BAKER RIVER PROJECT RELICENSE

Recreational & Aesthetic Resources Working Group

February 26, 2001

9:30 a.m. – 1:30 p.m.

PSE Mt. Vernon Business Office
1700 East College Way
Mt. Vernon, WA

AGENDA

1. Review/revise minutes/agenda

2. Review action items

3. Define "project-induced" recreation

4. Continue defining studies
   - near-term 2001 study needs
   - 2001 study priorities
   - 2001 study plan assignments
   - subsequent study needs

5. Set agenda for next meeting (March 26; consider meeting in Mountlake Terrace)

6. Evaluate meeting

7.

8.

DRAFT

Discussion Paper on
Project-Induced Recreation
for the
Baker River Hydroelectric Project
February 16, 2001

Background

This paper has been prepared in response to an action item assigned by the Recreational and Aesthetic Resources Working Group for the Baker River Hydroelectric Project relicensing process. At one of its initial monthly meetings, the working group identified as a "parking lot" item the need to develop a definition of "project-induced recreation" that could be applied in planning recreation studies and evaluating potential recreation measures for inclusion in a settlement agreement on a new license for the project. At the regular monthly meeting held January 22, 2001, the working group specifically requested Chris Lawson of Huckell/Weinman Associates (the designated Team Leader for the working group) to prepare a working definition to provide a basis for substantive discussion at the February 26, 2001 meeting. This paper reflects the professional views of Huckell/Weinman Associates, and has not yet been reviewed by other members of the working group.

General Definition

At a broad, conceptual level, the definition of project-induced recreation for a hydroelectric project (or any other type of project) should be relatively simple and straightforward. To "induce" means to bring about or to cause. Therefore, project-induced recreation in the FERC context means recreational activity that is directly or indirectly caused by a FERC-licensed hydroelectric project. More specifically, it consists of a type and/or volume of recreational activity that would not exist if the hydroelectric project itself did not exist.

Measurement

Unfortunately, that general concept can be difficult to apply in practice, particularly if the context is the relicensing of an existing hydro project. In the case of an application for license for a new project, the recreational use that could reasonably be identified as induced by that project would include the forecasted use of all recreational facilities and dispersed opportunities at the project (net of any existing uses that were displaced by development of the project), plus any *increased* use in adjacent areas for which a clear cause-effect relationship to the project could be established (e.g., campers at new project-developed campgrounds participating in day-use hiking on nearby existing trails).

For a project that has been in place for over 40 years, however, the identification of recreational use that is project-induced is considerably less clear. In this case, project-induced recreation

represents the types and amount of current use that are *over and above* the use that would have occurred without the project. This incremental amount typically cannot be determined with certainty, because it is not possible to "reverse forecast" the past, i.e., what recreation-related events would have occurred if the project had not been developed. If it could be firmly established that (1) regulations or management policies in place at the time of project construction would have prohibited any other type of recreational development, and (2) access to a basin or subbasin only occurred when the project was constructed and would not have occurred otherwise, then it could plausibly be argued that all current recreation in that basin or subbasin was project-induced. If these conditions do not apply, however, then it must be accepted that some level of recreational development and use would have occurred over the intervening period if the project had not been constructed.

Application to the Baker River Project

The Federal Power Commission licensed the Baker River Project in 1956. The original license for the project brought the Lower Baker development (constructed in the 1920s) under the jurisdiction of the Federal Power Act and authorized the construction of the Upper Baker development, which occurred from 1956 through 1959. Prior to 1956, roads and trails were extended into the upper basin and provided a degree of access for recreational use and other human activities. Two campgrounds and a resort (on the original Baker Lake) existed in the upper basin at the time construction of Upper Baker began. During subsequent decades, while the Forest Service was developing new campgrounds on and near the new Baker Lake reservoir, road construction and related development activities extended farther up several of the tributary drainages. Based on other contemporary events, it is clear that access development and related activities in the upper basin would have continued and expanded without the project. Consequently, a substantial level of recreational development and use would have occurred between 1956 and 2001 if the project had not been constructed. Further, some current recreational uses are largely or entirely project-induced, while others have little or no relation to the project.

There is no simple or indisputable way to postulate how much of the current recreational use in the basin is project-induced, such as assigning a percentage of all use that is assumed to be project-induced. However, it should be possible to develop reasonable (and reasonably agreeable) approximations of the project-related share of use by inspecting the characteristics of individual recreation use components. Table 1 summarizes relevant information for 19 identified components of the existing recreational resource setting, which are generally grouped according to type of use (developed or dispersed) and location within the basin.

