

Appendix D
Dispersed/Displaced Recreation Visitor Survey Results

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**Lewis River Hydroelectric Projects
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DISPERSED/DISPLACED RECREATION VISITOR SURVEY

The Recreation Surveys (REC 3) consist of a group of 7 user count, visitor attitude, and other surveys to supplement similar surveys conducted in 1996 through 1998 in the vicinity of the projects. Combined with previous survey data for the project area, these surveys provide information on demand and use levels in the study area. These 7 recreation surveys, once completed, will be compiled into the Recreation Demand Analysis report (REC 4). This survey, the Dispersed/Displaced Recreation Visitor Survey, is 1 of these 7 surveys. The results of this survey are presented below. Dispersed area recreation counts were collected as part of the broader User Count Survey and were reported in the 1998 Recreation Survey Results (PacifiCorp and Cowlitz PUD 1999b).

Study Objectives

The objectives of the Recreation Surveys (REC 3) are to answer key questions identified in the previous watershed scoping, assess existing demand and use levels, assess visitor attitudes and preferences, and assess perceptions of crowding.

Study Area

The study area for this survey includes recreation sites and use areas selected by agencies during 1997-1998 consultation along Forest Roads 81 and 90, including Merrill Lake, the Kalama Horsecamp area (but excludes the Horsecamp itself), and others.

Methods

The methods for this study are described on pages REC 3-3 to REC 3-6 of the Study Plan Document (PacifiCorp and Cowlitz PUD 1999a).

Study Results

This subtask was initiated in the spring of 1998 following approval by the Recreation Resource Group. The results of this subtask were reported in the 1998 Recreation Survey Results (PacifiCorp and Cowlitz PUD 1999b). Additional comments from the USFS on these results were discussed at the Recreation Resource Group meeting on 11/30/99. These results have been updated and revised and are presented below.

Dispersed/displaced recreation use at sites adjacent to the Lewis River reservoir system was the focus of this survey. The principal objective was to determine what influences recreation visitors' decisions to use non-project developed or undeveloped sites for recreation, as opposed to developed sites at the Yale, Swift, or Merwin reservoirs. Of primary interest is how peak use summer weekend and holiday conditions may affect the use of the surrounding areas, possibly displacing visitors from project campgrounds and day use sites into non-project lands. "Dispersed recreation" describes those recreation activities (including camping and day use) that occur in an undeveloped or more primitive manner outside of project campgrounds and developed facilities near the Lewis River reservoirs. "Displaced recreation" describes those recreation activities by visitors

who desire to utilize project reservoir campgrounds and day use areas, but were unable to do so, resulting in them seeking sites in the surrounding area.

During the 1998 field season, groups were interviewed on selected weekend and/or holidays from May to September in order to assess potential peak use spillover effects. A total of 11 survey sweeps were conducted over 15 days (Table 1). Dispersed recreation use was often low or nonexistent in many of these areas while survey sweeps were conducted. However, when groups were present, brief in-person interviews were conducted at up to 4 groups at each site. Rarely were more than 4 groups present at each site. In total, 41 groups (representing about 200 people) were surveyed by field researchers. The overall response rate for participating in these interviews was very high (95 percent).

Table 1. Survey interview days and conditions.

Date (1998)*	Day of the Week/Holiday	Time of Day	Weather
May 24	Sunday (Memorial weekend)	8:00am-11:15am	Overcast, Sprinkles, Cool
May 25	Monday (Memorial weekend)	9:00am-10:15am	Overcast, Cool
June 19	Friday	3:00pm	Partly Cloudy, Cool
June 21	Sunday	2:45pm	Partly Cloudy, Cool
July 3	Friday (July 4 weekend)	2:45pm-5:00pm	Overcast, Mild
July 18	Saturday	4:00pm	Clear, Hot
July 19	Sunday	10:00am-11:15pm	Clear, Hot
August 1	Saturday	12:30pm-12:45pm	Overcast, Mild
August 2	Sunday	4:00pm	Clear, Hot
August 8	Saturday	11:15am-3:30pm	Clear, Hot
August 15	Saturday	10:45am-3:00pm	Partly Cloudy, Mild
August 23	Sunday	10:00am-11:00am	Overcast, Mild
August 29	Saturday	10:00am-3:00pm	Clear, Hot
September 5	Saturday (Labor Day weekend)	9:45am-5:00pm	Clear, Hot
September 6	Sunday (Labor Day weekend)	11:00am	Clear, Hot

