

**MONITORING BOATERS' EXPERIENCES ON THE SNAKE RIVER IN
HELLS CANYON**

FINAL REPORT

2005

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EXECUTIVE SUMMARY

Background and Need for Research:

This report presents the findings of a year-long study of recreational boaters on the Wild and Scenic sections of the Snake River in Hells Canyon. Based on on-site and mail questionnaires, the views of private and commercial floaters and power boaters regarding conditions, experiences, and management of the river are contrasted. Commercial boaters included only paying passengers, not guides. Private boaters included all party members on self-guided trips. Our goals were to evaluate how well river management objectives for recreation settings are being met, to monitor how management actions and policies implemented in 1998 may have affected experiences and social conditions, and to identify any differences in expectations, perceptions, or other factors among the four user groups.

Study Area and Management

The study area extended from Hells Canyon Dam to the northern end of the Hells Canyon National Recreation Area, including the Wild and Scenic segments. On the Wild segment regulations on recreation during the primary season include required launch reservations on all seven days of the week, a non-motorized window (every 10 motorized days are followed by 3 that are motorless, for a total of 21 motorless days), party size limits (24 persons), and limits on the number of launches per day for each of the four user types (power/float, commercial/private). Use levels are not regulated in the secondary season. Self-issue permits are required year-round. On the Scenic segment, regulations during the primary season include required launch reservation for all users on weekend days (Friday, Saturday, and Sunday) and holidays, as well as limits on number of launches per day for each user type on those days and party size limits (24 persons). Self issue permits are required year-round.

Methods and Sample Sizes:

In 2002, a study plan was developed and subject to peer and public review as required by the agency. Recreational use is different at certain times of the year. Sampling occurred year-round to permit analysis of differences by season. Contact points for surveying boaters were Hells Canyon Dam, Pittsburg Landing, Cache Creek, Heller Bar, and the launch sites for commercial companies in Clarkston (the Quality Inn, Roosters Landing, and Hells Gate State Park Marina). Sampling was designed to be proportionate to use levels, with 21 days of sampling occurring during the 2003 and 2004 non-motorized windows on the Wild segment, 57 days occurring during the rest of the primary season on the Wild and Scenic segments, and 60 days occurring during the secondary season on the Wild and Scenic segments. On sample days, randomly selected boaters were asked to fill out a 2-page contact card with questions about their characteristics, motivations and experiences. Names and addresses were also collected and

used for a longer mail survey. Mail surveys were obtained from 333 private power boaters (259 Scenic, 74 Wild), 329 commercial power boaters (151 Scenic, 178 Wild), 303 private floaters (22 Scenic, 281 Wild), and 183 commercial floaters (15 Scenic, 168 Wild). The overall response rate was 64.8%, with 1,158 mail surveys completed. Adequately large samples of each of the four user types were collected for the Wild segment, but there were too few float boaters on the Scenic segment on sampled days who had been in Hells Canyon to generate adequate sample sizes for analysis.

Analysis

Results are presented separately for each question for each user group. Due to different sampling intensities, it is not appropriate to combine data from the groups. Results are also contrasted for boaters who used the Wild segment during their trip and those who used the Scenic segment. Where samples are large enough, data are additionally broken out by season. It is important to note that, because trips were usually multi-day trips, data reported for people sampled on days in the non-motorized window sometimes included boaters who used or saw motorboats at some point in their trip. No one sampled appeared to be in violation of the USFS management or enforcement of the non-motorized recreation opportunity.

Visitor Characteristics:

Men dominated the private float and private powerboat samples at all times and on both segments of the river (>70% of power boaters and >60% of floaters). Among commercial power boaters, 53% were women on the Wild section, compared to 45% on the Scenic section. Half of commercial floaters were women.

Regardless of the river segment or season, the mean age of respondents was 45-55 years. Commercial power boaters tended to be a few years older, on average, than other users.

Commercial floaters had the highest education levels, with nearly one third having received education beyond the Bachelors degree. Among private floaters, 18-24% had a graduate degree, while approximately one quarter of commercial power boaters did. Between 5% (Wild) and 14% (Scenic) of the private power boaters had completed education beyond a Bachelors degree.

Private power boaters had substantial experience on the Snake River, with a mean of 15-20 trips on both segments in the past two years. Private floaters had taken only 2-3 trips on each segment, and commercial floaters mostly had no previous trips on the Snake River. Commercial power boaters reported an average of about one previous trip on both the Wild and Scenic sections. Power boaters generally had not taken

any float trips, and float boaters generally had not taken any motorized trips. Private floaters had taken more trips on other rivers than on the Snake River, while private power boaters had taken more power boat trips on both the Wild and Scenic river sections than the other groups. Private power boaters also had taken more power boat trips on other rivers than any other group.

In a question asking boaters to compare the Snake in Hells Canyon to other rivers, about 45% of private power boaters said it was their favorite river, much higher than for any other group. Most private power boaters tend to report boating primarily on the Snake, while the other groups boat more on other rivers.

Most private power boaters rated themselves as intermediate-advanced boaters. About half of private floaters rated themselves as intermediate-advanced, and 15-20% said they were experts. Three-quarters of commercial power boaters were novices or beginners. Commercial floaters rated themselves as intermediate in skill (77% beginner to intermediate).

Trip Characteristics:

Floaters (commercial and private) launching on the Scenic section reported an average of approximately 5 days for their trip, compared to 3-4 for those launching on the Wild section. Power boaters on commercial trips mostly took day trips on both segments (77% on Scenic and 88% on Wild), but private power boaters generally took multi-day (2-3 day) trips on both river sections.

Group sizes varied depending on user group and river segment. Private power users were in the smallest groups, with two-thirds boating in groups of 1-5 and almost none in groups larger than 20. Commercial power users on the Wild segment were usually (67%) in groups of 1-5, compared to 45% of the commercial power users contacted on the Scenic segment. Eleven percent of commercial power user on the Scenic segment had more than 20 people in their group. Among private floaters, 42% on the Scenic segment but only 12% on the Wild segment were in groups of 1-5, and few were in very large groups. Commercial floaters were usually in groups of six or more, with 17% on the Wild segment in groups of more than 20 people.

The contact cards asked boaters who were launching how much they expected to achieve 11 different experiences, and the take-out card asked how much each was actually achieved. Boaters expected to have many of these experiences, with many items having average scores above 5.0 on a 7-point scale (*1=not at all; 7=very much*). The most expected experiences for floaters (both private and commercial) were being with friends and family and being in a natural environment. For private power boaters, the most expected experiences were friends/family and fishing. For commercial power boaters, a natural environment and

unique geology were most expected. In general, based on take-out cards, these expectations were met among all groups of boaters on both river segments.

There were statistically significant differences in expectations among boaters contacted on the Scenic section for 9 items and among boaters contacted on the Wild section for 9 items, demonstrating that different users have different expectations and experiences.

Like the contact cards, the mail survey asked about boaters' experiences. These questions were framed in terms of the extent to which boaters desired (were seeking) and actually experienced 10 outcomes. Most experiences were highly sought and attained for all user types on both segments of the river, during all seasons. Across all user groups, the most highly sought experiences were spending time with friends and family, viewing scenery, and relaxation.

Although all boaters enjoyed a variety of activities during their trips, there were some notable differences among the groups. Participation in angling varied greatly, from 85% of private power boaters to 59% of private floaters and less than 30% of commercial passengers. Camping rates ranged from a high of 90% among private floaters on the Wild section to 40-50% among private power boaters, and a low of 10% among commercial power boaters. Floaters hiked more (54% private, 74% commercial) than power boaters (10-26%). Floaters also were more likely to visit cultural or historic sites (70-78%) than commercial power boaters (60%) or private power boaters (44-52%). There were substantial seasonal differences in activity participation.

Conditions Encountered during the Trip:

Another set of questions on the mail survey were similar to the experience seeking and attainment questions, but these asked whether different conditions encountered were "more or less than expected." Boaters reported that their expectations for a variety of social and environmental conditions were largely met. Among power boaters (commercial and private), encounter levels were about as expected, and fishing was better than expected. Expectations for fishing and the wild character of the river were more likely to be exceeded in the secondary season than during the summer. Floaters tended to say they met slightly fewer other boating groups than expected. Commercial floaters, more than other groups, said the cultural and historic sites exceeded their expectations. Among all groups, wildlife viewing exceeded expectations in the secondary season more often than in summer. All groups said they had seen fewer groups camped within sight of them than they had expected, but this was especially common among floaters. All also saw less evidence of livestock than they had expected to see.

Among *private power boaters*, those boating in the secondary season on the Scenic section said the wild character of the river and fishing exceeded expectations more than those on the river during the primary season. Among *commercial power boaters* on the Scenic section, secondary season boaters said their expectations about the wild character of the river and challenging whitewater were exceeded to a larger extent than those who boated in the primary season, and they had fewer others camped in sight or sound than expected. There were many differences between primary and secondary season commercial power boaters on the Wild section, with fewer encounters than expected in the secondary season (but not the primary season), and expectations were more greatly exceeded regarding wildlife, the wild character of the river, challenging whitewater, prehistoric sites, and angling during the secondary season. *Private floaters* on the Wild section also showed several differences by season. Secondary season private floaters, though small, said they saw slightly more boaters than they had expected, while primary season floaters (especially during the non-motorized window) saw fewer than they had expected. Private floaters in the summer evaluated the quality of the whitewater and wild character of the river as better than expected, and those in the secondary season said they experienced about what they expected. *Commercial floaters* exhibited fewer differences by season for this set of questions, but those in the secondary season were especially likely to say they saw fewer other boaters than expected and to have the opportunities for seeing cultural sites and fishing more significantly exceed expectations.

Boaters indicated overall agreement with 12 items related to the Outstandingly Remarkable Values (ORVs) of the river. With two exceptions, private power, commercial power, and private floaters on the Scenic section agreed with all statements. However, agreement was strong among all groups only about the river's "unique backcountry" and "diverse and appealing landscape." Although there were statistically significant differences among groups for half of the items, the differences were large only for evaluations of the "4-season opportunity for whitewater power boating" (much higher among power boaters than floaters) and equitable treatment of floaters and power boaters (slight agreement by power boaters, disagreement from private floaters). One other item, related to equitable treatment of commercial and private boaters, differed among groups with slight agreement that treatment is equitable among power boaters, but slight disagreement among private floaters.

Among those on the Wild segment, boaters in each group generally agreed with the 12 ORV statements in a pattern similar to those on the Scenic segment. However, private power boaters agreed more strongly than others, regarding the fishing and four season power boating. On the Wild section of the river, private power boaters disagreed that management treats floaters and power boaters equitably, whereas the other groups slightly agreed.

Social Conditions:

On the Scenic section, commercial power boaters reported slightly more encounters with other boating trips during their trip ($M=24.1$) than private power boaters ($M=19.0$). On the Wild section, commercial and private floaters had similar encounter rates (approximately 12 other groups seen). Power boaters on the Wild section saw more other groups, between 19 (private power) and 24 (commercial power). Thus, power boaters report similar numbers of encounters on both segments. For all user groups on both river segments, about half of encounters were with floaters and half with power boaters.

Between 15% and 50% of boaters on the Scenic section said that the actions of other groups affected them either positively or negatively. On the Wild section, the range was 16-38%. On both river segments, commercial power boaters were least likely to be affected (15-16%), followed by private power boaters (22-33%) and floaters (38-50%). Floaters during the NMW reported such effects with about the same frequency as those during other seasons. Of 92 written responses about others' actions from boaters on the Scenic section, most (57) were from private power boaters. The largest number of comments concerned inconsiderate behavior (19.6%), positive interactions with others (18.5%), general positive comments (15.2%), negative interactions with others (14.1%), and crowding (10.9%). Of 206 comments about others' actions from boaters on the Wild section, most (102) were from private floaters. The largest number of comments contained general positive remarks (37.4%), descriptions of inconsiderate behavior on the river (22.3%), and crowding (13.1%).

Using a standard 9-point scale to measure crowding, boaters of all types in all seasons reported only slight crowding (<3.0). Means for the Scenic section as a whole ranged from 1.81 to 2.59, and on the Wild section means were between 1.77 and 2.37. Floaters felt significantly more crowded (means 2.29 to 2.59) than power boaters (means 1.77 to 1.92), but all means fell below "slightly crowded" on the scale.

In the mail survey, boaters were asked about 15 social conditions they might have noticed. Those who noticed each condition rated its positive or negative effect (+3 to -3) on their experience. Most items were either not noticed or had minimal effects. The only item with a mean above 0.75 was encountering Forest Service staff, stationed at HCCL, Kirkwood Ranch, Pittsburg Landing and Cache Creek Ranch (positive for commercial power boaters on the Wild section). The only items with means lower than -0.75 were inconsiderate behavior at launches (private power boaters on the Wild section), commercial groups sending boats ahead to claim campsites (private floaters on the Wild section), encountering power boaters (private floaters and commercial floaters on the Wild section), finding desired campsites occupied by others (private floaters on the Wild section), and noisy groups (commercial floaters on the Wild section).

Finally, the mail survey asked about satisfaction with four social conditions. All items scored means above 4.0 (on a 7-point scale: 1=*not at all satisfied*; 7=*extremely satisfied*) for private power boaters in all seasons on both river sections. However, private power boaters on both sections expressed substantially lower satisfaction with the number of float trips seen during the primary season. Commercial power boaters had means above 4.0 for all items in all seasons, on both river sections. Private floaters scored means above 4.0 for all items except the number of powerboats seen, which ranged from 3.09 to 3.61 depending on the segment of the river and the season. Commercial floaters had satisfaction scores above 4.0 for all items except the number of powerboats seen, which ranged from 1.6 to 3.3 depending on the segment of the river and the season.

Environmental Conditions

The mail survey asked about 15 environmental conditions that boaters might have noticed. If people noticed an item, they ranked its effect on their experience from very positive (+3) to very negative (-3). For *private power boaters* on the both river sections, the primary (means +/- 0.7) detractors were fluctuating water, human waste and weeds. Primary contributors were historic sites, rock art, challenging whitewater, and seeing wildlife. For *commercial power boaters* on both sections, there were no elements that detracted substantially, but high water levels, historic sites, rock art, whitewater, and wildlife all added substantially. *Private floaters* on the Wild section said that litter, human waste and weeds were the primary detractors, while historic sites, rock art, whitewater, and wildlife all added substantially. *Commercial floaters* on the Wild section said that high water, historic sites, rock art, whitewater, and wildlife all added, while litter and human waste were detractors, but only for those boating in the primary season. Thus, the factors that contributed the most to boaters' experiences were quite similar across all groups.