Table 1
Summary of Recreation Resources
and Their
Relationship to the Baker River Project

Recreation Resource	Historic Use	Current Use	Setting/Attraction	Relationship to Project
Upper Baker - Developed				
1. Horseshoe Cove CG	Old Baker Lake Campground, 10 developed units and 20 undeveloped sites	35 campsites, launch, beach, picnic area	Site on cove along southwest shore of Baker Lake/ flatwater activities and water-oriented camping and picnicking	Developed by USFS after Upper Baker constructed, to provide opportunities on Baker Lake; camping use project-induced if/to extant that it exceeds what would have occurred without the project
2. Panorama Point CG		16 campsites, launch, picnic sites	Site on west shore of lake near mouth of Little Park Creek and "elbow" of lake/flatwater activities and water-oriented camping and picnicking	Developed by USFS after Upper Baker constructed, to provide opportunities on Baker Lake; camping use project-induced if/to extant that it exceeds what would have occurred without the project
3. Shannon Creek CG		20 campsites, launch, picnic sites	Site on north shore of lake, near upper end of lake and Road 11/ flatwater activities and water-oriented camping and picnicking	Developed by USFS after Upper Baker constructed, to provide opportunities on Baker Lake; camping use project-induced if/to extant that it exceeds what would have occurred without the project
4. Maple Grove CG		5 boat-in/walk-in campsites	Site on east shore of lake, halfway between dam and elbow/unroaded site for water-oriented camping and picnicking	Developed by USFS after Upper Baker constructed, to provide boat-in/walk-in opportunities on Baker Lake; all camping and day use project-induced
5. Boulder Creek CG		10 campsites	Site on creek, just east of Road 11 and over 1 mile from Baker Lake/forest-oriented camping, proximity to sites on water	Developed by USFS after Upper Baker constructed; camping use project-induced if/to extant that (a) it exceeds what would have occurred without the project and (b) site serves users primarily interested in Baker Lake flatwater activities.
6. Park Creek CG	Old Morovitz Campground?	12 campsites	Site on creek, to west of Road 11 and about 1 mile from Baker Lake/forest-oriented camping, proximity to sites on water	Developed by USFS after Upper Baker constructed; camping use project-induced if/to extant that (a) it exceeds what would have occurred without the project and (b) site serves users primarily interested in Baker Lake flatwater activities.

Recreation Resource	Historic Use	Current Use	Setting/Attraction	Relationship to Project
7. Kulshan Campground		108 campsites, launch, picnic area	Site in old construction camp area near dam and about .25 mile from southwest corner of Baker Lake/proximity to flatwater activities	Developed by Puget after Upper Baker constructed to provide camping near and access to Baker Lake; all camping use project-induced.
8. Baker Lake Resort	Old Bagnell's Resort on original lake, 14 cabins, boat dock	11 cabin units, 90 campsites, launch, picnic area	Site on west/north shore of lake near mouths of Park and Swift Creeks and "elbow" of lake/flatwater activities and water-oriented lodging, camping and picnicking	Relocated resort from original Baker Lake, later expanded by private operator under USFS permit; all use project-induced to extent that it exceeds level of use of original resort.
9. USFS picnic/day use areas (1, 2, 3)		11 picnic sites at 3 locations, plus beach at Horseshoe Cove	Sites at Baker Lake campgrounds/swimming (Horseshoe Cove) and water-oriented picnicking	Developed by USFS after Upper Baker constructed, to provide opportunities on Baker Lake; all use considered project-induced.
10. Boat launches (1, 2, 3, 7)			Sites at Baker Lake campgrounds/flatwater activities	Developed by USFS and Puget after Upper Baker constructed, to provide access to flatwater opportunities on Baker Lake; all use considered project-induced.
Upper Baker – Dispersed				
11. Roaded camps on lake	Historical growth with basin road system	Est. 113 sites, of 232 total roaded sites in basin in 1999	Sites on or near Baker Lake/ flatwater use, water-oriented camping and picnicking, undeveloped setting	Developed by users after Upper Baker constructed, some at former USFS campgrounds; all use considered project-induced.
12. Unroaded camps on lake		Est. 17 sites in at least 5 clusters, of 144 total unroaded sites in basin	Sites on east shore of Baker L./flatwater activities, water-oriented camping and picnicking, undeveloped setting	Developed by users after Upper Baker constructed; all use considered project-induced.
13. Roaded camps away from lake	Historical growth with basin road system	Est. 119 sites, of 232 total roaded sites in basin	Sites primarily on spur roads away from Road 11 and Baker Lake/forest-oriented camping and picnicking, undeveloped setting	Developed by users as road network grew and recreation in general increased; small fraction might be project-induced, if/to extent that using Baker Lake is primary purpose for visiting the basin.
14. Unroaded camps away from lake	Historical growth with basin trail system	Est. 127 sites, of 144 total unroaded sites in basin	Sites primarily at higher elevations on trails or at climber camps/primitive high-country (primarily) camping and hiking	Developed by users as road network grew and recreation use generally increased; use not project-induced.