* A total of 11 survey sweeps of all sites were conducted over 15 days. Days of the week of interviews: 6 Saturdays (40%), 6 Sundays (40%), 2 Fridays (13%), and 1 Monday (7%). Weather: 7 Clear/Hot (47%), 5 Overcast (33%), and 3 Partly Cloudy (20%). Only 1 day experienced some precipitation.

Survey dates and times were selected to observe and interview dispersed/displaced visitors in nearby non-project areas during peak times when displacement would most likely occur (summer weekends and holidays) and when visitors would be at their campsites. Saturdays were surveyed during the entire day. Fridays were surveyed in the late afternoon after visitors might have arrived. Mondays (a holiday) and Sundays were surveyed in the morning hours before campers might leaving the area, except for the Curley area (primarily trail-related use). Because of the large geographical area and other ongoing surveys, survey times varied somewhat. At the same time as these surveys were occurring on lands surrounding the projects, visitor surveys at project campgrounds and day use areas were also being conducted. In this manner, dispersed/displaced visitors could have been surveyed within or outside of the project area.

This survey specifically addresses visitor responses collected outside of the project area at undeveloped and developed campsites and day use areas. Visitor responses collected inside the project area are presented in the 1998 Lewis River Recreation Survey Results (PacifiCorp and Cowlitz PUD 1999b). The vast majority of visitors surveyed in the

project area were camped at project campgrounds. A few visitors, however, indicated camping outside of the project recreation facilities.

Sites where interviews were conducted outside of project recreation facilities included:

- Corridor along Forest Road 81 (SR 503/Lewis River Road to Merrill Lake area)
- Dispersed sites near Kalama Horse Camp, but excluding the Camp itself
- Blue Lake Trailhead area
- Corridor along Forest Road 90 (above Eagle Cliff at Swift to the Curley Trailhead/Curley Falls area)
- Swift 2 area (Lewis River bridge/IP Road Gate area)

Key Questions and Summary of Results

To summarize the overall results of this survey, responses to 3 key questions are provided below. These responses pull from data presented later in this study.

Question 1: Are people camping on USFS lands (and other dispersed campsites) because they prefer the dispersed camping experience but are attracted to the area because of the reservoir related recreation opportunities (dispersed users by choice)?

Response 1: Most visitors surveyed indicated that they were intentionally seeking an undeveloped, quieter recreation experience than is provided at more developed private and PacifiCorp recreation facilities in the Lewis River corridor. Solitude, quiet, and getting away from other people and restrictions were the most commonly sought after experiences by groups interviewed. Groups interviewed were also asked why they chose the particular spot where they were encountered. Responses generally fell into 4 categories: Social reasons such as lack of crowding or low density of use (38%), setting attributes or activities (35%), avoidance of managerial influence such as no fees or the undeveloped nature of the site (15%), and/or family tradition or other similar reasons (12%). At the same time, 20% of those surveyed indicated that 1 of the 3 project reservoirs was their “main destination” during their trip and 25% of respondents indicated that the project reservoirs were “very important” to “extremely important” to their decision to come to this site. There appeared to be an attraction for these visitors, however, they chose not to camp along the reservoirs because they intentionally sought a more primitive recreation experience. It should also be noted that a few (3) of the dispersed visitor groups interviewed were located in the Swift 2 bypass area near but not on the project reservoirs.

Question 2: Are people camping on USFS lands (and other dispersed campsites) because they came to recreate at the reservoirs, but the PacifiCorp campgrounds were full (displaced users)?

Response 2: As stated above, most visitors surveyed indicated that they were intentionally seeking an undeveloped, quieter recreation experience than that provided at the PacifiCorp recreation facilities. Of the groups interviewed who were camping (34 groups or 83%), only 3 groups (9%) indicated that the campgrounds at the reservoirs were “full” or “too full.” These groups also reported difficulty finding

a campsite “all of the time.” As a result, these visitors could likely be viewed as being displaced.

