and 18 (dispersed camp sites) field trips.
- Tom: Continued to update studies affected by NAVD 88: (T2, T5 are going on currently). And addendum will be out for T17 by Sept. 19). Note: R2 has put out a CD (see first bullet above) that contains updated data on project elevations.
- Dee: Created a one-page summary of the RESOLVE process for attorneys.
- ALL: Reviewed Greta's "Next Steps" suggested for erosion control. Let Tony know if you have feedback.
- ALL: By end of July, Got Ron T. comments re: modeling aspects of elk study. Is use of IVMP adequate? Should we apply CART to IVMP? Ron set up conference call (tentatively on 7/25) with: Ron D., Stan, Bob N., Chris, Marty, Don, and Laura (respecting her expertise in this arena!).
- Ron: Sent CART data to Tony to distribute (prior to the above 7/25 conference call).
- Tony: Reminded Ron of meeting dates (RESOLVE and Technical Working Group meetings)
- ALL: Got comments to Tom by the end of July re: T4: two beetles and *carex flava*.
- Tony: Talked with Joetta re: attending RESOLVE sessions and projecting GIS data from a CD.
- Tom: Asked Joetta about T2 database: overlay disturbance codes (fire ring) with dispersed recreation site locations identified by Recreation Working Group. He created a spreadsheet to show this and sent to Tony to review for accuracy.

REACTION TO A14 (Shoreline Erosion)

Greta Movassaghi's email of May 27 requested cross-resource reactions to the suggested next steps she put together re: shoreline erosion PME. Tony reported that PMEs are being developed in the Terrestrial and Recreation Working Groups that have site specific measures associated with erosion, e.g., rare plants, erosion, etc.

Terrestrial erosion concerns are loss of habitat that can occur. We would therefore, be concerned with the rate of erosion. Areas of steep erosion are being used by birds for nesting. Might there be seasonal erosion associated with this that would impact nesting? Don reported that late seral sites at Baker have been identified. He estimated perhaps 10% of shoreline may be affected. We have data for Shannon. It has not yet been analyzed.

We are also interested in the connection between erosion and invasive species. These maps are being created. This will be addressed within the noxious invasive species management plan.

Next steps: Overlay A14 map over maps showing nests, also T2, T5, T6, T16 maps. All Working Groups will identify areas of high/immediate concern. The Plan will include how to remediate these sites. We will then monitor their success in doing this over the term of the license.

Tony will discuss ownership of the erosion issue at the next Team Leader meeting.

TST (TECHNICAL SCENARIO TEAMLET) UPDATE

Paul Wetherbee (Team Leader of the TST) explained how this cross-resource technical working group is working with hydrological and habitat models to provide Working Group members with technical analyses of various flow regimes.

The HYDROPS model is nearly complete, as is the first half of the Middle Skagit Habitat Model. The final piece of the physical habitat simulation model is scheduled to be complete in mid-September. Initial runs include Recent Conditions and Draft Actions (for purposes of the PDEA). The TST have also completed (about 10) runs requested by the Skagit Systems Cooperative.

Paul distributed sample standardized input and output packages for HYDROPS run requests. The TST has established five energy years (August 1 through July 31) which constitute the full hydrologic spectrum.

They have set up an e-Room where TST members can view the voluminous results of various model runs.

They have also set up various levels of analysis. The samples distributed today are 2A. This is the standard high level (briefest) level of analysis. There is also a Level 3 (with more frequency curves). Level 4 would only be run on a few runs, and the results would fill a CD.

PDEAKathy announced the PDEA should be out to Working Group members, October 1. The comment period will be until January 2. The draft PMEs from June formed the basis of this assessment.