Perception of Change:

Boaters who reported first using the Snake River in 1998 or before were asked about changes they perceived in facilities, the environment, and experiences. Enough boaters in four groups had done so to permit analysis of their responses: private power boaters on the Scenic section (n=141 to 157), commercial power boaters on the Scenic section (n=14 to 23), private power boaters on the Wild section (n=35 to 46), and private floaters on the Wild section (n=79 to 84). Most items had means near zero, indicating no perceived change. On average, all four groups, especially private power boaters, agreed that the degree of regulation had worsened and the sense of freedom from regulations had deteriorated. They all also agreed that treatment of floaters and power boaters had become less fair. This was especially true of private power boaters on the Wild section. All groups agreed that facilities at launches had improved, with strongest agreement from boaters on the Wild section.

Several other items differed across the four groups. Private floaters on the Wild section felt “equitable treatment of commercial and private boaters” had improved slightly, while all power boater groups disagreed. Similarly, private floaters on the Wild section felt that “relations between floaters and power boaters” had improved slightly, while private power boaters on both segments disagreed. Those private boaters on the Wild section (power and float) felt that opportunities for solitude had improved slightly, but commercial power boaters on the Scenic section disagreed slightly, but commercial power boaters on the Scenic section disagreed slightly, and private power boaters on the Scenic section saw no change.

Opinions about Management:

Boaters were asked if they were aware of the non-motorized window. Private power boaters were highly aware (70% Scenic, 87% Wild). Commercial boaters on both segments were largely unaware, especially those on power trips (30% aware), but also those on float trips (50%). Approximately 70% of private floaters on the Wild section knew of the NMW.

Those aware of the NMW were asked in an open-ended question about the effects of this policy on their experiences. Responses were categorized as positive, negative, or neutral. Private and commercial power boaters were the only groups to indicate the NMW had some type of negative effect on their experiences. Of the 179 comments received for the Scenic segment, 50% (90) indicated that the NMW affected experiences negatively. Two-thirds (63) of those negative comments indicated that the NMW caused greater limitations for motorized boating opportunities or caused an increase in planning. The other third (27) of negative comments illustrated a general dislike or disapproval of the policy. Forty-two percent (76) of the comments indicated that the policy had no effect on their experiences. Conversely, of the 290 comments received for the Wild segment, 50% (146) indicated that the NMW had a positive effect on river experiences, and an additional 24% (68) indicated the NMW had no effect on their experiences. Approximately one-fourth of the comments (76) indicated that the NMW had a negative impact on their experiences. The majority of “positive effect” responses were contributed by both commercial and private floaters.

Several management actions have been taken to improve opportunities for self-reliance, challenge, and solitude, including removing navigational markers, picnic tables, and outhouses, along with regulations requiring the use of fire pans and pack out of human waste and campfire ashes. Regulations also include a ban on personal watercraft and establishment of the NMW. Among power boaters on the Scenic section, all facility removal was deemed to detract from the experiences of both commercial and private power boaters. However, both groups felt that prohibiting jet skis was positive, as were the pack-out regulations for waste.

On the Wild section, three of the items added moderately to strongly to experiences for all groups: the ban on personal watercraft, requiring pack-out of human waste, and requiring fire pans. However, there were four items that floaters felt added to the experience but power boaters said detracted: removing navigational markers, removing picnic tables, removing outhouses, and implementation of the NMW. Having use limits on some days added moderately for both commercial and private floater groups, slightly for commercial power boaters, and detracted for the private power boaters. In all, there were some notable differences among the user groups in their evaluations of management actions on the Wild section.

There are many types of facilities on the Wild and Scenic sections of the Snake River. Boaters (commercial power and private power) on the Scenic section rated all 9 types of facility development as adding to their experiences, though not strongly. On the Wild section, all four groups said that Kirkwood Ranch, other historic sites, and hiking opportunities added moderately, while having outhouses and tables at camps, navigational markers, information signs, and the facilities at Pittsburg Landing added slightly. Only one item – resorts and buildings – detracted, and this was only among floaters, for whom the impact was slight. Thus, boaters generally enjoy the level of facilities development and recreation site services on the Snake River.

When asked in an open question if there was anything they would change about river management, 231 boaters on the Scenic section replied, with most (140) of these being private power boaters. Answers were quite varied, although the most common was “no change” (33%), followed by changing the limits on users (12%) and adding campsite amenities (8%). Among boaters on the Wild section, 365 responses were obtained, with the most (174) being from private floaters. The most prevalent comment was a desire to reduce motorized use (29%), followed by “no change” (18%), and changes to restrictions on boaters (15%).

To obtain a more complete understanding about the nature of the findings of this study, the data and their analyses, the reader should refer to the final report and associated appendices.

INTRODUCTION

1. Background and Need for Monitoring

This study monitors boaters' experiences on the Wild (Hells Canyon Dam to Pittsburg Landing) and Scenic (Pittsburg Landing to the northern boundary of Hells Canyon National Recreation Area) sections of the Snake River in Hells Canyon. This was accomplished through on-site contact cards and a mail-back visitor survey addressing boaters' perceptions and experiences on the river. We did not address other forms of recreation occurring in Hells Canyon.

The Wild and Scenic Snake River Recreation Management Plan (1999; hereafter referred to as "the River Plan"), which was signed in 1994 and amended in 1999, and the Final Environmental Impact Statement for the River Plan (1994) set forth guidance for management of recreational boating in the HCNRA to fulfill certain objectives. The goals of monitoring in general, and this project in particular, are (1) to determine how well management plan objectives are being met and (2) to evaluate how management actions and policies have promoted or impeded achievement of plan objectives for boaters' experiences and social conditions. Additionally, monitoring is often performed to assess trends in conditions, and to a limited extent this was a goal of our study.

The Snake River in Hells Canyon offers challenging whitewater opportunities in a mostly natural, remote setting for both motorized and non-motorized visitors. The River Plan specifies the desired future condition to be "A blend of motorized and non-motorized whitewater boating [that] provides diverse user groups a variety of opportunities in a unique setting within a major river environment." The river is used by both commercial and non-commercial parties. In past studies, it has been important to assess similarities and differences among the four primary user groups: commercial floaters, commercial power boaters, private floaters, and private power boaters. This study explores similarities and differences in the experiences of boaters from each of these four groups.

2. Conditions Monitored

Objectives developed in the River Plan stem from several policies and laws, but are primarily developed on the basis of the Wild and Scenic Rivers Act and the Recreational Opportunity Spectrum (ROS) framework that guides Forest Service recreation management (USDA Forest Service, 1982). In accordance with the Wild and Scenic Rivers Act, the Forest Service identified and described the Outstandingly Remarkable Values (ORVs) for which the river merits designation as Wild or Scenic. Management must ensure the protection and enhancement of those values. The ROS prescribes combinations of managerial, physical, and social setting attributes that are intended to provide

opportunities for specific types of experiences. This framework assumes that managers can create opportunities for specific experiences (e.g., challenge) through their management of setting attributes, even though they cannot guarantee that all individuals will have those experiences (Driver et al., 1987).

A. Outstandingly Remarkable Values

The ORVs identified in the River Plan include Geology, Fisheries, Wildlife, Cultural Resources, Scenery, Ecology, Vegetation/Botanicals, and Recreation. Some of these are outside the purview of our study because they deal with the condition of natural resources, not recreation experiences. However, many have direct bearing on our monitoring. A careful review of all planning documents identified the following ORVs and statements of desired future conditions, which our study assessed:

Recreation:

- The river provides “a blend of motorized and nonmotorized whitewater boating” (RMP 1999, p. 2) that attracts people from outside the geographic region (FEIS 1994, p. III-10).
- There are opportunities for “diverse user groups” (RMP 1999, p. 2) and for “new boaters to learn whitewater boating skills” (FEIS 1994, p. III-10).
- There is a “wide range of available recreation activities” occurring in a “unique backcountry river setting” (FEIS 1994, p. III-10).
- The canyon is a “unique setting” with “major rapids for a premier four-season whitewater adventure” (RMP 1999, p. 2).
- “Powerboaters travel and camp in a river setting that includes major rapids for a premier four-season whitewater adventure” (RMP 1994, p. 2).
- “Hells Canyon provides one of the best whitewater floating experiences in the Pacific Northwest” (RMP 1994, p. 2).
- Boaters can take “a variety of trip lengths, usually one to six days in duration” (RMP 1999, p. 2).
- There are opportunities for “adventurous, physically-challenged individuals to visit remote prehistoric sites and to view Wildlife and unique plant life in a natural setting” (RMP 1999, p. 2).
- “Interpretive opportunities may be exceptional” (FEIS 1994, p. III-10).

Scenery:

- “The Snake River of Hells Canyon provides for great contrasts of landform, vegetation, color, climate, and sound” (RMP 1999, p. 3).
- “Natural sounds produced by the river” are part of the scenery ORV (FEIS 1994, p. III-9).

Fisheries and Wildlife:

- There are opportunities for “year-round fishing” for various species (RMP 1999, p. 2), with an “abundant, unique, and diverse sport fishery” (RMP 111, p. 3).
- Visitors have “unique” experiences for viewing wildlife, especially bald eagles, peregrine falcons, and bighorn sheep (RMP 1999, p. 2).

Geology:

- The canyon environment provides “a diverse, appealing landscape for sightseers” due to “rugged topography, fascinating geological formations and unique geographical features” (RMP 1999, p. 2).

Historic and Prehistoric Cultural Resources:

- The rich “accumulation of riverine archaeological resources” is available for enjoyment by visitors (RMP 1999, p. 3).

B. Recreation Opportunity Spectrum Attributes

The Recreation Opportunity Spectrum typically identifies different experience “opportunities” that are to be provided on the basis of physical, social, and managerial features of the landscape. ROS generally focuses on remoteness, spatial extent of land management units, naturalness and level of development (especially roads, extractive uses, and structures), number of encounters with parties, and level and type of management presence, development and controls. In the HCNRA, these elements have been defined as encompassing naturalness/visual quality, access, remoteness, social encounters, visitor management, visitor impact, and facilities.

ROS is typically a spatial zoning technique. In Hells Canyon, this is reflected in the different experience opportunities that are prescribed for the Wild versus the Scenic portions of the river and uplands. Additionally, the management plan specifies different attributes for a variety of land management units or zones (developed sites, scientific stations, specific historic sites along the river, and the river corridor generally). For example, on the river corridor, solitude is a goal, whereas it is not in some other zones. In our monitoring, some questions focus on the attributes described for the “general river corridor,” while others focus on specific locations or destination sites. The management plan direction for general corridor conditions is presented in Table 1.

Table 1. ROS Setting Descriptions for the River Corridor in the Wild and Scenic Sections of the Snake River in the HCNRA¹

| | Wild River (General Corridor) ² | Scenic River (General Corridor) |
|--------------------------------|---|--|
| Naturalness/ Visual Quality | “Largely undisturbed natural environment with little evidence of human development. Manage for preservation of visual quality .” | “Largely undisturbed natural environment with limited evidence of human development. Manage for retention of visual quality .” |
| Access | “Very few access sites developed along the river. Roads are to access points only and do not parallel river. Valid motorized and non-motorized watercraft are consistent with management objectives.” | “Very few access sites developed along the river. Roads are to access points only and do not parallel river. Valid motorized and non-motorized watercraft are consistent with management objectives.” |
| Remoteness | “Moderate expectation of solitude and some expectation of experiencing isolation from the sights and sounds of others. Sense of remoteness.” | “Moderate expectation of solitude and some expectation of experiencing isolation from the sights and sounds of others. Sense of remoteness.” |
| Social Encounters | “ Few contacts with other users at rapids and access points. Little but some evidence of other users. Small party sizes are managed through limited boats per group. Upland users may frequent the corridor on established trails.” | “ Some contacts with other users at rapids and access points. Some evidence of other users. Small party sizes are managed through limited boats per group. Upland users may frequent the river corridor on established trails.” |
| Visitor Management | “Self-reliance through application of outdoor skills in an environment that offers a high degree of challenge and risk. No on-site visitor management controls or regulations apparent. On non-motorized trips, visitors participate in navigation of the river and perceive a high degree of challenge and risk ” | “Self-reliance through application of outdoor skills in an environment that offers a moderate degree of challenge and risk. Only a few subtle on-site visitor management controls or regulations are apparent. Outfitter and guides are often used , but customers experience a moderate degree of challenge and risk .” |
| Visitor Impact | “ Natural ecosystems operate freely . Human impact should not be apparent in an area greater than 750 sq. ft. at any campsite . No site hardening except to protect resources. No toilets provided.” | “ Natural ecosystems dominate . Human use obvious but subordinate . Sites may be hardened to accommodate use. No toilets provided.” |
| Facilities | “ No facility development for user comfort. Solid human waste carryout is required. Low impact camping practices are required .” | “ Minimal facility development primarily for resource protection. Solid human waste carryout is required.” |

¹Different descriptors apply to historic sites and developed facilities. Descriptors in this table are for the “river corridor” only.

²Bold text indicates differences between Wild and Scenic zones.

In addition to being used in its traditional application as a spatial zoning technique, in the HCNRA, ROS zoning has also been applied temporally. That is, there are approximately 20 weekdays (in 3-day blocks) each year during which motorized craft are prohibited on the Wild section of the river. This “non-motorized window” (NMW) creates a different social environment (and presumably different experience opportunities) during the non-motorized days. Our monitoring approach is designed to determine the nature of experience opportunities provided in the Wild and Scenic sections of river as well as to detect the nature and extent of differences between the motorized season and non-motorized window on the Wild section.

METHODS

1. Overall Approach

This study obtained representative samples of four user groups in Hells Canyon: (1) commercial float passengers; (2) commercial motor passengers; (3) non-commercial (private) floaters; and (4) non-commercial (private) power boaters.

University-administered written survey instruments were used to collect information on variables of interest. Boaters were contacted at launch sites (put-in or take-out) and asked to provide a mailing address for a mail survey. This approach ensured the minimum interference with boaters' river experiences, while maintaining consistency in the way boaters were approached, and it ensured a representative sample (assuming a high response rate). Boaters were asked about the types of experiences they expected and had, and factors (social, managerial, and physical) that affected experience quality. (Specific topic areas and survey questions are described below.)