Question 3: Are people camping on USFS lands (and other dispersed campsites) because they prefer the dispersed camping experience and the reservoir related recreation opportunities are of little consequence to them (dispersed users by choice)?

Response 3: Again, most visitors surveyed indicated that they were intentionally seeking an undeveloped, quieter recreation experience than that provided at the PacifiCorp recreation facilities. Only 9 groups (26% of those responding) indicated that they had considered camping at a recreation facility at 1 of the 3 reservoirs. Reasons given for why camping at one of these facilities was not considered included the same types of reasons as noted previously: social reasons, setting attributes, managerial/fee reasons, and/or hadn’t considered camping at any other site. Most (73%) visitors surveyed indicated that they had previously been to 1 of the 3 reservoirs, however, most (75%) of the respondents also indicated that the reservoirs were relatively unimportant to their visit. Responses included: “not at all important” (51%), “not very important” (17%), or “somewhat important” (7%).

Contacts by Area

Table 2 identifies the sites where dispersed recreation interview participants were contacted and the number of groups interviewed.

Table 2. Dispersed site interview survey locations.

Site and ownership	Groups Interviewed	Percent
Merrill Lake Campground (DNR)	15	37
Dispersed sites near Kalama Horsecamp (USFS)	9	22
Dispersed sites between the junction of Highways 503 and 81 up to Merrill Lake (DNR)	4	10
Curly Trailhead (FR 90 area) (USFS)	4	10
Curly Falls (USFS)	3	7
Blue Lake Trailhead area (USFS)	2	5
Lewis River bridge area (between Yale and Swift) (private)	2	5
Forest Road 90 areas (USFS)	1	2
IP Road gated area (between Yale and Swift) (private)	1	2

Just under three-fourths of those participating were located in the areas adjacent to Forest Road 81, with the largest sample from DNR’s Merrill Lake Campground (37 percent). Visitors contacted at dispersed sites in the vicinity of Kalama Horsecamp comprised 22 percent of the survey groups. Another 10 percent were contacted at sites on DNR land adjacent to the section of road between the Highway 503 junction near Yale Lake up to the area before Merrill Lake. These contacts were with people using the adjacent timber harvest areas for dispersed recreation.

Residence of Survey Participants

Each group participating in the survey was asked where group members resided. Table 3 presents a distribution of residence responses, with all survey participants indicating that they lived in either Washington or Oregon.

Table 3. Residence of survey participants at dispersed sites.

Location	Percent
Vancouver, WA area	51
Seattle, WA & surrounding communities	20
Portland, OR area	12
Longview/Kelso, WA area	12
Woodland, WA area	2
Hood River, OR area	2

Most groups interviewed were Washington residents, with over half (51 percent) indicating that they lived in the Vancouver, Washington area. One-fifth of the groups interviewed indicated that they were from the Seattle area. All together, roughly 86 percent of the groups interviewed were from the state of Washington. The other 14 percent resided in Oregon, primarily from the Portland metropolitan area.

These data suggest that a large percentage of visitors using dispersed recreation sites in the Lewis River corridor are from southwest Washington communities, with a total of 65 percent coming from the nearby communities of Vancouver, Longview/Kelso, and Woodland.

Main Activity of Survey Participants

As part of the group interviews, visitors were asked about their main activity. Visitor responses are presented in Table 4.

Table 4. Main activity of survey participants at dispersed sites.

Activity	Percent
Tent camping	29
Hiking/walking	15
Mountain/road biking	12
Relaxation	10
Fishing/crawfish gathering	10
Power boating	7
Climbing Mount St. Helens	5
Sightseeing	2
Non-motorized boating	2
General recreation	2

Results from interviews suggest that recreation of a non-motorized character is a common denominator among groups in surrounding dispersed recreation areas.

Participants’ Trip Characteristics

The duration of participants’ trips to the area ranged from 1 to 10 days, with an average stay of just under 3 days. Survey results are presented in Table 5.