Recreation Resource	Historic Use	Current Use	Setting/Attraction	Relationship to Project
Baker Basin - Trails				
15. Baker Lake Trail	Old trail along Baker River by 1913	Approx. 14(?) miles of trail, of 64 total miles in watershed	Trail along east shore of Baker Lake, generally quite close to shoreline/low-elevation, water-oriented hiking and camping	Developed by USFS after Upper Baker constructed, to provide opportunities on Baker Lake; all use considered project-induced.
16. Other basin trails	Considerable development beginning in 1930s	Approx. 50(?) miles of trail, of 64 total	Trails primarily in Heather Meadows and Mt. Baker NRA systems, plus scattered other destinations such as Blue Lake-Dock Butte and Anderson-Watson Lakes/primarily high-country camping, hiking and fishing	Developed by USFS over decades to serve growing demand; minor fraction of use might be project-related, consisting only of day use by visitors staying overnight at Baker lake, and to the extent that use exceeds what would have occurred without the project; "but-for" relationship applies to USFS road and trail system.
Lower Baker – All				
17. Visitor Center		Indoor displays and visual access to fish facilities	Facilities within project operations complex/rest stop and information about project and area resources	Developed by Puget after project constructed to provide project-related information/interpretation; all use project-induced.
18. Lake Shannon Day Park		Undefined campsites, gravel launch	Site on southeast shore of Lake Shannon about 1 mile north of dam/flatwater activities, water-oriented camping and picnicking, undeveloped setting	Operated by Puget to provide opportunities at and access to Lake Shannon; all camping use project-induced.
19. Dispersed camps		Est. 10 sites, all roaded	Sites at various locations on east shore of Lake Shannon/ flatwater activities, water-oriented camping and picnicking, undeveloped setting	Developed by users after Lower Baker constructed; all use considered project-induced.

Sources: USFS, Draft Baker River Watershed Analysis, July 2000; PSE Baker River Project Relicense, Project Information Package, July 2000.

Several general observations can be made from the "Relationship to Project" entries in the table, and the corresponding attributes of those recreation components. For one, there are several types of recreational activities and several specific existing resources that are clearly reservoir-dependent and would not be present in the basin if the project had not been developed; these recreation use components can be considered entirely project-induced. Secondly, there are several activities and types of resources that occur on or near the project reservoirs that are largely or primarily project-induced, but the attraction effect of the project is incremental and may be variable among resources. Finally, only a relatively small and variable share of recreation use in the outlying portions of the basin (away from the project) has any relationship to the project, and may or may not be fairly considered to be project-induced. These observations are stated more specifically as follows:

- **Flatwater recreation activities and all use at developed day-use facilities on Baker Lake** are entirely project-induced. Flatwater boating, fishing from boats, water skiing and personal watercraft use would likely occur today if the original Baker Lake had remained, but the difference in scale between the 600-acre original Baker Lake and the two project reservoirs is so large that the practical solution is to consider all of this type of activity to be project-induced. Similarly, the lakeside picnic areas and the beach at Horseshoe Cove (Table 1 entry 9) and the Baker Lake boat ramps would not exist, or exist in a form near their present scale, without the project and all use at these facilities can be considered project-induced.
- **Use of the Maple Grove and Kulshan Campgrounds** (Table 1 entries 4 and 7) is entirely project-induced. The existence of the reservoir is clearly the primary attraction for boaters and hikers who use Maple Grove on Baker Lake. Kulshan Campground was developed and is operated by PSE as a project feature.
- **Use of the Baker Lake Resort** is predominantly, but not exclusively, project-induced. While all activity is clearly oriented to or attracted by Baker Lake, the historic use represented by the original resort is an increment of use that cannot logically be considered project-induced. The original resort had 14 cabins, compared to 11 cabin units for the current resort. Campsite development probably would have occurred had the original resort remained, and day use previously existed at the resort and would likely have expanded. Nevertheless, the simplest treatment for this facility would be to equate the share of current use represented by cabin visitors to historical use, and to consider all other use (camper and day user) to be the project-induced component.
- **Overnight use of the USFS campgrounds on Baker Lake (Horseshoe Cove, Panorama Point and Shannon Creek)** is likely to be primarily project-induced, but must be incrementally compared to the potential camping use that would have existed without the project. Baker Lake is clearly the primary attraction for users of these facilities, and the camping supply they represent would not have been developed *in the current locations* without the project. However, some local camping capacity existed in 1956 (including a shoreline campground on the original lake) and was displaced when the project was constructed. In addition, the level of campground development that occurred in other drainages of the Mt. Baker-Snoqualmie and adjacent national forests through the 1970s indicates that a substantial supply of riverside camping would likely have developed in the upper Baker basin if the project had not been constructed. (See additional discussion of this point later in the paper.) Consequently, only a portion

(probably a large portion) of the overnight use at these three campgrounds can reasonably be considered project-induced.

