APPENDIX D: FS NATIONAL VISITOR USE PROGRAM DATA

National Visitor Use Monitoring Results

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WALLOWA- WHITMAN NATIONAL FOREST

Prepared by:

Susan M. Kocis
Donald B.K. English
Stanley J. Zarnoch
Ross Arnold
Larry Warren
Catherine Ruka

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INTRODUCTION

Scope and purpose of the National Visitor Use Monitoring project

The National Visitor Use Monitoring (NVUM) project was implemented as a response to the need to better understand the use and importance of and satisfaction with national forest system recreation opportunities. This level of understanding is required by national forest plans, Executive Order 12862 (Setting Customer Service Standards), and implementation of the National Recreation Agenda. To improve public service, the agency's Strategic and Annual Performance Plans require measuring trends in user satisfaction and use levels. It will assist Congress, Forest Service leaders, and program managers in making sound decisions that best serve the public and protect valuable natural resources by providing science based, reliable information about the type, quantity, quality and location of recreation use on public lands. The information collected is also important to external customers including state agencies and private industry. NVUM methodology and analysis is explained in detail in the research paper entitled: Forest Service National Visitor Use Monitoring Process: Research Method Documentation; English, Kocis, Zarnoch, and Arnold; Southern Research Station; May 2002 (http://www.fs.fed.us/recreation/programs/nvum).

In conjunction with guidelines and recommendations from the Outdoor Recreation Review Commission, the USDA-Forest Service has estimated recreation use and maintained records since the 1950s. Many publications on preferred techniques for estimating recreation use at developed and dispersed recreation sites were sponsored by Forest Service Research Stations and Universities. Implementation of these recommended methodologies takes specific skills, a dedicated work force, and strict adherence to an appropriate sampling plan. The earliest estimates were designed to estimate use at developed fee recreation facilities such as campgrounds. These estimates have always been fairly reliable because they are based upon readily observable, objective counts of items such as a fee envelope.

Prior to the mid-1990s, the Forest Service used its Recreation Information Management (RIM) system to store and analyze recreation use information. Forest managers often found they lacked the resources to simultaneously manage the recreation facilities and monitor visitor use following the established protocols. In 1996, the RIM monitoring protocols were no longer required to be used.

In 1998 a group of research and forest staff were appointed to investigate and pilot a recreation sampling system that would be cost effective and provide statistical recreation use information at the forest, regional, and national level. Since that time, a permanent sampling system (NVUM) has been developed. Several Forest Service staff areas including Recreation, Wilderness, Ecosystem Management, Research and Strategic Planning and Resource Assessment are involved in implementing the program. A four-year timeframe of data collection was established for the first sampling cycle, and a five-year timeframe for succeeding cycles. The first sampling cycle was completed in September 2003. The second sampling cycle begins October 2004. This ongoing monitoring effort will provide quality recreation information needed for improving citizen centered recreation services.

This data can be very useful for forest planning and decision making. The information provided can be used in economic efficiency analysis that requires providing a value per National Forest Visit. This can then be compared to other resource values. The description of visitor characteristics (age, race, zip code, activity participation) can help the forest identify the type of recreation niche they fill. The satisfaction information can help management decide where best to place limited resources that would result in improved visitor satisfaction. The economic expenditure information can help forests show local

communities the employment and income effects of tourism from forest visitors. In addition, the credible use statistics can be helpful in considering visitor capacity issues.

Definition of Terms

NVUM has standardized definitions of visitor use measurement to ensure that all national forest visitor measurements are comparable. These definitions are basically the same as established by the Forest Service since the 1970s, however the application of the definition is stricter. Visitors must pursue a recreation activity physically located "on" Forest Service managed land in order to be counted. They cannot be passing through; viewing from non-Forest Service managed roads, or just using restroom facilities. The NVUM basic use measurements are *national forest visits* and *site visits*. Along with these use measurements basic statistics, which indicate the precision of the estimate, are given. These statistics include the error rate and associated confidence intervals at the 80 percent confidence level. The definitions of these terms follow.

National forest visit - the entry of one person upon a national forest to participate in recreation activities for an unspecified period of time. A national forest visit can be composed of multiple site visits.

Site visit - the entry of one person onto a national forest site or area to participate in recreation activities for an unspecified period of time.

Recreation trip – the duration of time beginning when the visitor left their home and ending when they got back to their home.

Confidence level -- defines the degree of certainty that a range of values contains the true value of what is being estimated. For example, an 80% confidence level refers to the range of values within which the true value will fall 80% of the time. Higher confidence levels necessarily cover a larger range of values.

Confidence interval width (also called error rate) - these terms define the reliability of the visit estimates. The confidence level defines the desired level of certainty. The size of the interval that is needed to reach that level of certainty is the confidence interval width. The confidence interval width is expressed as a percent of the estimate and defines the upper and lower bounds of the confidence interval. The smaller the confidence interval, the more precise is the estimate. An 80 percent confidence level is very acceptable for social science applications at a broad national or forest scale. For example: There are 205 million national forest visits plus or minus 3 percent at the 80 percent confidence level. In other words we are 80 percent certain that the true number of national forest visits lies between 198.85 million and 211.15 million.

CHAPTER 1: SAMPLE DESIGN AND IMPLEMENTATION

The NVUM Process and Definition of Terms

To participate in the NVUM process, forests first categorized all recreation sites and areas into five basic categories called "site types": Day Use Developed Sites (DUDS), Overnight Use Developed Sites (OUDS), Wilderness, General Forest Areas (GFA), and View Corridors (VC). Only the first four categories are considered "true" national forest visits and were included in the estimate provided. Within these broad categories (called site types) every open day of the year for each site/area was rated as high, medium or low last exiting recreation use. Sites/areas that are scheduled to be closed or would have "0" use were also identified. Each day on which a site or area is open is called a site day and is the basic sampling unit for the survey. Results of this forest categorization are shown in Table 1.

A map showing all General Forest Exit locations and View Corridors was prepared and archived with the NVUM data for use in future sample years. NVUM also provided training materials, equipment, survey forms, funding, and the protocol necessary for the forest to gather visitor use information.

NVUM terms used in the site categorization framework are defined below:

Site day - a day that a recreation site or area is open to the public for recreation purposes.

Site types -- stratification of a forest recreation site or area into one of five broad categories as defined in the paper: Forest Service National Visitor Use Monitoring Process: Research Method Documentation, May 2002, English et al. The categories are Day Use Developed sites (DUDS), Overnight Use Developed Sites (OUDS), General Forest Areas (GFA), Wilderness (WILD), and View Corridors (VC). Another category called Off-Forest Recreation Activities (OFRA) was categorized but not sampled.

Proxy – information collected at a recreation site or area that is related to the amount of recreation visitation received. The proxy information must pertain to all users of the site, it must be an exact tally of use and it must be one of the proxy types allowed in the NVUM pre-work directions (fee receipts, fee envelopes, mandatory permits, permanent traffic counters, ticket sales, and daily use records).

Nonproxy – a recreation site or area that does not have proxy information. At these sites a 24-hour traffic count is taken to measure total use for one site day at the sample site.

Use level strata - for either proxy or nonproxy sites, each day that a recreation site or area was open for recreation, the site day was categorized as either high, medium or low last exiting recreation traffic, or closed. Closed was defined as either administratively closed or "0" use. For example Sabino Picnic Area (a DUDS nonproxy site) is closed for 120 days, has high last exiting recreation use on open weekends (70 days) and medium last exiting recreation use on open midweek days (175 days). This accounts for all 365 days of the year at Sabino Picnic area. This process was repeated for every developed site and area on the forest.

Constraints on Uses of the Results

The information presented here is valid and applicable at the forest level. It is not designed to be accurate at the district or site level. The quality of the visitation estimate is dependent on the preliminary sample design development, sampling unit selection, sample size and variability, and survey implementation. First, preliminary work conducted by forests to classify sites consistently according to the type and amount of visitation influences the quality of the estimate. Second, visitors sampled must be representative of the population of all visitors. Third, the number of visitors sampled must be large enough to adequately control variability. Finally, the success of the forest in accomplishing its assigned sample days, correctly filling out the interview forms, and following the sample protocol influence the error rate. The error rate will reflect all these factors. The smaller the error rate, the better the estimate. Interviewer error in asking the questions is not necessarily reflected in this error rate.