The study addresses the effectiveness of the ROS zoning of the river. It was designed to assess how well the Wild section provides the opportunities prescribed in the river plan and how well the Scenic section provides the opportunities it is designed to provide. Given the temporal zoning on the Wild section during the summer months, it was also designed to be able to describe any differences in experiences that occur on motorized versus non-motorized days and primary versus secondary seasons.

Our sampling design was a two-stage cluster sample, with the first stage consisting of a random cluster sample of days/locations for collection of names and addresses, and the second stage consisting of a systematic (interval) sample with a random start of individuals from within each of the four strata. (Specific procedures are described below.)

2. Computation of Sample Sizes

To estimate required sample sizes (n 's), we needed to establish four parameters: population sizes (N), the desired level of precision of estimates (called ϵ or B , depending on formulae), the confidence bounds, and the expected variance in the data. Some of our measures used 7-point scales. For these measures, we sought to estimate mean responses for each of the four primary user groups with a precision of ± 0.5 points (i.e., 14%), at the 95% confidence level. For data representing proportions (e.g., the percentage who "agree" with a statement), we sought to estimate statistics with a precision of $\pm 5\%$ at the 95% confidence level. For proportions, the most conservative estimate of variance assumes a 50-50 split in responses, and we use this to estimate sample sizes for proportions. For continuous data, variances are typically estimated from pilot studies or prior data. Such data were unavailable for Hells Canyon. (Earlier

studies, such as those by Krumpke et al. (1989) and Idaho Power (1999), either did not ask questions of the type we asked or did not have continuous response categories.) Therefore, a range of types of similar data from other recreational visitor studies was used to estimate needed samples under various possible response distributions. Appendix A presents details of computations for sample sizes.

Table 2 shows launch numbers in 2001. These numbers came from the Forest Service annual use summary report. The population sizes (N) for the four groups of interest are quite variable (in 2001 there were 2,080 commercial float passengers; 35,998 commercial power boat passengers; 3,010 private floaters; and 11,999 private power boaters). However, as shown in Appendix A, all population sizes are sufficiently large that the finite population correction ($N/[N-1]$) approaches unity. Because of this, the required sample sizes to estimate parameters are quite similar for all user groups.

Table 2. Use Levels (Launches) in 2001

| | Primary Season | | | | Secondary Season | | | |
|--------------------|----------------|-------|---------|-------|------------------|-------|---------|-------|
| | Commercial | | Private | | Commercial | | Private | |
| | Float | Power | Float | Power | Float | Power | Float | Power |
| Total People | 2021 | 23026 | 2289 | 5307 | 59 | 12972 | 721 | 6692 |
| Average People/day | 18 | 209 | 21 | 48 | 0.2 | 51 | 3 | 26 |

To estimate means with 95% confidence and 14% error bounds would require relatively small sample sizes (fewer than 100 per user group). For example, using pilot data from another recreation study, data on attainment of various types of experiences (e.g., solitude, freedom, socializing) would need n 's ≈ 35 people per user group (see Appendix A). Estimating the percent of time people are in sight of others during the day would require n 's ≈ 30 . Estimating the mean evaluation of problems noticed (litter, disruptive groups, environmental conditions), would require n 's ≈ 50 . Thus, fewer than 100 respondents from each group would be needed to estimate parameters for continuous variables with desired precision and confidence.

Estimating proportions required larger samples. For example, if we assumed the most conservative outcome (50-50 split), we would have needed n 's between about 336 (commercial floaters) and 356 (commercial power boaters). Based on other recreation studies (Dickson, Hall & Krumpke, 2003; Hall & Shelby, 1996), it was unlikely that we would find many variables that generated 50-50 splits in responses. If distributions were 70/30, the required sample sizes would drop to between 153 and 163 per user group. It seems likely that actual distributions of responses will be within this range (between 50/50 and 70/30).

Based on the need to estimate proportions, we set our target sample size for the primary season (the Friday before Memorial Day through September 10) at 300 returns per user group. According to our calculations, this was actually larger than would be needed to guarantee the desired precision for all parameter estimates. In order to obtain 300 returns from each of the four user groups, assuming a 77% response rate (the rate obtained in a study of boaters in Hells Canyon in 1988-89; Idaho Power’s 1999 study reported a 70% response rate), we needed to collect 390 names and addresses for each group. Assuming a 10% non-response rate during initial on-site contacts (the rate was lower than this in 1988-89, but was about 20% during Idaho Power’s 1999 study), we needed to contact 433 people from each group (Table 3).

Table 3. Targeted Number of Names/Addresses Per User Group and Use Season

| | Primary Season | | | Secondary Season ¹ | | |
|------------------|----------------|-------|---------|-------------------------------|-------|---------|
| | Contacts | Names | Returns | Contacts | Names | Returns |
| Commercial Float | 433 | 390 | 300 | 0 | 0 | 0 |
| Commercial Power | 433 | 390 | 300 | 289 | 260 | 200 |
| Private Float | 433 | 390 | 300 | 0 | 0 | 0 |
| Private Power | 433 | 390 | 300 | 289 | 260 | 200 |

¹See text for discussion of floating use during the secondary season.

For the secondary season, Table 2 demonstrates that use by two groups (commercial floaters and private floaters) is very low. For example, the total number of private floaters launching averaged about three people per day. We believed this low level of use made on-site sampling of these users impractical. Therefore, only power boat use was targeted during the secondary season. We set our target for returned mail surveys at 200 for each of the two power boating groups. Using the same assumptions about refusals as for the primary season, we would need to obtain names from 260 boaters, and we needed to contact a total of 289 people from each group.

3. Selection of Sample Dates:

The above analysis specified the number of contacts needed to generate an adequate sample from each user group. The next step was determining how many days of sampling were needed to generate this sample and deciding where sampling should occur. Allocating sampling days across locations had to reflect population proportions because the four different boater groups use the primary access points in different proportions. Moreover, their use intensity at each launch varies by season. Because of these differences, separate sampling schedules were developed for each group for each season. ***This separate sampling means that data cannot and should not be simply combined in presentations of results, because different proportions of each user type were obtained.***

In early Fall 2003, it was observed that contact numbers were lower than initially anticipated. In order to gain a larger sample for statistical purposes, eight randomly selected 3-day sampling periods, targeting contacts from each user group, were added to the sampling schedule (7 during the primary season in 2004, 1 during the secondary season in 2004, for a total of 24 additional days of sampling).

A. Sampling during the Primary Use Season - Motorized Days

Sampling of boaters during the motorized days in the primary use season is presented below. There are approximately 20 days each year when motorized boats are prohibited on the Wild section of the Snake, and those were addressed separately (See section B).

Float boaters:

Commercial and private floaters were sampled in the same way at the same locations. Their use levels are almost identical in the primary season. Therefore, the same sampling approach was used to obtain 390 names from each (commercial and private) category of floaters. It is important to note that boaters counted on a non-motorized day may have had some days fall on motorized days as well.

Nearly 100% of float boaters put in at Hells Canyon Creek (Table 4). About 59% take out at Pittsburg Landing (Table 5). According to Forest Service reports, 15% jet back to the dam at the end of their trip. By sampling floaters at Hells Canyon Creek (HCC) and Pittsburg, then, all float boaters would have an opportunity to be sampled. We needed an adequately large sample of days at HCC and/or Pittsburg to ensure that we could contact 433 private floaters and 433 commercial floaters (to generate 390 names for each). The smaller of the two groups was commercial floaters, who averaged 18 people launching per day in the primary use season. To contact 433 therefore required approximately 24 days of sampling at HCC and/or Pittsburg. A total of 24 sampling days occurred at both Hells Canyon Creek and Pittsburg Landing *during the primary season.*

Table 4. Percent of Put-In Use by Location and User Type, Primary Use Season in 2001

| | Private Power | | Commercial Power | | Float Boaters | |
|-------------|-------------------|---------|------------------|---------|---------------|---------|
| | Weekday | Weekend | Weekday | Weekend | Weekday | Weekend |
| | -----Percent----- | | | | | |
| Cache Creek | 63 | 71 | | | | |
| Pittsburg | 30 | 21 | 3 | 4 | 2 | 1 |
| HCC | 7 | 8 | 23 | 27 | 98 | 99 |

Table 5. Percent of Take-Out Use by Location and User Type, Primary Use Season¹

| | Private Power | | Commercial Power | | Float Boaters | |
|-------------|-------------------|---------|------------------|---------|------------------|---------|
| | Weekday | Weekend | Weekday | Weekend | Weekday | Weekend |
| | -----Percent----- | | | | | |
| Heller | 56.8 | 49.4 | 0.9 | 2.6 | 14.9 | 25.0 |
| Pittsburg | 18.7 | 24.9 | 3.2 | 4.4 | 62.4 | 53.1 |
| HCC | 7.7 | 6.4 | 25.0 | 30.0 | 0.0 ¹ | 0.0 |
| Quality Inn | 0.0 | 0.0 | 49.9 | 38.3 | 0.0 | 0.0 |
| Hellsgate | 6.4 | 4.7 | 16.8 | 18.6 | 0.0 | 0.0 |
| Swallows | 3.5 | 4.0 | 3.4 | 5.9 | 0.0 | 0.0 |
| Other | 6.9 | 10.6 | 0.8 | 0.2 | 22.7 | 21.9 |

¹These numbers do not include approximately 15% of floaters who jet back to the dam.

Private Power Boaters:

Private power boaters are perhaps the most diverse group in the way they use the river. Some launch at HCC, boat in the upper river, and return to HCC at the end of their trip. Others boat upstream (south) from the Lewiston/Clarkston area and stay mainly in the Scenic stretch. Others boat from Pittsburg Landing to Kirkwood Ranch or the dam and back. This diversity presented some challenges for representing private power boaters. Fortunately, however, all private power boaters from the north must stop at Cache Creek to obtain a river permit. This was a logical place to contact them. About two-thirds of weekday and 71% of weekend private power boaters pass through Cache Creek at the start of their trip (Table 4). The remaining private power boaters were contacted at HCC or Pittsburg Landing, where substantial proportions both launch and take out (Tables 4 and 5).

Based on the distribution of private power boaters' launch use, about 65-70% of sampling needed to occur at Cache Creek, 20-30% at Pittsburg, and 7-8% at HCC. Every other boater at each launch site was contacted to be included in the survey. This was done to ensure a greater representation of trips across the primary season and across locations. According to our initial calculations, we would need approximately 24 days of sampling to generate 390 names. After the first summer generated fewer contacts than expected, three of the additional eight sampling periods were added to target private power users in the primary season, increasing the total number by 9 days.

Commercial Power Boat Passengers:

In prior years, virtually all commercial power trips took out at one of six locations (Table 5): HCC (27.8%), Pittsburg (3.4%), the Clarkston, WA Quality Inn (45.2%), Hellsgate State Park (17.9%), Swallows Park (4.6%), and Heller Bar (1.1%). To obtain 390 names, we only needed a few days of sampling, the average number of commercial power boaters on the entire river per day is 209. However, we desired to have more than a few days of sampling, in order to capture the views of different clients on

different trips across the primary season. (Surveying all passengers on one very large commercial trip might not represent the views of passengers on other trips or to other locations.) Therefore, we proposed a sampling interval of 1-in-5 commercial passengers. We expected this to require approximately 24 days of sampling, which were allocated proportionately across take-out locations. (Most commercial trips launch and take out at the same locations. Therefore sampling occurred at the start or the end of the trip.) For commercial power boaters, we sampled at HCC, Pittsburg, the Quality Inn, and Hellsgate State Park in the primary motorized season. Three of the additional sampling periods (9 days) were added to the sampling schedule to target commercial power users in the primary boating season, increasing the number of sampling days to 33 for the user group. During the three added periods, systematic sampling was adjusted to 1 in every 2 passengers.

Selection of Dates:

For the sake of efficiency, we chose to draw a cluster sample of blocks of days, because land travel between boat launches in Hells Canyon is difficult and time consuming. We began by randomly selecting 15 dates during the primary motor season (between August 1, 2003 and September 10, 2003 and between May 28, 2004 and August 15, 2004). As mentioned before, eight additional sampling periods were randomly selected, seven of which were in the primary season, and included in the sampling schedule, bringing the total number of sampling periods to 21. Sampling occurred on those 21 dates as well as the two subsequent days (i.e., sampling occurred on three consecutive days on each occasion, for a total of 63 person-days of sampling).

The randomly selected dates were randomly assigned to one of the five study launches (Pittsburg, Hells Canyon Dam, Cache Creek, the Quality Inn, and Hellsgate State Park), according to the stipulations about sampling intensity specified above. (Note that sampling at Hellsgate could occur on the same days as at the Quality Inn. However, fewer days were required at Hellsgate, so that site was not visited every time the Quality Inn was sampled.) In 2001, Red Wolf Crossing/Clarkston Marina was not a launch point, so it did not figure into sampling protocols. However, in 2003 and 2004 it received substantial levels of commercial use. Therefore, it was sampled on the same days that sampling occurred at the Quality Inn.

B. Non-Motorized Days

Experiences during the non-motorized window (NMW) and how they differ from experiences during the motorized times were a focus of the study. This required intensive sampling to obtain appropriate sample sizes. Every other week during the primary use season, motor boats are prohibited on a majority of the Wild segment of river between Wild Sheep Rapid and Upper Kirkwood Bar on Monday, Tuesday, and

Wednesday. The NMW was implemented to increase the range of experiences provided, and it is essential to evaluate whether and to what extent this goal is achieved.

Therefore, a separate sample of boaters who boated during non-motorized days on the Wild section of the Snake was conducted. (The two relevant contact points were HCC and Pittsburg Landing.) This sample included float boaters (both private and commercial), as well as motorized boaters who launch from Pittsburg Landing (they are permitted to boat to Kirkwood Ranch during the NMW). Given the small population size during the approximately 20 days of the NMW, we sampled 7 non-motorized periods (21 days) from 8/11/03 to 8/12/04. This intensity was required to obtain adequately large samples of boaters. Sampling occurred equally at Pittsburg and HCC. When Pittsburg was the sampling location, boaters were contacted on Tuesday, Wednesday, and Thursday (rather than on Monday, Tuesday, and Wednesday). This captured more of the boaters who launched from HCC during the NMW, because it takes approximately two days to reach Pittsburg from HCC. It is important to note that some respondents had both motorized and non-motorized days during trips.