- **Use of the USFS campgrounds near Baker Lake (Boulder Creek and Park Creek)** is partially (perhaps primarily) project-induced, but must also be incrementally compared to the potential camping use that would have existed without the project. It is possible or even likely that most campers at these two facilities are attracted primarily by the proximity to Baker Lake, and the opportunity to get to the lake for flatwater recreation. As with the camps on Baker Lake, however, Boulder Creek and Park Creek in part replaced existing camping capacity (an unknown number of sites at the old Morovitz Campground), and river-oriented campground development would likely have occurred in the absence of the project. The increment of use at these campgrounds that can be considered project-induced is probably less than the corresponding increment for the USFS Baker lake campgrounds.
- **Use of the roaded and unroaded dispersed campsites on and near Baker Lake** can reasonably be considered entirely project-induced. (For this application, these sites are defined as the boat-in or walk-in sites on the east side of Baker Lake and all dispersed sites on the west side of Baker Lake between (east or south of) the Road 11 and the lake itself.) Road and trail access along the valley floor in the upper basin would no doubt exist if the project had not been constructed, and dispersed campsites would have developed gradually in conjunction with the access. Because dispersed use is probably much more concentrated by the degree of access present around Baker Lake, for simplicity it is best to consider all use in this category as project-induced.
- **Use of roaded dispersed camps away from Baker Lake** (west or north of Road 11 and in the tributary drainages) is likely to be predominantly unrelated to the project. Dispersed recreation has been heavily researched by USFS and university scientists, and that research has consistently shown that dispersed campers choose that style of camping primarily because they prefer the lower level of development, the less-regulated environment, and the opportunity to camp with others who share similar tastes (often in large groups). Those user characteristics no doubt hold in the Baker basin as they do in other areas. In some cases it has been postulated that dispersed camping activity has occurred as a "spillover effect" of reservoir-oriented recreation (i.e., campers drawn to an area by the attraction of reservoir recreation, and ending up in dispersed sites because of full reservoir campgrounds or a preference for informal camping). Field studies for the Lewis River relicensing process, however, showed that dispersed campers predominantly chose their sites for the standard preference-based reasons described above, and few were present due to spillover effects. Some users of roaded dispersed camps away from Baker Lake may come to the basin with Baker Lake recreation as a primary or key purpose, but they are likely to comprise a small percentage of the total for this category.
- **Use of unroaded dispersed camps away from Baker Lake** (trailside and climber camps) is likely to be exclusively independent of the project (i.e., none is project-induced). Users of these sites clearly come to the basin primarily for mountain climbing, backpack camping in higher-elevation settings, and similar reasons. They would pursue these activities regardless of the presence of the project, as long as the necessary road and trail access existed.
- **Use of the Baker Lake Trail** can be considered entirely project-induced. There was a trail along the Baker River as early as 1913, and there would likely be at least some

mileage of river-bottom trail today if the project had not been built. Nevertheless, the attraction of a lakeside trail is clearly a primary factor for current users, and current use is probably much higher than would have occurred without a lakeside trail. For simplicity, it is appropriate to consider all of this use as project-induced.

- **Use of other trails in the Baker basin** is likely to be predominantly unrelated to the project. The overnight component of recreational use on trails other than the Baker Lake Trail is completely independent of the project; these users are attracted to settings that are/were not created by the project, and to which access exists independently of the project. Visitors staying overnight at Baker Lake probably account for some of the day-use activity (likely to be well below half) on other trails in the basin. However, a significant (and currently unknown) portion of the overnight use at Baker Lake is not truly project-induced, as noted above and in Table 1. Therefore, only a portion of the trail day use by Baker Lake overnight visitors (which itself is some fraction of total day use on these trails) can be considered project-induced. Given this situation and the conclusion that no overnight trail use in this category is project-induced, the project-induced share of use on other trails in the basin is likely to be a small percentage of the total.
- **Use at Lower Baker** is considered to be entirely project-induced, for purposes of analytical simplicity. The visitor facilities near Lower Baker Dam would not exist if the project had not been built. Similarly, use at Lake Shannon Day Park is generated exclusively by opportunities (flatwater recreation and lakeshore camping and day use) created by the project, and comparable resources did not exist prior to project development. The few dispersed campsites on the east shore of Lake Shannon are comparable to the roaded dispersed sites and their use is considered to be entirely project-induced for the same reasons, even though some road access and associated dispersed use would likely have developed in the absence of the project.

Pending some additional input, these operational rules can be applied to quantify the level of recreational use in the Baker River basin that is attributable to the development of the project and its influence on recreation use patterns. Reliable estimates of current use for each resource component identified in Table 1 comprise one necessary input. Additional insight to user motivations and attraction factors (purposes for visiting the basin) is needed to determine the project-induced percentages for certain types of use (e.g., overnight use at Boulder Creek and Park Creek). Another key information item is an incremental analysis of current camping capacity relative to what might have been developed in the absence of the project; this topic is discussed below.

Incremental Comparison of Camping Supply

The 6 USFS campgrounds on and near Baker Lake currently provide an aggregate supply of 98 campsites (this includes the 5 boat-in/walk-in sites at maple Grove, but excludes the group sites at Horseshoe Cove). While all of these facilities were constructed after the Upper Baker development was completed, at least a portion of the total supply would likely have existed today even if the project had not been developed. As shown in Table 1, two USFS campgrounds with an indeterminate number of individual sites existed in the upper basin in 1956 and represent the minimum supply that would exist now without the project. More importantly, the history of

postwar national forest recreation development suggests that additional supply beyond these two campgrounds would likely have occurred in the upper Baker basin if the project had not been constructed.