Large error rates (i.e. high variability) in the national forest visit (NFV), site visit (SV) and Wilderness visit estimates is primarily caused by a small sample size in a given stratum (for example General Forest Area low use days) where the use observed was beyond that stratum's normal range. For example, on the Clearwater National Forest in the General Forest Area low stratum, there were 14 sample days. Of these 14 sample days, 13 days had visitation estimates between 0-20. One observation had a visitation estimate of 440. Therefore, the stratum mean was about 37 with a standard error of 116. The 80% confidence interval width is then 400% of the mean, a very high error rate (variability). Whether these types of odd observations are due to unusual weather, malfunctioning traffic counters, or a misclassification of the day (a sampled low use day that should have been categorized as a high use day) is unknown. Eliminating the unusual observation from data analyis could reduce the error rate. However, the NVUM team had no reason to suspect the data was incorrect and did not eliminate these unusual cases.

The descriptive information about national forest visitors is based upon only those visitors that were interviewed. If a forest has distinct seasonal use patterns and activities that vary greatly by season, these patterns may or may not be adequately captured in this study. This study was designed to estimate total number of people during a year. Sample days were distributed based upon high, medium, and low exiting use days, not seasons. When applying these results in forest analysis, items such as activity participation should be carefully scrutinized. For example, although the Routt National Forest had over 1 million skier visits, no sample days occurred during the main ski season; they occurred at the ski area but during their high use summer season. Therefore, activity participation based upon interviews did not adequately capture downhill skiers. This particular issue was adjusted. However, the same issue-seasonal use patterns- may still occur to a lesser degree on other forests. Future sample design will attempt to incorporate seasonal variation in use.

Some forest visitors were counted and included in the total forest use estimate but were not surveyed. This included visitors to recreation special events and organization camps.

The Forest Stratification Results

The results of the recreation site/area stratification and sample days accomplished by this forest are displayed in Table 1. This table describes the population of available site days open for sampling based on forest pre-work completed prior to the actual surveys. Every site and area on the forest was categorized as high, medium, low, or closed last exiting recreation use. This stratification was then used to randomly select sampling days for this forest. The project methods paper listed on page one describes the sampling process and sample allocation formulas in detail. Basically, at least eight sample days per stratum are randomly selected for sampling and more days are added if the stratum is very large. Also displayed on the table is the percentage of sample days per stratum accomplished by the forest.

Table 1. Population of available site days for sampling and percentage of days sampled by stratum on Wallowa-Whitman National Forest (2003).

| Site type | TYPE | | | PAYS IN POPLIATION | SAMPLENG RAFE |
|------------|----------|--------|-----|-----------------------|------------------|
| DUDS | NONPROXY | HIGH | 14 | 125 | 11.20 |
| DUDS | NONPROXY | MEDIUM | 14 | 220 | 6.36 |
| DUDS | NONPROXY | LOW | 12 | 897 | 1.34 |
| DUDS | PROXY | FR1 | 4 | 144 | 2.78 |
| DUDS | PROXY | FR3 | 4 | 39 | 10.26 |
| DUDS | PROXY | PTC1 | 2 | 162 | 1.23 |
| DUDS | PROXY | SV1 | 4 | 87 | 4.60 |
| GFA | NONPROXY | HIGH | 21 | 1,153 | 1.82 |
| GFA | NONPROXY | MEDIUM | 23 | 3,144 | 0.73 |
| GFA | NONPROXY | LOW | .15 | 5,039 | 0.30 |
| GFA | PROXY | FR3 | 4 | 802 | 0.50 |
| OUDS | NONPROXY | HIGH | 14 | 112 | 12.50 |
| OUDS | NONPROXY | MEDIUM | 8 | 234 | 3.42 |
| OUDS | NONPROXY | LOW | 7 | 1,216 | 0.58 |
| OUDS | PROXY | DUR4 | 1 | 163 | 0.61 |
| OUDS | PROXY | FE4 | 7 | 198 | 3.54 |
| OUDS | PROXY | RE4 | 1 | 57 | 1.75 |
| OUDS | PROXY | SUP4 | 3 | 208 | 1.44 |
| WILDERNESS | NONPROXY | HIGH | 14 | 115 | 12.17 |
| WILDERNESS | NONPROXY | MEDIUM | 13 | 196 | 6.63 |
| WILDERNESS | NONPROXY | LOW | 14 | 1,819 | 0.77 |

CHAPTER 2: VISITATION ESTIMATES

Visitor Use Estimates

Visitor use estimates are available at the national, regional, and forest level. Only forest level data is provided here. For national and regional reports visit the following web site: (http://www.fs.fed.us/recreation/programs/nvum).

Table 2. Annual Wallowa- Whitman National Forest recreation use estimate

| VILLE INCH | METTE | 80% CONFIDENCE INTERVAL |
|--------------------|---------|----------------------------|
| SITE VISITS | 654,476 | 17.5 |
| NATL FOREST VISITS | 565,681 | 18.7 |
| WILDERNESS VISITS | 56,968 | 20.9 |

The Wallowa- Whitman National Forest participated in the National Visitor Use Monitoring (NVUM) project from October 2002 through September 2003. The forest coordinator was Dan Ermovick. No unusual weather or fire circumstances that may have affected recreation use were reported during the sample year.

Recreation use on the forest for fiscal year 2003 at the 80 percent confidence level was 565,681 national forest visits +/- 18.7 percent. There were 654,476 site visits, an average of 1.12 site visits per national forest visit. Included in the site visit estimate are 56,968 Wilderness visits.

A total of 1,037 visitors were contacted on the forest during the sample year. Of these, 17.3 percent refused to be interviewed. Of the 858 people who agreed to be interviewed, 17.7 percent were not recreating, including 0.6 percent who just stopped to use the bathroom, 4.7 percent were working, 8.3 percent were just passing through, and 4.2 percent had some other reason to be there. About 82.3 percent of those interviewed said their primary purpose on the forest was recreation and 87.7 percent of them were exiting for the last time. Of the visitors leaving the forest agreeing to be interviewed, about 86 percent were last exiting recreation visitors (the target interview population). Table 3 displays the number of last-exiting recreation visitors interviewed at each site type and the type of interview form they answered.

Table 3. Number of last-exiting recreation visitors on Wallowa- Whitman NF by site type and form type $\underline{1}/$

| FORM | DEVELOPED DAY ESE | DEVELOPED OVERNIGHT | | WILDERNESS |
|-------|----------------------|------------------------|----|------------|
| BASIC | 74 | 13 | 56 | 52 |
| ECON | 93 | 10 | 62 | - 48 |
| SATIS | 84 | 14 | 64 | 49 |

^{1/} Form type means the type of interview form administered to the visitor. The basic form did not ask either economic or satisfaction questions. The Satisfaction form did not ask economic questions and the economic form did not ask satisfaction questions.

Description of Visitors

Descriptions of forest visitors were developed based upon the characteristics of interviewed visitors and expanding to the national forest visitor population. Tables 4 and 5 display the gender and age distributions for national forest visits.

Table 4. Gender distribution of Wallowa- Whitman NF recreation visitors

| MALE | EEWALE |
|------|--------|
| 73.6 | 26.4 |

Table 5. Age distribution of Wallowa- Whitman NF recreation visitors

| AGECLASS | PERCENT |
|----------|---------|
| UNDER 16 | 18.14 |
| 16 TO 19 | 1.34 |
| 20 TO 29 | 8.54 |
| 30 TO 39 | 10.54 |
| 40 TO 49 | 22.69 |
| 50 TO 59 | 20.23 |
| 60 TO 69 | 13.61 |
| 70 PLUS | 4.93 |

Visitors categorized themselves into one of seven race/ethnicity categories. Table 6 gives a detailed breakout by category.

Table 6. Race/ethnicity of Wallowa- Whitman NF recreation visitors

| HIS | PANIC OR N | ATRIVET AT | RICAN: | erev ie | ACHRIC | THE |
|------|---------------|------------|--------|---------|--------|-----|
| 97.4 | 3.6 | 0.6 | 0.0 | 4.0 | 2.1 | 0.5 |

Less than one percent (.4) of forest visitors were from another country. The survey did not collect country affiliation. The most common visitor zip codes are shown in Table 7. Additional zip code information was collected and is available upon request. The forest can determine what percent of local visitor use they have by comparing the local forest zip codes to those listed. This information can be used the help identify the forest visitor market area.

