

# **1999 Missouri-Madison Recreation Survey**

*Results of the Study*

Technical Completion Report 2000-1a.

April 2000



# 1999 Missouri Madison Recreation Survey

## Results of the Study

May 1999 - September 1999

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## Executive Summary

This information summarizes the results of a summer-season recreation survey on a 300 mile section of the Madison and Missouri Rivers from May 1999 through September 1999. Nearly 3,000 visitors completed questionnaires at approximately 80 recreation sites.

- Approximately 67% of the visitors to the corridor are from Montana. In the Hebgen/Ennis region 44% of the visitors are from Montana and 56% are nonresidents. In the Helena region nonresidents account for 21% of the use, and in the Great Falls region nonresidents account for 53% of use.

- Nonresident visitors to the corridor were most likely to come from Washington (3%), California (3%), Idaho (2%), and Utah (2%).

- Montana residents in the Hebgen/Ennis region were mainly from Gallatin (55%) and Yellowstone (17%) counties. Montanans visiting the Helena region mainly lived in Cascade (37%) and Lewis and Clark (24%) counties. The vast majority of Montana residents visiting the Great Falls sites were from Cascade county (83%).

- The most popular recreation activities in each region were: Hebgen/Ennis-sightseeing, viewing wildlife, and walking; Helena-sightseeing, viewing wildlife, and boat angling; Great Falls-sightseeing, walking, and photography.

- In the Hebgen/Ennis and Great Falls regions about 35% of visitors had not visited the site before while less than a quarter of visitors to the Helena region were first time visitors.

- Almost 90% of Great Falls visitors were day users, while about half of visitors to the Hebgen/Ennis and Helena regions stayed overnight.

- Helena area visitors perceived a greater degree of crowding than Hebgen/Ennis or Great Falls visitors. Great Falls visitors reported feeling the least crowded. Roaded modified visitors reported the highest degree of crowding while visitors to the most developed sites (ROS urban) reported the lowest levels of crowding. The majority of visitors reported feeling not at all crowded.

- In the Hebgen-Ennis region 12% of visitors reported that there were sites they had been displaced from. In the Helena and Great Falls regions, 13% and 9%, respectively, reported displacement. The most common reasons for displacement were fees and crowding.

- Global measures of satisfaction tended to be highest in the Hebgen/Ennis region and lowest in the Helena region.

- Hebgen/Ennis visitors were most satisfied with the condition of natural features and cleanliness of the sites they visited and least satisfied with the quality of historical, interpretive and educational material.
- The cleanliness of the area and facilities maintenance were most highly rated by Helena visitors. These visitors had the lowest rating of satisfaction with the number of fish caught.
- Great Falls visitors were most satisfied with the cleanliness of the area and the maintenance of facilities. They were least satisfied with the number of fish caught.
- About 58% of Helena area visitors felt that additional facilities or services were needed at the sites. The most commonly cited needed facilities were showers (10%), additional campsites (7%), running water (6%), and restroom facilities (5%).
- Half of Hebgen/Ennis visitors felt that additional facilities or services were needed. The most commonly cited needs were restroom facilities (10%), RV dump stations (6%), and trash bins (6%).
- About 30% of Great Falls visitors felt additional facilities or services were needed. These included restrooms (9%), water fountains (9%), and a snack bar/eatery (7%).
- Hebgen/Ennis visitors spent an average of \$273 per trip, Helena visitors spent \$153, and Great Falls visitors spent about \$108 per trip.

## **Acknowledgments**

Successfully conducting this study required the cooperation of numerous individuals. First of all, we would like to thank the thousands of visitors who volunteered a small portion of their leisure time to fill out the questionnaire. A tremendous thank you also goes to our tireless crew of field surveyors: Mark Stouffer, Alane Fitzpatrick, Sandy Shull, Sam Korsmoe, and B.J. Hultz. Their flexibility, patience, and perseverance in the field made this study possible; you guys deserved those tans! Thank you also to the students who assisted in the coding and computer data entry of the questionnaires: Mike Hamley, Amanda Lowe, Ryan Ulvin, and Sarah Harris.

The content of the questionnaire and much of the design of the study was developed by Neil Moisey and others for use in the 1994-1995 study. Many thanks to them as well.

Finally, thanks to Elvin Fitzhugh who provided overall coordination and support through American Public Land Exchange.

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## Preface

This report summarizes a study of recreational use on the Madison and Missouri rivers, from Hebgen Reservoir to Fort Benton, from May 1999 through September 1999. The primary purpose of the study is to provide an update to the information from the 1994-95 study which was used for the development of the comprehensive recreation management plan for the corridor.

There are ten major components to this study. The following sections are presented in this report:

- Section 1. Introduction to the 1999 Study
- Section 2. Results of the Recreation Visitor Study
- Section 3. Data for the Planning Framework
- Section 4. Estimates of Use at Selected Missouri and Madison Sites
- Section 5. Comparison with the 1994-95 Study
- Section 6. Economic Assessment of Recreation Use in the Missouri Madison Corridor
- Section 7. Appendices

The following sections are each published as separate documents:

Technical Completion Report 2000-1b. *Tables of Visitor Characteristics by Recreation Site*. Institute for Tourism and Recreation Research, The University of Montana, Missoula, MT 59812.

Technical Completion Report 2000-1c. *Analysis of Lewis and Clark Enthusiasts in the Missouri Madison Corridor*. Institute for Tourism and Recreation Research, The University of Montana, Missoula, MT 59812.

Technical Completion Report 2000-1d. *Visitor Comments by Recreation Site*. Institute for Tourism and Recreation Research, The University of Montana, Missoula, MT 59812.

## 1 - Introduction to the 1999 Study

The Missouri-Madison Project involves recreation resources, opportunities and values of increasing significance to Montanans. Understanding the role of this important resource to Montanans and their nonresident guests is a vital step in the development and maintenance of management plans for the river sections and the hydroelectric projects relevant to this study.

In 1994-95, a yearlong study was conducted to gather data for use in the Missouri-Madison Comprehensive Recreation Management Plan. The main purpose of the 1999 study is to update the information gathered during the 1995 summer season. Most elements of the 1999 study, from the questionnaire, to the sampling methodology, to the layout of this report, are relatively unchanged to facilitate comparison with 1995.

The 1994-95 report contains a detailed discussion of changes in Montana and particular results of the study as they relate to the comprehensive planning process. In this chapter, rather than repeat the discussion from the 1994-95 report, we identify a few recent changes within the corridor that may have implications for recreation visitor use, and differences between the 1994-95 and 1999 studies that should be noted when making comparisons.

There is a substantial amount of data contained in the following chapters of this report; we suggest that this data continue to be analyzed as new questions and issues arise. The information contained in the report is useful not only in helping make decisions about facilities and policies, but also in enhancing the long-term benefits to people in the corridor. Visitor information contained in the report also provides a baseline from which additional studies on more specialized questions may be developed.

### Resident and Nonresident Visitation in Montana

Visitors from outside Montana continue to account for a significant proportion of use within the corridor. In 1995, 36% of the sampled visitors were nonresidents, and in 1999 that proportion was relatively unchanged at 37%. Statewide, close to 9.5 million people visited Montana in 1999, an 8% increase over nonresident visitation in 1995 and a 2% increase over 1998 (Nickerson 2000). The Hebgen-Ennis region continues to have the greatest proportion of nonresident visitors (about 57%), but the Great Falls region was not far behind with nonresidents accounting for about 53% of the sample. The greater proportion of nonresidents sampled in the Great Falls region may be partially due to the addition of the new Lewis and Clark Interpretive Center in the 1999 study.

Resident population in the counties within the corridor has grown dramatically since 1990, though growth since the 1994-95 study appears to have slowed some compared to the period 1990-1995. Gallatin county saw a population increase of 5% from 1995-98, Jefferson county increased 9%, Lewis and Clark 2%, and Cascade county actually declined (-3%) during the

same period. Overall, Montana's population increased about 1% from 1995-98, and resident use within the corridor increased about 1% as well.

Interest in the coming Lewis and Clark Bicentennial Commemoration (2003-2006) may already be affecting recreation use within the corridor. Statewide, there were significant visitation increases along roads paralleling the Lewis and Clark Trail and at sites related to Lewis and Clark history (Nickerson 2000). Results from the 1999 Missouri Madison survey indicate that a significant proportion of visitors have an interest in Lewis and Clark historical sites or related activities, and this proportion may increase as the bicentennial commemoration draws closer.

### **Changes to the 1999 Study**

The 1994-95 study included both winter and summer sampling seasons. The 1999 study included only a summer sampling season which lasted from May through September (except at sites around Hebgen Reservoir, where sampling did not begin until June).

Overall, the 1999 study included fewer sites than the 1994-95 study. The 1999 study focused on reservoirs and selected affected river reaches, while the 1994-95 study included both reservoirs and river sections. In the Hebgen-Ennis region, several interpretive pullout sites were added, but the Madison River sites were not sampled. For this reason, the comparative analysis of upper and lower Madison River use, performed in 1994-95, was not repeated in the 1999 study. Sampling in the Helena region remained the same except for the Meriwether Picnic Area and Holter Boat-in Homes, which were not included in this study. In the Great Falls region, the USFS-operated Lewis and Clark Interpretive Center was included as a sample site; a significant addition since nearly 150 questionnaires were returned there. The Missouri River sites included in the 1994-95 study were not sampled in 1999. Section 2.2 of this report and Appendix A contain descriptions of the study area and a listing of the sampled sites.

The questionnaire used in the 1999 study was largely unchanged from 1994-95. However, since the 1999 study was conducted during the summer months only, questions pertaining to the winter activities snowmobiling and ice fishing were removed from the survey instrument. Also, in order to address information needs regarding the coming Lewis and Clark bicentennial commemoration, three new items were added to the questionnaire. In question 5 regarding reasons for choosing the site, *Lewis and Clark historical site* was added as an option. In question 4 regarding activity participation at the site, *visit Lewis and Clark sites* was added as an option. After that section, a new question was added as follows:

5. *Would you visit this site again if there were an event specific to the Lewis and Clark Journey Commemoration?* \_\_\_Yes \_\_\_No.

This question was not included in questionnaires distributed in the Hebgen/Ennis region. Finally, in question 12 regarding satisfaction with conditions at the site, the following condition was included for evaluation: *Quality of Lewis and Clark interpretive/educational information*. Visitors who answered affirmatively to the first three of these questions were identified as "Lewis and Clark Enthusiasts" and are analyzed in a supplement to this report.

## **2 - Recreation Visitor Survey Results**

### ***2.1 Introduction***

The overall goal of the 1999 Missouri Madison Recreation Study is to update 1994-95 information concerning the characteristics of recreational use and users at representative sites on the Missouri Madison reservoir system.

Specific objectives of the study are to:

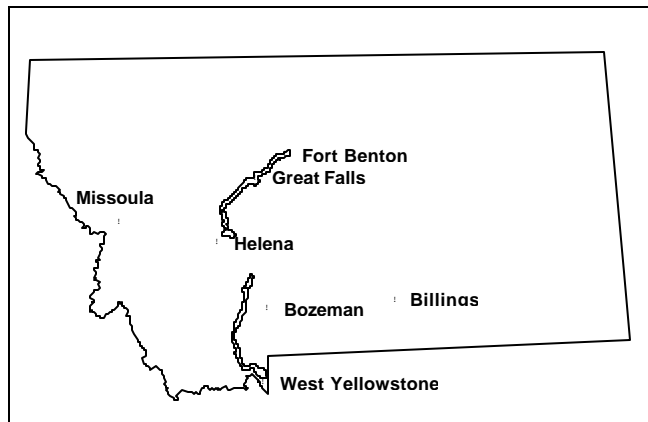
- 1) determine socio-demographic characteristics of on-site users;
- 2) determine on-site activity participation;
- 3) determine levels of overall trip satisfaction, satisfaction of existing facilities, settings and management, and identification of needed facilities;
- 4) identify potential/existing conflicts among user groups and where they occur;
- 5) explore attachment to place and how it may explain existing/potential use patterns;
- 6) investigate potential changes in visitation patterns due to resource/social changes at sites (e.g., crowding, resource degradation, conflict);
- 7) estimate current use levels at selected sites;
- 8) determine expenditure patterns;
- 9) to compare all of the above information across sites and/or ROS classes.

The 1999 Missouri Madison Recreation Study was a summer-long effort, which began in May 1999 and continued through September 1999. This report summarizes data from questionnaires distributed and collected during that period.

## 2.2 Study Area

The area under study includes the major recreation sites contained within the Missouri Madison Comprehensive Recreation Planning Corridor shown in Figure 1. The recreation sites around Canyon Ferry Reservoir near Helena were not included in this study<sup>1</sup>. The Madison River runs from Hebgen Reservoir near Yellowstone National Park in southwest Montana to

**Figure A. Missouri Madison Planning Corridor.**



its confluence with the Jefferson and Gallatin Rivers forming the Missouri River. The planning corridor then follows the Missouri River to Fort Benton, Montana. There are approximately 150 recreation sites within the planning corridor. Seventy-seven of these sites were sampled as part of the 1999 Missouri Madison Recreation Study.

Identical survey instruments and similar methodologies and sampling frameworks were applied at every site. Figures 1 through 6 show the sites sampled in each of the study regions.

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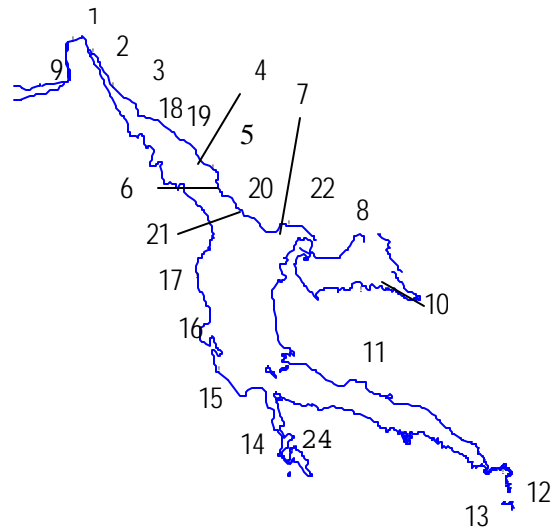
<sup>1</sup> These sites were sampled by ITRR for the Bureau of Reclamation during the summer of 1999 using the same methodology and questionnaire as was used in this study.

**2.2.1 Reservoir Sites (ITRR)**

The reservoir sites include the principal state, federal, and privately owned recreational facilities located on the reservoirs and hydroelectric facilities on the Madison and Missouri rivers from Hebgen Reservoir to Carter Ferry near Great Falls. The reservoir sites were split into four major segments for survey administration: the Hebgen sites, the Ennis sites, the Hauser and Holter sites, and the Great Falls sites.

The Hebgen reservoir sites sampled are shown in Figure 1. The sites primarily included the public sites around Hebgen Reservoir and included Cabin Creek Campground just below Hebgen Dam. Several commercial sites were also surveyed during the summer. The specific sites surveyed are shown in Table A1 (Appendix A).

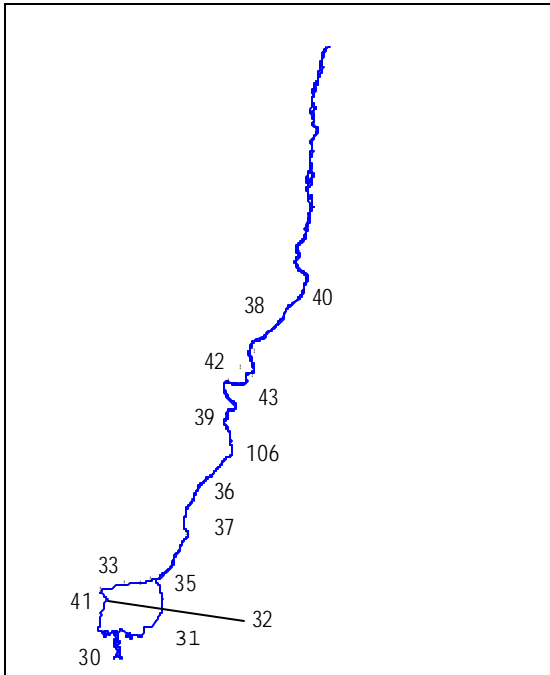
**Figure 1. Hebgen Reservoir Sites Sampled.**



1 Cabin Creek Campground	2 Hebgen Dam Day Use
3 Building Destruction Site	4 Highway Destruction Site
5 Kirkwood Picnic Site	6 Hebgen Lake Interpretive Site
7 Yellowstone Holiday Picnic Site	8 Red Canyon Scarp Interpretive Site
9 Earthquake Interpretive Site	10 Rainbow Point Campground
11 Horse Butte Lookout Picnic Site	12 Madison River Picnic Site
13 Bakershole Campground	14 Lonsomehurst Campground
15 Cherry Creek Campground	16 Rumbaugh Ridge FAS
17 Spring Creek Campground	18 Campfire Lodge Resort
19 Kirkwood Ranch Motel and Marina	20 Hebgen Lake Motel and Campground



**Figure 2. Ennis Area Sites Sampled.**

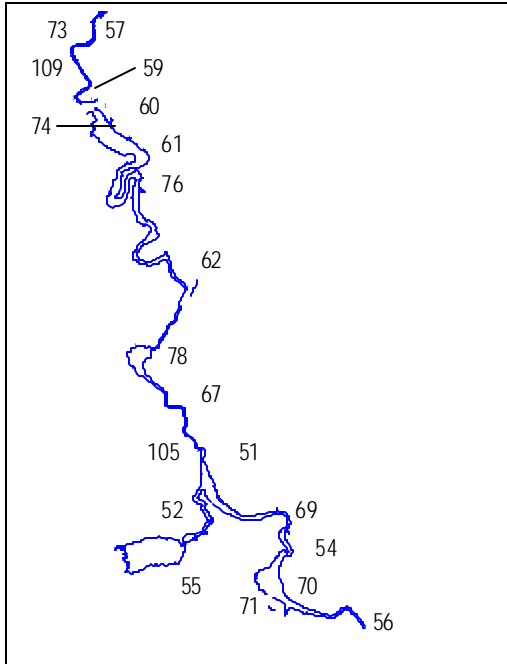


The Ennis sites sampled are shown in Figure 2. They include the public recreation sites around Ennis Reservoir including the sites just above Madison Dam. No recreation sites within the Beartrap Canyon Wilderness area were sampled as this area was excluded from the planning process. The sites immediately below the Beartrap Canyon to Black’s Ford were also sampled by ITRR. Table A2 (Appendix A) lists which sites were sampled.

30 West Shore Public Access	31 East Side Fishing Access
32 Meadow Lake Fishing Access	33 Kobayashi Beach
35 Trail Creek	36 Fall Creek
37 Powerhouse River Access	38 Red Mountain Campground
39 Warm Springs Access	40 Black's Ford
41 Lake Shore Lodge	42 Dispersed - West US84
43 Dispersed - East Side Beartrap Road	106 Bear Trap Canyon

The Helena reservoir sites sampled are shown in Figure 3. These were the primary public sites along the Missouri River below Canyon Ferry Dam to Wolf Creek Bridge below Holter Dam. Table A3 (Appendix A) lists all the sites (including commercial sites) that were sampled in the Helena region.

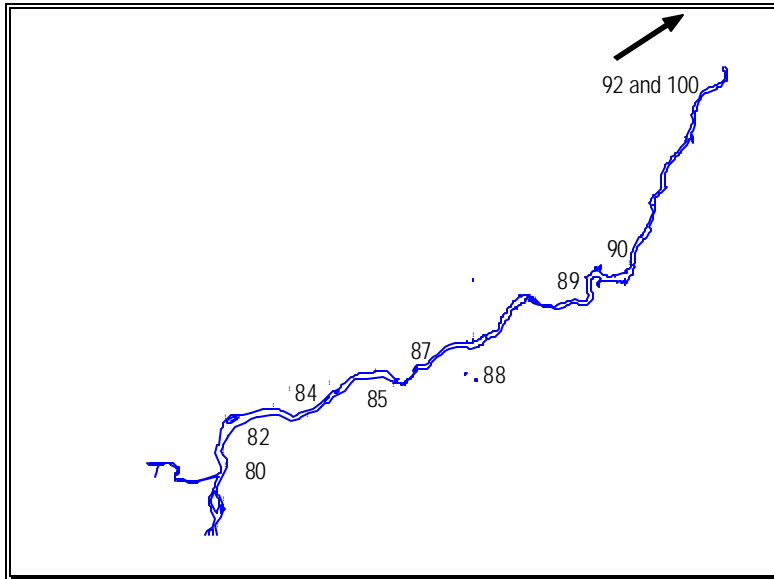
**Figure 3. Helena Area Sites Sampled.**



51 Black Sandy SRA	52 Causeway Fishing Access
54 York Bridge Fishing Access	55 County Park
56 Riverside SRA	57 Wolf Creek FAS
59 Holter Dam Campground	60 Holter Lake Campground
61 Log Gulch Campground	62 Departure Point Day Campground
67 Beaver Creek Fishing Access	69 El Dorado Bar Mine Inc.
70 Devil's Elbow	71 Lakeside Resort
73 Holter Lake Lodge	74 The Boat Loft
76 Indian Trail Marina	78 Gates of the Mountains Inc.

Some of the Great Falls sites sampled by ITRR are shown in Figure 4. Closely grouped urban sites are not shown in the figure but are listed in the key below. The area sampled includes the City of Great Falls sites within the urban area starting at Broadwater Bay and continuing on to the Montana Department of Fish Wildlife and Parks sites and then downstream to Carter Ferry FAS and the Fort Benton Boat Launch. No commercial sites were sampled in the Great Falls region. Table A4 (Appendix A) lists all the sites that were sampled.

**Figure 4. Great Falls Sites Sampled.**



80 Broadwater Bay Park	82 Speciman Sound Park (and Riverside Park)
84 Squaw Island West Bank Park	85 Giant Springs Heritage State Park
** Rivers Edge Trail	87 North Shore Public Access
88 Rainbow and Lewis and Clark Overlooks	89 Ryan Island Day Use Area
90 Morony Dam Public Access	** Dispersed from Giant Springs to Rainbow
92 Carter Ferry	93 Black Eagle Overlook
** Lewis and Clark Interpretive Center	** Rainbow Dam
100 Fort Benton Boat Launch	** Crooked Falls Overlook
** Historic Train Exhibit	

## **2.3 Methodology**

The primary data collection instrument was an on-site survey and included both a questionnaire and non-interactive observation. Data collection for this study took place from May 9 through September, 1999. Sites around Hebgen Lake were sampled beginning June 1.

### **2.3.1 Sampling Framework**

A stratified systematic random sample design was used in this study. This design allowed for a representative sample over the range of sites, times of the day and days of the week. Each sample region (e.g., Hebgen, Ennis, Holter/Hauser, Great Falls) was considered independent of the others.

The administration of questionnaires took place within a pre-determined sampling plan. Every day of the five-month data collection period was eligible to be selected for sampling. Each sampling day was divided into four, three-hour periods: 8-11, 11-2, 2-5, and 5-8. A different site was assigned to each three-hour period. Within each sampling region, sites located in close proximity to each other were grouped into clusters of three. Clusters were randomly assigned to days of the week, and sites within clusters were randomly assigned to consecutive sampling periods. This created a sampling structure that covered three different sites per day from 8 to 5 or 11 to 8. Travel time was split between clustered sites (for instance, a travel time of 10 minutes would be split by leaving one site 5 minutes before the end of the sampling period and arriving at the next site 5 minutes late). The sampling order was systematically rotated within each cluster so that every site had the opportunity to be sampled at each of the four sampling time periods. After the basic sampling frame was constructed, several adjustments were made to assure that every possible site-day-time combination was representatively sampled.

#### *Special Considerations in the Hebgen Area*

The number and geographic layout of sites in this region required that several clusters be composed of four sites. Within these clusters, a different site was systematically dropped from the group for each day the cluster was sampled so that all three-way combinations of sites were represented equally.

#### *Special Considerations in the Helena Region*

Sampling at Gates of the Mountains Inc. required conforming to a pre-determined tour boat schedule. This site were treated as one cluster, because access and travel time prevented sampling at additional sites on the same day.

#### *Special Considerations in the Great Falls Region*

The Carter Ferry and Ft. Benton Boat Launch sites were treated as one cluster because their distance from the other regional sites prevented sampling from an additional site on the same day. Also, these sites were sampled during non-consecutive time periods because travel time between them was significant.

### **2.3.2 Questionnaire**

Copies of the questionnaires can be found in Appendix F. The only difference between the two is that question 5. *Would you visit this site again if there were an event specific to the Lewis and Clark Journey Commemoration?* was omitted from the Hebgen/Ennis questionnaire. The content of the questionnaires included the following: the amount of previous experience the respondent has in the area, participation in various recreational activities, expenditures made in the area, perceptions (ratings) of public access, facilities and management actions at the site, perceptions of scenery, views and other features, perceptions of the setting attributes of the area, encounter levels and conflicts with other user groups, an overall evaluation of the visit, and socio-demographic variables such as age, sex, number of children (if present), education, occupation and income. No pre-test of the questionnaire was performed because the same one was used in 1994-95.

Questionnaires were coded and included site and date information to indicate where the data was collected from. This allowed for the comparison of visitor characteristics at the site, ROS class, and region level.

#### **2.3.2a On-site Questionnaire**

To meet the study objectives, interviews of visitors at each study site were made in accordance to the predetermined sampling plan. Survey personnel approached visitor groups present or arriving at the survey site during the three hour sample period. Visitors were invited to participate in the study. One visitor from each group was randomly selected to receive the on-site questionnaire. The questionnaire required about 15 minutes to complete. The surveyor then contacted the next person to participate in the study. The completed questionnaires were collected once completed.

#### **2.3.2b Mail-back Questionnaires**

Mail-back questionnaires were identical to the on-site survey instrument and were administered to those visitors where completing an on-site interview would prove difficult. Survey personnel were instructed to minimize the number of mail-back questionnaires administered and to restrict their use to certain situations. These were: weather conditions that did not permit visitors to fill out questionnaires on-site (e.g., rainy weather or cold conditions), sites where visitors were engaged in a recreation activity that would be interrupted to complete a questionnaire (e.g., wade anglers), situations where visitors were just entering the site and had not yet experienced the conditions at the site required to complete the questionnaire (e.g., campers entering a campsite or visitors launching a boat), put-in or departure sites, or where the potential respondent refuses to fill out a questionnaire on-site but agrees to complete a mail-back questionnaire.

Mail-back questionnaire packets contained the survey instrument, a postage paid pre-addressed envelope, and a letter describing the study and the importance of their response to

the success of the study, instructions on mailing the completed questionnaire and the name and phone number of a contact person if they require additional information. Front-end data were collected and included group size and type, and the respondents mailing address. Replacement questionnaires were sent to non-respondents two weeks after the initial contact.

## **2.4 Reporting Format**

The results presented in section 2.7 summarize the findings of the visitor survey. Data tables are in Appendix C (ROS region) and Appendix D (ROS and region). Results by site are in a separate supporting document. The same general numbering scheme is used within each appendix to facilitate comparability between tables by ROS region, tables by ROS and region and tables by site. Also, this numbering scheme matches the one used in 1994-95 to facilitate comparisons between the two studies. Where appropriate, some tables list only data at the site level and others for only for the ROS and region level.

The results shown in Appendix C are listed by ROS region. The ROS region tables aggregate similar ROS sites for each region. The results in these tables illustrate the differences in ROS classes between the three geographic regions. Appendix D results are listed by ROS class and region. The use of these tables allows for comparisons among planning regions and ROS classes. From these tables, the broad characteristics of both users and recreation use can illustrate the similarities and differences between the recreation settings and the geographic regions contained within the planning corridor.

Separate reports list the study results by individual recreation site and verbatim visitor comments by recreation site. This level of detail may not be necessary for a comprehensive planning approach. For site level management, this information is useful for comparisons, the identification of facility needs, and visitor satisfaction with management practices, existing facilities and site characteristics.

## **2.5 Survey Limitations**

All survey designs have limitations that define the interpretation of the data. The 1999 Missouri Madison Recreation Study has the same limitations as the 1994-95 study:

1. The data shown reflect the responses of only those visitors included in the study. The sample may not reflect the responses of other users not included in the study.
2. The data represent only those people who visited the recreation sites during the period from May 1999 through September 1999.
3. Because of survey limitations, the same questions were asked at all sites even though they may not have been appropriate at each site. In some instances, this procedure may have produced responses that were inappropriate for sites that do not exhibit the characteristics necessary to answer certain questions.

## **2.6 List of definitions**

The terms used in this study are defined below. They should be used when interpreting the results.

**Direct Impacts** - are the immediate impacts of expenditures. They include the expenditures, labor income, and employment associated with a purchase by a visitor to the corridor.

**Employment** - is the number of full and part time jobs that result from visitor expenditures.

**Group** - A set of individuals who share activities, expenses, and experiences together. They may be a family unit or several friends or may be an individual.

**Indirect Impacts** - result when the businesses who serve visitors buy goods and services elsewhere in the region in order to provide for the goods and services consumed by corridor visitors.

**Induced Impacts** - result from the spending of employee earnings of all affected firms.

**Industry Output** - is a measure of the value of goods and services produced within a region and does not include those items that must be imported.

**LAC** - The Limits of Acceptable Change. LAC is a planning process for establishing acceptable and appropriate conditions for managing resources.

**Labor Income** - is the income for those employed as a result of visitor spending in the corridor.

**Mailback Questionnaire** - Survey instrument to collect visitor characteristics given to visitors to fill in and then mail back. In this study, these questionnaires included a postage paid, pre-addressed envelope and a letter explaining the study and directions for returning.

**Mean** - The average of a set of values. The measure of central tendency toward the middle of a data set.

**On-site Questionnaire** - Survey instrument to collect visitor characteristics. These questionnaires were handed out and collected at the recreation site during each survey period.

**Population** - The collection of all individuals that are of interest and whose properties are to be analyzed.

**Random Sample** - A subset of the population whose individuals each have the same probability to be included in the study.

**Response Rate** - The proportion of mailback questionnaires returned by visitor groups.

**ROS** - Recreation Opportunity Spectrum. The ROS is a planning framework that defines geographic regions based on similar recreation management, experience and setting characteristics. These regions are characterized along a continuum from primitive to urban. Within this study there are 7 ROS classes; Primitive, Semi-primitive non-motorized, Semi-primitive motorized, Roaded natural, Roaded modified, Rural, and Urban. In this study, sites were in the 4th through 7th classes (Semi-primitive motorized to Urban).

**ROS region** - This aggregation of sites is used in many of the tables in this report. It is a breakdown of each region into the ROS classes. All surveys collected at sites within a common ROS in a region are combined to report the results.

**Sample** - A subset of the population.



## 2.7 Results - Visitor Survey

The following section describes the results of the 1999 Missouri Madison Recreation Survey. The tables are contained in Appendix C (results by ROS region) and Appendix D (results by ROS class and region)<sup>2</sup>. The ROS region breakdowns can be characterized by the types of sites that comprise each area. Appendix B contains a listing of the sites that belong in each ROS region. The following table describes the general characteristics of each ROS and regional grouping of sites.

**Table 1. Description of ROS Region site groupings.**

ROS Region	Description
<b>Hebgen/Ennis</b>	
Semi-Primitive Motorized	The Fall Creek and Powerhouse sites in the canyon above Madison dam.
Roaded Natural	Upper Madison river sites combined with several Hebgen reservoir sites.
Roaded Modified	Upper Madison river sites combined with several Ennis reservoir sites.
Rural	Hebgen and Ennis reservoir sites with lower Madison river sites.
<b>Helena</b>	
Roaded Natural	Upper Hauser sites, Gates of the Mountains Inc. and Holter Dam CG.
Roaded Modified	Lower Holter sites.
Rural	Hauser Dam area sites.
<b>Great Falls</b>	
Roaded Natural	Lower Missouri River sites.
Roaded Modified	Missouri River sites below Holter and including Ryan Island.
Urban	Sites in Great Falls and Fort Benton.

### 2.7.1 Sample Sizes

Approximately 80 sites were sampled as part of the 1999 Missouri Madison Recreation Survey and resulted in 2,795 returned questionnaires. Tables B1 through B11 (Appendix B) show the number of questionnaires by site. Sites were aggregated into ROS classifications and regions for input into the planning process. Table B12 lists sample sizes for each ROS class for the whole corridor and Table B13 sums the sample sizes for each of the three geographic regions in the planning corridor.

About 28% of the questionnaires were mailback questionnaires that visitors filled in and returned by mail. The overall response rate for these questionnaires was approximately 60%.

<sup>2</sup> Site specific tables are contained in a supplement to this report.

## 2.7.2 Visitor Characteristics

Tables C1s and D1s display visitor characteristics by ROS and region for the summer season.

### *Age*

The mean age varied across both the ROS and geographic spectrum from 38 to 49. Visitors to the Hebgen/Ennis and Great Falls regions were somewhat younger than the Helena area visitors. The roaded natural sites in the Great Falls area attracted the youngest visitors with an average age of 38 while the roaded natural sites in Helena were more likely to be used by older visitors.

### *Gender*

Gender varied across the ROS. Female participation tended to increase at sites that were at the more developed end of the ROS. Overall, female participation was about the same in each of the three regions (40-45%).

### *Education*

The educational attainment of respondents was the highest in the Hebgen/Ennis region with over 75% of visitors with some college or higher. It was lowest in the Helena region. In the Great Falls region, almost 26% of respondents had completed some post college graduate education.

### *Occupation*

The occupation of respondents was classified according to the Bureau of Census definitions. At most areas, the most often listed occupations were professional and retired. Great Falls had the highest proportion of professionals and members of the armed services, while Helena had the greatest proportion of retirees.

### *Income*

The distribution of household income varies considerably across ROS and region. Visitors to the Hebgen/Ennis sites had the highest incomes with 25% to 50% having incomes over \$70,000. Visitors to the Helena area sites had some of the lowest household income levels corridor-wide. The more primitive ROS classes tended to have visitors with the highest incomes.

### *Residence*

Table D2s lists the state of residence for visitors by ROS and region. The sites in the Helena and Great Falls regions have the highest proportion of Montana residents. Non-resident visitors to the corridor during this period were mainly from Washington, California, Idaho, and Utah.

Table C3 lists the Montana county of residence for Montanans. In the summer season, the Montana resident proportion of use around the Hebgen/Ennis region is mainly from the adjoining counties - Gallatin, Lewis and Clark, Silver Bow and Madison. The Montana resident

use in the Helena area is mainly from Cascade and Lewis and Clark counties. In the Great Falls area, the Montana residents are predominantly from the local area.

### ***Group Characteristics***

Table D4s shows the characteristics of groups by ROS and region. The majority of visitors were traveling with family or friends and in groups of about 3 to 6 people. In Great Falls, nearly 18% of respondents were alone. Average group size was largest in the rural modified sites across the corridor.

The proportion of groups in which someone had a disability is shown in Tables C6s and D6s. The Helena region was more likely to attract recreationists with disabilities than the Hebgen-Ennis and Great Falls regions. The most common disabilities were difficulty walking, back and heart conditions, arthritis and wheelchair confinement.

### **2.7.3 Trip Characteristics**

Table D5s shows various trip characteristics by ROS and region. Visitors to the Great Falls region were more likely to be visiting the site for the first time while the Helena area visitors were far more familiar with the sites. Roaded natural and urban sites had the highest proportions of first time visitors.

More than half of the visitors to each ROS/region area had visited the site at least ten times before except for visitors to the roaded natural areas in the Great Falls region. Visitors have also been recreating at most areas for many years. Close to 50% of visitors have been returning to sites for over ten years. The exceptions to this are the rural Helena areas and the Great Falls areas.

Day use was highest in the Great Falls area. The majority of day-users spent from two to six hours at the site, except for Great Falls area visitors, who only stayed at the sites for one to two hours.

Overnight use was highest in the Helena roaded modified and Hebgen-Ennis rural sites and lowest in the Great Falls region. Overnight lengths of stay tended to be higher in the Hebgen/Ennis Region and shortest in the Great Falls region.

Visitors were asked what their reasons were for choosing the recreation site they were visiting (Tables C7s and D7s). The majority of users felt that the scenic beauty, good fishing, and previous visits were all important reasons. Good fishing was the highest in the Helena areas and lower in the Great Falls region. Having a site close to home was one of the most often cited reasons in Great Falls. Scenic beauty was universally mentioned as an important reason. Good facilities were most often mentioned in the Helena area. When asked which reason was primary in their choice of sites, scenic beauty was still ranked highest in importance with good fishing the second most often mentioned, varying by ROS class. For example, the ease of getting to the site was quite important in the rural ROS class in every region.

Crowding at other sites can affect site choice. Tables C7.1 and D7.1 list the sites that visitors mentioned as being too crowded that resulted in their choosing another site to visit. Crowding at other sites was mentioned as a reason for choosing a site more often in the Hebgen/Ennis region than elsewhere. Here, the area most often mentioned as being crowded was Yellowstone National Park followed next by several of the campgrounds around Hebgen Lake. In the Helena region, Black Sandy was the most frequently mentioned site along with Holter and Hauser lakes in general. In Great Falls, Broadwater Bay Park was the most frequently mentioned crowded site.

#### **2.7.4 Recreation Activity Participation**

Tables C8 and D8 show the percentage of visitors who participated in various activities for each ROS and region. The most common summer uses were sightseeing, wildlife watching, fishing, camping, and walking or hiking. Wildlife viewing was mentioned most often in the Helena and the Hebgen/Ennis regions. Auto RV camping was highest in the roaded modified Helena sites and the roaded natural sites in Hebgen/Ennis. Fishing from boats and shore or wade angling was most often cited in the Helena region. Motorized activities such as powerboating, water-skiing and jetskiing mainly occurred in the Helena area. In Great Falls, the most popular activities were sightseeing and walking.

#### **2.7.5 Measures of Satisfaction**

##### ***Trip Satisfaction***

Respondents were asked to rate their satisfaction with their recreation trip. Three general statements of trip satisfaction were presented to each respondent. They were asked to rate their trip in terms of the best ever, the best to that area, or enjoyable enough to take again. Evaluating their trip satisfaction for each of these statements gives a better understanding of their experience relative to their expectations of satisfaction and the satisfaction they derived from previous recreation experiences. The specific statements were:

- 1. This trip was better than any other recreation experience I remember.*
- 2. This trip was better than any other trip to this area I remember.*
- 3. This trip was so good I would like to take it again.*

Responses were coded from strongly disagree (-2), neutral (0), to strongly agree (2). An overall trip satisfaction scale was derived for each respondent by averaging their responses to the three satisfaction questions. Tables C9 and D9 show the mean response to each question and the scaled score by ROS and region for the summer season.

Levels of trip satisfaction generally were the highest at the less developed end of the ROS and lower as the level of site development increased, except in the Great Falls region where satisfaction improved slightly as development increased. Satisfaction levels were higher in the Hebgen/Ennis region, lower in the Helena area and lowest in Great Falls, although the lowest

overall satisfaction was in the Helena rural sites. This was probably attributed to the types of visitors and recreation opportunities available in each of the three regions. Hebgen/Ennis visitors stayed longer and traveled further (e.g., greater non-resident use) and Great Falls visitors were primarily day users.

Responses to each of the three questions provides some insight not only into the levels of trip satisfaction but how important the recreation visit was relative to other recreation experiences. In the Hebgen/Ennis region, respondents were neutral or slightly agreed with the statement *This trip was better than any I can remember*. In the other regions this statement received negative scores. The highest average scoring of this question by ROS region was the semi-primitive sites in the Hebgen/Ennis region. The lowest score on this item was in the Helena rural areas.

When comparing their trip relative to all other trips to that area, visitors generally rated their satisfaction as slightly positive. In other words, on average, visitors somewhat agreed that their visit was better than any other trip to the area. Hebgen/Ennis visitors were most likely to agree with this statement and Helena visitors were least likely. Visitors to the rural sites in the Helena region scored this item the lowest of all ROS regions.

Visitors agreed with the statement that the recreation experience was so good they would take it again, although the scores in the Hebgen-Ennis area were much higher than either the Helena or Great Falls areas. Visitors rated this question highest in the Hebgen/Ennis semi-primitive, rural, and roaded modified sites and in the Great Falls roaded modified sites. The rating of this question was lowest in the Helena rural sites.

Average scaled satisfaction scores were positive in all ROS regions except for the rural Helena sites. Highest scaled scores were in the Hebgen/Ennis region and lowest in the Helena area. Generally, scores were higher at the less developed end of the ROS and decreased as the sites became more developed.

### ***Visitor Perceptions of Existing Site Characteristics***

Visitors were asked to indicate the attributes they felt were most important at a site and then to rate their satisfaction with those attributes at the interview site. Tables C10 and D10 show the site conditions that visitors felt were most important and Tables C11 and D11 show the average ratings of those conditions by ROS and region.

When assessing visitor satisfaction with site conditions, it is helpful to understand the level of importance visitors place on each measure of a site's attributes. Attributes that users feel are very important at a site as opposed to those that users deem less important should receive greater management attention. If, for example, visitors rate campsite and picnic area conditions as very important, then management should show a greater concern if satisfaction levels with these conditions are relatively low. On the other hand, if visitors feel that these conditions as not

very important, then managers can focus more on the attributes and conditions that users feel are more important.

To present the data contained in Tables C10s-D10s and C11s-D11s, the percent of users who find the site attribute as important and the average level of satisfaction have been combined into one graph for each site attribute. Figures 5 through 24 further illustrate the relative differences between ROS and region in terms of the importance and satisfaction users place on the site attributes measured. Satisfaction scores are mostly positive but it should be noted that **the satisfaction scale goes from -2 to +2.**

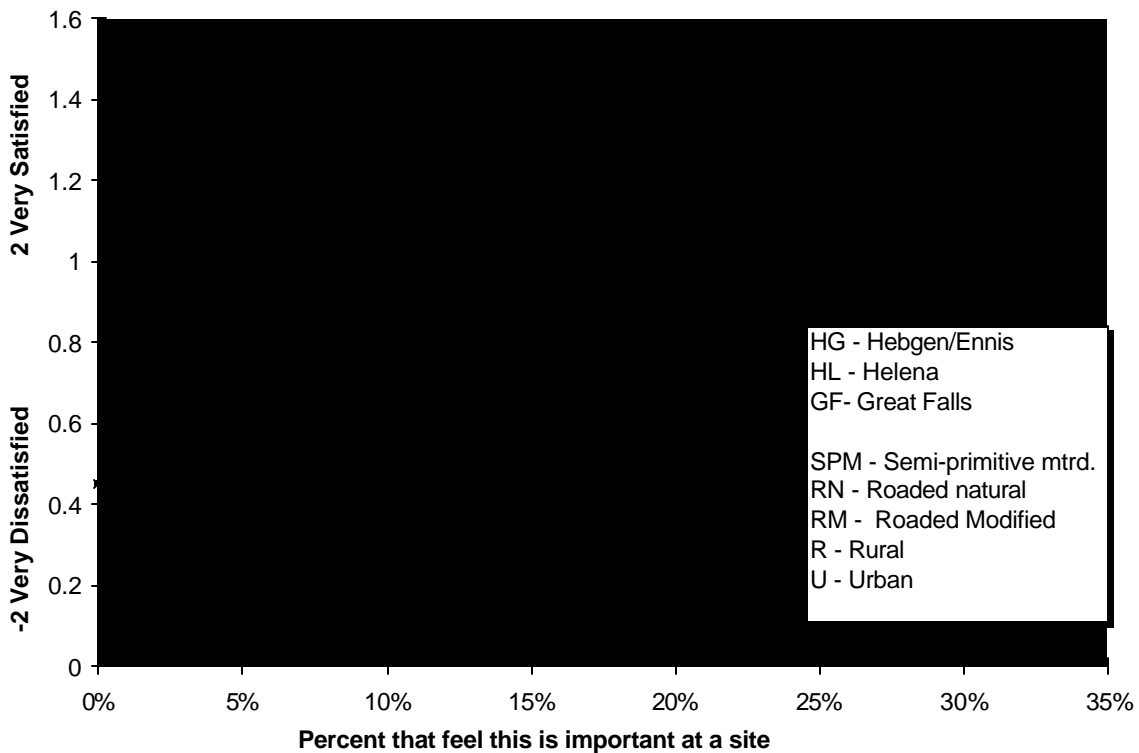
To interpret the information in the graphs, it is best to first note the relative proportion of visitors who find the condition important - do many users find this attribute important? Then note the average satisfaction levels - are they low or high? Next, is the pattern spread out or tightly compacted? This is a measure of the variability. Then, is there a positive relationship between importance and satisfaction - as importance increases, does satisfaction also increase? Finally, what is the significance of the outliers, those points that do not generally conform to the other points?

From a management perspective, the areas with high importance proportions and low satisfaction levels are where attention needs to be focused. Here visitors feel that a site condition is very important to them but are unsatisfied with that condition at the site. On the other hand, conditions with high satisfaction and low importance may need less attention in the future as users do not find that condition important and are satisfied with the present condition.

**Campsite and picnic area conditions**

As the level of site development increases along the ROS, the number of visitors who rated the importance of campsite and picnic area conditions as important at a recreation site increases too. Generally, at least 15-20% of visitors felt that this was an important condition at a site. This was strongest in the Helena region and somewhat less in the other two areas. The reported degree of satisfaction with these conditions was highest in the Great Falls and Hebgen/Ennis areas. Visitors rated their satisfaction with the campsite and picnic area conditions highest at the sites within the Hebgen/Ennis roaded modified areas. The lowest level of satisfaction with these conditions was in the Great Falls roaded natural sites, although less than 10% placed a great deal of importance on these conditions at these sites. There are two sites in this ROS region - Morony Dam and Carter Ferry that have no campground facilities.

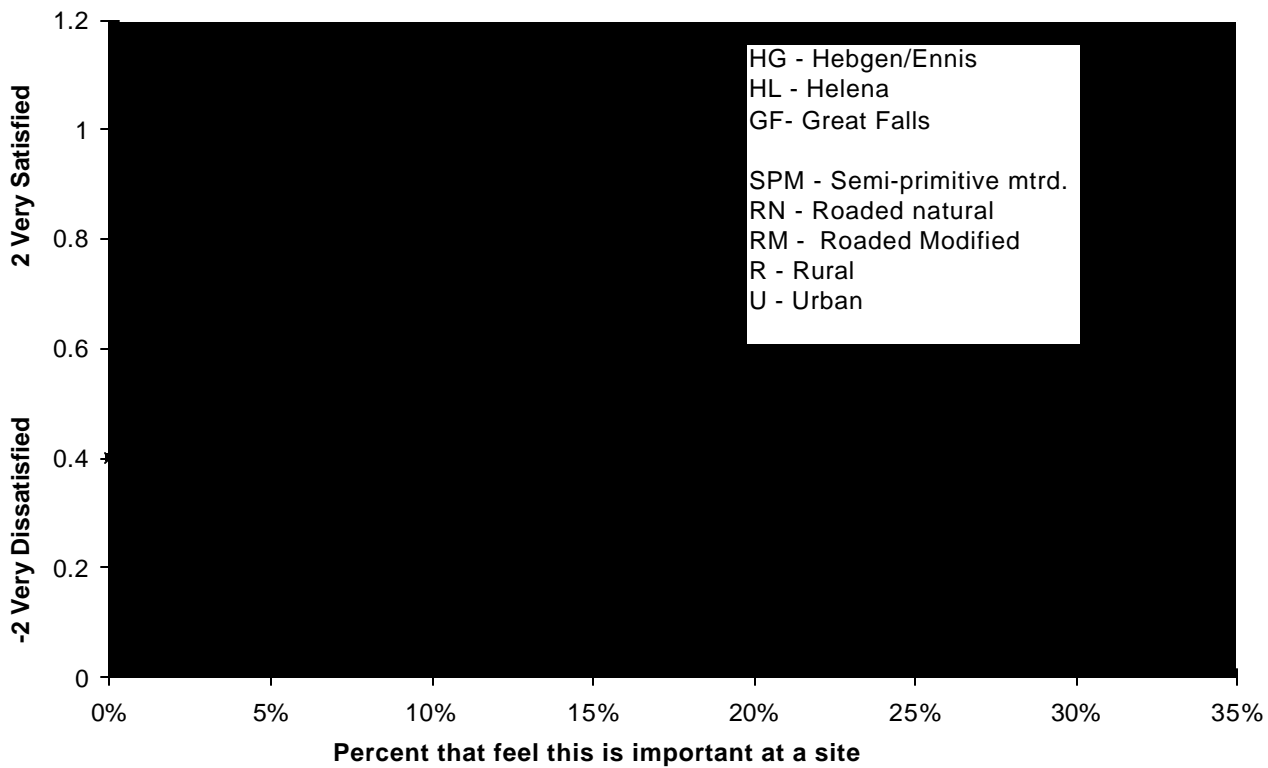
**Figure 5. Importance of and satisfaction with campsite and picnic area conditions.**



**Quality of Lewis and Clark interpretive and educational Information**

Generally, visitors did not feel that Lewis and Clark information was an important feature at a recreation site. This attribute was most often cited as important at Great Falls sites. The small portion of visitors that felt concerned with Lewis and Clark information is analyzed in detail in a separate supporting document titled *Analysis of Lewis and Clark Enthusiasts in the Missouri Madison Corridor* (Technical Completion Report 2000-1c).

**Figure 6. Importance of and satisfaction with the quality of Lewis and Clark interpretive and educational information.**

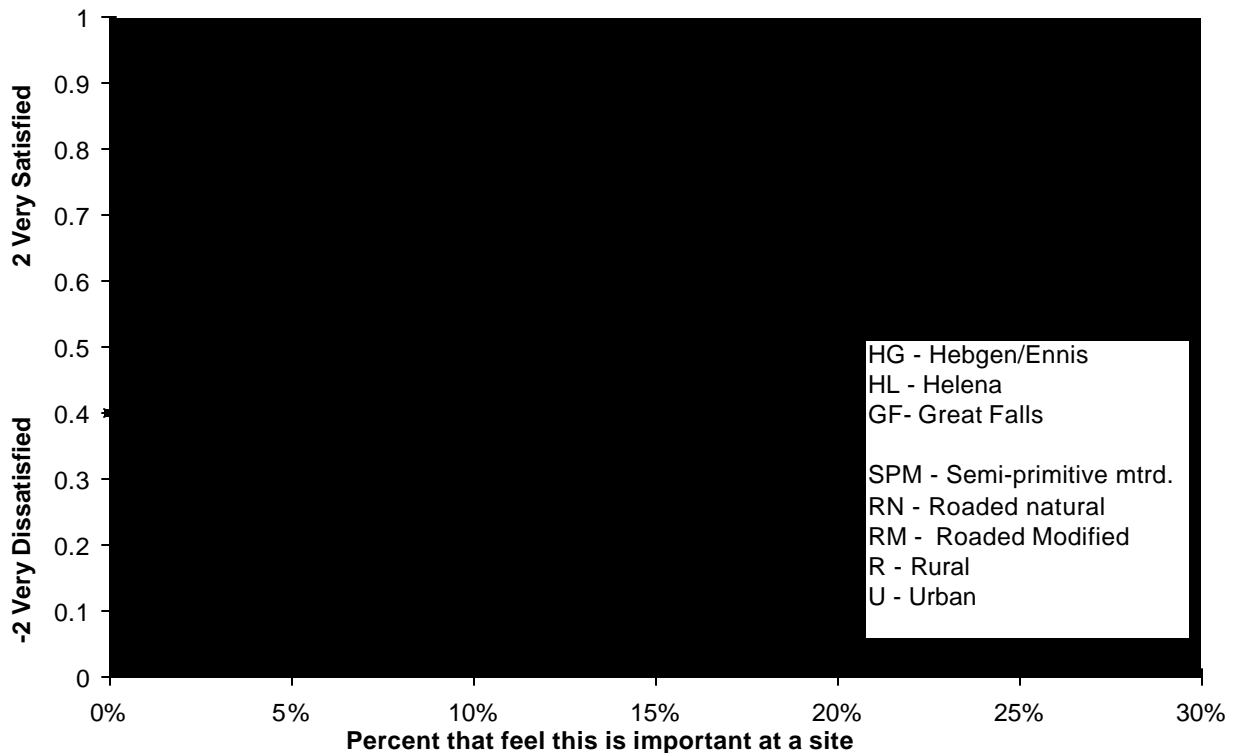




**Quality of interpretive and educational Information**

Visitors did not find the quality of the interpretive or educational information as important as some other site conditions. Although in the regions where this was more important, visitors tended to be most satisfied. Overall, visitors to the Helena and Great Falls region placed the greatest importance on this attribute and also had higher satisfaction levels. The exception to this was the Great Falls roaded natural visitors. The Hebgen/Ennis areas generally rated lower in importance and satisfaction, except for the roaded natural areas which rated the importance of interpretive and educational information highest overall.

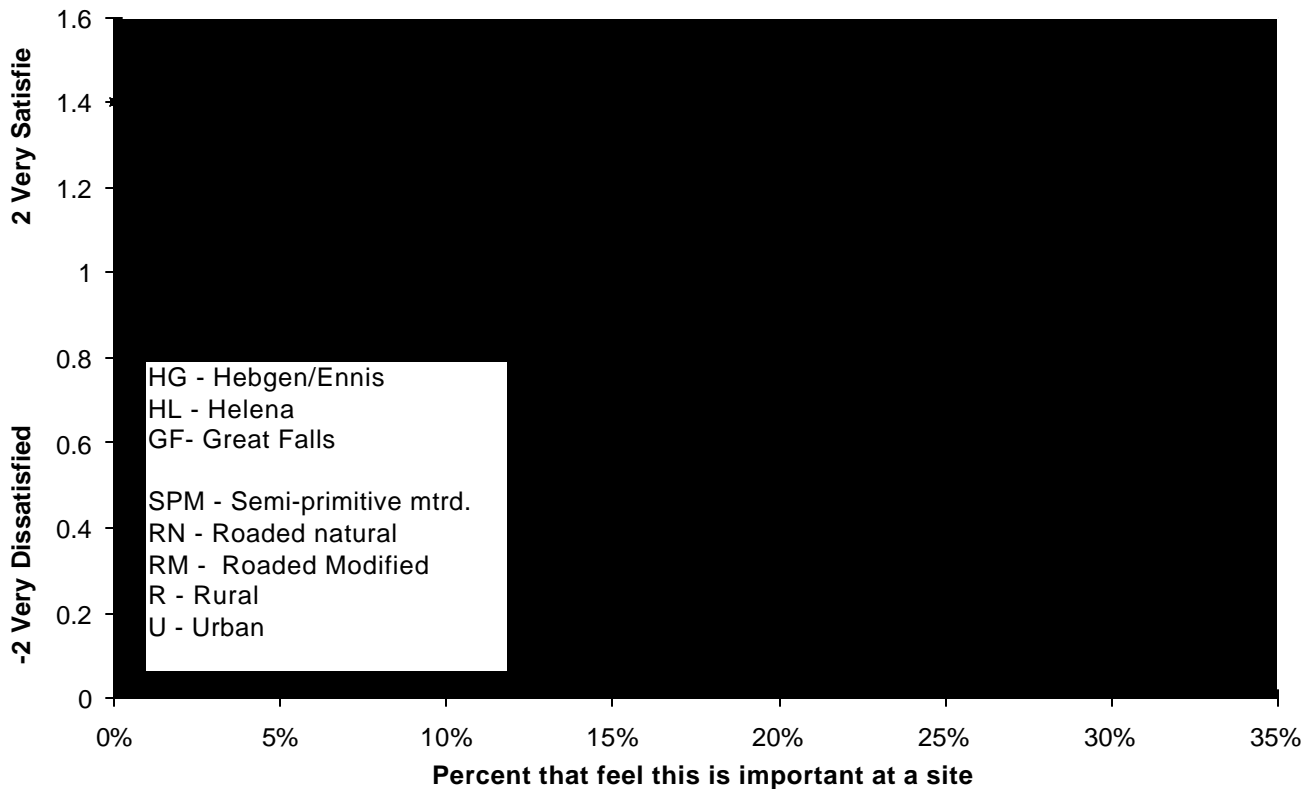
**Figure 7. Importance of and satisfaction with the quality of interpretive and educational information.**



**Maintenance of facilities**

The upkeep and maintenance of facilities was important to most users with around 20% or more of visitors noting its importance at a recreation site. Helena area visitors were most likely to find this important at a site. Most visitors were satisfied with the maintenance of facilities with all the average satisfaction ratings well above zero. The Great Falls roaded natural sites had the lowest satisfaction levels while the Hebgen/Ennis semi-primitive motorized sites the highest. Overall most users were satisfied with the maintenance at the recreation sites they visited.