Study #	Title	Notes/Next Steps
T2	Vegetation Mapping in Project Area	Tom showed us how in inundation zone cover types changed when we converted the maps to the NAVD '88. The above full pool plots would become "VIT". The other cover types will remain unchanged with the exception of grass/forbs. Tom will update all the acreage figures accordingly.
		Re: overlays with dispersed recreation sites, Joetta made maps showing the instances where Hamer folks noted fire rings in polygons where no numbered dispersed recreation site was noted by the recreation folks. Some of these may have been under water when the recreation folks did their survey. There are also instances when sites on polygon boundaries may have been recorded in one or the other. Next Steps: Tony will get copies of these data to Terrestrial

		Working Group members and Andy (to share with
		Recreation Working Group folks).
T4	Analysis Species Assessment	This is complete! Report was distributed in August.
T5		
T6	Wetland Inventory Study Noxious Weed Assessment and	A study update was distributed.
10		Tom distributed a written update of progress on this study. A
	Control Plan	draft report should be out the first week of October. Carex
		flava site will be covered in the Forest Service NEPA. For PSE to deal with weeds on Forest Service lands, not covered
		by forest. The EA would have to be covered by FERC
		NEPA in the license.
T7	Historic Vegetation of the UB	This study is complete and has been approved. Marty
1 /	and LB Projects	produced a final report with revised numbers (NAVD) by
	and LB 1 rojects	the July meeting.
T7b	Future vegetation mapping	Marty distributed hard copies of the T7b report that he
170	Tuture vegetation mapping	revised to reflect the NAVD. He also expanded the
		discussion of the different scenarios and added a new graph
		showing reservoir elevations.
T-9,10	Recreation use, effects on Mt.	Did not discuss at this meeting. Don has drafted a PME for
1 3,10	Goat Habitat use	our review with regard to mountain goats.
T11	Oregon Spotted Frog Inventory	This study is complete and has been approved.
T12	Grizzly Bear Spring Foraging	Ron reported that plots were sampled from five different
	Habitat Value	habitat types between April and June. Approximately 24
		sites were sampled in each habitat type.
		The percentage coverage of herbaceous plant species,
		especially tuberous plants were also documented.
		Individual bio-mass measurements showed a slight increase
		in biomass over time.
		Wet meadow habitats were found to have significantly more
		forage than the other types. Within forested wetlands, 95%
		of the total forage was found to be "important". 48-70% was
		"important" in the other two wetlands. Riparian and
TT4.0		deciduous forests were low.
T13	Survey and Manage Terrestrial	This study is complete and has been approved.
T1.5	Mollusk Survey	
T15	Basin Vegetation Mapping	This is complete. It helped us identify critical information
		for grizzly and elk studies. An additional use for this data
		set might be helping us understand how many acres of
T16	Droiget Area Dave Dlant Com	riparian habitat are available for different stream classes.
T16	Project Area Rare Plant Survey	Tom distributed a written update of progress on this study
		Laura is working with Tony to get some cost estimates for
		looking at long term monitoring with the University of Washington.
		They are also looking at having the Rare Plant Report

		Addendum complete by the end of September
T17	Amphibian Studies in Reservoir Fluctuation Zone	Tom sent out copies of the updated version of this report this week, including changes to reflect conversion to the NAVD '88. There will also be an addendum to this report out by September 24. Tom reported that key data have been put into excel spreadsheet to facilitate manipulation by Working Group members. Comments are due on the Report and Addendum by October 15
R-T18	Breeding Bird Surveys	PME will be proposed by Bob K. and Lauri.
R-T19	Habitat Evaluation Studies	This will be part of the Management Plan (monitoring tool).
T21	Elk studies	Ron gave us a run through of the findings of this report. The model relates digestibility and volume of forage from various stands to cows and calves. From this they came up with a categorization (value ranking from "poor" to "good") of forage/coverage types.
		Low canopy was rated high. Deciduous was rated medium. High canopy was rated low.
		Ron reported that between 1/4 and 1/3 of the area was not mapped as no data were available. Most of this was high elevation summer range.
		Overall, of the data that were available (acres that were typed), 85% was mapped as poor, 11% as moderate, and only 4% was good (close to Lake Shannon).
		72% of total habitat was outside of any buffer (including future potential trails). 20% of total ranked forage habitat was within the road buffer. 26% of the good was within the buffer.
		Summary: Elk seem to be in pretty good shape, despite the poor forage habitat. Calves don't seem to be coming into the adult population. Are the elk numbers low? Is the existing forage being over grazed?
		Do we need additional data? Scott volunteered to bring in composition data that has been collected by the Upper Skagit in cooperation with WDFW. He will get this to Tony by Sept. 16 to distribute to Working Group members.
		We could also set up another conference call with Bender, Davis Lewis and Cook (elk experts) to discuss additional