Table 7. Most common zip codes of Wallowa- Whitman NF recreation visitors

| ZIPCODE | COUNT P | ERCENT |
|---------|---------|---------|
| 97850 | 61 | 11.2546 |
| 97814 | 57 | 10.5166 |
| 97846 | 15 | 2.7675 |
| 97828 | 12 | 2.2140 |
| 97801 | 10 | 1.8450 |
| 97833 | 10 | 1.8450 |
| .99352 | 8 | 1.4760 |
| 99362 | 8 | 1.4760 |
| 97883 | 7 | 1.2915 |
| 97914 | 7 | 1.2915 |
| 97834 | 6 | 1.1070 |
| 83709 | 5 | 0.9225 |
| 83843 | 5 | 0.9225 |
| 97321 | 5 | 0.9225 |
| 97885 | 5 | 0.9225 |
| 99031 | 5 | 0.9225 |
| 83501 | 4 | 0.7380 |
| 83642 | 4 | 0.7380 |
| 97080 | 4 | 0.7380 |
| 97202 | 4 | 0.7380 |
| 97217 | 4 | 0.7380 |
| 97824 | 4 | 0.7380 |
| 97838 | 4 | 0.7380 |

Average number of people per vehicle and average axle count per vehicle in survey

There was an average of 2.4 people per vehicle with an average of 2.07 axles per vehicle. This information in conjunction with traffic counts was used to expand observations from individual interviews to the full forest population of recreation visitors. This information may be useful to forest engineers and others who use vehicle counters to conduct traffic studies.

CHAPTER 3: WILDERNESS VISITORS

Several questions on the NVUM survey form dealt directly with use of designated Wilderness. Wilderness was sampled 41 days on the forest, and 149 interviews were obtained. There were 52.6 percent male and 47.4 percent female visitors to Wilderness on the forest. Tables 8 and 9 display the age distribution and race/ethnicity of Wilderness visitors.

Table 8. Age distribution of Wallowa- Whitman NF Wilderness visitors

| AGECLAS | PERCENT |
|----------|---------|
| UNDER 16 | 22.33 |
| 16 TO 19 | 2.38 |
| 20 TO 29 | 10.87 |
| 30 TO 39 | 8.78 |
| 40 TO 49 | 19.10 |
| 50 TO 59 | 25.26 |
| 60 TO 69 | 7.47 |
| 70 PLUS | 3.81 |

Table 9. Race/ethnicity of Wallowa- Whitman NF Wilderness visitors

| WHITE L | SPÄNIC S OR IN ATINO AVE | ATO VIMET ERICANIA | APING AN MERIC AN | VSIANE | PACIFIC ISLANDIA | OTHER |
|---------|--------------------------------|--------------------------|----------------------|--------|---------------------|-------|
| 99.1 | 0.3 | 1.4 | 0.0 | 0.9 | 0.0 | 0.0 |

The Wilderness visitors were from a wide variety of zip codes. The most common Wilderness visitor zip codes are shown in Table 10. Additional zip code information is available upon request.

Table 10. Most common zip codes of Wallowa- Whitman NF Wilderness visitors

| WEDZIE | COUNT | PERCENT |
|--------|-------|---------|
| 97846 | 11 | 7.43243 |
| 97828 | 10 | 6.75676 |
| 97850 | 7 | 4.72973 |
| 97814 | 5 | 3.37838 |
| 99362 | 5 | 3.37838 |
| 83843 | 4 | 2.70270 |
| 99352 | 4 | 2.70270 |
| 83501 | 3 | 2.02703 |
| 97219 | 3 | 2.02703 |
| 83642 | 2 | 1.35135 |
| 97031 | 2 | 1.35135 |
| 97206 | 2 | 1.35135 |
| 97229 | 2 | 1.35135 |
| 97833 | 2 | 1.35135 |
| 97857 | 2 | 1.35135 |
| 98632 | 2 | 1.35135 |
| 99337 | 2 | 1.35135 |
| 99403 | 2 | 1.35135 |
| 02478 | 1 | 0.67568 |
| 11201 | 1 | 0.67568 |
| 21050 | 1 | 0.67568 |
| 45701 | 1 | 0.67568 |
| 49735 | 1 | 0.67568 |
| 56001 | 1 | 0.67568 |
| 80302 | 1 | 0.67568 |
| 83648 | 1 | 0.67568 |
| 83661 | 1 | 0.67568 |
| 83686 | 1 | 0.67568 |
| 83702 | . 1 | 0.67568 |
| 83703 | 1 | 0.67568 |
| 83714 | 1 | 0.67568 |
| 83823 | 1 | 0.67568 |
| 83858 | 1 | 0.67568 |
| 90265 | 1 | 0.67568 |
| 91604 | 1 | 0.67568 |
| 94708 | 1 | 0.67568 |
| 95615 | 1 | 0.67568 |

National Visitor Use Monitoring Project

The average length of stay in Wilderness on the forest was 12.2 hours. In addition, all visitors were asked on how many different days they entered into designated Wilderness during their national forest visit even if we interviewed them at a developed recreation site or general forest area. Of those visitors who did enter designated Wilderness, they entered 1.54 different days.

1.64 percent of those interviewed in Wilderness said they used the services of a commercial guide.

Table 11 gives detailed information about how the Wilderness visitors rated various aspects of the area. A general example of how to interpret this information: If the visitors had rated the importance of the adequacy of signage a 5.0 (very important) and they rated their satisfaction with the adequacy of signage a 3.0 (somewhat satisfied) then the forest might be able to increase visitor satisfaction. Perhaps twenty-nine percent of visitors said the adequacy of signage was poor. The forest could target improving this sector of visitors for increased satisfaction by improving the signage for Wilderness.

Wilderness visitors on the average rated their visit 4.0 (on a scale from 1 to 10) concerning crowding, meaning they felt there were few people there. Zero percent said the area they visited was overcrowded (a 10 on the scale) and 40.6 percent said there was hardly anyone there (a 1 on the scale).

Table 11. Satisfaction of Wallowa- Whitman NF Wilderness Visitors.

| 22.00 | | | | | | America | . Alem | |
|------------------------------|-----|------|---------|-----------------------|---------------|---------|--------------|----------|
| ITEM | | | Ayerage | Contract of the Print | Alere Good | Raung | -Importance. | N obs |
| Restroom cleanliness | 0.0 | 0.0 | 3.1 | 32.1 | 64.9 | 4.6 | 3.9 | 24 |
| Developed facility condition | 0.0 | 0.0 | 28.4 | 29.6 | 42.0 | 4.1 | 3.7 | 29 |
| Condition of environment | 0.0 | 7.7 | 2.4 | 22.8 | 67.0 | 4.5 | 4.7 | 49 |
| Employee helpfulness | 1.2 | 0.0 | 0.0 | 52.9 | 45.9 | 4.4 | 4.4 | 14 |
| Interpretive display | 6.4 | 0.0 | 17.2 | 50.9 | 25.4 | 3.9 | 3.9 | 32 |
| Parking availability | 1.0 | 1.3 | 12.5 | 40.3 | 44.9 | 4.3 | 3.3 | 46 |
| Parking lot condition | 0.0 | 1.3 | 5.3 | 51.0 | 42.4 | 4.3 | 3.0 | 47 |
| Rec. info. available | 1.1 | 3.3 | 17.5 | 51.9 | 26.2 | 4.0 | 4.1 | 43 |
| Road condition | 0.6 | 2.7 | 12.1 | 35.4 | 49.3 | 4.3 | 3.8 | 33 |
| Feeling of safety | 0.0 | 1.2 | 4.0 | 25.6 | 69.2 | 4.6 | 3.9 | 48 |
| Scenery | 0.0 | 0.0 | 0.0 | 13.8 | 86.2 | 4.9 | 4.8 | 49 |
| Signage adequacy | 2.3 | 14.1 | 15.1 | 34.6 | 34.0 | 3.8 | 3.9 | 47 |
| Trail condition | 0.5 | 13.6 | 19.6 | 25.9 | 40.4 | 3.9 | 4.3 | 49 |
| Value for fee paid | 2.8 | 0.0 | 20.5 | 6.1 | 70.6 | 4.4 | 3.9 | 36 |

^{*}Scale is: Poor = 1 Fair = 2 Average = 3 Good = 4 Very Good = 5

N obs means the number of visitors who responded to this item.