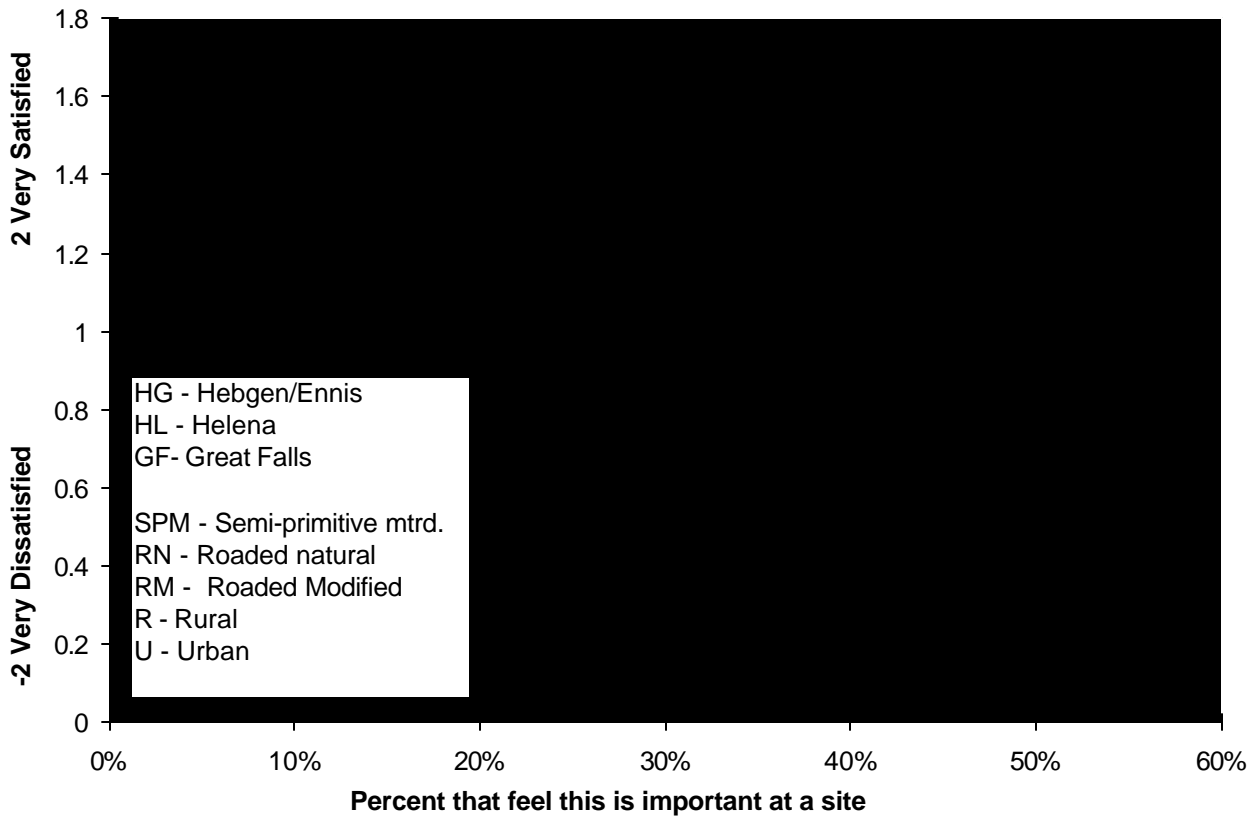
**Figure 8. Importance of and satisfaction with the maintenance of facilities.**



**Cleanliness of area**

Nearly half of visitors at all areas felt that the cleanliness of a recreation site was important. Visitors to the sites in the more developed end of the ROS were more likely to find this condition important while the visitors to the semi-primitive sites felt this to be less important. Satisfaction levels were very high with the cleanliness of the sites except for the visitors to the Helena rural areas.

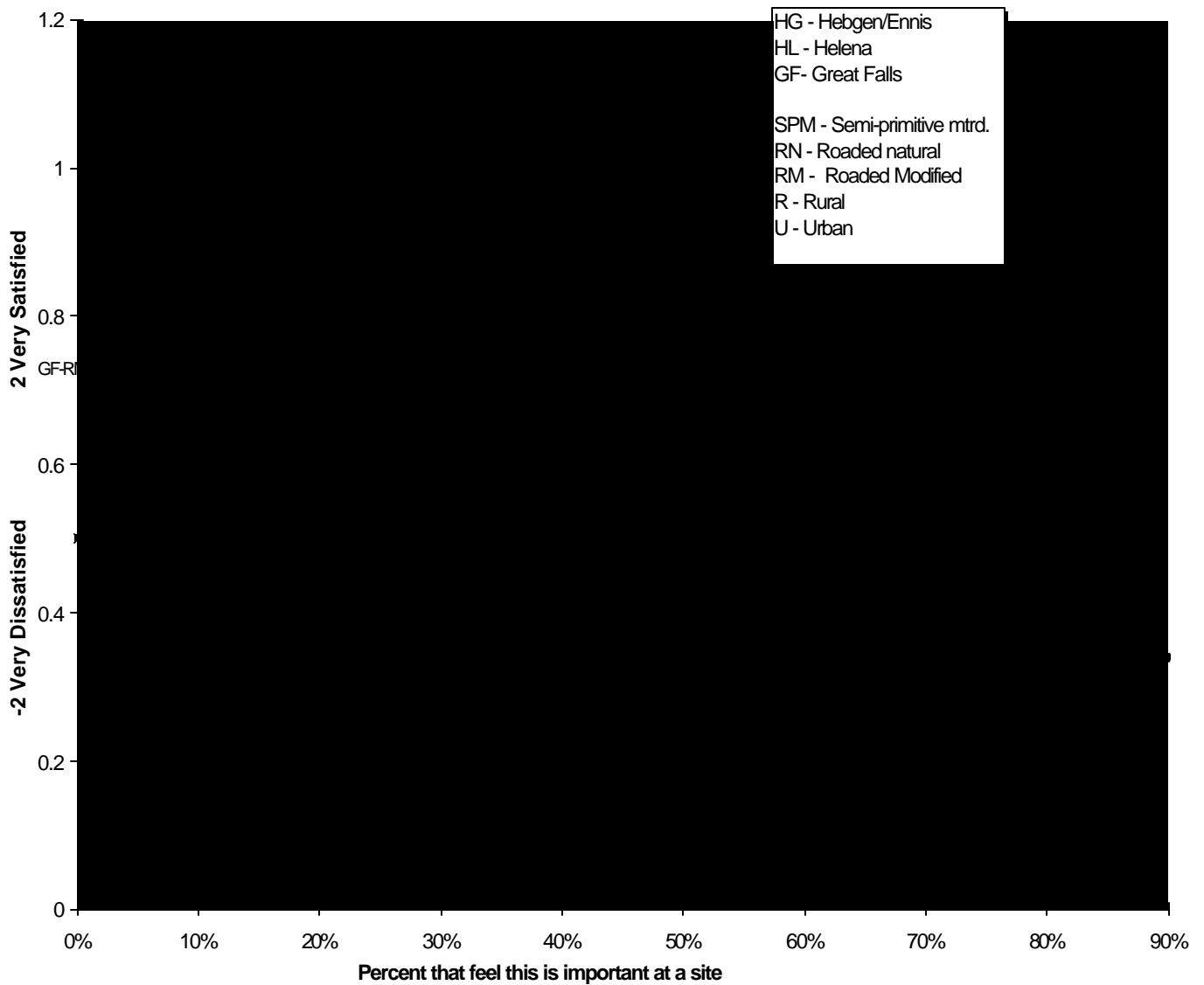
**Figure 9. Importance of and satisfaction with the cleanliness of the area.**



### Historical Information

Visitors were less concerned about the importance of historical information at a recreation site than some other site conditions. A greater proportion of visitors to the Helena sites felt this was important, though that proportion was still less than 10%. Satisfaction was highest in Great Falls urban areas, possibly due to the large number of surveys returned from the Lewis and Clark Interpretive Center.

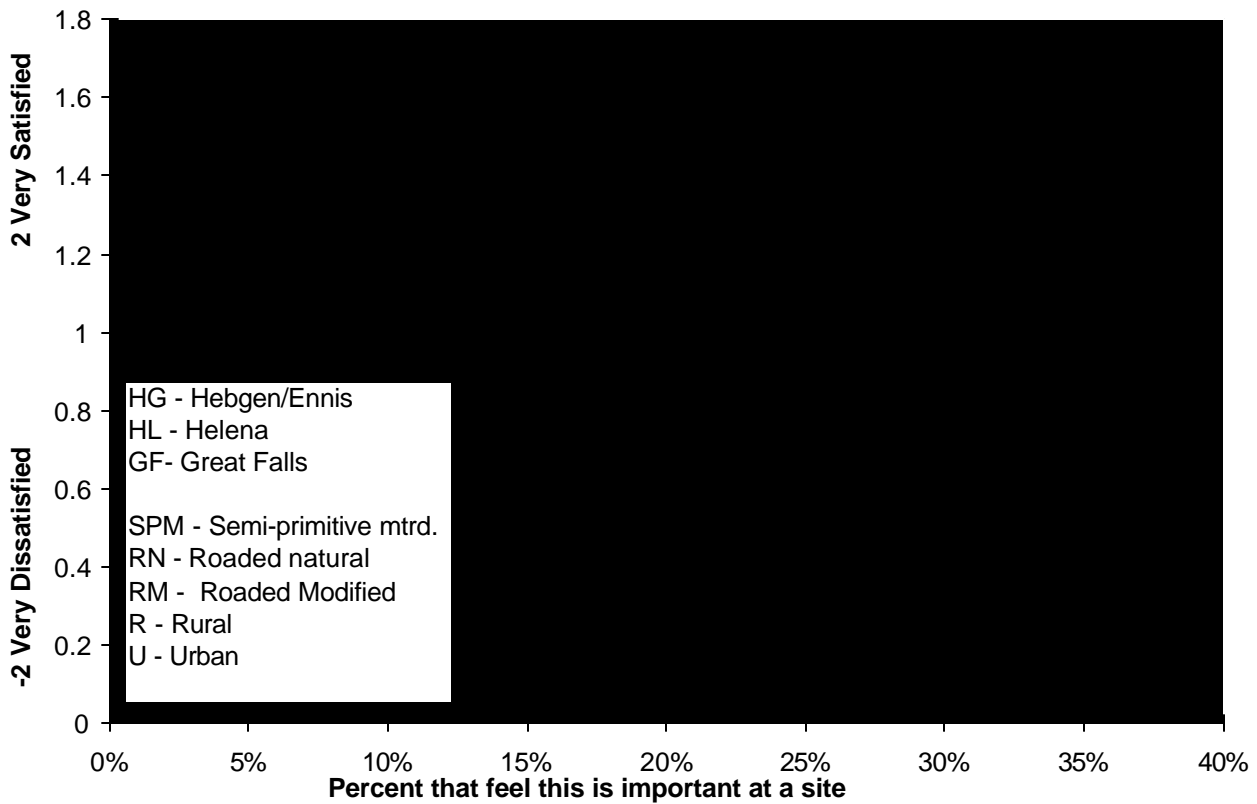
**Figure 10. Importance of and satisfaction with the historical information.**



**Privacy of the area**

The proportion of visitors who felt the privacy of a recreation site varied 15-25% by ROS and region. Satisfaction levels differed, with the Helena rural and Helena roaded modified visitors the least satisfied. These visitors may represent an important group since they felt that privacy was relatively important.

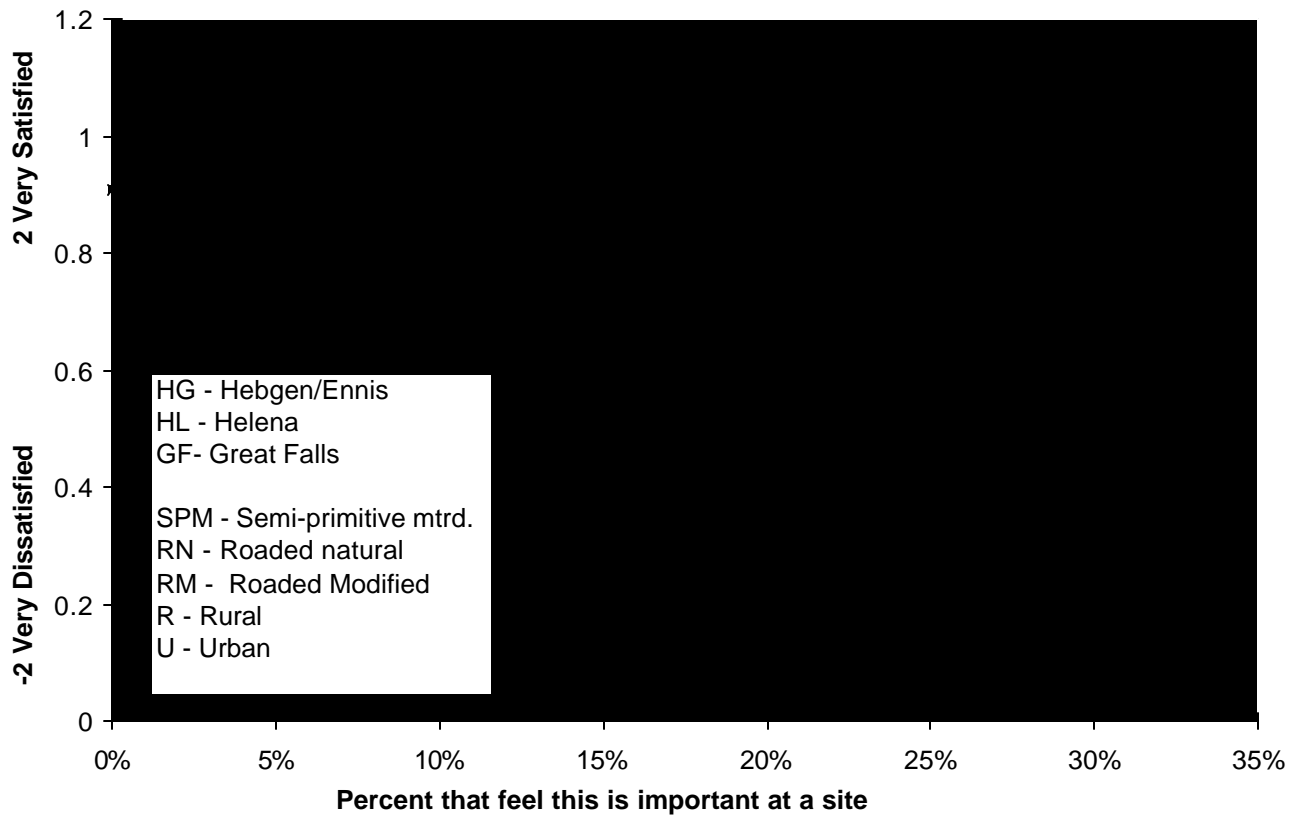
**Figure 11. Importance of and satisfaction with the privacy of the area.**



**Behavior of other people**

10-20% of visitors felt that the behavior of other people was an important condition at a recreation site. This was most felt in the Helena area sites where around 20% of visitors mentioned other visitors behavior as important. Visitors' reported satisfaction with others' behavior was relatively high and did not vary much amongst areas.

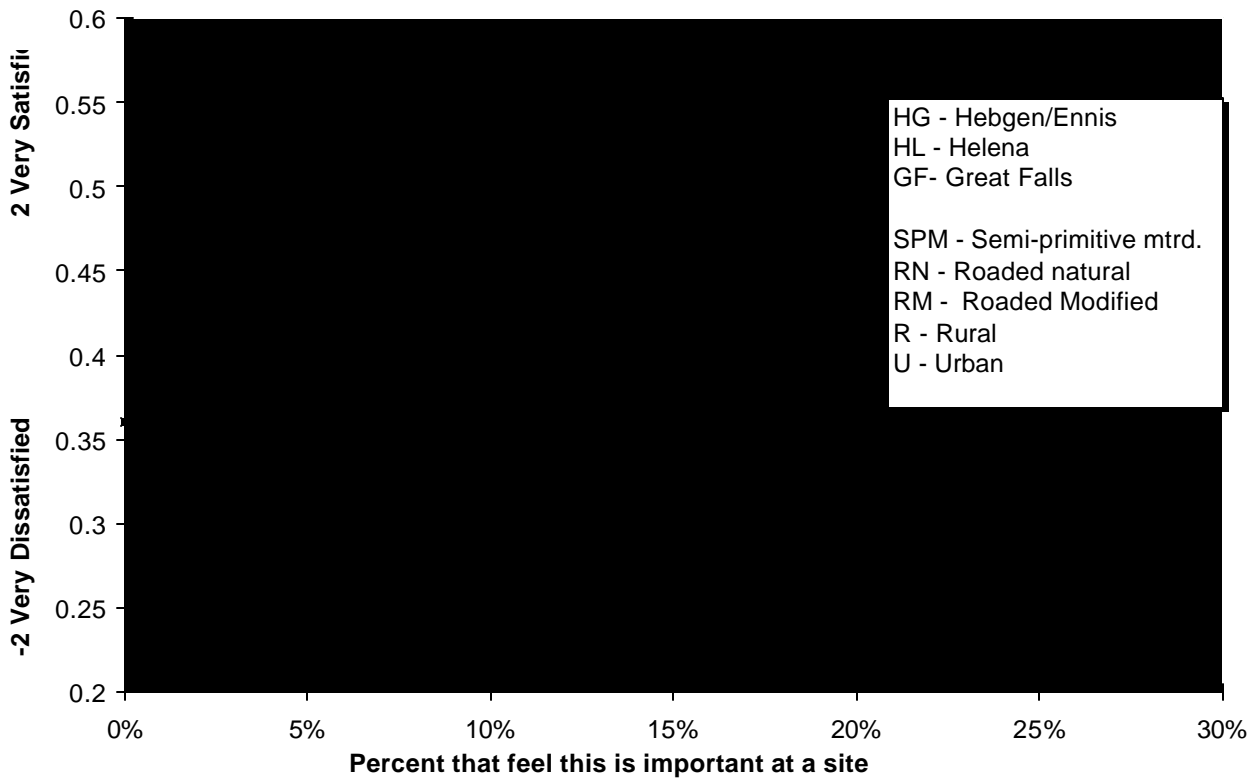
**Figure 12. Importance of and satisfaction with the behavior of other people.**



**Little conflict with other users**

Only about 5% to 10% of visitors felt that little conflict with other visitors was important at a recreation site. Visitors were least satisfied with conflicts in the Helena rural and roaded modified areas and most satisfied in the Great Falls roaded modified sites.

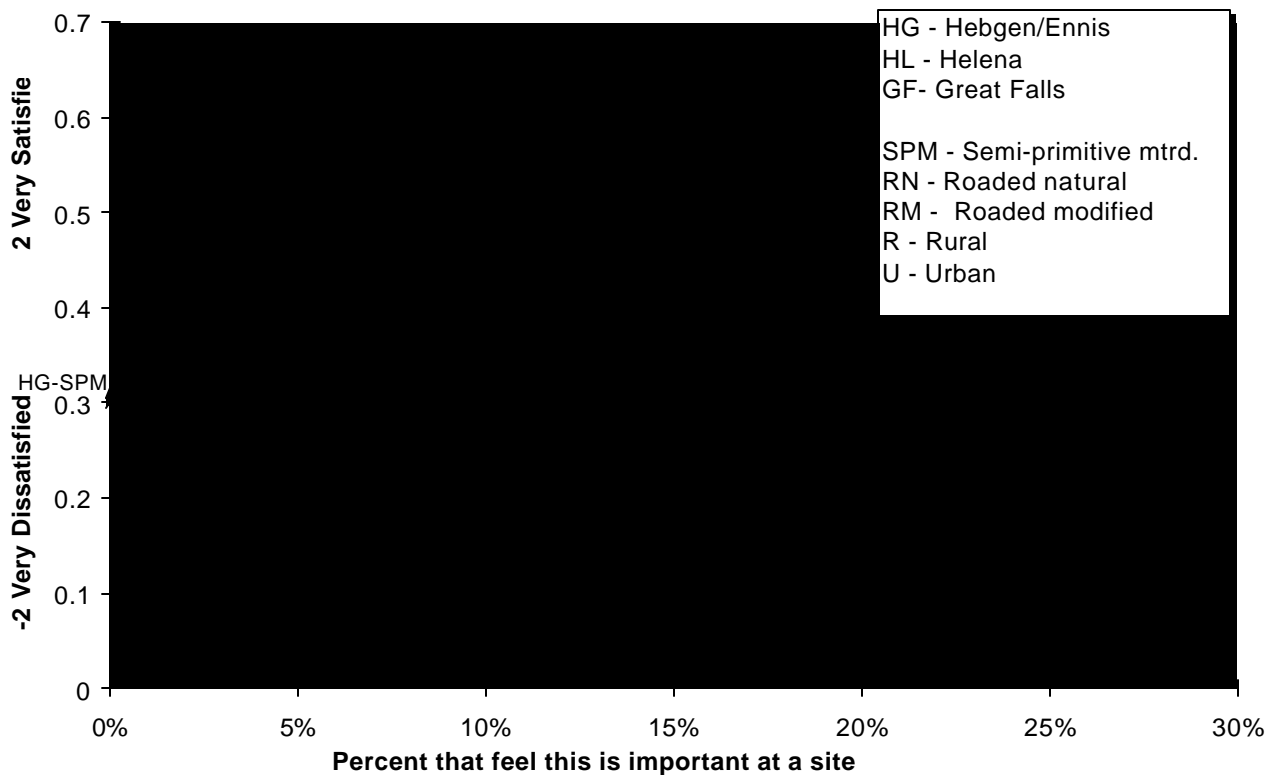
**Figure 13. Importance of and satisfaction with conflict with other users.**



**Number of campsites within site or sound**

Generally, less than 10% of visitors felt that the number of campsites within site or sound was important. Satisfaction with the number of campsites within site or sound was relatively low across ROS regions. The Helena rural sites had the lowest satisfaction levels. Sites in this region are the Causeway, Black Sandy and Hauser Dam. Visitors to the Hebgen-Ennis sites were more satisfied than other visitors with the number of campsites within site or sound (camping areas around Hebgen Reservoir and the lower Madison River).

**Figure 14. Importance of and satisfaction with the number of campsites within site or sound.**

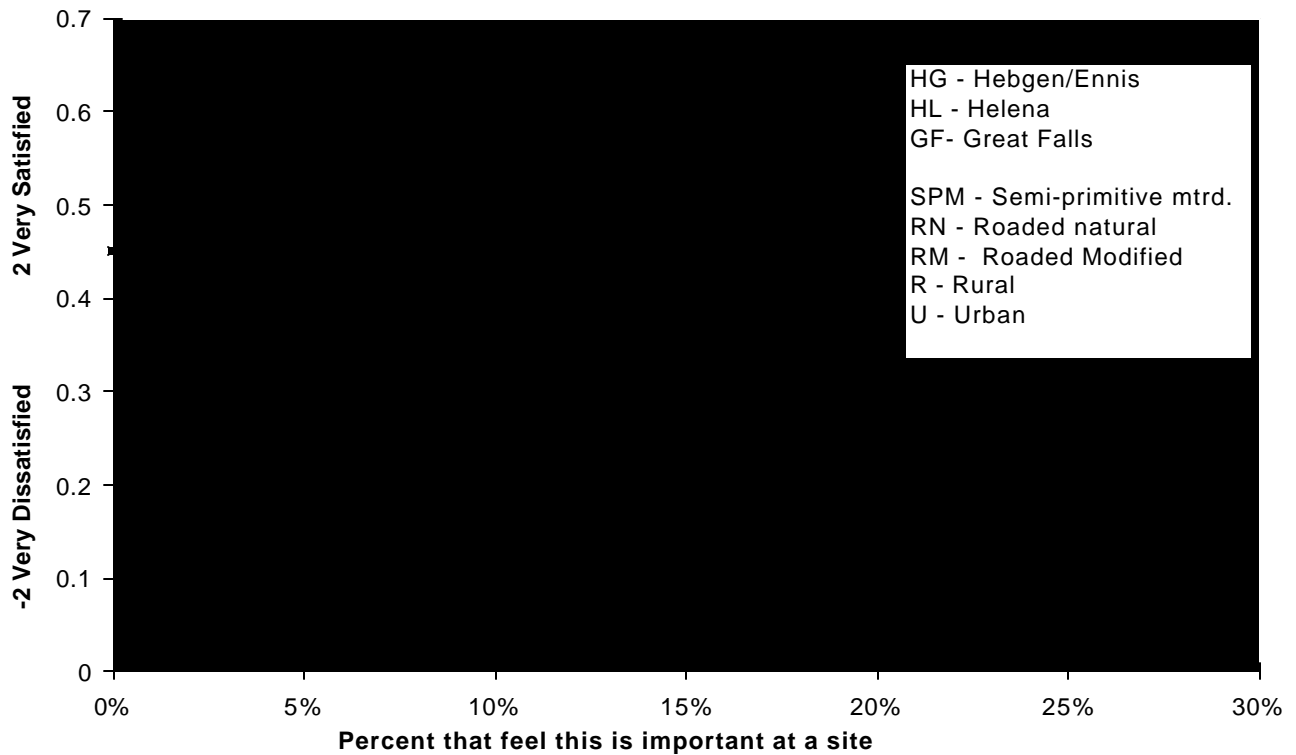




**Seeing and hearing few others**

Generally, less than 15% of visitors felt that seeing and hearing few others was important at a recreation site. A slightly greater proportion of Hebgen/Ennis area visitors felt this was important than visitors to other areas. Visitors to the Great Falls urban and Helena roaded natural sites were least likely to feel this was important.

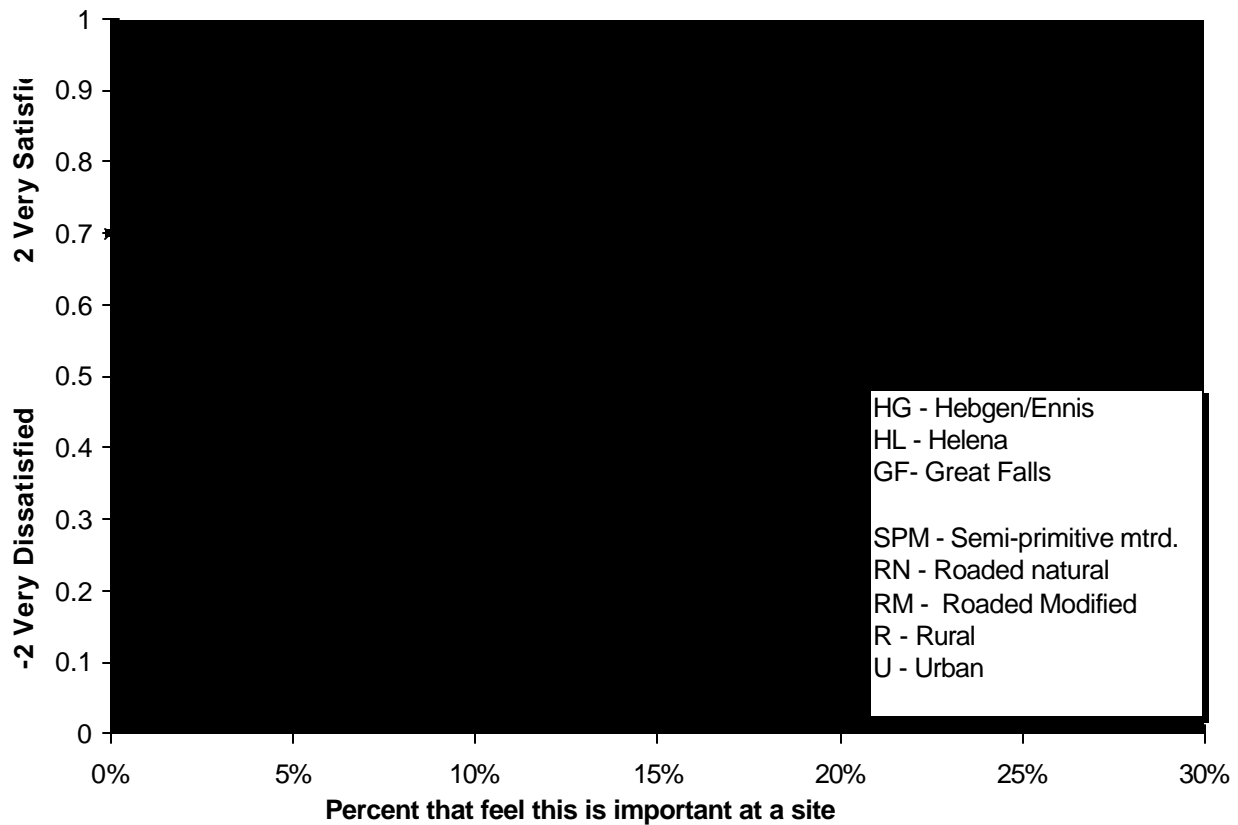
**Figure 15. Importance of and satisfaction with seeing and hearing few others.**



**Few rules or restrictions**

Less than 10% of visitors felt that having few rules or restrictions was important at a recreation site. Hebgen/Ennis visitors were most satisfied and Helena rural visitors were least satisfied.

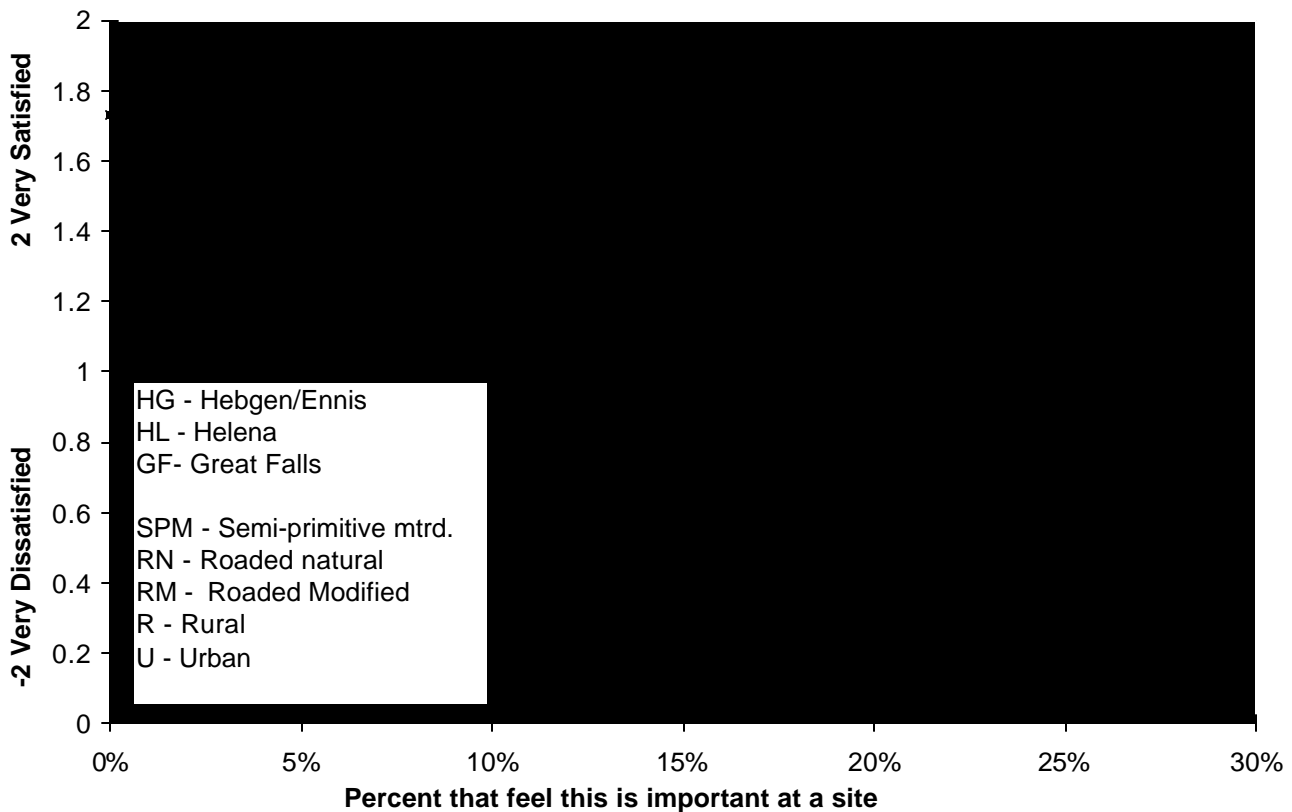
**Figure 16. Importance of and satisfaction with few rules or restrictions.**



**Condition of natural features**

The proportion of visitors who felt that condition of natural features is important at a site varied considerably between regions. Less than 15% of Helena rural area visitors felt natural features were important, while nearly 30% of visitors to Hebgen/Ennis roaded modified and Helena roaded natural areas felt they were important. The highest ratings were in the Hebgen/Ennis sites. The lowest (and least important) ratings were in the Helena rural sites.

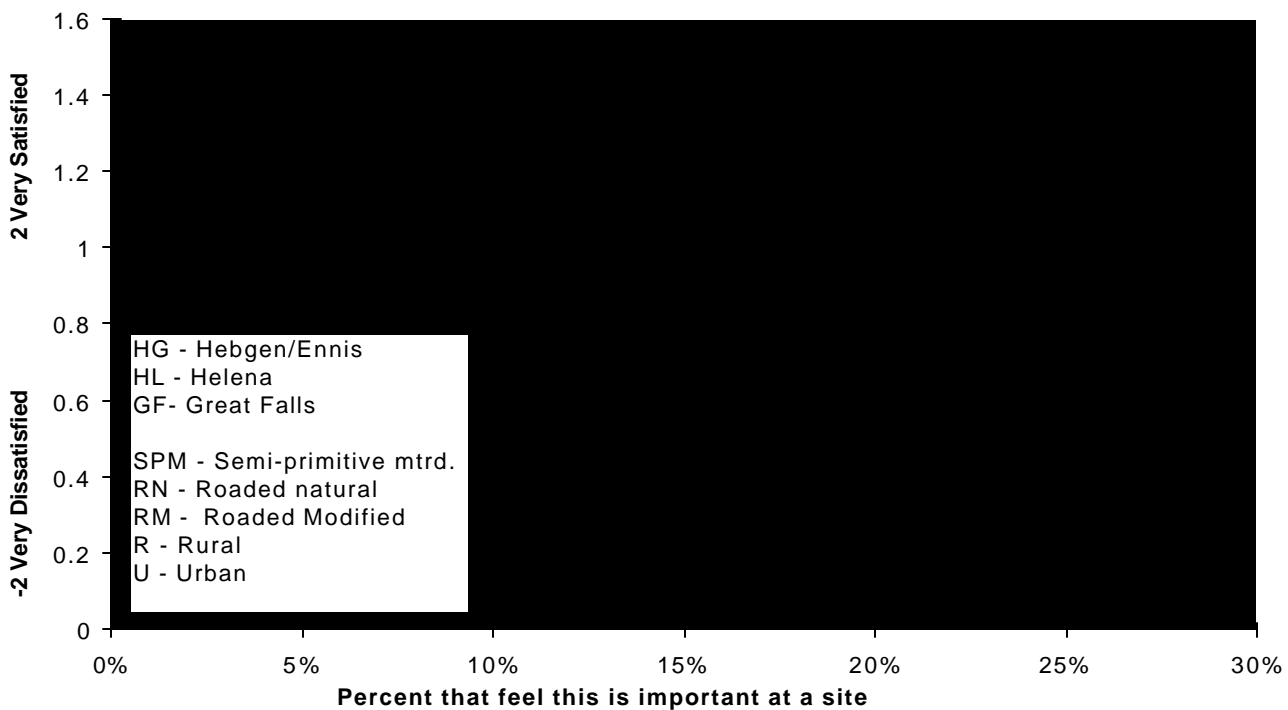
**Figure 17. Importance of and satisfaction with the condition of the natural features.**



### High degree of naturalness

Closely related to the condition of the natural features was the degree of naturalness present at a site. The proportion of visitors that felt that this was important at a recreation site varied similarly at most areas. Satisfaction with the degree of naturalness at sites was greatest in Hebgen/Ennis areas. Visitors to the Helena rural sites were the least satisfied though proportionally less felt that this was an important site condition.

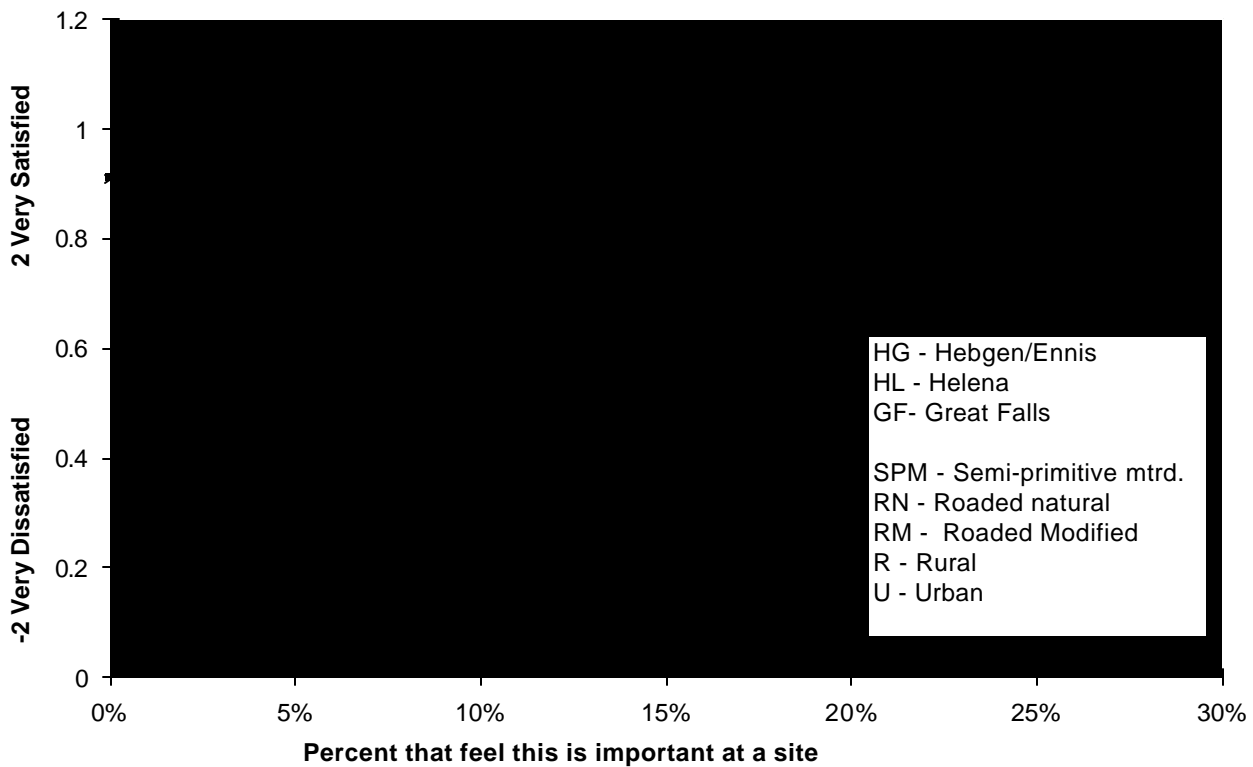
**Figure 18. Importance of and satisfaction with the high degree of naturalness.**



**Appropriateness of developments**

On average, only about 10% (or less) of visitors felt that the appropriateness of the developments at a recreation site was important. In general, Great Falls area respondents had the highest satisfaction and Helena respondents had the lowest satisfaction scores. Interestingly, no Hebgen/Ennis semi-primitive area respondents thought this was an important condition. However, it should be noted that there were only 11 surveys returned from these sites.

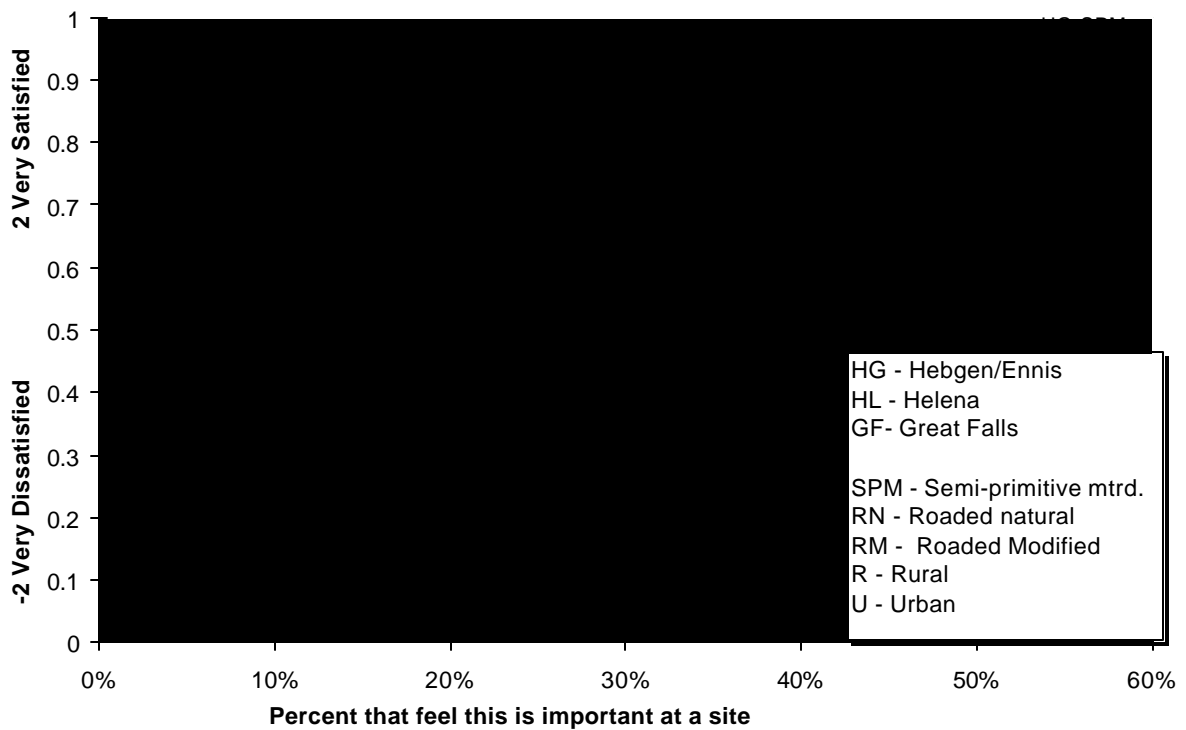
**Figure 19. Importance of and satisfaction with the appropriateness of developments.**



**Low amount of development**

Visitors to the Hebgen/Ennis area sites were very likely to feel that the amount of development is important at a recreation site. Helena area visitors were least likely to list this as being important. As can be expected, the urban visitors also did not feel that this was as important at a recreation site. Hebgen/Ennis visitors rated their satisfaction with the low amount of development higher than other visitors to the corridor. The Helena and Great Falls visitors were about even in their satisfaction levels. Satisfaction was lowest in the Helena rural (Hauser Dam area), Helena roaded modified (lower Holter), and the Great Falls roaded natural sites (Morony and Carter Ferry).

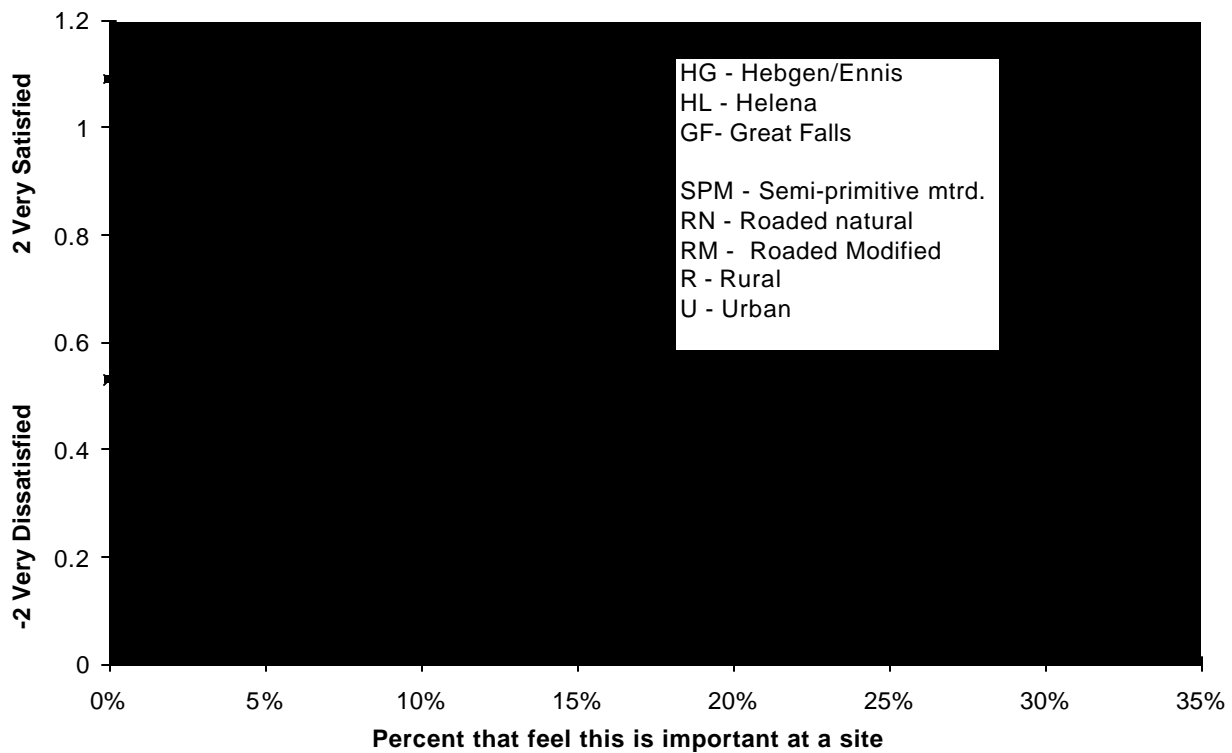
**Figure 20. Importance of and satisfaction with the amount of development.**



**Low amount of residential development visible from the river**

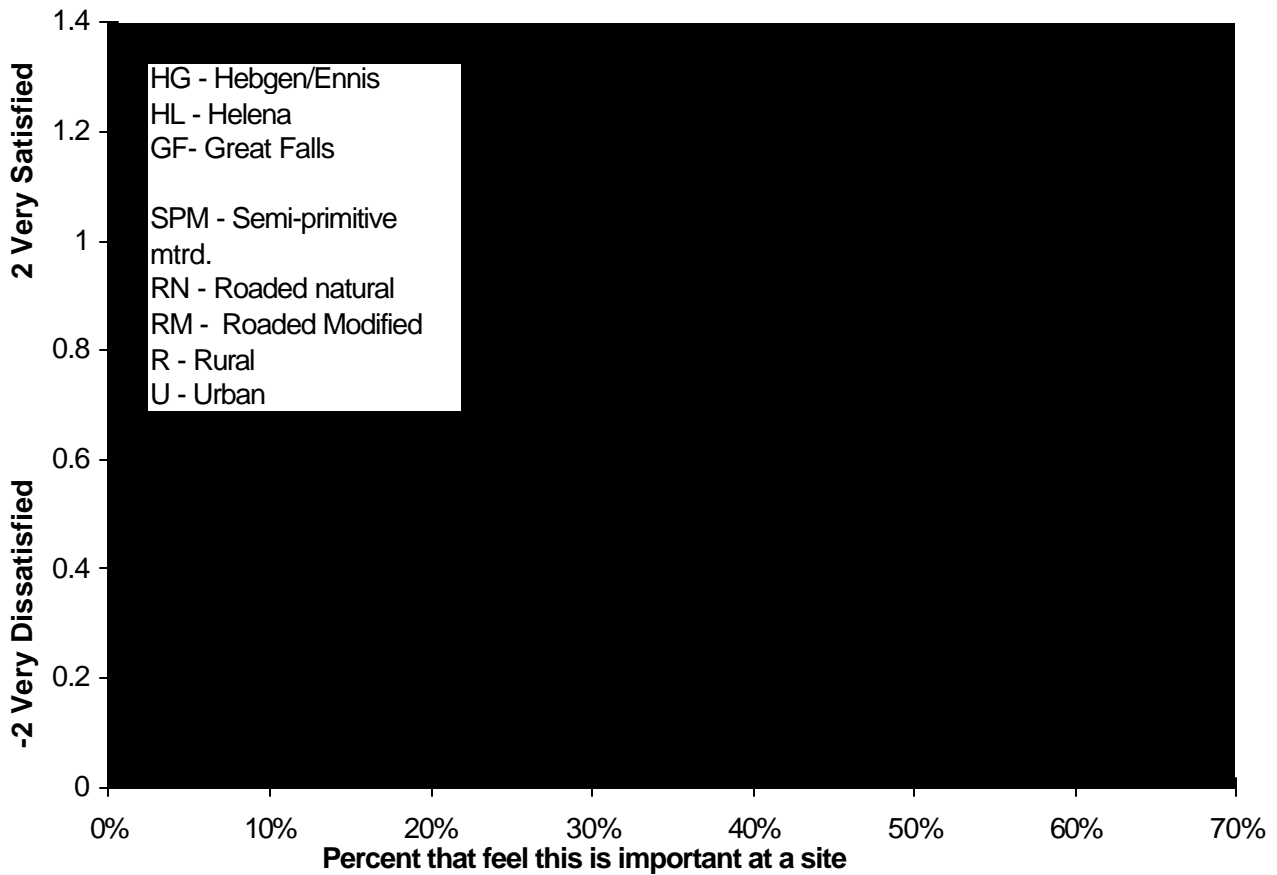
Less than 10% of visitors in any of the regions felt that low amount of development visible from the water is an important feature at a recreation site. Hebgen/Ennis roaded natural area visitors felt it was most important, and they were also the second most satisfied. Helena roaded modified visitors had the lowest satisfaction ratings, but only about 2% of them felt that low residential development visible from the water is important.

**Figure 21. Importance of and satisfaction with a low amount of residential development visible from the water.**



**Number of fish caught**

Over 60% of Hebgen/Ennis semi-primitive motorized (below Madison Dam) visitors felt this was an important feature. This group also had the highest satisfaction ratings. About 30% of Helena rural visitors considered number of fish caught an important feature, and they had the lowest satisfaction ratings.



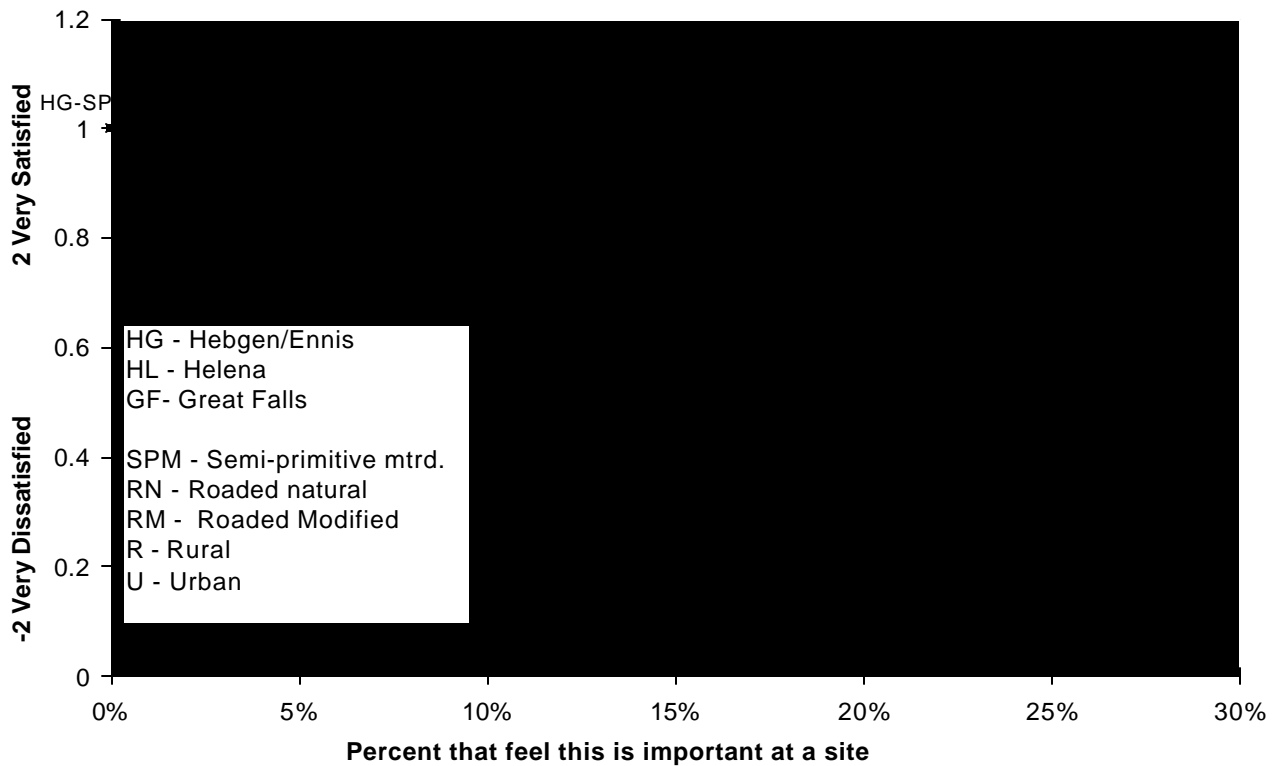
**Figure 22. Importance of and satisfaction with the number of fish caught.**



**Opportunity to view wildlife**

Wildlife viewing was one of the most popular recreation activities visitors participated in along the corridor. About 10-20% of visitors felt that the opportunity to view wildlife was important at a site. Satisfaction levels with the opportunity to view wildlife were fairly high at most areas in the corridor. The Great Falls visitors ranked their satisfaction lower than visitors to other regions.

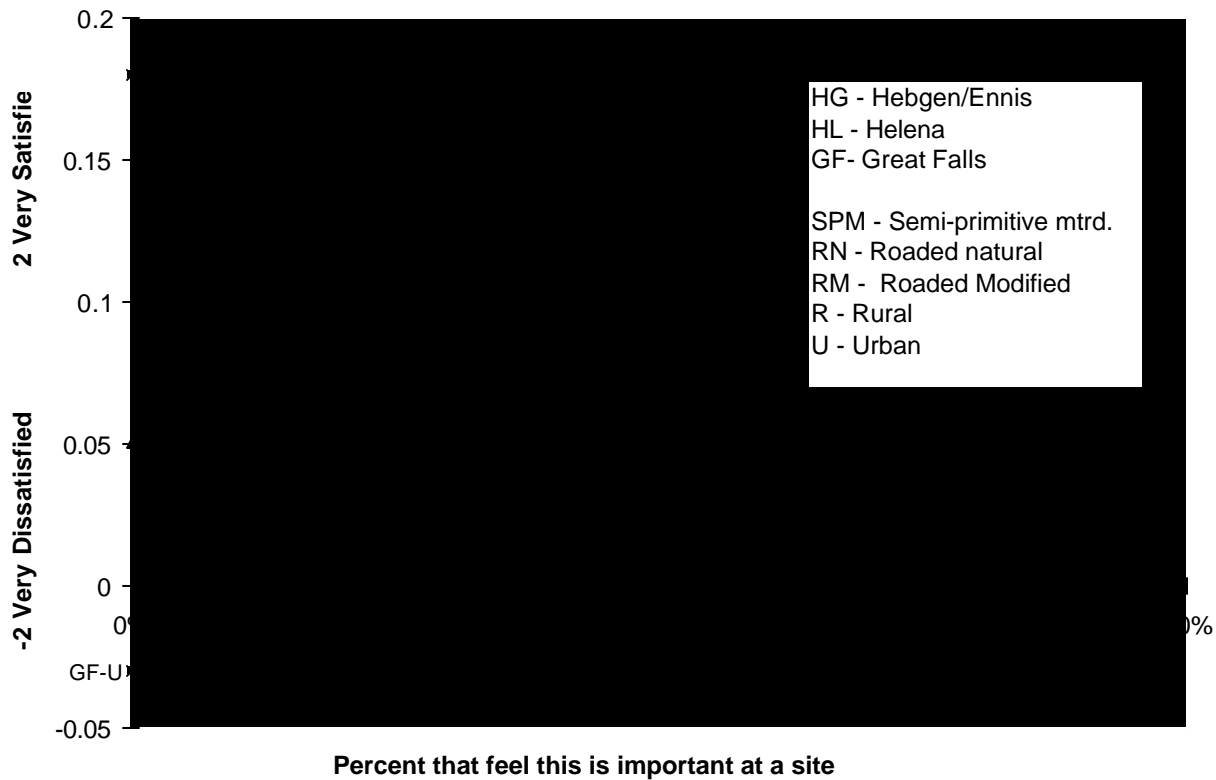
**Figure 23. Importance of and satisfaction with the opportunity to view wildlife.**



**Opportunity to hunt**

Very few summer visitors felt that the opportunity to hunt was important at a recreation site, with the exception of the Great Falls roaded natural sites. Satisfaction levels were highest in the Hebgen-Ennis semi-primitive motorized sites (above Ennis Dam) and lowest in the Helena rural areas, Great Falls urban areas, and the Hebgen/Ennis roaded natural areas.

**Figure 24. Importance of and satisfaction with the opportunity to hunt.**



## 2.7.6 Visitor Perceptions of Facility Needs

### *General Facility Needs*

An important component of managing the recreation resources within the corridor is whether the existing facilities are adequate for the types of use present. To help identify whether facilities are adequate, visitors were asked if they felt that any additional facilities or services were needed at each site. The percent of visitors that felt additional facilities or services were needed and what those additional facilities or services should be, are reflected in Tables C12 and D12. The additional facilities are listed in order of magnitude. (More specific site information can be found in the supplemental document *Tables of Visitor Characteristics by Recreation Site*).

50% of visitors in the Hebgen/Ennis region felt that the existing facilities were adequate. Within the semi-primitive motorized sites, more parking was the most often cited facility need. Restroom facilities were the most common facility need at the roaded natural sites. Within the roaded modified areas, visitors noted that restrooms, running water, and additional campsites were the greatest need. Visitors to the rural sites in this region felt that dump stations and trash bins were needed. The proportion of visitors citing the need for additional facilities was about the same in all the ROS classes in the region.

In the Helena region, about 58% felt additional facilities were needed. The facilities most often suggested were showers, and additional campsites. Visitors to the roaded natural areas cited a varied list of additional facility needs including additional campsites, trash bins, and restroom facilities. Rural visitors felt that showers and additional campsites were most needed in the area.

About one third of Great Falls visitors felt that additional facilities or services were needed. Within the roaded natural area, the most common needs were for bike trails, picnic tables, and restroom facilities. Roaded modified visitors were slightly less likely to feel that additional facilities were needed, but mostly wanted drinking water and trash cans. Within the urban sites, visitors mainly wanted restroom facilities, a snack bar, and drinking water.

### *Disabled Facility Needs*

Visitors were asked if there was anything that needed to be done at each site to accommodate those with disabilities. Tables C13 and D13 note the proportion of visitors who felt that there were facility or service needs for the disabled and what those needs were. At most areas, about 10% of visitors felt there was a need. The most often mentioned facility need for the disabled was handicap bathroom facilities followed by better access to water, black topping the drives and walkways, and constructing wider ramps.