Table 5. Duration of visitor trips at dispersed sites.

Duration	Percent
1 day	15
2 days	39
3 days	24
4 days	15
5 days	5
10 days	2

When contacted by the field researcher, visitors were asked if they were camping in the area, or if they were visiting as part of a day trip. Most groups interviewed for the survey indicated that they were camping in the area, with 83 percent on a camping trip and 17 percent on a day trip.

If groups interviewed indicated that they were camping in the area, they were asked to indicate where. Table 6 presents a list of visitor responses.

Table 6. Sites where overnight visitors indicated they were staying while on their trip.

Site	Percent
Dispersed sites near Kalama Horsecamp	29
Merrill Lake Campground	29
Dispersed sites near Blue Lake trailhead	6
In the Kalama Horsecamp	6
Dispersed sites in the Lewis River bridge area (between Yale and Swift)	6
Dispersed sites between the junction of Highways 503 and 81 (north of Yale Lake)	6
Cougar Campground	3
Curly Trailhead area	3
Swift Campground	3
No site given	9

Of the groups who indicated that they were camping in the area, 70 percent of those participating in the interviews were camped at sites along Forest Road 81. Just under one third (29 percent) of the visitors were camping in dispersed areas adjacent to or near Kalama Horsecamp, while the same percentage of survey participants were camping at DNR’s Merrill Lake Campground.

Participants' Main Destination

Groups in the survey were asked to indicate the main destination on their trip. Their responses are presented in Table 7.

Table 7. Main destination of dispersed site visitors.

Destination	Percent
Merrill Lake and Campground	20
Gifford Pinchot National Forest	15
Kalama Horsecamp area	12
Mount St. Helens National Volcanic Monument, including Ape Cave and Lava Canyon	10
Yale Lake	10
Lewis River area upstream of Swift Reservoir	10
Swift Reservoir	5
Lake Merwin	5
Private RV parks and resorts	2
Siouxon DNR lands	2
Curly Falls area	2
Battleground, WA area campground	2
Lewis River area below Merwin Dam	2
Swift 2 bypass reach between Swift and Yale	2

Fifty-seven percent of visitors in the survey reported that their main destinations were sites within the Monument, or on DNR or GPNF-managed lands. Eight groups interviewed (20 percent) reported that Merrill Lake (DNR) was their main destination, while 6 groups (15 percent) said that the GPNF was their primary destination. The area near Kalama Horsecamp was the main destination for 12 percent of groups in the survey.

Visitors' main destinations associated with each of the Lewis River reservoirs accounted for 5 to 10 percent of the survey sample. Yale Lake was the primary destination for 10 percent of survey participants, while Swift and Merwin reservoirs accounted for 5 percent each. The Lewis River area above Swift Reservoir (in the GPNF) was the primary destination for 10 percent of visitors in the survey sample.

Participants' Trip Itineraries

As part of the survey interviews, visitors participating in the survey were shown a map of the Lewis River area and were asked to indicate sites that they were planning to visit on their current trip. A considerable number of the groups surveyed indicated that they did not have plans to stop anywhere else on their trip other than the site where they were contacted.

Groups interviewed could indicate more than 1 site visit or stop as part of their larger trip itinerary. Table 8 presents the sites that visitors reported, with the total number of responses equaling 38. These results illustrate that a large number of the visitors contacted did not intend to visit any other sites.

Table 8. Sites visited by dispersed area survey participants.

Site	Percent
Mount St. Helens Volcanic National Monument, including Ape Cave and Lava Canyon	24
Merrill Lake	16
Town of Cougar	13
Lewis River area (undefined general area)	11
Yale Lake	11
Swift Reservoir	5
Woodland	5
Gifford Pinchot National Forest sites	5
Private RV parks, area resorts	5
Kalama Horsecamp	5

About one-quarter (24 percent) of the participants indicated that they were planning on visiting areas in Mount St. Helens National Volcanic Monument. The next most commonly visited area was Merrill Lake, with 16 percent. The town of Cougar was the next most frequently visited site with 13 percent of visitors reporting a stop there. Eleven percent responded that their trip included visits at Lewis River areas, but did not specifically name sites. Between 5 and 11 percent of visitors in the survey included Yale and Swift reservoirs as part of their trip.