In addition to the sample of floaters (and power boaters from Pittsburg) during the NMW, power boaters were sampled at Cache Creek during the 2004 NMW as well. The decision to add these days was made to permit the assessment of power boaters' experiences and views specifically during the NMW. Although power boaters are not permitted from Upper Kirkwood Landing to Wild Sheep Rapids in the Wild section during the NMW, it was possible that power boaters on the Scenic section might express different views during non-motorized times.

It is important to note that the NMW samples are separate from the larger sample of boaters in the primary and secondary use seasons. Analyses compare responses of boaters during the NMW to those of boaters during motorized times.

C. Sampling During the Secondary Use Season

Use levels and distributions are different in the secondary season than in the primary season. To obtain 260 names from commercial power boaters and 260 from private power boaters required approximately 36 days of sampling for private power boaters (assuming a sampling interval of 2) and approximately 36 days for commercial power boaters (assuming a sampling interval of 5). As shown in Table 6, in 2001 private power boat use was concentrated at Cache Creek, Pittsburg, HCC, and Heller Bar during the secondary season (the precise proportions varied by day of week and month). Half of commercial use was out of the Quality Inn, with most of the rest occurring at HCC and Hellsgate. (Any sample dates for HCC or Pittsburg that fell in January or February were moved to the closest weekend, because prior use data

indicated that there is virtually no weekday use during those months at those sites.) After initial efforts resulted in lower than expected numbers of boaters, one additional sampling period was added to the secondary season schedule and targeted both private and commercial power boaters. The total number of days sampled for private power boaters and commercial power passengers was 39 for each.

Table 6. Distribution of Take-Out Use During the 2001 Secondary Use Season.

| | Private Power | Commercial Power |
|---------------|-------------------|------------------|
| | -----Percent----- | |
| Heller Bar | 40-70 | <10 |
| Pittsburg | 20 | <10 |
| HCC | 6-30 | 20 |
| Hellsgate | 10 | 20 |
| Quality Inn | 0 | 50 |
| Swallows Park | 0 | 5 |

Table 7 presents the final sample schedule for sampling. It includes the number of boater contacts made at each sampling site and period. Throughout the study, a total of 534 private power boaters (423 on Scenic, 111 on Wild), 529 commercial power boaters (239 on Scenic, 290 on Wild), 518 private floaters (40 on Scenic, 478 on Wild), and 336 commercial floaters were contacted (27 on Scenic, 309 on Wild). The numbers indicate completed contact cards, not amount of use, because sampling intervals differed for different user types.

Table 7. Number of Contact Cards Completed by Location and Date

| Sampling Date | Days | Location | Launch/ Out | Power | | Float | |
|------------------------------|-------|----------|-------------|---------|------------|---------|------------|
| | | | | Private | Commercial | Private | Commercial |
| Primary Season 2003 | | | | | | | |
| 8/3-8/5 | S,M,T | Cache | L | 36 | 0 | 0 | 0 |
| 8/7-8/9 | H,F,S | HCC | L/O | 9 | 37 | 26 | 28 |
| 8/20-8/22 | W,H,F | QI/HG | O | 0 | 27 | 0 | 0 |
| 8/25-8/27 | M,T,W | HCC-NMW | L/O | 0 | 0 | 37 | 13 |
| 8/29-8/31 | H,F,S | Cache | L | 61 | 0 | 0 | 0 |
| 9/4-9/6 | H,F,S | Pitt | L/O | 12 | 7 | 20 | 0 |
| 9/9-9/11 | T,W,H | Pitt | L/O | 16 | 3 | 4 | 0 |
| Secondary Season 2003 | | | | | | | |
| 9/17-9/19 | W,H,F | QI | L/O | 0 | 15 | 0 | 0 |
| 9/24-9/26 | W,H,F | HCC | L/O | 2 | 13 | 32 | 36 |
| 10/6-10/8 | M,T,W | Pitt | L/O | 6 | 1 | 12 | 0 |
| 10/19-10/21 | S,M,T | Heller | L/O | 51 | 21 | 3 | 1 |
| 10/27-10/29 | M,T,W | QI | L/O | 0 | no boats | 0 | 0 |
| 11/4-11/6 | T,W,H | Heller | L/O | 7 | 24 | 0 | 0 |
| 11/15-11/17 | S,S,M | HCC | L/O | 17 | 2 | 3 | 0 |
| 12/3-12/5 | W,H,F | QI | L/O | 0 | no boats | 0 | 0 |

| Sampling Date | Days | Location | Launch/ Out | Power | | Float | |
|------------------------------|---------|-------------------|-------------|------------|------------|------------|------------|
| | | | | Private | Commercial | Private | Commercial |
| 12/19-12/21 | F,S,S | Heller | L/O | 10 | 0 | 0 | 0 |
| Secondary Season 2004 | | | | | | | |
| 1/24-1/26 | S,S,M | Heller | L/O | 6 | 2 | 0 | 0 |
| 2/7-2/9 | S,S,M | Heller | L/O | 8 | 1 | 0 | 0 |
| 3/5-3/7 | W,H,F | Swallow | L/O | 0 | no boats | 0 | 0 |
| 3/21-3/23 | S,M,T | QI | L/O | 0 | no boats | 0 | 0 |
| 3/28-3/30 | S,M,T | HCC | L/O | 0 | no boats | 0 | 0 |
| 4/17-4/19 | S,S,M | Pitt | L/O | 8 | 6 | 3 | 0 |
| 4/26-4/28 | M,T,W | QI | L/O | 0 | 24 | 0 | 0 |
| 5/6-5/8 | H,F,S | Heller | L/O | 20 | 6 | 0 | 0 |
| 5/14-5/16* | F,S,S | Heller | L/O | 15 | 3 | 0 | 0 |
| 5/14-5/16 | F,S,S | HG/QI | L/O | 0 | 15 | 0 | 0 |
| 5/18-5/20 | T,W,H | Pitt | L/O | 9 | 15 | 5 | 3 |
| Primary Season 2004 | | | | | | | |
| 5/21-5/23* | F,S,S | Heller | L/O | 16 | 4 | 1 | 0 |
| 5/31-6/2 | M,T,W | Pitt | L/O | 11 | 14 | 23 | 0 |
| 6/8-6/10 | T,W,H | Pitt- <i>NMW</i> | L/O | 22 | 4 | 16 | 0 |
| 6/16-6/18 | W,H,F | QI/HG | O | 0 | 22 | 0 | 0 |
| 6/21-6/23 | M,T,W | HCC- <i>NMW</i> | L/O | 0 | 49 | 20 | 36 |
| 6/25-6/27 | F,S,S | HCC | L/O | 0 | 100 | 47 | 51 |
| 7/1-7/3* | H,F,S | QI/HG | L/O | 0 | 22 | 0 | 0 |
| 7/3-7/5 | S,M,T | Cache | L | 44 | 0 | 0 | 0 |
| 7/8-7/10 | H,F,S | QI/HG | O | 0 | 30 | 0 | 0 |
| 7/12-7/14 | M,T,W | HCC- <i>NMW</i> | L/O | 2 | 0 | 30 | 20 |
| 7/12-7/14* | M,T,W | Cache- <i>NMW</i> | L/O | 16 | 0 | 0 | 0 |
| 7/15-7/17 | H,F,S | HCC | L | 0 | 0 | 73 | 49 |
| 7/15-7/17* | H,F,S | QI/HG | L/O | 0 | 30 | 0 | 0 |
| 7/19-7/21 | M,T,W | Pitt | L/O | 21 | 0 | 24 | 8 |
| 7/23-7/25 | F,S,S | Cache | L | 58 | 0 | 0 | 0 |
| 7/23-7/25* | F,S,S | QI/HG | L/O | 0 | 27 | 0 | 0 |
| 7/27-7/29 | T,W,H | Pitt- <i>NMW</i> | L/O | 1 | 0 | 31 | 15 |
| 7/29-7/31 | H,F,S | HCC | L/O | 0 | 0 | 52 | 25 |
| 8/3-8/5* | T,W,H | Cache | L/O | 39 | 0 | 0 | 0 |
| 8/10-8/12* | T,W,H | Pitt- <i>NMW</i> | L/O | 9 | 0 | 33 | 16 |
| 8/12-8/14 | H, F, S | Pitt | L/O | 5 | 1 | 23 | 35 |
| TOTAL | | | | 534 | 529 | 518 | 336 |

*Indicates dates that were added to sampling schedule after study plan approval.

4. On-Site Collection of Names and Addresses for the Mail Survey

A. Approach

On-site sampling was used primarily to collect names and addresses for a mail survey. The contact card also asked a small number of questions (Appendices B and C) that permitted analysis of non-response

bias. Those who did not respond to the mail survey were compared to those who did, to determine whether there were any systematic differences. The contact cards also obtained information about experiences and encounters that might be difficult for boaters to recall later.

B. On-Site Data Collection: Procedures

On the selected days, a researcher from the University of Idaho began sampling between 7:00 a.m. and 9:00 a.m. in the morning and continued for approximately 8 hours, with a one-hour break for lunch. The start times were flexible to ensure that sampling coincided with the times of greatest use. For example, days began earlier at Hells Canyon Dam because boaters launch early in the day, but days began later at Heller Bar because boaters were taking off the river later in the day. Start and end times were specified for each launch prior to the start of data collection, based on consultation with river rangers and others knowledgeable about boaters' use of those sites.

During surveying hours, researchers approached all boaters sixteen years or older who selected based on the appropriate sampling interval. Researchers informed boaters that they were conducting a survey on behalf of the U.S. Forest Service through the University of Idaho that was designed to monitor the quality of boaters' experiences in Hells Canyon. When appropriate (for example, at Heller Bar), boaters were questioned to ensure that they actually entered the HCNRA and which segment they used. They were told that their participation was voluntary and that responses would be confidential, and they were told that only a small number of boaters were randomly selected to participate. They were then invited to participate. Those agreeing received a contact card along with a clipboard and pencil. The contact cards differed slightly for those launching (Appendix B) and taking-out (Appendix C). They completed the instrument on their own and returned it to the researcher.

Researchers kept a log form to document all boaters seen and contacted (Appendix D). Each day, they noted the location, weather, and start and end times. For each group of boaters seen, one line on the log form was completed, indicating the type and number of craft, the status (commercial or private), group size, and any other pertinent information about each group, including the segment boated. They indicated how many adults (at least 16 years old) were asked to participate, how many agreed, and how many refused. They also noted if they missed any boaters. Each contact card received a unique number linking it to the log form information.

C. Content of the Contact Card

A primary purpose of the contact card was to collect names and addresses. Another purpose was to permit us to assess non-response bias in the mail survey. We expected a high level of participation in the on-site

portion of the study, but the response rate to the mail survey was expected to be lower. By comparing on-site responses of those who returned the mail survey to those who did not, we could determine whether there are any systematic biases between respondents and non-respondents. In 1988-89 (Krumpe et al.) and in 1999 (Idaho Power), there were very few such biases. In other studies, non-respondents have tended to be those with less experience on the river and members of organized groups or commercial passengers (Hall & Shelby, 1996). Questions on both versions of the contact card included number of trips to Hells Canyon in the past two years (two years was the time frame presented in the 1988-89 study) and group size.

A third purpose of the on-site contact card was to collect trip-specific information that might be difficult or unreliable to obtain in a later mail survey. To do this, we developed two versions of the card. For those launching, basic trip and visitor information was collected, in addition to experiences sought. The items about experiences included fishing, whitewater, socializing, and other common river trip motivations. These were included to discern the extent to which boaters seek the types of experiences the Forest Service is charged in providing and managing on the river. Those contacted as they took-out received a slightly longer card. In addition to the trip and visitor characteristics, the longer card asked about high and low points of the trip (open-ended), number of encounters with other boaters, and degree to which boaters obtained the experiences listed on the launch contact card.

The final purpose of the on-site contact card was to collect information to allow us to determine which version of the mail survey to send to respondents. As discussed below, boaters were sent a survey pertinent to either the Wild or the Scenic section of river. (With a few minor exceptions, the questions are the same, but the respondent was asked to think only of one or the other segment of the river.) The contact card documented which section(s) of river boaters visited so they could be sent the appropriate survey instrument.

5. Mail Survey

A. Mail Survey Topics

The mail surveys (Appendices E and F) contained four sections: questions about the specific trip; questions about general impressions of the river; perceptions of change since 1998; and boater information.

Specific Trip. Questions were asked about the specific trip on which boaters were contacted in order to permit managers to know how many boaters noticed various conditions and the intensity of their evaluations. They also were comparable to questions asked in earlier studies, which referred to a specific

trip. These responses can be matched to the specific section of river run by each boater, to ascertain any differences between the Wild and Scenic sections, as well as differences during different times of the year. Trip-specific data permit analysis of relationships among variables, such as between the number of encounters and perceptions of crowding.

General Impressions of the River. These questions pertained to overall assessments of the ORVs of the river that are not dependent on a specific trip. For example, boaters were asked to indicate whether they believed that river management treats different users fairly. Another question asked boaters what, if anything, they would change in river management.

Perceptions of Change Since 1998. In the years since the River Plan was signed in 1994, many changes in river management have taken place. One major change was the implementation of the non-motorized window in 1998. An important goal of our study was to determine whether those management changes have improved the quality of river experiences and whether they protect opportunities for targeted experiences, specifically challenge, self-reliance, and solitude. Boaters who had been boating on Hells Canyon for more than 5 years were asked to indicate whether various experiences had improved, deteriorated, or stayed the same. (Similar questions were asked successfully on the Owyhee River in another study; Dickson & Hall, 2003.) Asking such questions relies on boaters' memories, which may or may not be accurate. However, during our interactions with boaters we have found that many had strong views about the nature of changes on the river and sought an opportunity to express those views.

Boater Information. Boater information questions (basic socio-demographics and past experience) are typically asked in river recreation studies. Such information allows managers to characterize how their populations of visitors differ from boaters in prior studies and on other rivers. Past experience data are also important in understanding boaters' evaluations of conditions they encounter.

B. Mail Survey Question Development

Questions were developed from several sources. One was past surveys, both in Hells Canyon and on other rivers (e.g., Dickson & Hall, 2003; Hall & Shelby, 1996; Idaho Power, 1999; Krumpke et al., 1989). Such efforts have established reliable, accurate measures for many variables of interest. In addition, some commonly asked questions permit managers to assess how the Snake compares with other rivers. As an example, a 9-point "crowding" question has been asked in dozens of river surveys, and we used that measure.