Huckell/Weinman Associates conducted an inventory of USFS campground capacity in similar settings to illustrate this concept (see the attached spreadsheet "USFS Cascade Campgrounds"). The inventory includes 12 major stream drainages within the Mt. Baker-Snoqualmie National Forest on the west slope of the Cascade Mountains, plus three drainages within the Okanogan National Forest and 12 drainages within the Wenatchee National Forest on the east slope of the Cascades. Road-accessible campgrounds and numbers of campsites were tabulated for each drainage, using USFS national forest maps of approximately 1980 vintage as source materials; the older national forest maps better show the pattern of camping supply expansion that occurred through the 1960s and 1970s, while more recent maps reflect the extent of facility retrenchment that has occurred since approximately 1980. In addition, the length of primary national forest road (or, in some cases, federal or state highway) along the floor of each drainage was estimated from the maps, to approximate the road-accessible size of each valley and allow a more standardized comparison. The number of campsites per mile of roaded valley area was calculated from these figures, to illustrate the approximate intensity of campground development in different areas.

MBSNF recreation data from 1977 (as shown on the forest map printed in 1985) indicate a total camping supply in the 12 inventoried drainages of 46 campgrounds with 750 total individual campsites. The road-accessible area of these valleys totaled about 275 miles, so the total campsite supply represents an overall average of 2.7 campsites per roaded mile in the major drainages. On a per-mile basis, the drainages with the largest campsite supply were the South Fork of the Stillaguamish (122 sites total and 4.9 sites per mile), the Suiattle (67 total and 4.5 sites per mile), the White (65 total and 4.3 sites per mile), the Baker (83 total [at that time] and 4.2 sites per mile) and the South Fork of the Snoqualmie (80 total and 4.0 sites per mile).

The campsite supply on 3 inventoried Okanogan National Forest drainages (the Twisp River, Methow River/Trout Creek and Early Winters Creek) totaled 151 sites and 1.7 sites per mile; the smaller supply and lower site intensity for these drainages probably reflect the greater distance and lesser demand from the major population centers in the state. By contrast, a supply of 69 campgrounds and 1,574 campsites was reported for 12 Wenatchee National Forest drainages, representing an overall intensity of 4.6 sites per roaded mile of stream valley. Data for specific drainages included 230 total sites and 7.7 sites per mile for the upper Yakima; 229 sites total and 6.5 sites per mile for the Cle Elum; 251 total sites and 6.3 sites per mile for the Tieton; and 132 total sites and 5.3 sites per mile for the Bumping. All four of these drainages include large reservoirs with major campgrounds (Lake Kachess, Lake Cle Elum, Rimrock Lake and Bumping Lake), and the campsite development levels clearly indicate a pattern of concentrated camping supply on lakes. However, WNF drainages such as the Wenatchee, Naches, American, Icicle and Entiat all had substantial campsite supplies and site intensities ranging from 3.2 to 4.5 sites per mile, but with little or no lake-oriented campground development.

Based on the 1970s-era supply of river-oriented campgrounds, it is conceivable that up to about 5 sites per mile of river valley would have been constructed in the Baker basin during the period of

national forest campground expansion if the Upper Baker dam and reservoir had not been developed. A development intensity of that level would equate to a total supply of about 100 campsites in a roaded valley area of nearly 20 miles. Alternatively, a figure of 3 sites per mile (60 sites total) would appear to be the minimum plausible development level for the Baker River, given the corresponding ratios for the Nooksack (3.3 sites per mile), Cascade (3.1 sites per mile), Suiattle, Sauk (1.6 sites per mile) and South Stillaguamish Rivers. Therefore, the present camping supply (out of 93 total road-accessible units) that can be considered project-induced could be as high as about 30 to 35 sites, and as low as 0 sites. By extension, the proportion of overnight use at the 5 road-accessible Baker Lake campgrounds (including Boulder Creek and Park Creek) that is appropriately considered project-induced is somewhere between 0 and 35 percent of the total overnight use for those facilities.

Conclusion

Existing information on recreation use patterns for the Baker River basin does not yet allow a precise, quantified specification of the level of project-induced recreation for the Baker River Project. However, the conclusions in Table 1 and the corresponding bulleted observations describe at present a qualitative working definition of the project-induced share of use for most of the separable components of recreation use in the basin. In addition, the discussion of camping supply in the Baker basin relative to the supply in comparable drainages elsewhere in the Cascades identifies a plausible percentage range for the project-induced portion of overnight use at the five USFS Baker Lake campgrounds. Using visitor-derived information from project field studies, it should be possible for the working group to assign specific project-induced percentages to each use component. Once those percentages have been defined, it will be a simple step to apply those ratios to estimated use levels for each recreation component and derive an aggregate figure for total project-induced recreation.

Literature Sources

Puget Sound Energy. 2000. Baker River Project Relicense, Project Information Package. Bellevue, Washington. July 2000.

U.S. Forest Service. 2000. Baker River Watershed Analysis July 2000. Draft. U.S. Department of Agriculture, Forest Service, Mt. Baker-Snoqualmie National Forest, Mt. Baker Ranger District. Sedro-Woolley, Washington.