## 2.7.7 Recreational and Resource Use Encounters and Conflicts

The number of other users visitors encounter is important in understanding the relationship between use levels and existing and/or potential conflicts. Visitors were asked to indicate the

number of specific recreational types and resource uses they encountered and to then evaluate how they felt about these encounters. The types of uses encountered were: canoes, powerboats, waterkiers, jetskis, bank anglers, wade anglers, boat anglers, river floaters, livestock, shoreline development, and hunters. Encounter levels and visitor evaluation of these encounters are shown in Tables C14 by ROS region. The total sample size for each ROS region is given at the end of Tables C14. In this section of the questionnaire, respondents were free to evaluate all the types of uses including ones that they did not actually encounter (for instance, visitors might report that they saw no boat anglers and that they enjoyed seeing no boat anglers).

### ***Canoes***

Very few visitors encountered canoes during their visits with most of these encounters occurring in the Hebgen/Ennis rural sites. Here, visitors that did see canoes most often saw one to five. Sites in the roaded natural and roaded modified classes were more likely to have visitors encountering canoes. Very few visitors reported that they disliked seeing canoes. About 3% of Great Falls roaded modified visitors who encountered canoes disliked the encounter.

### ***Powerboats***

Powerboat encounters were overwhelmingly concentrated in the Helena region where nearly 75% of visitors reported seeing them. In the Helena roaded modified areas, 16% reported having 31+ powerboat encounters and 15% disliked those encounters.

In the Hebgen/Ennis region, most powerboat encounters occurred in the rural sites with the majority of those encountering powerboats usually reporting seeing from one to five. However, 11% of these visitors reported that they disliked the encounters they had.

In Great Falls, most powerboat encounters were in the roaded modified areas where 27% of visitors reported seeing from one to five. Less than 2% of visitors seeing powerboats reported that they disliked seeing them.

### ***Water-skiers***

Water-skier encounters closely follows the pattern of powerboat encounters with most occurring in the Helena area, but a fairly high number occurring in the Hebgen/Ennis region as well. The greatest number of encounters were in the roaded modified and roaded natural areas but were disliked most often in the rural sites (Hauser dam area).

In the Hebgen/Ennis region, most waterskier encounters took place in roaded natural areas where about 5% disliked seeing them. Many fewer encounters took place in roaded modified sites, but 18% of respondents who had them disliked the experience.

In Great Falls, most of the water-skier encounters happened in the urban area where 12% of those who encountered them reported not enjoying the experience. While only 5% of roaded modified visitors saw water-skiers, 17% of them disliked the encounter.

### ***Jetskis***

Jetskis were most often encountered in the Helena region and disliked the most in the same area. Jetskis, when encountered anywhere along the entire river corridor, were more disliked than any other recreation activity or resource use.

In the Helena area, jetski encounters occurred most often in the roaded modified sites in Lower Holter Reservoir. Over half of visitors reported encountering jetskis with most seeing from one to five. The greatest proportion of visitors that reported disliking seeing jetskis was in the roaded modified sites where nearly 50% reported encounters they disliked.

Jetskier encounters were reported more often at the roaded natural and rural sites in the Hebgen-Ennis region. Though they were also disliked most (about 30%) in the roaded modified and rural classes.

Most jetski encounters in the Great Falls area occurred in the urban area. In the roaded modified sites below Holter dam, only 6% of visitors saw jetskis but 30% disliked the encounter.

### ***Bank Anglers***

The number of encounters with bank anglers was high for most areas along the entire corridor and for the majority of visitors this was mostly a positive experience.

In the Hebgen/Ennis region, encounters were highest in the rural sites where about 45% of visitors reported seeing bank anglers. Visitors to the roaded modified sites in this area were more likely to dislike seeing bank anglers.

In Helena, the greatest number of bank angler encounters was reported in the roaded modified and rural sites - these were the areas on lower Holter and around Hauser Dam. Interestingly, encounters with bank anglers were overwhelmingly positive - at most, only 4% of visitors encountering bank anglers disliked the experience.

The number of encounters with bank anglers was similar to the rest of the corridor in the Great Falls roaded modified and roaded natural sites and less likely in the urban area. 7% or less of visitors reported disliking seeing bank anglers.

### ***Wade Anglers***

The majority of wade angling occurred in the Hebgen/Ennis region where over 27% of visitors participated compared with just under 5% in the Helena and Great Falls regions. Very few reported that they disliked seeing wade anglers.

In the Hebgen-Ennis region, encounters with wade anglers were common. About 30% reported 1 to 5 encounters and in the semi-primitive motorized sites an additional 20% reported 6 to 10 encounters. This was also where visitors were most likely to not have enjoyed the encounter (about 14%). Over 9% of those encountering wade anglers in the rural sites did not enjoy seeing them.

The majority of wade angler encounters in the Great Falls region occurred at the roaded modified sites (Missouri River below Holter dam) where 20% saw eleven or more wade anglers. Very few reported that they disliked the encounter, except in the roaded modified areas, where 12% that saw wade anglers did not enjoy seeing them.

### ***Boat Anglers***

The number of visitors that encountered boat anglers in the Hebgen/Ennis areas was highest at the roaded natural sites where over 18% saw more than 5 boat anglers, and 33% saw 1 to 5. Generally, boat angler encounters were rated favorably with only 4% or less reporting that they disliked encounters.

Visitors to the Helena sites reported the highest number of boat angler encounters with almost half to three quarters seeing them. The number of encounters was quite high at almost all areas where in some areas, 20% of visitors saw 20 or more boat anglers. In roaded modified sites, 10% of respondents reported 31 or more encounters. Surprisingly with such high encounter levels very few (less than 5%) reported disliking seeing them.

The bulk of boat angler encounters occurring in the Great Falls area were at the roaded modified sites, where 11% of respondents reported 31 or more encounters (Missouri River below Holter Dam). This was also where the largest proportion disliked the encounters (almost 17%). Overall, the Great Falls region had the highest proportion of negatively evaluated boat angler encounters.

### ***River Floaters***

Since most of the study sites were not located on rivers, respondents in this category may have been recalling encounters earlier in the day or earlier in their trips. By definition, we would expect encounters with river floaters to occur primarily in the ROS regions that contained river sites.

River floater encounters were most common in the Hebgen/Ennis rural sites and the Great Falls roaded modified sites. Floater encounters were generally rated positively although a small proportion disliked seeing floaters in almost every ROS-region category. In the Great Falls roaded modified sites, 14% reported unfavorable encounters, and in the Hebgen/Ennis semi-primitive motorized sites 20% of respondents disliked seeing floaters (although this number should be interpreted carefully since only 11 surveys were returned at those sites).

Encounters with river floaters in the Helena area were less likely than in the Hebgen/Ennis region. Most Helena encounters with river floaters were reported at the roaded natural and roaded modified areas where the reported numbers of encounter were fairly similar. The majority of those seeing river floaters saw from one to five.

### ***Livestock***

Visitors reported seeing livestock all along the river corridor. The greater number of reports came from the Hebgen-Ennis region, which had slightly more than the Helena region. A significant proportion of these encounters were rated negatively. Generally, a greater proportion of visitors to the more developed end of the ROS disliked seeing livestock.

The roaded modified sites in the Hebgen/Ennis area were where visitors were most likely to encounter livestock. But it was in the semi-primitive motorized sites that 33% found the encounters to be unenjoyable (again, it should be noted that this proportion only represents about 3 respondents).

In the Helena area, most livestock encounters were in the roaded natural sites, though visitors to rural sites were most likely to dislike seeing livestock.

In the Great Falls region most livestock encounters occurred at the roaded modified sites, though visitors to urban sites were most likely to dislike livestock encounters (13%).

### ***Shoreline Development***

The magnitude of the negative ratings of shoreline development is worth noting. In most ROS-region categories, 20-30% disliked seeing shoreline developments, though it should be noted that a fairly high proportion also reported that they enjoyed seeing shoreline developments. The overall proportion of negative evaluations was about the same in all three regions, even though Great Falls respondents had fewer encounters.

In the Hebgen/Ennis region, most reported shoreline developments were in the roaded modified and rural sites, where the greatest proportion of respondents also reported that they disliked the encounters.

The Helena region had the greatest number of shoreline development encounters, with over 40% reported having them, but 65% of respondents reported that they did not mind seeing shoreline development.

In the Great Falls region, most shoreline development encounters were in the roaded modified sites. These sites also had the highest proportion of respondents who disliked seeing shoreline development (30%). Relatively few respondents reported seeing any shoreline development in roaded natural sites, but about 12% disliked those encounters.

### **Hunters**

Very few hunter encounters were reported in any of the regions. Compared to the number of reported encounters, the proportion of negative evaluations was high. Hunter encounters were most likely in the Hebgen-Ennis region, and most often disliked in the Great Falls region. Strangely, in the Great Falls roaded natural areas no hunter encounters were reported, but 15% of respondents reported that they disliked their encounters. One possibility is that these respondents were indicating that they *would* dislike seeing hunters if they saw them.

### **2.7.8 Crowding**

Visitors were asked to evaluate their perception of how crowded they felt during their visit and where the crowding, if any, occurred. The perception of crowding was measured on the nine point scale shown below. Tables C15 show the responses to this scale by ROS

1	2	3	4	5	6	7	8	9
<i>Not at all</i>			<i>Slightly</i>		<i>Moderately</i>		<i>Extremely</i>	
<i>Crowded</i>		<i>Crowded</i>		<i>Crowded</i>		<i>Crowded</i>		<i>Crowded</i>

region for the summer season.

Overall, the reported perceptions of crowding were lowest at the less developed end of the ROS and increased as the sites moved up the spectrum, peaking at the roaded modified areas and then decreasing somewhat at the rural and urban sites. Visitors to the Helena region reported feeling most crowded with Hebgen-Ennis visitors feeling slightly less and Great Falls visitors feeling much less crowded.

The highest mean perception of crowding occurred in the Helena roaded modified sites. Here, over 20% of visitors felt moderately crowded or more during their visit. For the corridor, roaded modified visitors reported the highest levels of crowding with 4% feeling extremely crowded. The semi-primitive motorized and urban sites had the lowest reported levels of crowding.

In the Helena area about 50% of visitors felt at least slightly crowded, 30% felt at least moderately crowded, and about 4% felt extremely crowded. Visitors in Helena roaded natural sites had the lowest perceived crowding scores.

In the Great Falls area, perceptions of crowding were less than in the other two regions. The perception of crowding was highest in the rural and roaded modified sites. Overall, 66% of visitors felt that they were not at all crowded. In roaded natural sites almost 75% felt that they were not at all crowded.



### ***Where Crowding Occurs***

If visitors felt crowded they were asked where the crowding occurred. Tables C16 and D16 list the responses to this question by ROS and region. Because the question was asked in an open-ended format, respondents could have replied with any possible response. Consequently, many of the areas they listed were not necessarily part of the study area.

In the Hebgen/Ennis area, most visitors reported that when they felt crowded it was either in the campsite (23%), in Yellowstone National Park (15%), or in West Yellowstone (11%). In the Helena area, crowding occurred in the campsite (34%), or on the boat dock (9%) or boat ramp (7%). Great Falls visitors most often felt crowded on the river (13%), on boat ramps (7%), and in campsites (5%).

### **2.7.9 Displacement**

Displacement occurs when recreationists no longer visit a site due to some perceived negative attribute that has developed at that site. Understanding displacement is important because the way visitors react to changes in site attributes can affect use and attributes at other sites in the area. Displacement is difficult to measure because managers can not elicit responses from recreationists who no longer visit.

Displacement can occur for a variety of reasons; the most common are conflicts with other user groups, crowding and congestion, and changes in the setting attributes of a site (e.g., the level of site development or a change in management policy).

If visitors are displaced, the existence of substitute sites or experiences can affect how they react to displacement. Typical responses to being displaced are changing the time of the visit (e.g., off season versus busy times), visiting some other site in the region (substitute site), visiting some other area (substitute area), engaging in some other activity (activity substitute), or to not engage in any activity.

Several questions were asked of visitors to examine some potential causes of and behavioral responses to displacement within the corridor. To identify some of the underlying reasons for existing displacement in the corridor, visitors were first asked if there were any sites they no longer visited in the area, which sites they no longer visited, and what were the reasons they no longer visited these sites. To measure how visitors might respond to being displaced and the degree to which substitute sites and activities exist within the corridor, visitors were next asked how they would react to the potential closure of the site in which they were interviewed.

### ***Reasons for Displacement***

Tables C17s and D17s show the percent of visitors who said there were recreation sites they no longer visited and the reasons for their discontinued visitation. Overall, about 10% of visitors

no longer visit recreation sites in the area. Of these, more than 50% said they no longer visit some sites because of crowding, more than 30% said due to fees, about 30% mentioned overuse, 25% mentioned conflicts with other users, 18% said resource degradation, and around 30% gave other reasons. The most frequently mentioned sites no longer visited were Giant Springs State Park in Great Falls (Table C18), followed next by Yellowstone National Park and Black Sandy. Helena area visitors were most likely to mention being displaced from a local recreation site while fewer of those in the Great Falls area felt this way. There was little relationship between the ROS class and the degree of displacement.

In the Hebgen/Ennis region, a slightly higher proportion of visitors to the roaded natural sites reported being displaced than those in the other ROS classes. Crowding was the most frequently cited reason for no longer visiting local recreation sites. The main site they mentioned no longer visiting (Tables C18) was Yellowstone National Park.

Helena area visitors most frequently said they no longer visited recreation sites in the area (41%, compared to 29% in Hebgen/Ennis and 10% in Great Falls). The most frequently cited reason (60%) was due to crowding. Conflict with other users was also given as a reason more often in this region than elsewhere. The sites they mentioned no longer visiting, were Black Sandy, Log Gulch, and Canyon Ferry.

Great Falls area visitors were the least likely to have been displaced from a recreation site in the local area but those that had (74%) overwhelmingly mentioned they no longer visit Giant Springs State Park. The reason most often cited was fees. Crowding and overuse were other often cited reasons for displacement. Crowding was most often reported in roaded natural areas.

### ***Behavioral Responses to Displacement***

To measure how visitors might respond to being displaced and the degree to which substitute sites and activities exist within the corridor, visitors were asked how they would react to the potential closure of the site in which they were interviewed. Overall, the majority of visitors said they would simply visit some other site in the area. This illustrates that visitors perceive, at least corridor-wide, that there are local alternative or substitute sites available. Hebgen-Ennis visitors were most likely to choose a local substitute while Helena area visitors felt that there were fewer local alternative sites. Great Falls visitors were the least likely to visit alternative local sites.

Fewer respondents said they would visit a site elsewhere and the proportion choosing this option varied by region. Helena area visitors were most likely to choose sites in other areas. Great Falls visitors were least likely to visit a site in another area.

For Helena and Great Falls area visitors, visiting at some other time was a more common choice than for Hebgen-Ennis visitors. Inflexible travel itineraries might have been the reason for not choosing to visit at another time. The majority of Hebgen/Ennis visitors were non-residents and their ability to visit at other times might not have been practical. In the Helena area, roaded natural visitors were most likely to say they would visit at another time while fewer visitors to the

rural sites chose this option. Great Falls visitors were most likely to choose this option. As most visitors to this area were local, visiting at another time was more practical.

The level of activity substitution reflects how dependent visitors were on the area to provide the setting for their chosen recreation activity as well as the number of substitute opportunities available. This was highest in the Great Falls area and lowest in the Hebgen/Ennis region. Over 15% of Great Falls urban visits said they would choose another activity.

The option of staying at home was least likely to be chosen by Great Falls visitors. Helena and Hebgen/Ennis visitors were only slightly more likely to choose not to participate rather than take one of the other options. Overall, less than 10% of respondents said they would stay home if the site was closed.

### **2.7.10 Attachment to Place**

Visitors were asked to respond to a series of questions developed to measure place attachment (Williams 1995). These questions were designed to measure the strength of visitor's attachment to the recreation site or area. The strength of their attachment reflects their willingness to accept changes in the site's attributes or changes in the levels and types of uses, and how they might respond to these changes.

Tables C20 and D20 show the average scores to the place attachment questions by ROS and region. Hebgen-Ennis visitors were more attached to the area than Helena or Great Falls visitors, but not dramatically so. They were most likely to feel very attached to the place and were more likely to identify with the area. They were also more likely to feel a dependence on the site for what they like to do. Helena and Great Falls visitors had very similar levels of attachment. Visitors in all three regions disagreed with the statement: *The time I spend here could just as easily be spent somewhere else*. Visitors to the less developed ROS classes displayed a stronger place attachment and dependence.

### **2.7.11 Expenditures**

Average trip expenditures by ROS and region are shown in Tables C21s and D21s. Visitors to the Hebgen-Ennis area had the largest total trip expenditures spending about \$216 in the corridor. Helena area visitors spent less, with an average of \$141. Visitors to the Great Falls sites had the lowest expenditure levels only spending about \$107 in the corridor. Hebgen-Ennis area visitors spent more on accommodations, guides, licenses, admission fees, and retail goods. The largest expenditure items for Helena area visitors were for food and transportation costs. Great Falls visitors spent money mainly for food transportation items, and retail goods.

Much of the difference in expenditure levels between regions can be explained by how long visitors spent on-site and their residency status (i.e. Montana resident or not). Tables D5s and C5s (Appendices C and D) show that a significant portion of Hebgen-Ennis visitors (54%) and Helena visitors (46%) stayed overnight at the site. Only 11% of Great Falls visitors stayed

overnight. The following table shows the difference in average expenditures for overnight versus day use. Corridor-wide, overnight visitors spent nearly two times more than day users.

**Table 2. Average Group Trip Expenditures by Overnight Versus Day Use.**

	Overnight	Day Use
Food, drinks, and refreshments	69.78	35.09
Motels, campgrounds, and etc.	36.94	28.27
Gas and other transportation	47.39	33.16
Guide or outfitter	12.07	6.19
License or entrance fees	9.28	4.91
Retail goods	23.32	12.94
Other expenditures	4.04	1.82
Total expenditures	203.20	122.05

Whether visitors were Montana residents or not also had an effect on expenditure levels. While Montana residents constituted only about 40% of visitors to the Hebgen-Ennis area, they accounted for over half of visitors to the Helena and Great Falls areas. Montana residents were also twice as likely to be day users than non-residents. Non-residents reported spending an impressive average of \$283 per trip in the corridor; more than four times the resident average of about \$61 (Table 3).

**Table 3. Average Group Trip Expenditures by Residency Status.**

	Residency	
	Montana	Nonresident
Food, drinks, and refreshments	22.28	82.80
Motels, campgrounds, and etc.	8.53	67.53
Gas and other transportation	16.49	70.60
Guide or outfitter	1.69	17.86
License or entrance fees	3.43	10.46
Retail goods	8.37	27.95
Other expenditures	0.53	5.71
Total expenditures	61.11	283.05

### 3 - Inputs into the Planning Framework

The Missouri Madison Comprehensive Recreation Management Plan is based on concepts from the Limits of Acceptable Change (LAC) and Recreation Opportunity Spectrum (ROS) planning frameworks. Crucial to LAC is the identification of key resource indicators. Standards that are measurable are developed for each indicator. These standards reflect the existing and desired condition for each indicator. When the condition of indicators changes over time, such as when the existing condition exceeds the desired condition of the indicator, management action is triggered.

The initial list of indicators for the Missouri Madison Comprehensive Recreation Management Plan was developed through the input of the various technical advisory groups prior to the 1994-95 Recreation Visitor Survey. The existing conditions for the social indicators were first collected from the 1994-95 Missouri Madison Recreation Survey and were again collected in the 1999 survey. It is important to remember that for the 1999 project, only summer conditions were evaluated and most of the river recreation sites were not sampled. Existing conditions based on the 1999 data are discussed below.

#### 3.1 Conflicts

When recreating, visitors may encounter many, few, or no other people. When use levels are low it is less likely for recreationists to encounter one another. When use levels increase, the number of encounters and the potential for visitor conflicts also increases. There is no direct relationship between increasing use, encounters and conflicts. This is due to several factors. The behavior of visitors can affect the number of encounters. For example, because boat anglers are floating at about the same speed, they are less likely to encounter each other than they are to encounter wade anglers. But their encounters with other boat anglers may be more likely to result in conflict. Visitor expectations can also influence perceptions when the number of visitors that are present at a site conflict with their expectations of use levels. In general, respondents to the 1999 survey had fewer negative evaluations of their encounters. This may be due to changing expectations.

It is important for planning to not only know when and how often conflict between user groups occurs, but also to know the number of encounters between the conflicting groups. The situation where there are many conflicts with a low number of encounters is indicative of recreation uses that may not be compatible. The management of these conflicts presents a different set of options than when a high number of conflicts occur with higher encounter levels.

The tables in Appendix E display the encounter levels for each of the user group conflicts that were identified as social indicators. The tables show the proportion of all visitors within each ROS region that were in the group with the conflict (e.g., non-motorized users), the proportion of these who actually had a conflict, and the number of encounters that occurred with the group causing the conflicts. **It is important to remember that the percentages reported for each level of encounter frequency (1-5, 6-10, 11-20, 21-30, and 31+) refer only to the**

**proportion of visitors who actually had a conflict.** The total number of visitors who had conflicts is given on the right side of each table.

In the following section of this report, an (n) value is given after each reported percentage. This value is the actual number of respondents that had a conflict. The percentages reported were calculated by dividing the number of respondents with conflict for each ROS-region-activity category by the number of respondents who participated in each of the various activities. The Hebgen/Ennis semi-primitive motorized ROS-region is included in the tables but not in this analysis because only 11 questionnaires were returned from those sites.

#### ***Non-motorized encountering motorized***

The majority of conflicts between non-motorized and motorized users occurred in the Helena region where nearly 30% of non-motorized visitors (n = 160) reported having a conflict with motorized recreationists (Table E1). Encounter levels were also much higher in the Helena region. Conflicts and encounters were lowest in the Hebgen/Ennis rural areas, where only 7% of visitors (n = 29) were non-motorized.

#### ***Non-motor boats encountering motor boats***

Most of the conflicts between non-motor boats and motor boats were in the Helena and Great Falls regions (Table E2). The Helena rural sites were the highest with over 32% of non-motor boat visitors (n = 29) reporting conflicts with motor boats. Where conflicts were highest, the number of encounters also tended to be high. The highest proportion of non-motorboat visitors was in the Helena roaded modified area, where 25% (n = 35) reported having conflicts.

#### ***Motor boats encountering non-motor boats***

Very few conflicts were reported between motor boats and non-motorboats and all of them were in the Helena region (Table E3).

#### ***Motorboat anglers encountering motor boats***

There was a relatively high level of conflict between motorboat anglers and motorboats in general (Table E4). The Helena sites were highest with about 35% of motorboat anglers (n = 62) reporting conflicts with motorboats. Helena roaded modified sites had the highest proportion of motorboat anglers (25%). The lowest level of conflict was in the Hebgen/Ennis rural sites, although the percentage was still fairly high (22%, n = 9). Encounter levels between these two groups was also high in most areas where well over 80% of motorboat anglers with conflicts typically encountered 31 or more motor boats.

#### ***Non-angling motor boats encountering motor boats***

Conflicts between non-angling motor boats and motor boats were much lower than for anglers in motorboats (Table E5). The highest was at 13% (n = 12) in the Helena rural sites where 28% of visitors were non-angling motorboaters. Encounter levels were very high in all areas.

***All boats encountering bank anglers***

The greatest proportion of boaters reporting conflicts with bank anglers was in the Great Falls roaded natural sites (20%, n = 5) with Hebgen/Ennis roaded modified sites coming in second at 7% (n = 3) (Table E6). Where conflicts were relatively high, the number of encounters was also high. In almost all areas, at least 30% of visitors reported engaging in boat related activities.

***Bank anglers encountering motorboats***

Bank angler participation was very high with some areas reporting participation rates of 40% to almost 75%. All areas reported conflicts between bank anglers and motorboats (Table E7). The areas with the highest proportion of bank anglers conflicting with motor boats were the sites in the Great Falls roaded modified and Helena roaded natural areas. In the Helena roaded natural sites, more than 40% of bank anglers (n = 35) did not enjoy meeting motorboats. About 50% of the Great Falls roaded modified bank anglers (n = 15) reported having conflicts with motorboats.

***Bank anglers encountering non-motorboats***

Very few bank anglers reported having conflicts with non-motorboats. The highest proportions of respondents with conflicts were in the Great Falls roaded modified areas (10%, n = 3) and the Helena roaded natural areas (7%, n = 6).

***Wade anglers encountering wade anglers***

The largest proportion of visitors that were wade anglers was in the Hebgen/Ennis region (Table E8). Conflicts between wade anglers were highest in the Hebgen/Ennis roaded modified sites where 14% reported conflicts (n = 4). Throughout the corridor, wade angler conflicts were very rare; in fact, a total of only 8 were reported.

***River floaters encountering anglers***

The Hebgen/Ennis ROS-regions had the highest proportions of respondents who participated in river floating (Table E10). However, the largest number of river floaters reporting conflicts with anglers was in the Great Falls roaded modified sites. Even there, only about 13% of river floaters (n = 4) had conflicts with anglers.

***Anglers encountering floaters***

Conflicts between anglers and floaters were also highest in the Great Falls roaded modified sites where almost 14% of anglers (n = 5) reported having conflicts with river floaters (Table E10). In general, there were few conflicts of this type.

***Livestock encounters***

Livestock encounters occurred almost universally along the planning corridor although reported conflicts were low (Table E11). The number of encounters was highest in the Hebgen/Ennis region. The Hebgen/Ennis rural sites had the highest proportion of livestock conflicts, with a little over 3% (n = 15) of respondents reporting that they disliked their livestock encounters.

### **3.2 Satisfaction**

Several measures of visitor satisfaction were included as indicators for the LAC planning framework. These were visitor satisfaction with the number of fish caught and the satisfaction with the number of campsites within site. Respondents were asked to rate their satisfaction with these two indicators on a scale from (-2) very dissatisfied to (2) very satisfied. Responses were averaged by ROS region to compare the relative measure of satisfaction among these planning areas. Positive scores generally reflect an overall positive level of satisfaction while a negative score illustrates a greater proportion of visitors reporting dissatisfaction. Most scores were near zero, which indicates a neutral feeling.

#### **Satisfaction with the number of fish caught**

Measures of average satisfaction with the number of fish caught are shown in Table E12. Generally, ratings were just slightly positive in most areas. Scores were the lowest in the Helena rural sites and highest in the Hebgen/Ennis semi-primitive motorized area.

#### **Satisfaction with the number of campsites within sight**

The satisfaction with campsites within site was generally positive (Table E13). The highest satisfaction levels were in the Hebgen/Ennis roaded modified sites and the lowest was in the Helena rural areas.

### **3.3 Other Indicators**

Other social indicators were identified for the planning process including the perceived level of crowding visitors felt at the site, and the adequacy of existing facilities. Respondents were asked to rate how crowded they felt at the site on a scale from (1) not at all crowded to (9) extremely crowded. Average scores for each ROS region give a comparative measure of the average perception of crowding. Respondents were also asked to list any additional facilities or services they felt were needed at the site. The proportion of visitors reporting that some facility or service was needed gives a relative measure of the perceived need for these additions.

#### **Perceived crowding**

Table E14 shows the average score for visitors' perceptions of crowding for each ROS region. Averages were relatively low when one considers these were measured on a nine point scale. Ratings were highest in the Helena roaded modified sites and, surprisingly, lowest in the Great Falls roaded natural and urban areas. (This might be explained by visitor expectations of crowding and not just on the number of people they actually saw and is discussed in more detail in Section 2.4.8)



### **Adequacy of facilities**

The proportion of visitors reporting that additional facilities or services were needed at the site are shown in Table E15. In all regions, at least a third of visitors felt that there were additional needs (See section 2.4.6). This was highest in the roaded modified sites. Fewer Great Falls visitors felt there was a need for additional facilities or services.

## 4 - Estimates of Use at Selected Sites

### ***Introduction***

This section of the report illustrates the methods used to estimate use levels for the individual sites sampled. Estimates are also subtotaled for the three general areas sampled: Hebgen-Ennis region, Helena region, and the Great Falls area. Estimates are displayed as total number of visitors for the summer period May 9, 1999 to October 2, 1999 except where otherwise noted (at some sites, the season is shorter).

### ***Methodology***

In the 1994-95 study, use levels were estimated for each survey site for the winter and summer seasons. Estimates were based on observations and counts made during the three-hour sample periods at each site. Visitors entering the site during the sample period were counted with the total number of visitors entering being tallied. The average number of visitors entering the site per period was then calculated based on the average of all sample periods for each site. Separate average estimates per time period were calculated for weekday and weekend use. Use estimates were calculated for individual sites based on each of the four time frames for each stratum (weekday vs. weekend). The total number of observation hours, as well as the total number of visitors for each time frame was calculated. The total number of visitors was then divided by the total observation hours to determine the estimated number of visitors per hour for each time frame. The estimated total seasonal visitors for each time frame was calculated by multiplying the visitors per hour by the total seasonal hours. The estimated total seasonal visitors for each site resulted from the sum of the total seasonal visitors of each time frame within the site.

While the above method was useful and, in most cases, produced estimates that were comparable to those from other studies, there are at least two reasons why repeating the same methodology might produce significantly different results. First of all, the large number of sites sampled for this project meant that each individual site was visited by a surveyor relatively few times over the summer. A single very slow or very busy day could have a drastic effect on the use estimate for that site--especially at sites where use is low to begin with. In addition, some sites are inherently difficult to monitor; especially those that have multiple entrances or highly dispersed use (e.g. the River's Edge Trail in Great Falls). In the 1994-95 study, each surveyor developed a strategy for addressing these difficulties. A different strategy adopted by 1999 surveyors might have produced significantly different use estimates.

Since a primary purpose of the 1999 Missouri Madison Survey was to gather information for comparison with results from the 1994-95 survey, all 1999 estimates are based on the estimates

from 1994-95 (except for new sites, where an approximate version of the 1994-95 methodology was used). For each site, the 1994-95 use estimate was adjusted to match the shorter sampling season in 1999. Then the proportions of Montana and nonresident visitors were calculated and a standard multiplier (1.3% increase for residents and 8% increase for nonresidents, these values are ITRR estimates of statewide visitation increases since 1995) for each proportion was applied.

For example: The 1995 use estimate for Cabin Creek Campground was 6,800. Adjusted to match the 1999 sampling season, that number becomes  $6,800 * (0.96) = 6,581$ . Montana residents accounted for 28% of use in the area and nonresidents accounted for 72%. Multiplying the increases in resident visitation (1.3%) and nonresident visitation (8%) since 1995 by their respective proportions, then adding the products to the adjusted 1995 estimate, we get the following:

$$\begin{aligned}
 (.718 * 6,581) + (.718 * 6,581 * .08) &= 5103 \text{ [nonresident use estimate]} \\
 (.282 * 6,581) + (.282 * 6,581 * .013) &= 1880 \text{ [resident use estimate]} \\
 5103 + 1880 &= \mathbf{6,983} \text{ [1999 use estimate for Cabin Creek Campground]}
 \end{aligned}$$

### ***Estimates of Use by Site and Region***

Table 3 contains the estimates of use by survey site and by planning region.

Where estimates are not based on the 1995 estimate, an explanation is provided in a footnote.

**Table 4. Estimates of Visitation - Hebgen Ennis Region.**

SITE	Start of Sampling Season (5/9/99 unless noted)*	1999 Use Estimates		TOTAL
		MT resident	nonreside nt	
Cabin Creek Campground	6/1/99	1880	5103	6983
Hebgen Dam Day Use Area	6/1/99	857	2326	3183
Building Destruction Site	6/1/99	3047	8271	11318
Highway Destruction Site	6/1/99	619	1680	2299
Kirkwood Picnic Site	6/1/99	309	840	1150
Hebgen Lake Interpretive Site	6/1/99	690	1874	2564
Red Canyon Scarp Interpretive Site	6/1/99			2400 <sup>(1)</sup>
Earthquake Area Interpretive Site	6/1/99			480 <sup>(1)</sup>
Rainbow Point Campground	6/1/99	857	2326	3183
Horse Butte Lookout Picnic Site	6/1/99			2128 <sup>(1)</sup>
Madison River Picnic Site	6/1/99	1238	3360	4598
Bakershole Campground	6/1/99	2370	6433	8803
Lonesomehurst Campground	6/1/99	1797	4878	6675
Cherry Creek Campground	6/1/99	581	1576	2156
Rumbaugh Ridge Fishing Access	6/1/99	746	2026	2773
Spring Creek Campground	6/1/99	581	1576	2156
West Shore Public Access		561	302	863
East Side Fishing Access				281 <sup>(1)</sup>
Meadow Lake Fishing Access		1121	605	1726
Kobayashi (Sandy) Beach		2747	1482	4228
Trail Creek		1345	726	2071
Fall Creek		3980	2147	6127
Red Mountain Campground		2747	1482	4228
Warm Springs		9955	5371	15326
Black s Ford		3195	1724	4919
Dispersed - West US84		3868	2087	5954
Dispersed - East side Beartrap Road		3868	2087	5954
<b>Hebgen/Ennis Total</b>		<b>48957</b>	<b>60281</b>	<b>114527</b>
Hauser Dam Public Access		3539	997	4536
Black Sandy SRA		9615	2709	12324
Causeway Fishing Access		3940	1110	5049
York Bridge Fishing Access		9215	2596	11811
Riverside SRA		7813	2201	10013
Wolf Creek FAS		6277	1768	8045
Holter Dam Campground		5609	1580	7189
Holter Lake Campground		11418	3217	14635
Log Gulch Campground		9482	2671	12153
Departure Point Day Campground		4073	1147	5221
<b>Helena Total</b>		<b>70980</b>	<b>19995</b>	<b>92247</b>
Broadwater Bay Park		8944	10624	19568
Speciman Sound Park		9743	11573	21316 <sup>(2)</sup>
Squaw Island West Bank Park		3114	3700	6814
Giant Springs Heritage State Park		23638	28079	51717
River s Edge Trail		10382	12332	22713
North Shore Public Access		1837	2182	4019
Rainbow and Lewis and Clark		10901	12948	23849

SITE	Start of Sampling Season (5/9/99 unless noted)*	1999 Use Estimates		
		MT resident	nonreside nt	TOTAL
Overlooks				
Ryan Island Day Use Area	5/9/99 to 9/1/99	6484	7703	14187
Morony Dam Public Access		2276	2704	4979
Dispersed sites from Giant Springs		1837	2182	4019
Carter Ferry		280	332	612
Lewis and Clark Interpretive Center				69542 <sup>(3)</sup>
<b>Great Falls Total</b>		<b>79435</b>	<b>94357</b>	<b>243334</b>

- (1) These estimates were calculated in the same manner as in 1995 except that cars were counted and multiplied by average group size at the site, rather than counting people.
- (2) This estimate includes Riverside Park and Mitchell Pool.
- (3) This number was provided by the Interpretive Center.

## 5 - Comparison With the 1994-1995 Study

### *Introduction*

This section will compare ROS-level results from 1995 to 1999 in each of the three planning regions. As noted previously, the 1999 sampling sites in the Hebgen/Ennis area differed from 1994-95 since most Madison river sites were not surveyed in 1999. Therefore, the Hebgen/Ennis comparison, while still provided, should be regarded with caution. The differences may be attributed to changes in survey sites rather than actual changes in use or visitor characteristics. Also, comparisons between 1995 and 1999 Hebgen/Ennis semi-primitive motorized classes are not made because sample sizes in both years were small. This section will only highlight differences between recreation users; similarities will not be discussed.

To facilitate use of this section, differences are presented in the form of a bulleted list for each region, rather than a lengthy narrative.

### *Hebgen/Ennis Region ROS Categories Roaded Natural, Roaded Modified, Rural*

This section will compare three of the ROS regions between the two survey time periods. The semi-primitive motorized classification will not be compared due to low sample sizes in both years. Some of the differences found in the following section may be a result of fewer river sites surveyed on the Madison River in 1999. In addition, the roaded modified areas had significantly fewer respondents in 1999 compared to 1994 (83 and 286 respectively).

#### 1999 Demographic Differences

- The respondent was more likely to be female in 1999.
- Rural ROS users were less likely to be retired than in 1994 and had higher incomes.
- Roaded natural and roaded modified visitors were less likely to be from Montana in 1999.
- Rural visitors were more likely to be from Montana.
- The group sizes in 1999 were quite a bit larger than in 1994.
- Rural users were more likely to be repeat visitors.
- Roaded modified visitors were more likely to have been visiting the site for more than ten years

#### 1999 Use Differences

- Visitors in all three ROS categories were more likely to spend the night in 1999 and spend more total days than in 1994.
- If visitors were day users, they spent less time at the site than in 1994
- In the roaded natural areas, overall reasons for choosing the site stayed the same.
- Roaded modified area users rated scenic beauty substantially higher and good fishing

dropped dramatically as a reason for visiting the site.

- The trip satisfaction index went down slightly in the roaded modified areas but up in the other two areas. In the rural category, trip satisfaction increased significantly from -0.20 to +0.35.
- Slightly more users in 1999 indicated a need for additional facilities. Roaded natural users suggested more restrooms, better roads, and information boards. Roaded modified visitors suggested water access and a store. Rural users suggested a dump station, trash bins, and restrooms.
- Users in all three ROS categories were less likely to be bothered by seeing powerboats in 1999.
- Roaded natural and rural users were less likely to be bothered by seeing waterskiers but roaded modified users disliked seeing waterskiers slightly more in 1999.
- 1999 visitors in all three ROS categories were less likely to be bothered by seeing jetskiers.
- 1999 visitors had no conflicts with boat anglers (down 2-12%).
- 1999 users were less likely to have conflicts with livestock except in the rural areas where negative encounters with livestock increased slightly.
- While visitors generally did not feel crowded, the perception of crowding went up very slightly in the rural areas and down in both the roaded natural and roaded modified areas.
- When crowding occurred, it generally happened in campsites.
- If the site were closed users responded the same in 1999 as in 1994 but a higher percentage of users indicated that choosing another site in the area was their first choice.
- Users in all three ROS areas show a higher attachment to place than the users in 1994.

#### Activity differences

**Roaded natural** top five activities in order:

- '94-95- Sightseeing, photography, walking/hiking, viewing wildlife, shore fishing.
- '99 - Sightseeing, photography, walking, viewing wildlife, auto/RV camping.

**Roaded modified** top five activities in order:

- '94-95 - Wade fishing, sightseeing, walking/hiking, photography, viewing wildlife.
- '99 - Sightseeing, viewing wildlife, photography, walking, bank angling.
- Wade fishing dropped out of the top five activities altogether and bank angling came in only as the fifth top activity in 1999.

**Rural** top five activities in order:

- '94-95 - Sightseeing, auto/RV camping, walking/hiking, wildlife viewing, photography.
- '99 - Sightseeing, viewing wildlife, auto/RV camping, walking, photography.
- There are no changes in the top five activities from 1994-95 to 1999.

#### Importance of site attribute differences

**Roaded natural** top five important site attributes:

- '94-95 - Cleanliness, camp/picnic conditions, facility maintenance, high degree of naturalness, condition of natural features.
- '99 - Cleanliness, condition of natural features, degree of naturalness, facility maintenance, wildlife viewing.

**Roaded modified** top five important site attributes:

- '94-95 - Cleanliness, privacy of area, high degree of naturalness, facility maintenance, camp/picnic conditions.
- '99 - Cleanliness, privacy of area, facility maintenance, condition of natural features, degree of naturalness.
- 1999 users placed more importance on the condition of natural features and slightly less on camp/picnic conditions.

**Rural** top five important site attributes:

- '94-95 - Cleanliness, camp/picnic conditions, facility maintenance, privacy of area, high degree of naturalness.
- '99 - Cleanliness, privacy of area, degree of naturalness, camp/picnic conditions, facility maintenance.
- 1999 respondents ranked similar site attributes as important.

Site conditions with highest satisfaction ratings--differences**Roaded natural** top five categories of satisfaction at the site:

- '94-95 - Natural features, high degree of naturalness, cleanliness, opportunity to view wildlife, low amount of development visible from water.
- '99 - Cleanliness, condition of natural features, degree of naturalness, camp/picnic conditions, privacy of area.
- Camp/picnic conditions emerged in 1999 while viewing wildlife dropped out of the top five.

**Roaded modified** top five categories of satisfaction at the site:

- '94-95 - Cleanliness, natural features, high degree of naturalness, facility maintenance, camp/picnic conditions.
- '99 - Cleanliness, camp/picnic conditions, condition of natural features, facility maintenance, degree of naturalness.
- Degree of naturalness came out higher in satisfaction for 1999 users.

**Rural** top five categories of satisfaction at the site:

- '94-95 - Natural features, cleanliness, high degree of naturalness, facility maintenance, camp/picnic conditions.
- '99 - Condition of natural features, cleanliness, degree of naturalness, facility maintenance, camp/picnic conditions.
- There was no difference in 1999 user satisfaction.

***Helena Region ROS Categories***  
***Roaded Natural, Roaded Modified, Rural***



### 1999 Demographic differences

- The user was slightly younger in all three ROS categories
- Overall, there were more professionals and fewer retirees
- Overall, visitors reported higher income
- There was a slightly greater proportion of Montana resident visitors in the roaded modified and rural categories
- Group sizes were larger in the roaded natural and rural categories

### 1999 Use differences

- More users were spending the night at the site than in the past (8% more in roaded natural, 32% more in roaded modified, 35% more in rural)
- If just spending the day, users spent more of the day at the sites in the roaded natural and roaded modified areas
- Reasons for choosing the site stayed the same
- The trip satisfaction index went up in all three categories from the slightly negative to the slightly positive
- More users in 1999 indicated a need for additional facilities. Roaded natural visitors suggested additional campsites, trash bins, and restrooms. Roaded modified visitors suggested showers, dump stations, and additional campsites. Rural users suggested showers, restrooms, and additional campsites.
- Visitors in 1999 were slightly more likely to say that disabled facilities were needed although less than 14% indicated this need.
- In general, encounters and satisfaction with encounters had similar patterns with a few significant exceptions. 1999 users were less likely to say they did not like seeing waterskiers in all three ROS categories. 1999 users were less likely to say they didn't like seeing jetskiers in the roaded natural but more like to say they didn't like them in the roaded modified. Rural users were more likely to indicate their dissatisfaction with seeing livestock in 1999. In all three categories more users did not mind seeing shoreline development.
- Users in all three ROS categories felt slightly more crowded in 1999 compared to 1994-95, with the rural category showing the most increase in perceived degree of crowding. Campsites were always where users felt the most crowded.
- 1999 users appear to be displaced less frequently than in 1994. Fewer 1999 users indicated there were sites they no longer visit from each ROS category.
- Behavioral responses to closure of this site differed in 1999 in the roaded modified and the rural areas, where 1999 users were more likely to choose another site somewhere else as opposed to visiting at some other time.
- Attachment to place indicators essentially remained the same with one exception: At roaded modified sites, visitors' evaluations of the statement, *the time I spend here could just as easily be spent somewhere else* went from negative (disagree) in 1994-95 to positive (agree) in 1999.
- Trip expenditures went up in each category. This can be explained partially by inflation but also reflects longer stays in 1999.

Activity differences**Roaded natural** top five activities in order:

- '94-95- Sightseeing, boat fishing, viewing wildlife, photography, powerboating/fishing from shore.
- '99 - Sightseeing, viewing wildlife, photography, walking, picnicking.
- 1999 users are more likely to be passive recreationists than in 1994.

**Roaded modified** top five activities in order:

- '94-95 - Boat fishing, auto/RV camping, sightseeing, viewing wildlife, swimming.
- '99 -Sightseeing, boat fishing, auto/RV camping, viewing wildlife, powerboating.
- 1999 recreation activities are fairly similar to 1994-95 activities

**Rural** top five activities in order:

- '94-95 - Boat fishing, shore fishing, auto/RV camping, sightseeing, viewing wildlife.
- '99 - Boat fishing, sightseeing, shore fishing, auto/RV camping, viewing wildlife.
- This category has not changed in the five-year period.

Importance of site attribute differences**Roaded natural** top five important site attributes:

- '94-95- cleanliness, facility maintenance, camp/picnic conditions, behavior of others, condition of natural features.
- '99 - cleanliness, condition of natural features, privacy of area, degree of naturalness, facility maintenance.
- 1999 visitors are more concerned about naturalness than 1994-95 users.

**Roaded modified** top five important site attributes:

- '94-95 - cleanliness, facility maintenance, camp/picnic conditions, behavior of others, privacy of area.
- '99 -cleanliness, facility maintenance, privacy of area, camp/picnic conditions, number of fish caught.
- 1999 users have similar concerns as 1999 users but they are slightly more concerned about number of fish caught.

**Rural** top five important site attributes:

- '94-95 - cleanliness, facility maintenance, camp/picnic conditions, behavior of others, privacy of area.
- '99 -cleanliness, number of fish caught, facility maintenance, privacy of area, camp/picnic conditions.
- 1999 users are more concerned about number of fish caught.

Site conditions with highest satisfaction ratings--differences**Roaded natural** top five categories of satisfaction at the site:

- '94-95 - natural features, viewing wildlife, cleanliness, facility maintenance, degree of naturalness.
- '99 - cleanliness, condition of natural features, facility maintenance, viewing wildlife, camp/picnic conditions.
- satisfaction with viewing wildlife and camp/picnic conditions emerged in 1999.

**Roaded modified** top five categories of satisfaction at the site:

- '94-95 - cleanliness, facility maintenance, camp/picnic conditions, viewing wildlife, natural features.
- '99 - viewing wildlife, cleanliness, condition of natural features, facility maintenance, camp/picnic conditions.
- satisfaction with conditions did not change for 1999 users.

**Rural** top five categories of satisfaction at the site:

- '94-95 - cleanliness, facility maintenance, camp/picnic conditions, little conflict with behavior of others, satisfied with behavior of others.
- '99 - cleanliness, facility maintenance, condition of natural features, viewing wildlife, camp/picnic conditions.
- 1999 users are more satisfied with the condition of natural features and wildlife viewing.

***Great Falls Region ROS Categories  
Roaded Natural, Roaded Modified, Urban***1999 Demographic differences

- The visitor was slightly younger in all three categories.
- Slightly more females responded to the survey in the roaded natural and roaded modified areas.
- Overall, there were more professionals and fewer retirees.
- Overall, visitors had higher incomes.
- The proportion of Montana resident visitors was slightly smaller in all three ROS categories.
- More users were at the site for the first time in 1999.

1999 Use differences

- All three ROS areas have a greater share of users who have been going to the site for more than 10 years.
- Slightly more users spent the night in urban areas while quite a few more spent the night in roaded modified areas.
- If just spending the day, urban respondents stayed longer in 1999.
- Overall, reasons for choosing the site stayed the same, however, in the roaded modified areas the most important reason changed from fishing in 1994-95 to scenic beauty in 1999.
- The trip satisfaction index went up in all three categories with roaded natural and roaded modified areas changing from slightly negative to slightly positive.
- Slightly more users in 1999 indicated a need for additional facilities. Roaded natural visitors suggested more bike trails, picnic tables, and restrooms. Roaded modified visitors suggested running water, trash bins, and showers. Urban respondents suggested water fountains, restrooms, and a snack bar/eatery.

- Roaded modified and urban visitors disliked seeing powerboats more in 1999, though the difference is small.
- Roaded modified users were less likely to be bothered by waterskiers in 1999; dropping from 40% who disliked waterskiers in 1994-95 to only 17% who disliked encountering waterskiers in 1999.
- Roaded modified users were less likely to be bothered by seeing jetskiers in 1999; dropping from 75% to only 29% who disliked their jetskier encounters in 1999.
- Roaded modified users were less likely to be bothered by shoreline development in 1999; dropping from 47% who disliked seeing development to only 29% who disliked shoreline development in 1999.
- Fewer people in 1999 said there were sites they no longer visited.
- If the site were closed, 1999 users were more likely to say they would visit at some other time but less likely to choose another site in the area or choose another site somewhere else.
- Visitors in all three ROS categories indicated they were more attached to the place than in 1994-95.

#### Activity differences

##### **Roaded natural** top five activities in order:

- '94-95- Sightseeing, shore fishing, other reasons, walking/hiking, photography.
- '99 - Sightseeing, walking, viewing wildlife, bank fishing, photography.
- 1999 visitors are much more likely to view wildlife than 1994-95 visitors.

##### **Roaded modified** top five activities in order:

- '94-95 - Sightseeing, photography, walking/hiking, river floating, picnicking.
- '99 - Sightseeing, walking, photography, picnicking, viewing wildlife.
- 1999 visitors were more likely to be viewing wildlife and less likely to be river floating.

##### **Urban** top five activities in order:

- '94-95 - Sightseeing, walking/hiking, wildlife viewing, photography, picnicking.
- '99 - Sightseeing, walking, viewing wildlife, visiting Lewis & Clark sites, photography.
- In 1994 Lewis & Clark recreation was not offered as an option but was the fourth most common activity in 1999.

#### Importance of site attribute differences

##### **Roaded natural** top five important site attributes:

- '94-95 - condition of natural features, cleanliness, facility maintenance, low residence visible from water, high degree of naturalness.
- '99 - cleanliness, condition of natural features, degree of naturalness, facility maintenance, wildlife viewing.
- In 1999, more respondents feel wildlife viewing is important at the site.

##### **Roaded modified** top five important site attributes:

- '94-95 - cleanliness, facility maintenance, camp/picnic conditions, condition of natural features, high degree of naturalness.
- '99 -cleanliness, degree of naturalness, privacy of area, number of fish caught, condition of natural features.

- In 1999, visitors place more importance on the privacy of the area and the number of fish caught .

**Urban** top five important site attributes:

- '94-95 - cleanliness, facility maintenance, camp/picnic conditions, condition of natural features, privacy of area.
- '99 - cleanliness, condition of natural features, degree of naturalness, facility maintenance, privacy of area.

Site conditions with highest satisfaction ratings--differences

**Roaded natural** top five categories of satisfaction at the site:

- '94-95 - low amount of development visible from water, high degree of naturalness, condition of natural features, little conflict with other users, facility maintenance.
- '99 - condition of natural features, cleanliness, privacy of area, behavior of other people, degree of naturalness.
- Satisfaction with cleanliness, privacy, and behavior of other people emerged in 1999.

**Roaded modified** top five categories of satisfaction at the site:

- '94-95 - cleanliness, condition of natural features, facility maintenance, camp/picnic conditions, behavior of other people.
- '99 - cleanliness, facility maintenance, condition of natural features, behavior of other people, camp/picnic conditions.
- satisfaction with conditions did not change for 1999 users.

**Urban** top five categories of satisfaction at the site:

- '94-95 - cleanliness, condition of natural features, facility maintenance, little conflict with other users, high degree of naturalness.
- '99 - cleanliness, facility maintenance, condition of natural features, behavior of other people, appropriateness of development.
- 1999 users had a higher satisfaction with all the top five conditions and rated behavior of other people and appropriateness of development higher in 1999.

In general, the only striking differences between 1994-95 and 1999 are visitor's evaluations of their encounters with other users. 1999 respondents are often much less likely to report that they disliked encountering a motorized use, even though the number of encounters has not significantly decreased. Visitors may have adjusted their expectations regarding motorized encounters, motorized users may have altered the way they recreate, or there may be other factors that we are not aware of.

## 6 – Economic Assessment of Recreation Use

### ***Introduction***

The recreation resources that exist in the planning corridor attract a large number of both resident and nonresident visitors to the area. Expenditures made by these visitors within the corridor generate considerable economic activity that in turn supports numerous jobs, either directly or indirectly. In many smaller communities, tourism expenditures constitute an important part of the local economy.

Tourism and recreation are major components of Montana's economic base. The nonresident travel and tourism market has shown considerable growth since the 1980s and is projected to maintain this trend. Resident expenditures for recreation trips within Montana also add a substantial amount to this component. The number of resident recreation trips is projected to increase in direct proportion to Montana's population growth.

This section of the report illustrates the current trends and characteristics of the tourism and recreation industries, the current economic conditions that exist within the corridor, and the economic impacts resulting from recreational use of some of the corridor's resources.

### ***Tourism and Recreation in Montana***

#### **Non-Resident Tourism**

In 1999, close to 9.5 million people visited Montana. These visitors spent over \$1.5 billion during their stay (ITRR 2000). The economic activity generated by this expenditure directly supported 26,400 full-time jobs, with a payroll of over \$392 million. Nonresident tourism has increased substantially over the past decades (Table 5). The rapid growth rate of the early nineties has leveled out, and an annual visitation increase of about two percent is projected for the current year (Nickerson 2000).

Natural resources form the basis of Montana's tourism industry. Moisey and Yuan (1991) found that over half of the economic impact of non-resident tourism results from wild-land related activities (e.g. camping, hiking). The most common outdoor recreation activities that nonresidents participated in during 1995 were sightseeing, visiting historical and interpretive sites, photography, viewing wildlife, and camping. These activities were also some of the more popular recreation activities mentioned by visitors to the river corridor in 1999.

The nonresident component of visitation to the river corridor has increased by 8 percent since the 1994-95 Missouri Madison Recreation Survey, and is expected to continue to increase in the future. There are several reasons for this assumption. First, almost one third of nonresidents visit Yellowstone National Park and the surrounding area, of which the Missouri Madison corridor is part. Secondly, Interstate 15 is the major north-south travel corridor for tourist travel in the state, and provides ready access to the river corridor in both the Helena and Great Falls regions. Additionally, the impact of promotion and several recent movies has popularized Montana as a vacation destination.

### Resident Tourism and Recreation

In 1998-99, Montana residents took an estimated 9.2 million pleasure trips (McMahon et al. 1999). These trips resulted in an estimated \$255 million being spent by Montanans in the state. The most popular recreation activities were visiting historical/interpretive sites, nature photography and day hiking.

Fishing, hunting and wildlife associated recreation participation by Montana residents has decreased somewhat in the last five years. Hunting and fishing participation show a decrease of 9 and 5 percent respectively, while wildlife watching shows an increase of 7 percent. On a national and regional level, fishing participation exhibits a tremendous increase, while hunting and wildlife watching show decreases on both levels (Table 6).

Population growth for the Rocky Mountain region (Colorado, Idaho, Montana, Utah and Wyoming) has been increasing over the past 15 years, and is estimated to increase by 15 percent in the period from 1998 to 2005.

Population increases in Montana have been somewhat lower than for the region, but are similar for the counties

**Table 5. Nonresident visitation to Montana**

Year	Non-resident Visitation	Percent Change
1985	5,964,696	
1986	5,922,943	-0.7%
1987	6,130,246	3.5%
1988	6,375,456	4.0%
1989	6,522,092	2.3%
1990	7,167,779	9.9%
1991	7,519,000	4.9%
1992	8,181,000	8.8%
1993	8,375,000	2.4%
1994	8,657,000	3.4%
1995	8,772,000	1.3%
1996	8,696,000	-0.9%
1997	8,889,000	2.2%
1998	9,279,000	4.4%
1999	9,486,000	2.2%

Source: ITRR

**Table 6. Recreational Participation Trends**

	Fishing	Hunting	Wildlife Watching
<b>National</b>			
1985 to 1990	10%	3%	9%
1991 to 1996	36%	-1%	-19%
<b>Mountain States</b>			
1985-1990	9%	-1%	7%
1991-1996	70%	-1%	-8%
<b>Montana</b>			
1985-1990	6%	13%	31%
1991-1996	-5%	-9%	7%

Source: 1991 and 1996 National Survey of Fishing, Hunting, and Wildlife Associated Recreation Trends. State and Regional Trends. U.S. Fish and Wildlife Service. 1993, 1998.

containing the river corridor. Generally speaking, the counties in the lower portion of the corridor have exhibited the higher growth rates over the past 15 years (Table 7).

**Table 7. Total Population**

County	Years					Percent Changes		
	1985	1990	1995	1997	1998	85-95	95-97	95-98
Gallatin	48,994	50,463	59,406	61,196	62,545	21%	3%	5%
Madison	5,877	5,989	6,662	6,878	6,875	13%	3%	3%
Broadwater	3,494	3,318	3,885	4,080	4,132	11%	5%	6%
Lewis & Clark	46,912	47,495	52,785	53,319	53,655	13%	11%	2%
Cascade	79,591	77,691	81,091	79,039	78,983	2%	-2%	-3%
Chouteau	5,924	5,452	5,492	5,242	5,187	-7%	-4%	-6%
CORRIDOR	190,792	190,408	209,321	209,754	211,377	10%	0.2%	1%
MONTANA	822,320	799,065	870,281	878,730	880,453	6%	1%	1%
ROCKY MOUNTAIN	7,168,500	7,298,900	8,211,700	8,526,065	8,660,030	14%	4%	5%

Source: U.S. Census

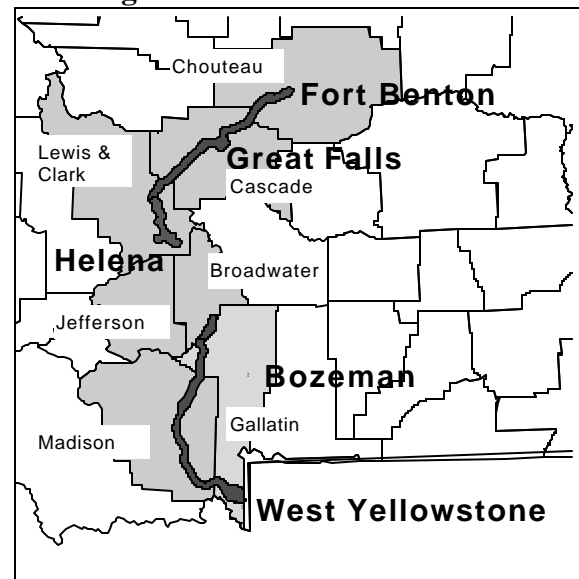
Increases in resident populations in the state and within the river corridor, combined with increases in recreation participation have resulted in an increased demand for recreational opportunities within Montana and the river corridor.

**Current Economic Conditions**

The planning corridor touches or is contained by the six Montana counties shown in Figure 38. These are, starting from the south, Gallatin, Madison, Broadwater, Lewis & Clark, Cascade, and Chouteau Counties. The current economic conditions and trends in the six-county area, in Montana, and in the Rocky Mountain region are discussed below. **All dollar amounts are stated in 1999 currency to illustrate any real changes that have occurred.**

Employment data are only available for broad industry aggregations such as the retail or service sectors. Income data is shown for the specific industries where recreationists typically spend their money.