Some questions were developed specifically for this study to address the ORVs and ROS setting attributes set forth in the River Plan. Specific wording was kept as close to the wording of the plan as possible, though question formats were developed to follow commonly used response categories.

An important source of question content was input from stakeholders. During three public meetings held in Lewiston, Boise, and Baker City in June 2003, boaters identified factors that they felt contribute positively to or detract from their experiences on Hells Canyon. Many of these were identified in planning documents, but additional items (e.g., concern about dogs; conflicts at boat ramps) were suggested by boaters. Existing questions addressing these topics were used where possible. Table 8 presents the types of items described by stakeholders. Additional suggestions were provided in public and agency reviews of the draft study plan.

Table 8. Stakeholders' Identification of Factors that Contribute Positively and Negatively to Their Hells Canyon River Experiences

| | Positive | Negative |
|--------------------------------|---|---|
| Management Policies or Actions | New toilets at Pittsburg and Cache Creek | Removal of toilets at campsites |
| | Helpful Forest Service staff at launch/take-out sites | Non-motorized window on the Wild section |
| | Non-motorized window on the Wild section | Somewhat complicated permit system |
| Social Conditions | Meeting interesting people on the river | Disruptive or inconsiderate boaters on the river |
| | Generally not crowded | Having to wait at rapids for boaters who are strung out to pass |
| | People who lend a helping hand | Inconsiderate use of launch (causing delays for others) |
| | | People who litter or don't use portable toilets |
| Environmental Factors | Seeing wildlife (especially bighorn sheep) | Improperly disposed dog waste |
| | Scenic beauty, historic & natural conditions | Human waste and toilet paper |
| | | Loss of beaches and sand at beaches |

Table 9 presents the topic of each question (or battery of questions) in the final survey, the rationale for the question, and the source of the question.

Table 9. Survey Topics, Rationales, and Sources

| Question | Rationale | Source |
|--|--|---|
| Section 1: This trip | | |
| Comparison of conditions with expectations | Fulfillment of expectations often explains satisfaction or dissatisfaction with a trip. Managers may desire to know whether visitors have accurate expectations. Items address ORVs and ROS attributes: social conditions, wildlife and fishing, whitewater, and wild character of the river | Asked in many surveys on rivers & wilderness; Shelby et al. 1983 |
| Comparison of encounters to expectations | Addresses expectations for encounters with floaters and power boaters. Encounters are presumed to have a substantial impact on experiences, especially solitude. | Asked in 1988-89 |
| Did actions of anyone else affect you? | Open-ended question designed to understand how aspects of encounters other than crowding affect experiences. Past research has shown that behavior of others is often more important than the number of encounters. | Modified from 1988-89 to allow for both “positive” and “negative” interactions |
| Crowding – open-ended | Crowding is a major concern on popular rivers, and use limits on the Snake were designed in part to alleviate crowding | Asked in 1988-89 |
| Crowding – closed-ended | Asks boaters to evaluate how crowded they felt on the river, using a 9-point scale | Many river studies; Idaho Power 1999; Shelby et al. 1989 |
| Perception and evaluation of facilities | Items ask whether boaters noticed facilities (e.g., toilets, navigational markers, picnic tables, buildings, historic sites); if so, they evaluate the extent to which those facilities added to or detracted from their experience. Many are elements targeted by management actions. | Many items from 1988-89 (responses altered slightly). Commonly asked in recreation studies (Hall & Shelby 1998; Hall et al. 1997) |
| Perception and evaluation of environmental conditions | Items ask whether boaters noticed conditions such as water levels, cultural sites, recreational impacts, wildlife, stock impacts, and weeds. Boaters who noticed evaluated the extent to which those facilities added to or detracted from their experience. | Many items from 1988-89; several items suggested by stakeholders |
| Perception and evaluation of social conditions | Items ask whether boaters noticed conditions such as noisy groups, FS rangers, campsite competition, waiting at rapids, and firearm use. If so, boaters evaluated extent to which conditions added to detracted from their experience. | Many items from 1988-89 and Idaho Power 1999; several items suggested by stakeholders |
| Effect of management actions on self-reliance, challenge, solitude | Items ask how specific management actions (e.g., removal of tables, toilets, and navigational markers) affected boaters’ attainment of specific types of experiences proscribed in the River Plan | Items developed for this study. Similar items asked by Hall & Cole 2002 |
| Satisfaction with experiences | Items ask boaters to indicate whether they were seeking each of several types of experience and the extent to | Guadagnolo 1985; Hammitt et al. 1996 |

| Question | Rationale | Source |
|--|--|--|
| | which they attained those experiences. The format is a typical “importance/performance” type of question. | |
| Section 2: Overall Perceptions | | |
| Adequacy of facility provision | Items ask boaters to indicate whether they felt there are too many or too few facilities such as toilets, parking, and tables. This question was intended to assess visitor preferences. An earlier question asked how these facilities affected types of experiences. | Asked in 1988-89; Idaho Power 1999 |
| Provision of ORVs | Questions ask boaters whether (and how strongly) they agreed or disagreed that the river provides the types of values proscribed in the River Plan. | Items developed from the Plan; standard Likert-type format |
| Changes to management | An open-ended question asks boaters what, if anything, they would change about river management | Item developed in response to stakeholder reviews |
| Perception of the NMW | A question asks boaters if they are aware that a NMW exists. If so, they are asked to describe (open-ended question) how this has affected their boating experiences | Item developed in response to stakeholder reviews |
| Section 3: Perceptions of Change | | |
| Use history | Asks boaters whether they had experience on the Snake before 1998. This filtered out boaters who were capable of commenting on change | Asked in several river studies |
| Perceptions of change | Boaters indicated whether specific attributes based on ORVs (cultural resources, scenery, recreation, facilities, Wildlife, solitude, naturalness, management, and campsite conditions) had improved, deteriorated, or stayed the same | Asked in several studies; some items suggested by stakeholders |
| Section 4: Boater Characteristics | | |
| River experience | Items ask about specific experience in HCNRA as well as on other rivers | Asked in 1988-89; slightly modified |
| Season of use in Hells Canyon | Items ask about which seasons boaters had floated Hells Canyon. Permits comparison of those floating in the secondary and primary seasons. Boaters were also asked why they choose to boat in the secondary use season. | New for this study |
| Overall evaluation of river | Asks boaters whether the Snake is among their favorite rivers | Asked in 1988-89; Idaho Power 1999 |
| Skill levels | Ask boaters about their whitewater skill levels | Standard skill questions; Idaho Power 1999 |
| Age | Basic demographic information | Standard question; Idaho Power 1999 |
| Gender | Basic demographic information | Standard question; Idaho Power 1999 |
| Education | Basic demographic information. Sometimes relates to perceptions of conditions and views on management | Standard survey question |

C. Mail Survey – Procedures

As names and addresses were collected in the field, they were entered into a spreadsheet to generate mailing labels. Answers to questions on the contact card were entered into a spreadsheet. Mail survey administration generally followed the Dillman Total Design Method (Dillman, 1978; Salant & Dillman, 1994) with three waves of mailings.

Mailings were done in bulk lots for the sake of efficiency and ease of tracking. Boaters were sent the version that corresponded to their trip (Wild vs. Scenic). Boaters who passed through both sections were randomly assigned to one or the other version. Approximately two weeks after the first collection of names and addresses (and once a month thereafter), the boaters sampled from the on-site contact list were sent a cover letter (see Appendix G) along with a survey booklet (See Appendix E and F) and a postage-paid return envelope. Records were kept of the date that the first mailing was sent.

As surveys were returned, they were logged into the mailing data base, and names and addresses of those who returned surveys were deleted. Survey data were entered into the spreadsheet containing information from the contact cards. After three weeks from the date of the first mailing, postcards (see Appendix H) were sent to all remaining individuals on the mailing list. The postcards thanked those who returned their surveys and gently reminded those who did not that their participation was valued. Two weeks later, another copy of the survey itself with a new cover letter (See Appendix I) was sent to all non-respondents. This was the final effort to solicit participation.

Random checks of the spreadsheet were performed regularly to ensure quality of data entry. Once a week, six random surveys were selected and the spreadsheet was inspected to ensure that there were no errors in data entry.

RESULTS

Response Rate and Non-response Bias

A total of 2,724 visitors were approached and asked to fill out a contact card. Of those visitors asked, 70% agreed to fill out a contact card.

A total of 1,917 boaters completed contact cards during 138 days (Table 7). Of these, 76 boaters gave no address on the contact card for the purpose of a mail survey and four were not eligible due to conflicts of interest. These were subtracted from the total, leaving a sampling frame total of 1,837 boaters for participation in the mail survey portion of the study. Of these, mailing addresses of 51 participants were incorrect and the surveys were returned to sender. When computing the response rate for the mail survey, the 51 participants with incorrect mailing addresses were subtracted from the total, and the new total (1,786) was then used as the divisor for the total number of mail surveys that were completed and returned (1,158). The overall response rate for the mail survey instrument was 64.8%.

Response rates for the mail survey for each user group were as follows: 67.3% for private power boaters; 67.5% for commercial power boat passengers; 62.4% for private floaters; and 60.0% for commercial float passengers.

There is the possibility that those who did not return mail surveys were in some way systematically different from those who did. Therefore, responses to the questions on the contact card were used to perform a non-response bias check. Responses of those who returned the mail survey were compared to responses of those who did not. Any significant differences that appeared are documented and discussed.

We used the contact card data to test for potential non-response bias in the mail survey. Twenty variables from both contact cards were used in the analysis (Appendix B and C), and for both contact cards, those who responded to the mail survey were compared with those who did not respond. These comparisons were made within each user type. For commercial floaters, there were no differences, and for private and commercial power users, only one or two differences emerged. The most differences emerged for private floaters. There were six variables of 20 that showed statistically significant differences, all of which are related to expectations and experience variables on the questionnaire (Table 10). In every case, private floaters who returned the mail survey rated the expectation or experience variables slightly higher than non-responders, but only by a small degree (less than 1 point on a 7 point scale). This may indicate that private floaters who were more interested in these experiences were more likely to respond.

Overall, there were few statistically significant differences among responders and non-responders, and the differences were small. Of the 80 tests performed, only 9 achieved statistical significance (at $\alpha=.05$). Thus, we feel confident that there were no distinct or important differences between responders and non-responders.

Table 10 Variables with Significant Differences Among Responding/Non-responding Participants¹

| Variable | User Group and p-value |
|--|-------------------------------|
| <i>Expectations (Launch Contact Card)</i> | |
| Historical/cultural sites | PF (p=0.004) |
| Solitude | PF (p=0.018) |
| Remoteness | PF (p=0.002) |
| Closeness to nature | PF (p=0.007) |
| Opportunities for fishing | PF (p=0.030) |
| Unique geology | PF (p=0.014) |
| <i>Experiences (Take-out Contact Card)</i> | |
| Remoteness | PP (p=0.006) |
| Closeness to nature | PP (p=0.007) |
| Unique geology | CP (p=0.010) |

¹ PF=private floaters; CP=commercial power; PP=private power

How the Data are Presented:

The following pages present survey results, arranged topically according to the issue areas described above. Data are analyzed and presented for each user type (private power boaters, commercial power boaters, private floaters, and commercial floaters) by river segment (Scenic and Wild). Additionally, findings are split out by season, where “non-motorized window” refers to the 18-21 days in the summer when motor boats are not permitted on the Wild segment, “primary” refers to the remaining days between May 31st (Memorial Day) and September 11, 2003, (excluding the non-motorized window), and secondary season refers to the rest of the year. When “primary seasons” (plural) is used, we refer to both the NMW and motorized time during the summer.

It is important to note that boaters contacted during the NMW reported seeing power boats on the Wild segment. This is not likely due to disregard of the motorized prohibition, but instead to the timing of the launch or take-out of floater trips. For instance, float trip may have launched right before or partially into the NMW, which could allow individuals to see power boaters before the start of the NMW. Floaters could have taken out after the NMW had ended, also allowing for the possibility of seeing motorized traffic. Power boaters are permitted to boat from Pittsburg Landing to Kirkwood Ranch and one commercial power boat outfitter is permitted from Hells Canyon Creek to Wild Sheep Rapids during the

NMW. Since respondents were asked to report about how many float and power trips they had seen during their whole trip, it is likely that respondents from float trips were including power trips from outside of the NMW time period.

Data from all questions are summarized and reported using frequencies and central tendency measures. Analysis of closed-ended questions was performed using a current version of SPSS, a software package for statistical data analysis. Frequency data are presented graphically where practical. Basic descriptive statistics are presented for every question asked in the study. Because the surveys were not administered proportionately to use levels for the four groups of boaters, data are not aggregated in any presentations. That is, the view of each river user group is presented separately for each question.

Although it is inappropriate to aggregate across groups, it is acceptable to compare groups, which we do using Chi-square or ANOVA analyses. It is important to note that when broken out by user type, segment and season, some samples are quite small. In particular, the following samples for contact cards are too small to permit reliable conclusions about them:

- Private power on the Wild segment in the secondary season and NMW;
- Commercial power on the Scenic in the NMW;
- Private floaters on the Scenic in any single time period;
- Commercial floaters on the Scenic in the NMW.

The inadequate samples for the mail survey include:

- Private power on the Wild and Scenic segments in the NMW;
- Commercial power on the Scenic in the NMW;
- Private floaters on the Scenic during any single time period;
- Commercial floaters on the Wild and Scenic during the secondary season.

There is a large quantity of data presented in the results section making it difficult to follow the tables throughout the report. To make this process easier, for each item or question that was asked on the contact cards and mail surveys, we created a “family” of data tables that contain corresponding results information for that item or question. That is, the tables follow in numerical order but each set of tables for an item or question has the same table number, as well as a letter attached to indicate that it belongs to a family of results (example: Table 12A, 12B, 12C; 13A, 13B...). Also in the tables, cells for which there were fewer than 10 respondents are left blank because it is not appropriate to make conclusions about the results based on so few responses.

Interpretation of the data is limited to the content and context of the questions. Interpretation of the monitoring objectives and goals remains the responsibility of the US Forest Service.