Note: For items with less than 10 responses the data was not reported

^{**} Scale is: 1= not important 2= somewhat important 3=moderately important 4= important 5 = very important

CHAPTER 4: DESCRIPTION OF THE VISIT

A description of visitor activity during their national forest visit was developed. This basic information includes participation in various recreation activities, length of stay on the national forest and at recreation sites, visitor satisfaction with national forest facilities and services, and economic expenditures.

The average length of stay on this forest for a national forest visit was 27.1 hours. Over 24 percent (24.56%) of visitors stayed overnight on the forest.

In addition, visitors reported how much time they spent on the specific recreation site at which they were interviewed. Average time spent varied considerably by site and is displayed in Table 12.

Table 12. Site visit length of stay (in hours) by site/type on Wallowa- Whitman NF

| Site | De | veloped (| Seneral | | Vational |
|-----------------------|---------------------|----------------|------------------|-----------|-----------------|
| Visit De Average D | veloped O av Use | vermght Use | rorest Area V | ilderness | vorest Visit |
| 23.1 | 2.0 | 40.6 | 32.0 | 12.2 | 27.1 |

The average recreation visitor went to 1.12 sites during their national forest visit. Forest visitors sometimes go to just one national forest site or area during their visit. For example, downhill skiers may just go the ski area and nowhere else. 95.2 percent of visitors went only to the site at which they were interviewed.

During their visit to the forest, the top five recreation activities of the visitors were viewing wildlife, viewing natural features, hiking/walking, relaxing, and driving for pleasure (see Table 13). Each visitor also picked one of these activities as their primary activity for their current recreation visit to the forest. The top primary activities were hunting, hiking/walking, relaxing, viewing wildlife, and fishing (see Table 13). Please note that the results of the NVUM activity analysis DO NOT identify the types of activities visitors would like to have offered on the national forests. It also does not tell us about displaced forest visitors, those who no longer visit the forest because the activities they desire are not offered.

Table 13. Wallowa- Whitman NF activity participation and primary activity

| Activity | % Participating | 26 28. Main Activity |
|----------------------------|--------------------|----------------------------|
| Developed Camping | 10.85 | 3.90 |
| Primitive Camping | 15.64 | 2.20 |
| Backpacking | 10.05 | 3.77 |
| Resort Use | 6.88 | 1.16 |
| Picnicking | 19.95 | 4.38 |
| Viewing Natural Features | 60.05 | 4.64 |
| Visiting Historic Sites | 13.55 | 2.84 |
| Nature Center Activities | 12.47 | 0.73 |
| Nature Study | 8.02 | 2.48 |
| Relaxing | 44.03 | 7.74 |
| Fishing | 16.07 | 8.16 |
| Hunting | 28.14 | 22.55 |
| OHV Use | 10.45 | 0.81 |
| Driving for Pleasure | 37.89 | 3.75 |
| Snowmobiling | 5.41 | 4.99 |
| Motorized Water Activities | 4.30 | 0.43 |
| Other Motorized Activity | 1.24 | 1.12 |
| Hiking / Walking | 44.95 | 12.29 |
| Horesback Riding | 2.01 | 0.44 |
| Bicycling | . 1.51 | 0.27 |
| Non-motorized Water | 2.16 | 0.52 |
| Downhill Skiing | 2.76 | 2.36 |
| Cross-country Skiing | 2.97 | 2.27 |
| Other Non-motorized | 4.81 | 0.71 |
| Gathering Forest Products | 15.73 | 3.02 |
| Viewing Wildlife | 64.12 | 5.57 |

Note: this column may total more than 100% because some visitors chose more than one primary activity.

Use of constructed facilities and designated areas

One-third of the last exiting recreation visitors interviewed were asked about the types of constructed facilities and special designated areas they used during their visit. The five most used facilities/areas were: forest roads, forest trails, scenic byways, developed campground, and picnic area. Table 14 provides a summary of reported facility and special area use.

Table 14. Percentage use of facilities and specially designated areas on Wallowa- Whitman NF.

| FACILITY | PERCENT |
|-------------------------|---------|
| Developed Campground | 13.16 |
| Developed Swimming Site | 3.90 |
| Forest Trails | 20.82 |
| Scenic Byway | 18.39 |
| Wilderness | 9.32 |
| Museum | 9.49 |
| Picnic Area | 11.29 |
| Boat Launch | 2.40 |
| Designated OHV Area | 2.07 |
| Forest Roads | 35.92 |
| Interpretive Displays | 5.50 |
| Information Sites | 3.16 |
| Organization Camps | 1.31 |
| Developed Fishing Site | 1.57 |
| Snowmobile Area/Trails | 5.61 |
| Downhill Ski Area | 2.90 |
| Nordic Trails | 1.81 |
| FS Lodge | 4.81 |
| FS Fire Lookout | 3.12 |
| Snowplay Area | 0.54 |
| Motorized Trails | 7.42 |
| Recreation Residence | 2.08 |

Economic Information

About one-third of visitors interviewed were asked a series of questions that enabled economic analyses. Several questions focused on the trip away from home that included their visit to the national forest, and others about their annual visits to the forest and annual spending on all outdoor recreation.

This trip away from home

While away from home, some people just go to the forest, while others incorporate a national forest visit as part of a larger trip away from home. On this forest, 76.28 percent said that recreating on this forest was their primary trip destination. Visitors were asked to select one of several substitute choices, if for some reason they were unable to visit this national forest. Their responses are shown in Table 15. 37.74 percent of visitors indicated their trip would include at least on night away from home. The average number of nights away for those staying away overnight was 5.2. About 33 percent indicated they would be staying overnight within 50 miles of this forest, and for them, the average number of nights in the local area was 2.6. Visitors estimated the amount of money spent during their trip within 50 miles of the recreation site at which they were interviewed (the trip may include multiple national forest visits, as well as visits to other forests or parks). This information will be available in a separate report and data file that can be used to estimate the local jobs and income that are generated by recreation visits to this forest.

Table 15. Substitute behavior choices of recreation visitors

| | Percent who |
|---|----------------|
| Substitute response | would have |
| Come back another time | 12.5 |
| Stayed at Home | 16.0 |
| Gone elsewhere for the Same activity | 58.0 |
| Gone elsewhere for a Different activity | 4.7 |
| Gone to Work | 4.4 |
| Had some other substitute | 4.5 |

Average annual outdoor recreation activity

In the 12 months prior to the interview the typical visitor had come to this forest 20 times for all activities, including 13.2 times to participate in their identified main activity. Visitors were also asked about the amount of money they spent in a typical year on all outdoor recreation activities including equipment, recreation trips, memberships, and licenses. Nearly 20% said they spent less then \$500 per year, and a little less than 7% said they spent over \$10,000 per year (Table 16).

Table 16. Annual recreation spending for visitors to the Wallowa - Whitman NF

| SS spent | The state of the s |
|-------------------------|--|
| each year on outdoor | A Thomas and the said a state of the amounts |
| recreation | Frequency |
| UNDER 500 | 19.79 |
| 500 - 999 | 23.53 |
| 1000 - 1999 | 21.39 |
| 2000 - 2999 | 11.76 |
| 3000 - 3999 | 8.02 |
| 4000 - 4999 | 4.28 |
| 5000 - 9999 | 4.28 |
| OVER 10000 | 6.95 |

Visitor Satisfaction Information

About one-third of visitors interviewed on the forest rated their satisfaction with the recreation facilities and services provided. Although their satisfaction ratings pertain to conditions at the specific site or area they visited, this information is not valid at the site-specific level. The survey design does not usually have enough responses for every individual site or area on the forest to draw these conclusions. Rather, the information is generalized to overall satisfaction with facilities and services on the forest as a whole.

Visitors' site-specific answers may be colored by a particular condition on a particular day at a particular site. For example, a visitor camping in a developed campground when all the forest personnel are off firefighting and the site has not been cleaned. Perhaps the garbage had not been emptied or the toilets cleaned during their stay, although the site usually receives excellent maintenance. The visitor may have been very unsatisfied with the cleanliness of restrooms.