BAKER RIVER PROJECT RELICENSE

Recreational & Aesthetic Resources Working Group

February 26, 2001

9:30 a.m. – 1:30 p.m.

PSE Office, Mt. Vernon, WA

FINAL MEETING NOTES

Mission: *"To develop alternative solutions and recommendations addressing recreation, education and aesthetic resources related to the Baker River Project and its operations leading to a settlement agreement."*

Team Leader: Chris Lawson (Huckell/Weinman Associates) (425) 828-4463, clawson@huckellweinman.com
PSE Contact: Tony Fuchs: (425) 462-3553, tfuchs@puget.com

PRESENT
Chris Lawson (Huckell/Weinman Associates, Inc.), Ann Dunphy (U.S.Forest Service),Jamie Van De Vanter (Van De Vanter Group), Jim Eychaner (IAC), Ardis Bynum (U.S. Forest Service) by phone, Andy Hatfield (PSE), Tony Fuchs (PSE), Lyn Wiltse, facilitator (PDSA Consulting)

NOTE: The next few 2001 meeting dates are as follows: 3/26, 4/23, and 5/21 (to avoid Memorial Day). ***Times will be 9:00 a.m. - 2:00 p.m***. The location will remain, for the most part, at the PSE office in Mount Vernon, WA. **On March 26, we will meet at the Forest Service office in Mountlake Terrace**.

In the event of ***adverse weather***, call Chris and he will have a message announcing any meeting change or cancellation.

NEW ACTION ITEMS
- Saul: Contact Nature Conservancy, NCCC, Park Service, City of Concrete, Forest Service re: their interests in outreach and education.

- Chris: Touch base with Ken and Saul re: participation
- Ann and Chris: Get together and share data and look at making any revisions to Chris's paper on project-induced recreation, and work on revised study requests/study plans.
- Ardis and Jim: Review updated/revised study planning products.
- Chris: Distribute PSE creel survey questions to team members.
- Chris: Distribute updated study plans to members by March 19th.
- Jim: Provide PSE with statewide recreation data to be used in SCORP.

REPORT ON OLD ACTION ITEMS

- Chris: Emailed 1/11/01 version of study request form to all team members as son as possible
- Chris: Collated and distributed study requests to all team members by February 13th.
- Wayne: Made a copy of the Corps EIS available to this group.
- Tony: Checked availability of digital aerial photos and digital terrain map. January 16th aerial photos were taken and made into digital topography of the drawdown zone. PSE is planning to take another set of photos now since the reservoir is as low as it can get. They have FERC boundary covered from just outside of it to 30 ft. depth into the reservoir. The new photos will be taken within the next two weeks. The second digital terrain map (all maps are at 5 ft. contour intervals) should be available to all members by the end of March/early April.
- Chris: Prepared and distributed by e-mail a paper defining "project induced" recreation.
- Ann: Reserved a meeting room for us at the Forest Service Building at Mountlake Terrace, WA for the next three months.

February 26, 2000 Agenda
9:30 a.m. to 1:30 p.m. at PSE Office in Mt. Vernon

1. Review/revise minutes/agenda
2. Review Action Items
3. Define "project induced" recreation
4. Identify Studies: Prioritize 2001 studies and assign responsibilities for study plans, determine approach, how to allocate coverages, etc.
5. Set agenda and location for Mar. 26 meeting (Consider meeting in Mountlake Terrace)
6. Evaluate meeting

OPERATIONS UPDATE

The project maintenance outage is currently scheduled to begin March 5. The reservoirs were drafted to minimum pool sooner than they otherwise would have because PSE (at the request of various fisheries agencies and tribes) was supplementing stream flows to protect salmon redds. Both reservoirs should be filled again by about the end of May, given normal precipitation through that period.

HANDOUTS:

Discussion Paper on Project-Induced Recreation for the Baker River Hydroelectric Project, February 16, 2001 by Chris Lawson

"PROJECT INDUCED" RECREATION DISCUSSION

Chris walked the group through his paper. There was discussion about some of the conclusions drawn from the data, as well as which data were referenced in the paper. Ann reported that she had found two old USFS recreation plans for the area, one from 1948 and one from 1961. She stated those documents indicated that there was limited potential for dispersed recreation along the Baker River due to the terrain, and that the federal power site withdrawal (dating from about 1928) would have been a deterrent to construction of developed recreation facilities. One plan mentioned that Noisy Creek would be a good site for recreation development, but only if the operator purchased the private lands near that site (the old Scott Paper property).

The Forest Service representatives indicated that most recreationists are attracted by water and many are attracted specifically by lakes, which in this case essentially would not exist without the project; therefore, they believe that all recreation development that occurred after the project was built is project induced. Ann said that we should not try to speculate as to what development would have occurred without the project, but we should focus on the resources that we knew existed prior to the project. Chris agreed that we could never accurately establish what would have happened if Upper Baker had not been built, but noted that focusing only on what was present in 1956 would be the same as speculating that no additional recreation development would have occurred. Given the expansion of road and trail access in the Baker basin and the history of USFS recreation development through the 1970s, he felt that would be inappropriate.