CONTACT CARD RESULTS

Visitor Characteristics

Visitors were asked how many times they had either floated or power boated the Wild and Scenic Snake River in Hells Canyon National Recreation Area in the last two years (Table 11). On average, for those contacted on both the Scenic and Wild segments, private power boaters had taken the most trips in the last two years (19.3, 15.3 respectively). Private power users in the primary season on the Wild segment had taken substantially more trips in the past two years (20.3) than those in the other seasons. Commercial floaters on both segments took less than one trip in the past two years, as have commercial power users on the Wild segment (0.96), while commercial power users on the Scenic segment took, on average, just over one trip (1.4) in the past two years. Private floaters on the Scenic segment reported taking approximately two trips in the past two years (2.0), while on the Wild segment, they reported just over two trips in the past two years (2.3). Overall, then, private power boaters use the river substantially more often than any other group.

Table 11 Mean Number of Trips Taken in HCNRA in the Last Two Years by User Groups

| Number of trips in the last two years | Scenic | | | | Wild | | | |
|---------------------------------------|---------|-----------|------|-------------|---------|-----------|-----|-------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Private power | 20.7 | 18.3 | 12.3 | 19.3 | 20.3 | 9.6 | 5.8 | 15.3 |
| <i>N</i> | 230 | 128 | 28 | 386 | 60 | 29 | 14 | 103 |
| Commercial power | 0.5 | 2.3 | | 1.4 | 1.2 | 1.1 | 0.1 | 1.0 |
| <i>N</i> | 111 | 108 | 2 | 221 | 177 | 39 | 45 | 261 |
| Private float | 2.1 | 2.3 | 1.5 | 2.0 | 3.0 | 2.5 | 1.1 | 2.3 |
| <i>N</i> | 15 | 10 | 12 | 37 | 257 | 46 | 143 | 446 |
| Commercial float | 0.0 | | | 0.2 | 0.7 | 0.6 | 0.5 | 0.6 |
| <i>N</i> | 17 | 1 | 8 | 26 | 159 | 33 | 87 | 279 |

Visitors were also asked which sections of the Snake River they had boated (float or powerboat) in the last two years, excluding their current trip. On the Scenic segment, only 28% of private power users boated on the section from Hells Canyon Dam to Rush Creek, while 44% indicated boating on the section from Rush Creek to Pittsburg Landing (Table 12A). A slim majority of 55% indicated having boated on the section from Pittsburg Landing to the Salmon River confluence, and an even greater proportion (66%) boated from the confluence of the Salmon and Snake Rivers to Cache Creek. Among private power boaters on the Wild segment, nearly 60% had boated the section from Hells Canyon Dam to Rush

Creek, while 61% had boated from Rush Creek to Pittsburg Landing in the past two years. Forty percent of these users boated the section from Pittsburg to the Salmon River confluence, and an even smaller proportion (30%) boated from the confluence to Cache Creek. Thus, among private power users, it appears that there are two different groups—those who boat the lower river and those who boat near the dam.

Table 12A Percent of Private Power Boaters Using Each River Section in the Past Two Years

| Private Power | | Scenic | | | | Wild | | | |
|--|----------|---------|-----------|------|-------------|---------|-----------|------|-------------|
| | | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Hells Canyon Dam to Rush Creek | No | 74.5 | 70.9 | 56.7 | 71.9 | 41.7 | 33.3 | 50.0 | 40.4 |
| | Yes | 25.5 | 29.1 | 43.3 | 28.1 | 58.3 | 66.7 | 50.0 | 59.6 |
| | <i>N</i> | 231 | 134 | 30 | 395 | 60 | 30 | 14 | 104 |
| Rush Creek to Pittsburg Landing | No | 57.6 | 58.2 | 36.7 | 56.2 | 25.4 | 63.3 | 42.9 | 38.8 |
| | Yes | 42.4 | 41.8 | 63.3 | 43.8 | 74.6 | 36.7 | 57.1 | 61.2 |
| | <i>N</i> | 231 | 134 | 30 | 395 | 59 | 30 | 14 | 103 |
| Pittsburg Landing to Salmon Confluence | No | 42.0 | 50.0 | 50.0 | 45.3 | 56.7 | 60.0 | 71.4 | 59.6 |
| | Yes | 58.0 | 50.0 | 50.0 | 54.7 | 43.3 | 30.0 | 28.6 | 40.4 |
| | <i>N</i> | 231 | 134 | 30 | 395 | 60 | 30 | 14 | 104 |
| Salmon River Confluence to Cache Creek | No | 31.2 | 35.8 | 50.0 | 34.2 | 68.3 | 66.7 | 85.7 | 70.2 |
| | Yes | 68.8 | 64.2 | 50.0 | 65.8 | 31.7 | 33.3 | 14.3 | 29.8 |
| | <i>N</i> | 231 | 134 | 30 | 395 | 60 | 30 | 14 | 104 |

Overall, on the Scenic segment, 80 to 90% of commercial power users indicated not boating any of the sections of the Snake River in the past two years (Table 12B). The one exception occurred in the secondary season, where 29% of passengers indicated having boated from the Salmon River confluence to Cache Creek. On the Wild segment, most of the commercial power users (>90%) had not boated on the Snake River in the past two years. Across all seasons, at most only 21% of commercial power users said they had boated in either section, with the exception of those contacted in the primary season on the stretch of river 46% of whom had boated from Hells Canyon Dam to Rush Creek (46%).

Table 12B Percent of Commercial Power Users Boating in Each River Section in the Past Two Years

| Commercial Power | | Scenic | | | | Wild | | | |
|--|----------|------------|------------|----------|-------------|------------|-----------|-----------|-------------|
| | | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Hells Canyon Dam to Rush Creek | No | 91.0 | 85.3 | | 88.3 | 54.3 | 86.8 | 97.8 | 90.1 |
| | Yes | 9.0 | 14.7 | | 11.7 | 45.7 | 13.2 | 2.2 | 9.9 |
| | <i>N</i> | <i>111</i> | <i>109</i> | <i>2</i> | <i>222</i> | <i>180</i> | <i>38</i> | <i>45</i> | <i>263</i> |
| Rush Creek to Pittsburg Landing | No | 91.0 | 82.6 | | 86.9 | 90.0 | 79.5 | 97.8 | 89.8 |
| | Yes | 9.0 | 17.4 | | 13.1 | 10.0 | 20.5 | 2.2 | 10.2 |
| | <i>N</i> | <i>111</i> | <i>109</i> | <i>2</i> | <i>222</i> | <i>180</i> | <i>39</i> | <i>45</i> | <i>264</i> |
| Pittsburg Landing to Salmon Confluence | No | 89.2 | 81.7 | | 85.6 | 91.1 | 86.8 | 97.8 | 91.6 |
| | Yes | 10.8 | 18.3 | | 14.4 | 8.9 | 13.2 | 2.2 | 8.4 |
| | <i>N</i> | <i>111</i> | <i>109</i> | <i>2</i> | <i>222</i> | <i>180</i> | <i>38</i> | <i>45</i> | <i>263</i> |
| Salmon River Confluence to Cache Creek | No | 89.2 | 70.6 | | 79.7 | 92.2 | 92.1 | 95.6 | 92.8 |
| | Yes | 10.8 | 29.4 | | 20.3 | 7.8 | 7.9 | 4.4 | 7.2 |
| | <i>N</i> | <i>111</i> | <i>109</i> | <i>2</i> | <i>222</i> | <i>180</i> | <i>38</i> | <i>45</i> | <i>263</i> |

Some interesting differences occurred among private floaters in terms of their use of the Scenic and Wild segments (Table 12C). Among those contacted, on the Scenic segment, 53% had boated on the river from Hells Canyon Dam to Pittsburg Landing in the past two years, while only 39% indicated they had boated from Pittsburg Landing to Cache Creek in the past two years. A similar situation occurred among those contacted on the Wild segment, with 42% having boated on the river from Hells Canyon Dam to Pittsburg Landing, and only 12% from Pittsburg Landing to Cache Creek. On the Wild segment, it is evident that many private floaters had not floated any segment in the past two years. These findings illustrate that floaters predominantly use the upper reaches of the river.

Table 12C Percent of Private Floaters Boating Each River Section in the Past Two Years

| Private float | | Scenic | | | | Wild | | | |
|---------------------------------|----------|-----------|-----------|-----------|-------------|------------|-----------|------------|-------------|
| | | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Hells Canyon Dam to Rush Creek | No | 73.3 | 27.3 | 33.3 | 47.4 | 54.3 | 65.2 | 62.5 | 58.1 |
| | Yes | 26.7 | 72.7 | 66.7 | 52.6 | 45.7 | 34.8 | 37.5 | 41.9 |
| | <i>N</i> | <i>15</i> | <i>11</i> | <i>12</i> | <i>38</i> | <i>256</i> | <i>46</i> | <i>144</i> | <i>446</i> |
| Rush Creek to Pittsburg Landing | No | 73.3 | 27.3 | 33.3 | 47.4 | 53.7 | 56.5 | 63.9 | 58.1 |
| | Yes | 26.7 | 72.7 | 66.7 | 52.6 | 46.3 | 43.5 | 36.1 | 41.9 |
| | <i>N</i> | <i>15</i> | <i>11</i> | <i>12</i> | <i>38</i> | <i>256</i> | <i>46</i> | <i>144</i> | <i>446</i> |

| Private float | | Scenic | | | | Wild | | | |
|--|----------|-----------|-----------|-----------|-------------|------------|-----------|------------|-------------|
| | | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Pittsburg Landing to Salmon Confluence | No | 80.0 | 45.5 | 50.0 | 60.5 | 89.9 | 91.3 | 82.6 | 87.7 |
| | Yes | 20.0 | 54.5 | 50.0 | 39.5 | 10.1 | 8.7 | 17.4 | 12.3 |
| | <i>N</i> | <i>15</i> | <i>11</i> | <i>12</i> | <i>38</i> | <i>257</i> | <i>46</i> | <i>144</i> | <i>447</i> |
| Salmon River Confluence to Cache Creek | No | 73.3 | 54.5 | 50.0 | 60.5 | 87.9 | 84.8 | 84.7 | 86.6 |
| | Yes | 26.7 | 45.5 | 50.0 | 39.5 | 12.1 | 15.2 | 15.3 | 13.4 |
| | <i>N</i> | <i>15</i> | <i>11</i> | <i>12</i> | <i>38</i> | <i>257</i> | <i>46</i> | <i>144</i> | <i>447</i> |

Overall, for both the Scenic and Wild segments, no more than 9% of commercial floaters indicated having boated on either of the river sections in the past two years (Table 12D). In particular, on the Wild segment across all seasons, only about 5 to 10% of floaters had boated during any season in the last two years.

Table 12D Percent of Commercial Floaters Boating Each River Section in the Past Two Years

| Commercial float | | Scenic | | | | Wild | | | |
|--|----------|-----------|-----------|----------|-------------|------------|-----------|-----------|-------------|
| | | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Hells Canyon Dam to Rush Creek | No | 100.0 | | | 92.3 | 88.1 | 97.0 | 94.3 | 91.0 |
| | Yes | 0 | | | 7.7 | 11.9 | 3.0 | 5.7 | 9.0 |
| | <i>N</i> | <i>17</i> | <i>1</i> | <i>8</i> | <i>26</i> | <i>159</i> | <i>33</i> | <i>87</i> | <i>279</i> |
| Rush Creek to Pittsburg Landing | No | 100.0 | | | 96.2 | 89.3 | 93.9 | 95.4 | 91.8 |
| | Yes | 0 | | | 3.8 | 10.7 | 6.1 | 4.6 | 8.2 |
| | <i>N</i> | <i>17</i> | <i>1</i> | <i>8</i> | <i>26</i> | <i>159</i> | <i>33</i> | <i>87</i> | <i>279</i> |
| Pittsburg Landing to Salmon Confluence | No | 100.0 | | | 92.6 | 93.1 | 97.0 | 96.6 | 94.6 |
| | Yes | 0 | | | 7.7 | 6.9 | 3.0 | 3.4 | 5.4 |
| | <i>N</i> | <i>17</i> | <i>1</i> | <i>8</i> | <i>26</i> | <i>159</i> | <i>33</i> | <i>87</i> | <i>279</i> |
| Salmon River Confluence to Cache Creek | No | 100.0 | | | 92.3 | 95.0 | 97.0 | 95.4 | 95.3 |
| | Yes | 0 | | | 7.7 | 5.0 | 3.0 | 4.6 | 4.7 |
| | <i>N</i> | <i>17</i> | <i>1</i> | <i>8</i> | <i>26</i> | <i>159</i> | <i>33</i> | <i>87</i> | <i>279</i> |

Trip Characteristics

Visitors were asked to indicate the number of people in their group, including themselves, during their river trip using six response categories. Overall, for both the Scenic and the Wild segments, private power users had group sizes that tended to be smaller (Table 13A). Sixty-four percent of these boaters on the Scenic segment had 1 to 5 people in their group, while nearly 29% had 6 to 10 in their group. Only a small proportion (approximately 7%) had more than 10 people in their group. The proportions are only slightly different on the Wild segment, where 60% of private power users reported having 1 to 5 people in their group, and 35% had 6 to 10 in their group. Only 5% of users on the Wild segment had more than 10 people in their group. On both segments, private power boaters' group sizes were larger in the primary motorized season.

Table 13A Distribution of Group Size for Private Power Boaters¹

| Private power | Scenic | | | | Wild | | | |
|---------------|---------|-----------|------|-------------|---------|-----------|------|-------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| 1-5 | 61.2 | 67.9 | 70.0 | 64.1 | 44.3 | 86.7 | 71.4 | 60.0 |
| 6-10 | 32.8 | 22.4 | 23.3 | 28.5 | 49.2 | 10.0 | 28.6 | 35.2 |
| 11-15 | 4.7 | 9.0 | 6.7 | 6.3 | 1.6 | 3.3 | 0.0 | 1.9 |
| 16-20 | 1.3 | 0.0 | 0.0 | 0.8 | 3.3 | 0.0 | 0.0 | 1.9 |
| 21-25 | 0.0 | 0.0 | 0.0 | 0.0 | 1.6 | 0.0 | 0.0 | 1.0 |
| 25+ | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| <i>N</i> | 232 | 134 | 30 | 396 | 61 | 30 | 14 | 105 |

¹Expressed in percentages

There was some diversity in group sizes reported by commercial power users (Table 13B), likely due to some passengers reporting only the members in their immediate group and others including the passengers from the entire boat. The majority of commercial power users on both the Scenic and Wild segments reported having 1 to 5 people in their group (45% on the Scenic, 67% on the Wild). Group sizes tended to be larger on the Scenic section. Only 14% of those on the Wild segment had more than 10 people in their group, but 31% on the Scenic were in groups that large. Interestingly, on both the Wild and Scenic segments, 14-15.5% of commercial power users in the secondary season reported having more than 25 people in their group.