Recreation Experience Sought by Visitors at Dispersed Sites

Visitors in the survey were asked by field researchers to describe the type of recreation activity they were seeking on this particular trip. Responses were analyzed categorically, and most visitors indicated that they were intentionally seeking an undeveloped, quieter recreation experience than is provided at the more developed recreation sites in the Lewis River corridor. Solitude, quiet, and getting away from other people/restrictions were the most commonly sought experiences by the groups interviewed.

Just under one-fourth (24 percent) of the groups indicated that they were looking for quiet and solitude as part of their trip to the area. Getting away from restrictions and other people was cited by 15 percent of the visitors surveyed when asked what type of recreation experience they were seeking. Other experiences that participants sought in the area included being outdoors, getting away, and viewing scenery (7 percent each).

Specific recreation activities reported by visitors at dispersed recreation sites included relaxing (17 percent), hiking (10 percent), fishing (10 percent), camping (7 percent),

mountain biking (7 percent), boating/swimming (7 percent), and off-highway vehicle use (2 percent).

When groups were asked if they thought they could find this type of experience at Merwin, Yale, or Swift reservoirs, two-thirds (66 percent) of the groups surveyed responded that they could not. Of this group of respondents, 10 groups provided a setting-related response (they sought the seclusion of camping in a dispersed area); and 7 groups provided a social or managerial response (they disliked the proximity of other campers, or that they were attempting to avoid crowding or fees associated with developed sites).

Over a quarter (27 percent) of the participants in the survey indicated that they thought they could find a similar experience at Merwin, Yale, or Swift reservoirs. Two of these groups cited social avoidance as their reason for using a dispersed area. These groups indicated that they could find a similar experience at the reservoir sites, but only when they were able to find a “nice spot” or when no other people were present. There was no response to this item from 7 percent of the groups in the survey.

Choice of Area for Camping

Groups indicating that they were camping in the area when they were interviewed were asked why they chose that particular place. Their responses generally fell into 4 categories: social reasons, setting attributes, avoidance of managerial influence, and/or family tradition.

As a group, survey participants who were camping in the area were similar to the survey sample overall. Responses indicate that they sought recreation experiences in dispersed areas because they did not desire the social and/or setting attributes that characterize the developed facilities. Over a third (38 percent) of the campers in the survey said that they wanted to camp in a setting low in density and crowding. Over a third (35 percent) of the camping groups in the survey also indicated that they wanted to camp in a more primitive, solitary setting away from other groups. Fifteen percent of the campers indicated that they wanted to avoid an overly managed camping experience, naming characteristics such as overdeveloped, paved camping sites, and user fees as negative factors. Twelve percent of the groups interviewed mentioned some kind of family or friendship tradition of camping in a particular area. One group had traditionally camped in the same area near the Kalama Horsecamp for 17 consecutive years.

Groups who were camped in a dispersed setting were asked if they had considered camping specifically at Merwin, Yale, or Swift developed campgrounds. Three-fourths (74 percent) of the respondents did not consider camping at Merwin, Yale, or Swift reservoirs, while a quarter (26 percent) of respondents said that they had thought about camping there.

Similar to the more general reasons (see above) for camping in a dispersed area, participants cited specific social and setting-related factors influencing their decisions for not camping near the project reservoirs. Under a third (30 percent) of respondents

indicated that they were avoiding the density of campgrounds at Merwin, Yale, or Swift reservoirs. Eighteen percent of those camping mentioned a setting attribute (e.g., seeking more privacy or solitude) while a quarter (24 percent) of the respondents avoided camping at Merwin, Yale, or Swift reservoirs because of a management issue (e.g., avoid paying a fee). Twelve percent of respondents indicated that they had never considered camping at sites other than the one they were using.