In addition to how satisfied visitors were with facilities and services they were asked how important that particular facility or service was to the quality of their recreation experience. The importance of these elements to the visitors' recreation experience is then analyzed in relation to their satisfaction. Those elements that were extremely important to a visitor's overall recreation experience and the visitor rated as poor quality are those elements needing most attention by the forest. Those elements that were rated not important to the visitors' recreation experience need the least attention.

Tables 17 through 19 summarize visitor satisfaction with the forest facilities and services at Day Use Developed sites, Overnight Developed sites and General Forest areas. Wilderness satisfaction is reported in Table 11. To interpret this information for possible management action, one must look at both the importance and satisfaction ratings. If visitors rated an element a 1 or 2 they are telling management that particular element is not very important to the overall quality of their recreation experience. Even if the visitors rated that element as poor or fair, improving this element may not necessarily increase visitor satisfaction because the element was not that important to them. On the other hand, if visitors rated an element as a 5 or 4 they are saying this element is very important to the quality of their recreation experience. If their overall satisfaction with that element is not very good, management action here can increase visitor satisfaction.

Table 17. Satisfaction of Wallowa- Whitman NF recreation visitors at Developed Day Use sites

| | ura esta | | | Andrews Strong Cons | Verv | Average Rating | Mean Importance | N |
|--|----------|-------|---------|------------------------|------|-------------------|--------------------|------|
| TTEM TO THE TENT OF THE TENT O | Poor | Fair | Average | ۋod: | Good | | 44 | obs |
| Restroom cleanliness | 6.2 | 2.2 | 9.9 | 31.8 | 49.9 | 4.2 | 4.2 | 74 |
| Developed facility condition | 0.0 | 0.0 | 6.5 | 38.7 | 54.8 | 4.5 | 3.9 | 80 |
| Condition of environment | 0.0. | 0.0 | 7.5 | 22.7 | 69.8 | 4.6 | 4.5 | 84 |
| Employee helpfulness | 0.0 | · 1.9 | 2.6 | 19.4 | 76.1 | 4.7 | 4.3 | . 58 |
| Interpretive display | 0.8 | 2.6 | 5.9 | 39.5 | 51.2 | 4.4 | 3.9 | 68 |
| Parking availability | 0.0 | 5.0 | 9.1 | 30.9 | 55.0 | 4.4 | 3.6 | 82 |
| Parking lot condition | 0.0 | 2.6 | 11.4 | 31.9 | 54.2 | 4.4 | 3.5 | 80 |
| Rec. info. available | 3.7 | 0.4 | 8.2 | 38.9 | 48.8 | 4.3 | 4.0 | 74 |
| Road condition | 7.4 | 4.0 | 4.0 | 50.8 | 33.8 | 4.0 | 4.2 | 80 |
| Feeling of safety | 1.4 | 0.0 | 5.5 | 11.2 | 81.9 | 4.7 | 4.4 | 82 |
| Scenery | 0.0 | 0.3 | 0.3 | 9.7 | 89.6 | 4.9 | 4.6 | 84 |
| Signage adequacy | 1.4 | 0.0 | 13.0 | 39.4 | 46.1 | 4.3 | 4.0 | 84 |
| Trail condition | 0.0 | 8.0 | 8.1 | 29.1 | 54.8 | 4.3 | 4.3 | 52 |
| Value for fee paid | 0.0 | 0.0 | 14.6 | 33.7 | 51.7 | 4.4 | 4.3 | 63 |

^{*}Scale is: Poor = 1 Fair = 2 Average = 3 Good = 4 Very Good = 5

^{**} Scale is: 1= not important 2= somewhat important 3=moderately important 4= important 5 = very important

N obs means the number of visitors who responded to this item.

Note: For items with less than 10 responses the data was not reported

Table 18. Satisfaction of Wallowa- Whitman NF recreation visitors at Developed Overnight sites

| F. Comment | | | | | | -Average | e Mean | |
|------------------------------|-------|------|-----------------|------|------|----------|-------------|----------|
| nem 1. T. | Padro | Fäll | Average 2000 | Cont | 00E7 | Rating | Linnoclance | N obs |
| Restroom cleanliness | 0.0 | 0.0 | 21.8 | 23.5 | 54.7 | 4.3 | 4.5 | 14 |
| Developed facility condition | 0.0 | 0.0 | 12.4 | 24.6 | 63.0 | 4.5 | 4.1 | 12 |
| Condition of environment | 0.0 | 9.9 | 1.9 | 3.9 | 84.3 | 4.6 | 4.8 | 14 |
| Employee helpfulness | | | | | | | 4.3 | 9 |
| Interpretive display | | | | | | | 3.2 | 8 |
| Parking availability | 2.2 | 0.0 | 11.3 | 29.3 | 57.2 | 4.4 | 3.7 | 12 |
| Parking lot condition | 11.5 | 0.0 | 13.8 | 16.1 | 58.6 | 4.1 | 3.7 | 11 |
| Rec. info. available | 10.1 | 29.4 | 6.3 | 23.9 | 30.3 | 3.3 | 4.3 | 13 |
| Road condition | 0.0 | 0.0 | 10.3 | 49.3 | 40.4 | 4.3 | 4.2 | 12 |
| Feeling of safety | 0.0 | 0.0 | 0.0 | 35.4 | 64.6 | 4.6 | 4.1 | 14 |
| Scenery | 0.0 | 0:0 | 0.0 | 1.9 | 98.1 | 5.0 | 4.8 | -14 |
| Signage adequacy | 20.7 | 12.4 | 28.0 | 14.4 | 24.5 | 3.1 | 4.2 | 12 |
| Trail condition | 0.0 | 11.3 | 2.2 | 42.5 | 43.9 | 4.2 | 4.2 | 12 |
| Value for fee paid | 0.0 | 0.0 | 0.0 | 24.6 | 75.4 | 4.8 | 4.6 | 13 |

Note: For items with less than 10 responses the data was not reported

^{*}Scale is: Poor = 1 Fair = 2 Average = 3 Good = 4 Very Good = 5

** Scale is: 1= not important 2= somewhat important 3=moderately important 4= important 5 = very important N obs means the number of visitors who responded to this item.

Table 19. Satisfaction of Wallowa- Whitman NF recreation visitors in General Forest Areas

| | | | | | | | Mean | |
|------------------------------|------|------|---------|--------------|--------------|---------------------|------------|----------|
| ITEM Seq. | Poor | Cain | Average | E oud | Very Good | Average : Rating | Importance | N öbs |
| Restroom cleanliness | .0.0 | 4.1 | 32.0 | 40.2 | 23.7 | 3.8 | 3.3 | 15 |
| Developed facility condition | 4.5 | 0.0 | 19.8 | 55.0 | 20.7 | 3.9 | 3.3 | 17 |
| Condition of environment | 0.0 | 3.9 | 13.8 | 47.7 | 34.6 | 4.1 | 4.6 | 36 |
| Employee helpfulness | 0.0 | 0.0 | 7.7 | 53.0 | 39.3 | 4.3 | 3.7 | 17 |
| Interpretive display | 0.0 | 14.0 | 38.5 | 30.8 | 16.7 | 3.5 | 3.2 | 19 |
| Parking availability | 9.8 | 0.0 | 27.2 | 35.1 | 27.8 | 3.7 | 3.5 | 33 |
| Parking lot condition | 0.0 | 0.0 | 18.9 | 55.4 | 25.6 | 4.1 | 2.7 | 19 |
| Rec. info. available | 3.4 | 9.0 | 6.2 | 75.8 | 5.6 | 3.7 | 3.5 | 21 |
| Road condition | 9.3 | 5.3 | 20.3 | 42.8 | 22.3 | 3.6 | 4.1 | 35 |
| Feeling of safety | 0.0 | 1.6 | 3.5 | 67.5 | 27.4 | 4.2 | 4.3 | 37 |
| Scenery | 0.0 | 5.1 | 0.0 | 19.4 | 75.5 | 4.7 | 4.5 | 37 |
| Signage adequacy | 20.5 | 3.7 | 12.3 | 50.8 | 12.7 | 3.3 | 3.8 | 35 |
| Trail condition | 0.0 | 0.0 | 24.6 | 56.6 | 18.8 | 3.9 | 3.8 | 21 |
| Value for fee paid | 0.0 | 0.0 | 26.6 | 29.1 | 44.2 | 4.2 | 3.8 | 19 |

Note: For items with less than 10 responses the data was not reported.