Table 13B Distribution of Group Size for Commercial Power Boaters¹

| Commercial Power | Scenic | | | | Wild | | | |
|------------------|---------|-----------|-----|-------------|---------|-----------|------|-------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| 1-5 | 55.8 | 33.6 | | 45.3 | 67.2 | 64.1 | 69.8 | 67.2 |
| 6-10 | 13.3 | 35.5 | | 24.0 | 17.8 | 17.9 | 23.3 | 18.7 |
| 11-15 | 12.4 | 14.5 | | 13.3 | 8.9 | 0.0 | 7.0 | 7.3 |
| 16-20 | 10.6 | 2.7 | | 6.7 | 2.8 | 2.6 | 0.0 | 2.3 |
| 21-25 | 1.8 | 0.0 | | 0.9 | 0.0 | 0.0 | 0.0 | 0.0 |
| 25+ | 6.2 | 13.6 | | 9.8 | 3.3 | 15.4 | 0.0 | 4.6 |
| <i>N</i> | 113 | 110 | 2 | 225 | 180 | 39 | 43 | 262 |

¹Expressed in percentages

Group sizes also varied among private floaters on the Scenic and Wild segments, though less on the Scenic than the Wild segment (Table 13C). Overall, the majority of private floaters on the Scenic segment reported having either 1 to 5 people (42%) or 6 to 10 people in their group (37%). None boated in groups larger than 15.

On the Wild segment, the majority of private floaters reported having at least 6 to 10 people (35%) or 11 to 15 people in their group (27%). A small proportion of floaters (8%) had 21 or more people in their group. It is often the case that on rivers where use is limited, float parties increase in size as people pool their efforts to gain access. This may explain why groups were larger on the Wild segment, especially during the NMW. Additionally, floaters on the Wild segment may prefer larger groups for the sake of safety in rapids.

Table 13C Distribution of Group Size for Private Floaters¹

| Private Float | Scenic | | | | Wild | | | |
|---------------|---------|-----------|------|-------------|---------|-----------|------|-------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| 1-5 | 40.0 | 63.6 | 25.0 | 42.1 | 12.0 | 13.3 | 11.0 | 11.8 |
| 6-10 | 26.7 | 36.4 | 50.0 | 36.8 | 38.4 | 62.2 | 21.4 | 35.3 |
| 11-15 | 33.3 | 0.0 | 25.0 | 21.1 | 24.0 | 20.0 | 35.2 | 27.2 |
| 16-20 | 0.0 | 0.0 | 0.0 | 0.0 | 22.5 | 4.4 | 13.8 | 17.9 |
| 21-25 | 0.0 | 0.0 | 0.0 | 0.0 | 2.7 | 0.0 | 6.2 | 3.6 |
| 25+ | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 0.0 | 12.4 | 4.2 |
| <i>N</i> | 15 | 11 | 12 | 38 | 258 | 45 | 145 | 448 |

¹Expressed in percentages

Commercial floaters on the Scenic segment tend toward having either small groups (1 to 5) or larger groups (11 to 20), although conclusions are tentative because of the small sample size (Table 13D). Nearly 40% of these commercial floaters said they had 1 to 5 people in their group.

On the Wild segment, just over 50% of commercial floaters had between 1 and 10 people in their group, but the percentage in small groups (1 to 5) was lower than on the Scenic segment (Table 13D). There appear to be some large differences in the size of commercial float trips on the Wild segment based on season. Almost half of those contacted during the secondary season were in groups of more than 25 people. (However, the small sample size from this time means the conclusions may not be generalizable. If our respondents were all from a few large groups, this would skew the results).

Table 13D Frequency of Group Size for Commercial Floaters¹

| Commercial float | Scenic | | | | Wild | | | |
|------------------|-----------|-----------|----------|-------------|------------|-----------|-----------|-------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| 1-5 | 35.3 | | | 38.5 | 23.8 | 6.1 | 23.0 | 21.4 |
| 6-10 | 5.9 | | | 11.5 | 28.1 | 27.3 | 32.2 | 29.3 |
| 11-15 | 11.8 | | | 19.2 | 12.5 | 0.0 | 25.3 | 15.0 |
| 16-20 | 41.2 | | | 26.9 | 19.4 | 6.1 | 17.2 | 17.1 |
| 21-25 | 5.9 | | | 3.8 | 13.8 | 12.1 | 2.3 | 10.0 |
| 25+ | 0.0 | | | 0.0 | 2.5 | 48.5 | 0.0 | 7.1 |
| <i>N</i> | <i>17</i> | <i>1</i> | <i>8</i> | <i>26</i> | <i>160</i> | <i>33</i> | <i>87</i> | <i>280</i> |

¹Expressed in percentages

Visitors were asked on both contact cards (launch and take-out) to specify the number of days they had spent or planned to spend on the river during their trip (Table 14). On average, visitors on both segments of the river indicated spending anywhere from 1 to 5 days on the river. On the Scenic segment, commercial floaters spent the most days on the river during their trip (4.9), followed closely by private floaters (4.7). Private power users spent roughly 2.5 days on the river during a trip, while commercial power users spent approximately 1.5 days on the river. For the power boaters on the Scenic segment, the means are affected by a large number of day users, 45% of private power users and 77% of commercial power users.

On the Wild segment, private floaters spent the most days on the river during a trip (3.5), while private power users and commercial floaters spent roughly three days on the river during a trip. Commercial power users spent approximately one day on the river during a trip, with only 24% taking overnight trips. Interestingly, commercial power users in the secondary season on both the Scenic and Wild segments spent, on average, nearly 2 days on the river, reflecting that many visitors (32% Scenic, 37% Wild) stay overnight during their trip. Also, private floaters during the NMW spent more days on average on the river than during the other seasons.

Table 14 Mean Number of Days Spent on the River, by User Group and Season

| Number of day spent on the river during a trip | Scenic | | | | Wild | | | |
|--|---------|-----------|------|-------------|---------|-----------|------|-------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Private power | 2.14 | 2.63 | 3.30 | 2.39 | 3.36 | 3.02 | 2.36 | 3.13 |
| <i>N</i> | 230 | 133 | 30 | 393 | 61 | 29 | 14 | 104 |
| Commercial power | 1.12 | 1.86 | | 1.49 | 1.13 | 1.63 | 1.0 | 1.18 |
| <i>N</i> | 113 | 109 | 2 | 224 | 180 | 38 | 45 | 263 |
| Private float | 3.93 | 4.09 | 6.25 | 4.71 | 3.16 | 3.28 | 4.05 | 3.46 |
| <i>N</i> | 15 | 11 | 12 | 38 | 258 | 46 | 145 | 449 |
| Commercial float | 4.88 | | | 4.92 | 2.88 | 2.73 | 3.52 | 3.06 |
| <i>N</i> | 17 | 1 | 8 | 26 | 160 | 33 | 86 | 279 |

Expectations (Launch Card) and Experiences (Take Out Card):

On the launch contact card, visitors were asked to indicate how much they *expected* to have several feelings or experiences during their trip on the river, while on the take-out contact card, they were asked to indicate how much they had *actually experienced* those feeling or experiences. On a 7-point scale with 1 indicating “not at all” and 7 indicating “very much,” visitors rated their expectations and experiences.

Overall, private power users on both the Scenic and Wild segments had at least moderate expectations that each of the feelings or experiences would occur during their trip (Table 15A). Many of the feelings and experiences had means of at least 4.0, suggesting a moderate degree of expectation. On the Scenic segment, private power users had the highest expectations for time with friends and family (6.16), and the lowest expectations for learning about historic/cultural sites (4.16). There were few differences in the ratings of the different experiences across seasons on the Scenic segment for this group.

On the Wild segment, private power users not only had the highest expectations for time with friends and family (6.47), but also for outstanding fishing opportunities (6.04). Nearly all of the items had at least a moderate level of expectation, with means above 4.5, with the exception of learning about historic/cultural sites (3.98). Although expectations were generally similar across seasons, the few private power users in the secondary season on the Wild segment ranked relaxation and peace and quiet as more likely than did boaters in the primary seasons.

Table 15A Private Power Boaters’ *Expectations* for Experiences¹

| Private power | Scenic | | | | Wild | | | |
|--|---------|-----------|------|-------------|---------|-----------|------|-------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Learning about historic/cultural sites | 4.25 | 3.97 | 3.92 | 4.16 | 4.09 | 3.50 | 4.10 | 3.98 |
| Solitude | 4.89 | 4.88 | 4.65 | 4.87 | 4.62 | 4.90 | 4.89 | 4.71 |
| Feeling of remoteness | 4.94 | 4.95 | 4.44 | 4.90 | 4.66 | 5.10 | 4.90 | 4.78 |
| Closeness to nature | 5.21 | 5.05 | 4.96 | 5.15 | 5.22 | 5.40 | 5.40 | 5.29 |
| Mental relaxation | 5.67 | 5.41 | 5.54 | 5.60 | 5.58 | 6.33 | 5.40 | 5.67 |
| Peace and Quiet | 5.17 | 5.08 | 4.96 | 5.13 | 4.97 | 5.70 | 5.30 | 5.16 |
| Outstanding fishing opportunities | 5.37 | 6.27 | 6.00 | 5.65 | 6.00 | 6.10 | 6.10 | 6.04 |
| Sense of challenge | 4.92 | 5.33 | 5.46 | 5.06 | 5.58 | 5.20 | 5.20 | 5.45 |

| Private power | Scenic | | | | Wild | | | |
|-------------------------------------|-------------------|-----------------|-----------------|-------------------|-----------------|-----------|-----------|-----------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Time with friends and family | 6.19 | 6.00 | 6.41 | 6.16 | 6.46 | 6.50 | 6.50 | 6.47 |
| Being in a natural environment | 5.70 | 5.48 | 5.92 | 5.66 | 5.53 | 5.60 | 6.10 | 5.64 |
| Seeing unique geological formations | 5.24 | 4.99 | 5.36 | 5.19 | 4.53 | 4.80 | 4.70 | 4.61 |
| <i>N</i> | <i>230 to 237</i> | <i>79 to 85</i> | <i>23 to 27</i> | <i>321 to 329</i> | <i>34 to 37</i> | <i>10</i> | <i>10</i> | <i>54 to 57</i> |

[†] 7-point scale: 1=not at all; 7=very much

Private power users at take-outs rated actual feelings and experiences at similar levels as expectations (Table 15B). Overall, these users on both segments experienced each item at least moderately. Users on both the Scenic and Wild segments rated experiences the highest for time with friends and family (6.32 on Wild, 6.23 on Scenic) and being in a natural environment (6.16 on Wild, 6.21 on Scenic). Private power users on the Wild segment also felt that they had experienced a high degree of mental relaxation and fishing opportunities (both 5.86) and seeing unique geological features (5.94), while users on the Scenic segment felt they had experienced geologic feature to a slightly less degree (5.77). Private power users on the Scenic segment felt they had least experienced historical/cultural sites (3.84), similar to those on the Wild segment who rated experience with historical/cultural sites at 3.57. Although actual experiences (Table 15B) were quite similar to expectations (Table 15A), there were a few cases where expectations were either exceeded or not met. On the Scenic segment, feelings of relaxation, peace/quiet, being in a natural environment, and seeing unique geological formations all exceeded expectations substantially, but learning about historical/cultural sites fell short of expectations.

On the Wild segment, like the Scenic, historical/cultural sites fell short of expectations. Experiencing solitude exceeded expectations on the Scenic segment, but fell short of expectations on the Wild segment. Relaxation and being in a natural environment exceeded expectations, and seeing unique geological features far exceeded expectations.

Table 15B Private Power Boaters' *Actual* Experiences¹

| Private Power | Scenic | | | | Wild | | | |
|--|-----------|-----------------|----------|-----------------|-----------------|-----------|---------------|-----------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Learning about historic/cultural sites | 3.91 | 3.77 | | 3.84 | 4.07 | 2.75 | | 3.57 |
| Solitude | 4.91 | 5.13 | | 5.03 | 4.84 | 3.95 | | 4.41 |
| Feeling of remoteness | 5.30 | 5.22 | | 5.21 | 4.81 | 4.21 | | 4.60 |
| Closeness to nature | 6.00 | 5.47 | | 5.52 | 5.56 | 5.15 | | 5.45 |
| Mental relaxation | 6.20 | 6.12 | | 6.06 | 6.04 | 5.68 | | 5.86 |
| Peace and Quiet | 6.20 | 5.67 | | 5.71 | 5.33 | 5.05 | | 5.18 |
| Outstanding fishing opportunities | 5.70 | 5.51 | | 5.52 | 6.37 | 5.40 | | 5.86 |
| Sense of challenge | 4.70 | 5.28 | | 5.19 | 5.70 | 5.35 | | 5.55 |
| Time with friends and family | 6.18 | 6.33 | | 6.23 | 6.48 | 6.11 | | 6.32 |
| Being in a natural environment | 6.00 | 6.27 | | 6.21 | 6.15 | 6.15 | | 6.16 |
| Seeing unique geological formations | 6.10 | 5.71 | | 5.77 | 5.93 | 5.90 | | 5.94 |
| <i>N</i> | <i>11</i> | <i>51 to 55</i> | <i>4</i> | <i>65 to 70</i> | <i>25 to 27</i> | <i>20</i> | <i>3 to 4</i> | <i>49 to 51</i> |

¹ 7-point scale: 1=not at all; 7=very much

Generally, commercial power users on both segments held moderate to high expectations for several feelings and experiences (Table 15C). Commercial power users on the Scenic segment had the highest expectations for being in a natural environment (6.11), seeing unique geologic features (5.89), and time with friends and family (5.87). They had the least expectations for fishing opportunities (2.86), experiencing solitude (3.82), and sense of challenge (3.99). Those commercial power boaters using the river in the secondary season expected more challenge and better fishing than those in the primary season.

Commercial power users on the Wild segment had the highest expectations for being in a natural environment (5.92), seeing unique geological features (5.85), and time with friends and family (5.68). They had the least expectations for outstanding fishing opportunities (2.50), sense of challenge (3.54), and solitude (3.94). Commercial power users in the secondary season on the Wild segment had a substantially higher expectation of solitude (4.58), peace and quiet (5.15), outstanding fishing opportunities (4.45), and mental relaxation (5.73) than those in the other seasons.