		data they may have that might be relevant here.
		We need to focus on projected limiting factors.
		Next steps: Don will help us assign habitat values for un-mapped areas based on canopy type in mountain hemlock zones. He will also help us assign non-forest types based on our collective knowledge of the types of forage they produce. Don will lead a teamlet conference call to discuss the straw dog he puts together on Sept. 19 and distributes to teamlet members (Ron, Scott, Marty, and Bob N.). They will review the list of assumptions that Don used for this exercise. This could help us in making determinations of the value of road closures to elk. It would also create a useful planning tool going forward.
		We also need to discuss the "buffer thang" in terms of what might be project related. Tony reported that Ed and Jon V. will be meeting September 24 to discuss projected relatedness for recreation. This could be helpful to us as well. We will wait to see what they come up with and evaluate how it meets the needs of this group.
		We agreed that for current conditions, we won't be looking at project-induced recreation disturbance at Lake Shannon.
RT22	Fluctuation Zone Enhancement	This PME has been dropped.
RT23	Sphagnum Bog Survey	Preliminary data were reviewed.

NEW PME: MAPS (T5b)

Bob K. reported that a draft PME on this (Monitoring Aviary Productivity and Survival) was sent out in July.

This PME covers resident and migratory bird (mostly song birds) monitoring to address meeting their needs over the term of the license (productivity and recruitment of adults back into the population). They are suggesting three control sites and three other sites for comparison purposes. The monitoring would be an annual process.

We agreed to discuss this further in the RESOLVE process.

Bob will distribute some background information on the proposed monitoring methodology.

HANDOUTS (Those that will be posted to the website are bolded.)

- Paper copies of Greta's May 27 email re: cross-resource erosion concerns
- Sample HYDROPS Input and Output (Level 2) Forms for Draft Action for PDEA
- Invasive Weed Survey Update (Study T-6) by Hamer Environmental L.P.
- Rare Plant Survey Update (Study T-16) by Hamer Environmental L. P.

PARKING LOT

- Conceptual Mitigation Approach (PMEs)
- Review time frame/goals of working groups/milestones
- Definitions of "project boundary", "project effects", "previous environment", "project area", NEPA definitions
- Watershed Analysis Presentation
- Land Management Do study?
- Make list of all available relevant data. Create a subset of those data for Tony to always bring to meetings for group to continually reference.
- Changing Climate Patterns
- Determine land management allocations within Project boundary
- Interface with Access Management Plan
- Come up with optimal reservoir operation scenario(s) from Terrestrial perspective (HYDROPs)
- Set up "face to face" meetings with Russ Paul to review our proposals

MEETING EVALUATION

Well-Dones

- All experts were present
- Stan's slide show
- Scott's presence
- Carl on phone
- Phone technology is better
- Home grown organic grapes
- Good food

What to Change for Next Time

• Have all handouts we need.

WHAT'S HOT?

Developing PMEs

STUDIES STATUS FOR SOLUTION TEAM

- Grizzly and Elk Study Reports are almost complete!
- Finalizing reports for Rare Plants and Noxious Weeds
- Analysis Species Report is complete!

Tentative Agenda for October 16 (Technical) Meeting USFS Office in Mountlake Terrace

8:30 a.m. - 2:00 p.m.

Bring a sack lunch and we'll work through!

- 1. Review notes/agenda/action items
- 2. Assess terrestrial concern using A14 (shoreline erosion) overlay
- 3. Terrestrial HYDROPS run discussion

Page 8 of 9

Lyn Wiltse for Terrestrial Technical Working Group

- 4. Adaptive Management Update(?)
- 5. Technical discussion of studies: T21 (Elk), T12 (Grizzly), T17 (Amphibians), T6 (Noxious Weeds), T16 (Rare Plants)
- 6. Set November 20, agenda (location?)
- 7. Evaluate meeting