**Figure 25. Counties Adjacent to the Planning Corridor**



**Total Personal Income**

Total personal income (TPI) is income from all sources. It includes, among other things, wages and salaries, dividend interest and rents, and transfer payments. TPI is a measure of the overall personal wealth in a region.



TPI in Montana has been growing since 1985, but at a slightly slower rate than for the surrounding states. For the period 1985 to 1995, TPI in Montana grew by 38 percent, compared to a 41 percent growth in the region. TPI growth for the corridor outpaces the growth of the state, as well as the region. The counties of Gallatin and Broadwater have shown increases in TPI far greater than the state, the corridor, and the region. The remaining counties, especially Cascade and Madison counties, have experienced growth rates far lower (Table 8).

**Table 8. Total personal income (\$thousands 1999).**

County	Years				% Change	
	1985	1990	1995	1997	85-95	95-97
Gallatin	683,990	775,649	1,159,635	1,319,130	70%	14%
Madison	69,820	76,527	95,028	103,051	36%	8%
Broadwater	37,620	44,322	60,405	72,270	61%	20%
Lewis & Clark	743,610	773,356	1,072,138	1,153,577	44%	8%
Cascade	1,241,950	1,273,000	1,601,760	1,709,602	29%	7%
Chouteau	85,180	109,713	120,977	127,955	42%	6%
CORRIDOR	2,862,170	3,052,567	4,109,943	4,485,585	44%	9%
MONTANA	11,476,970	12,027,866	15,881,282	17,275,913	38%	9%
ROCKY MOUNTAIN	124,152,556	135,135,057	174,644,814	199,598,302	41%	14%

Source: U.S. Department of Commerce, Bureau of Economic Analysis

### Per Capita Personal Income

Per capita personal income (PCI) is a measure of the level of individual wealth. It is the TPI of an area divided by the population. PCI is a better measure of the wealth of a region than TPI because it provides a standard that is comparable among geographic areas of various sizes, whether they are counties, states, or regions.

Montana's overall PCI is lower than for the Rocky Mountain region as a whole. During the 1985-95 period, Montana experienced a higher growth rate than the region, but this rate has slowed down recently. PCI in the corridor grew rapidly in the eighties and early nineties, and is now higher than for the state as a whole. Broadwater County has shown a growth rate of over 60 percent in PCI since 1985, the greatest in the corridor, but is still lagging behind the other counties. Chouteau County is the richest of the corridor counties on a per capita basis, with a PCI almost 30 percent over the state figure, and 14 percent over the corridor average. Madison County has exhibited the least growth since 1985, with an increase in CPI of only 27 percent (Table 9).

**Table 9. Per capita personal income (1999\$).**

County	Years				% Change	
	1985	1990	1995	1997	85-95	95-97
Gallatin	14,195	15,289	19,564	21,556	38%	10%
Madison	11,754	12,765	14,147	14,983	20%	6%
Broadwater	10,989	13,330	15,600	17,713	42%	14%
Lewis & Clark	16,213	16,262	20,348	21,635	26%	6%
Cascade	15,379	16,379	19,824	21,630	29%	9%
Chouteau	18,010	20,135	22,424	24,410	25%	9%
CORRIDOR	15,021	15,053	19,648	21,363	31%	9%
MONTANA	13,963	15,038	18,286	18,872	31%	3%
ROCKY MOUNTAIN	16,908	17,956	21,229	23,410	26%	10%

Source: U.S. Department of Commerce, Bureau of Economic Analysis

### Total Labor Income

Total labor income (TLI) is a measure of earnings within an area. It is less than TPI because it is a measure of earned income (i.e. wages and salaries, proprietors' income). While the Rocky Mountain Region has seen a healthy growth in TLI since 1985, Montana's growth has been lagging some, as has the average for the corridor. The counties within the river corridor outperformed the state between 1985 and 1995, with the exception of Cascade and Lewis & Clark counties. The low growth rates here brought the rate for the corridor below that of the state. Broadwater and Chouteau both experienced exceptional increases of 116 and 226 percent, respectively. Between 1995 and 1997, the growth rate slowed down, and generally speaking the corridor showed increases on par or lower than that of the state and the region. Again, Broadwater County is an exception, with a growth rate of 28 percent (Table 10).

**Table 10. Total Labor Income (\$thousands 1999)**

County	Years				% Change	
	1985	1990	1995	1997	85-95	95-97
Gallatin	397,526	434,893	641,904	749,436	61%	17%
Madison	23,911	29,052	34,569	39,331	45%	14%
Broadwater	11,182	16,012	24,117	30,769	116%	28%
Lewis & Clark	543,382	542,297	12,907	768,202	31%	8%
Cascade	771,472	769,165	909,710	950,276	18%	4%
Chouteau	8,712	17,799	28,431	29,924	226%	5%
CORRIDOR	1,756,185	1,809,218	2,351,638	2,567,938	34%	9%
MONTANA	6,350,995	6,643,141	8,607,606	9,430,555	36%	10%
ROCKY MOUNTAIN	79,346,856	85,264,848	111,290,004	127,979,169	40%	15%

Source: U.S. Department of Commerce, Bureau of Economic Analysis

## Employment

Employment grew substantially in the region and somewhat less in Montana in the period since 1985. Between 1985 and 1995, the corridor counties enjoyed a growth in employment which in most cases far exceeded that of the state and the region. Notable exceptions are Chouteau and Cascade counties. The growth rate slowed down for the 1995-1997 period, when only two counties, Gallatin and Broadwater, had growth rates which exceeded that of the region. Gallatin County exhibited the largest growth rate for the entire period at 71 percent (Table 11).

**Table 11. Total Employment**

County	Years				% Change	
	1985	1990	1995	1997	85-95	95-97
Gallatin	26,909	31,591	42,455	46,072	58%	9%
Madison	2,753	2,855	3,488	3,677	27%	5%
Broadwater	1,568	1,566	1,961	2,190	25%	12%
Lewis & Clark	27,827	29,886	36,163	37,348	30%	3%
Cascade	41,079	43,462	48,451	48,735	18%	1%
Chouteau	2,375	2,456	2,795	2,860	18%	2%
CORRIDOR	102,511	111,816	135,313	140,882	32%	4%
MONTANA	406,089	429,642	512,609	534,091	26%	4%
ROCKY MOUNTAIN	3,150,380	3,468,569	4,063,769	4,351,737	29%	7%

Source: U.S. Department of Commerce, Bureau of Economic Analysis

## Retail Trade

The retail trade sector has been growing in the region and in the state over the past 15 years, and patterns here closely follow population trends (Swanson 1991).

Growth trends in retail labor income were highest in Gallatin, Chouteau and Madison counties, and lowest in Broadwater and Cascade counties. This pattern is mirrored by the growth in retail employment, with the greatest growth occurring in Gallatin County and the lowest rate in Broadwater County (Tables 12 and 13).

**Table 12. Retail Labor Income (\$thousands 1999)**

County	Years				% Change	
	1985	1990	1995	1997	85-95	95-97
Gallatin	79,158	84,311	126,958	140,579	60%	11%
Madison	4,777	5,356	7,080	7,957	48%	12%
Broadwater	2,522	2,020	2,673	2,692	6%	1%
Lewis & Clark	63,978	66,862	81,433	88,069	27%	8%
Cascade	129,029	123,271	140,006	149,633	9%	7%
Chouteau	3,074	3,346	4,576	4,729	49%	3%
CORRIDOR	282,538	285,164	362,726	393,659	28%	9%
MONTANA	1,076,677	1,015,484	1,300,469	1,425,578	21%	10%
ROCKY MOUNTAIN	10,067,994	9,932,784	13,324,940	15,244,353	32%	14%

Source: U.S. Department of Commerce, Bureau of Economic Analysis

**Table 13. Retail Employment**

County	Years				% Change	
	1985	1990	1995	1997	85-95	95-97
Gallatin	5,335	6,199	9,114	9,678	71%	6%
Madison	393	432	588	639	50%	9%
Broadwater	269	220	336	324	25%	-4%
Lewis & Clark	4,677	5,000	6,259	6,468	34%	3%
Cascade	7,592	8,640	10,375	10,699	37%	3%
Chouteau	265	300	364	379	37%	4%
CORRIDOR	18,531	20,791	27,036	28,187	46%	4%
MONTANA	71,292	76,354	100,387	105,369	41%	5%
ROCKY MOUNTAIN	544,475	607,201	770,445	814,449	42%	6%

Source: U.S. Department of Commerce, Bureau of Economic Analysis

### Service Sector

During the period from 1985 to 1995, growth in service sector labor income was spectacular, not only in the Rocky Mountain region, but in Montana as well. Although some of the corridor counties, most notably Chouteau, experienced a growth rate lower than the state average, the overall growth exceeded that of the state (Table 14).

**Table 14. Service Sector Labor Income (\$thousands 1999)**

County	Years				% Change	
	1985	1990	1995	1997	85-95	95-97
Gallatin	103,515	135,875	210,499	249,727	103%	19%
Madison	5,054	5,901	8,665	10,281	71%	19%
Broadwater	2,667	3,133	5,045	5,104	89%	1%
Lewis & Clark	136,421	162,909	238,877	262,531	75%	10%
Cascade	219,704	237,723	315,221	337,908	43%	7%
Chouteau	4,187	3,672	5,055	5,505	21%	9%
CORRIDOR	471,548	549,211	783,362	873,053	66%	11%
MONTANA	1,751,789	1,957,347	2,736,206	3,091,952	56%	13%
ROCKY MOUNTAIN	18,917,308	24,020,989	34,050,571	40,158,903	80%	18%

Source: U.S. Department of Commerce, Bureau of Economic Analysis

When it comes to service sector employment, the picture is similar. The Rocky Mountain region has experienced rapid growth over the last 15 years, and although the growth in Montana has not been quite as strong, it is none the less a healthy development. The corridor counties exhibit a growth rate that is stronger than that of the state, with the exception of Chouteau County which saw a growth rate of only 23 percent over the 1985-97 period, far lower than the state average of 59 percent (Table 15).

**Table 15. Service Sector Employment**

County	Years				% Change	
	1985	1990	1995	1997	85-95	95-97
Gallatin	6,694	8,341	12,001	13,300	79%	11%
Madison	494	527	766	832	55%	9%
Broadwater	205	255	435	460	112%	6%
Lewis & Clark	7,989	9,379	12,174	12,608	52%	4%
Cascade	10,822	12,153	15,178	15,416	40%	2%
Chouteau	421	396	500	516	19%	3%
CORRIDOR	26,625	31,051	41,054	43,132	54%	5%
MONTANA	101,967	117,466	152,275	162,298	49%	7%
ROCKY MOUNTAIN	690,053	870,847	1,100,561	1,215,745	59%	10%

Source: U.S. Department of Commerce, Bureau of Economic Analysis

### Food Stores

Groceries and snacks comprise one of the major purchase categories for recreationists in the river corridor. Montana experienced a healthy growth in this sector over the past 15 years, but this growth rate was only partially reflected in the corridor counties. Cascade County saw a sizeable decline between 1985 and 1995, and a positive growth rate in 1995-97 has not been sufficient to make up for the loss. Madison County on the other hand, experienced a healthy 27 percent increase in both periods, totaling 61 percent from 1985 to 1997 (Table 16).

**Table 16. Food Stores Labor Income (\$thousands 1999)**

County	Years				% Change	
	1985	1990	1995	1997	85-95	95-97
Gallatin	9,780	10,218	12,779	15,175	31%	19%
Madison	640	563	815	1,031	27%	27%
Broadwater	425	426	464	514	9%	11%
Lewis & Clark	10,842	9,677	11,926	13,138	10%	10%
Cascade	28,317	25,942	23,293	24,183	-18%	4%
Chouteau	749	620	967	1,031	29%	7%
MONTANA	135,325	130,492	184,844	199,500	37%	8%

Source: U.S. Department of Commerce, Bureau of Economic Analysis

### Eating and Drinking Establishments

Bars and restaurants comprise another industry that benefits greatly from recreationists visiting the river corridor. Montana as a whole has experienced a healthy growth in this sector since 1985, as have the corridor counties. However, this growth has taken a downturn for some since 1995, most notably for Broadwater County, where a strong negative trend was observed in labor income from this sector between 1995 and 1997 (Table 17).

**Table 17. Eating and Drinking Places Labor Income (\$thousands 1999)**

County	Years				% Change	
	1985	1990	1995	1997	85-95	95-97
Gallatin	17,826	19,583	32,247	35,811	81%	11%
Madison	(D)	1,524	2,346	2,517	N/A	7%
Broadwater	994	693	1,176	1,056	18%	-10%
Lewis & Clark	17,667	16,618	21,347	23,173	21%	9%
Cascade	24,479	26,731	34,023	36,100	39%	6%
Chouteau	576	477	873	1,002	52%	15%
MONTANA	225,289	217,242	331,441	360,345	47%	9%

Source: U.S. Department of Commerce, Bureau of Economic Analysis

(D) Data suppressed to maintain confidentiality

### Hotels and Lodging

Over the past 15 years, the growth in the lodging industry as been varied. In the 1985-95 period, Gallatin County saw an increase in labor income in this sector of over 100 percent, while Cascade County experienced a decrease of 9 percent. The growth rate for the state for this period was 19 percent. Any meaningful trend is hard to detect due to missing data. As for the 1995-97 period, all corridor counties experienced growth rates considerably higher than the state, except for Lewis & Clark County which saw a slight decline. There was no data available for Chouteau County for the entire period (Table 18).

**Table 18. Hotels and Lodging Places Labor Income (\$thousands 1999)**

County	Years				% Change	
	1985	1990	1995	1997	85-95	95-97
Gallatin	12,077	17,944	25,072	30,506	108%	22%
Madison	1,018	1,160	1,632	2,095	60%	28%
Broadwater	(D)	228	574	651	N/A	13%
Lewis & Clark	(D)	4,622	5,557	5,532	N/A	-0.4%
Cascade	7,539	8,423	6,884	8,694	-9%	26%
Chouteau	(D)	(D)	(D)	(D)	N/A	N/A
<b>MONTANA</b>	<b>103,154</b>	<b>94,426</b>	<b>122,651</b>	<b>132,998</b>	<b>19%</b>	<b>8%</b>

Source: U.S. Department of Commerce, Bureau of Economic Analysis

(D) Data suppressed to maintain confidentiality

### Amusement and Recreation Services

This sector of the economy saw rapid growth both in Montana and in the corridor counties, with only one exception. Gallatin County experienced a decline of 10 percent for the 1985-95 period, the result of a 18 percent decline between 1985 and 1990 which was only partially offset by a 9 percent increase from 1990 and 1995. During the 1995-97 period, the corridor largely outpaced the state's growth in the sector (Table 19).

**Table 19. Amusement and Recreation Services Labor Income (\$thousands 1999)**

County	Years				% Change	
	1985	1990	1995	1997	85-95	95-97
Gallatin	12,723	10,496	11,406	14,165	-10%	24%
Madison	194	249	538	645	178%	20%
Broadwater	58	103	217	254	276%	17%
Lewis & Clark	2,399	3,641	7,583	8,442	216%	11%
Cascade	3,114	4,279	8,269	9,315	166%	13%
Chouteau	(D)	144	189	191	N/A	1%
<b>MONTANA</b>	<b>36,284</b>	<b>53,908</b>	<b>105,406</b>	<b>119,262</b>	<b>191%</b>	<b>13%</b>

Source: U.S. Department of Commerce, Bureau of Economic Analysis

(D) Data suppressed to maintain confidentiality

### Economic Mix

The composition of an area's economy provides insights into the type and magnitude of economic dependence upon certain industries and the diversity of the local economy. In general, an economy that is diversified tends to be more stable over time than one that is tied to a single industry. This is especially true if that industry is characterized by cyclical patterns of growth and decline.

Table 20 displays the proportion of total labor income that is derived by each sector of the economy for the corridor counties, the corridor as a whole, and for the state of Montana. Generally, larger geographic regions have more diverse economies. This can be seen when comparing the economic mix for Montana and the aggregation of the corridor counties. The most balanced composition can be seen at the state level.

More populated urban counties are characterized by greater economic diversity, as well as more emphasis on the service, retail and FIRE (Finance, Insurance and Real Estate) sectors. Smaller rural counties tend to have economies dominated by one single industry, as is the case with Chouteau County, where farming is responsible for a full 55 percent of labor income.

**Table 20. Proportion of Labor Income by Economic Sector (1997)**

	Gallatin	Madison	Broadwater	Lewis & Clark	Cascade	Chouteau	Corridor	Montana
Farm earnings	2%	-1%	13%	0.3%	2%	55%	3%	3%
Agricultural services, forestry, fisheries	1%	N/A	N/A	0.3%	N/A	2%	0.4%	1%
Mining	0.3%	N/A	N/A	0.4%	N/A	N/A	0%	3%
Construction	12%	22%	7%	6%	6%	2%	8%	8%
Manufacturing	9%	5%	26%	4%	4%	1%	6%	8%
Transportation and public utilities	5%	12%	10%	5%	6%	2%	5%	8%
Wholesale trade	5%	2%	5%	3%	6%	4%	5%	5%
Retail trade	15%	22%	7%	10%	14%	7%	13%	13%
FIRE*	5%	8%	3%	8%	8%	3%	7%	6%
Services	26%	28%	14%	30%	31%	8%	29%	27%
Government, government enterprises	20%	2%	15%	32%	24%	16%	25%	19%

Source: U.S. Department of Commerce, Bureau of Economic Analysis

\*FIRE=Finance, Insurance and Real Estate



## **Economic Impacts from Recreational Use of Surveyed Corridor Sites**

Visitors to the corridor spent a considerable amount of money in the surrounding towns and recreation facilities. In addition, while en route to the corridor, many visitors bought gas, groceries and retail items outside the planning region. Visitors were asked to record the amount and location of all trip expenditures made in Montana. Expenditures made outside the region do not directly generate economic activity within the planning corridor, and were therefore not included in the estimates. The economic impacts from recreational use within the region are based solely on the expenditures that occurred there.

The estimates of economic impact were calculated only for those sites sampled during the 1999 Missouri Madison Recreation Survey. As use estimates for non-sampled sites do not exist, the economic contribution from recreational use of these sites was not calculated.

### **Overview of the methodology**

Visitor expenditure information was collected as part of the visitor survey. Average group trip expenditures for each region were calculated for the summer season. Total expenditures were then calculated by multiplying the average group expenditure by estimated use levels for each region.

The economic impacts to the corridor from visitor expenditures were then estimated using the IMPLAN economic input/output model from MIG, Inc. The economic impacts include direct, indirect, induced, and total impacts in terms of industry output, labor income, and employment.

### **Visitor Expenditures**

Average group expenditures were estimated from the survey data for each region. Various categories were provided for expenditure allocations, and visitors were asked to list the location where each expenditure was made.

Several adjustments were made to the average trip expenditures to better reflect the economic impact of recreation use of corridor resources. Expenditures made outside the corridor were eliminated to avoid overestimating spending levels. Adjustments were made to avoid overestimating visitor expenditures from respondents visiting multiple sites during their trip. As many visitors may have stayed at more than one site during their visit, it would be inappropriate to attribute their total trip expenditure to the site where they were sampled. Total trip expenditures were adjusted to reflect the portion of the trip spent at the survey site. As an example, a visitor may only spend one night at a site in the corridor during a one-week camping trip, so only one-seventh of their expenditures should be contributed to that site (Table 21).

**Table 21. Average Group Trip Expenditure - All Users (\$1999)**

	1999 Survey			1994-95 Survey		
	Hebgen/ Ennis	Helena	Great Falls	Hebgen/ Ennis	Helena	Great Falls
Food, drink	71.49	48.45	27.33	63.87	32.25	23.62
Motels, campgrounds	42.74	24.81	28.86	36.76	8.53	13.58
Gas and transportation	61.38	35.63	24.27	42.62	23.22	15.20
Guide or outfitter	4.96	4.82	11.61	25.20	0.40	11.06
License or entrance fees	8.80	8.00	2.84	13.39	8.32	3.21
Retail goods	21.31	17.37	11.09	42.85	11.10	12.34
Other expenditures	3.78	2.05	2.10	6.92	3.06	1.04
Total average expenditures	214.46	141.13	108.1	231.61	86.88	80.05

Source: 1999 and 1994-95 Missouri Madison Recreation Surveys

In comparing the expenditure levels for the 1994-95 and the 1999 surveys, the one obvious feature is the lack of clear trends. Large differences both on the positive and the negative side can be observed across the regions, making it difficult to offer just one explanation that covers the whole picture.

Part of the observed increases in expenditures can be attributed to improvements in the survey instrument. In the 1994-95 survey, there were only seven expenditure categories, including one for "Food and Drink", one for "Gas and Transportation" and one for "Motels and Campgrounds". The 1999 survey provided 11 categories, including two categories for food and drink ("Restaurant, bar" and "Groceries, snacks"), three for gas and transportation expenses ("Auto/RV rental and repair", "Transportation expenses" and "Gas, oil") and two for motels and campgrounds ("Motel/hotel/BB" and "Campground/RV park"). By asking more specific questions, the 1999 survey obtained more specific and inclusive answers.

One increase in particular seems disproportionately large: spending on guides/outfitters in the Helena region increased 1105% from 1994/95 to 1999. Looking at Table 21 however, the reader will notice that this change reflects an increase in average expenditure of only \$4.42, from \$.40 in 1994/1995 to \$4.82 in 1999, in reality a modest increase (Table 22).

As for the marked decline in some expenditure categories, there are various explanations. In the category for "Other expenditures", the decreases are likely caused by a shift rather than a reduction. In the old less-specific instrument, many expenditures had to be lumped in the "Other" category, whereas in the new survey these expenses could be more accurately attributed to other categories.

The largest decrease is seen in the category for guide and outfitter fees in the Hebgen/Ennis area, and for obvious reasons. The 1999 survey focused on reservoirs and adjacent sites in this area rather than river sites. In 1994/1995, the majority of outfitted/guided users was found at the river sites. By excluding these sites from the 1999 study, a large portion of expenditures on outfitters and/or guides was excluded as well. In addition, the 1999 sample size was only half of what it was in 1994/95. This reduction causes any differences between the two to be magnified.

**Table 22. Percent Change in Average Group Trip Expenditure - All Users**

	Hebgen/ Ennis	Helena	Great Falls
Food, drink	12%	50%	16%
Motels, campgrounds	16%	191%	113%
Gas and transportation	44%	53%	60%
Guide or outfitter	-80%	1105%	5%
License or entrance fees	-34%	-4%	-12%
Retail goods	-50%	57%	-10%
Other expenditures	-45%	-33%	102%
Total average expenditures	-7%	62%	35%

Source: 1999 and 1994-95 Missouri Madison Recreation Surveys

To derive total expenditures for recreational users of the surveyed sites, the average group expenditures were multiplied by the use level for each region. Added up, this represents an estimate of total recreational expenditures for the corridor for the 1999 summer season (Table 23). Estimates for the 1994-95 survey were given for the full year makes comparisons meaningless. Comparison of average expenditures was possible because these were broken out by season in the 1994/95 study.

**Table 23. Total Expenditures - All Users (\$1999)**

	Hebgen/ Ennis	Helena	Great Falls	Total
Food, drink	8,187,535	4,469,367	6,650,318	19,307,221
Motels, campgrounds	4,894,884	2,288,648	7,022,619	14,206,151
Gas and transportation	7,029,667	3,286,761	5,905,716	16,222,144
Guide or outfitter	568,054	444,631	2,825,108	3,837,792
License or entrance fees	1,007,838	737,976	691,069	2,436,882
Retail goods	2,440,570	1,602,330	2,698,574	6,741,475
Other expenditures	432,912	189,106	511,001	1,133,020
Total expenditures	24,561,460	13,018,819	26,304,405	63,884,685

Source: 1999 and 1994-95 Missouri Madison Recreation Surveys

## Economic Impacts

The economic impacts to the counties surrounding the corridor resulting from recreational use of selected survey sites within the corridor were estimated using the IMPLAN input-output economic model. The IMPLAN data base contains county-level economic data, derived from the national input-output model and the 1996 Census of Business. IMPLAN allows the user to define an economic region based on single or multiple counties, and estimates economic impacts in terms of changes in final demand within these regions. Spending by visitors introduces exogenous dollars into the economy, and can be treated as changes in final demand. IMPLAN estimates the direct, indirect, and induced effects of these changes. These important secondary effects are then used to derive multipliers for industry output, employee compensation and employment.

The six counties that surround the river corridor were used to define the economic region for impact analysis. Visitor expenditures were estimated for each of the three areas within the corridor, and the economic impacts were estimated for the corridor as a whole.

The IMPLAN county-level database is derived from the 1996 Census of Business, and thus uses 1996 price levels. Although today's prices no longer have to be deflated for input into the IMPLAN model, the estimated regional impacts need to be inflated as they are output in 1996 dollars. The output is achieved by "bridging" the seven expenditure categories, that is, distributing them to the appropriate economic sectors contained within the IMPLAN database. These allocations were developed by ITRR (Moisey and Yuan 1990; ITRR 1995), and are based on production function data provided by the U.S. Department of Commerce (Bureau of Economic Analysis).

IMPLAN estimates *direct*, *indirect* and *induced* economic impacts for industry output, labor income and employment. *Direct effects* result from the initial purchases of goods and services by recreationists, for instance a restaurant meal.

Businesses that provide these goods and services must purchase inputs (i.e. raw materials and labor) from their suppliers. For this example, the restaurant manager needs to purchase food ingredients (fish, meats, etc.) and labor (cooks and wait staff). These purchases result in *indirect effects*, that is, suppliers of these inputs are indirectly affected by recreationists' expenditures.

*Induced effects* result from the increased spending of persons employed in the directly and indirectly affected businesses, such as the wait staff, the cooks and the employees of the food products supplier. This chain of buying and selling continues until the original expenditures completely leak out of the region in the form of purchases, interests, profits, rents and taxes paid outside the region.

The sum of the indirect and induced impacts are defined as total secondary impacts (Walsh 1986). The ratio of the direct impact to the total impact is called a multiplier. Multipliers give an indication of how much "leakage" occurs from a region as a result of spending. The more leakages an industry has, the smaller the multiplier. Stated differently, the lower the secondary effects are relative to the direct effects, the lower the

multiplier. The multiplier for a region with a diverse economic base will be larger because regional demand can be satisfied within the region, rather than through imports.

Multipliers can be calculated for numerous economic indicators. The ratio of direct impact to total impacts is called an impact multiplier (Walsh 1986). Just as the additional employment earnings are generated as a result of direct expenditures, additional employee compensation is produced from secondary spending. The ratio of direct employee income to total employee income is called a personal income multiplier. Employment is generated by each level of impact, producing an employment multiplier, which is defined as the ratio of direct to total employment.

Separate IMPLAN estimates were made for all recreational use that occurred at the sampled sites, as well as for several popular recreational activities in the corridor. These were angling, wildlife viewing, river floating and camping. The following sections summarize the economic impacts for each type of recreation use within the corridor.

### **Economic Impacts from All Recreational Use**

The economic impact estimated from the 1999 Missouri Madison Recreation Survey is considerably higher than the estimate resulting from the 1994-95 survey. The significant increase, discounting inflation, is due in part to improved information resulting from the 1999 survey. Respondents were prompted for more information, and were also provided with more categories for reporting their expenditures. This resulted in better data. Any differences in distribution is due to the IMPLAN modeling software being updated and improved. Current estimates may seem off in comparison to earlier ones, or vice versa, but the reader is cautioned to bear in mind that each estimate represents the best estimate possible at the time it was calculated, considering the information and resources available.

Total recreational use of the six counties surrounding the river corridor contributes to the economic activity of the area, supporting approximately 1,520 jobs. This amounts to 1.1 percent of total employment in the area, and 1.2 percent of total labor income (Table 24). Table 25 provides a comparison of the total economic impact generated by visitors to the planning corridor in 1994/95 and 1999. Impact figures for 1994/95 cover both summer and winter spending, so the difference is somewhat understated. However, the majority of expenditures occur in the summer season so the 1994/95 impacts are only moderately exaggerated. Please refer to the previous section titled "Economic Impacts" for a detailed explanation of the various types of economic impacts.

**Table 24. Economic Impact—All Users (\$1999)**

<b>1999</b>	<b>Direct Impact</b>	<b>Indirect Impact</b>	<b>Induced Impact</b>	<b>Total Impact</b>	<b>Multipliers</b>
Output	51,167,760	12,549,076	14,470,966	78,187,802	1.53
Labor Income	17,159,555	3,875,961	5,096,291	26,131,807	1.52
Employment (jobs)	1,106	170	244	1,520	1.37

Source: 1999 Missouri Madison Recreation Survey

**Table 25. Changes in Economic Impact—1994/95 to 1999 (\$1999)**

	1994/95 Total Impact	1999 Total Impact	% Change in Total Impact
Output	66,175,717	78,187,802	18%
Labor Income	21,509,596	26,131,807	22%
Employment (jobs)	1,363	1,520	12%

Source: 1999 and 1994/95 Missouri Madison Recreation Survey

### Economic Impacts From Selected Recreation Activities

The following sections contain the estimates of the economic impacts from visitors who participated in angling, wildlife viewing, river floating, and camping in the Missouri Madison corridor. These activities were chosen because they were the most popular corridor-wide. Estimates are based on the expenditures and number of visitors who reported engaging in each of the activities. **As visitors could have participated in any or all of these activities, the resulting economic impacts for each activity cannot be attributed solely to that activity as some overlap does occur.**

#### *Economic Impact from Angling*

Angling was one of the most frequently mentioned recreation activities that visitors engaged in while in the river corridor. About half of all visitors mentioned they fished, either from the riverbank, or using waders or a boat. In the Helena area, angling was the primary recreation activity, involving 71 percent of visitors.

On average, anglers spent more per trip than visitors in general. Anglers visiting the Hebgen-Ennis area had the largest expenditures per trip, and spent the most on food and drink, followed by gas and transportation. Helena anglers spent the least of any group, anywhere, on motels and campgrounds (Table 26).

**Table 26. Average Angler Group Trip Expenditure (\$1999)**

	Hebgen/ Ennis	Helena	Great Falls
Food, drink	78.06	44.06	48.28
Motels, campgrounds	35.41	12.87	40.42
Gas and transportation	44.99	33.64	41.38
Guide or outfitter	7.74	3.98	27.33
License or entrance fees	16.03	7.74	12.59
Retail goods	24.04	15.77	30.52
Other expenditures	3.90	0.63	1.90
Total average expenditures	210.17	118.69	202.42

Source: 1999 Missouri Madison Recreation Survey

Anglers visiting the Hebgen-Ennis region account for over half of all angler expenditures made within the corridor, while Helena anglers spent about one-fifth of the total (Table 27). The economic impact of angler use at the surveyed sites in the river corridor is shown in Table 28.

**Table 27. Total Angler Group Expenditure (\$1999)**

	Hebgen/ Ennis	Helena	Great Falls	Total
Food, drink	3,798,857	2,239,027	1,338,691	7,376,575
Motels, campgrounds	1,723,258	654,023	1,120,751	3,498,033
Gas and transportation	2,189,477	1,709,507	1,147,370	5,046,354
Guide or outfitter	376,674	202,254	757,797	1,336,725
License or entrance fees	780,114	393,329	349,091	1,522,534
Retail goods	1,169,927	801,395	846,248	2,817,570
Other expenditures	189,797	32,015	52,683	274,495
Total expenditures	10,228,105	6,031,550	5,612,630	21,872,285

Source: 1999 Missouri Madison Recreation Survey

**Table 28. Economic Impact, Anglers (\$1999)**

	Direct Impact	Indirect Impact	Induced Impact	Total Impact	Multipliers
Output	16,341,406	3,751,057	4,566,090	24,658,553	1.51
Labor income	5,515,325	1,125,623	1,608,056	8,249,004	1.49
Employment (jobs)	343	49	77	469	1.37

Source: 1999 Missouri Madison Recreation Survey

NOTE: These economic impact estimates are for visitors who reported angling as one of their activities during their visit to the Missouri Madison corridor. These visitors may also have engaged in other recreation activities during their visit. Therefore, the economic impacts shown above can not be attributed solely to angling, and are the result of overlapping between categories.

### ***Economic Impact from Wildlife Viewing at Surveyed Sites***

Over 37 percent of respondents reported that they engaged in wildlife viewing at some point during their visit to the corridor. Visitors to the Hebgen-Ennis area outspent visitors to the other two regions by a wide margin, both regarding average and total expenditures (Tables 29 and 30).

**Table 29. Average Wildlife Viewing Group Expenditures (\$1999)**

	Hebgen/ Ennis	Helena	Great Falls
Food, drink	99.42	61.70	30.04
Motels, campgrounds	57.41	35.84	33.07
Gas and transportation	95.20	47.06	27.95
Guide or outfitter	5.63	7.32	12.69
License or entrance fees	11.59	8.46	3.25
Retail goods	36.93	22.62	18.3
Other expenditures	3.31	4.50	5.13
Total average expenditures	309.49	187.50	130.43

Source: 1999 Missouri Madison Recreation Survey

**Table 30. Total Wildlife Viewing Group Expenditures (\$1999)**

	Hebgen/ Ennis	Helena	Great Falls	Total
Food, drink	4,773,849	2,354,245	1,974,639	9,102,732
Motels, campgrounds	2,756,655	1,367,523	2,173,812	6,297,989
Gas and transportation	4,571,217	1,795,637	1,837,255	8,204,109
Guide or outfitter	270,336	279,304	834,160	1,383,800
License or entrance fees	556,517	322,802	213,634	1,092,954
Retail goods	1,773,267	863,096	1,202,926	3,839,289
Other expenditures	158,936	171,703	337,214	667,853
Total expenditures	14,860,777	7,154,310	8,573,639	30,588,727

Source: 1999 Missouri Madison Recreation Survey

The economic impact resulting from the expenditures of those engaging in wildlife watching is summarized below. The geographical distribution of the jobs, output, and labor income will reflect the distribution of the initial expenditures. The direct impacts will be felt locally, whereas the indirect and induced effects will also be felt in the surrounding area (Table 31).

**Table 31. Economic Impact, Wildlife Viewers (\$1999)**

	Direct Impact	Indirect- Impact	Induced Impact	Total Impact	Multipliers
Output	24,311,618	5,944,226	6,893,720	37,149,564	1.53
Labor income	8,165,766	1,832,462	2,427,786	12,426,014	1.52
Employment (jobs)	526	81	116	723	1.37

Source: 1999 Missouri Madison Recreation Survey

NOTE: These economic impact estimates are for visitors who reported angling as one of their activities during their visit to the Missouri Madison corridor. These visitors may also have engaged in other recreation activities during their visit. Therefore, the economic impacts shown above can not be attributed solely to angling, and are the result of overlapping between categories.

### ***Economic Impact from River Floaters at Survey Sites***

About 13 percent of visitors to the river corridor are estimated to have participated in river floating activities. The majority of this activity occurred in the Hebgen-Ennis region, where 26 percent of visitors floated the Madison River. Although spending levels are similar across the regions with Great Falls floaters spending the most, Helena floaters are responsible for the largest portion of total expenditures, as well as economic impact (Tables 32, 33 and 34).



**Table 32. Average River Floating Group Expenditures (\$1999)**

	Hebgen/ Ennis	Helena	Great Falls
Food, drink	64.24	67.91	57.71
Motels, campgrounds	30.03	23.66	44.93
Gas and transportation	56.97	44.42	22.29
Guide or outfitter	4.49	9.15	52.74
License or entrance fees	7.35	13.25	7.17
Retail goods	22.59	27.80	15.79
Other expenditures	6.22	0.80	0.27
Total average expenditures	191.89	186.99	200.90

Source: 1999 Missouri Madison Recreation Survey

**Table 33. Total River Floating Group Expenditures (\$1999)**

	Hebgen/Ennis	Helena	Great Falls	Total
Food, drink	3,126,295	3,451,028	1,600,162	8,177,486
Motels, campgrounds	1,461,436	1,202,346	1,245,803	3,909,585
Gas and transportation	2,772,494	2,257,321	618,049	5,647,865
Guide or outfitter	218,510	464,982	1,462,356	2,145,848
License or entrance fees	357,694	673,334	198,807	1,229,836
Retail goods	1,099,362	1,412,731	437,820	2,949,913
Other expenditures	302,702	40,654	7,486	350,842
Total expenditures	9,338,493	9,502,397	5,570,484	24,411,374

Source: 1999 Missouri Madison Recreation Survey

**Table 34. Economic Impact, River Floaters (\$1999)**

	Direct Impact	Indirect Impact	Induced Impact	Total Impact	Multipliers
Output	18,543,689	4,431,780	5,149,331	28,124,800	1.52
Labor income	6,138,106	1,342,595	1,813,458	9,294,159	1.51
Employment (jobs)	401	59	87	547	1.36

Source: 1999 Missouri Madison Recreation Survey

NOTE: These economic impact estimates are for visitors who reported angling as one of their activities during their visit to the Missouri Madison corridor. These visitors may also have engaged in other recreation activities during their visit. Therefore, the economic impacts shown above can not be attributed solely to angling, and are the result of overlapping between categories.

### ***Economic Impact from Camping at Surveyed Sites***

Approximately 34 percent of visitors reported that they camped at one point during their visit to the Missouri Madison corridor. Visitors to the Hebgen-Ennis region were most likely to be camping (51 percent of respondents), followed by visitors to the Helena area (44%). Only 8 percent of visitors to the Great Falls area reported camping in the corridor during their visit.

Average group trip expenditures for this category of visitors are at the lower end when considering all the previous user groups. One reason for this may be that expenditures on lodging are lower, however level of expenditures varies widely between the regions (Table 35).

**Table 35. Average Camping Group Expenditures (\$1999)**

	<b>Hebgen/ Ennis</b>	<b>Helena</b>	<b>Great Falls</b>
Food, drink	69.54	62.55	29.34
Motels, campgrounds	26.50	20.69	31.35
Gas and transportation	47.60	46.65	26.52
Guide or outfitter	4.30	5.45	0
License or entrance fees	13.17	6.35	3.80
Retail goods	25.59	22.37	12.60
Other expenditures	3.37	1.49	0
Total average expenditures	190.07	165.55	103.61

Source: 1999 Missouri Madison Recreation Survey

Total expenditures for campers are also concentrated in the Hebgen-Ennis region, which accounts for nearly 60 percent of all visitor outlays. Food and drink was the largest expenditure category here, as well as in the Helena area. Around Great Falls, motels and campgrounds constituted the largest category. As for economic impact, it is expected to be concentrated in the Hebgen-Ennis area (Tables 36 and 37).

**Table 36. Total Camping Group Expenditures (\$1999)**

	<b>Hebgen/ Ennis</b>	<b>Helena</b>	<b>Great Falls</b>	<b>Total</b>
Food, drink	2,899,152	1,815,599	245,461	4,960,213
Motels, campgrounds	1,104,796	600,556	262,277	1,967,629
Gas and transportation	1,984,464	1,354,080	221,869	3,560,413
Guide or outfitter	179,269	158,194	0	337,463
License or entrance fees	549,063	184,317	31,791	765,171
Retail goods	1,066,858	649,320	105,413	1,821,591
Other expenditures	140,497	43,249	0	183,746
Total expenditures	7,924,099	4,805,315	866,812	13,596,225

Source: 1999 Missouri Madison Recreation Survey

**Table 37. Economic Impact, Campers (\$1999)**

	<b>Direct Impact</b>	<b>Indirect Impact</b>	<b>Induced Impact</b>	<b>Total Impact</b>	<b>Multipliers</b>
Output	9,665,873	1,988,614	2,616,762	14,271,249	1.48
Labor income	3,231,543	566,702	921,554	4,719,799	1.46
Employment (jobs)	186	24	44	254	1.37

Source: 1999 Missouri Madison Recreation Survey

NOTE: These economic impact estimates are for visitors who reported angling as one of their activities during their visit to the Missouri Madison corridor. These visitors may also have engaged in other recreation activities during their visit. Therefore, the economic impacts shown above can not be attributed solely to angling, and are the result of overlapping between categories.

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## Appendix A - 1999 Missouri Madison Recreation Survey Sites

**Table A1. Hebgen Reservoir Sites Sampled.**

Sites	Agency	Type
Rainbow Point Campground	USFS	Campground
Bakershole Campground	USFS	Campground
Lonesomehurst Campground	USFS	Campground
Cherry Creek Campground	USFS	Campground
Spring Creek Campground	USFS	Campground
Cabin Creek Campground	USFS	Campgrounds
Hebgen Dam Day Use Area	MPC	Picnic Day Use
Building Destruction Site	USFS	Picnic Day Use
Highway Destruction Site	USFS	Picnic Day Use
Kirkwood Picnic Site	USFS	Picnic Day Use
Horse Butte Lookout Picnic Site	USFS	Picnic Day Use
Madison River Picnic Site	USFS	Picnic Day Use
Rumbaugh Ridge Fishing Access	USFS	Picnic Day Use
Campfire Lodge Resort	Commercial	Private Development
Kirkwood Ranch Motel and Marina	Commercial	Private Development
Hebgen Lake Motel & Campground	Commercial	Private Development
Lakeview Cabins & Happy Hour Bar	Commercial	Private Development
Yellowstone Holiday Resort	Commercial	Private Development
Hebgen Lake Interpretive Site	USFS	Day Use Pull-out
Madison Arm Resort	Commercial	Private Development
Earthquake Area Interpretive Site	USFS	Day Use Pull-out
Red Canyon Scarp Interpretive Site	USFS	Day Use Pull-out

**Table A2. Ennis Area Sites Sampled.**

Sites	Agency	Type
Warm Springs	BLM	Picnic Day Use
Bear Trap Canyon	BLM	Water Access
Lake Shore Lodge	Commercial	Private Development
West Shore Public Access	BLM	Water Access
Meadow Lake Fishing Access	MDFWP	Water Access
Kobyashi/Sandy Beach	Informal	Water Access
Trail Creek	BLM	Water Access
Fall Creek	BLM	Water Access
Dispersed - West US84	BLM	Water Access
Dispersed - East side Beartrap Road	BLM	Water Access

Sites	Agency	Type
East Side Fishing Access		
Powerhouse River Access	BLM	Water Access
Red Mountain Campground (North)	BLM	Campground
Black's Ford	MDFWP	Water Access

**Table A3. Helena Reservoir Sites Sampled.**

Sites	Agency	Type
Holter Dam Campground	MPC	Campground
Holter Lake Campground	BLM	Campground
Log Gulch Campground	BLM	Campground
Coulter Campground	USFS	Campground
Black Sandy SRA A	MDFWP	Picnic Day Use
Riverside SRA	MDFWP	Picnic Day Use
Departure Point Day Campground	BLM	Picnic Day Use
Holter Dam	MPC	Day Use
Lakeside Resort	Commercial	Private Development
Hauser Dam	MPC	Day Use
Holter Lake Lodge	Commercial	Private Development
The Boat Loft	Commercial	Private Development
Indian Trail Marina	Commercial	Private Development
Gates of the mountains Inc.	Commercial	Private Development
Causeway Fishing Access	MDFWP	Water Access
York Bridge Fishing Access	MDFWP	Water Access
Wolf Creek	MDFWP	Water Access
Beaver Creek Fishing Access	USFS	Water Access
El Dorado Bar Mine INC	Commercial	Private Development
County Park	BLM	Picnic Day Use

**Table A4. Great Falls Reservoir Sites Sampled.**

Sites	Agency	Type
Broadwater Bay Park	City of Great Falls	Picnic Day Use
Specimen Sound Park	City of Great Falls	Picnic Day Use
Girl Scout Riverside Park	City of Great Falls	Picnic Day Use
Squaw Island West Bank Park	City of Great Falls	Picnic Day Use
Giant Springs Heritage State Park	MDFWP	Picnic Day Use
Rivers Edge Trail	City of Great Falls	Picnic Day Use
Rainbow and Lewis and Clark Overlooks	MDFWP	Picnic Day Use
Ryan Island Day Use Area	MPC	Picnic Day Use
Dispersed sites from Rivers Edge to GS	City	Picnic Day Use
North Shore Public Access	MPC	Water Access
Morony Dam Public Access	MPC	Water Access
Dispersed sites from Giant Springs to Rainbow	MDFWP	Water Access
Carter Ferry/Fort Benton	MDFWP	Water Access
Black Eagle Overlook	MDT	Day Use
Lewis & Clark Interpretive Center	USFS	Visitor Center
Fort Benton Boat Launch	City of Ft. Benton	
Rainbow Dam	FWP/PPL Montana	
Crooked Falls Overlook	FWP/PPL Montana	
Historic Train Exhibit/Rivers Edge Trailhead	Recreation Trails Inc.	

## Appendix B - Visitor Survey Sample Size by ROS Class and Region

**Table B1. Hebgen/Ennis - Semiprimitive Motorized**

survey site	count
Fall Creek	6
Powerhouse River Access	5
N	11

**Table B2. Hebgen/Ennis - Roaded Natural**

survey site	count
Madison Arm Resort	35
Spring Creek Campground	27
Building Destruction Site	16
Hebgen Dam Day Use Area	14
Rumbaugh Ridge Fishing Access	11
Highway Destruction Site	8
Kirkwood Picnic Site	4
Madison River Picnic Site	3
N	118

**Table B3. Hebgen/Ennis - Roaded Modified**

survey site	count
Campfire Lodge Resort	34
Cabin Creek Campground	30
Trail Creek	9
Earthquake Area Interp. Site	7
East Side Fishing Access	3
N	83





**Table B4. Hebgen/Ennis - Rural**

survey site	count
Bakershole Campground	55
Black's Ford	55
Warm Springs Access	47
Lonsomehurst Campground	38
Lakeshore Lodge	37
Kobayashi (Sandy) Beach	34
Rainbow Point Campground	32
Yellowstone Holiday Resort	32
Bear Trap Canyon	31
Red Mountain Campground	21
Kirkwood Ranch Motel and Marina	19
West US 84 -dispersed	17
Cherry Creek Campground	15
Lakeview Cabins and Happy Hour Bar	14
Hebgen Lake Interp. Site	12
West Shore Public Access	12
East Side Beartrap Road-dispersed	9
Horse Butte Lookout Picnic Site	6
Hebgen Lake Motel and Campground	3
Meadow Lake Fishing Access	3
Red Canyon Scarp Interp. Site	2
N	494

**Table B6. Helena - Roded Natural**

survey site	count
Gates of the Mountains Inc.	191
York Bridge Fishing Access	61
The Boat Loft	60
Holter Dam Campground	58
Beaver Creek Fishing Access	23
County Park	19
Devil's Elbow	6
N	418

**Table B7. Helena - Roaded Modified**

survey site	count
Holter Lake Campground	141
Log Gulch Campground	88
Departure Point Day Campground	24
El Dorado Bar Mine Inc.	23
Holter Dam	20
Holter Lake Lodge	19
Indian Trail Marina	12
N	327

**Table B8. Helena - Rural**

survey site	count
Black Sandy SRA	121
Causeway Fishing Access	79
Lakeside Resort	59
Hauser Dam	34
Riverside SRA	33
N	326

**Table B9. Great Falls - Roaded Natural**

survey site	count
Crooked Falls Overlook	35
Morony Dam Public Access	29
Carter Ferry	28
N	92

**Table B10. Great Falls - Roaded Modified**

survey site	count
Ryan Island Day Use Area	119
Wolf Creek FAS	45
N	164

**Table B11. Great Falls - Urban**

survey site	count
Lewis and Clark Interp. Center	142
Giant Springs Heritage State Park	116
Rainbow and Lewis and Clark Overlooks	97
Black Eagle Overlook	89
Historic Train Exhibit/Rivers Edge	82
Broadwater Bay Park	60
Rivers Edge Trail	47
Fort Benton Boat Launch	43
West Bank Park	32
Speciman Sound Park	26
Dispersed sites from Giant Springs to Rainbow	15
North Shore Public Access	13
N	762

**Table B12. Sample Size by ROS Class**

ROS class	count
Semi-primitive motorized	11

Roaded modified	574
Roaded natural	628
Urban	762
Rural	820
N	2795
-----	

**Table B13. Sample Size by Region**

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<b>REGION</b>	<b>count</b>
Helena	1071
Great Falls	1018
Hebgen/Ennis	706
N	2795
-----	

## Appendix C - Tables for Section 1 - Visitor Survey Results by ROS Region

Table C1s. Visitor Characteristics by ROS Region

	REGION									
	Hebgen/Ennis				Helena			Great Falls		
	Semi-primitive motorized	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Urban
age	40	48	43	44	49	49	46	38	45	45
gender										
male	81.8%	51.8%	59.8%	54.5%	56.5%	57.4%	63.2%	64.4%	62.4%	52.6%
female	18.2%	48.2%	40.2%	45.5%	43.5%	42.6%	36.8%	35.6%	37.6%	47.4%
highest level of education completed										
Elementary	.0%	.0%	.0%	.2%	.5%	1.0%	1.7%	.0%	.0%	.4%
High school	9.1%	21.9%	21.0%	23.7%	27.3%	36.9%	37.2%	37.6%	23.8%	27.4%
College	72.7%	50.0%	48.1%	53.1%	46.9%	45.8%	43.9%	48.2%	45.7%	46.2%
Post grad	18.2%	28.1%	30.9%	23.0%	25.3%	16.3%	17.3%	14.1%	30.5%	26.0%
primary occupation										
professional	9.1%	29.4%	32.5%	33.7%	37.3%	26.4%	26.9%	28.9%	38.5%	38.1%
managerial	27.3%	11.0%	7.5%	8.3%	7.9%	9.0%	8.2%	6.6%	12.2%	4.7%
sales	9.1%	3.7%	2.5%	5.6%	5.8%	3.3%	2.4%	7.9%	4.1%	3.2%
clerical	.0%	2.8%	3.8%	3.8%	3.9%	4.3%	6.1%	2.6%	4.7%	4.4%
craftsman	.0%	8.3%	8.8%	8.9%	5.2%	6.7%	9.5%	9.2%	4.7%	5.9%
operatives	.0%	.0%	1.3%	1.6%	.8%	1.7%	2.0%	2.6%	.7%	.3%
transport	18.2%	2.8%	1.3%	1.1%	1.0%	2.7%	3.1%	1.3%	.0%	1.7%
laborer	.0%	2.8%	5.0%	3.6%	3.1%	2.7%	6.5%	2.6%	3.4%	5.1%
service worker	.0%	1.8%	2.5%	2.9%	2.4%	2.3%	2.7%	6.6%	2.0%	3.2%
farmer/rancher	9.1%	.0%	1.3%	.2%	1.3%	2.7%	2.0%	1.3%	2.7%	1.2%
farm/ranch laborer	.0%	.0%	.0%	.4%	.3%	.7%	.0%	.0%	.0%	.2%
armed services	.0%	.0%	.0%	.7%	3.4%	3.0%	1.7%	21.1%	4.7%	5.1%
homemaker	.0%	8.3%	1.3%	5.1%	4.7%	6.4%	5.1%	2.6%	4.1%	5.3%
student	18.2%	5.5%	13.8%	6.9%	1.0%	1.7%	2.4%	3.9%	4.7%	3.2%
retired	9.1%	23.9%	17.5%	16.5%	19.9%	24.7%	17.0%	1.3%	13.5%	16.5%
unemployed/disabled	.0%	.0%	1.3%	.7%	1.8%	1.7%	4.4%	1.3%	.0%	2.0%
household income before taxes										
less than \$10,000	20.0%	7.3%	10.8%	6.9%	2.8%	2.5%	6.3%	3.9%	5.6%	6.3%
10,000-\$19,000	.0%	4.2%	8.1%	8.3%	7.2%	9.3%	11.2%	20.8%	8.8%	12.6%
\$20,000-\$29,000	.0%	8.3%	6.8%	14.0%	12.4%	14.3%	18.6%	22.1%	11.2%	12.6%
\$30,000-\$39,000	.0%	12.5%	12.2%	14.0%	14.9%	17.6%	15.2%	16.9%	20.8%	14.2%
\$40,000-\$49,000	20.0%	13.5%	10.8%	12.6%	12.2%	16.5%	16.0%	9.1%	12.8%	13.4%
\$50,000-\$59,000	.0%	19.8%	13.5%	12.4%	16.9%	14.0%	11.5%	11.7%	12.0%	11.4%

\$60,000-\$69,000	10.0%	7.3%	12.2%	8.3%	8.8%	7.9%	8.6%	5.2%	5.6%	7.6%
\$70,000 or more	50.0%	27.1%	25.7%	23.5%	24.9%	17.9%	12.6%	10.4%	23.2%	22.0%
N	11	118	83	494	418	327	326	92	164	762

Table C2s. Visitor State of Residence by ROS Region

	REGION									
	Hebgen/Ennis			Helena			Great Falls			
	Semi-primitive motorized	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Urban
home state										
MONTANA	18.2%	15.9%	17.3%	55.5%	71.2%	84.0%	86.7%	79.8%	66.2%	64.3%
WASHINGTON	.0%	2.7%	.0%	3.8%	2.0%	5.0%	2.3%	3.6%	3.8%	3.5%
CALIFORNIA	9.1%	10.6%	8.6%	4.5%	3.0%	1.3%	.6%	.0%	1.3%	3.0%
IDAHO	.0%	21.2%	3.7%	4.7%	1.5%	.3%	1.6%	.0%	.6%	1.2%
UTAH	18.2%	12.4%	27.2%	4.0%	1.0%	.6%	.3%	1.2%	.0%	.6%
COLORADO	.0%	1.8%	6.2%	.9%	.2%	.9%	1.0%	.0%	.0%	2.0%
FLORIDA	.0%	4.4%	.0%	1.7%	.7%	.6%	.0%	4.8%	3.2%	.7%
MINNESOTA	.0%	.0%	1.2%	1.1%	1.7%	.9%	.0%	1.2%	.0%	1.7%
PENNSYLVANIA	9.1%	.9%	7.4%	1.7%	1.7%	.5%	.3%	1.2%	.6%	1.0%
OREGON	.0%	1.8%	.0%	1.1%	.5%	.3%	.0%	.0%	.6%	2.5%
ARIZONA	.0%	2.7%	1.2%	1.1%	1.2%	.9%	.0%	.0%	1.3%	1.0%
TEXAS	18.2%	.0%	.0%	.6%	2.0%	.9%	.0%	1.2%	.0%	1.2%
NEW YORK	9.1%	.0%	8.6%	.2%	1.5%	.0%	.3%	.0%	1.3%	.7%
ILLINOIS	.0%	3.5%	.0%	1.7%	.7%	.3%	.3%	.0%	.6%	.6%
OHIO	.0%	2.7%	1.2%	1.5%	.5%	.3%	.6%	1.2%	.0%	.4%
NEVADA	.0%	4.4%	2.5%	1.5%	.2%	.0%	.0%	.0%	.0%	.4%
GEORGIA	.0%	.0%	1.2%	.2%	.2%	.0%	.0%	.0%	.6%	1.7%
WYOMING	.0%	.9%	.0%	1.7%	.0%	.6%	.0%	.0%	.0%	.7%
MICHIGAN	.0%	1.8%	1.2%	.9%	.2%	.0%	.0%	2.4%	1.3%	.4%
NEW MEXICO	.0%	.0%	1.2%	.9%	.7%	.0%	.0%	.0%	.0%	1.0%
WISCONSIN	.0%	.0%	.0%	.6%	1.2%	.6%	.0%	.0%	1.3%	.3%
ALASKA	.0%	.0%	.0%	.4%	.0%	.0%	.6%	.0%	.0%	1.3%
MISSOURI	9.1%	1.8%	.0%	.2%	.5%	.3%	.0%	1.2%	.6%	.6%
ALBERTA	.0%	.0%	.0%	.4%	.2%	.6%	.0%	.0%	.0%	1.2%
IOWA	9.1%	.9%	.0%	.6%	.2%	.3%	.0%	.0%	2.5%	.1%
NEBRASKA	.0%	1.8%	.0%	1.1%	.5%	.0%	.6%	.0%	.0%	.1%
INDIANA	.0%	.0%	.0%	.6%	.5%	.0%	.0%	.0%	.0%	.9%
ALABAMA	.0%	.9%	.0%	.6%	.7%	.0%	.0%	1.2%	.0%	.3%
VIRGINIA	.0%	.9%	1.2%	.2%	.5%	.0%	.3%	1.2%	.0%	.4%
NEW JERSEY	.0%	.0%	2.5%	.0%	.0%	.0%	.0%	.0%	1.3%	.7%
LOUISIANA	.0%	.0%	.0%	.4%	.0%	.0%	.3%	.0%	2.5%	.1%
NORTH CAROLINA	.0%	1.8%	.0%	.2%	.5%	.0%	.0%	.0%	.6%	.3%
SOUTH DAKOTA	.0%	.0%	.0%	.4%	.2%	.0%	.0%	.0%	1.3%	.4%

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KANSAS	.0%	.0%	.0%	.6%	.5%	.0%	.0%	.0%	.0%	.3%
MASSACHUSETTS	.0%	.0%	.0%	.4%	.5%	.0%	.0%	.0%	.6%	.3%
OTHER	.0%	.0%	1.2%	.2%	.0%	.0%	.6%	.0%	.0%	.4%
MAINE	.0%	.0%	1.2%	.2%	.5%	.0%	.0%	.0%	.0%	.3%
TENNESSEE	.0%	.0%	.0%	.2%	.5%	.0%	.0%	.0%	.0%	.4%
CONNECTICUT	.0%	.9%	.0%	.2%	.0%	.0%	.6%	.0%	.0%	.1%
MARYLAND	.0%	.0%	1.2%	.2%	.0%	.0%	.0%	.0%	1.3%	.1%
NORTH DAKOTA	.0%	.0%	.0%	.4%	.0%	.3%	.3%	.0%	.6%	.0%
UNITED KINGDOM	.0%	.0%	.0%	.0%	.5%	.0%	.0%	.0%	.6%	.3%

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(continued)