Of the groups surveyed who were camping, 3 groups specifically indicated encountering capacity problems at the reservoir campgrounds. Two of these groups (1 at Merrill Lake Campground and 1 at Forest Road 81 DNR land) indicated that the campgrounds at the reservoirs were “too full.” This response could either be facility capacity related (i.e., all of the campsites were taken and a full sign was displayed) or it could be social capacity related (i.e., the campground appeared to be too crowded but was not actually full). One additional group at a USFS dispersed site near Kalama Horsecamp indicated that the campgrounds they had checked at the reservoirs were “full.” When these 3 groups were asked how often this condition occurred at Merwin, Yale, or Swift campgrounds, they all indicated that it “happened all the time.”

In reference to the specific dispersed site where survey participants were contacted, they were asked: “On this particular trip, how important are Merwin/Yale/Swift reservoirs in your decision to come to this site in particular?” Their responses are presented in Table 9.

Table 9. Importance of the project reservoirs to dispersed area visitors.

Importance	Percent
Not at all	51
Not very	17
Somewhat	7
Very	10
Extremely	15

These results suggest that the existence of the reservoirs is of either no importance to visitors, or highly important, with fewer feeling neutral. Most visitors in the survey did not indicate that the Lewis River reservoirs were very important in their decision to come to the area, with two-thirds (68 percent) indicating that the reservoirs were not very or not at all important. A quarter of the respondents, however, indicated that the reservoirs were very or extremely important.

Previous Experience at Merwin, Yale, and Swift Reservoirs

Participants were also asked if they had been to Merwin, Yale, or Swift reservoirs previously. About three-quarters (73 percent or 30 groups) indicated that they had, while one-quarter (27 percent or 11 groups) indicated they had not.

Those groups who had been to Merwin, Yale, or Swift reservoirs previously were asked to indicate the number of times they had visited the project reservoirs. Approximately a

third (29 percent) of the visitors surveyed indicated that they had been to Merwin, Yale, or Swift reservoirs so frequently that they could not recount an accurate number. Twelve percent said that they had previously visited from 10 to 25 times. Ten percent recalled 3 to 6 previous visits. Twelve percent said that they had visited twice, while 10 percent said they had been to the project reservoirs only once. Overall, almost two-thirds (63 percent) of respondents reported visiting the reservoirs multiple times.

The visitors who had been to Merwin, Yale, or Swift reservoirs previously were asked to indicate what they thought their present frequency of visits were in comparison to past visits. Most respondents thought they visited Merwin, Yale, and Swift reservoirs about the same as in the past, while just under a quarter (24 percent) said that they visited the reservoirs less than in the past. Seventeen percent said that they visited Merwin, Yale, or Swift reservoirs more than in the past.

Survey participants were asked if the amount of use or behavior of other people at Merwin, Yale, or Swift reservoirs had changed the way they use those places. Fifty-nine percent indicated that it had not, while 39 percent said yes. Two percent did not provide an answer to this question. Of these 16 groups who said that the amount of use or behavior of other people had changed their use, most cited high use levels and crowding as the reason.

Responses to Day Use Fees

Visitors at dispersed recreation areas were told that beginning in 1999, Pacific Power would be implementing a day use fee (probably \$2 - \$3 per vehicle) to cover the increasing cost of maintaining recreation facilities and services in the Merwin, Yale, and Swift reservoir areas.

Survey participants were then asked how this would affect their visits to the area. About 3 out of 5 (59 percent) respondents indicated that the day use fees would not alter their use. About 2 out of 5 (39 percent) respondents said that the introduction of the new day use fee would change the way they used the area in general, with half of these groups specifically saying that they would simply go somewhere else because of the new day use fee. None of the visitors in the survey said they would visit the area more because of the fee, while most (59 percent) said that they would visit the area “about the same.” About a quarter (27 percent) of respondents thought they would visit the area less in the future.

Participants were also informed that recreation managers were considering a potential additional fee to increase law enforcement and/or emergency services available to visitors in the Merwin, Yale, and Swift reservoir areas. They were asked, in addition to the new day use fee, if they were willing to pay a little more for increased services in these areas.

About 2 out of 5 (44 percent) respondents indicated that they would pay additional fees for more services. Less than a third (29 percent) of respondents said they would not wish to pay more, while 12 percent responded maybe.