^{*}Scale is: Poor = 1 Fair = 2 Average = 3 Good = 4 Very Good = 5

** Scale is: 1= not important 2= somewhat important 3=moderately important 4= important 5 = very important N obs means the number of visitors who responded to this item.

Crowding

Visitors rated their perception of how crowded the recreation site or area felt to them. This information is useful when looking at the type of site the visitor was using since someone visiting a designated Wilderness may think 5 people is too many while someone visiting a developed campground may think 200 people is about right. Table 20 summarizes mean perception of crowding by site type on a scale of 1 to 10 where 1 means hardly anyone was there, and a 10 means the area was perceived as overcrowded.

Table 20. Perception of crowding by Wallowa- Whitman NF recreation visitors by site type (percent site visits)

| | | Övernight | CONTRACTOR OF STREET, | |
|--------------------------|---------|-----------|---|------------|
| Crowding Rating | Day Use | t se | Area | Wilderness |
| 10 Overcrowded | 2.1 | 0.0 | 13.6 | 0.0 |
| 9 | 0.0 | 0.0 | 0.0 | 1.0 |
| 8 beliavated 8 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 3.5 | 1.9 | 4.7 | 1.7 |
| 6 | 2.4 | 1.7 | 3.5 | 3.5 |
| 5 | 22.2 | 9.9 | 14.6 | 11.9 |
| 4 bene | 5.1 | 11.9 | 15.5 | 3.5 |
| 3 Lett see a boar algred | 18.9 | 11.9 | 14.2 | 26.3 |
| 2 | 22.9 | 51.0 | 6.9 | 11.4 |
| 1 Hardly anyone there | 22.8 | 11.7 | 26.9 | 40.6 |

Other comments from visitors

Visitors were asked if there were any accommodations or assistance that the forest could offer that would be helpful to the visitor and anyone in their group to improve their recreation experience. Responses are summarized in Table 21.

Table 21. List of comments received from Wallowa- Whitman NF recreation visitors

| Site Name, 1844 1645 | What Accommodation could be made |
|------------------------------------|---|
| 39 RD NORTH | more interpretive sites |
| ANTHONY LAKES SKI AREA-NP- 1 | improve interpretive/education displays, posting of rules/regulations |
| ANTHONY LAKES SKI AREA-NP- 1 | better management of wildlife |
| ANTHONY LAKES SKI AREA-NP- 1 | open up more of NF for skiing |
| ANTHONY LAKES SKI AREA-NP- 1 | 2 day parking pass would be helpful |
| ANTHONY LAKES SKI AREA-PR - 1 | winter camping available |
| ANTHONY LAKES SKI AREA-PR - 1 | trail markers noting distance left to be traveled |
| East Eagle Creek TH- 131 | don't charge at end of trail |
| FS RD. 8210 LOSTINE CANYON | trail maintenance |
| FSR 73 - Elkhorn Scenic North | tell where elk are |
| FSR 73 - Elkhorn Scenic North | segregation motorized/non-motorized |
| HELLS CANYON CREEK VIS - 3 | better road signs, better maps, and people need more training |
| HELLS CANYON CREEK VIS - 3 | more camping areas |
| HELLS CANYON OVERLOOK I- 13 | vending/maps |
| HELLS CANYON OVERLOOK I- 13 | trail maps |
| Hells Canyon Boat Launch-Secondary | showers (some) |
| Hurricane Cr TH- 121 | stop NWFP; spray bugs (mosquitoes) |
| Hurricane Cr TH- 121 | reservation system for campgrounds |
| Hurricane Cr TH- 121 | get ride of fees |
| Lostine GS- 29 | information on available guide service, etc. |
| Marble Pass TH- 103 | trail information or maps on information boards |
| Moss Springs TH- 62 | better creating and clearing trails; better signs in wilderness |
| OREGON TRAIL INTPT. PARK-15 | signs on hiking trails aren't informative enough- need more information about ecology |
| OREGON TRAIL INTPT. PARK-15 | more interpretive sites for Oregon Trail |
| SR 245 - Dooley North | open up more roads |
| SR 245 - Dooley North | more reforesting; road availability |
| Wallowa Lake TH- 120 | provide more detailed information |

APPENDIX E: RECREATION STUDY PLAN

ALTERNATIVE STUDY PLAN 5: RECREATION VISITOR SURVEY AND USE STUDY

This study was requested by FERC.

5.0 Introduction

Baker County filled for their preliminary license and received it on October 8, 2003 for the 3 MW Mason Dam Hydroelectric Project (Project No. P-12058-002). The project is run of release meaning Baker County does not and will not have any control over the release of the water at Mason Dam. The Bureau Of Reclamation and Baker Valley Irrigation District have control of the release of water and will not change water flows at Baker County's request.

The project consists of two small turbines that will be housed in a power plant at the base of Mason Dam. The power generated will be sent approximately 1 mile to an existing Idaho Power Company 138kv transmission line. The 34.5kv power line connecting the power plant to the substation and then to the 138kv transmission line will be buried in the Black Mountain Road right of way.

The project boundary consists of 100 feet beyond the area that contains the powerhouse and tailrace facilities, and the substation to the interconnect with IPC transmission line. It also includes 50 feet on each side of the underground power line that will be placed in the Black Mountain Road right of way.

5.1 Goals and Objectives

The goal of this Recreation Visitor Survey and Use Study is to obtain additional information regarding utilization, including activity types and locations in the proposed project area around Mason Dam, as well as utilization of the developed recreation access areas located below the dam. Information should also be obtained to determine amount of usage of access routes to recreation areas within the project area.

Information gathered would be used to estimate average weekday, weekend, and holiday recreational use at the developed recreation access areas below the dam. Surveys would be employed to gather information about visitors' recreation activities and attitudes in the project area.

5.2 Relevant Resource Management Goals

Construction operations and staging may displace recreation visitors within the proposed project area. Reasonable consideration of the effect of project construction and operation pertaining to recreational access and opportunities in the area is in the public interest.

Baker County maintains a road system throughout the county that is used for the local population as well as tourists and other recreational visitors. Black Mt. Road accesses

homes within the area and construction of the powerline in the road area is a concern. It is anticipated that the road will not be closed during construction, though one way, flag car passage may be required. Baker County will comply with standard local and state rules and regulations to work around the construction project.

5.3 Background and Existing Information

No data exists specifically for the Project Boundary area. This area is part of the Phillips Reservoir recreation area. The major impact of the powerline project aside from local residential traffic would be the construction during deer and elk hunting season. Baker County intends to do the work on the powerline outside of existing deer and elk hunting season.

Forest Service personnel have a great deal of knowledge of the use of the sites located on the Mason Dam river road. Baker County intends to assess Forest Service recreational personnel to determine usage of these parking areas in the projected construction months of October and November. We believe that this assessment will confirm that little public use occurs during this time and a temporary shutdown of this area will not greatly effect recreational opportunities.

During the winter the Mason Dam river road and site 2 parking lot (see attached map, attachment A) are plowed. Site 1 does not get plowed and in some winters the snow would make access to this area difficult.

5.4 Project Nexus

Black Mountain Road provides motorized access to the Wallowa-Whitman National Forest. It provides for local residential as well as recreational use by the public. Baker County intends to keep this road open during construction though delays may occur. The developed parking area immediately below the dam will be used as a staging area but the time of year the work will be performed will cause little effect on visitor and recreational satisfaction.

5.5 Proposed Methodology

Baker County proposes to work in conjunction with the Forest Service to minimize impacts to recreation and visitors to the National Forest. The project will be scheduled to cause the lowest disruption to recreational use. Local Forest Service employees and Baker County Road Department personnel working collaboratively will be able to most adequately set construction schedules that have the least impact to the area. The following outlines the study area and methodology proposed to conduct the recreation Resources Study.

5.5.1 Study Area

The proposed study area is the recreational area below Mason Dam with the two sites that are accessible off of the Mason Dam river road. Attachment A shows the area with the two sites. The study will include a list of recreational resources within this area provided by the Forest Service.