Table C2s. Visitor State of Residence by ROS Region

	REGION									
	Hebgen/Ennis			Helena				Great Falls		
	Semi-primitive motorized	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Urban
NEW HAMPSHIRE	.0%	.0%	.0%	.2%	.2%	.0%	.0%	.0%	.0%	.3%
SOUTH CAROLINA	.0%	.0%	.0%	.0%	.5%	.0%	.0%	.0%	.0%	.3%
WEST VIRGINIA	.0%	.0%	.0%	.0%	.5%	.3%	.0%	.0%	.0%	.1%
SASKATCHEWAN	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	1.9%	.1%
GERMANY	.0%	.9%	1.2%	.4%	.0%	.0%	.0%	.0%	.0%	.0%
ENGLAND	.0%	.0%	.0%	.0%	.2%	.0%	.0%	.0%	1.9%	.0%
KENTUCKY	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	1.3%	.1%
MISSISSIPPI	.0%	.0%	.0%	.2%	.0%	.0%	.0%	.0%	.0%	.3%
BRITISH COLUMBIA	.0%	.0%	.0%	.0%	.0%	.0%	.3%	.0%	.0%	.3%
ONTARIO	.0%	.0%	.0%	.4%	.2%	.0%	.0%	.0%	.0%	.0%
JAPAN	.0%	.0%	.0%	.0%	.0%	.0%	1.0%	.0%	.0%	.0%
ARKANSAS	.0%	.9%	.0%	.0%	.2%	.0%	.0%	.0%	.0%	.0%
DELAWARE	.0%	.9%	.0%	.2%	.0%	.0%	.0%	.0%	.0%	.0%
RHODE ISLAND	.0%	.0%	.0%	.0%	.0%	.0%	.3%	.0%	.0%	.1%
VERMONT	.0%	.0%	1.2%	.2%	.0%	.0%	.0%	.0%	.0%	.0%
NOVA SCOTIA	.0%	.0%	.0%	.2%	.2%	.0%	.0%	.0%	.0%	.0%
DISTRICT OF COLUMBIA	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.1%
OKLAHOMA	.0%	.0%	.0%	.0%	.0%	.0%	.3%	.0%	.0%	.0%
MANITOBA	.0%	.0%	.0%	.2%	.0%	.0%	.0%	.0%	.0%	.0%
CANADA NONSPECIFIC	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.1%
SWITZERLAND	.0%	.0%	.0%	.2%	.0%	.0%	.0%	.0%	.0%	.0%
AUSTRIA	.0%	.0%	1.2%	.0%	.0%	.0%	.0%	.0%	.0%	.0%
HOLLAND	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.1%
AUSTRALIA	.0%	.0%	.0%	.0%	.2%	.0%	.0%	.0%	.0%	.0%
SWEDEN	.0%	.9%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%
PHILIPPINES	.0%	.0%	.0%	.0%	.0%	.0%	.3%	.0%	.0%	.0%
N	11	118	83	494	418	327	326	92	164	762

Table C3s. Montana County of Residence by ROS Region

	REGION									
	Hebgen/Ennis			Helena			Great Falls			
	ROS			ROS			ROS			
	Semi-primitive motorized	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Urban
Montana County										
CASCADE	.0%	.0%	14.3%	1.3%	35.3%	59.4%	6.2%	90.8%	72.6%	84.1%
LEWIS AND CLARK	.0%	5.9%	.0%	.9%	29.9%	6.4%	42.4%	.0%	10.5%	1.4%
GALLATIN	50.0%	47.1%	14.3%	59.6%	4.6%	2.4%	5.6%	.0%	1.1%	.9%
YELLOWSTONE	.0%	29.4%	14.3%	15.7%	2.9%	2.4%	5.1%	1.5%	4.2%	1.6%
MISSOULA	.0%	11.8%	.0%	.4%	3.7%	5.6%	10.2%	1.5%	.0%	1.6%
SILVER BOW	.0%	.0%	.0%	3.5%	2.9%	3.6%	8.5%	.0%	1.1%	1.6%
RAVALLI	.0%	.0%	7.1%	1.3%	1.7%	4.8%	2.8%	.0%	.0%	.7%
FLATHEAD	.0%	.0%	.0%	.9%	2.5%	2.8%	2.3%	.0%	2.1%	.2%
MADISON	50.0%	.0%	21.4%	7.8%	.0%	.0%	.0%	.0%	.0%	.0%
JEFFERSON	.0%	.0%	.0%	1.7%	2.9%	1.2%	3.4%	.0%	1.1%	.0%
PARK	.0%	5.9%	7.1%	3.0%	1.2%	.8%	2.3%	.0%	1.1%	.5%
CHOUTEAU	.0%	.0%	.0%	.0%	.8%	2.8%	1.1%	1.5%	.0%	1.6%
FERGUS	.0%	.0%	.0%	.0%	1.7%	.8%	.6%	1.5%	2.1%	.0%
HILL	.0%	.0%	.0%	.0%	.4%	1.2%	.6%	.0%	.0%	.9%
BROADWATER	.0%	.0%	.0%	.4%	1.2%	.0%	1.7%	.0%	1.1%	.0%
TETON	.0%	.0%	.0%	.0%	1.2%	.4%	.0%	1.5%	1.1%	.2%
MINERAL	.0%	.0%	7.1%	.0%	.0%	.8%	1.7%	.0%	.0%	.0%
PONDERA	.0%	.0%	.0%	.4%	.4%	.8%	.0%	.0%	.0%	.5%
STILLWATER	.0%	.0%	.0%	.4%	.8%	.4%	1.1%	.0%	.0%	.0%
DEER LODGE	.0%	.0%	.0%	.0%	.0%	.0%	2.3%	.0%	1.1%	.0%
GLACIER	.0%	.0%	.0%	.0%	.4%	.4%	.0%	.0%	.0%	.7%
POWELL	.0%	.0%	.0%	.0%	.8%	.8%	.0%	1.5%	.0%	.0%
BEAVERHEAD	.0%	.0%	.0%	.9%	.4%	.0%	.0%	.0%	1.1%	.0%
CARBON	.0%	.0%	7.1%	.0%	.4%	.0%	.0%	.0%	.0%	.5%
LAKE	.0%	.0%	.0%	.4%	.4%	.4%	.0%	.0%	.0%	.2%
LINCOLN	.0%	.0%	.0%	.9%	.0%	.0%	.0%	.0%	.0%	.5%
GRANITE	.0%	.0%	.0%	.0%	.8%	.0%	.6%	.0%	.0%	.0%
VALLEY	.0%	.0%	.0%	.0%	.8%	.0%	.0%	.0%	.0%	.2%
DAWSON	.0%	.0%	.0%	.4%	.0%	.4%	.0%	.0%	.0%	.0%
JUDITH BASIN	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.5%
LIBERTY	.0%	.0%	.0%	.0%	.4%	.0%	.0%	.0%	.0%	.2%
PHILLIPS	.0%	.0%	.0%	.0%	.0%	.0%	.6%	.0%	.0%	.2%
RICHLAND	.0%	.0%	.0%	.0%	.0%	.4%	.0%	.0%	.0%	.2%
ROOSEVELT	.0%	.0%	.0%	.0%	.0%	.0%	.6%	.0%	.0%	.2%
SANDERS	.0%	.0%	7.1%	.0%	.0%	.4%	.0%	.0%	.0%	.0%
TOOLE	.0%	.0%	.0%	.0%	.0%	.4%	.0%	.0%	.0%	.2%
WHEATLAND	.0%	.0%	.0%	.0%	.0%	.0%	.6%	.0%	.0%	.2%
BLAINE	.0%	.0%	.0%	.0%	.4%	.0%	.0%	.0%	.0%	.0%
CUSTER	.0%	.0%	.0%	.0%	.4%	.0%	.0%	.0%	.0%	.0%

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ROSEBUD	.0%	.0%	.0%	.0%	.4%	.0%	.0%	.0%	.0%	.0%
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Table C3s. Montana County of Residence by ROS Region

	REGION									
	Hebgen/Ennis			Helena			Great Falls			
	ROS			ROS			ROS			
	Semi-primitive motorized	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Urban
N	11	118	83	494	418	327	326	92	164	762

Table C4s. Group Characteristics by ROS Region

	REGION									
	Hebgen/Ennis			Helena			Great Falls			
	Semi-primitive motorized	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Urban
group type										
alone	9.1%	4.3%	6.0%	5.1%	5.9%	9.1%	14.7%	20.7%	4.5%	20.3%
family	36.4%	54.8%	44.6%	49.6%	56.8%	53.1%	46.8%	41.4%	53.5%	48.5%
friends	36.4%	21.7%	22.9%	25.8%	13.6%	12.8%	17.3%	27.6%	29.7%	17.9%
family and friends	18.2%	19.1%	15.7%	18.2%	21.7%	24.7%	20.5%	9.2%	12.3%	9.2%
outfitted guests	.0%	.0%	9.6%	.8%	1.0%	.0%	.0%	.0%	.0%	.9%
business associates	.0%	.0%	1.2%	.4%	1.0%	.3%	.6%	1.1%	.0%	3.3%
Group size	2.91	7.48	7.69	5.70	4.61	4.73	4.15	2.65	4.07	3.07
# of males in group?	2.27	3.03	3.20	2.47	1.73	1.96	1.84	1.36	1.73	1.16
# of females in group?	.45	2.43	3.27	1.97	1.83	1.65	1.19	.77	1.60	1.26
# of children (16 and under) in group?	.18	1.96	1.18	1.19	.99	1.06	1.00	.39	.60	.47
N	11	118	83	494	418	327	326	92	164	762

Table C5s. Visitor Site Experience by ROS Region

	REGION									
	Hebgen/Ennis			Helena				Great Falls		
	Semi-primitive motorized	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Urban
first visit?										
yes	27.27%	35.65%	46.99%	29.88%	29.95%	16.82%	20.56%	40.22%	28.22%	38.33%
no	72.73%	64.35%	53.01%	70.12%	70.05%	83.18%	79.44%	59.78%	71.78%	61.67%
N	11	115	83	482	414	321	321	92	163	754
number of visits to this site before today										
1 to 5	25.0%	41.9%	34.0%	37.4%	34.4%	23.6%	26.2%	41.7%	31.6%	23.3%
6 to 10	.0%	9.5%	6.4%	14.4%	14.6%	14.0%	15.5%	15.0%	18.4%	10.5%
more than 10	75.0%	48.6%	59.6%	48.2%	51.0%	62.4%	58.3%	43.3%	50.0%	66.2%
N	8	74	47	340	288	258	252	60	114	459
years visiting this site										
less than 1	12.5%	9.6%	10.2%	10.3%	4.4%	5.8%	11.5%	34.4%	8.6%	15.7%
1 to 2	.0%	11.0%	10.2%	13.1%	13.2%	7.7%	11.5%	21.9%	11.2%	16.1%
3 to 5	.0%	6.8%	12.2%	16.3%	12.8%	10.8%	15.8%	12.5%	11.2%	20.0%
5 to 10	37.5%	15.1%	16.3%	17.4%	19.6%	24.6%	20.0%	15.6%	31.0%	18.5%
more than 10 years	50.0%	57.5%	51.0%	42.9%	50.0%	51.2%	41.2%	15.6%	37.9%	29.7%
staying over night?										
yes	30.0%	60.5%	64.2%	50.9%	29.9%	71.3%	40.7%	1.1%	12.5%	11.9%
no	70.0%	39.5%	35.8%	49.1%	70.1%	28.8%	59.3%	98.9%	87.5%	88.1%
if yes, how many nights?	2.67	16.87	9.19	6.46	4.19	4.63	6.76	1.00	3.00	1.95
if no, how many hours?										
less than 1	.0%	29.7%	16.7%	18.2%	11.3%	5.8%	4.0%	32.8%	25.9%	29.5%
1 to 2 hours	40.0%	35.1%	45.8%	16.6%	25.4%	15.1%	19.3%	20.3%	43.5%	47.1%
2 to 6 hours	60.0%	29.7%	25.0%	54.0%	54.0%	43.0%	66.0%	37.5%	26.9%	22.5%
more than 6 hours	.0%	5.4%	12.5%	11.2%	9.3%	36.0%	10.7%	9.4%	3.7%	.9%
N	11	118	83	494	418	327	326	92	164	762



Table C6s. Group Disabilities by ROS Region

	REGION									
	Hebgen/Ennis			Helena			Great Falls			
	Semi-primitive motorized	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Urban
anyone in group with a disability?										
yes	18.2%	12.6%	13.9%	8.5%	14.5%	14.5%	18.9%	4.8%	13.2%	9.4%
no	81.8%	87.4%	86.1%	91.5%	85.5%	85.5%	81.1%	95.2%	86.8%	90.6%
Specific disabilities										
Difficulty walking	.0%	23.1%	.0%	19.2%	17.4%	12.1%	13.9%	33.3%	20.0%	18.6%
Back condition	.0%	.0%	30.0%	7.7%	13.0%	15.2%	16.7%	33.3%	6.7%	7.0%
Heart condition	.0%	15.4%	.0%	3.8%	13.0%	6.1%	8.3%	.0%	.0%	9.3%
Wheelchair confinement	.0%	7.7%	.0%	7.7%	2.2%	9.1%	5.6%	.0%	20.0%	11.6%
Arthritis	.0%	.0%	.0%	.0%	10.9%	18.2%	2.8%	33.3%	.0%	7.0%
Bad knee	.0%	23.1%	10.0%	.0%	4.3%	3.0%	8.3%	.0%	.0%	.0%
Blindness	.0%	.0%	20.0%	7.7%	2.2%	3.0%	5.6%	.0%	.0%	4.7%
Hearing	.0%	7.7%	.0%	3.8%	2.2%	.0%	2.8%	.0%	.0%	9.3%
Legs	.0%	7.7%	.0%	7.7%	2.2%	3.0%	2.8%	.0%	.0%	4.7%
Mental illness	.0%	.0%	.0%	3.8%	.0%	3.0%	11.1%	.0%	.0%	4.7%
Old age	50.0%	.0%	.0%	.0%	8.7%	3.0%	.0%	.0%	6.7%	.0%
Cancer	.0%	.0%	.0%	15.4%	2.2%	.0%	2.8%	.0%	.0%	.0%
Amputee	.0%	.0%	30.0%	.0%	2.2%	.0%	2.8%	.0%	6.7%	.0%
Mobility problems	.0%	.0%	.0%	.0%	2.2%	6.1%	5.6%	.0%	6.7%	.0%
Replacements-hip										
shoulder	.0%	.0%	.0%	.0%	4.3%	3.0%	2.8%	.0%	.0%	2.3%
MS	.0%	.0%	.0%	3.8%	.0%	.0%	.0%	.0%	.0%	9.3%
Bad eyes	.0%	7.7%	.0%	.0%	4.3%	.0%	.0%	.0%	13.3%	.0%
Diabetes	.0%	.0%	.0%	.0%	2.2%	3.0%	2.8%	.0%	.0%	2.3%
Asthma	.0%	.0%	.0%	3.8%	.0%	3.0%	.0%	66.7%	.0%	.0%
Paraplegic	.0%	.0%	.0%	11.5%	.0%	.0%	.0%	.0%	6.7%	.0%
Muscular dystrophy	50.0%	.0%	.0%	.0%	.0%	6.1%	.0%	.0%	.0%	.0%
Foot	.0%	.0%	.0%	.0%	.0%	6.1%	2.8%	.0%	.0%	.0%
Stroke	.0%	.0%	.0%	3.8%	2.2%	3.0%	.0%	.0%	.0%	.0%
Missing lung	.0%	.0%	.0%	3.8%	2.2%	3.0%	.0%	.0%	.0%	.0%
Surgical	.0%	.0%	10.0%	.0%	2.2%	.0%	.0%	.0%	.0%	.0%
Parkinsons disease	.0%	.0%	.0%	.0%	2.2%	.0%	.0%	.0%	.0%	2.3%
Learning	.0%	.0%	.0%	.0%	2.2%	.0%	2.8%	.0%	.0%	.0%
Cerebral Palsy	.0%	7.7%	.0%	3.8%	.0%	.0%	.0%	.0%	.0%	.0%
Seizures	.0%	.0%	.0%	.0%	.0%	.0%	2.8%	.0%	.0%	2.3%
Quadriplegic	.0%	.0%	.0%	.0%	.0%	.0%	5.6%	.0%	.0%	.0%
Chemical sensitivity	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	4.7%
Respiratory	.0%	.0%	.0%	.0%	2.2%	.0%	2.8%	.0%	.0%	.0%
Arm messed up	.0%	.0%	.0%	.0%	.0%	.0%	2.8%	.0%	.0%	2.3%
Spinal disorder	.0%	.0%	.0%	.0%	2.2%	.0%	.0%	.0%	6.7%	.0%
Osteoporosis	.0%	7.7%	.0%	.0%	2.2%	.0%	.0%	.0%	.0%	.0%



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Note: totals do not add to 100% due to multiple responses.

(continued)

Table C6s. Group Disabilities by ROS Region

	REGION									
	Hebgen/Ennis			Helena			Great Falls			
	Semi-primitive motorized	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Urban
Handicapped child	.0%	.0%	.0%	.0%	2.2%	.0%	.0%	.0%	.0%	.0%
Chronic hip	.0%	.0%	.0%	.0%	.0%	.0%	2.8%	.0%	.0%	.0%
Downs syndrome	.0%	7.7%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%
Shoulder	.0%	.0%	.0%	.0%	.0%	.0%	2.8%	.0%	.0%	.0%
Speech impaired	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	6.7%	.0%
Sun allergy	.0%	.0%	.0%	.0%	.0%	.0%	2.8%	.0%	.0%	.0%
VA disabled	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	6.7%	.0%
On oxygen	.0%	.0%	.0%	.0%	.0%	3.0%	.0%	.0%	.0%	.0%
Emphysema	.0%	.0%	.0%	.0%	.0%	.0%	2.8%	.0%	.0%	.0%
Glaucoma	.0%	.0%	.0%	.0%	.0%	.0%	2.8%	.0%	.0%	.0%
Neuromuscular disorder	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	2.3%
Chronic fatigue syndrome	.0%	.0%	.0%	.0%	.0%	.0%	2.8%	.0%	.0%	.0%
Advanced Senility	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	2.3%
Neck problems	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	6.7%	.0%
SSI	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	2.3%
PTSD	.0%	.0%	.0%	.0%	.0%	3.0%	.0%	.0%	.0%	.0%
N	2	13	10	26	46	33	36	3	15	43

Note: totals do not add to 100% due to multiple responses.

Table C7s. Reasons for Choosing This Site by ROS Region

	REGION									
	Hebgen/Ennis			Helena			Great Falls			
	Semi-primitive motorized	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Urban
Reasons why site chosen										
close to home	18.2%	18.3%	13.3%	51.5%	48.0%	54.2%	60.7%	68.1%	57.4%	55.4%
easy to get to group facilities available	18.2%	27.0%	22.9%	54.4%	46.0%	49.5%	62.3%	58.2%	46.9%	57.5%
specific attraction?	.0%	7.0%	8.4%	12.4%	7.7%	11.8%	11.2%	3.3%	16.7%	4.2%
other sites too crowded?	18.2%	32.2%	33.7%	33.6%	32.5%	34.9%	20.6%	27.5%	27.2%	29.6%
good facilities	.0%	7.8%	4.8%	5.4%	6.7%	5.3%	5.6%	1.1%	2.5%	1.9%
good fishing	18.2%	21.7%	37.3%	27.6%	23.6%	40.8%	29.0%	7.7%	28.4%	19.7%
scenic beauty	81.8%	41.7%	53.0%	39.8%	30.8%	54.8%	53.6%	28.6%	25.3%	6.9%
been here before	63.6%	72.2%	78.3%	67.0%	70.4%	65.4%	41.4%	54.9%	71.6%	61.1%
try a new area	54.5%	49.6%	53.0%	54.8%	50.4%	64.2%	53.9%	35.2%	49.4%	42.9%
Lewis and Clark historic site	9.1%	13.9%	22.9%	12.9%	11.1%	9.0%	10.3%	22.0%	10.5%	10.5%
heard about it	.0%	3.5%	4.8%	1.9%	26.3%	5.9%	4.7%	16.5%	27.2%	36.0%
other reason to visit this site?	27.3%	24.3%	12.0%	17.2%	22.4%	10.6%	13.4%	18.7%	19.1%	22.8%
most important reason for visiting site	9.1%	17.4%	21.7%	14.7%	14.7%	16.8%	10.6%	6.6%	6.8%	11.2%
scenic beauty										
good fishing	12.5%	20.0%	34.7%	19.0%	29.8%	10.1%	7.2%	26.8%	29.1%	28.9%
close to home	50.0%	22.0%	16.7%	20.0%	15.7%	28.2%	27.1%	14.6%	20.3%	2.4%
specific attraction	12.5%	4.0%	1.4%	13.8%	11.0%	20.2%	25.1%	20.7%	9.5%	17.9%
Lewis and Clark historical site	12.5%	10.0%	9.7%	11.4%	9.4%	7.7%	5.8%	1.2%	5.4%	6.8%
been here before	.0%	.0%	.0%	.0%	6.3%	.0%	.3%	3.7%	15.5%	19.3%
easy to get to	.0%	13.0%	6.9%	7.1%	5.2%	6.6%	6.5%	3.7%	3.4%	3.3%
other reason	.0%	1.0%	2.8%	7.6%	5.5%	4.2%	5.8%	7.3%	1.4%	5.8%
heard about it	.0%	6.0%	6.9%	6.9%	6.5%	4.2%	5.2%	3.7%	1.4%	4.9%
	12.5%	9.0%	5.6%	4.5%	4.7%	3.5%	4.1%	6.1%	4.1%	5.0%

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Note: totals do not add to 100% due to multiple responses.

(continued)

Table C7s. Reasons for Choosing This Site by ROS Region

	REGION									
	Hebgen/Ennis			Helena				Great Falls		
	Semi-primitive motorized	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Urban
good facilities	.0%	4.0%	4.2%	3.3%	3.1%	9.1%	5.5%	.0%	4.7%	2.4%
try a new area	.0%	6.0%	9.7%	3.6%	1.6%	4.5%	3.1%	9.8%	2.0%	2.1%
group facilities available	.0%	3.0%	.0%	2.6%	.8%	1.4%	3.4%	2.4%	2.7%	.9%
other sites too crowded	.0%	2.0%	1.4%	.2%	.5%	.3%	.7%	.0%	.7%	.2%
N	11	118	83	494	418	327	326	92	164	762

Note: totals do not add to 100% due to multiple responses.

Table C7.1s. Other Crowded Sites as a Reason for Choosing This Site by ROS Region

	REGION								
	Hebgen/Ennis			Helena			Great Falls		
	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Urban
Sites crowded									
Yellowstone									
National									
Park	50.0%	75.0%	33.3%	3.6%	.0%	.0%	.0%	.0%	.0%
Holter	.0%	.0%	.0%	17.9%	12.5%	18.8%	.0%	25.0%	14.3%
Black Sandy	.0%	.0%	.0%	32.1%	.0%	12.5%	.0%	.0%	.0%
Canyon Ferry	.0%	.0%	4.2%	14.3%	6.3%	18.8%	.0%	.0%	.0%
Hauser Dam	.0%	.0%	.0%	.0%	31.3%	6.3%	.0%	.0%	.0%
Craig	.0%	.0%	.0%	7.1%	.0%	.0%	.0%	50.0%	.0%
Broadwater Bay									
Park	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	28.6%
Gibson	.0%	.0%	.0%	.0%	.0%	.0%	.0%	25.0%	14.3%
Lonsomehurst									
Campground	25.0%	.0%	4.2%	.0%	.0%	.0%	.0%	.0%	.0%
Spring Creek									
Campground	12.5%	.0%	8.3%	.0%	.0%	.0%	.0%	.0%	.0%
Log Gulch	.0%	.0%	.0%	3.6%	12.5%	.0%	.0%	.0%	.0%
York Bridge									
Fishing									
Access	.0%	.0%	.0%	.0%	6.3%	12.5%	.0%	.0%	.0%
Holter Lake									
Campground	.0%	.0%	.0%	3.6%	.0%	6.3%	.0%	.0%	7.1%
Big Horn River	.0%	.0%	4.2%	3.6%	.0%	.0%	.0%	.0%	.0%
Court Sheriff	.0%	.0%	.0%	.0%	.0%	12.5%	.0%	.0%	.0%
State parks	.0%	.0%	4.2%	.0%	.0%	6.3%	.0%	.0%	.0%
All others	.0%	.0%	.0%	.0%	6.3%	6.3%	.0%	.0%	.0%
Missouri River									
below Hauser									
Dam	12.5%	.0%	.0%	.0%	.0%	.0%	100.0%	.0%	.0%
Cooney	.0%	.0%	4.2%	.0%	.0%	6.3%	.0%	.0%	.0%
Cherry Creek									
Campground	25.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%
West									
Yellowstone	.0%	25.0%	4.2%	.0%	.0%	.0%	.0%	.0%	.0%
Seeley Lake	.0%	.0%	.0%	3.6%	6.3%	.0%	.0%	.0%	.0%
Bighorn	.0%	.0%	4.2%	.0%	.0%	.0%	.0%	25.0%	.0%
Kims Marina	.0%	.0%	.0%	.0%	6.3%	6.3%	.0%	.0%	.0%
Other side of									
river-lake	.0%	.0%	.0%	3.6%	.0%	.0%	.0%	.0%	.0%
Hauser Lake	.0%	.0%	.0%	.0%	6.3%	.0%	.0%	.0%	.0%
Madison	.0%	.0%	4.2%	.0%	.0%	.0%	.0%	.0%	.0%
Lake Side	.0%	.0%	.0%	3.6%	.0%	.0%	.0%	.0%	.0%
Path or walkway	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	7.1%

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Note: totals do not add to 100% due to multiple responses.

(continued)

Table C7.1s. Other Crowded Sites as a Reason for Choosing This Site by ROS Region

	REGION								
	Hebgen/Ennis			Helena			Great Falls		
	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Urban
River Road Park	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	7.1%
Como Lake	.0%	.0%	.0%	3.6%	.0%	.0%	.0%	.0%	.0%
Salmon Lake	.0%	.0%	.0%	3.6%	.0%	.0%	.0%	.0%	.0%
Fish Hatchery	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	7.1%
Georgetown Lake	.0%	.0%	4.2%	.0%	.0%	.0%	.0%	.0%	.0%
Everything close to town	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	7.1%
Squaw Creek	.0%	.0%	4.2%	.0%	.0%	.0%	.0%	.0%	.0%
Cartwheel spot	.0%	.0%	4.2%	.0%	.0%	.0%	.0%	.0%	.0%
Alberton Gorge	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	7.1%
Clark Fork River	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	7.1%
East side Fishing Access	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	7.1%
Beaver Creek Fishing Access	.0%	.0%	4.2%	.0%	.0%	.0%	.0%	.0%	.0%
Holter Lake Lodge	.0%	.0%	.0%	.0%	6.3%	.0%	.0%	.0%	.0%
The Boat Loft	.0%	.0%	.0%	3.6%	.0%	.0%	.0%	.0%	.0%
Swan Valley	.0%	.0%	.0%	.0%	6.3%	.0%	.0%	.0%	.0%
Harrison	.0%	.0%	4.2%	.0%	.0%	.0%	.0%	.0%	.0%
Norris	.0%	.0%	4.2%	.0%	.0%	.0%	.0%	.0%	.0%
Chinamen Gulch	.0%	.0%	.0%	3.6%	.0%	.0%	.0%	.0%	.0%
Silos	.0%	.0%	.0%	.0%	.0%	6.3%	.0%	.0%	.0%
N	8	4	24	28	16	16	1	4	14

Note: totals do not add to 100% due to multiple responses.



Table C8s. Recreation Activity by ROS Region

	REGION									
	Hebgen/Ennis			Helena			Great Falls			
	Semi-primitive motorized	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Urban
Site Activities										
sightseeing	45.5%	72.2%	74.7%	60.5%	71.3%	58.9%	37.8%	64.4%	72.6%	70.4%
photography	54.5%	53.0%	50.6%	32.1%	47.4%	25.4%	16.5%	20.7%	40.2%	27.0%
auto/RV camping	.0%	40.0%	33.7%	37.9%	17.3%	52.7%	31.1%	1.1%	4.3%	3.7%
tent camping	18.2%	23.5%	14.5%	12.0%	4.6%	22.6%	10.2%	2.3%	4.3%	5.0%
floating/ rafting	9.1%	15.7%	22.9%	29.6%	10.7%	9.7%	4.4%	14.9%	16.5%	5.7%
walking	45.5%	50.4%	49.4%	34.8%	31.6%	35.1%	23.5%	39.1%	47.6%	50.7%
day hiking	18.2%	20.9%	27.7%	14.9%	18.7%	9.1%	7.3%	18.4%	2.4%	13.3%
picnicking	9.1%	29.6%	33.7%	24.6%	29.4%	32.0%	24.8%	13.8%	34.8%	12.9%
sunbathing	.0%	26.1%	7.2%	26.5%	18.2%	27.3%	19.4%	8.0%	14.0%	8.0%
horseback riding	9.1%	4.3%	12.0%	1.4%	.2%	.3%	.3%	.0%	.0%	.1%
shooting	.0%	.0%	9.6%	2.7%	.7%	.6%	.6%	1.1%	.6%	.8%
swimming	.0%	29.6%	4.8%	26.3%	18.5%	36.7%	21.9%	4.6%	1.8%	7.1%
jetskiing	.0%	4.3%	.0%	5.6%	5.6%	5.0%	3.8%	.0%	.0%	1.8%
powerboating	.0%	13.0%	8.4%	11.6%	28.5%	38.2%	25.1%	1.1%	1.8%	2.2%
nature study	9.1%	10.4%	26.5%	7.7%	9.2%	2.5%	3.8%	11.5%	5.5%	11.3%
tubing	9.1%	16.5%	8.4%	18.4%	11.2%	15.4%	13.0%	2.3%	.0%	1.5%
canoeing/ kayaking	.0%	11.3%	8.4%	10.6%	1.9%	1.6%	2.5%	8.0%	2.4%	5.3%
viewing wildlife	27.3%	48.7%	63.9%	38.1%	51.1%	46.4%	27.0%	34.5%	23.2%	28.1%
visit other historic sites	.0%	14.8%	18.1%	6.2%	8.3%	6.3%	2.9%	8.0%	3.7%	12.9%
biking	.0%	10.4%	9.6%	7.9%	2.4%	5.6%	3.8%	17.2%	.6%	11.7%
hunting	9.1%	.0%	2.4%	1.9%	.5%	.6%	1.3%	1.1%	.0%	.7%
boat angling	.0%	22.6%	19.3%	25.7%	26.0%	53.0%	38.7%	10.3%	20.7%	2.0%
bank angling	63.6%	22.6%	38.6%	19.9%	16.8%	25.1%	36.8%	24.1%	10.4%	4.3%
wade angling	45.5%	13.0%	33.7%	18.2%	9.0%	6.3%	7.3%	2.3%	14.0%	2.4%
ATV/ motorcycling	.0%	6.1%	10.8%	3.1%	.5%	2.2%	1.9%	.0%	.0%	1.2%
water skiing	.0%	12.2%	1.2%	9.9%	12.4%	19.1%	13.3%	.0%	.0%	.9%
sailing/ sailboarding	.0%	.0%	.0%	.6%	.5%	.3%	1.6%	.0%	.0%	.3%
visit Lewis and Clark sites	.0%	9.6%	7.2%	3.7%	23.6%	8.5%	4.8%	13.8%	15.9%	29.0%
other activities?	9.1%	8.7%	14.5%	12.0%	10.0%	13.5%	11.1%	8.0%	4.3%	15.9%
N	11	118	83	494	418	327	326	92	164	762

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Note: totals do not add to 100% due to multiple responses.

Table C9s. Levels of Overall Trip Satisfaction by ROS Region

	REGION									
	Hebgen/Ennis			Helena			Great Falls			
	Semi-primitive motorized	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Urban
This trip was better than any I can remember	.45	.05	.30	-.04	-.08	-.24	-.57	-.19	-.08	.01
This trip was better than any other to this area	.45	.21	.39	.09	.12	-.10	-.32	.01	.09	.12
This trip was so good I would take it again	1.27	1.01	1.21	1.01	.88	.67	.32	.76	.91	.73
Trip satisfaction index	.73	.42	.64	.35	.30	.11	-.19	.19	.31	.27
N	11	118	83	494	418	327	326	92	164	762

-2=Strongly disagree    0=Neutral/no opinion    2=Strongly agree

Table C10s. Importance of Site Conditions by ROS Region

	REGION									
	Hebgen/Ennis			Helena			Great Falls			
	Semi-primitive motorized	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Urban
Importance of site Conditions										
campsite/picnic area conditions	.0%	16.9%	25.0%	20.7%	19.2%	30.4%	18.8%	8.2%	16.0%	11.9%
quality of Lewis and Clark interpretive/educational information	.0%	1.5%	1.7%	.3%	6.4%	.5%	.5%	6.1%	4.0%	7.1%
quality of other interpretive/educational information	.0%	7.7%	1.7%	.3%	6.0%	.5%	1.0%	2.0%	2.7%	6.1%
appropriateness of development	.0%	7.7%	6.7%	9.8%	10.2%	9.3%	6.1%	6.1%	10.7%	9.2%
maintenance of facilities	.0%	20.0%	30.0%	20.3%	20.4%	31.3%	25.9%	16.3%	16.0%	22.8%
cleanliness of area	40.0%	49.2%	36.7%	44.9%	47.5%	44.9%	45.2%	36.7%	54.7%	42.5%
amount of development	20.0%	4.6%	6.7%	11.1%	9.4%	6.5%	9.1%	12.2%	6.7%	10.2%
privacy of area	20.0%	36.9%	36.7%	26.9%	21.9%	31.3%	25.4%	14.3%	24.0%	18.4%
condition of natural features	.0%	18.5%	28.3%	18.0%	26.8%	14.5%	12.2%	24.5%	22.7%	25.5%
residential development visible from the water	.0%	6.2%	.0%	3.3%	3.4%	1.9%	4.1%	4.1%	5.3%	1.7%
historical information	.0%	3.1%	1.7%	1.0%	6.4%	.9%	3.0%	2.0%	4.0%	3.4%
behavior of other people	.0%	13.8%	11.7%	15.4%	12.5%	21.5%	17.3%	14.3%	13.3%	15.0%
conflict with other users	.0%	3.1%	5.0%	5.9%	5.7%	8.4%	3.0%	4.1%	9.3%	2.7%
degree of naturalness	20.0%	16.9%	26.7%	24.9%	21.1%	13.6%	12.2%	22.4%	26.7%	24.5%
number of campsites within sight or sound	.0%	6.2%	3.3%	7.5%	4.5%	8.9%	7.1%	.0%	6.7%	1.4%
seeing/hearing others	.0%	12.3%	8.3%	10.2%	6.0%	12.1%	9.6%	10.2%	10.7%	6.1%
rules and restrictions	.0%	3.1%	1.7%	5.9%	5.3%	8.9%	8.1%	4.1%	2.7%	4.4%
number of fish caught	60.0%	16.9%	16.7%	13.4%	12.5%	23.8%	29.4%	10.2%	24.0%	2.7%
opportunity to view wildlife	.0%	16.9%	20.0%	9.8%	14.0%	15.0%	11.2%	16.3%	18.7%	11.9%
opportunity to hunt	.0%	.0%	3.3%	2.3%	1.9%	1.9%	3.0%	6.1%	.0%	1.4%
N	11	118	83	494	418	327	326	92	164	762

Note: totals do not add to 100% due to multiple responses.



Table C11s. Mean Satisfaction of Site Conditions by ROS Region

	REGION									
	Hebgen/Ennis			Rural	Helena			Great Falls		
	Semi-primitive motorized	Roaded natural	Roaded modified		Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Urban
campsite/picnic conditions	.45	1.06	1.44	.92	.82	.94	.64	.38	.98	.68
quality of Lewis and Clark interpretive info	.40	.36	.32	.20	.65	.26	.12	.44	.74	1.05
quality of other interpretive/educational materials	.40	.55	.60	.27	.60	.32	.15	.39	.57	.87
appropriateness of development	.91	.72	.81	.76	.75	.65	.51	.75	.92	1.10
maintenance of facilities	1.40	1.04	1.31	.98	1.14	.95	.90	.91	1.36	1.31
cleanliness of area	1.64	1.28	1.54	1.19	1.22	1.05	.93	1.21	1.43	1.42
amount of development	1.09	.72	.74	.67	.69	.61	.39	.80	.90	1.02
privacy of area	1.55	1.01	1.00	.75	.64	.33	.13	1.05	.77	.93
condition of natural features	1.73	1.27	1.44	1.22	1.20	.99	.83	1.22	1.19	1.19
residential development visible from water	1.09	.82	.53	.60	.59	.33	.45	.63	.68	.58
historical info	.50	.73	.73	.30	.66	.34	.10	.70	.75	1.08
behavior of other people	.91	.90	.64	.80	.83	.57	.59	1.05	.98	1.12
conflict with other users	.36	.50	.34	.46	.44	.33	.33	.43	.58	.54
degree of naturalness	1.36	1.22	1.27	1.05	1.01	.77	.62	.97	.92	1.01
number of campsites within sight or sound	.30	.56	.61	.49	.39	.24	.10	.31	.36	.29
seeing,hearing others	.45	.40	.51	.49	.32	.17	.05	.59	.44	.58

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-2=Strongly disagree    0=Neutral/no opinion    2=Strongly agree

(continued)

Table C11s. Mean Satisfaction of Site Conditions by ROS Region

	REGION									
	Hebgen/Ennis			Helena				Great Falls		
	Semi-primitive motorized	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Urban
rules and restrictions	.70	.88	.91	.63	.64	.55	.36	.60	.63	.62
number of fish caught	1.30	.40	.43	.24	.14	.16	.01	.27	.45	.09
opportunity to view wildlife	1.00	.96	1.11	.82	1.04	1.10	.66	.65	.70	.68
opportunity to hunt	.18	-.03	.17	.08	.02	.07	-.02	.10	.05	-.03
N	11	118	83	494	418	327	326	92	164	762

-2=Strongly disagree    0=Neutral/no opinion    2=Strongly agree



Table C12s. Additional Facilities and Services by ROS Region

	REGION									
	Hebgen/Ennis				Helena			Great Falls		
	Semi-primitive motorized	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Urban
N	11	118	83	494	418	327	326	92	164	762
No facilities needed	54.5%	51.7%	50.6%	50.2%	48.3%	35.5%	41.1%	63.0%	62.2%	70.2%
Facilities needed	45.5%	48.3%	49.4%	49.8%	51.7%	64.5%	58.9%	37.0%	37.8%	29.8%
Additional facilities/services needed.										
None	80.0%	33.3%	63.4%	38.2%	37.0%	16.1%	29.2%	38.2%	59.7%	31.3%
Restroom facilities	.0%	38.6%	2.4%	4.9%	6.5%	3.8%	6.3%	8.8%	1.6%	11.0%
Showers	.0%	3.5%	.0%	3.3%	1.9%	18.0%	9.9%	.0%	4.8%	1.3%
Trash bins	.0%	3.5%	.0%	7.7%	7.4%	2.4%	4.2%	.0%	6.5%	2.6%
Running water	.0%	1.8%	2.4%	3.7%	5.6%	7.6%	3.6%	2.9%	8.1%	1.8%
Additional campsites	.0%	1.8%	2.4%	2.4%	7.9%	8.1%	5.7%	2.9%	3.2%	.0%
Dump station	.0%	.0%	.0%	8.1%	2.3%	11.4%	1.0%	.0%	.0%	.0%
Eatery	.0%	3.5%	.0%	2.8%	2.8%	.5%	2.1%	.0%	4.8%	8.8%
Picnic tables	.0%	1.8%	.0%	2.8%	2.3%	.9%	1.6%	8.8%	1.6%	7.0%
Water fountains	.0%	.0%	.0%	.0%	.9%	.5%	2.1%	5.9%	.0%	11.5%
Better roads	.0%	8.8%	.0%	2.4%	.9%	6.2%	1.0%	.0%	.0%	.4%
Electrical hook up	.0%	.0%	.0%	1.6%	1.4%	7.6%	3.1%	.0%	.0%	.0%
More trees	.0%	.0%	.0%	1.2%	.5%	4.7%	2.6%	2.9%	.0%	2.6%
More bike trails	.0%	.0%	.0%	.4%	.5%	.5%	.5%	11.8%	.0%	5.3%
Parking-more	20.0%	.0%	.0%	1.2%	2.3%	1.9%	2.6%	2.9%	.0%	.4%
Shade	.0%	.0%	.0%	1.6%	.5%	1.9%	1.6%	.0%	1.6%	2.6%
More boat slips-dock spaces	.0%	1.8%	.0%	.4%	2.8%	4.3%	1.0%	.0%	.0%	.0%
More fish	.0%	.0%	.0%	.8%	1.9%	.9%	4.7%	.0%	.0%	.4%
Information boards	.0%	5.3%	2.4%	1.2%	1.9%	1.4%	.0%	.0%	.0%	1.3%
Enforcement of rules	.0%	.0%	.0%	.0%	3.2%	2.8%	1.0%	.0%	.0%	.4%
Clean restrooms	.0%	1.8%	2.4%	1.6%	.0%	2.4%	2.1%	2.9%	.0%	.0%
Better boat launch	.0%	.0%	.0%	2.4%	1.4%	.9%	.5%	5.9%	.0%	.9%
Another boat launch	.0%	.0%	.0%	2.0%	1.9%	1.9%	1.0%	.0%	1.6%	.0%
Water access	.0%	.0%	7.3%	.4%	.5%	.9%	1.0%	2.9%	.0%	2.2%
More room between campsites-more seclusion	.0%	.0%	.0%	.8%	.9%	1.4%	2.6%	.0%	.0%	.0%
Fish cleaning station	.0%	.0%	.0%	.4%	.5%	.9%	3.1%	.0%	1.6%	.0%
Public docks	.0%	.0%	.0%	1.2%	1.4%	1.4%	.5%	.0%	.0%	.4%
Store	.0%	.0%	4.9%	.4%	.0%	1.4%	1.6%	2.9%	.0%	.4%
Play ground	.0%	.0%	.0%	.4%	.0%	1.9%	.0%	.0%	3.2%	1.3%
Better Boat docking	.0%	.0%	.0%	.8%	.9%	1.4%	1.0%	.0%	.0%	.4%
Campfire pits	.0%	.0%	.0%	.0%	.5%	1.4%	1.0%	.0%	1.6%	.9%

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(continued)

Table C12s. Additional Facilities and Services by ROS Region

	REGION									
	Hebgen/Ennis			Helena			Great Falls			
	Semi-primitive motorized	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Urban
More wheel chair-handicap access	.0%	.0%	2.4%	.0%	.5%	.5%	1.6%	.0%	.0%	.9%
More historical interpretation	.0%	.0%	.0%	.0%	1.9%	.0%	.0%	.0%	.0%	1.8%
Sand beach	.0%	.0%	.0%	.4%	1.4%	.9%	.5%	.0%	.0%	.4%
New outhouse	.0%	.0%	.0%	2.0%	.9%	.0%	.0%	.0%	.0%	.4%
No fees	.0%	.0%	.0%	1.2%	.0%	.9%	1.6%	.0%	.0%	.0%
Camping	.0%	.0%	.0%	.4%	.5%	.5%	.5%	2.9%	.0%	.9%
Better facilities	.0%	.0%	.0%	1.2%	.0%	.5%	1.0%	.0%	1.6%	.0%
Fewer facilities	.0%	.0%	.0%	.8%	1.9%	.0%	.0%	2.9%	.0%	.0%
Level camping spots	.0%	.0%	.0%	.8%	.0%	.9%	1.0%	.0%	1.6%	.0%
Dumpster in parking lot	.0%	.0%	.0%	.4%	1.9%	.5%	.0%	.0%	.0%	.0%
Laundry	.0%	.0%	.0%	.4%	.0%	.0%	2.6%	.0%	.0%	.0%
Gas-fuel	.0%	.0%	2.4%	.4%	.0%	.0%	1.6%	.0%	.0%	.4%
Better swimming area-reduction of boat traffic	.0%	1.8%	.0%	.4%	.0%	.0%	.5%	.0%	.0%	1.3%
Manage at all times	.0%	1.8%	.0%	.0%	.5%	1.4%	.5%	.0%	.0%	.0%
Boat rentals-raft rentals	.0%	.0%	2.4%	.4%	.0%	.5%	1.0%	.0%	.0%	.4%
Weather shelter	.0%	.0%	.0%	.0%	.0%	.5%	.5%	.0%	1.6%	.9%
Dust control	.0%	.0%	.0%	.0%	.5%	.9%	1.0%	.0%	.0%	.0%
Clean area	.0%	.0%	.0%	.0%	.5%	.9%	1.0%	.0%	.0%	.0%
More boat trailer parking	.0%	.0%	.0%	.0%	.0%	1.4%	.5%	.0%	.0%	.0%
Full hookups	.0%	.0%	.0%	.0%	.5%	.5%	1.0%	.0%	.0%	.0%
Animals	.0%	.0%	.0%	.0%	.5%	.0%	.5%	.0%	.0%	.9%
Camp Reservation System	.0%	.0%	.0%	.8%	.0%	.5%	.5%	.0%	.0%	.0%
Grass needs mowed	.0%	.0%	.0%	.4%	.9%	.0%	.0%	.0%	.0%	.0%
Telephone	.0%	.0%	.0%	.0%	.0%	.5%	.5%	.0%	.0%	.4%
Jet ski restriction	.0%	.0%	.0%	.0%	.5%	.5%	.5%	.0%	.0%	.0%
More water in lake	.0%	3.5%	.0%	.4%	.0%	.0%	.0%	.0%	.0%	.0%
Distance markers	.0%	.0%	.0%	.0%	.5%	.0%	.0%	.0%	.0%	.9%
Fire wood for sale	.0%	.0%	.0%	.8%	.0%	.5%	.0%	.0%	.0%	.0%
Fewer people	.0%	.0%	.0%	.4%	.5%	.0%	.5%	.0%	.0%	.0%
Better night fishing facilities	.0%	.0%	.0%	.0%	.5%	.0%	.5%	.0%	.0%	.4%
Horse shoe pits	.0%	.0%	.0%	.0%	.5%	.0%	.0%	.0%	1.6%	.4%
Motorboat restriction	.0%	.0%	.0%	.0%	.9%	.0%	.5%	.0%	.0%	.0%
Less bug eaters	.0%	.0%	.0%	.8%	.0%	.0%	.0%	.0%	.0%	.0%
Pegs or posts to anchor boats	.0%	.0%	.0%	.0%	.5%	.0%	.5%	.0%	.0%	.0%

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Signs explaining plants	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.9%
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(continued)

Table C12s. Additional Facilities and Services by ROS Region

	REGION									
	Hebgen/Ennis			Helena			Great Falls			
	Semi-primitive motorized	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Urban
Mirrors in bathrooms	.0%	.0%	.0%	.0%	.5%	.5%	.0%	.0%	.0%	.0%
Shooting area	.0%	.0%	.0%	.0%	.0%	.0%	.5%	2.9%	.0%	.0%
Bigger day use area	.0%	.0%	.0%	.0%	.0%	.5%	.5%	.0%	.0%	.0%
Expansion	.0%	.0%	.0%	.0%	.0%	.5%	.5%	.0%	.0%	.0%
Less trash	.0%	.0%	.0%	.0%	.5%	.0%	.5%	.0%	.0%	.0%
Picnic area outside										
resting area	.0%	.0%	.0%	.0%	.0%	.0%	.5%	.0%	.0%	.4%
Keep visitor center open	.0%	.0%	.0%	.0%	.5%	.0%	.5%	.0%	.0%	.0%
Volleyball court	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.9%
More park grass	.0%	.0%	.0%	.4%	.0%	.0%	.0%	.0%	.0%	.4%
More benches	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.9%
More pulloffs along										
road-wider pulloffs	.0%	.0%	.0%	.0%	.5%	.0%	.0%	.0%	.0%	.4%
Dock for										
swimming-fishing	.0%	1.8%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.4%
Take big rocks out of										
swimming-boating area	.0%	.0%	.0%	.0%	.0%	.5%	.0%	.0%	1.6%	.0%
Park	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.9%
Mosquito-insect spraying	.0%	.0%	.0%	.4%	.0%	.0%	.0%	.0%	1.6%	.0%
Campground host	.0%	.0%	2.4%	.0%	.0%	.0%	.5%	.0%	.0%	.0%
Speed bumps	.0%	.0%	.0%	.0%	.5%	.0%	.5%	.0%	.0%	.0%
Wider bank area to fish										
from	.0%	.0%	.0%	.0%	.0%	.0%	1.0%	.0%	.0%	.0%
More cabins	.0%	.0%	2.4%	.4%	.0%	.0%	.0%	.0%	.0%	.0%
Restriction on dogs	.0%	.0%	.0%	.4%	.0%	.0%	.5%	.0%	.0%	.0%
Keep fish hatchery open	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.9%
Entertainment	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.9%
Better access to										
kayaking site	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.4%
Better tent area	.0%	.0%	.0%	.0%	.0%	.5%	.0%	.0%	.0%	.0%
Bird nesting areas	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.4%
More grass parking	.0%	.0%	.0%	.0%	.0%	.5%	.0%	.0%	.0%	.0%
Keep kayakers out of										
white water area	.0%	.0%	.0%	.0%	.0%	.0%	.5%	.0%	.0%	.0%
Fines for unattended										
campers	.0%	.0%	.0%	.0%	.0%	.5%	.0%	.0%	.0%	.0%
Free day camping	.0%	.0%	.0%	.0%	.0%	.5%	.0%	.0%	.0%	.0%
Pathway steps	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.4%
Better water drains	.0%	.0%	.0%	.0%	.0%	.0%	.5%	.0%	.0%	.0%
Clean picnic tables	.0%	.0%	.0%	.0%	.0%	.0%	.5%	.0%	.0%	.0%
Clean river bottom	.0%	.0%	.0%	.0%	.0%	.0%	.5%	.0%	.0%	.0%
Sitting logs by										

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campfires	.0%	.0%	.0%	.4%	.0%	.0%	.0%	.0%	.0%	.0%
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(continued)

Table C12s. Additional Facilities and Services by ROS Region

	REGION									
	Hebgen/Ennis				Helena			Great Falls		
	Semi-primitive motorized	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Urban
Smooth out bridges	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.4%
Clean rocks off trail	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.4%
Barbecue	.0%	.0%	.0%	.0%	.0%	.0%	.5%	.0%	.0%	.0%
No game wardens	.0%	.0%	.0%	.0%	.0%	.0%	.5%	.0%	.0%	.0%
RV camping	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	1.6%	.0%
Remove day limits	.0%	.0%	.0%	.0%	.5%	.0%	.0%	.0%	.0%	.0%
View cams-binoculars	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	1.6%	.0%
Rest Area	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.4%
Designated Jet Ski Area	.0%	.0%	.0%	.0%	.0%	.5%	.0%	.0%	.0%	.0%
Numbered campsites	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	1.6%	.0%
Regulation of dock use	.0%	.0%	.0%	.0%	.0%	.5%	.0%	.0%	.0%	.0%
Choose own campsite	.0%	.0%	.0%	.4%	.0%	.0%	.0%	.0%	.0%	.0%
More freedom for dogs	.0%	.0%	.0%	.4%	.0%	.0%	.0%	.0%	.0%	.0%
Equipment rental	.0%	.0%	.0%	.4%	.0%	.0%	.0%	.0%	.0%	.0%
50 amp power	.0%	.0%	.0%	.4%	.0%	.0%	.0%	.0%	.0%	.0%
New concrete for										
basketball court	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.4%
Pay phone	.0%	.0%	.0%	.0%	.0%	.0%	.5%	.0%	.0%	.0%
Clean silt out of river	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.4%
Worms for sale	.0%	.0%	2.4%	.0%	.0%	.0%	.0%	.0%	.0%	.0%
Pack dog allowed on boat	.0%	.0%	.0%	.0%	.5%	.0%	.0%	.0%	.0%	.0%
More picnic areas by										
water	.0%	.0%	.0%	.0%	.5%	.0%	.0%	.0%	.0%	.0%
Fishing pole holders	.0%	.0%	.0%	.0%	.0%	.0%	.5%	.0%	.0%	.0%
More brochures	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.4%
Less signage	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.4%
More variety in store	.0%	.0%	.0%	.4%	.0%	.0%	.0%	.0%	.0%	.0%
Less hassle with fees	.0%	.0%	2.4%	.0%	.0%	.0%	.0%	.0%	.0%	.0%
More game wardens	.0%	.0%	.0%	.0%	.0%	.0%	.5%	.0%	.0%	.0%
Propane availability	.0%	1.8%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%
Breakwater	.0%	.0%	.0%	.4%	.0%	.0%	.0%	.0%	.0%	.0%
Wildlife viewing area	.0%	.0%	2.4%	.0%	.0%	.0%	.0%	.0%	.0%	.0%
Another exit out of										
campground	.0%	.0%	.0%	.0%	.0%	.0%	.5%	.0%	.0%	.0%
Get rid of casinos	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.4%
Weed control	.0%	.0%	.0%	.4%	.0%	.0%	.0%	.0%	.0%	.0%
Recycling bins	.0%	.0%	.0%	.0%	.0%	.5%	.0%	.0%	.0%	.0%
Rope swing	.0%	.0%	.0%	.0%	.5%	.0%	.0%	.0%	.0%	.0%
Wind gauges	.0%	.0%	.0%	.4%	.0%	.0%	.0%	.0%	.0%	.0%
Clocks	.0%	.0%	.0%	.4%	.0%	.0%	.0%	.0%	.0%	.0%
Clean fire pits	.0%	.0%	.0%	.4%	.0%	.0%	.0%	.0%	.0%	.0%
On-duty park ranger	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.4%

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Air pumps for tubes	.0%	.0%	.0%	.4%	.0%	.0%	.0%	.0%	.0%	.0%
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Table C13s. Disabled Facility Needs by ROS Region

	REGION									
	Hebgen/Ennis			Helena				Great Falls		
	Semi-primitive motorized	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Urban
No disabled facilities needed	90.9%	83.1%	95.2%	94.9%	86.4%	90.5%	86.5%	91.3%	95.1%	93.3%
Disabled facilities needed	9.1%	16.9%	4.8%	5.1%	13.6%	9.5%	13.5%	8.7%	4.9%	6.7%
Specific additional accommodation										
More handicap access to water	100.0%	15.4%	33.3%	35.3%	37.5%	45.0%	46.4%	75.0%	.0%	19.0%
Need handicap bathroom facilities	.0%	69.2%	66.7%	58.8%	28.1%	10.0%	21.4%	.0%	.0%	23.8%
Need paved surfaces	.0%	7.7%	.0%	5.9%	15.6%	20.0%	10.7%	.0%	.0%	14.3%
Ramps-wider	.0%	7.7%	33.3%	.0%	9.4%	5.0%	3.6%	25.0%	.0%	4.8%
Handicap access to campground	.0%	.0%	.0%	.0%	6.3%	10.0%	3.6%	.0%	.0%	.0%
Need handicap parking	.0%	.0%	.0%	.0%	3.1%	10.0%	3.6%	.0%	.0%	.0%
Make it safe for disabled	.0%	.0%	.0%	.0%	6.3%	.0%	.0%	.0%	.0%	4.8%
Easier access to potable water	.0%	.0%	.0%	5.9%	.0%	.0%	.0%	.0%	.0%	9.5%
Steps to aid asthmatics-benches-resting places	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	14.3%
Access to tables	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	14.3%
Braille signs-signs in large print	.0%	.0%	.0%	.0%	6.3%	.0%	.0%	.0%	.0%	.0%
More handrails	.0%	.0%	.0%	.0%	3.1%	.0%	3.6%	.0%	.0%	.0%
Electricity	.0%	.0%	.0%	5.9%	.0%	5.0%	.0%	.0%	.0%	.0%
Awning	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	4.8%
Fishing pole holders	.0%	.0%	.0%	.0%	.0%	.0%	3.6%	.0%	.0%	.0%
More room	.0%	.0%	.0%	.0%	.0%	.0%	3.6%	.0%	.0%	.0%
Clean up grass and weeds	.0%	.0%	.0%	.0%	.0%	.0%	3.6%	.0%	.0%	.0%
Access to Tail Race Island	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	4.8%
Better loading facilities	.0%	.0%	.0%	.0%	.0%	.0%	3.6%	.0%	.0%	.0%
N	1	13	3	17	32	20	28	4	0	21

Note: totals do not add to 100% due to multiple responses.