Ardis suggested that the group move on to other topics, because we probably would not be able to agree on what would really have happened (with respect to recreation) without the project. Tony responded that he wanted to continue the discussion, because he felt strongly that the influence of road and trail access could not be ignored. The group subsequently agreed to move on to discussion of studies, with the intention that through studies we can flesh out what really constitutes "project induced" recreation.

Ann suggested there are some details that need to be clarified/corrected in the paper. Ann will meet with Chris to address the changes, and we will review them and continue this discussion at our March meeting. It will be a challenge to distinguish recreation which results from the project (e.g., flat water-related) and that which results from road access or fire-related trails. Some of the high-elevation recreation use in the basin originates at Baker Lake. We hope to uncover the degree of the connection through surveys/interviews.

STUDY REQUESTS

Tony reported that the Terrestrial Working Group had two study requests, both addressing potential impacts on mountain goats, that they thought should be considered by the Recreation Working Group. The following discussion addressed whether these studies actually involved primarily recreation or wildlife issues, and whether the recreation group had access to the expertise needed to provide the types of information desired by the terrestrial group. Ann noted that the concern of USFS biologists over potential recreation impacts on goats centered on a couple of areas (including Anderson/Watson), and that the risk of adverse impacts on goat behavior appeared to be associated with off-trail recreational activity (i.e., that goats seemed to be relatively habituated to recreationists on trails and at camps). Group members observed that users probably would not be very forthcoming if our surveys asked about off-trail activity, that the goat population decline was relatively widespread and not confined to the Baker basin, and that

recreation-related impacts might be only one of several potential factors in the decline. Based on these observations, the group decided to send the two proposed mountain goat-related studies back to the Terrestrial Working Group from which they originated.

The group also discussed the need and appropriate sponsor for potential study of water quality related to dispersed recreation sites. Based on the expertise available to the respective groups, the Recreation Working Group concluded that any such water quality study should be designed, managed and conducted by the Aquatics Working Group. However, coordination between the two groups will be needed.

The group had a rather lengthy discussion of how the 2001 recreation season was shaping up, primarily with respect to water and weather conditions, and whether it would be advisable to proceed with full-blown recreation field studies in 2001. Jim proposed that we defer detailed field studies to the 2002 season, because there is limited time available to develop complete study plans and survey instruments and there would be a significant risk that results from 2001 studies might have limited applicability because of abnormal conditions. Chris acknowledged a significant concern over the applicability of 2001 results, but indicated we needed to balance that risk against future schedule pressures relative to the recreation plan and the EA if the field studies were postponed to 2002. A clear consensus on this issue was not stated, but the group seemed to agree that monitoring of use patterns needed to be done in 2001 regardless, and that it might be advisable to conduct user survey (questionnaire) work on a limited or experimental basis during 2001.

The group then reviewed the 11 study requests submitted to date, clarified what was desired for each one and decided to revise and/or combine studies as shown below. They also noted which studies need to be begun this year.

R-R12: Dispersed & Developed Site Inventory (Combination of R-1, R-3, and R-6)
The group agreed this study should employ GPS equipment to locate and map both developed and dispersed recreation sites, and to inventory both facilities/resources present at the site and their condition. For dispersed sites, the inventory will include those with direct highway (Road 11) access and those on spur roads between the highway and Baker Lake, plus any boat-in sites anywhere (including Lake Shannon) and any walk-in sites from Baker Lake Trail. The study will capture developed and dispersed sites at the same time, and should consider seasonality of site use.

Ann noted that this study should address safety issues (as in request R-3), such as boating hazards (exposed stumps near launch and access points) and include elements from the proposed lake level survey (boater and camping use in drawdown zone).

R-R13 Visitor Surveys (Combination of R-2, R-3, R-4, R-10, R-11)
This study should look at recreation in Baker basin/project vicinity in the larger sense and cover user demographics (i.e., develop a user profile). It could be done with one-on-one surveys, exit surveys, observation, and/or mailers. Questions should investigate what makes the basin unique (include dispersed campsites, aesthetics, sight-seeing, etc.). We may want to add questions related to other resource areas. We should consider using one survey instrument in a variety of ways to get quantification of user levels, their experience, etc.

Ann said that this study should include some off-site surveying, through mail or phone sampling of the general public, to address the market-area population using the Baker basin. Jim indicated that he was very uncomfortable with doing any off-site surveys, because people are getting very resistant to responding to such surveys, particularly phone surveys. He indicated IAC had recently spent $100,000 on a statewide boating survey that ended up costing twice what had been originally expected, and the agency was still not sure if the data from the survey were reliable and usable. How off-site surveys could or would be done and whether they are cost-effective remain unresolved questions for this study.

Information needs identified in the original Recreational Fishing (R-4) study request can be met by questions that can be incorporated into the user surveys (R-13), and/or the annual creel survey conducted by PSE. Several people said they would like to see how they (PSE) do the creel survey. Jim suggested the group may want to do some surveys at boat launches, as that can usually be effective. Other questions noted in R-4 (related to impacts of fishing on the resources) are the responsibility of State Fish & Wildlife.