5.5.2 *Methodology*

Baker County proposed Recreation Resources Study will include an inventory of recreational rescues in the study area, data collection, on-site surveys and observations to determine recreational use patterns, and user attitudes in the Mason Dam area and upper Powder River. A traffic counter will be installed on the Mason Dam river road.

5.5.2.1 Recreation Inventory

Dispersed day-use areas around Mason Dam will be identified and mapped. Other recreational use facilities including toilet and water facilities, interpretive displays and wilderness stations in the Project area will be identified. The status of recreational use facilities around Mason Dam will be described, and maintenance, inspection, or management practices will be identified.

5.5.2.2 Data Collection

Information will be obtained from the Forest Service, and any other identified entities who may have recreational use information available to supplement on-site field surveys, observations, and traffic counter data. We will ask Baker Valley Irrigation District to document their visits to Mason Dam in order to get accurate information on those that visit the area for recreation.

5.5.2.3 On-Site Surveys and Observations

On-site surveys and observations will be conducted to obtain information regarding use on weekday, weekend, and holiday recreation use in the Mason Dam and the upper Powder River area. Surveys will also provide information regarding attitudes of Mason Dam area visitors.

On-Site Surveys

The on-site survey will be an exiting survey with the survey site being near the traffic counter to engage visitors exiting both parking lots (on map, attachment A). The survey will be conducted between 8:45 am and 4:15 pm. A calendar showing survey days will be provided in this study plan. Survey days will consist of 20 days randomly selected through the months May-Sept. for the main hunting and fishing seasons. Attachments G, H, and I are included showing the hunting, fishing, and game bird seasons respectively. The days will be generated with two weekdays and two weekend days randomly being selected for each month, May-September, through a program made for random number generation in a weighted calendar format by the Baker County Technology Department. The dates generated have been added to the calendar following section 5.6.

The surveyor will count all vehicles entering the area on the Mason Dam river road. The surveyor will ask visitors upon exiting, if they would like to participate in a study about their recreation use of the Mason Dam area. One representative from each party will be surveyed. The surveyor will either interview the visitors or will hand out the survey forms for visitors to fill out and give back to the surveyor.

Information on the survey will attempt to identify the following, without being unduly long and time consuming:

- -Number of visitors and size of group
- -Length of stay/use
- -Return visitors
- -Access route (FS road, Trail, or Wading upstream)
- -Access method (hike, ATV, Bicycle, Motorcycle, Vehicle)
- -Destination (River, Recreation sites)
- -Activities participating in
- -Concerns and desires for improvements
- -Visual appeal

A pre-test of the survey will be conducted in the field prior to full implementation of the survey. If problems with the clarity of this survey are encountered, the survey form will be modified. Attachment B is the survey form for exiting visitors. Attachment D will be used to track Baker Valley Irrigation District employee visits. Attachment E will document Baker County, other agencies, and contractor use. Attachment F will be used by residents located at the operators house, if it is agreeable by them, in order that the information from the traffic counter gives us the most useful information.

5.5.2.4 Traffic Counters

One pressure sensitive counter will be placed on the road that accesses Mason Dam. It will be placed at the start of the road off of Highway 7.

The counter will be installed at the beginning of the field survey period May and will be removed at the end of the survey period in March. The counter will be checked for working order and data will be collected during Baker County personnel visits to Mason Dam. Attachment C will be utilized to document counter status and data collected.

5.5.3 Product

Recreation Resources Study

The product of the Recreation Resources Study will be draft and final reports discussing the results of the recreation inventory, data collection, on-site surveying, observations, and traffic counter data. Draft copies of the Recreation Resources Study report will be

provided to the Forest Service and other stakeholders for review and comment. The final study report will be provided to the Forest Service and other stakeholders for their files.

5.6 Level of Effort and Cost

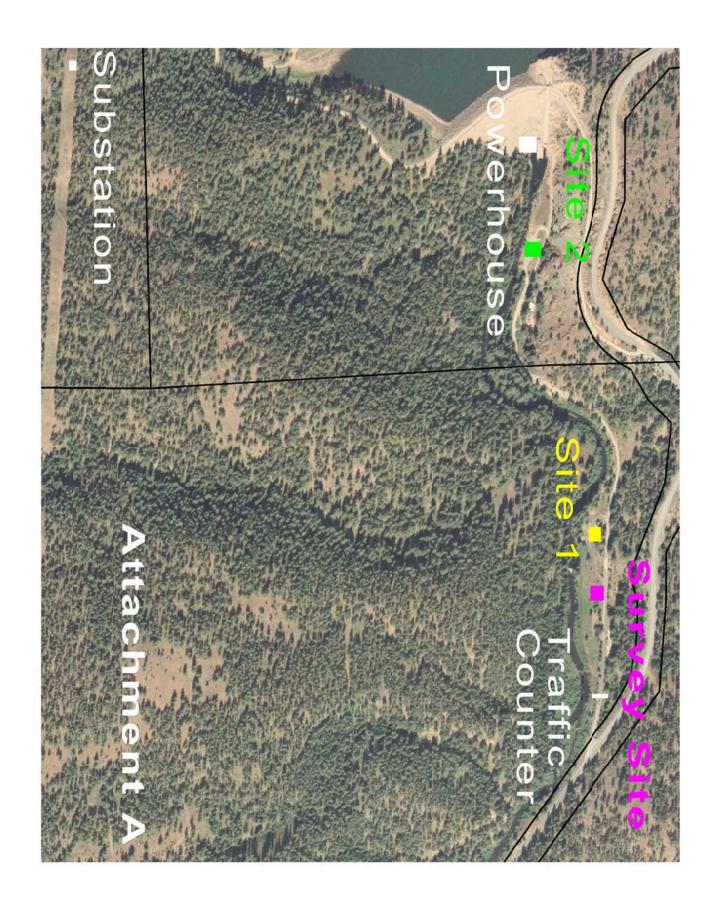
Local Forest Service personnel and Baker County road officials will assess the project and determine a scope of work and timing of construction issues that least effect recreation and visitors. Baker County will use pressure sensitive counters on the river road to Mason Dam in order to determine construction times. Baker County will keep Black Mt. Road open to all during the construction of the power line in the road right of way. Baker County will work with the local Forest Service landscape architect after construction to restore any damage to the staging area. In collaboration with the Forest Service, we will agree on a site plan as part of the FERC Licensing agreement.

Study efforts outlined above for the Recreation Resources Study are intended to provide relevant information regarding recreational use in the Project area. Efforts will include data collection, on-site inventory and mapping of formal and informal recreation facilities, database development and on-site surveying, observations and traffic data collection. Several person-days of time will be required for data collection and for the on-site inventory and mapping efforts. Development of the database for the study will also require several person-days of time. It is expected that one person can effectively conduct the on-site surveys and observations. On-site surveys and observations will require approximately 20 person-days of time. Additional time will be required for hiring and training the surveyor and on-site pre-testing of the survey. Costs will also include pressure sensitive automatic counter, approximately 1 person days to install and 15 days to monitor the counters and collect data. Following completion of data collection and on-site monitoring efforts several weeks of work will be required for data input and analysis, and preparation of draft and final reports.