Table C14s. Number of Encounters and Their Evaluation by ROS Region

	REGION									
	Hebgen/Ennis			Helena			Great Falls			
	Semi-primitive motorized	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Urban
Canoes seen today										
0	90.0%	80.4%	82.9%	65.6%	67.5%	79.4%	75.5%	84.6%	70.5%	88.1%
1 to 5	10.0%	17.4%	15.7%	29.9%	28.7%	19.1%	23.7%	15.4%	25.7%	9.7%
6 to 10	.0%	.0%	1.4%	3.2%	2.6%	1.2%	.8%	.0%	1.9%	1.3%
11 to 20	.0%	.0%	.0%	.5%	.0%	.4%	.0%	.0%	1.9%	.7%
21 to 30	.0%	.0%	.0%	.5%	.3%	.0%	.0%	.0%	.0%	.0%
31+	.0%	2.2%	.0%	.3%	.9%	.0%	.0%	.0%	.0%	.2%
Rate canoe encounters										
Enjoyed seeing	40.0%	58.6%	30.0%	27.7%	29.5%	28.8%	25.6%	23.8%	18.8%	54.1%
Didnt mind seeing	60.0%	41.4%	70.0%	71.6%	69.8%	69.9%	74.4%	76.2%	78.1%	45.9%
Disliked seeing	.0%	.0%	.0%	.7%	.7%	1.4%	.0%	.0%	3.1%	.0%
Powerboats seen today										
0	90.0%	49.0%	77.1%	62.1%	14.6%	18.9%	26.8%	84.6%	66.3%	84.5%
1 to 5	10.0%	35.4%	14.3%	23.5%	32.9%	20.4%	27.6%	13.8%	26.9%	10.1%
6 to 10	.0%	6.3%	5.7%	7.5%	19.4%	17.4%	16.1%	1.5%	3.8%	2.5%
11 to 20	.0%	4.2%	1.4%	4.3%	16.4%	16.6%	16.1%	.0%	1.0%	1.6%
21 to 30	.0%	.0%	.0%	.5%	7.0%	10.6%	3.8%	.0%	1.9%	.0%
31+	.0%	5.2%	1.4%	2.1%	9.7%	16.2%	9.6%	.0%	.0%	1.3%
Rate powerboats encounters										
Enjoyed seeing	66.7%	32.7%	37.5%	19.5%	11.8%	17.3%	16.0%	30.0%	13.5%	40.5%
Didnt mind seeing	33.3%	63.6%	62.5%	69.5%	71.8%	68.0%	66.5%	60.0%	37.8%	45.9%
Disliked seeing	.0%	3.6%	.0%	11.0%	16.4%	14.7%	17.6%	10.0%	48.6%	13.5%
Waterskiers seen today										
0	100.0%	72.0%	88.6%	74.7%	60.3%	49.4%	54.8%	93.8%	95.1%	89.7%
1 to 5	.0%	20.4%	8.6%	18.1%	21.4%	26.4%	25.4%	6.3%	2.9%	6.4%
6 to 10	.0%	4.3%	1.4%	3.0%	8.2%	13.4%	9.3%	.0%	1.0%	3.0%
11 to 20	.0%	.0%	1.4%	1.3%	4.8%	5.4%	3.2%	.0%	.0%	.7%
21 to 30	.0%	.0%	.0%	.5%	3.1%	1.5%	2.8%	.0%	1.0%	.0%
31+	.0%	3.2%	.0%	2.4%	2.3%	3.8%	4.4%	.0%	.0%	.2%
Rate waterskiers encounters										
Enjoyed seeing	100.0%	38.5%	35.3%	26.4%	18.6%	16.5%	18.2%	33.3%	50.0%	46.7%
Didnt mind seeing	.0%	56.4%	47.1%	64.8%	72.5%	75.9%	65.0%	53.3%	33.3%	41.7%
Disliked seeing	.0%	5.1%	17.6%	8.8%	9.0%	7.5%	16.8%	13.3%	16.7%	11.7%
Jetskis seen today										

0                      90.0%           76.8%           91.4%           75.0%           52.9%           40.1%           49.2%           91.8%           94.3%           86.5%

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(continued)

Table C14s. Number of Encounters and Their Evaluation by ROS Region

	REGION									
	Hebgen/Ennis			Helena			Great Falls			
	Semi-primitive motorized	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Urban
1 to 5	10.0%	16.8%	4.3%	16.5%	27.5%	28.3%	31.0%	6.6%	2.9%	9.2%
6 to 10	.0%	2.1%	2.9%	4.5%	8.4%	18.2%	10.7%	.0%	1.9%	2.5%
11 to 20	.0%	1.1%	1.4%	2.1%	5.4%	5.9%	5.6%	1.6%	1.0%	1.4%
21 to 30	.0%	2.1%	.0%	.5%	3.0%	1.9%	1.2%	.0%	.0%	.2%
31+	.0%	1.1%	.0%	1.3%	2.7%	5.6%	2.4%	.0%	.0%	.2%
Rate jetskiers encounters										
Enjoyed seeing	66.7%	37.1%	33.3%	25.2%	13.8%	6.9%	13.4%	23.5%	50.0%	34.3%
Didnt mind seeing	33.3%	40.0%	40.0%	48.9%	49.7%	44.7%	49.7%	58.8%	21.4%	44.3%
Disliked seeing	.0%	22.9%	26.7%	26.0%	36.5%	48.4%	36.9%	17.6%	28.6%	21.4%
Bank anglers seen today										
0	40.0%	48.4%	38.4%	35.1%	48.5%	37.5%	32.8%	49.2%	55.3%	75.6%
1 to 5	20.0%	34.7%	32.9%	44.7%	31.5%	35.1%	33.2%	42.9%	13.6%	19.2%
6 to 10	30.0%	11.6%	16.4%	11.2%	10.9%	16.2%	18.6%	7.9%	14.6%	3.4%
11 to 20	10.0%	4.2%	6.8%	6.1%	5.8%	5.4%	9.9%	.0%	8.7%	.9%
21 to 30	.0%	1.1%	.0%	1.3%	1.4%	3.1%	.8%	.0%	4.9%	.5%
31+	.0%	.0%	5.5%	1.6%	1.9%	2.7%	4.7%	.0%	2.9%	.5%
Rate bank anglers encounters										
Enjoyed seeing	16.7%	36.0%	31.8%	20.6%	24.6%	30.4%	21.1%	29.6%	15.9%	44.3%
Didnt mind seeing	83.3%	62.0%	59.1%	77.6%	71.1%	65.8%	74.7%	70.4%	77.3%	53.8%
Disliked seeing	.0%	2.0%	9.1%	1.8%	4.3%	3.7%	4.2%	.0%	6.8%	1.9%
Wade anglers seen today										
0	30.0%	67.0%	45.9%	50.1%	75.7%	74.7%	78.8%	90.6%	62.5%	87.6%
1 to 5	30.0%	25.3%	28.4%	30.4%	14.0%	13.6%	16.7%	9.4%	8.7%	10.0%
6 to 10	20.0%	5.5%	13.5%	12.2%	4.3%	4.7%	2.4%	.0%	8.7%	1.6%
11 to 20	.0%	1.1%	4.1%	4.6%	4.0%	5.1%	1.2%	.0%	10.6%	.9%
21 to 30	10.0%	1.1%	1.4%	.8%	.3%	.0%	.0%	.0%	5.8%	.0%
31+	10.0%	.0%	6.8%	1.9%	1.7%	1.9%	.8%	.0%	3.8%	.0%
Rate wade anglers encounters										
Enjoyed seeing	28.6%	36.6%	35.7%	21.4%	24.0%	24.7%	24.7%	18.8%	19.5%	40.8%
Didnt mind seeing	57.1%	63.4%	54.8%	75.9%	71.9%	73.0%	70.6%	75.0%	68.3%	56.3%
Disliked seeing	14.3%	.0%	9.5%	2.7%	4.1%	2.2%	4.7%	6.3%	12.2%	2.8%
Boat anglers seen today										
0	70.0%	49.5%	65.3%	41.2%	31.4%	21.1%	29.8%	84.4%	59.8%	92.7%

1 to 5                      20.0%       32.6%       19.4%       34.4%       29.4%       18.4%       29.0%       12.5%       12.7%       4.6%

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(continued)

Table C14s. Number of Encounters and Their Evaluation by ROS Region

	REGION									
	Hebgen/Ennis			Helena			Great Falls			
	Semi-primitive motorized	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Urban
6 to 10	.0%	9.5%	6.9%	13.9%	20.7%	25.6%	17.6%	3.1%	7.8%	.9%
11 to 20	.0%	5.3%	1.4%	6.3%	9.8%	16.5%	13.7%	.0%	3.9%	1.4%
21 to 30	.0%	.0%	1.4%	1.8%	3.1%	8.6%	3.9%	.0%	4.9%	.0%
31+	10.0%	3.2%	5.6%	2.4%	5.6%	9.8%	5.9%	.0%	10.8%	.5%
Rate boat anglers encounters										
Enjoyed seeing	50.0%	38.5%	28.6%	18.4%	15.5%	22.8%	17.0%	21.1%	14.3%	43.1%
Didnt mind seeing	50.0%	59.6%	71.4%	77.4%	79.4%	74.6%	78.9%	73.7%	69.0%	51.0%
Disliked seeing	.0%	1.9%	.0%	4.2%	5.2%	2.6%	4.1%	5.3%	16.7%	5.9%
River floaters seen today										
0	80.0%	87.5%	81.7%	56.1%	77.3%	83.6%	88.8%	85.9%	61.8%	85.3%
1 to 5	.0%	11.4%	8.5%	18.4%	13.2%	8.4%	7.9%	7.8%	7.8%	10.2%
6 to 10	.0%	.0%	4.2%	10.2%	3.4%	4.0%	2.1%	.0%	13.7%	1.8%
11 to 20	.0%	1.1%	2.8%	6.7%	2.3%	1.2%	.0%	3.1%	9.8%	1.8%
21 to 30	20.0%	.0%	.0%	2.4%	1.1%	1.6%	.4%	3.1%	2.0%	.5%
31+	.0%	.0%	2.8%	6.1%	2.6%	1.2%	.8%	.0%	4.9%	.5%
Rate river floater encounters										
Enjoyed seeing	40.0%	54.2%	47.6%	25.9%	19.3%	21.4%	28.8%	27.8%	14.3%	52.7%
Didnt mind seeing	40.0%	45.8%	52.4%	66.9%	76.3%	77.1%	66.1%	72.2%	71.4%	44.6%
Disliked seeing	20.0%	.0%	.0%	7.2%	4.4%	1.4%	5.1%	.0%	14.3%	2.7%
Livestock seen today										
0	70.0%	85.6%	71.8%	75.8%	73.7%	70.6%	84.9%	87.5%	77.5%	89.8%
1 to 5	.0%	5.6%	14.1%	10.3%	14.3%	12.9%	7.9%	3.1%	5.9%	4.5%
6 to 10	.0%	1.1%	5.6%	5.6%	5.7%	5.9%	2.5%	3.1%	2.9%	1.1%
11 to 20	.0%	2.2%	2.8%	.8%	2.3%	5.9%	2.5%	3.1%	3.9%	.5%
21 to 30	.0%	1.1%	1.4%	1.7%	.6%	2.4%	1.3%	.0%	4.9%	1.1%
31+	30.0%	4.4%	4.2%	5.8%	3.4%	2.4%	.8%	3.1%	4.9%	2.9%
Rate livestock encounters										
Enjoyed seeing	33.3%	39.1%	32.0%	28.3%	30.6%	28.7%	30.9%	35.3%	32.1%	41.3%
Didnt mind seeing	33.3%	56.5%	64.0%	56.6%	62.0%	64.9%	55.9%	58.8%	60.7%	46.0%
Disliked seeing	33.3%	4.3%	4.0%	15.0%	7.4%	6.4%	13.2%	5.9%	7.1%	12.7%
Shoreline development seen today										

0                      70.0%        74.7%        66.7%        61.5%        51.0%        53.2%        58.2%        88.9%        69.4%        77.2%

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(continued)



Table C14s. Number of Encounters and Their Evaluation by ROS Region

	REGION									
	Hebgen/Ennis			Helena			Great Falls			
	Semi-primitive motorized	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Urban
1 to 5	20.0%	15.4%	20.3%	27.4%	25.8%	23.4%	21.8%	11.1%	20.4%	16.4%
6 to 10	.0%	5.5%	5.8%	5.0%	6.7%	7.7%	7.9%	.0%	5.1%	3.9%
11 to 20	.0%	2.2%	4.3%	3.1%	4.3%	4.4%	5.9%	.0%	1.0%	1.2%
21 to 30	10.0%	1.1%	.0%	.3%	3.8%	3.6%	2.5%	.0%	2.0%	.2%
31+	.0%	1.1%	2.9%	2.8%	8.4%	7.7%	3.8%	.0%	2.0%	1.2%
Rate shoreline development encounters										
Enjoyed seeing	25.0%	18.8%	20.0%	17.1%	14.0%	13.6%	14.8%	23.5%	20.6%	18.0%
Didnt mind seeing	75.0%	68.8%	52.0%	59.2%	66.7%	68.0%	57.4%	64.7%	50.0%	62.9%
Disliked seeing	.0%	12.5%	28.0%	23.7%	19.4%	18.4%	27.9%	11.8%	29.4%	19.1%
Hunters seen today										
0	100.0%	96.7%	94.4%	95.0%	98.2%	97.1%	98.8%	100.0%	97.0%	98.4%
1 to 5	.0%	1.1%	.0%	3.6%	.9%	1.6%	.4%	.0%	.0%	.7%
6 to 10	.0%	1.1%	.0%	.6%	.0%	.8%	.0%	.0%	1.0%	.5%
11 to 20	.0%	1.1%	5.6%	.0%	.0%	.4%	.4%	.0%	1.0%	.0%
21 to 30	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	1.0%	.0%
31+	.0%	.0%	.0%	.8%	.9%	.0%	.4%	.0%	.0%	.5%
Rate hunting encounters										
Enjoyed seeing	33.3%	44.4%	27.3%	27.4%	31.5%	33.3%	27.5%	38.5%	45.5%	43.9%
Didnt mind seeing	66.7%	50.0%	63.6%	62.9%	63.0%	66.7%	67.5%	46.2%	54.5%	43.9%
Disliked seeing	.0%	5.6%	9.1%	9.7%	5.6%	.0%	5.0%	15.4%	.0%	12.2%
N	11	118	83	494	418	327	326	92	164	762

Table C15s. Perceptions of Crowding by ROS Region

	REGION									
	Hebgen/Ennis			Helena				Great Falls		
	Semi-primitive motorized	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Urban
How crowded did you feel during this visit?										
not at all crowded	70.0%	43.8%	45.6%	44.7%	40.0%	34.5%	36.5%	73.8%	49.0%	68.7%
2	10.0%	20.5%	17.7%	17.7%	15.9%	10.3%	11.5%	14.3%	12.9%	17.3%
slightly crowded	10.0%	15.2%	21.5%	17.9%	19.7%	15.2%	17.0%	8.3%	9.7%	8.6%
4	.0%	2.7%	1.3%	5.1%	5.5%	7.1%	7.1%	2.4%	6.5%	2.1%
5	10.0%	6.3%	3.8%	4.7%	4.2%	4.5%	7.1%	.0%	3.2%	1.4%
moderately crowded	.0%	7.1%	5.1%	4.9%	5.2%	9.7%	6.7%	1.2%	12.9%	1.0%
7	.0%	1.8%	2.5%	3.6%	5.0%	7.7%	8.0%	.0%	1.9%	.3%
8	.0%	.9%	1.3%	.6%	1.5%	5.5%	2.6%	.0%	1.3%	.1%
extremely crowded	.0%	1.8%	1.3%	.9%	3.0%	5.5%	3.5%	.0%	2.6%	.4%
Mean	1.70	2.51	2.39	2.45	2.79	3.57	3.23	1.44	2.70	1.58
N	11	118	83	494	418	327	326	92	164	762

Table C16s. Where crowding occurred by ROS Region

	REGION									
	Hebgen/Ennis			Helena				Great Falls		
	Semi-primitive motorized	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Urban
Where did you feel crowded?										
In campsite	.0%	32.3%	5.3%	24.3%	17.2%	45.2%	39.0%	.0%	5.6%	5.5%
On boat ramp	.0%	3.2%	.0%	4.3%	6.6%	9.5%	4.0%	33.3%	11.1%	1.8%
On the river	.0%	.0%	5.3%	7.8%	4.1%	3.2%	1.0%	.0%	33.3%	1.8%
On boat dock	.0%	.0%	.0%	.0%	4.9%	16.7%	4.0%	.0%	2.8%	1.8%
Yellowstone National Park	.0%	16.1%	26.3%	13.0%	.8%	.0%	.0%	.0%	2.8%	1.8%
Parking area	.0%	.0%	5.3%	7.0%	4.1%	5.6%	4.0%	.0%	2.8%	1.8%
West Yellowstone	.0%	16.1%	26.3%	7.8%	.0%	.0%	.0%	.0%	2.8%	.0%
On Boat Tour	.0%	.0%	.0%	.0%	14.8%	.0%	.0%	.0%	.0%	.0%
On water	50.0%	.0%	.0%	.9%	4.9%	4.8%	2.0%	.0%	.0%	.0%
On the lake	.0%	.0%	.0%	.0%	4.9%	4.0%	3.0%	.0%	.0%	1.8%
On the bank or shoreline	.0%	.0%	.0%	.0%	.8%	4.0%	7.0%	.0%	.0%	1.8%
On causeway	.0%	.0%	.0%	.0%	.0%	.0%	14.0%	.0%	.0%	.0%
In fishing areas	.0%	.0%	5.3%	2.6%	.8%	1.6%	2.0%	.0%	2.8%	.0%
Weekend crowding at										
Holter dam campground	.0%	.0%	.0%	2.6%	.8%	2.4%	1.0%	.0%	2.8%	.0%
All over	.0%	3.2%	.0%	3.5%	1.6%	.8%	1.0%	.0%	.0%	.0%
Bathroom	.0%	9.7%	.0%	.0%	.8%	1.6%	2.0%	.0%	.0%	1.8%
Picnic area'	.0%	.0%	.0%	.0%	4.1%	.8%	2.0%	.0%	2.8%	.0%
In Lewis and Clark facility	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	16.4%
On shore	.0%	.0%	.0%	4.3%	.8%	1.6%	.0%	.0%	.0%	.0%
Glacier National Park	.0%	.0%	5.3%	.0%	.8%	.0%	.0%	.0%	2.8%	9.1%
Holter Lake	.0%	.0%	.0%	.9%	1.6%	2.4%	.0%	.0%	.0%	1.8%
In town	.0%	.0%	.0%	2.6%	.0%	.8%	1.0%	.0%	.0%	3.6%
Black Sandy SRA	.0%	.0%	.0%	.0%	1.6%	.8%	4.0%	.0%	.0%	.0%
Boat launch area	.0%	.0%	.0%	.9%	.0%	.8%	.0%	.0%	2.8%	5.5%
Log Gulch Campground	.0%	.0%	.0%	.0%	1.6%	3.2%	.0%	.0%	.0%	.0%

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Note: totals do not add to 100% due to multiple responses.

(continued)

Table C16s. Where crowding occurred by ROS Region

	REGION									
	Hebgen/Ennis			Helena				Great Falls		
	Semi-primitive motorized	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Urban
Great Falls	.0%	3.2%	.0%	.0%	.8%	.0%	.0%	16.7%	2.8%	3.6%
Holter Lake										
Campground	.0%	.0%	.0%	.0%	.0%	3.2%	.0%	.0%	2.8%	.0%
Holter Dam	.0%	.0%	.0%	.0%	1.6%	.8%	1.0%	.0%	2.8%	.0%
On Missouri River between Wolf Creek and Craig	.0%	.0%	.0%	.0%	.8%	.0%	.0%	.0%	8.3%	.0%
On roads	.0%	3.2%	.0%	.9%	.8%	.0%	.0%	.0%	2.8%	.0%
Madison	.0%	.0%	10.5%	1.7%	.0%	.0%	.0%	.0%	.0%	.0%
Exhibits	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	7.3%
Put-in	.0%	.0%	.0%	2.6%	.8%	.0%	.0%	.0%	.0%	.0%
Holter Dam										
Campground	.0%	.0%	.0%	.0%	2.5%	.8%	.0%	.0%	.0%	.0%
Hauser Lake	.0%	.0%	.0%	.0%	.8%	.0%	3.0%	.0%	.0%	.0%
On trail	.0%	.0%	.0%	.9%	.8%	.0%	.0%	.0%	.0%	1.8%
At the dam	.0%	.0%	.0%	.0%	.8%	.0%	.0%	16.7%	.0%	1.8%
At trailhead	.0%	.0%	.0%	.9%	.8%	.0%	.0%	.0%	.0%	1.8%
In the park	.0%	.0%	.0%	.0%	.0%	.8%	.0%	.0%	.0%	3.6%
Swimming area	.0%	3.2%	.0%	.0%	.8%	.0%	1.0%	.0%	.0%	.0%
Ryan Dam	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	8.3%	.0%
Giant Springs	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	5.5%
Quake Lake	.0%	.0%	5.3%	1.7%	.0%	.0%	.0%	.0%	.0%	.0%
Lakeside Resort	.0%	.0%	.0%	.0%	.0%	.0%	3.0%	.0%	.0%	.0%
Helena	.0%	.0%	.0%	.0%	1.6%	.0%	1.0%	.0%	.0%	.0%
Bear Trap Canyon	.0%	.0%	.0%	2.6%	.0%	.0%	.0%	.0%	.0%	.0%
Parking at side of road	.0%	.0%	.0%	.0%	.0%	.0%	2.0%	.0%	.0%	.0%
Shoreline of Madison	50.0%	3.2%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%
Viewing area	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	3.6%
Entrance and exit	.0%	.0%	.0%	.9%	.8%	.0%	.0%	.0%	.0%	.0%
At restaurant	.0%	3.2%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	1.8%
RV park	.0%	.0%	.0%	.9%	.0%	.0%	1.0%	.0%	.0%	.0%
Creek	.0%	.0%	.0%	.0%	1.6%	.0%	.0%	.0%	.0%	.0%
Marina	.0%	.0%	.0%	.0%	.8%	.8%	.0%	.0%	.0%	.0%
Below dam	.0%	.0%	.0%	.0%	.0%	.0%	2.0%	.0%	.0%	.0%
On Missouri River	.0%	.0%	5.3%	.0%	.0%	.0%	1.0%	.0%	.0%	.0%

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Note: totals do not add to 100% due to multiple responses.

(continued)

Table C16s. Where crowding occurred by ROS Region

	REGION									
	Hebgen/Ennis			Helena			Great Falls			
	Semi-primitive motorized	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Urban
Parade	.0%	.0%	.0%	1.7%	.0%	.0%	.0%	.0%	.0%	.0%
Lakeside RV campground	.0%	.0%	.0%	.0%	.0%	.0%	2.0%	.0%	.0%	.0%
Below Holter Dam west side	.0%	.0%	.0%	.0%	.8%	.8%	.0%	.0%	.0%	.0%
Judith Landing	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	3.6%
By Split Rock	.0%	.0%	.0%	.0%	.8%	.8%	.0%	.0%	.0%	.0%
Black Beach	.0%	.0%	.0%	.0%	.8%	.0%	1.0%	.0%	.0%	.0%
Wolf Creek Bridge	.0%	.0%	.0%	.0%	.8%	.0%	.0%	.0%	2.8%	.0%
Rainbow Point Campground	.0%	.0%	.0%	1.7%	.0%	.0%	.0%	.0%	.0%	.0%
Beaver Creek FAS	.0%	.0%	.0%	.0%	1.6%	.0%	.0%	.0%	.0%	.0%
Gates of the Mountains Inc	.0%	.0%	.0%	.0%	1.6%	.0%	.0%	.0%	.0%	.0%
Rainbow Dam	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	3.6%
Around the bridge	.0%	.0%	.0%	.0%	.0%	.0%	1.0%	.0%	.0%	.0%
In hatchery	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	1.8%
Town pond	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	1.8%
Place we stayed	.0%	.0%	.0%	.9%	.0%	.0%	.0%	.0%	.0%	.0%
First 3 miles	.0%	.0%	.0%	.9%	.0%	.0%	.0%	.0%	.0%	.0%
Beaverhead creek	.0%	.0%	.0%	.0%	.8%	.0%	.0%	.0%	.0%	.0%
Creek inlet	.0%	.0%	.0%	.0%	.8%	.0%	.0%	.0%	.0%	.0%
Wheelchair access site	.0%	.0%	.0%	.0%	.0%	.0%	.0%	16.7%	.0%	.0%
Day use area	.0%	.0%	.0%	.0%	.0%	.8%	.0%	.0%	.0%	.0%
Between Holter and Gates of the Mountains	.0%	.0%	.0%	.0%	.8%	.0%	.0%	.0%	.0%	.0%
Around the river	.0%	.0%	.0%	.9%	.0%	.0%	.0%	.0%	.0%	.0%
Canyon Ferry Campgrounds	.0%	.0%	.0%	.0%	.8%	.0%	.0%	.0%	.0%	.0%

Note: totals do not add to 100% due to multiple responses.

(continued)



Table C16s. Where crowding occurred by ROS Region

	REGION									
	Hebgen/Ennis			Helena			Great Falls			
	Semi-primitive motorized	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Urban
Hill overlooking the Great Falls	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	2.8%	.0%
Campground at Cliff Lake	.0%	.0%	.0%	.9%	.0%	.0%	.0%	.0%	.0%	.0%
Morony Dam put-in spot	.0%	.0%	.0%	.0%	.0%	.0%	.0%	16.7%	.0%	.0%
On grass Between Wolf Creek and Cascade	.0%	.0%	.0%	.0%	.8%	.0%	.0%	.0%	.0%	.0%
On roads in Yellowstone	.0%	.0%	.0%	.9%	.0%	.0%	.0%	.0%	.0%	.0%
Close to docks On the east bank of the Missouri below Hauser Dam	.0%	.0%	.0%	.0%	.8%	.0%	1.0%	.0%	.0%	.0%
By Pavilion Up the Gallatin	.0%	.0%	.0%	.9%	.0%	.0%	.0%	.0%	.0%	.0%
When asked to do survey	.0%	.0%	.0%	.9%	.0%	.0%	.0%	.0%	.0%	.0%
In the shower	.0%	.0%	.0%	.9%	.0%	.0%	.0%	.0%	.0%	.0%
Waiting areas	.0%	.0%	.0%	.0%	.8%	.0%	.0%	.0%	.0%	.0%
Boat landing	.0%	.0%	.0%	.9%	.0%	.0%	.0%	.0%	.0%	.0%
Close to fishing boats	.0%	.0%	.0%	.0%	.0%	.0%	1.0%	.0%	.0%	.0%
Gift shop	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	1.8%
Observatory overlooking Quake Lake	.0%	3.2%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%
IMAX theater in W Yellowstone	.0%	.0%	.0%	.9%	.0%	.0%	.0%	.0%	.0%	.0%
Museum	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	1.8%
Hotel-motel	.0%	.0%	.0%	.0%	.8%	.0%	.0%	.0%	.0%	.0%
Interpretive Center	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	1.8%

Note: totals do not add to 100% due to multiple responses.

(continued)

Table C16s. Where crowding occurred by ROS Region

	REGION									
	Hebgen/Ennis			Helena				Great Falls		
	Semi-primitive motorized	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Urban
At points of interest	.0%	.0%	.0%	.9%	.0%	.0%	.0%	.0%	.0%	.0%
Boat trailer parking lot	.0%	.0%	.0%	.0%	.0%	.0%	1.0%	.0%	.0%	.0%
Cabin Creek Campground	.0%	.0%	5.3%	.0%	.0%	.0%	.0%	.0%	.0%	.0%
Spring Creek Campground	.0%	3.2%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%
Powerhouse River Access	.0%	.0%	.0%	.9%	.0%	.0%	.0%	.0%	.0%	.0%
Warm Springs Access	.0%	.0%	.0%	.9%	.0%	.0%	.0%	.0%	.0%	.0%
Holter Lake Lodge	.0%	.0%	.0%	.0%	.0%	.8%	.0%	.0%	.0%	.0%
Broadwater Bay Park	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	1.8%
Bigfork	.0%	.0%	.0%	.9%	.0%	.0%	.0%	.0%	.0%	.0%
Bozeman	.0%	.0%	.0%	.9%	.0%	.0%	.0%	.0%	.0%	.0%
Lee Metcalf Wilderness	.0%	.0%	.0%	.9%	.0%	.0%	.0%	.0%	.0%	.0%
Missouri Headwaters	.0%	.0%	.0%	.0%	.8%	.0%	.0%	.0%	.0%	.0%
Craig	.0%	.0%	.0%	.0%	.8%	.0%	.0%	.0%	.0%	.0%
Nevada City	.0%	.0%	5.3%	.0%	.0%	.0%	.0%	.0%	.0%	.0%
Norris	.0%	.0%	.0%	.9%	.0%	.0%	.0%	.0%	.0%	.0%
Missoula	.0%	.0%	.0%	.0%	.8%	.0%	.0%	.0%	.0%	.0%
Hauser Dam	.0%	.0%	.0%	.0%	.0%	.0%	1.0%	.0%	.0%	.0%
Lewis and Clark	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	1.8%
Logan	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	1.8%
Wolf Creek	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	1.8%
Rock Creek	.0%	.0%	.0%	.0%	.8%	.0%	.0%	.0%	.0%	.0%
Yellowstone Holiday Resort	.0%	.0%	.0%	.9%	.0%	.0%	.0%	.0%	.0%	.0%
N	2	31	19	115	122	126	100	6	36	55

Note: totals do not add to 100% due to multiple responses.

Table C17s. Reasons No Longer Visit Sites by ROS Region

	REGION									
	Hebgen/Ennis			Helena			Great Falls			
	Semi-primitive motorized	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Urban
Are there any sites in this area you no longer visit?										
yes	.0%	16.8%	8.9%	11.4%	9.9%	14.8%	15.4%	12.0%	11.6%	7.9%
no	100.0%	83.2%	91.1%	88.6%	90.1%	85.2%	84.6%	88.0%	88.4%	92.1%
Reasons no longer visit sites										
because of fees	.0%	50.0%	60.0%	27.3%	48.5%	30.0%	43.9%	50.0%	69.2%	85.4%
because of crowding	.0%	81.3%	60.0%	45.5%	66.7%	45.0%	61.0%	60.0%	15.4%	31.3%
conflicts with other users	.0%	18.8%	.0%	18.2%	18.2%	17.5%	24.4%	20.0%	7.7%	12.5%
overuse	.0%	43.8%	40.0%	25.0%	33.3%	32.5%	34.1%	40.0%	15.4%	16.7%
resource degradation	.0%	6.3%	40.0%	27.3%	15.2%	20.0%	9.8%	40.0%	7.7%	4.2%
other reason	.0%	12.5%	40.0%	34.1%	30.3%	65.0%	26.8%	.0%	23.1%	8.3%
N	11	118	83	494	418	327	326	92	164	762

Table C18s. Recreation Sites No Longer Visited by ROS Region

	REGION								
	Hebgen/Ennis			Helena			Great Falls		
	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Urban
Sites no longer visited									
Giant Springs Heritage State Park	.0%	.0%	.0%	2.9%	2.8%	.0%	40.0%	46.2%	88.9%
Black Sandy SRA	.0%	.0%	.0%	29.4%	8.3%	40.0%	.0%	.0%	.0%
Yellowstone Park	37.5%	100.0%	26.3%	2.9%	.0%	.0%	.0%	.0%	.0%
Log Gulch Campground	.0%	.0%	.0%	8.8%	33.3%	.0%	.0%	.0%	.0%
Canyon Ferry	.0%	.0%	2.6%	32.4%	5.6%	.0%	.0%	7.7%	.0%
Holter Lake	.0%	.0%	2.6%	5.9%	5.6%	2.5%	20.0%	.0%	2.2%
Rainbow Point Campground	6.3%	.0%	18.4%	.0%	.0%	.0%	.0%	.0%	.0%
Lonesomehurst Campground	25.0%	.0%	2.6%	.0%	.0%	.0%	.0%	.0%	.0%
Giant Spring	.0%	.0%	.0%	.0%	.0%	.0%	20.0%	23.1%	.0%
Hauser Dam	.0%	.0%	.0%	.0%	11.1%	2.5%	.0%	.0%	.0%
Madison Arm Resort	12.5%	.0%	2.6%	.0%	.0%	.0%	.0%	7.7%	.0%
York campground	.0%	.0%	.0%	2.9%	.0%	7.5%	.0%	.0%	.0%
Hellgate	.0%	.0%	.0%	.0%	.0%	10.0%	.0%	.0%	.0%
Cherry Creek Campground	12.5%	.0%	2.6%	.0%	.0%	.0%	.0%	.0%	.0%
Spring Creek Campground	12.5%	.0%	2.6%	.0%	.0%	.0%	.0%	.0%	.0%
Hauser Lake	.0%	.0%	.0%	5.9%	2.8%	.0%	.0%	.0%	.0%
Craig	.0%	.0%	.0%	2.9%	.0%	2.5%	.0%	7.7%	.0%
Silos	.0%	.0%	.0%	2.9%	.0%	5.0%	.0%	.0%	.0%
Kims Marina	.0%	.0%	.0%	.0%	.0%	7.5%	.0%	.0%	.0%
Chinamen Gulch	.0%	.0%	.0%	2.9%	.0%	5.0%	.0%	.0%	.0%
Kirkwood Ranch Motel and Marina	.0%	.0%	2.6%	.0%	.0%	2.5%	.0%	.0%	.0%
Holter Lake Campground	.0%	.0%	.0%	.0%	5.6%	.0%	.0%	.0%	.0%
Lakeside Resort	.0%	.0%	.0%	2.9%	.0%	2.5%	.0%	.0%	.0%
Gates Of The Mountains Inc	.0%	.0%	.0%	.0%	2.8%	2.5%	.0%	.0%	.0%
Lewis and Clark Interpretive Center	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	4.4%
Missouri River	.0%	.0%	.0%	.0%	2.8%	2.5%	.0%	.0%	.0%
Lower Madison Harrison	.0%	.0%	5.3%	.0%	.0%	.0%	.0%	.0%	.0%
Big Horn	.0%	.0%	2.6%	.0%	.0%	.0%	.0%	7.7%	.0%
Gallatin River	.0%	.0%	5.3%	.0%	.0%	.0%	.0%	.0%	.0%
Greycliff	.0%	.0%	5.3%	.0%	.0%	.0%	.0%	.0%	.0%
Holter Dam	.0%	.0%	.0%	.0%	.0%	5.0%	.0%	.0%	.0%
Earthquake Area Interpretive Site	6.3%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%
Madison River Picnic Site	.0%	.0%	2.6%	.0%	.0%	.0%	.0%	.0%	.0%
Bakershole Campground	.0%	.0%	2.6%	.0%	.0%	.0%	.0%	.0%	.0%
Causeway Fishing Access	.0%	.0%	.0%	.0%	.0%	2.5%	.0%	.0%	.0%

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Note: totals do not add to 100% due to multiple responses.

(continued)

Table C18s. Recreation Sites No Longer Visited by ROS Region

	REGION								
	Hebgen/Ennis			Helena			Great Falls		
	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Urban
Holter Dam Campground	.0%	.0%	.0%	.0%	2.8%	.0%	.0%	.0%	.0%
Beaver Creek Fishing Access	.0%	.0%	2.6%	.0%	.0%	.0%	.0%	.0%	.0%
El Dorado Bar Mine INC	.0%	.0%	.0%	2.9%	.0%	.0%	.0%	.0%	.0%
The Boat Loft	.0%	.0%	.0%	2.9%	.0%	.0%	.0%	.0%	.0%
Indian Trail Marina	.0%	.0%	.0%	2.9%	.0%	.0%	.0%	.0%	.0%
North Shore Public Access	.0%	.0%	2.6%	.0%	.0%	.0%	.0%	.0%	.0%
Ryan Dam	.0%	.0%	.0%	.0%	.0%	.0%	10.0%	.0%	.0%
Ulm Pishkun	.0%	.0%	.0%	.0%	.0%	.0%	.0%	7.7%	.0%
Any fee area	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	2.2%
North Side	.0%	.0%	2.6%	.0%	.0%	.0%	.0%	.0%	.0%
Spring Meadow	.0%	.0%	.0%	.0%	.0%	2.5%	.0%	.0%	.0%
Lewis and Clark Caverns	.0%	.0%	.0%	.0%	2.8%	.0%	.0%	.0%	.0%
Henrys Fork	6.3%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%
State park	.0%	.0%	.0%	2.9%	.0%	.0%	.0%	.0%	.0%
Frenchtown Pond	.0%	.0%	.0%	.0%	.0%	2.5%	.0%	.0%	.0%
Beartooth	.0%	.0%	.0%	.0%	2.8%	.0%	.0%	.0%	.0%
Hyalite	.0%	.0%	2.6%	.0%	.0%	.0%	.0%	.0%	.0%
Holiday	6.3%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%
Beam Lake	.0%	.0%	.0%	.0%	2.8%	.0%	.0%	.0%	.0%
White Bear Island	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	2.2%
Pelican Point to Holter	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	2.2%
Lake Francis	.0%	.0%	.0%	.0%	2.8%	.0%	.0%	.0%	.0%
South Fork	.0%	.0%	2.6%	.0%	.0%	.0%	.0%	.0%	.0%
Tiber	.0%	.0%	.0%	.0%	.0%	.0%	.0%	.0%	2.2%
Beaverhead	.0%	.0%	.0%	.0%	.0%	.0%	.0%	7.7%	.0%
Moose Creek	.0%	.0%	.0%	.0%	.0%	2.5%	.0%	.0%	.0%
Opposite bank at Warm Springs	.0%	.0%	2.6%	.0%	.0%	.0%	.0%	.0%	.0%
Loma	.0%	.0%	.0%	.0%	.0%	.0%	10.0%	.0%	.0%
Wade Lake	.0%	.0%	2.6%	.0%	.0%	.0%	.0%	.0%	.0%
Park Lake	.0%	.0%	.0%	.0%	.0%	2.5%	.0%	.0%	.0%
Smith River	.0%	.0%	.0%	.0%	.0%	.0%	.0%	7.7%	.0%
Wolf Creek	.0%	.0%	.0%	.0%	2.8%	.0%	.0%	.0%	.0%
Glacier National Park	.0%	.0%	.0%	2.9%	.0%	.0%	.0%	.0%	.0%
Crooked Falls Overlook	.0%	.0%	.0%	2.9%	.0%	.0%	.0%	.0%	.0%
Riverside	.0%	.0%	.0%	.0%	2.8%	.0%	.0%	.0%	.0%
Jo Bonner	.0%	.0%	.0%	.0%	2.8%	.0%	.0%	.0%	.0%
White Earth	.0%	.0%	.0%	.0%	.0%	2.5%	.0%	.0%	.0%
N	16	5	38	34	36	40	10	13	45

Note: totals do not add to 100% due to multiple responses.



Table C19s. Behavioral Response to Displacement by ROS Region

	REGION										
	Hebgen/Ennis			Rural	Helena			Great Falls			Urban
	Semi-primitive motorized	Roaded natural	Roaded modified		Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified		
If this site were closed, how would it affect trip plans?											
I would choose another site in this area	27.3%	47.6%	43.0%	46.1%	35.3%	28.3%	44.7%	30.0%	33.1%	32.8%	
I would visit at some other time	36.4%	20.0%	16.5%	17.7%	25.7%	22.8%	13.9%	45.0%	31.0%	34.3%	
I would choose another site somewhere else	27.3%	19.0%	22.8%	22.8%	16.9%	32.6%	30.1%	15.0%	12.7%	11.9%	
I would do some other activity	.0%	6.7%	8.9%	5.6%	14.0%	3.6%	4.6%	6.3%	14.8%	16.2%	
I would stay home	9.1%	6.7%	8.9%	7.8%	8.1%	12.7%	6.6%	3.8%	8.5%	4.8%	
N	11	118	83	494	418	327	326	92	164	762	

Table C20s. Average Measures of Attachment to Place by ROS Region

	REGION									
	Hebgen/Ennis			Rural	Helena			Great Falls		
	Semi-primitive motorized	Roaded natural	Roaded modified		Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Urban
A lot of my life is organized around this place	-.27	-.37	-.48	-.36	-.36	-.33	-.36	-.51	-.52	-.27
This place is the best for what I like to do	.55	.54	.58	.71	.52	.72	.47	.72	.41	.58
I feel no commitment to this place	-.45	-.30	-.42	-.31	-.34	-.28	-.09	-.28	-.42	-.32
The time I spend here could just as easily be spent somewhere else	.18	-.37	-.14	-.23	-.26	-.02	.26	-.35	-.32	-.31
I am very attached to this place	.91	.49	.78	.60	.41	.45	.17	.40	.45	.51
I identify strongly with this place	.27	.45	.75	.58	.36	.40	.13	.34	.37	.41
This place makes me feel like no other place can	.00	.27	.71	.24	.09	.04	-.23	.08	.13	.15
Doing what I do here is more important than doing it any other place	.00	.09	.29	.12	-.14	.04	-.22	.05	.02	.07
N	11	118	83	494	418	327	326	92	164	762

-2=Strongly disagree    0=Neutral/no opinion    2=Strongly agree

Table C21s. Group Trip Expenditures by ROS Region

	REGION									
	Hebgen/Ennis			Helena			Great Falls			
	Semi-primitive motorized	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Rural	Roaded natural	Roaded modified	Urban
Motel/hotel/BB	190.91	41.89	142.82	9.38	31.78	4.41	6.25	26.04	36.70	22.87
Campground/RV parks	.45	7.00	11.53	13.69	6.87	11.68	8.95	1.80	2.29	3.94
Guides/outfitters	22.73	4.16	14.29	3.46	7.73	.51	5.33	12.83	21.19	9.40
Licenses and entrance fees	5.91	11.13	8.98	8.36	9.94	7.33	6.10	2.79	7.21	1.91
Auto/RV rental/repair	30.00	6.51	220.41	5.81	13.88	3.77	1.17	.27	13.35	7.46
Transportation expenses	.00	.24	.00	.95	6.15	3.22	.75	.43	5.09	5.86
Gasoline/oil	69.18	44.22	91.29	24.22	24.97	31.79	17.92	6.03	17.93	10.47
Restaurant/bar	70.45	32.40	148.20	18.92	30.15	12.81	8.80	18.38	21.60	15.98
Groceries/snacks	58.55	46.16	72.96	30.58	28.38	38.93	22.77	1.80	17.87	9.59
Retail goods	30.45	45.22	12.69	17.03	19.32	14.94	17.24	1.75	21.04	10.07
Other expenses	.00	8.28	13.16	1.75	4.23	.71	.51	6.53	2.12	1.56
Total expenditures	478.64	253.09	736.33	134.38	183.91	129.21	96.11	78.67	166.40	97.37
N	11	83	49	389	358	273	267	92	164	762

## Appendix D - Tables for Section 1 - Visitor Survey Results by ROS Class and by Region

Table D1s. Visitor Characteristics by Region and ROS Class

	REGION				ROS			
	Hebgen/ Ennis	Helena	Great Falls	Semi- primitive motorized	Roaded natural	Roaded modified	Rural	Urban
age	45	48	44	40	47	47	45	45
gender								
male	55.1%	58.8%	55.3%	81.8%	56.7%	59.2%	57.9%	52.6%
female	44.9%	41.2%	44.7%	18.2%	43.3%	40.8%	42.1%	47.4%
highest level of education completed								
Elementary	.2%	1.0%	.3%	.0%	.3%	.6%	.8%	.4%
High school	22.8%	33.2%	27.7%	9.1%	27.8%	30.8%	29.1%	27.4%
College	52.3%	45.7%	46.3%	72.7%	47.7%	46.2%	49.4%	46.2%
Post grad	24.8%	20.1%	25.7%	18.2%	24.2%	22.5%	20.7%	26.0%
primary occupation								
professional	32.4%	30.8%	37.4%	9.1%	34.6%	30.7%	31.0%	38.1%
managerial	9.0%	8.3%	6.1%	27.3%	8.3%	9.7%	8.2%	4.7%
sales	4.9%	4.0%	3.7%	9.1%	5.7%	3.4%	4.3%	3.2%
clerical	3.5%	4.7%	4.3%	.0%	3.5%	4.4%	4.7%	4.4%
craftsman	8.6%	7.0%	6.0%	.0%	6.4%	6.5%	9.2%	5.9%
operatives	1.2%	1.4%	.6%	.0%	.9%	1.3%	1.8%	.3%
transport	1.7%	2.2%	1.4%	18.2%	1.4%	1.7%	1.9%	1.7%
laborer	3.5%	4.0%	4.6%	.0%	3.0%	3.2%	4.7%	5.1%
service worker	2.6%	2.5%	3.3%	.0%	2.8%	2.3%	2.8%	3.2%
farmer/rancher	.5%	2.0%	1.5%	9.1%	1.1%	2.5%	.9%	1.2%
farm/ranch laborer	.3%	.3%	.1%	.0%	.2%	.4%	.3%	.2%
armed services	.5%	2.8%	6.4%	.0%	5.1%	3.0%	1.1%	5.1%
homemaker	5.1%	5.3%	4.9%	.0%	5.1%	4.9%	5.1%	5.3%
student	7.7%	1.6%	3.5%	18.2%	2.3%	4.4%	5.1%	3.2%
retired	17.7%	20.5%	14.7%	9.1%	18.2%	20.5%	16.7%	16.5%
unemployed/disabled	.6%	2.6%	1.6%	.0%	1.4%	1.1%	2.2%	2.0%
household income before taxes								
less than \$10,000	7.7%	3.7%	5.9%	20.0%	3.7%	4.6%	6.7%	6.3%
10,000-\$19,000	7.5%	9.0%	12.8%	.0%	8.6%	9.0%	9.4%	12.6%
\$20,000-\$29,000	12.0%	14.8%	13.3%	.0%	13.1%	12.3%	15.8%	12.6%
\$30,000-\$39,000	13.3%	15.8%	15.5%	.0%	14.8%	17.6%	14.5%	14.2%
\$40,000-\$49,000	12.6%	14.6%	12.9%	20.0%	12.0%	14.6%	13.9%	13.4%
\$50,000-\$59,000	13.5%	14.4%	11.5%	.0%	16.6%	13.4%	12.0%	11.4%
\$60,000-\$69,000	8.7%	8.5%	7.1%	10.0%	8.0%	7.9%	8.4%	7.6%
\$70,000 or more	24.8%	19.1%	21.1%	50.0%	23.2%	20.5%	19.3%	22.0%

N	706	1071	1018	11	628	574	820	762
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Table D2s. Visitor State of Residence by Region and ROS Class

	REGION				ROS			
	Hebgen/ Ennis	Helena	Great Falls	Semi- primitive motorized	Roaded natural	Roaded modified	Rural	Urban
home state								
MONTANA	43.7%	79.8%	66.0%	18.2%	62.0%	69.2%	67.9%	64.3%
WASHINGTON	3.1%	3.0%	3.5%	.0%	2.3%	4.0%	3.2%	3.5%
CALIFORNIA	6.1%	1.7%	2.5%	9.1%	4.0%	2.3%	3.0%	3.0%
IDAHO	7.3%	1.2%	1.0%	.0%	5.0%	.9%	3.5%	1.2%
UTAH	8.4%	.7%	.5%	18.2%	3.2%	4.3%	2.6%	.6%
COLORADO	1.6%	.7%	1.5%	.0%	.5%	1.4%	.9%	2.0%
FLORIDA	1.9%	.5%	1.5%	.0%	2.0%	1.3%	1.0%	.7%
MINNESOTA	.9%	1.0%	1.4%	.0%	1.3%	.7%	.6%	1.7%
PENNSYLVANIA	2.4%	.4%	1.0%	9.1%	.7%	1.4%	1.2%	1.0%
OREGON	1.0%	.3%	1.9%	.0%	.7%	.4%	.6%	2.5%
ARIZONA	1.3%	.8%	1.0%	.0%	1.3%	1.1%	.6%	1.0%
TEXAS	.7%	1.1%	1.0%	18.2%	1.5%	.5%	.4%	1.2%
NEW YORK	1.3%	.7%	.8%	9.1%	1.0%	1.6%	.3%	.7%
ILLINOIS	1.8%	.5%	.5%	.0%	1.2%	.4%	1.2%	.6%
OHIO	1.6%	.5%	.4%	.0%	1.0%	.4%	1.2%	.4%
NEVADA	2.1%	.1%	.3%	.0%	1.0%	.4%	.9%	.4%
GEORGIA	.3%	.1%	1.4%	.0%	.2%	.4%	.1%	1.7%
WYOMING	1.3%	.2%	.5%	.0%	.2%	.4%	1.0%	.7%
MICHIGAN	1.0%	.1%	.8%	.0%	.8%	.5%	.5%	.4%
NEW MEXICO	.7%	.3%	.8%	.0%	.5%	.2%	.5%	1.0%
WISCONSIN	.4%	.7%	.4%	.0%	.8%	.7%	.4%	.3%
ALASKA	.3%	.2%	1.0%	.0%	.0%	.0%	.5%	1.3%
MISSOURI	.6%	.3%	.6%	9.1%	.8%	.4%	.1%	.6%
ALBERTA	.3%	.3%	.9%	.0%	.2%	.4%	.3%	1.2%
IOWA	.7%	.2%	.5%	9.1%	.3%	.9%	.4%	.1%
NEBRASKA	1.0%	.4%	.1%	.0%	.7%	.0%	.9%	.1%
INDIANA	.4%	.2%	.6%	.0%	.3%	.0%	.4%	.9%
ALABAMA	.6%	.3%	.3%	.0%	.8%	.0%	.4%	.3%
VIRGINIA	.4%	.3%	.4%	.0%	.7%	.2%	.3%	.4%
NEW JERSEY	.3%	.0%	.8%	.0%	.0%	.7%	.0%	.7%
LOUISIANA	.3%	.1%	.5%	.0%	.0%	.7%	.4%	.1%
NORTH CAROLINA	.4%	.2%	.3%	.0%	.7%	.2%	.1%	.3%
SOUTH DAKOTA	.3%	.1%	.5%	.0%	.2%	.4%	.3%	.4%
KANSAS	.4%	.2%	.2%	.0%	.3%	.0%	.4%	.3%
MASSACHUSETTS	.3%	.2%	.3%	.0%	.3%	.2%	.3%	.3%
OTHER	.3%	.2%	.3%	.0%	.0%	.2%	.4%	.4%
MAINE	.3%	.2%	.2%	.0%	.3%	.2%	.1%	.3%
TENNESSEE	.1%	.2%	.3%	.0%	.3%	.0%	.1%	.4%

CONNECTICUT	.3%	.2%	.1%	.0%	.2%	.0%	.4%	.1%
MARYLAND	.3%	.0%	.3%	.0%	.0%	.5%	.1%	.1%
NORTH DAKOTA	.3%	.2%	.1%	.0%	.0%	.4%	.4%	.0%
UNITED KINGDOM	.0%	.2%	.3%	.0%	.3%	.2%	.0%	.3%
NEW HAMPSHIRE	.1%	.1%	.2%	.0%	.2%	.0%	.1%	.3%
SOUTH CAROLINA	.0%	.2%	.2%	.0%	.3%	.0%	.0%	.3%

(continued)

Table D2s. Visitor State of Residence by Region and ROS Class

	REGION				ROS			
	Hebgen/ Ennis	Helena	Great Falls	Semi- primitive motorized	Roaded natural	Roaded modified	Rural	Urban
WEST VIRGINIA	.0%	.3%	.1%	.0%	.3%	.2%	.0%	.1%
SASKATCHEWAN	.0%	.0%	.4%	.0%	.0%	.5%	.0%	.1%
GERMANY	.6%	.0%	.0%	.0%	.2%	.2%	.3%	.0%
ENGLAND	.0%	.1%	.3%	.0%	.2%	.5%	.0%	.0%
KENTUCKY	.0%	.0%	.3%	.0%	.0%	.4%	.0%	.1%
MISSISSIPPI	.1%	.0%	.2%	.0%	.0%	.0%	.1%	.3%
BRITISH COLUMBIA	.0%	.1%	.2%	.0%	.0%	.0%	.1%	.3%
ONTARIO	.3%	.1%	.0%	.0%	.2%	.0%	.3%	.0%
JAPAN	.0%	.3%	.0%	.0%	.0%	.0%	.4%	.0%
ARKANSAS	.1%	.1%	.0%	.0%	.3%	.0%	.0%	.0%
DELAWARE	.3%	.0%	.0%	.0%	.2%	.0%	.1%	.0%
RHODE ISLAND	.0%	.1%	.1%	.0%	.0%	.0%	.1%	.1%
VERMONT	.3%	.0%	.0%	.0%	.0%	.2%	.1%	.0%
NOVA SCOTIA	.1%	.1%	.0%	.0%	.2%	.0%	.1%	.0%
DISTRICT OF COLUMBIA	.0%	.0%	.1%	.0%	.0%	.0%	.0%	.1%
OKLAHOMA	.0%	.1%	.0%	.0%	.0%	.0%	.1%	.0%
MANITOBA	.1%	.0%	.0%	.0%	.0%	.0%	.1%	.0%
CANADA NONSPECIFIC	.0%	.0%	.1%	.0%	.0%	.0%	.0%	.1%
SWITZERLAND	.1%	.0%	.0%	.0%	.0%	.0%	.1%	.0%
AUSTRIA	.1%	.0%	.0%	.0%	.0%	.2%	.0%	.0%
HOLLAND	.0%	.0%	.1%	.0%	.0%	.0%	.0%	.1%
AUSTRALIA	.0%	.1%	.0%	.0%	.2%	.0%	.0%	.0%
SWEDEN	.1%	.0%	.0%	.0%	.2%	.0%	.0%	.0%
PHILIPPINES	.0%	.1%	.0%	.0%	.0%	.0%	.1%	.0%
N	706	1071	1018	11	628	574	820	762

Table D3s. Montana County of Residence by Region and ROS Class

	REGION				ROS			
	Hebgen/ Ennis	Helena	Great Falls	Semi- primitive motorized	Roaded natural	Roaded modified	Rural	Urban
MTCNTY								
CASCADE	2.0%	36.8%	82.9%	.0%	44.2%	61.2%	3.6%	84.1%
LEWIS AND CLARK	1.2%	24.2%	2.8%	.0%	22.7%	7.3%	18.8%	1.4%
GALLATIN	54.9%	4.1%	.9%	50.0%	5.9%	2.5%	35.3%	1.0%
YELLOWSTONE	16.9%	3.3%	2.1%	.0%	4.0%	3.4%	11.4%	1.7%
MISSOULA	1.2%	6.2%	1.4%	.0%	3.7%	3.9%	4.8%	1.7%
SILVER BOW	3.1%	4.7%	1.4%	.0%	2.2%	2.8%	5.8%	1.7%
RAVALLI	1.6%	3.2%	.5%	.0%	1.2%	3.7%	2.0%	.7%
MADISON	8.6%	.0%	.0%	50.0%	.0%	.8%	4.6%	.0%
JEFFERSON	1.6%	2.4%	.2%	.0%	2.2%	1.1%	2.5%	.0%
PARK	3.5%	1.4%	.5%	.0%	1.2%	1.1%	2.8%	.5%
FLATHEAD	.8%	2.3%	.5%	.0%	1.9%	2.5%	1.0%	.2%
CHOUTEAU	.0%	1.7%	1.2%	.0%	.9%	2.0%	.5%	1.4%
FERGUS	.0%	1.1%	.5%	.0%	1.6%	1.1%	.3%	.0%
HILL	.0%	.8%	.7%	.0%	.3%	.8%	.3%	1.0%
BROADWATER	.4%	.9%	.2%	.0%	.9%	.3%	1.0%	.0%
TETON	.0%	.6%	.5%	.0%	1.2%	.6%	.0%	.2%
MINERAL	.4%	.8%	.0%	.0%	.0%	.8%	.8%	.0%
PONDERA	.4%	.5%	.3%	.0%	.3%	.6%	.3%	.5%
STILLWATER	.4%	.8%	.0%	.0%	.6%	.3%	.8%	.0%
DEER LODGE	.0%	.6%	.2%	.0%	.0%	.3%	1.0%	.0%
GLACIER	.0%	.3%	.5%	.0%	.3%	.3%	.0%	.7%
POWELL	.0%	.6%	.2%	.0%	.9%	.6%	.0%	.0%
BEAVERHEAD	.8%	.2%	.2%	.0%	.3%	.3%	.5%	.0%
CARBON	.4%	.2%	.3%	.0%	.3%	.3%	.0%	.5%
LAKE	.4%	.3%	.2%	.0%	.3%	.3%	.3%	.2%
LINCOLN	.8%	.0%	.3%	.0%	.0%	.0%	.5%	.5%
GRANITE	.0%	.5%	.0%	.0%	.6%	.0%	.3%	.0%
VALLEY	.0%	.3%	.2%	.0%	.6%	.0%	.0%	.2%
DAWSON	.4%	.2%	.0%	.0%	.0%	.3%	.3%	.0%
JUDITH BASIN	.0%	.0%	.3%	.0%	.0%	.0%	.0%	.5%
LIBERTY	.0%	.2%	.2%	.0%	.3%	.0%	.0%	.2%
PHILLIPS	.0%	.2%	.2%	.0%	.0%	.0%	.3%	.2%
ROOSEVELT	.0%	.2%	.2%	.0%	.0%	.0%	.3%	.2%
SANDERS	.4%	.2%	.0%	.0%	.0%	.6%	.0%	.0%
TOOLE	.0%	.2%	.2%	.0%	.0%	.3%	.0%	.2%
WHEATLAND	.0%	.2%	.2%	.0%	.0%	.0%	.3%	.2%
BLAINE	.0%	.2%	.0%	.0%	.3%	.0%	.0%	.0%
CUSTER	.0%	.2%	.0%	.0%	.3%	.0%	.0%	.0%
RICHLAND	.0%	.0%	.2%	.0%	.0%	.0%	.0%	.2%
ROSEBUD	.0%	.2%	.0%	.0%	.3%	.0%	.0%	.0%
N	295	822	616	2	372	385	529	445

Table D4s. Group Characteristics by Region and ROS Class

	REGION				ROS			
	Hebgen/ Ennis	Helena	Great Falls	Semi- primitive motorized	Roaded natural	Roaded modified	Rural	Urban
group type								
alone	5.1%	9.5%	17.7%	9.1%	7.7%	7.3%	8.9%	20.3%
family	49.6%	52.7%	48.7%	36.4%	54.2%	52.0%	48.5%	48.5%
friends	25.0%	14.5%	20.7%	36.4%	17.1%	19.0%	22.4%	17.9%
family and friends	18.1%	22.3%	9.7%	18.2%	19.4%	19.9%	19.1%	9.2%
outfitted guests	1.8%	.4%	.6%	.0%	.7%	1.4%	.5%	.9%
business associates	.4%	.7%	2.6%	.0%	.8%	.4%	.5%	3.3%
Group size	6.19	4.51	3.19	2.91	4.86	4.97	5.08	3.07
# of males in group?	2.64	1.83	1.27	2.27	1.92	2.07	2.22	1.16
# of females in group?	2.18	1.58	1.27	.45	1.79	1.87	1.66	1.26
# of children (16 and under) in group?	1.30	1.02	.48	.18	1.08	.95	1.11	.47
N	706	1071	1018	11	628	574	820	762



Table D5s. Visitor Site Experience by Region and ROS Class

	REGION				ROS			
	Hebgen/ Ennis	Helena	Great Falls	Semi- primitive motorized	Roaded natural	Roaded modified	Rural	Urban
first visit?								
yes	32.9%	23.1%	36.9%	27.3%	32.5%	24.5%	26.2%	38.3%
no	67.1%	76.9%	63.1%	72.7%	67.5%	75.5%	73.8%	61.7%
N	691	1056	1009	11	621	567	803	754
number of visits to this site before today								
1 to 5	37.5%	28.3%	26.5%	25.0%	36.7%	27.0%	32.6%	23.3%
6 to 10	12.6%	14.7%	12.3%	.0%	13.7%	14.3%	14.9%	10.5%
more than 10	49.9%	57.0%	61.1%	75.0%	49.5%	58.7%	52.5%	66.2%
N	469	798	633	8	422	419	592	459
years visiting this site								
less than 1	10.2%	7.1%	16.3%	12.5%	9.7%	7.1%	10.8%	15.7%
1 to 2	12.3%	10.9%	15.8%	.0%	14.1%	8.9%	12.5%	16.1%
3 to 5	14.2%	13.1%	17.7%	.0%	11.8%	11.1%	16.1%	20.0%
5 to 10	17.3%	21.3%	20.5%	37.5%	18.2%	25.4%	18.5%	18.5%
more than 10 years	46.0%	47.5%	29.8%	50.0%	46.2%	47.5%	42.1%	29.7%
staying over night?								
yes	53.8%	45.7%	11.0%	30.0%	31.3%	53.5%	46.8%	11.9%
no	46.2%	54.3%	89.0%	70.0%	68.7%	46.5%	53.2%	88.1%
if yes, how many nights?	8.7	5.1	2.1	2.7	8.7	5.3	6.6	2.0
if no, how many hours?								
less than 1	19.4%	8.1%	29.2%	.0%	17.2%	17.0%	11.9%	29.5%
1 to 2 hours	22.5%	21.7%	43.7%	40.0%	25.5%	32.6%	17.8%	47.1%
2 to 6 hours	47.8%	55.8%	24.8%	60.0%	48.4%	33.0%	59.3%	22.5%
more than 6 hours	10.3%	14.5%	2.3%	.0%	8.9%	17.4%	11.0%	.9%
N	706	1071	1018	11	628	574	820	762



Table D6s. Group Disabilities by Region and ROS Class

	REGION				ROS			
	Hebgen/ Ennis	Helena	Great Falls	Semi- primitive motorized	Roaded natural	Roaded modified	Rural	Urban
anyone in group with a disability?								
yes	10.0%	15.8%	9.6%	18.2%	12.8%	14.1%	12.6%	9.4%
no	90.0%	84.2%	90.4%	81.8%	87.2%	85.9%	87.4%	90.6%
Specific disabilities								
Difficulty walking	15.7%	14.8%	19.7%	.0%	19.4%	12.1%	16.1%	18.6%
Back condition	9.8%	14.8%	8.2%	.0%	11.3%	15.5%	12.9%	7.0%
Heart condition	5.9%	9.6%	6.6%	.0%	12.9%	3.4%	6.5%	9.3%
Wheelchair confinement	5.9%	5.2%	13.1%	.0%	3.2%	10.3%	6.5%	11.6%
Arthritis	.0%	10.4%	6.6%	.0%	9.7%	10.3%	1.6%	7.0%
Bad knee	7.8%	5.2%	.0%	.0%	8.1%	3.4%	4.8%	.0%
Blindness	7.8%	3.5%	3.3%	.0%	1.6%	5.2%	6.5%	4.7%
Hearing	3.9%	1.7%	6.6%	.0%	3.2%	.0%	3.2%	9.3%
Legs	5.9%	2.6%	3.3%	.0%	3.2%	1.7%	4.8%	4.7%
Mental illness	2.0%	4.3%	3.3%	.0%	.0%	1.7%	8.1%	4.7%
Old age	2.0%	4.3%	1.6%	50.0%	6.5%	3.4%	.0%	.0%
Cancer	7.8%	1.7%	.0%	.0%	1.6%	.0%	8.1%	.0%
Amputee	5.9%	1.7%	1.6%	.0%	1.6%	6.9%	1.6%	.0%
Mobility problems	.0%	4.3%	1.6%	.0%	1.6%	5.2%	3.2%	.0%
Replacements-hip								
shoulder	.0%	3.5%	1.6%	.0%	3.2%	1.7%	1.6%	2.3%
MS	2.0%	.0%	6.6%	.0%	.0%	.0%	1.6%	9.3%
Bad eyes	2.0%	1.7%	3.3%	.0%	4.8%	3.4%	.0%	.0%
Diabetes	.0%	2.6%	1.6%	.0%	1.6%	1.7%	1.6%	2.3%
Asthma	2.0%	.9%	3.3%	.0%	3.2%	1.7%	1.6%	.0%
Paraplegic	5.9%	.0%	1.6%	.0%	.0%	1.7%	4.8%	.0%
Muscular dystrophy	2.0%	1.7%	.0%	50.0%	.0%	3.4%	.0%	.0%
Foot	.0%	2.6%	.0%	.0%	.0%	3.4%	1.6%	.0%
Stroke	2.0%	1.7%	.0%	.0%	1.6%	1.7%	1.6%	.0%
Missing lung	2.0%	1.7%	.0%	.0%	1.6%	1.7%	1.6%	.0%
Surgical	2.0%	.9%	.0%	.0%	1.6%	1.7%	.0%	.0%
Parkinsons disease	.0%	.9%	1.6%	.0%	1.6%	.0%	.0%	2.3%
Learning	.0%	1.7%	.0%	.0%	1.6%	.0%	1.6%	.0%
Cerebral Palsy	3.9%	.0%	.0%	.0%	1.6%	.0%	1.6%	.0%
Seizures	.0%	.9%	1.6%	.0%	.0%	.0%	1.6%	2.3%
Quadriplegic	.0%	1.7%	.0%	.0%	.0%	.0%	3.2%	.0%
Chemical sensitivity	.0%	.0%	3.3%	.0%	.0%	.0%	.0%	4.7%
Respiratory	.0%	1.7%	.0%	.0%	1.6%	.0%	1.6%	.0%
Arm messed up	.0%	.9%	1.6%	.0%	.0%	.0%	1.6%	2.3%
Spinal disorder	.0%	.9%	1.6%	.0%	1.6%	1.7%	.0%	.0%
Osteoporosis	2.0%	.9%	.0%	.0%	3.2%	.0%	.0%	.0%
Handicapped child	.0%	.9%	.0%	.0%	1.6%	.0%	.0%	.0%
Chronic hip	.0%	.9%	.0%	.0%	.0%	.0%	1.6%	.0%

Note: totals do not add to 100% due to multiple responses.