The group decided that the intent of the original study request for R-3, the Lake Level Survey could be split up between the new R-12 and R-13 studies. The site inventory (R-12) can cover physical aspects of lake levels in relation to use patterns at the resort, concession campgrounds, boat launches, etc., while the user surveys (R-13) can include questions about lake levels and the recreation experience. Tony noted that lake level mapping is being covered by the Aquatics and Operations Working Groups, and the latter group would be looking to identify operating ranges for boat ramps and other facilities.

R-R5 Visuals & Aesthetics Study
Discussion of this study request was deferred, as this work is not considered critical for completion in the 2001 season.

R-R14 Secondary Data Collection (Combination of R-R7 and R-R8)
The group agreed to combine two original PSE study requests, as both involved collection of secondary (already existing) information and would logically be conducted jointly. This study involves both collecting and aggregating existing data applicable to the study area that have not already been processed (e.g., USFS data on use of concessioner campgrounds have been collected for years, but have not been pulled together or analyzed). The group agreed there is no required start date for this study, but the earlier it is done, the better.

Jim will provide PSE with new statewide recreation data that he will be using later this year to prepare the next Statewide Comprehensive Outdoor Recreation Plan (SCORP). The data are not yet available in final form, but should be soon.

R-R9 Recreation Use Survey-Electronic Monitoring
Chris explained that this study request was to implement a limited program of using electronic traffic counters to count total traffic coming into the Basin and traffic at particular developed sites, for which we could estimate day use by subtracting the overnight use from the total traffic. The group raised several questions about such a study, such as whether we could use the results to get an idea of the popularity of different spots, how reliable the counters would be, how much they cost, and how usable these data would be. Chris replied that counters range widely in price and capability, and that if we did pursue this study PSE had assumed we would use classifying counters (which have the ability to distinguish vehicles

pulling trailers) and that calibration work (visual observations checked against electronic records) would be a required component of any such program. The group tentatively decided it would be desirable to install a permanent counter on Road 11 to count cars coming into the Basin, and to do this before the start of the fishing season. This decision will be re-visit at the next meeting.

R-R11 Recreation Capacity & Suitability Analysis
This study includes elements of or overlap with the site inventory study, although it also addresses potential (in addition to existing) recreation capacity, as well as components of the recreation needs analysis and other recreation plan functions. The group agreed to look at this after the 2001 field studies have been programmed, except for the elements that need to be reflected in R-12.

Summary of Study Request Disposition
Based on the resolution of the proposed studies, the group characterized the original and revised study requests as follows:

Studies for 2001 Field Season	**Studies that could be Deferred**
R-12 (R-1, 3, 6)	R-5
R-13 (R-2, 3, 4, 10, 11	R-11 (potential capacity and suitability)
R-14 (R-7, 8)	
R-9 (Counter on Road 11 to count cars coming into the upper basin)	

For future consideration: WATER QUALITY

Lyn suggested that a technical working group (or groups) needed to be created to revise the study requests and develop more detailed plans for the studies. Jim and Ardis agreed to review products developed by others. Ann and Chris were tabbed with figuring out how to proceed with study planning documentation.

PARKING LOT
- Visioning exercise
- Organizational/agency goals
- Bounce around with meeting locations
- Operationally define “vicinity”, “watershed”, “project induced”, “dispersed”, or “displaced”
- List authorities that this team must be aware of
- Be sure someone from Recreational Resources area sits on the Solution Team.
- Look at dispersed recreation with the Project as a whole.
- Look into getting guest speaker from Seattle City Light
- Tie education piece to ALL Working Groups
- Hold periodic “outreach” meetings for feedback from other groups (hiking, horseback riding, etc.)
- Land Management
- Get a National Park Service rep
- Forest Service presentation of SMS
- Need good maps of the project area
- Consult with Jim Johnston (with WDFW)

EVALUATION OF MEETING

Things Done Well

- Covered a lot of ground
- Good participation
- "Project induced" discussion
- Chris's paper

Need for Improvement

- Missed Lauri
- Need full participation for "project induced" discussion

TENTATIVE AGENDA FOR MARCH MEETING

March 26, 2000 Agenda

9:00 a.m. to 2:00 p.m. at Forest Service Building at Mountlake Terrace, WA

NOTE: NEW EXTENDED HOURS. BRING LUNCH; BE PREPARED TO WORK THROUGH

1. Review/revise minutes/agenda
2. Review Action Items
3. Studies: Finalize 2001 studies
   - Review/discuss revised study request forms
   - Discuss study plans for near-term work
   - Provide direction for mobilizing studies in April
   - Discuss input to PSE opening day creel survey
4. Continue to consider definition of "project-induced recreation"
   - What facts will we use?
   - What is our premise?
   - How and when will we apply concept?
5. Set agenda and location for Apr. 23 meeting (Consider meeting back at Mt. Vernon)
6. Evaluate meeting