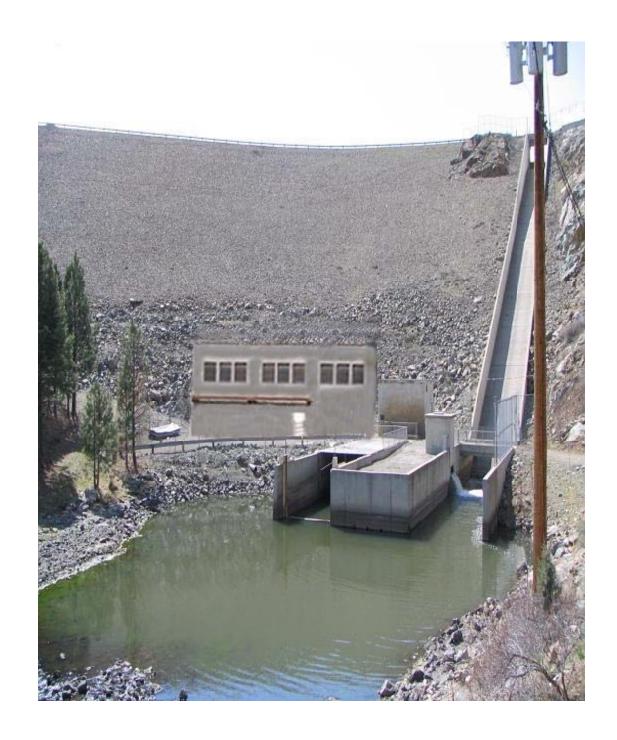
It is proposed that the trial survey be done from April 1-31, 2007 once a week with revisions made as needed. The survey will start May 1, 2007 and end September 30, 2007. The draft report shall be completed by December 31, 2007. Comments on the draft will be due by January 31, 2008. The final report will be completed by March 1, 2008.

| N | //ason Dam & เ | Jpper Powder F | River Survey | Attachment B |
|--|---|---|---|------------------------------|
| Not Surveyed (Fill in Date, Time, and pg 2) | Date: | Time: | | Surveyor: |
| Hello my name is more about the recrea | tion use in the Masor | I am conducting an Dam area. I have a | a survey for Baker County t few questions about your v | o learn visit here. |
| How many people a How many vehicles Where are you from Zip Code: | does your group have (for multiple location | ns show number of pe | eople) ? #: Zip Code: | #: |
| | nights: | | Yes (If yes please continuate of the Yes) | _ |
| 5. If not staying over r6. What is your method | | u plan to visit <i>(# of hod</i> Vehicle | torcycle ATV | ☐ Hiking le |
| | you participate in dur Camping Dicnicking | OHV Trails | Sightseeing Other: | ☐ Other: ☐ Other: |
| 8. Is this your first visi Yes | Do you plan on com | ing back? Yes N e year would you visit? | | mer 🗌 Fall 🗌 Winter |
| No | How many times pe | ve you been coming to r year do you visit? e year do you visit? | | _ |
| 9. What has drawn you Scenery | u to recreate in this a | | Other: | Other: |
| 10. What aspects of the Natural ope | nis area are importan en pine landscapes | t to you? rustic amenities | fresh water fishery Other: | Scenic appearance Other: |
| 11. Are there features | here that detract fro | m your experience? (| Please identify or describe |) |
| Good le | owerhouse to the dat dea | m for producting a | icitv? | |
| Good le | dea 🗌 Bad Idea | No Opinion | | |
| Would the ☐ Very m | • | | ct your recreational visits to | |
| 13. If the Forest Servi fire rings from site 2. V | /hat would your opio | | ck of funding to remove the | outhouse, picnic tabkes, and |
| 10. Do you have any a | additional comments | you would like to mak | e about the questions or in | nprovements to these sites. |
| | | 150 | 85 | page 1 |

| Number of axles of v | vehicle or vehicles in group, incl | ude trailers if applicable: | | _ | |
|----------------------------|--|---|------|-----------------------------------|-----|
| Gender of person surve | eyed: | | | Survey From Number _ Surveyor: | |
| Estimated age group: | ☐ 19 Years or under ☐ 20-29 ☐ 30-39 ☐ 40-49 ☐ 50-59 ☐ 60-69 ☐ 70 Years or over | WEATHER: Sky/Weather: Sunny Wind: 0 5 Precipitation: None Temp: | 6 10 | 11 15 15 20 | 20+ |
| If they did not stop to fi | ll out survey please fill out obse | rvations made below. | | | |
| Estimated number of p | veling together:eople in group:_ nicle or vehicles in group, includ | _ | | - | |







| | | 2 | 12 | 19 | | 26 | 2 | |
|--------|-----------|----------|----|----|------|----|--------|--|
| | Saturday | | | | | | | |
| | Friday | 4 | 11 | 18 | | 25 | June 1 | |
| | Thursday | 3 | 10 | 17 | | 24 | 31 | |
| May 07 | Wednesday | 2 | 6 | 16 | | 23 | 30 | |
| | Tuesday | May 1 | 8 | 15 | | 22 | 29 | |
| | Monday | 30 | 7 | 14 | | 21 | 28 | |
| | Sunday | April 29 | 9 | 13 | 1570 | 20 | 27 | |

| | Saturday | 7 | 14 | 21 | | 28 | 4 | |
|---------|-----------|--------|----|----|------|----|----------|--|
| | Friday | 9 | 13 | 20 | | 27 | 3 | |
| | Thursday | 5 | 12 | 19 | | 26 | 2 | |
| July 07 | Wednesday | 4 | 11 | 18 | | 25 | August 1 | |
| | Tuesday | က | 10 | 17 | | 24 | 31 | |
| | Monday | 2 | 6 | 16 | | 23 | 30 | |
| | Sunday | July 1 | 8 | 15 | 1571 | 22 | 59 | |

| | | 2 | 6 | 16 | | 23 | 30 | |
|---------|-----------|--------|---|----|------|----|----|--|
| | Saturday | | | | | | | |
| | Friday | June 1 | 8 | 15 | | 22 | 29 | |
| | Thursday | 31 | 7 | 14 | | 21 | 28 | |
| June 07 | Wednesday | 30 | 9 | 13 | | 20 | 27 | |
| | Tuesday | 29 | 5 | 12 | | 19 | 26 | |
| | Monday | 28 | 4 | 11 | | 18 | 25 | |
| | Sunday | May 27 | | 10 | 1572 | 17 | 24 | |

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|-----------|-----------|----------|---|----|----|------|----|-------------|--|
| | Saturday | 4 | | 11 | 18 | | 25 | September 1 | |
| | Friday | က | | 10 | 17 | | 24 | 31 | |
| | Thursday | 2 | | 6 | 16 | | 23 | 30 | |
| August 07 | Wednesday | August 1 | | 8 | 15 | | 22 | 29 | |
| | Tuesday | 31 | | 7 | 14 | | 21 | 28 | |
| | Monday | 30 | | 9 | 13 | | 20 | 27 | |
| | Sunday | July 29 | | 5 | 12 | 1573 | 19 | 26 | |

| | | ber 1 | 80 | 15 | | 22 | 29 | |
|--------------|-----------|-------------|----|----|------|----|----|----|
| | Saturday | September 1 | | | | | | |
| | Friday | 31 | 7 | 14 | | 21 | 28 | |
| | Thursday | 30 | 9 | 13 | | 20 | 27 | |
| September 07 | Wednesday | 29 | 5 | 12 | | 19 | 26 | |
| | Tuesday | 28 | 4 | 11 | | 18 | 25 | |
| | Monday | 27 | 3 | 10 | | 17 | 24 | |
| | Sunday | August 26 | 2 | 6 | 1574 | 16 | 23 | 30 |

Mason Dam Access Road Traffic Counter Records

| Date | Time | Count | Any Maintenance or Comments |
|------|------|-------|-----------------------------|
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Mason Dam Intake visits by Baker Valley Irrigation District

| Date | Time | Number | of Axles | Weather | |
|--|------|---------|----------|--------------|--------------|
| | | Vehicle | Trailer | 1,2,3 | Observations |
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Weather

- 1. Excellent Weather it would make you want to go outdoors
- 2. Decent Weather you would go out if you had something planned
- 3. Terrible weather too cold, windy, hard rain, miserable for much fun outdoors

Mason Dam Visits by Baker County, Agencies, or Contractors

| Date | Time | Number | of Axles | Weather | |
|------|------|---------|----------|---------|--------------|
| | | Vehicle | Trailer | 1,2,3 | Observations |
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Weather

- 1. Excellent Weather it would make you want to go outdoors
- 2. Decent Weather you would go out if you had something planned
- 3. Terrible weather too cold, windy, hard rain, miserable for much fun outdoors

Mason Dam "Operators House"

Month: Year:

| Month: | Year: | | | |
|--------|-----------------------|----------|-------------|--------------|
| Day | Number of Round Trips | Vis | sitors | Comments or |
| | Tally Marks | 1,2,3 | Tally Marks | Observations |
| 1 | | | | |
| 2 | | 1 | | |
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Visitors

- 1. They came to see you Only.
- 2. They came to visit after using Mason Dam/Upper Powder River area for recreation.
- 3. They came to visit and plan on using the Mason Dam/Upper Powder River recreation area.