(continued)

Table D6s. Group Disabilities by Region and ROS Class

	REGION				ROS			
	Hebgen/ Ennis	Helena	Great Falls	Semi- primitive motorized	Roaded natural	Roaded modified	Rural	Urban
Downs syndrome	2.0%	.0%	.0%	.0%	1.6%	.0%	.0%	.0%
Shoulder	.0%	.9%	.0%	.0%	.0%	.0%	1.6%	.0%
Speech impaired	.0%	.0%	1.6%	.0%	.0%	1.7%	.0%	.0%
Sun allergy	.0%	.9%	.0%	.0%	.0%	.0%	1.6%	.0%
VA disabled	.0%	.0%	1.6%	.0%	.0%	1.7%	.0%	.0%
On oxygen	.0%	.9%	.0%	.0%	.0%	1.7%	.0%	.0%
Emphysema	.0%	.9%	.0%	.0%	.0%	.0%	1.6%	.0%
Glaucoma	.0%	.9%	.0%	.0%	.0%	.0%	1.6%	.0%
Neuromuscular disorder	.0%	.0%	1.6%	.0%	.0%	.0%	.0%	2.3%
Chronic fatigue syndrome	.0%	.9%	.0%	.0%	.0%	.0%	1.6%	.0%
Advanced Senility	.0%	.0%	1.6%	.0%	.0%	.0%	.0%	2.3%
Neck problems	.0%	.0%	1.6%	.0%	.0%	1.7%	.0%	.0%
SSI	.0%	.0%	1.6%	.0%	.0%	.0%	.0%	2.3%
PTSD	.0%	.9%	.0%	.0%	.0%	1.7%	.0%	.0%
N	51	115	61	2	62	58	62	43

Note: totals do not add to 100% due to multiple responses.

Table D7s. Reasons for Choosing This Site by Region and ROS Class

	REGION				ROS			
	Hebgen/ Ennis	Helena	Great Falls	Semi- primitive motorized	Roaded natural	Roaded modified	Rural	Urban
Reasons why site chosen								
close to home	40.8%	53.7%	56.9%	18.2%	45.4%	49.1%	55.2%	55.4%
easy to get to group	45.4%	52.0%	55.9%	18.2%	44.3%	44.9%	57.5%	57.5%
facilities available	10.9%	10.0%	6.1%	.0%	6.9%	12.7%	12.0%	4.2%
specific attraction?	33.1%	29.6%	29.0%	18.2%	31.7%	32.5%	28.4%	29.6%
other sites too crowded?	5.6%	6.0%	1.9%	.0%	6.1%	4.4%	5.5%	1.9%
good facilities	27.6%	30.5%	20.0%	18.2%	20.9%	36.7%	28.1%	19.7%
good fishing	42.4%	45.0%	11.9%	81.8%	32.5%	46.1%	45.3%	6.9%
scenic beauty	69.2%	60.1%	62.2%	63.6%	68.4%	69.1%	56.8%	61.1%
been here before	53.7%	55.6%	43.2%	54.5%	48.0%	58.3%	54.4%	42.9%
try a new area	14.2%	10.2%	11.6%	9.1%	13.2%	11.5%	11.8%	10.5%
Lewis and Clark historic site	2.5%	13.5%	32.8%	.0%	20.6%	11.8%	3.0%	36.0%
heard about it	17.9%	16.1%	21.8%	27.3%	22.2%	13.3%	15.7%	22.8%
other reason to visit this site?	15.9%	14.1%	10.1%	9.1%	14.0%	14.7%	13.1%	11.2%
most important reason for visiting site								
scenic beauty	21.0%	17.1%	28.7%	12.5%	27.6%	19.1%	14.2%	28.9%
good fishing	20.3%	22.9%	6.5%	50.0%	16.6%	24.3%	22.9%	2.4%
close to home	10.6%	18.0%	16.8%	12.5%	11.2%	14.4%	18.4%	17.9%
specific attraction	11.0%	7.8%	6.1%	12.5%	8.3%	7.3%	9.1%	6.8%
Lewis and Clark historical site	.0%	2.6%	17.2%	.0%	4.8%	4.5%	.1%	19.3%
been here before	8.0%	6.0%	3.4%	.0%	6.4%	5.7%	6.9%	3.3%
easy to get to	5.8%	5.2%	5.2%	.0%	5.0%	3.2%	6.9%	5.8%
other reason	6.7%	5.4%	4.2%	.0%	6.0%	3.7%	6.2%	4.9%
heard about it	5.5%	4.2%	5.0%	12.5%	5.7%	3.9%	4.4%	5.0%
good facilities	3.5%	5.6%	2.6%	.0%	2.8%	7.1%	4.2%	2.4%
try a new area	4.7%	2.9%	2.8%	.0%	3.5%	4.5%	3.4%	2.1%

Note: totals do not add to 100% due to multiple responses.

(continued)

Table D7s. Reasons for Choosing This Site by Region and ROS Class

	REGION				ROS			
	Hebgen/ Ennis	Helena	Great Falls	Semi- primitive motorized	Roaded natural	Roaded modified	Rural	Urban
group								
facilities available	2.3%	1.8%	1.4%	.0%	1.4%	1.6%	2.9%	.9%
other sites too crowded	.7%	.5%	.2%	.0%	.7%	.6%	.4%	.2%
N	706	1071	1018	11	628	574	820	762

Note: totals do not add to 100% due to multiple responses.



Table D7.1s. Other Crowded Sites as a Reason for Choosing This Site by Region and ROS Class

	REGION			ROS			
	Hebgen/ Ennis	Helena	Great Falls	Roaded natural	Roaded modified	Rural	Urban
Sites crowded							
Yellowstone							
National							
Park	41.7%	1.7%	.0%	13.5%	12.5%	20.0%	.0%
Holter	.0%	16.7%	15.8%	13.5%	12.5%	7.5%	14.3%
Black Sandy	.0%	18.3%	.0%	24.3%	.0%	5.0%	.0%
Canyon Ferry	2.8%	13.3%	.0%	10.8%	4.2%	10.0%	.0%
Hauser Dam	.0%	10.0%	.0%	.0%	20.8%	2.5%	.0%
Craig	.0%	3.3%	10.5%	5.4%	8.3%	.0%	.0%
Broadwater Bay							
Park	.0%	.0%	21.1%	.0%	.0%	.0%	28.6%
Gibson	.0%	.0%	15.8%	.0%	4.2%	.0%	14.3%
Lonsomehurst							
Campground	8.3%	.0%	.0%	5.4%	.0%	2.5%	.0%
Spring Creek							
Campground	8.3%	.0%	.0%	2.7%	.0%	5.0%	.0%
Log Gulch	.0%	5.0%	.0%	2.7%	8.3%	.0%	.0%
York Bridge							
Fishing							
Access	.0%	5.0%	.0%	.0%	4.2%	5.0%	.0%
Holter Lake							
Campground	.0%	3.3%	5.3%	2.7%	.0%	2.5%	7.1%
Big Horn River	2.8%	1.7%	.0%	2.7%	.0%	2.5%	.0%
Court Sheriff	.0%	3.3%	.0%	.0%	.0%	5.0%	.0%
State parks	2.8%	1.7%	.0%	.0%	.0%	5.0%	.0%
All others	.0%	3.3%	.0%	.0%	4.2%	2.5%	.0%
Missouri River							
below Hauser							
Dam	2.8%	.0%	5.3%	5.4%	.0%	.0%	.0%
Cooney	2.8%	1.7%	.0%	.0%	.0%	5.0%	.0%
Cherry Creek							
Campground	5.6%	.0%	.0%	5.4%	.0%	.0%	.0%
West							
Yellowstone	5.6%	.0%	.0%	.0%	4.2%	2.5%	.0%
Seeley Lake	.0%	3.3%	.0%	2.7%	4.2%	.0%	.0%
Bighorn	2.8%	.0%	5.3%	.0%	4.2%	2.5%	.0%
Kims Marina	.0%	3.3%	.0%	.0%	4.2%	2.5%	.0%
Other side of							
river-lake	.0%	1.7%	.0%	2.7%	.0%	.0%	.0%
Hauser Lake	.0%	1.7%	.0%	.0%	4.2%	.0%	.0%
Madison	2.8%	.0%	.0%	.0%	.0%	2.5%	.0%
Lake Side	.0%	1.7%	.0%	2.7%	.0%	.0%	.0%
Path or walkway	.0%	.0%	5.3%	.0%	.0%	.0%	7.1%
River Road Park	.0%	.0%	5.3%	.0%	.0%	.0%	7.1%
Como Lake	.0%	1.7%	.0%	2.7%	.0%	.0%	.0%

Note: totals do not add to 100% due to multiple responses.

(continued)

Table D7.1s. Other Crowded Sites as a Reason for Choosing This Site by Region and ROS Class

	REGION			ROS			
	Hebgen/ Ennis	Helena	Great Falls	Roaded natural	Roaded modified	Rural	Urban
Salmon Lake	.0%	1.7%	.0%	2.7%	.0%	.0%	.0%
Fish Hatchery	.0%	.0%	5.3%	.0%	.0%	.0%	7.1%
Georgetown Lake	2.8%	.0%	.0%	.0%	.0%	2.5%	.0%
Everything close to town	.0%	.0%	5.3%	.0%	.0%	.0%	7.1%
Squaw Creek	2.8%	.0%	.0%	.0%	.0%	2.5%	.0%
Cartwheel spot	2.8%	.0%	.0%	.0%	.0%	2.5%	.0%
Alberton Gorge	.0%	.0%	5.3%	.0%	.0%	.0%	7.1%
Clark Fork River	.0%	.0%	5.3%	.0%	.0%	.0%	7.1%
East side Fishing Access	.0%	.0%	5.3%	.0%	.0%	.0%	7.1%
Beaver Creek Fishing Access	2.8%	.0%	.0%	.0%	.0%	2.5%	.0%
Holter Lake Lodge	.0%	1.7%	.0%	.0%	4.2%	.0%	.0%
The Boat Loft	.0%	1.7%	.0%	2.7%	.0%	.0%	.0%
Swan Valley	.0%	1.7%	.0%	.0%	4.2%	.0%	.0%
Harrison	2.8%	.0%	.0%	.0%	.0%	2.5%	.0%
Norris	2.8%	.0%	.0%	.0%	.0%	2.5%	.0%
Chinamen Gulch	.0%	1.7%	.0%	2.7%	.0%	.0%	.0%
Silos	.0%	1.7%	.0%	.0%	.0%	2.5%	.0%
N	36	60	19	37	24	40	14

Note: totals do not add to 100% due to multiple responses.

Table D8s. Recreation Activity by Region and ROS Class

	REGION				ROS			
	Hebgen/ Ennis	Helena	Great Falls	Semi- primitive motorized	Roaded natural	Roaded modified	Rural	Urban
Site Activities								
sightseeing	63.9%	57.4%	70.2%	45.5%	70.5%	65.2%	51.5%	70.4%
photography	38.2%	31.4%	28.6%	54.5%	44.7%	33.4%	25.9%	27.0%
auto/RV camping	37.1%	32.2%	3.5%	.0%	19.2%	35.9%	35.2%	3.7%
tent camping	14.3%	11.8%	4.7%	18.2%	7.8%	16.1%	11.3%	5.0%
floating/ rafting	26.2%	8.5%	8.3%	9.1%	12.2%	13.6%	19.7%	5.7%
walking	39.3%	30.2%	49.2%	45.5%	36.2%	40.8%	30.3%	50.7%
day hiking	17.5%	12.3%	11.9%	18.2%	19.1%	9.9%	11.9%	13.3%
picnicking	26.3%	28.8%	16.6%	9.1%	27.2%	33.0%	24.7%	12.9%
sunbathing	23.7%	21.3%	9.0%	.0%	18.3%	20.5%	23.7%	8.0%
horseback riding	3.3%	.3%	.1%	9.1%	1.0%	1.9%	1.0%	.1%
shooting	3.0%	.7%	.8%	.0%	.7%	1.9%	1.9%	.8%
swimming	23.8%	25.1%	6.0%	.0%	18.6%	21.9%	24.6%	7.1%
jetskiing	4.6%	4.9%	1.3%	.0%	4.6%	2.8%	4.9%	1.8%
powerboating	11.3%	30.4%	2.0%	.0%	21.7%	23.3%	16.9%	2.2%
nature study	10.4%	5.6%	10.3%	9.1%	9.8%	6.9%	6.1%	11.3%
tubing	16.8%	13.0%	1.3%	9.1%	10.9%	9.9%	16.3%	1.5%
canoeing/ kayaking	10.3%	2.0%	5.1%	.0%	4.6%	2.8%	7.4%	5.3%
viewing wildlife	42.8%	42.4%	27.8%	27.3%	48.3%	42.2%	33.7%	28.1%
visit other historic sites	9.0%	6.0%	10.9%	.0%	9.5%	7.2%	4.9%	12.9%
biking	8.4%	3.8%	10.3%	.0%	6.0%	4.8%	6.3%	11.7%
hunting	1.7%	.8%	.6%	9.1%	.5%	.7%	1.6%	.7%
boat angling	24.0%	38.1%	5.9%	.0%	23.2%	38.7%	30.8%	2.0%
bank angling	23.3%	25.4%	7.1%	63.6%	18.9%	22.8%	26.6%	4.3%
wade angling	19.7%	7.7%	4.4%	45.5%	8.8%	12.5%	13.9%	2.4%
ATV/ motorcycling	4.5%	1.4%	.9%	.0%	1.5%	2.8%	2.6%	1.2%
water skiing	9.1%	14.7%	.7%	.0%	10.6%	11.0%	11.3%	.9%
sailing/ sailboarding	.4%	.8%	.2%	.0%	.3%	.2%	1.0%	.3%
visit Lewis and Clark sites	5.1%	13.3%	25.5%	.0%	19.6%	10.4%	4.1%	29.0%
other activities?	11.7%	11.4%	13.3%	9.1%	9.5%	11.0%	11.7%	15.9%
N	706	1071	1018	11	628	574	820	762

Note: totals do not add to 100% due to multiple responses.



Table D9s. Levels of Overall Trip Satisfaction by Region and ROS Class

	REGION				ROS			
	Hebgen/ Ennis	Helena	Great Falls	Semi- primitive motorized	Roaded natural	Roaded modified	Rural	Urban
This trip was better than any I can remember	.02	-.27	-.02	.45	-.07	-.11	-.25	.01
This trip was better than any other to this area	.15	-.08	.10	.45	.12	.02	-.07	.12
This trip was so good I would take it again	1.04	.65	.76	1.27	.89	.81	.74	.73
Trip satisfaction index	.40	.09	.27	.73	.30	.24	.14	.27
N	706	1071	1018	11	628	574	820	762

-2=Strongly disagree    0=Neutral/no opinion    2=Strongly agree

Table D10s. Importance of Site Characteristics by Region and ROS Class

	REGION				ROS			
	Hebgen/ Ennis	Helena	Great Falls	Semi- primitive motorized	Roaded natural	Roaded modified	Rural	Urban
Importance of site								
Conditions								
campsite/picnic area								
conditions	20.5%	22.6%	12.2%	.0%	17.4%	26.4%	19.9%	11.9%
quality of Lewis and								
Clark								
interpretive/ educational								
information	.7%	2.8%	6.5%	.0%	5.5%	1.4%	.4%	7.1%
quality of other								
interpretive/ educational								
information	1.6%	2.8%	5.0%	.0%	5.8%	1.1%	.6%	6.1%
appropriateness of								
development	9.0%	8.7%	9.1%	.0%	9.2%	9.2%	8.4%	9.2%
maintenance of								
facilities	21.4%	25.4%	20.8%	.0%	19.8%	27.8%	22.5%	22.8%
cleanliness of area	44.4%	46.0%	44.0%	40.0%	46.4%	45.6%	45.0%	42.5%
amount of development	9.7%	8.4%	9.8%	20.0%	9.0%	6.6%	10.4%	10.2%
privacy of area	29.7%	25.9%	18.9%	20.0%	23.5%	30.7%	26.3%	18.4%
condition of natural								
features	19.3%	18.6%	24.9%	.0%	25.1%	18.6%	15.7%	25.5%
residential development								
visible from the								
water	3.2%	3.1%	2.6%	.0%	4.0%	2.3%	3.6%	1.7%
historical information	1.4%	3.7%	3.3%	.0%	5.3%	1.7%	1.8%	3.4%
behavior of other people	14.5%	16.7%	14.6%	.0%	12.9%	18.1%	16.1%	15.0%
conflict with other								
users	5.3%	5.8%	4.1%	.0%	5.0%	8.0%	4.8%	2.7%
degree of naturalness	23.9%	16.1%	24.6%	20.0%	20.6%	18.6%	19.9%	24.5%
number of campsites								
within sight or sound	6.7%	6.7%	2.2%	.0%	4.2%	7.4%	7.4%	1.4%
seeing/hearing others	10.1%	9.0%	7.4%	.0%	7.7%	11.2%	10.0%	6.1%
rules and restrictions	4.8%	7.2%	4.1%	.0%	4.7%	6.3%	6.8%	4.4%
number of fish caught	14.9%	21.0%	7.4%	60.0%	12.9%	22.6%	19.7%	2.7%
opportunity to view								
wildlife	12.2%	13.5%	13.6%	.0%	14.8%	16.6%	10.4%	11.9%
opportunity to hunt	2.1%	2.2%	1.7%	.0%	2.1%	1.7%	2.6%	1.4%
N	706	1071	1018	11	628	574	820	762

Note: totals do not add to 100% due to multiple responses.





Table D11s. Mean Satisfaction of Site Characteristics by Region and ROS Class

	REGION				ROS			
	Hebgen/ Ennis	Helena	Great Falls	Semi- primitive motorized	Roaded natural	Roaded modified	Rural	Urban
campsite/picnic conditions	1.00	.80	.70	.45	.81	1.03	.81	.68
quality of Lewis and Clark interpretive info	.25	.37	.94	.40	.57	.40	.17	1.05
quality of other interpretive/ educational materials	.36	.38	.77	.40	.56	.43	.22	.87
appropriateness of development	.76	.65	1.04	.91	.75	.75	.66	1.10
maintenance of facilities	1.04	1.01	1.29	1.40	1.09	1.12	.95	1.31
cleanliness of area	1.25	1.08	1.40	1.64	1.23	1.23	1.08	1.42
amount of development	.70	.57	.98	1.09	.71	.71	.56	1.02
privacy of area	.84	.39	.91	1.55	.77	.55	.50	.93
condition of natural features	1.27	1.02	1.19	1.73	1.21	1.11	1.07	1.19
residential development visible from water	.63	.46	.60	1.09	.63	.45	.54	.58
historical info	.43	.39	.98	.50	.68	.51	.22	1.08
behavior of other people	.80	.68	1.09	.91	.88	.69	.72	1.12
conflict with other users	.45	.37	.53	.36	.45	.40	.41	.54
degree of naturalness	1.11	.82	.99	1.36	1.04	.88	.87	1.01
number of campsites within sight or sound	.51	.25	.31	.30	.41	.32	.33	.29
seeing, hearing others	.47	.19	.56	.45	.37	.29	.31	.58
rules and restrictions	.71	.53	.62	.70	.68	.63	.52	.62

-2=Strongly disagree    0=Neutral/no opinion    2=Strongly agree

(continued)

Table D11s. Mean Satisfaction of Site Characteristics by Region and ROS Class

	REGION				ROS			
	Hebgen/ Ennis	Helena	Great Falls	Semi- primitive motorized	Roaded natural	Roaded modified	Rural	Urban
number of fish caught	.31	.11	.17	1.30	.21	.28	.15	.09
opportunity to view wildlife	.88	.94	.68	1.00	.97	1.00	.76	.68
opportunity to hunt	.07	.02	.00	.18	.02	.08	.04	-.03
N	706	1071	1018	11	628	574	820	762

-2=Strongly disagree    0=Neutral/no opinion    2=Strongly agree

Table D12s. Additional Facilities and Services by Region and ROS Class

	REGION				ROS			
	Hebgen/ Ennis	Helena	Great Falls	Semi- primitive motorized	Roaded natural	Roaded modified	Rural	Urban
N	706	1071	1018	11	628	574	820	762
No facilities needed	50.6%	42.2%	68.3%	54.5%	51.1%	45.3%	46.6%	70.2%
Facilities needed	49.4%	57.8%	31.7%	45.5%	48.9%	54.7%	53.4%	29.8%
Additional facilities/services needed.								
None	41.0%	27.5%	37.5%	80.0%	36.5%	30.9%	34.2%	31.3%
Restroom facilities	10.0%	5.5%	9.0%	.0%	12.7%	3.2%	5.5%	11.0%
Showers	2.9%	9.9%	1.9%	.0%	2.0%	13.1%	6.2%	1.3%
Trash bins	6.0%	4.7%	3.1%	.0%	5.9%	2.9%	6.2%	2.6%
Running water	3.2%	5.7%	3.1%	.0%	4.6%	7.0%	3.7%	1.8%
Additional campsites	2.3%	7.3%	.9%	.0%	6.2%	6.4%	3.9%	.0%
Dump station	5.7%	5.0%	.0%	.0%	1.6%	7.6%	5.0%	.0%
Eatery	2.6%	1.8%	7.1%	.0%	2.6%	1.3%	2.5%	8.8%
Picnic tables	2.3%	1.6%	6.2%	.0%	2.9%	1.0%	2.3%	7.0%
Water fountains	.0%	1.1%	8.7%	.0%	1.3%	.3%	.9%	11.5%
Better roads	3.2%	2.7%	.3%	.0%	2.3%	4.1%	1.8%	.4%
Electrical hook up	1.1%	4.0%	.0%	.0%	1.0%	5.1%	2.3%	.0%
More trees	.9%	2.6%	2.2%	.0%	.7%	3.2%	1.8%	2.6%
More bike trails	.3%	.5%	5.0%	.0%	1.6%	.3%	.5%	5.3%
Parking-more	1.1%	2.3%	.6%	20.0%	2.0%	1.3%	1.8%	.4%
Shade	1.1%	1.3%	2.2%	.0%	.3%	1.6%	1.6%	2.6%
More boat slips-dock spaces	.6%	2.7%	.0%	.0%	2.3%	2.9%	.7%	.0%
More fish	.6%	2.4%	.3%	.0%	1.3%	.6%	2.5%	.4%
Information boards	2.0%	1.1%	.9%	.0%	2.3%	1.3%	.7%	1.3%
Enforcement of rules	.0%	2.4%	.3%	.0%	2.3%	1.9%	.5%	.4%
Clean restrooms	1.7%	1.5%	.3%	.0%	.7%	1.9%	1.8%	.0%
Better boat launch	1.7%	1.0%	1.2%	.0%	1.6%	.6%	1.6%	.9%
Another boat launch	1.4%	1.6%	.3%	.0%	1.3%	.3%	1.6%	.0%
Water access	1.1%	.8%	1.9%	.0%	.7%	1.6%	.7%	2.2%
More room between campsites-more seclusion	.6%	1.6%	.0%	.0%	.7%	1.0%	1.6%	.0%
Fish cleaning station	.3%	1.5%	.3%	.0%	.3%	1.0%	1.6%	.0%
Public docks	.9%	1.1%	.3%	.0%	1.0%	1.0%	.9%	.4%
Store	.9%	1.0%	.6%	.0%	.3%	1.6%	.9%	.4%
Play ground	.3%	.6%	1.5%	.0%	.0%	1.9%	.2%	1.3%
Better Boat docking	.6%	1.1%	.3%	.0%	.7%	1.0%	.9%	.4%
Campfire pits	.0%	1.0%	.9%	.0%	.3%	1.3%	.5%	.9%
More wheel chair-handicap access	.3%	.8%	.6%	.0%	.3%	.6%	.7%	.9%

(continued)

Table D12s. Additional Facilities and Services by Region and ROS Class

	REGION				ROS			
	Hebgen/ Ennis	Helena	Great Falls	Semi- primitive motorized	Roaded natural	Roaded modified	Rural	Urban
More historical interpretation	.0%	.6%	1.2%	.0%	1.3%	.0%	.0%	1.8%
Sand beach	.3%	1.0%	.3%	.0%	1.0%	.6%	.5%	.4%
New outhouse	1.4%	.3%	.3%	.0%	.7%	.0%	1.1%	.4%
No fees	.9%	.8%	.0%	.0%	.0%	.6%	1.4%	.0%
Camping	.3%	.5%	.9%	.0%	.7%	.3%	.5%	.9%
Better facilities	.9%	.5%	.3%	.0%	.0%	.6%	1.1%	.0%
Fewer facilities	.6%	.6%	.3%	.0%	1.6%	.0%	.5%	.0%
Level camping spots	.6%	.6%	.3%	.0%	.0%	1.0%	.9%	.0%
Dumpster in parking lot	.3%	.8%	.0%	.0%	1.3%	.3%	.2%	.0%
Laundry	.3%	.8%	.0%	.0%	.0%	.0%	1.4%	.0%
Gas-fuel	.6%	.5%	.3%	.0%	.0%	.3%	.9%	.4%
Better swimming area-reduction of boat traffic	.6%	.2%	.9%	.0%	.3%	.0%	.5%	1.3%
Manage at all times	.3%	.8%	.0%	.0%	.7%	1.0%	.2%	.0%
Boat rentals-raft rentals	.6%	.5%	.3%	.0%	.0%	.6%	.7%	.4%
Weather shelter	.0%	.3%	.9%	.0%	.0%	.6%	.2%	.9%
Dust control	.0%	.8%	.0%	.0%	.3%	.6%	.5%	.0%
Clean area	.0%	.8%	.0%	.0%	.3%	.6%	.5%	.0%
More boat trailer parking	.0%	.6%	.0%	.0%	.0%	1.0%	.2%	.0%
Full hookups	.0%	.6%	.0%	.0%	.3%	.3%	.5%	.0%
Animals	.0%	.3%	.6%	.0%	.3%	.0%	.2%	.9%
Camp Reservation System	.6%	.3%	.0%	.0%	.0%	.3%	.7%	.0%
Grass needs mowed	.3%	.3%	.0%	.0%	.7%	.0%	.2%	.0%
Telephone	.0%	.3%	.3%	.0%	.0%	.3%	.2%	.4%
Jet ski restriction	.0%	.5%	.0%	.0%	.3%	.3%	.2%	.0%
More water in lake	.9%	.0%	.0%	.0%	.7%	.0%	.2%	.0%
Distance markers	.0%	.2%	.6%	.0%	.3%	.0%	.0%	.9%
Fire wood for sale	.6%	.2%	.0%	.0%	.0%	.3%	.5%	.0%
Fewer people	.3%	.3%	.0%	.0%	.3%	.0%	.5%	.0%
Better night fishing facilities	.0%	.3%	.3%	.0%	.3%	.0%	.2%	.4%
Horse shoe pits	.0%	.2%	.6%	.0%	.3%	.3%	.0%	.4%
Motorboat restriction	.0%	.5%	.0%	.0%	.7%	.0%	.2%	.0%
Less bug eaters	.6%	.0%	.0%	.0%	.0%	.0%	.5%	.0%
Pegs or posts to anchor boats	.0%	.3%	.0%	.0%	.3%	.0%	.2%	.0%
Signs explaining plants	.0%	.0%	.6%	.0%	.0%	.0%	.0%	.9%
Mirrors in bathrooms	.0%	.3%	.0%	.0%	.3%	.3%	.0%	.0%
Shooting area	.0%	.2%	.3%	.0%	.3%	.0%	.2%	.0%
Bigger day use area	.0%	.3%	.0%	.0%	.0%	.3%	.2%	.0%
Expansion	.0%	.3%	.0%	.0%	.0%	.3%	.2%	.0%

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(continued)

Table D12s. Additional Facilities and Services by Region and ROS Class

	REGION				ROS			
	Hebgen/ Ennis	Helena	Great Falls	Semi- primitive motorized	Roaded natural	Roaded modified	Rural	Urban
Less trash	.0%	.3%	.0%	.0%	.3%	.0%	.2%	.0%
Picnic area outside resting area	.0%	.2%	.3%	.0%	.0%	.0%	.2%	.4%
Keep visitor center open	.0%	.3%	.0%	.0%	.3%	.0%	.2%	.0%
Volleyball court	.0%	.0%	.6%	.0%	.0%	.0%	.0%	.9%
More park grass	.3%	.0%	.3%	.0%	.0%	.0%	.2%	.4%
More benches	.0%	.0%	.6%	.0%	.0%	.0%	.0%	.9%
More pulloffs along road-wider pulloffs	.0%	.2%	.3%	.0%	.3%	.0%	.0%	.4%
Dock for swimming-fishing	.3%	.0%	.3%	.0%	.3%	.0%	.0%	.4%
Take big rocks out of swimming-boating area	.0%	.2%	.3%	.0%	.0%	.6%	.0%	.0%
Park	.0%	.0%	.6%	.0%	.0%	.0%	.0%	.9%
Mosquito-insect spraying	.3%	.0%	.3%	.0%	.0%	.3%	.2%	.0%
Campground host	.3%	.2%	.0%	.0%	.0%	.3%	.2%	.0%
Speed bumps	.0%	.3%	.0%	.0%	.3%	.0%	.2%	.0%
Wider bank area to fish from	.0%	.3%	.0%	.0%	.0%	.0%	.5%	.0%
More cabins	.6%	.0%	.0%	.0%	.0%	.3%	.2%	.0%
Restriction on dogs	.3%	.2%	.0%	.0%	.0%	.0%	.5%	.0%
Keep fish hatchery open	.0%	.0%	.6%	.0%	.0%	.0%	.0%	.9%
Entertainment	.0%	.0%	.6%	.0%	.0%	.0%	.0%	.9%
Better access to kayaking site	.0%	.0%	.3%	.0%	.0%	.0%	.0%	.4%
Better tent area	.0%	.2%	.0%	.0%	.0%	.3%	.0%	.0%
Bird nesting areas	.0%	.0%	.3%	.0%	.0%	.0%	.0%	.4%
More grass parking	.0%	.2%	.0%	.0%	.0%	.3%	.0%	.0%
Keep kayakers out of white water area	.0%	.2%	.0%	.0%	.0%	.0%	.2%	.0%
Fines for unattended campers	.0%	.2%	.0%	.0%	.0%	.3%	.0%	.0%
Free day camping	.0%	.2%	.0%	.0%	.0%	.3%	.0%	.0%
Pathway steps	.0%	.0%	.3%	.0%	.0%	.0%	.0%	.4%
Better water drains	.0%	.2%	.0%	.0%	.0%	.0%	.2%	.0%
Clean picnic tables	.0%	.2%	.0%	.0%	.0%	.0%	.2%	.0%
Clean river bottom	.0%	.2%	.0%	.0%	.0%	.0%	.2%	.0%
Sitting logs by campfires	.3%	.0%	.0%	.0%	.0%	.0%	.2%	.0%
Smooth out bridges	.0%	.0%	.3%	.0%	.0%	.0%	.0%	.4%
Clean rocks off trail	.0%	.0%	.3%	.0%	.0%	.0%	.0%	.4%
Barbecue	.0%	.2%	.0%	.0%	.0%	.0%	.2%	.0%
No game wardens	.0%	.2%	.0%	.0%	.0%	.0%	.2%	.0%
RV camping	.0%	.0%	.3%	.0%	.0%	.3%	.0%	.0%
Remove day limits	.0%	.2%	.0%	.0%	.3%	.0%	.0%	.0%



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(continued)

Table D12s. Additional Facilities and Services by Region and ROS Class

	REGION				ROS			
	Hebgen/ Ennis	Helena	Great Falls	Semi- primitive motorized	Roaded natural	Roaded modified	Rural	Urban
View cams-binoculars	.0%	.0%	.3%	.0%	.0%	.3%	.0%	.0%
Rest Area	.0%	.0%	.3%	.0%	.0%	.0%	.0%	.4%
Designated Jet Ski Area	.0%	.2%	.0%	.0%	.0%	.3%	.0%	.0%
Numbered campsites	.0%	.0%	.3%	.0%	.0%	.3%	.0%	.0%
Regulation of dock use	.0%	.2%	.0%	.0%	.0%	.3%	.0%	.0%
Choose own campsite	.3%	.0%	.0%	.0%	.0%	.0%	.2%	.0%
More freedom for dogs	.3%	.0%	.0%	.0%	.0%	.0%	.2%	.0%
Equipment rental	.3%	.0%	.0%	.0%	.0%	.0%	.2%	.0%
50 amp power	.3%	.0%	.0%	.0%	.0%	.0%	.2%	.0%
New concrete for basketball court	.0%	.0%	.3%	.0%	.0%	.0%	.0%	.4%
Pay phone	.0%	.2%	.0%	.0%	.0%	.0%	.2%	.0%
Clean silt out of river	.0%	.0%	.3%	.0%	.0%	.0%	.0%	.4%
Worms for sale	.3%	.0%	.0%	.0%	.0%	.3%	.0%	.0%
Pack dog allowed on boat	.0%	.2%	.0%	.0%	.3%	.0%	.0%	.0%
More picnic areas by water	.0%	.2%	.0%	.0%	.3%	.0%	.0%	.0%
Fishing pole holders	.0%	.2%	.0%	.0%	.0%	.0%	.2%	.0%
More brochures	.0%	.0%	.3%	.0%	.0%	.0%	.0%	.4%
Less signage	.0%	.0%	.3%	.0%	.0%	.0%	.0%	.4%
More variety in store	.3%	.0%	.0%	.0%	.0%	.0%	.2%	.0%
Less hassle with fees	.3%	.0%	.0%	.0%	.0%	.3%	.0%	.0%
More game wardens	.0%	.2%	.0%	.0%	.0%	.0%	.2%	.0%
Propane availability	.3%	.0%	.0%	.0%	.3%	.0%	.0%	.0%
Breakwater	.3%	.0%	.0%	.0%	.0%	.0%	.2%	.0%
Wildlife viewing area	.3%	.0%	.0%	.0%	.0%	.3%	.0%	.0%
Another exit out of campground	.0%	.2%	.0%	.0%	.0%	.0%	.2%	.0%
Get rid of casinos	.0%	.0%	.3%	.0%	.0%	.0%	.0%	.4%
Weed control	.3%	.0%	.0%	.0%	.0%	.0%	.2%	.0%
Recycling bins	.0%	.2%	.0%	.0%	.0%	.3%	.0%	.0%
Rope swing	.0%	.2%	.0%	.0%	.3%	.0%	.0%	.0%
Wind gauges	.3%	.0%	.0%	.0%	.0%	.0%	.2%	.0%
Clocks	.3%	.0%	.0%	.0%	.0%	.0%	.2%	.0%
Clean fire pits	.3%	.0%	.0%	.0%	.0%	.0%	.2%	.0%
On-duty park ranger	.0%	.0%	.3%	.0%	.0%	.0%	.0%	.4%
Air pumps for tubes	.3%	.0%	.0%	.0%	.0%	.0%	.2%	.0%

Table D13s. Disabled Facility Needs by Region and ROS Class

	REGION				ROS			
	Hebgen/ Ennis	Helena	Great Falls	Semi- primitive motorized	Roaded natural	Roaded modified	Rural	Urban
No disabled facilities needed	92.9%	87.7%	93.4%	90.9%	86.5%	92.5%	91.6%	93.3%
Disabled facilities needed	7.1%	12.3%	6.6%	9.1%	13.5%	7.5%	8.4%	6.7%
Specific additional accommodation								
More handicap access to water	29.4%	42.5%	28.0%	100.0%	34.7%	43.5%	42.2%	19.0%
Need handicap bathroom facilities	61.8%	21.3%	20.0%	.0%	36.7%	17.4%	35.6%	23.8%
Need paved surfaces	5.9%	15.0%	12.0%	.0%	12.2%	17.4%	8.9%	14.3%
Ramps-wider	5.9%	6.3%	8.0%	.0%	10.2%	8.7%	2.2%	4.8%
Handicap access to campground	.0%	6.3%	.0%	.0%	4.1%	8.7%	2.2%	.0%
Need handicap parking	.0%	5.0%	.0%	.0%	2.0%	8.7%	2.2%	.0%
Make it safe for disabled	.0%	2.5%	4.0%	.0%	4.1%	.0%	.0%	4.8%
Easier access to potable water	2.9%	.0%	8.0%	.0%	.0%	.0%	2.2%	9.5%
Steps to aid asthmatics-benches-resting places	.0%	.0%	12.0%	.0%	.0%	.0%	.0%	14.3%
Access to tables	.0%	.0%	12.0%	.0%	.0%	.0%	.0%	14.3%
Braille signs-signs in large print	.0%	2.5%	.0%	.0%	4.1%	.0%	.0%	.0%
More handrails	.0%	2.5%	.0%	.0%	2.0%	.0%	2.2%	.0%
Electricity	2.9%	1.3%	.0%	.0%	.0%	4.3%	2.2%	.0%
Awning	.0%	.0%	4.0%	.0%	.0%	.0%	.0%	4.8%
Fishing pole holders	.0%	1.3%	.0%	.0%	.0%	.0%	2.2%	.0%
More room	.0%	1.3%	.0%	.0%	.0%	.0%	2.2%	.0%
Clean up grass and weeds	.0%	1.3%	.0%	.0%	.0%	.0%	2.2%	.0%
Access to Tail Race Island	.0%	.0%	4.0%	.0%	.0%	.0%	.0%	4.8%
Better loading facilities	.0%	1.3%	.0%	.0%	.0%	.0%	2.2%	.0%
N	34	80	25	1	49	23	45	21

Note: totals do not add to 100% due to multiple responses.

Table D14s. Number of Encounters and Their Evaluation by Region and ROS Class

	REGION				ROS			
	Hebgen/ Ennis	Helena	Great Falls	Semi- primitive motorized	Roaded natural	Roaded modified	Rural	Urban
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Canoes seen today								
0	70.7%	73.4%	84.7%	90.0%	72.1%	77.8%	69.5%	88.1%
1 to 5	25.6%	24.4%	13.0%	10.0%	25.0%	20.1%	27.4%	9.7%
6 to 10	2.4%	1.6%	1.3%	.0%	1.8%	1.4%	2.2%	1.3%
11 to 20	.4%	.1%	.8%	.0%	.0%	.7%	.3%	.7%
21 to 30	.4%	.1%	.0%	.0%	.2%	.0%	.3%	.0%
31+	.5%	.4%	.2%	.0%	1.0%	.0%	.2%	.2%
Rate canoe encounters								
Enjoyed seeing	32.8%	28.2%	40.2%	40.0%	33.2%	26.4%	26.9%	54.1%
Didnt mind seeing	66.7%	71.1%	59.1%	60.0%	66.3%	72.0%	72.7%	45.9%
Disliked seeing	.5%	.6%	.8%	.0%	.5%	1.6%	.4%	.0%
Powerboats seen today								
0	64.7%	23.2%	82.5%	90.0%	33.4%	44.0%	52.4%	85.8%
1 to 5	25.1%	33.1%	13.5%	10.0%	35.3%	23.4%	27.7%	10.3%
6 to 10	7.2%	21.3%	2.6%	.0%	16.9%	13.7%	12.1%	2.5%
21 to 30	.4%	8.5%	.3%	.0%	5.6%	7.6%	2.1%	.0%
31+	2.6%	13.9%	1.0%	.0%	8.8%	11.2%	5.7%	1.4%
Rate powerboats encounters								
Enjoyed seeing	24.8%	14.5%	31.3%	66.7%	15.8%	18.6%	17.6%	40.5%
Didnt mind seeing	67.1%	69.3%	45.8%	33.3%	70.0%	63.2%	67.9%	45.9%
Disliked seeing	8.1%	16.2%	22.9%	.0%	14.2%	18.2%	14.5%	13.5%
Waterskiers seen today								
0	77.3%	58.1%	91.5%	100.0%	68.9%	68.9%	68.2%	90.3%
1 to 5	17.1%	25.2%	5.8%	.0%	20.0%	18.7%	21.5%	6.4%
6 to 10	3.0%	10.5%	2.3%	.0%	6.7%	8.9%	5.6%	3.0%
21 to 30	.4%	2.7%	.2%	.0%	2.2%	1.2%	1.5%	.0%
31+	2.2%	3.5%	.2%	.0%	2.2%	2.4%	3.3%	.2%
Rate waterskiers encounters								
Enjoyed seeing	30.6%	17.8%	44.8%	100.0%	23.1%	21.0%	22.1%	46.7%
Didnt mind seeing	60.7%	71.2%	42.5%	.0%	68.3%	69.8%	64.9%	41.7%
Disliked seeing	8.7%	11.0%	12.6%	.0%	8.6%	9.3%	13.0%	11.7%
Jetskis seen today								
0	79.1%	50.8%	89.6%	90.0%	64.5%	63.6%	67.0%	87.7%
1 to 5	15.2%	30.4%	7.9%	10.0%	24.2%	19.2%	23.1%	9.3%
6 to 10	3.9%	12.8%	2.2%	.0%	6.6%	12.4%	7.3%	2.6%
21 to 30	.7%	2.3%	.2%	.0%	2.6%	1.2%	.8%	.2%
31+	1.1%	3.7%	.2%	.0%	2.2%	3.5%	1.8%	.2%

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(continued)

Table D14s. Number of Encounters and Their Evaluation by Region and ROS Class

	REGION				ROS			
	Hebgen/ Ennis	Helena	Great Falls	Semi- primitive motorized	Roaded natural	Roaded modified	Rural	Urban
Rate jetskiers encounters								
Enjoyed seeing	28.8%	11.5%	34.7%	66.7%	17.8%	12.2%	18.9%	34.3%
Didnt mind seeing	46.2%	48.1%	43.6%	33.3%	49.0%	42.6%	49.3%	44.3%
Disliked seeing	25.0%	40.4%	21.8%	.0%	33.2%	45.2%	31.8%	21.4%
Bank anglers seen today								
0	40.3%	43.6%	70.9%	44.4%	51.0%	44.7%	37.0%	76.3%
1 to 5	43.6%	35.5%	21.2%	22.2%	35.2%	31.7%	43.4%	19.4%
6 to 10	13.1%	15.8%	5.9%	33.3%	11.2%	17.0%	15.3%	3.4%
21 to 30	1.2%	1.8%	1.2%	.0%	1.2%	3.2%	1.2%	.5%
31+	1.9%	3.2%	.8%	.0%	1.4%	3.4%	3.1%	.5%
Rate bank anglers encounters								
Enjoyed seeing	24.4%	25.3%	35.0%	16.7%	27.3%	28.1%	20.8%	44.3%
Didnt mind seeing	72.9%	70.6%	62.1%	83.3%	69.3%	66.7%	76.4%	53.8%
Disliked seeing	2.7%	4.1%	2.8%	.0%	3.4%	5.2%	2.8%	1.9%
Wade anglers seen today								
0	54.1%	79.1%	85.7%	30.0%	78.4%	71.3%	63.6%	88.4%
1 to 5	30.4%	15.2%	9.9%	30.0%	15.9%	15.9%	25.8%	10.0%
6 to 10	11.9%	4.0%	2.7%	20.0%	4.1%	7.6%	8.6%	1.6%
21 to 30	1.1%	.1%	1.0%	10.0%	.4%	1.7%	.5%	.0%
31+	2.5%	1.6%	.7%	10.0%	1.2%	3.4%	1.5%	.0%
Rate wade anglers encounters								
Enjoyed seeing	26.0%	24.4%	31.3%	28.6%	26.4%	26.2%	22.4%	40.8%
Didnt mind seeing	70.4%	71.9%	62.5%	57.1%	70.2%	67.4%	74.3%	56.3%
Disliked seeing	3.6%	3.7%	6.3%	14.3%	3.4%	6.4%	3.3%	2.8%
Boat anglers seen today								
0	48.9%	31.9%	87.7%	70.0%	44.7%	41.9%	40.4%	94.0%
1 to 5	33.7%	29.8%	6.9%	20.0%	30.3%	19.4%	35.5%	4.7%
6 to 10	12.7%	24.5%	2.4%	.0%	17.9%	20.7%	17.0%	.9%
21 to 30	1.5%	5.8%	.8%	.0%	2.3%	7.4%	2.9%	.0%
31+	3.2%	8.0%	2.2%	10.0%	4.8%	10.5%	4.2%	.5%
Rate boat anglers encounters								
Enjoyed seeing	23.3%	18.2%	28.6%	50.0%	19.7%	22.0%	17.8%	43.1%
Didnt mind seeing	73.3%	77.7%	61.6%	50.0%	75.7%	73.4%	78.1%	51.0%
Disliked seeing	3.4%	4.0%	9.8%	.0%	4.6%	4.6%	4.2%	5.9%

(continued)

Table D14s. Number of Encounters and Their Evaluation by Region and ROS Class

	REGION				ROS			
	Hebgen/ Ennis	Helena	Great Falls	Semi- primitive motorized	Roaded natural	Roaded modified	Rural	Urban
River floaters seen today								
0	68.5%	83.6%	84.2%	80.0%	82.0%	80.9%	71.9%	86.9%
1 to 5	16.5%	10.4%	9.9%	.0%	12.5%	8.6%	14.9%	10.4%
6 to 10	8.0%	3.3%	3.7%	.0%	2.5%	6.6%	7.3%	1.8%
21 to 30	2.1%	1.1%	1.0%	20.0%	1.2%	1.5%	1.7%	.5%
31+	4.9%	1.7%	1.2%	.0%	1.8%	2.5%	4.2%	.5%
Rate river floater encounters								
Enjoyed seeing	31.5%	22.2%	37.3%	40.0%	25.6%	23.3%	26.7%	52.7%
Didnt mind seeing	62.5%	74.1%	56.7%	40.0%	71.2%	71.4%	66.7%	44.6%
Disliked seeing	6.0%	3.7%	6.0%	20.0%	3.2%	5.3%	6.7%	2.7%
Livestock seen today								
0	77.9%	78.7%	88.6%	70.0%	79.5%	76.2%	80.7%	90.2%
1 to 5	9.9%	12.5%	4.7%	.0%	11.6%	12.0%	9.5%	4.6%
6 to 10	4.8%	5.0%	1.7%	.0%	4.7%	5.4%	4.4%	1.1%
21 to 30	1.5%	1.3%	1.7%	.0%	.6%	2.9%	1.5%	1.1%
31+	5.9%	2.5%	3.3%	30.0%	3.7%	3.4%	3.9%	3.0%
Rate livestock encounters								
Enjoyed seeing	30.5%	30.0%	38.0%	33.3%	32.3%	29.9%	29.3%	41.3%
Didnt mind seeing	57.3%	61.5%	51.9%	33.3%	60.9%	63.9%	56.4%	46.0%
Disliked seeing	12.2%	8.5%	10.2%	33.3%	6.8%	6.1%	14.4%	12.7%
Shoreline development seen today								
0	66.6%	56.4%	77.9%	70.0%	62.2%	61.5%	62.8%	78.1%
1 to 5	25.0%	25.1%	16.6%	20.0%	22.8%	23.0%	26.2%	16.6%
6 to 10	5.3%	7.7%	3.7%	.0%	5.8%	7.0%	6.5%	4.0%
21 to 30	.6%	3.5%	.5%	10.0%	2.9%	2.8%	1.2%	.2%
31+	2.5%	7.2%	1.2%	.0%	6.2%	5.8%	3.3%	1.2%
Rate shoreline development encounters								
Enjoyed seeing	17.8%	14.1%	19.3%	25.0%	15.3%	15.8%	16.1%	18.0%
Didnt mind seeing	60.1%	64.4%	60.0%	75.0%	66.8%	62.5%	58.4%	62.9%
Disliked seeing	22.1%	21.5%	20.7%	.0%	17.9%	21.7%	25.5%	19.1%
Hunters seen today								
0	96.2%	98.3%	98.5%	100.0%	98.4%	98.1%	96.7%	98.4%
1 to 5	2.6%	1.0%	.5%	.0%	.8%	1.0%	2.3%	.7%



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(continued)

Table D14s. Number of Encounters and Their Evaluation by Region and ROS Class

	REGION				ROS			
	Hebgen/ Ennis	Helena	Great Falls	Semi- primitive motorized	Roaded natural	Roaded modified	Rural	Urban
6 to 10	.6%	.2%	.5%	.0%	.2%	.7%	.3%	.5%
21 to 30	.0%	.0%	.2%	.0%	.0%	.2%	.0%	.0%
31+	.6%	.5%	.3%	.0%	.6%	.0%	.7%	.5%
Rate hunting encounters								
Enjoyed seeing	30.9%	30.7%	43.1%	33.3%	35.3%	34.5%	27.5%	43.9%
Didnt mind seeing	60.6%	65.4%	46.2%	66.7%	57.6%	63.6%	64.7%	43.9%
Disliked seeing	8.5%	3.9%	10.8%	.0%	7.1%	1.8%	7.8%	12.2%
N	706	1071	1018	11	628	574	820	762

Table D15s. Perceptions of Crowding by Region and ROS Class

	REGION				ROS			
	Hebgen/ Ennis	Helena	Great Falls	Semi- primitive motorized	Roaded natural	Roaded modified	Rural	Urban
How crowded did you feel during this visit?								
not at all crowded	45.0%	37.3%	66.0%	70.0%	45.5%	40.3%	41.4%	68.7%
2	18.0%	12.9%	16.3%	10.0%	16.6%	12.1%	15.2%	17.3%
slightly crowded	17.7%	17.5%	8.8%	10.0%	17.2%	14.5%	17.5%	8.6%
4	4.2%	6.4%	2.9%	.0%	4.5%	6.1%	5.9%	2.1%
5	4.9%	5.2%	1.6%	10.0%	4.0%	4.0%	5.6%	1.4%
moderately crowded	5.2%	7.0%	3.0%	.0%	5.0%	9.9%	5.6%	1.0%
7	3.1%	6.7%	.5%	.0%	3.7%	5.3%	5.4%	.3%
8	.7%	3.0%	.3%	.0%	1.2%	3.7%	1.4%	.1%
extremely crowded	1.0%	3.9%	.7%	.0%	2.3%	4.0%	1.9%	.4%
Mean	2.44	3.16	1.75	1.70	2.55	3.15	2.76	1.58
N	706	1071	1018	11	628	574	820	762

Table D16s. Where crowding occurred by Region and ROS Class

	REGION				ROS			
	Hebgen/ Ennis	Helena	Great Falls	Semi- primitive motorized	Roaded natural	Roaded modified	Rural	Urban
Where did you feel crowded?								
In campsite	23.4%	33.6%	5.2%	.0%	19.5%	33.1%	31.2%	5.5%
On boat ramp	3.6%	6.9%	7.2%	.0%	6.9%	8.8%	4.2%	1.8%
On the river	6.0%	2.9%	13.4%	.0%	3.1%	9.4%	4.7%	1.8%
On boat dock	.0%	8.9%	2.1%	.0%	3.8%	12.2%	1.9%	1.8%
Yellowstone National Park	15.0%	.3%	2.1%	.0%	3.8%	3.3%	7.0%	1.8%
Parking area	5.4%	4.6%	2.1%	.0%	3.1%	5.0%	5.6%	1.8%
West Yellowstone	11.4%	.0%	1.0%	.0%	3.1%	3.3%	4.2%	.0%
On Boat Tour	.0%	5.2%	.0%	.0%	11.3%	.0%	.0%	.0%
On water	1.2%	4.0%	.0%	50.0%	3.8%	3.3%	1.4%	.0%
On the lake	.0%	4.0%	1.0%	.0%	3.8%	2.8%	1.4%	1.8%
On the bank or shoreline	.0%	3.7%	1.0%	.0%	.6%	2.8%	3.3%	1.8%
On causeway	.0%	4.0%	.0%	.0%	.0%	.0%	6.5%	.0%
In fishing areas	2.4%	1.4%	1.0%	.0%	.6%	2.2%	2.3%	.0%
Weekend crowding at Holter dam campground	1.8%	1.4%	1.0%	.0%	.6%	2.2%	1.9%	.0%
All over	3.0%	1.1%	.0%	.0%	1.9%	.6%	2.3%	.0%
Bathroom	1.8%	1.4%	1.0%	.0%	2.5%	1.1%	.9%	1.8%
Picnic area'	.0%	2.3%	1.0%	.0%	3.1%	1.1%	.9%	.0%
In Lewis and Clark facility	.0%	.0%	9.3%	.0%	.0%	.0%	.0%	16.4%
On shore	3.0%	.9%	.0%	.0%	.6%	1.1%	2.3%	.0%
Glacier National Park	.6%	.3%	6.2%	.0%	.6%	1.1%	.0%	9.1%
Holter Lake	.6%	1.4%	1.0%	.0%	1.3%	1.7%	.5%	1.8%
In town	1.8%	.6%	2.1%	.0%	.0%	.6%	1.9%	3.6%
Black Sandy SRA	.0%	2.0%	.0%	.0%	1.3%	.6%	1.9%	.0%
Boat launch area	.6%	.3%	4.1%	.0%	.0%	1.1%	.5%	5.5%
Log Gulch Campground	.0%	1.7%	.0%	.0%	1.3%	2.2%	.0%	.0%
Great Falls	.6%	.3%	4.1%	.0%	1.9%	.6%	.0%	3.6%

Note: totals do not add to 100% due to multiple responses.

(continued)

Table D16s. Where crowding occurred by Region and ROS Class

	REGION				ROS			
	Hebgen/ Ennis	Helena	Great Falls	Semi- primitive motorized	Roaded natural	Roaded modified	Rural	Urban
Holter Lake								
Campground	.0%	1.1%	1.0%	.0%	.0%	2.8%	.0%	.0%
Holter Dam	.0%	1.1%	1.0%	.0%	1.3%	1.1%	.5%	.0%
On Missouri								
River								
between Wolf								
Creek and								
Craig	.0%	.3%	3.1%	.0%	.6%	1.7%	.0%	.0%
On roads	1.2%	.3%	1.0%	.0%	1.3%	.6%	.5%	.0%
Madison	2.4%	.0%	.0%	.0%	.0%	1.1%	.9%	.0%
Exhibits	.0%	.0%	4.1%	.0%	.0%	.0%	.0%	7.3%
Put-in	1.8%	.3%	.0%	.0%	.6%	.0%	1.4%	.0%
Holter Dam								
Campground	.0%	1.1%	.0%	.0%	1.9%	.6%	.0%	.0%
Hauser Lake	.0%	1.1%	.0%	.0%	.6%	.0%	1.4%	.0%
On trail	.6%	.3%	1.0%	.0%	.6%	.0%	.5%	1.8%
At the dam	.0%	.3%	2.1%	.0%	1.3%	.0%	.0%	1.8%
At trailhead	.6%	.3%	1.0%	.0%	.6%	.0%	.5%	1.8%
In the park	.0%	.3%	2.1%	.0%	.0%	.6%	.0%	3.6%
Swimming area	.6%	.6%	.0%	.0%	1.3%	.0%	.5%	.0%
Ryan Dam	.0%	.0%	3.1%	.0%	.0%	1.7%	.0%	.0%
Giant Springs	.0%	.0%	3.1%	.0%	.0%	.0%	.0%	5.5%
Quake Lake	1.8%	.0%	.0%	.0%	.0%	.6%	.9%	.0%
Lakeside Resort	.0%	.9%	.0%	.0%	.0%	.0%	1.4%	.0%
Helena	.0%	.9%	.0%	.0%	1.3%	.0%	.5%	.0%
Bear Trap								
Canyon	1.8%	.0%	.0%	.0%	.0%	.0%	1.4%	.0%
Parking at side								
of road	.0%	.6%	.0%	.0%	.0%	.0%	.9%	.0%
Shoreline of								
Madison	1.2%	.0%	.0%	50.0%	.6%	.0%	.0%	.0%
Viewing area	.0%	.0%	2.1%	.0%	.0%	.0%	.0%	3.6%
Entrance and								
exit	.6%	.3%	.0%	.0%	.6%	.0%	.5%	.0%
At restaurant	.6%	.0%	1.0%	.0%	.6%	.0%	.0%	1.8%
RV park	.6%	.3%	.0%	.0%	.0%	.0%	.9%	.0%
Creek	.0%	.6%	.0%	.0%	1.3%	.0%	.0%	.0%
Marina	.0%	.6%	.0%	.0%	.6%	.6%	.0%	.0%
Below dam	.0%	.6%	.0%	.0%	.0%	.0%	.9%	.0%

On Missouri River	.6%	.3%	.0%	.0%	.0%	.6%	.5%	.0%
Parade	1.2%	.0%	.0%	.0%	.0%	.0%	.9%	.0%
Lakeside RV campground	.0%	.6%	.0%	.0%	.0%	.0%	.9%	.0%

Note: totals do not add to 100% due to multiple responses.

(continued)

Table D16s. Where crowding occurred by Region and ROS Class

	REGION				ROS			
	Hebgen/ Ennis	Helena	Great Falls	Semi- primitive motorized	Roaded natural	Roaded modified	Rural	Urban
Below Holter Dam west side	.0%	.6%	.0%	.0%	.6%	.6%	.0%	.0%
Judith Landing	.0%	.0%	2.1%	.0%	.0%	.0%	.0%	3.6%
By Split Rock	.0%	.6%	.0%	.0%	.6%	.6%	.0%	.0%
Black Beach	.0%	.6%	.0%	.0%	.6%	.0%	.5%	.0%
Wolf Creek Bridge	.0%	.3%	1.0%	.0%	.6%	.6%	.0%	.0%
Rainbow Point Campground	1.2%	.0%	.0%	.0%	.0%	.0%	.9%	.0%
Beaver Creek FAS	.0%	.6%	.0%	.0%	1.3%	.0%	.0%	.0%
Gates of the Mountains Inc	.0%	.6%	.0%	.0%	1.3%	.0%	.0%	.0%
Rainbow Dam	.0%	.0%	2.1%	.0%	.0%	.0%	.0%	3.6%
Around the bridge	.0%	.3%	.0%	.0%	.0%	.0%	.5%	.0%
In hatchery	.0%	.0%	1.0%	.0%	.0%	.0%	.0%	1.8%
Town pond	.0%	.0%	1.0%	.0%	.0%	.0%	.0%	1.8%
Place we stayed	.6%	.0%	.0%	.0%	.0%	.0%	.5%	.0%
First 3 miles	.6%	.0%	.0%	.0%	.0%	.0%	.5%	.0%
Beaverhead creek	.0%	.3%	.0%	.0%	.6%	.0%	.0%	.0%
Creek inlet	.0%	.3%	.0%	.0%	.6%	.0%	.0%	.0%
Wheelchair access site	.0%	.0%	1.0%	.0%	.6%	.0%	.0%	.0%
Day use area	.0%	.3%	.0%	.0%	.0%	.6%	.0%	.0%
Between Holter and Gates of the Mountains	.0%	.3%	.0%	.0%	.6%	.0%	.0%	.0%

Around the river	.6%	.0%	.0%	.0%	.0%	.0%	.5%	.0%
Canyon Ferry Campgrounds	.0%	.3%	.0%	.0%	.6%	.0%	.0%	.0%
Hill overlooking the Great Falls	.0%	.0%	1.0%	.0%	.0%	.6%	.0%	.0%
Campground at Cliff Lake	.6%	.0%	.0%	.0%	.0%	.0%	.5%	.0%
Morony Dam put-in spot	.0%	.0%	1.0%	.0%	.6%	.0%	.0%	.0%

Note: totals do not add to 100% due to multiple responses.

(continued)

Table D16s. Where crowding occurred by Region and ROS Class

	REGION				ROS			
	Hebgen/Ennis	Helena	Great Falls	Semi-primitive motorized	Roaded natural	Roaded modified	Rural	Urban
On grass	.0%	.0%	1.0%	.0%	.0%	.6%	.0%	.0%
Between Wolf Creek and Cascade	.0%	.3%	.0%	.0%	.6%	.0%	.0%	.0%
On roads in Yellowstone	.6%	.0%	.0%	.0%	.0%	.0%	.5%	.0%
Close to docks	.0%	.3%	.0%	.0%	.6%	.0%	.0%	.0%
On the east bank of the Missouri below Hauser Dam	.0%	.3%	.0%	.0%	.0%	.0%	.5%	.0%
By Pavilion	.0%	.3%	.0%	.0%	.6%	.0%	.0%	.0%
Up the Gallatin	.6%	.0%	.0%	.0%	.0%	.0%	.5%	.0%
When asked to do survey	.6%	.0%	.0%	.0%	.0%	.0%	.5%	.0%
In the shower	.6%	.0%	.0%	.0%	.0%	.0%	.5%	.0%
Waiting areas	.0%	.3%	.0%	.0%	.6%	.0%	.0%	.0%
Boat landing	.6%	.0%	.0%	.0%	.0%	.0%	.5%	.0%
Close to fishing boats	.0%	.3%	.0%	.0%	.0%	.0%	.5%	.0%
Gift shop	.0%	.0%	1.0%	.0%	.0%	.0%	.0%	1.8%
Observatory overlooking								

Quake Lake	.6%	.0%	.0%	.0%	.6%	.0%	.0%	.0%
IMAX theater in W Yellowstone	.6%	.0%	.0%	.0%	.0%	.0%	.5%	.0%
Museum	.0%	.0%	1.0%	.0%	.0%	.0%	.0%	1.8%
Hotel-motel	.0%	.3%	.0%	.0%	.6%	.0%	.0%	.0%
Interpretive Center	.0%	.0%	1.0%	.0%	.0%	.0%	.0%	1.8%
At points of interest	.6%	.0%	.0%	.0%	.0%	.0%	.5%	.0%
Boat trailer parking lot	.0%	.3%	.0%	.0%	.0%	.0%	.5%	.0%
Cabin Creek Campground	.6%	.0%	.0%	.0%	.0%	.6%	.0%	.0%
Spring Creek Campground	.6%	.0%	.0%	.0%	.6%	.0%	.0%	.0%
Powerhouse River Access	.6%	.0%	.0%	.0%	.0%	.0%	.5%	.0%

Note: totals do not add to 100% due to multiple responses.

(continued)

Table D16s. Where crowding occurred by Region and ROS Class

	REGION				ROS			
	Hebgen/ Ennis	Helena	Great Falls	Semi- primitive motorized	Roaded natural	Roaded modified	Rural	Urban
Warm Springs Access	.6%	.0%	.0%	.0%	.0%	.0%	.5%	.0%
Holter Lake Lodge	.0%	.3%	.0%	.0%	.0%	.6%	.0%	.0%
Broadwater Bay Park	.0%	.0%	1.0%	.0%	.0%	.0%	.0%	1.8%
Bigfork	.6%	.0%	.0%	.0%	.0%	.0%	.5%	.0%
Bozeman	.6%	.0%	.0%	.0%	.0%	.0%	.5%	.0%
Lee Metcalf Wilderness	.6%	.0%	.0%	.0%	.0%	.0%	.5%	.0%
Missouri Headwaters	.0%	.3%	.0%	.0%	.6%	.0%	.0%	.0%
Craig	.0%	.3%	.0%	.0%	.6%	.0%	.0%	.0%
Nevada City	.6%	.0%	.0%	.0%	.0%	.6%	.0%	.0%
Norris	.6%	.0%	.0%	.0%	.0%	.0%	.5%	.0%
Missoula	.0%	.3%	.0%	.0%	.6%	.0%	.0%	.0%
Hauser Dam	.0%	.3%	.0%	.0%	.0%	.0%	.5%	.0%
Lewis and Clark	.0%	.0%	1.0%	.0%	.0%	.0%	.0%	1.8%



Logan	.0%	.0%	1.0%	.0%	.0%	.0%	.0%	1.8%
Wolf Creek	.0%	.0%	1.0%	.0%	.0%	.0%	.0%	1.8%
Rock Creek	.0%	.3%	.0%	.0%	.6%	.0%	.0%	.0%
Yellowstone								
Holiday								
Resort	.6%	.0%	.0%	.0%	.0%	.0%	.5%	.0%
N	167	348	97	2	159	181	215	55

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Table D17s. Reasons No Longer Visit Sites by Region and ROS Class

	REGION				ROS			
	Hebgen/ Ennis	Helena	Great Falls	Semi- primitive motorized	Roaded natural	Roaded modified	Rural	Urban
Are there any sites in this area you no longer visit?								
yes	11.9%	13.0%	8.9%	.0%	11.5%	13.0%	13.0%	7.9%
no	88.1%	87.0%	91.1%	100.0%	88.5%	87.0%	87.0%	92.1%
Reasons no longer visit sites								
because of fees	35.4%	40.4%	77.5%	.0%	49.2%	41.4%	35.3%	85.4%
because of crowding	55.4%	57.0%	32.4%	.0%	69.5%	39.7%	52.9%	31.3%
conflicts with other users	16.9%	20.2%	12.7%	.0%	18.6%	13.8%	21.2%	12.5%
overuse	30.8%	33.3%	19.7%	.0%	37.3%	29.3%	29.4%	16.7%
resource degradation	23.1%	14.9%	9.9%	.0%	16.9%	19.0%	18.8%	4.2%
other reason	29.2%	41.2%	9.9%	.0%	20.3%	53.4%	30.6%	8.3%
N	706	1071	1018	11	628	574	820	762

Table D18s. Recreation Sites No Longer Visited by Region and ROS Class

	REGION			ROS			
	Hebgen/ Ennis	Helena	Great Falls	Roaded natural	Roaded modified	Rural	Urban
Sites no longer visited							
Giant Springs Heritage State Park	.0%	1.8%	73.5%	8.3%	13.0%	.0%	88.9%
Black Sandy SRA	.0%	26.4%	.0%	16.7%	5.6%	20.5%	.0%
Yellowstone Park	35.6%	.9%	.0%	11.7%	9.3%	12.8%	.0%
Log Gulch Campground	.0%	13.6%	.0%	5.0%	22.2%	.0%	.0%
Canyon Ferry	1.7%	11.8%	1.5%	18.3%	5.6%	1.3%	.0%
Holter Lake	1.7%	4.5%	4.4%	6.7%	3.7%	2.6%	2.2%
Rainbow Point Campground	13.6%	.0%	.0%	1.7%	.0%	9.0%	.0%
Lonesomehurst Campground	8.5%	.0%	.0%	6.7%	.0%	1.3%	.0%
Giant Spring	.0%	.0%	7.4%	3.3%	5.6%	.0%	.0%
Hauser Dam	.0%	4.5%	.0%	.0%	7.4%	1.3%	.0%
Madison Arm Resort	5.1%	.0%	1.5%	3.3%	1.9%	1.3%	.0%
York campground	.0%	3.6%	.0%	1.7%	.0%	3.8%	.0%
Hellgate	.0%	3.6%	.0%	.0%	.0%	5.1%	.0%
Cherry Creek Campground	5.1%	.0%	.0%	3.3%	.0%	1.3%	.0%
Spring Creek Campground	5.1%	.0%	.0%	3.3%	.0%	1.3%	.0%
Hauser Lake	.0%	2.7%	.0%	3.3%	1.9%	.0%	.0%
Craig	.0%	1.8%	1.5%	1.7%	1.9%	1.3%	.0%
Silos	.0%	2.7%	.0%	1.7%	.0%	2.6%	.0%
Kims Marina	.0%	2.7%	.0%	.0%	.0%	3.8%	.0%
Chinamen Gulch	.0%	2.7%	.0%	1.7%	.0%	2.6%	.0%
Kirkwood Ranch Motel and Marina	1.7%	.9%	.0%	.0%	.0%	2.6%	.0%
Holter Lake Campground	.0%	1.8%	.0%	.0%	3.7%	.0%	.0%
Lakeside Resort	.0%	1.8%	.0%	1.7%	.0%	1.3%	.0%
Gates Of The Mountains Inc	.0%	1.8%	.0%	.0%	1.9%	1.3%	.0%
Lewis and Clark Interpretive Center	.0%	.0%	2.9%	.0%	.0%	.0%	4.4%
Missouri River	.0%	1.8%	.0%	.0%	1.9%	1.3%	.0%
Lower Madison	3.4%	.0%	.0%	.0%	.0%	2.6%	.0%
Harrison	3.4%	.0%	.0%	.0%	.0%	2.6%	.0%
Big Horn	1.7%	.0%	1.5%	.0%	1.9%	1.3%	.0%
Gallatin River	3.4%	.0%	.0%	.0%	.0%	2.6%	.0%
Greycliff	3.4%	.0%	.0%	.0%	.0%	2.6%	.0%
Holter Dam	.0%	1.8%	.0%	.0%	.0%	2.6%	.0%
Earthquake Area Interpretive Site	1.7%	.0%	.0%	1.7%	.0%	.0%	.0%
Madison River Picnic Site	1.7%	.0%	.0%	.0%	.0%	1.3%	.0%
Bakershole Campground	1.7%	.0%	.0%	.0%	.0%	1.3%	.0%
Causeway Fishing Access	.0%	.9%	.0%	.0%	.0%	1.3%	.0%
Holter Dam Campground	.0%	.9%	.0%	.0%	1.9%	.0%	.0%

Note: totals do not add to 100% due to multiple responses.

(continued)

Table D18s. Recreation Sites No Longer Visited by Region and ROS Class

	REGION			ROS			
	Hebgen/ Ennis	Helena	Great Falls	Roaded natural	Roaded modified	Rural	Urban
Beaver Creek Fishing							
Access	1.7%	.0%	.0%	.0%	.0%	1.3%	.0%
El Dorado Bar Mine INC	.0%	.9%	.0%	1.7%	.0%	.0%	.0%
The Boat Loft	.0%	.9%	.0%	1.7%	.0%	.0%	.0%
Indian Trail Marina	.0%	.9%	.0%	1.7%	.0%	.0%	.0%
North Shore Public							
Access	1.7%	.0%	.0%	.0%	.0%	1.3%	.0%
Ryan Dam	.0%	.0%	1.5%	1.7%	.0%	.0%	.0%
Ulm Pishkun	.0%	.0%	1.5%	.0%	1.9%	.0%	.0%
Any fee area	.0%	.0%	1.5%	.0%	.0%	.0%	2.2%
North Side	1.7%	.0%	.0%	.0%	.0%	1.3%	.0%
Spring Meadow	.0%	.9%	.0%	.0%	.0%	1.3%	.0%
Lewis and Clark Caverns	.0%	.9%	.0%	.0%	1.9%	.0%	.0%
Henry's Fork	1.7%	.0%	.0%	1.7%	.0%	.0%	.0%
State park	.0%	.9%	.0%	1.7%	.0%	.0%	.0%
Frenchtown Pond	.0%	.9%	.0%	.0%	.0%	1.3%	.0%
Beartooth	.0%	.9%	.0%	.0%	1.9%	.0%	.0%
Hyalite	1.7%	.0%	.0%	.0%	.0%	1.3%	.0%
Holiday	1.7%	.0%	.0%	1.7%	.0%	.0%	.0%
Beam Lake	.0%	.9%	.0%	.0%	1.9%	.0%	.0%
White Bear Island	.0%	.0%	1.5%	.0%	.0%	.0%	2.2%
Pelican Point to Holter	.0%	.0%	1.5%	.0%	.0%	.0%	2.2%
Lake Francis	.0%	.9%	.0%	.0%	1.9%	.0%	.0%
South Fork	1.7%	.0%	.0%	.0%	.0%	1.3%	.0%
Tiber	.0%	.0%	1.5%	.0%	.0%	.0%	2.2%
Beaverhead	.0%	.0%	1.5%	.0%	1.9%	.0%	.0%
Moose Creek	.0%	.9%	.0%	.0%	.0%	1.3%	.0%
Opposite bank at Warm Springs	1.7%	.0%	.0%	.0%	.0%	1.3%	.0%
Loma	.0%	.0%	1.5%	1.7%	.0%	.0%	.0%
Wade Lake	1.7%	.0%	.0%	.0%	.0%	1.3%	.0%
Park Lake	.0%	.9%	.0%	.0%	.0%	1.3%	.0%
Smith River	.0%	.0%	1.5%	.0%	1.9%	.0%	.0%
Wolf Creek	.0%	.9%	.0%	.0%	1.9%	.0%	.0%
Glacier National Park	.0%	.9%	.0%	1.7%	.0%	.0%	.0%
Crooked Falls Overlook	.0%	.9%	.0%	1.7%	.0%	.0%	.0%
Riverside	.0%	.9%	.0%	.0%	1.9%	.0%	.0%
Jo Bonner	.0%	.9%	.0%	.0%	1.9%	.0%	.0%
White Earth	.0%	.9%	.0%	.0%	.0%	1.3%	.0%
N	59	110	68	60	54	78	45

Note: totals do not add to 100% due to multiple responses.



Table D19s. Behavioral Response to Displacement by Region and ROS Class

	REGION				ROS			
	Hebgen/ Ennis	Helena	Great Falls	Semi- primitive motorized	Roaded natural	Roaded modified	Rural	Urban
If this site were closed, how would it affect trip plans?								
I would choose another site in this area	45.6%	36.0%	32.6%	27.3%	36.8%	31.8%	45.5%	32.8%
I would visit at some other time	18.2%	21.2%	34.8%	36.4%	27.4%	24.1%	16.2%	34.3%
I would choose another site somewhere else	22.3%	25.8%	12.3%	27.3%	17.0%	25.8%	25.8%	11.9%
I would do some other activity	6.1%	7.9%	15.1%	.0%	11.6%	7.4%	5.2%	16.2%
I would stay home	7.8%	9.1%	5.3%	9.1%	7.2%	11.0%	7.3%	4.8%
N	706	1071	1018	11	628	574	820	762

Table D20s. Average Measures of Attachment to Place by Region and ROS Class

	REGION				ROS			
	Hebgen/ Ennis	Helena	Great Falls	Semi- primitive motorized	Roaded natural	Roaded modified	Rural	Urban
A lot of my life is organized around this place	-.37	-.35	-.34	-.27	-.39	-.40	-.36	-.27
This place is the best for what I like to do	.67	.57	.57	.55	.55	.62	.62	.58
I feel no commitment to this place	-.32	-.25	-.33	-.45	-.32	-.34	-.22	-.32
The time I spend here could just as easily be spent somewhere else	-.24	-.03	-.31	.18	-.30	-.12	-.04	-.31
I am very attached to this place	.61	.35	.49	.91	.43	.50	.43	.51
I identify strongly with this place	.57	.31	.40	.27	.38	.45	.40	.41
This place makes me feel like no other place can	.30	-.02	.14	.00	.12	.16	.06	.15
Doing what I do here is more important than doing it any other place	.14	-.11	.06	.00	-.07	.07	-.01	.07
N	706	1071	1018	11	628	574	820	762

-2=Strongly disagree    0=Neutral/no opinion    2=Strongly agree



Table D21s. Group Trip Expenditures by Region and ROS Class

	REGION			Semi-primitive motorized	Roaded natural	Roaded modified	Rural	Urban
	Hebgen/Ennis	Helena	Great Falls					
Motel/hotel/BB	30.57	15.86	25.38	190.91	32.33	29.26	8.10	22.87
Campground/RV parks	12.17	8.95	3.48	.45	6.01	8.50	11.76	3.94
Guides/outfitters	4.96	4.82	11.61	22.73	8.06	8.87	4.22	9.40
Licenses and entrance fees	8.80	8.00	2.84	5.91	8.89	7.45	7.44	1.91
Auto/RV rental/repair	26.18	7.03	7.76	30.00	10.38	28.84	3.92	7.46
Transportation expenses	.74	3.66	5.24	.00	4.25	3.53	.87	5.86
Gasoline/oil	34.46	24.94	11.27	69.18	24.70	33.12	21.65	10.47
Restaurant/bar	34.00	18.53	17.11	70.45	28.47	29.43	14.80	15.98
Groceries/snacks	37.49	29.92	10.22	58.55	26.56	35.25	27.40	9.59
Retail goods	21.31	17.37	11.09	30.45	20.33	16.77	17.12	10.07
Other expenses	3.78	2.05	2.10	.00	5.26	2.44	1.24	1.56
Total expenditures	215.95	141.14	106.84	478.64	175.91	203.12	118.72	97.37
N	532	898	1018	11	533	486	656	762

## Appendix E - Indicators and Standards by ROS Class and Region

The following tables display encounter levels for each of the user-group conflicts that were identified as social indicators during the planning process for the Missouri Madison corridor. The ROS code identifies the region and the ROS class. The first digit of the code refers to the region (1 for Hebgen/Ennis, 2 for Helena, and 3 for Great Falls) and the second digit refers to the ROS class (1 through 7 for each class from primitive to urban). The desired condition shown was established following the 1994-95 recreation survey. **All percentages shown under the Number of Encounters heading refer only to the subset of visitors who had conflicts with the specified user group.** Percent with conflict was calculated by dividing the number of visitors reporting conflicts by the number of visitors who participated in the specified use (total with conflict/total activity). Percent of visitors was calculated by dividing the total sample (N) by total activity for each ROS region. Total with conflict is the actual number of visitors in each category who reported having conflicts.

**Table E1. Non-motorized uses encountering motorized uses.**

ROS Code	ROS Region	Number of Encounters										Percent with Conflict	Percent of Visitors	Total with Conflict (n)	Total Activity (n)	Total Sample (N)	
		1 to 5		6 to 10		11 to 20		21 to 30		31+							
		Desired	Existing	Desired	Existing	Desired	Existing	Desired	Existing	Desired	Existing						
13	Heb/Enn-SPM	50.0%	0%	0%	0%	0%	0%	0%	0%	50.0%	0%	10.0%	0%	100%	0	11	11
14	Heb/Enn-RN	18.8%	0%	12.5%	0%	37.5%	16.7%	25.0%	0%	6.3%	83.3%	10.0%	6.1%	83.1%	6	98	118
15	Heb/Enn-RM	75.0%	9.1%	0%	0%	0%	0%	16.7%	50.0%	8.3%	50.0%	10.0%	2.8%	86.7%	2	72	83
16	Heb/Enn-R	0%	0%	14.3%	13.8%	57.1%	6.9%	28.6%	10.3%	0%	69.0%	10.0%	7.3%	81.0%	29	400	494
24	Helena-RN	18.6%	1.4%	16.3%	8.6%	16.3%	2.8%	9.3%	26.8%	39.5%	69.0%	10.0%	24.2%	70.1%	71	293	418
25	Helena-RM	13.8%	0%	12.3%	2.0%	18.5%	0%	9.2%	18.4%	46.2%	79.6%	10.0%	26.2%	57.2%	49	187	327
26	Helena-R	17.5%	0%	12.5%	2.5%	15.0%	5.0%	17.5%	12.5%	37.5%	80.0%	10.0%	17.2%	71.5%	40	233	326
34	Gt. Falls-RN	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	98.9%	0	91	92
35	Gt. Falls-RM	66.7%	0%	15.4%	9.5%	5.1%	0%	2.6%	66.7%	10.3%	23.8%	10.0%	13.0%	98.2%	21	161	164
37	Gt. Falls-U	20.0%	0%	13.3%	7.7%	6.7%	15.4%	20.0%	15.4%	40.0%	61.5%	10.0%	1.8%	95.9%	13	731	762

SPM - Semi-primitive motorized    RN - Roaded natural    RM - Roaded modified    R - Rural    U - Urban

**Table E2. Non-motorboats encountering motorboats.**

ROS Code	ROS Region	Number of Encounters										Percent with Conflict	Percent of Visitors	Total with Conflict (n)	Total Activity (n)	Total Sample (N)	
		1 to 5		6 to 10		11 to 20		21 to 30		31+							
		Desired	Existing	Desired	Existing	Desired	Existing	Desired	Existing	Desired	Existing						
13	Heb/Enn-SPM	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0	0	11
14	Heb/Enn-RN	0%	0%	0%	0%	25.0%	0%	25.0%	0%	50.0%	100%	10.0%	5.3%	16.1%	1	19	118
15	Heb/Enn-RM	50.0%	9.1%	0%	0%	0%	0%	25.0%	0%	25.0%	90.9%	10.0%	28.6%	8.4%	2	7	83
16	Heb/Enn-R	0%	0%	14.3%	0%	57.1%	2.9%	28.6%	2.9%	0%	94.1%	10.0%	12.8%	17.4%	11	86	494
24	Helena-RN	23.1%	0%	7.7%	8.6%	7.7%	2.9%	15.4%	0%	46.2%	88.6%	10.0%	27.4%	29.7%	34	124	418
25	Helena-RM	20.0%	0%	0%	0%	20.0%	0%	40.0%	0%	20.0%	100%	10.0%	25.0%	42.8%	35	140	327
26	Helena-R	33.3%	0%	0%	0%	0%	0%	0%	0%	66.7%	100%	10.0%	32.2%	27.6%	29	90	326
34	Gt. Falls-RN	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0	0	92
35	Gt. Falls-RM	72.7%	0%	18.2%	0%	4.5%	0%	0%	0%	4.5%	0%	10.0%	0%	1.8%	0	3	164
37	Gt. Falls-U	0%	0%	0%	0%	0%	0%	22.2%	0%	77.8%	100%	10.0%	8.3%	3.1%	2	24	762

**Table E3. Motorboats encountering non-motorboats.**

ROS Code	ROS Region	Number of Encounters										Percent with Conflict	Percent of Visitors	Total with Conflict (n)	Total Activity (n)	Total Sample (N)	
		1 to 5		6 to 10		11 to 20		21 to 30		31+							
		Desired	Existing	Desired	Existing	Desired	Existing	Desired	Existing	Desired	Existing						
13	Heb/Enn-SPM	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0	0	0	11
14	Heb/Enn-RN	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	16.1%	0	19	118
15	Heb/Enn-RM	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	8.4%	0	7	83
16	Heb/Enn-R	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	17.4%	0	86	494
24	Helena-RN	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	10%	0%	29.7%	0	124	418
25	Helena-RM	100%	0%	0%	0%	0%	0%	0%	0%	0%	100%	10%	1.7%	42.8%	1	140	327
26	Helena-R	0%	0%	100%	100%	0%	0%	0%	0%	0%	0%	10%	1.1%	27.6%	1	90	326
34	Gt. Falls-RN	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1.1%	2	1	92
35	Gt. Falls-RM	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1.8%	0	3	164
37	Gt. Falls-U	50%	0%	0%	0%	0%	0%	0%	0%	50%	0%	10%	0%	3.1%	0	24	762

SPM - Semi-primitive motorized   RN - Roaded natural   RM - Roaded modified   R - Rural   U - Urban

**Table E4. Motorboat anglers encountering motorboats.**

ROS Code	ROS Region	Number of Encounters										Percent with Conflict	Percent of Visitors	Total with Conflict (n)	Total Activity (n)	Total Sample (N)	
		1 to 5		6 to 10		11 to 20		21 to 30		31+							
		Desired	Existing	Desired	Existing	Desired	Existing	Desired	Existing	Desired	Existing						
13	Heb/Enn-SPM	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0	0	0	11
14	Heb/Enn-RN	0%	0%	14.3%	0%	28.6%	0%	0%	0%	57.1%	0%	10%	0%	5.9%	0	7	118
15	Heb/Enn-RM	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	28.6%	8.4%	2	7	83
16	Heb/Enn-R	0%	11.1%	0%	0%	12.5%	0%	37.5%	0%	50%	88.9%	10%	22%	8.3%	9	41	494
24	Helena-RN	4.3%	0%	4.3%	0%	0%	0%	0%	5.3%	91.3%	94.7%	10%	32.8%	13.9%	19	58	418
25	Helena-RM	0%	0%	0%	11.5%	4.5%	3.8%	22.7%	0%	72.7%	84.6%	10%	31.3%	25.4%	26	83	327
26	Helena-R	0%	0%	0%	0%	42.9%	0%	28.6%	0%	28.6%	100%	10%	35.4%	14.7%	17	48	326
34	Gt. Falls-RN	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0	0	92
35	Gt. Falls-RM	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	10%	0%	1.8%	0	3	164
37	Gt. Falls-U	0%	0%	0%	0%	0%	0%	50%	0%	50%	0%	10%	0%	0.5%	0	4	762

**Table E5. Non-angling motorboats encountering motorboats.**

ROS Code	ROS Region	Number of Encounters										Percent with Conflict	Percent of Visitors	Total with Conflict (n)	Total Activity (n)	Total Sample (N)	
		1 to 5		6 to 10		11 to 20		21 to 30		31+							
		Desired	Existing	Desired	Existing	Desired	Existing	Desired	Existing	Desired	Existing						
13	Heb/Enn-SPM	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0	0	11	
14	Heb/Enn-RN	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	5.3%	16.1%	1	19	118
15	Heb/Enn-RM	0%	0%	0%	0%	50%	0%	0%	0%	50%	0%	10%	0%	8.4%	0	7	83
16	Heb/Enn-R	9.1%	0%	0%	0%	27.3%	6.7%	9.1%	0%	54.5%	93.3%	10%	2.3%	17.4%	2	86	494
24	Helena-RN	0%	0%	14.3%	0%	0%	0%	0%	0%	85.7%	100%	10%	12.1%	29.7%	15	124	418
25	Helena-RM	0%	0%	12.5%	0%	0%	0%	12.5%	0%	75%	100%	10%	6.4%	42.8%	9	140	327
26	Helena-R	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	10%	13.3%	27.6%	12	90	326
34	Gt. Falls-RN	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1.1%	0	1	92
35	Gt. Falls-RM	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1.8%	0	3	164
37	Gt. Falls-U	0%	0%	0%	0%	18.2%	0%	9.1%	0%	72.7%	100%	10%	8.3%	3.1%	2	24	762

SPM - Semi-primitive motorized    RN - Roaded natural    RM - Roaded modified    R - Rural    U - Urban

**Table E6. All boats encountering bank anglers.**

ROS Code	ROS Region	Number of Encounters										Percent with Conflict	Percent of Visitors	Total with Conflict (n)	Total Activity (n)	Total Sample (N)
		1 to 5		6 to 10		11 to 20		21 to 30		31+						
		Desired	Existing	Desired	Existing	Desired	Existing	Desired	Existing	Desired	Existing					
13	Heb/Enn-SPM	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0	0	11
14	Heb/Enn-RN	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	43.2%	0	118
15	Heb/Enn-RM	33.3%	0%	33.3%	0%	0%	0%	50%	33.3%	50%	10%	6.9%	34.9%	2	29	83
16	Heb/Enn-R	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	1.0%	60.3%	3	298	494
24	Helena-RN	0%	0%	50%	0%	25%	0%	25%	0%	100%	10%	2.1%	45.9%	4	192	418
25	Helena-RM	0%	0%	28.6%	33.3%	0%	0%	28.6%	0%	42.9%	66.7%	1.3%	70.9%	3	232	327
26	Helena-R	0%	0%	50%	50%	25%	0%	0%	25%	50%	10%	1.1%	53.7%	2	175	326
34	Gt. Falls-RN	0%	20%	0%	0%	0%	0%	0%	0%	80%	0%	20%	27.2%	5	25	92
35	Gt. Falls-RM	20%	0%	40%	0%	0%	0%	20%	0%	20%	0%	0%	23.8%	0	39	164
37	Gt. Falls-U	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	10.6%	0	81	762

**Table E7. Bank anglers encountering motorboats.**

ROS Code	ROS Region	Number of Encounters										Percent with Conflict	Percent of Visitors	Total with Conflict (n)	Total Activity (n)	Total Sample (N)	
		1 to 5		6 to 10		11 to 20		21 to 30		31+							
		Desired	Existing	Desired	Existing	Desired	Existing	Desired	Existing	Desired	Existing						
13	Heb/Enn-SPM	100%	0%	0%	0%	0%	100%	0%	0%	0%	0%	10%	12.5%	72.7%	1	8	11
14	Heb/Enn-RN	0%	0%	7.1%	0%	50%	0%	21.4%	0%	21.4%	100%	10%	6.9%	24.6%	2	29	118
15	Heb/Enn-RM	77.8%	0%	0%	0%	0%	0%	11.1%	50%	11.1%	50%	10%	5.3%	45.8%	2	38	83
16	Heb/Enn-R	19.4%	3.6%	25.8%	3.6%	16.1%	32.1%	25.8%	7.1%	12.9%	53.6%	10%	20.3%	27.9%	28	138	494
24	Helena-RN	15.4%	2.9%	19.2%	0%	11.5%	2.9%	3.8%	37.1%	50%	57.1%	10%	43.2%	19.4%	35	81	418
25	Helena-RM	3.8%	0%	15.4%	3.7%	3.8%	0%	7.7%	14.8%	69.2%	81.5%	10%	31%	26.6%	27	87	327
26	Helena-R	25%	0%	16.7%	0%	8.3%	0%	16.7%	15.8%	33.33%	84.2%	10%	15.2%	38.3%	19	125	326
34	Gt. Falls-RN	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	4.8%	22.8%	1	21	92
35	Gt. Falls-RM	76.9%	0%	11.5%	0%	7.7%	0%	0%	80%	3.8%	20%	10%	51.7%	17.7%	15	29	164
37	Gt. Falls-U	37.5%	0%	0%	50%	0%	50%	12.5%	0%	50%	0%	10%	4.8%	5.5%	2	42	762





**Table E8. Bank anglers encountering non-motorboats.**

ROS Code	ROS Region	Number of Encounters										Percent with Conflict	Percent of Visitors	Total with Conflict (n)	Total Activity (n)	Total Sample (N)		
		1 to 5		6 to 10		11 to 20		21 to 30		31+								
		Desired	Existing	Desired	Existing	Desired	Existing	Desired	Existing	Desired	Existing							
13	Heb/Enn-SPM	0%	0%	0%	100%	100%	0%	0%	0%	0%	0%	0%	10.0%	12.5%	72.7%	1	8	11
14	Heb/Enn-RN	55.6%	0%	0%	0%	33.3%	0%	11.1%	0%	0%	0%	0%	10.0%	0%	24.6%	0	29	118
15	Heb/Enn-RM	21.4%	0%	42.9%	0%	21.4%	0%	14.3%	0%	0%	0%	0%	10.0%	0%	45.8%	0	38	83
16	Heb/Enn-R	27.3%	0%	9.1%	0%	27.3%	12.5%	18.2%	37.5%	18.2%	50.0%	10.0%	5.8%	27.9%	8	138	494	
24	Helena-RN	0%	0%	0%	0%	50.0%	16.7%	0%	0%	50.0%	83.3%	10.0%	7.4%	19.4%	6	81	418	
25	Helena-RM	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	10.0%	0%	26.6%	0	87	327	
26	Helena-R	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	10.0%	0%	38.3%	0	125	326	
34	Gt. Falls-RN	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	22.8%	0	21	92	
35	Gt. Falls-RM	0%	0%	0%	0%	66.7%	0%	33.3%	0%	0%	100%	10.0%	10.3%	17.6%	3	29	164	
37	Gt. Falls-U	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	10.0%	0%	5.5%	0	42	762	

**Table E9. Wade anglers encountering wade anglers.**

ROS Code	ROS Region	Number of Encounters										Percent with Conflict	Percent of Visitors	Total with Conflict (n)	Total Activity (n)	Total Sample (N)	
		1 to 5		6 to 10		11 to 20		21 to 30		31+							
		Desired	Existing	Desired	Existing	Desired	Existing	Desired	Existing	Desired	Existing						
13	Heb/Enn-SPM		0%		100%		0%		0%		0%		20.0%	45.5%	1	5	11
14	Heb/Enn-RN		0%		0%		0%		0%		0%		0%	12.7%	0	15	118
15	Heb/Enn-RM		25.0%		25.0%		25.0%		25.0%		0%		14.3%	33.7%	4	28	83
16	Heb/Enn-R		50.0%		0%		50.0%		0%		0%		2.3%	17.8%	2	88	494
24	Helena-RN		0%		0%		0%		0%		0%		0%	8.9%	0	0	418
25	Helena-RM		0%		0%		0%		0%		0%		0%	6.1%	0	20	327
26	Helena-R		0%		0%		0%		0%		100%		4.3%	7.1%	1	23	326
34	Gt. Falls-RN		0%		0%		0%		0%		0%		0%	2.2%	0	2	92
35	Gt. Falls-RM		0%		50.0%		0%		50.0%		0%		0%	14.0%	0	18	762
37	Gt. Falls-U		0%		0%		0%		0%		0%		0%	2.4%	0	18	762

**\*\*Note: No desired conditions were set for this encounter category.**

SPM - Semi-primitive motorized   RN - Roaded natural   RM - Roaded modified   R - Rural   U - Urban

**Table E10. River floaters encountering anglers.**

ROS Code	ROS Region	Number of Encounters										Percent with Conflict	Percent of Visitors	Total with Conflict (n)	Total Activity (n)	Total Sample (N)
		1 to 5		6 to 10		11 to 20		21 to 30		31+						
		Desired	Existing	Desired	Existing	Desired	Existing	Desired	Existing	Desired	Existing					
13	Heb/Enn-SPM	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	9.1%	0	1	11	
14	Heb/Enn-RN	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	28.8%	0	34	118	
15	Heb/Enn-RM	0%	0%	0%	0%	50.0%	50.0%	0%	0%	0%	0%	9.1%	2	22	83	
16	Heb/Enn-R	0%	0%	0%	0%	0%	0%	100%	100%	0%	0%	1.0%	2	208	494	
24	Helena-RN	0%	0%	0%	0%	0%	0%	100%	100%	0%	0%	3.6%	3	84	418	
25	Helena-RM	0%	0%	0%	0%	0%	0%	100%	100%	0%	0%	2.9%	2	69	327	
26	Helena-R	0%	50.0%	0%	0%	0%	0%	50.0%	50.0%	0%	0%	3.8%	2	52	326	
34	Gt. Falls-RN	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	17.4%	0	16	92	
35	Gt. Falls-RM	25.0%	0%	0%	0%	0%	0%	75.0%	75.0%	0%	0%	13.8%	4	29	164	
37	Gt. Falls-U	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	8.1%	0	62	762	

**\*\*Note: No desired conditions were set for this encounter category.**

**Table E11. Anglers encountering floaters.**

ROS Code	ROS Region	Number of Encounters										Percent with Conflict	Percent of Visitors	Total with Conflict (n)	Total Activity (n)	Total Sample (N)
		1 to 5		6 to 10		11 to 20		21 to 30		31+						
		Desired	Existing	Desired	Existing	Desired	Existing	Desired	Existing	Desired	Existing					
13	Heb/Enn-SPM	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	20.0%	45.5%	1	5	11
14	Heb/Enn-RN	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	33.1%	0	39	118
15	Heb/Enn-RM	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	42.2%	0	35	83
16	Heb/Enn-R	36.4%	36.4%	0%	9.1%	0%	0%	18.2%	18.2%	0%	0%	6.3%	35.6%	11	176	494
24	Helena-RN	0%	0%	25.0%	25.0%	0%	0%	50.0%	50.0%	0%	0%	3.0%	32.1%	4	134	418
25	Helena-RM	0%	0%	0%	0%	0%	0%	100%	100%	0%	0%	0.6%	55.4%	1	181	327
26	Helena-R	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0.7%	42.6%	1	139	326
34	Gt. Falls-RN	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	12.0%	0	11	92
35	Gt. Falls-RM	0%	40.0%	20.0%	20.0%	0%	0%	40.0%	40.0%	0%	0%	13.5%	22.6%	5	37	164
37	Gt. Falls-U	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	3.5%	0	27	762

**\*\*Note: No desired conditions were set for this encounter category.**

SPM - Semi-primitive motorized    RN - Roaded natural    RM - Roaded modified    R - Rural    U - Urban

**Table E12. Encounters with livestock.**

ROS Code	ROS Region	Number of Encounters										Percent with Conflict	Percent of Visitors	Total with Conflict (n)	Total Activity (n)	Total Sample (N)	
		1 to 5		6 to 10		11 to 20		21 to 30		31+							
		Desired	Existing	Desired	Existing	Desired	Existing	Desired	Existing	Desired	Existing						
13	Heb/Enn-SPM		0%		0%		0%		0%		0%		0%	100%	0	11	11
14	Heb/Enn-RN		0%		100%		0%		0%		0%		0%	0.8%	1	118	118
15	Heb/Enn-RM		0%		0%		0%		0%		100%		1.2%	100%	1	83	83
16	Heb/Enn-R		53.3%		20.0%		6.7%		0%		20.0%		3.4%	100%	15	494	494
24	Helena-RN		40.0%		20.0%		20.0%		0%		20.0%		1.2%	100%	5	418	418
25	Helena-RM		16.7%		16.7%		33.3%		0%		33.3%		1.8%	100%	6	327	327
26	Helena-R		57.1%		14.3%		0%		28.6%		0%		2.1%	100%	7	326	326
34	Gt. Falls-RN		0%		0%		0%		0%		0%		0%	0%	0	0	92
35	Gt. Falls-RM		0%		0%		0%		50.0%		50.0%		1.2%	100%	2	164	164
37	Gt. Falls-U		40.0%		0%		0%		0%		60.0%		0.7%	100%	5	762	762

**\*\*Note: No desired conditions were set for this encounter category.**

**Table E13. Satisfaction with the number of fish caught.**

ROS Code	ROS Region	Mean Satisfaction	(n)
13	Heb/Enn-SPM	1.30	11
14	Heb/Enn-RN	0.40	118
15	Heb/Enn-RM	0.43	83
16	Heb/Enn-R	0.24	494
24	Helena-RN	0.14	418
25	Helena-RM	0.16	327
26	Helena-R	0.01	326
34	Gt. Falls-RN	0.27	92
35	Gt. Falls-RM	0.45	164
37	Gt. Falls-U	0.09	762

(-2 Very Dissatisfied to 2 Very Satisfied)

SPM - Semi-primitive motorized  
 RN - Roaded natural  
 RM - Roaded modified  
 R - Rural  
 U - Urban

**Table E14. Satisfaction with the number of campsites within sight.**

ROS Code	ROS Region	Mean Satisfaction	(n)
13	Heb/Enn-SPM	0.30	11
14	Heb/Enn-RN	0.56	118
15	Heb/Enn-RM	0.61	83
16	Heb/Enn-R	0.49	494
24	Helena-RN	0.39	418
25	Helena-RM	0.24	327
26	Helena-R	0.10	326
34	Gt. Falls-RN	0.31	92
35	Gt. Falls-RM	0.36	164
37	Gt. Falls-U	0.29	762

(-2 Very Dissatisfied to 2 Very Satisfied)

**Table E15. Perceived crowding.**

ROS Code	ROS Region	Mean Perception of Crowding	(n)
13	Heb/Enn-SPM	1.70	11
14	Heb/Enn-RN	2.51	118
15	Heb/Enn-RM	2.39	83
16	Heb/Enn-R	2.45	494
24	Helena-RN	2.79	418
25	Helena-RM	3.57	327
26	Helena-R	3.23	326
34	Gt. Falls-RN	1.44	92
35	Gt. Falls-RM	2.70	164
37	Gt. Falls-U	1.58	762

SPM - Semi-primitive motorized  
 RN - Roaded natural  
 RM - Roaded modified  
 R - Rural  
 U - Urban

(1-Not at all crowded to 9-Extremely crowded)

**Table E16. Adequacy of existing facilities.**

ROS Code	ROS Region	% reporting facilities needed	(n)
13	Heb/Enn-SPM	45.5%	11
14	Heb/Enn-RN	48.3%	118
15	Heb/Enn-RM	49.4%	83
16	Heb/Enn-R	49.8%	494
24	Helena-RN	51.7%	418
25	Helena-RM	64.5%	327
26	Helena-R	58.9%	326
34	Gt. Falls-RN	37.0%	92
35	Gt. Falls-RM	37.8%	164
37	Gt. Falls-U	29.8%	762

28a. Please use the space below for additional comments you have regarding *the management* of this site.

28b. Please use the space below for additional comments you have regarding *your satisfaction* with this site.

***Thank you for your time!***

Institute for Tourism and Recreation Research  
Science Complex 442  
The University of Montana  
Missoula, MT 59812  
(406) 243-5686  
[www.forestry.umt.edu/itrr](http://www.forestry.umt.edu/itrr)

Date: \_\_\_\_\_  
Site: \_\_\_\_\_  
Primary: \_\_\_\_\_

The University of  
Montana

Institute  
for  
Tourism and  
Recreation  
Research

# Missouri/Madison Recreation Visitor Use Survey



Summer 1999



**1. Is this your first visit to this site?**

\_\_\_ Yes (Go to question 2)

\_\_\_ No

**1a. How many visits have you made to this site before today?**

\_\_\_ 1 to 5 \_\_\_ 6 to 10 \_\_\_ more than 10

**1b. How many years have you been visiting this site?**

\_\_\_ Less than 1 \_\_\_ 1 to 2 years \_\_\_ 3 to 5 years

\_\_\_ 5 to 10 years \_\_\_ More than 10 years

**2. On this visit, will you be staying overnight at this site?**

\_\_\_ Yes - How many nights? \_\_\_\_\_

\_\_\_ No - About how many hours will you stay at this site?

\_\_\_ Less than 1 \_\_\_ 1 - 2 hours \_\_\_ 2 - 6 hours \_\_\_ More than 6

**3. Please circle all reasons why you chose to visit this site rather than another place.**

- 1. Close to home
- 2. Easy to get to
- 3. Group facilities
- 4. Heard about it
- 5. Good facilities
- 6. Good fishing
- 7. Scenic beauty
- 8. Been here before
- 9. Try a new area
- 10. Lewis & Clark historical site
- 11. Specific attraction \_\_\_\_\_  
*Please specify.*
- 12. Other sites too crowded \_\_\_\_\_  
*Please indicate which sites.*
- 13. Other reason \_\_\_\_\_  
*Please describe.*

**3a. Please write the number from the list above of the most important reason you visited this site. \_\_\_\_\_**

**4. For this trip, please circle all activities you will participate in at this site.**

- 1. Sightseeing
- 2. Photography
- 3. Auto/RV Camping
- 4. Tent camping
- 5. Floating/Rafting
- 6. Walking
- 7. Day hiking
- 8. Picnicking
- 9. Sunbathing
- 10. Horseback Riding
- 11. Hunting
- 12. Shooting
- 13. Swimming
- 14. Jet Skiing
- 15. Powerboating
- 16. Nature study
- 17. Tubing
- 18. Canoeing/Kayaking
- 19. Viewing wildlife
- 20. ATV/Motorcycling
- 21. Biking
- 22. Boat angling
- 23. Bank angling
- 24. Wade angling
- 25. Water skiing
- 26. Sailing/sailboarding
- 27. Visit Lewis & Clark sites
- 28. Visit other historic sites
- 29. Other \_\_\_\_\_  
*Please specify.*

**4a. Please write the number from the list above of your primary activity. \_\_\_\_\_**

**5. Would you visit this site again if there were an event specific to the Lewis & Clark Journey Commemoration? \_\_\_ Yes \_\_\_ No**

**17. What type of group are you with on this trip? Check only one group type.**

\_\_\_ Alone \_\_\_ Family \_\_\_ Friends \_\_\_ Family & Friends

\_\_\_ Outfitted guests \_\_\_ Business Associates

**18. Including yourself, how many people are in your traveling group?**

Adults: Males \_\_\_\_\_ Females \_\_\_\_\_

Children 16 and under: \_\_\_\_\_

**19. Does anyone in your group have a disability?**

\_\_\_ Yes \_\_\_\_\_

\_\_\_ No *Please describe.*

**20. Do additional accommodations need to be made for visitors with disabilities?**

\_\_\_ Yes \_\_\_\_\_

\_\_\_ No *Please describe.*

**21. What is your age? \_\_\_\_\_**

**22. Your gender? \_\_\_ Male \_\_\_ Female**

**23. What is the highest level of education you have completed so far?**

*Please circle one number only.*

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19+
Elementary								High School				After High School						

**24. Please circle the one profession which best describes your primary occupation.**

- |                 |                        |                         |
|-----------------|------------------------|-------------------------|
| 1. Professional | 7. Transport           | 12. Armed Services      |
| 2. Managerial   | 8. Laborer             | 13. Homemaker           |
| 3. Sales        | 9. Service Worker      | 14. Student             |
| 4. Clerical     | 10. Farmer/Rancher     | 15. Retired             |
| 5. Craftsman    | 11. Farm/Ranch Laborer | 16. Unemployed/Disabled |
| 6. Operatives   |                        |                         |

**25. What U.S. state, Canadian province, or foreign country are you from? \_\_\_\_\_**

**26. What is your home zip/postal code? \_\_\_\_\_**

**27. What is your approximate annual household income before taxes?**

___ less than \$10,000	___ \$40,000 to \$49,999
___ \$10,000 to \$19,999	___ \$50,000 to \$59,999
___ \$20,000 to \$29,999	___ \$60,000 to \$69,999
___ \$30,000 to \$39,999	___ \$70,000 or more

**28. Please include additional comments regarding the management of this site or your satisfaction with this site on the back of this survey.**



**14. What is your overall satisfaction with this trip?**

*Please circle one number only.*

1	2	3	4	5	6	7	8	9
Not at all satisfied		Slightly satisfied			Moderately satisfied			Extremely satisfied

**15. What additional facilities or services would you prefer to see at this site?**

-----

-----

-----

**16. Indicate how many encounters you had with other recreation activities and resource uses today. Then evaluate your encounters or lack thereof.** *(Mark the appropriate column after each type of use.)*

	<b>Number of Encounters</b>						<b>Reaction to Encounters</b>			
	0	1-5	6-10	11-20	21-30	31+	Enjoyed	Didn't Mind	Disliked	N/A
Canoes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	2	3	4
Powerboats	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	2	3	4
Water skiers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	2	3	4
Jetskis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	2	3	4
Bank anglers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	2	3	4
Wade anglers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	2	3	4
Boat anglers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	2	3	4
River floaters	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	2	3	4
Livestock	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	2	3	4
Shoreline development	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	2	3	4
Hunters	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	2	3	4
Other _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	2	3	4
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	2	3	4

**16a. If you indicated above there were any uses you disliked encountering, where did you encounter them?**

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**6. For this trip, what were your group's expenditures *in Montana*? Please enter the amount and the town where you spent it. If you spent money in more than one town, list each separately. Use "Additional" category for expenditures made in more than two towns or if the expenditure type does not match those listed.**

<u>Expenditure Type</u>	<u>Amount Spent</u>	<u>Town</u>
Hotels, motels, bed & breakfasts	\$ _____	_____
	\$ _____	_____
Campground facility, RV Park	\$ _____	_____
	\$ _____	_____
Guides, outfitters	\$ _____	_____
	\$ _____	_____
Licenses, entrance fees	\$ _____	_____
	\$ _____	_____
Auto/RV Rental, Repair	\$ _____	_____
	\$ _____	_____
Transportation Fares (e.g., taxi fare)	\$ _____	_____
	\$ _____	_____
Gasoline, Oil	\$ _____	_____
	\$ _____	_____
Restaurant, Bar	\$ _____	_____
	\$ _____	_____
Groceries, Snacks	\$ _____	_____
	\$ _____	_____
Retail Goods	\$ _____	_____
	\$ _____	_____
Additional _____	\$ _____	_____
_____	\$ _____	_____

**TOTAL:** \$ \_\_\_\_\_

**7. During this visit, how crowded did you feel?**

*Please circle one number only.*

1	2	3	4	5	6	7	8	9
Not at all crowded		Slightly crowded			Moderately crowded			Extremely crowded

**7a. If you felt crowded, where did you feel crowded? Please be as specific as possible.**

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**8. If this site were temporarily closed, how would it affect your trip plans?**

*(check one statement only)*

- I would visit at some other time.
- I would choose another site in this area.
- I would choose another site somewhere else.
- I would do some other activity.
- I would stay home.

**9. Are there any recreation sites in this area you no longer visit?**

- Yes       No

**9a. If yes, please tell us which sites and all reasons why by checking the appropriate boxes.**

Site	Fees	Crowding	Conflicts with other users	Over-use	Resource degradation	Other (specify)
1.						
2.						
3.						

**10. Please indicate the extent to which each statement describes your general feelings about this site. Circle one number for each statement.**

	Strongly Disagree	No Opinion/ Neutral	Strongly Agree
A lot of my life is organized around this place.	-2	-1 0 1	2
This area is the best place for what I like to do.	-2	-1 0 1	2
I feel no commitment to this place.	-2	-1 0 1	2
The time I spend here could just as easily be spent somewhere else.	-2	-1 0 1	2
I am very attached to this place.	-2	-1 0 1	2
I identify strongly with this place.	-2	-1 0 1	2
This place makes me feel like no other place can.	-2	-1 0 1	2
Doing what I do here is more important to me than doing it in any other place.	-2	-1 0 1	2

**11. How well do each of the following statements describe your feelings about this trip to this area? Circle one number for each statement.**

	Strongly Disagree	No Opinion/ Neutral	Strongly Agree
This trip was better than any other recreation experience I remember.	-2	-1 0 1	2
This trip was better than any other trip to this area I remember.	-2	-1 0 1	2
This trip was so good I would like to take it again.	-2	-1 0 1	2

**12. Please rate your satisfaction with the following conditions at this site.**

*Circle one number for each statement.*

	Very Dissatisfied	No Opinion/ Neutral	Very Satisfied
1. Campsite/picnic area conditions	-2	-1 0 1	2
2. Quality of Lewis & Clark interpretive/ educational information	-2	-1 0 1	2
3. Quality of other interpretive/ educational information	-2	-1 0 1	2
4. Appropriateness of development	-2	-1 0 1	2
5. Maintenance of facilities	-2	-1 0 1	2
6. Cleanliness of area	-2	-1 0 1	2
7. Amount of development	-2	-1 0 1	2
8. Privacy of area	-2	-1 0 1	2
9. Condition of natural features	-2	-1 0 1	2
10. Residential development visible from water	-2	-1 0 1	2
11. Historical information	-2	-1 0 1	2
12. Behavior of other people	-2	-1 0 1	2
13. Conflict with other users	-2	-1 0 1	2
14. Degree of naturalness	-2	-1 0 1	2
15. Number of campsites within sight or sound	-2	-1 0 1	2
16. Seeing/hearing others	-2	-1 0 1	2
17. Rules and restrictions	-2	-1 0 1	2
18. Number of fish caught	-2	-1 0 1	2
19. Opportunity to view wildlife	-2	-1 0 1	2
20. Opportunity to hunt	-2	-1 0 1	2

**13. Please list the above conditions you feel are *most important* at an outdoor recreation site.**

\_\_\_\_\_

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