Table 15C Commercial Power Boaters' *Expectations* for Experiences¹

| Commercial power | Scenic | | | | Wild | | | |
|--|----------|-----------|-----|-------------|------------|-----------|----------|-------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Learning about historic/cultural sites | 5.53 | 5.40 | | 5.43 | 5.17 | 4.76 | 4.58 | 4.99 |
| Solitude | 3.71 | 3.92 | | 3.82 | 3.79 | 4.58 | 3.98 | 3.94 |
| Feeling of remoteness | 5.41 | 4.54 | | 5.00 | 4.49 | 5.13 | 4.30 | 4.54 |
| Closeness to nature | 5.62 | 5.69 | | 5.64 | 5.39 | 6.00 | 5.43 | 5.48 |
| Mental relaxation | 5.40 | 4.72 | | 5.11 | 4.85 | 5.73 | 4.73 | 4.95 |
| Peace and Quiet | 4.71 | 4.60 | | 4.68 | 4.21 | 5.15 | 4.36 | 4.38 |
| Outstanding fishing opportunities | 2.32 | 3.35 | | 2.86 | 2.19 | 4.45 | 2.13 | 2.50 |
| Sense of challenge | 3.76 | 4.18 | | 3.99 | 3.44 | 3.91 | 3.56 | 3.54 |
| Time with friends and family | 5.76 | 6.04 | | 5.87 | 5.63 | 5.53 | 5.94 | 5.68 |
| Being in a natural environment | 6.19 | 6.02 | | 6.11 | 5.89 | 5.94 | 6.00 | 5.92 |
| Seeing unique geological formations | 5.95 | 5.85 | | 5.89 | 5.97 | 5.38 | 5.76 | 5.85 |
| N | 59 to 63 | 49 to 55 | 2 | 110 to 120 | 136 to 151 | 31 to 34 | 48 to 51 | 215 to 234 |

¹ 7-point scale: 1=not at all; 7=very much

Overall, commercial power users on both the Scenic and Wild segments rated their actual experiences as moderately to very high (Table 15D). On the Scenic segment, users rated being in a natural environment (6.02), seeing unique geological features (5.96), and time with friends and family (5.83) as most intensely experienced. Users in the secondary season felt they had experienced fishing opportunities (5.00) and a sense of challenge (4.78) substantially more than those in the primary season.

On the Wild segment, commercial power users most experienced geological features (6.22), being in a natural environment (6.12), and time with friends and family (5.74). They reported least experiencing fishing opportunities (3.19) and a sense of challenge (3.79). Compared to private power users, commercial power users on both segments were more likely to have experiences that closely matched their expectations. On the Scenic segment, learning about historical/cultural sites and feelings of remoteness fell short of expectations, and solitude and closeness to nature fell slightly short of expectations on the Wild segment. On the other hand, fishing substantially exceeded expectations for commercial power users on both segments.

Table 15D Commercial Power Boaters' *Actual* Experiences¹

| Commercial Power | Scenic | | | | Wild | | | |
|--|-----------------|-----------------|----------|------------------|-----------------|-----------|----------|-----------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Learning about historic/cultural sites | 4.89 | 4.55 | | 4.78 | 5.34 | | | 5.15 |
| Solitude | 4.07 | 4.36 | | 4.29 | 3.71 | | | 3.81 |
| Feeling of remoteness | 4.68 | 4.94 | | 4.82 | 4.60 | | | 4.71 |
| Closeness to nature | 5.48 | 5.59 | | 5.56 | 5.23 | | | 5.24 |
| Mental relaxation | 5.26 | 5.48 | | 5.44 | 5.00 | | | 5.17 |
| Peace and Quiet | 4.66 | 5.00 | | 4.86 | 4.30 | | | 4.53 |
| Outstanding fishing opportunities | 2.97 | 5.00 | | 4.22 | 2.92 | | | 3.19 |
| Sense of challenge | 3.53 | 4.78 | | 4.24 | 3.68 | | | 3.79 |
| Time with friends and family | 5.83 | 5.82 | | 5.83 | 5.65 | | | 5.74 |
| Being in a natural environment | 5.94 | 6.05 | | 6.02 | 6.07 | | | 6.12 |
| Seeing unique geological formations | 6.09 | 5.84 | | 5.96 | 6.26 | | | 6.22 |
| <i>N</i> | <i>37 to 54</i> | <i>51 to 56</i> | <i>0</i> | <i>84 to 103</i> | <i>36 to 42</i> | <i>7</i> | <i>0</i> | <i>42 to 49</i> |

¹ 7-point scale: 1=not at all; 7=very much

In general, private floaters on both river segments had relatively high expectations for each feeling and experience, with means of at least 4.0 (Table 15E). On the Scenic segment, floaters had the highest expectations for time with friends and family (6.23), being in a natural environment (6.19), mental relaxation (6.19), and closeness to nature (6.00).

On the Wild segment, private floaters had the highest expectations for time with friends and family (6.25), followed by being in a natural environment (6.09). They had the least expectations for learning about historic/cultural sites (4.26) and outstanding fishing opportunities (4.29). Private floaters during the secondary season on the Wild segment in the secondary season had much higher expectations for many of the feelings and experiences than those in the summer.

Table 15E Private Floaters' *Expectations* for Experiences¹

| Private float | Scenic | | | | Wild | | | |
|--|-----------------|-----------|-----------|-------------|-------------------|-----------------|-----------------|-------------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Learning about historic/cultural sites | 4.57 | | 5.18 | 4.48 | 4.15 | 4.97 | 4.19 | 4.26 |
| Solitude | 4.93 | | 5.82 | 5.23 | 5.04 | 5.82 | 5.13 | 5.16 |
| Feeling of remoteness | 5.57 | | 5.73 | 5.52 | 5.28 | 5.91 | 5.37 | 5.38 |
| Closeness to nature | 6.21 | | 6.00 | 6.00 | 5.68 | 6.37 | 5.62 | 5.73 |
| Mental relaxation | 6.00 | | 6.27 | 6.19 | 5.57 | 6.32 | 5.91 | 5.75 |
| Peace and Quiet | 5.71 | | 6.18 | 5.81 | 5.33 | 6.29 | 5.73 | 5.55 |
| Outstanding fishing opportunities | 4.15 | | 5.64 | 5.07 | 4.48 | 4.00 | 3.99 | 4.29 |
| Sense of challenge | 5.64 | | 5.82 | 5.48 | 5.36 | 5.50 | 5.28 | 5.35 |
| Time with friends and family | 6.36 | | 6.36 | 6.23 | 6.20 | 6.35 | 6.33 | 6.25 |
| Being in a natural environment | 6.36 | | 6.09 | 6.19 | 6.00 | 6.59 | 6.07 | 6.09 |
| Seeing unique geological formations | 5.93 | | 6.00 | 5.90 | 5.29 | 5.59 | 5.20 | 5.30 |
| <i>N</i> | <i>13 to 14</i> | <i>6</i> | <i>11</i> | <i>31</i> | <i>183 to 188</i> | <i>32 to 34</i> | <i>82 to 84</i> | <i>301 to 305</i> |

¹ 7-point scale: 1=not at all; 7=very much

Due to the small number of private floaters contacted on the Scenic segment, we cannot make conclusive statements about actual experiences. On the Wild segment, private floaters generally felt that experiences were being met at least moderately to highly (Table 15F). They felt they had most experienced being in a natural environment (6.23), time with friends and family (6.22), and closeness to nature (5.99). They felt they had least experienced learning about historic/cultural sites (4.05) and opportunities for outstanding fishing opportunities (4.44), though these are still moderately high levels. For all items, intensity of the actual experiences closely matched expectations.

Table 15F Private Floaters' *Actual* Experiences¹

| Private Float | Scenic | | | | Wild | | | |
|--|---------|-----------|-----|-------------|---------|-----------|------|-------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Learning about historic/cultural sites | | | | | 4.15 | 4.64 | 3.84 | 4.05 |
| Solitude | | | | | 5.33 | 5.58 | 4.93 | 5.18 |
| Feeling of remoteness | | | | | 5.48 | 5.58 | 5.51 | 5.50 |
| Closeness to nature | | | | | 6.05 | 6.00 | 5.93 | 5.99 |
| Mental relaxation | | | | | 5.82 | 6.00 | 5.84 | 5.84 |
| Peace and Quiet | | | | | 5.81 | 5.67 | 5.79 | 5.79 |
| Outstanding fishing opportunities | | | | | 4.08 | 3.92 | 4.96 | 4.44 |

| Private Float | Scenic | | | | Wild | | | |
|-------------------------------------|----------|-----------|----------|-------------|-----------------|-----------------|-----------------|-------------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Sense of challenge | | | | | 5.01 | 5.55 | 5.10 | 5.08 |
| Time with friends and family | | | | | 6.13 | 5.64 | 6.41 | 6.22 |
| Being in a natural environment | | | | | 6.23 | 6.33 | 6.23 | 6.23 |
| Seeing unique geological formations | | | | | 5.89 | 5.00 | 5.52 | 5.67 |
| <i>N</i> | <i>1</i> | <i>4</i> | <i>3</i> | <i>8</i> | <i>78 to 84</i> | <i>11 to 12</i> | <i>30 to 31</i> | <i>157 to 167</i> |

¹ 7-point scale: 1=not at all; 7=very much

Overall, commercial floaters on both segments had at least moderate (4.0 or greater) expectations for all experiences except fishing (Table 15G). Commercial floaters on the Scenic segment had the highest expectations for being in a natural environment (5.96) and experiencing peace and quiet (5.79), and the least expectations for fishing opportunities (3.35).

Commercial floaters on the Wild segment had the highest expectations for being in a natural environment (6.01) and time with friends and family (5.90). They had the least expectations for experiencing outstanding fishing opportunities (3.34). Interestingly, commercial floaters in the secondary season had lower expectations for nearly every item than those in the other seasons, with the exception of expecting a sense of challenge. However, it should be noted that the sample sizes for the secondary season are small.

Table 15G Commercial Floaters' *Expectations* for Experiences¹

| Commercial float | Scenic | | | | Wild | | | |
|--|---------|-----------|-----|-------------|---------|-----------|------|-------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Learning about historic/cultural sites | 4.47 | | | 4.46 | 4.61 | 4.24 | 4.57 | 4.63 |
| Solitude | 4.65 | | | 4.37 | 4.54 | 3.50 | 4.56 | 4.45 |
| Feeling of remoteness | 5.18 | | | 4.75 | 4.94 | 3.94 | 5.31 | 4.94 |
| Closeness to nature | 5.59 | | | 5.38 | 5.57 | 4.97 | 5.92 | 5.66 |
| Mental relaxation | 6.12 | | | 5.88 | 5.34 | 4.52 | 5.91 | 5.48 |
| Peace and Quiet | 5.94 | | | 5.79 | 4.97 | 4.16 | 5.42 | 5.17 |
| Outstanding fishing opportunities | 2.88 | | | 3.35 | 3.63 | 2.94 | 3.73 | 3.34 |

| Commercial float | Scenic | | | | Wild | | | |
|-------------------------------------|----------|-----------|-----|-------------|------------|-----------|----------|-------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Sense of challenge | 5.18 | | | 5.29 | 4.72 | 5.47 | 5.42 | 5.18 |
| Time with friends and family | 5.88 | | | 5.83 | 5.98 | 5.67 | 6.02 | 5.90 |
| Being in a natural environment | 6.12 | | | 5.96 | 5.94 | 5.48 | 6.30 | 6.01 |
| Seeing unique geological formations | 5.24 | | | 5.04 | 5.49 | 5.06 | 5.18 | 5.31 |
| <i>N</i> | 16 to 17 | 0 | 7 | 24 | 119 to 120 | 32 to 33 | 58 to 61 | 210 to 215 |

¹ 7-point scale: 1=not at all; 7=very much

The small number of commercial floaters contacted on the Scenic segment makes conclusive statements impossible for their actual experiences. Commercial floaters on the Wild segment generally felt that their expectations were being met during their river trip (Table 15H). They felt they had most experienced being in a natural environment (6.33), time with friends and family (6.19), closeness to nature (5.88), and mental relaxation (5.81). They least experienced fishing opportunities (4.36), though this is still a relatively high rating for experience. This group was most likely to score the intensity of actual experiences as consistently higher than expected, with the means for actual experiences more than 0.25 higher than expectations. This was especially true for learning about historical/cultural sites and fishing.

Table 15H Commercial Floaters' *Actual* Experiences¹

| Commercial Float | Scenic | | | | Wild | | | |
|--|---------|-----------|-----|-------------|----------|-----------|----------|-------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Learning about historic/cultural sites | | | | | 5.22 | | 5.32 | 5.19 |
| Solitude | | | | | 4.59 | | 4.97 | 4.78 |
| Feeling of remoteness | | | | | 4.90 | | 5.67 | 5.18 |
| Closeness to nature | | | | | 5.61 | | 6.39 | 5.88 |
| Mental relaxation | | | | | 5.51 | | 6.35 | 5.81 |
| Peace and Quiet | | | | | 5.15 | | 5.97 | 5.44 |
| Outstanding fishing opportunities | | | | | 4.09 | | 5.36 | 4.36 |
| Sense of challenge | | | | | 4.85 | | 5.26 | 5.13 |
| Time with friends and family | | | | | 6.09 | | 6.42 | 6.19 |
| Being in a natural environment | | | | | 6.19 | | 6.61 | 6.33 |
| Seeing unique geological formations | | | | | 5.83 | | 6.13 | 5.63 |
| <i>N</i> | 0 | 1 | 1 | 7 | 47 to 54 | 5 | 28 to 31 | 80 to 90 |

¹ 7-point scale: 1=not at all; 7=very much

Comparing the different user groups in expectations revealed several statistically significant differences. Most expectation items showed significant differences among user groups on the Scenic segment (Table 15I). Commercial power boaters had significantly higher expectations for learning about historic/cultural sites than private power users, and they had significantly lower expectations for outstanding fishing and challenge than both private power users and private floaters. Both private power users and private floaters had significantly higher expectations for solitude than did commercial power users, and private floaters rated their expectations for mental relaxation and peace/quiet significantly higher than both private and commercial power users. Figure 1 graphically displays this information.

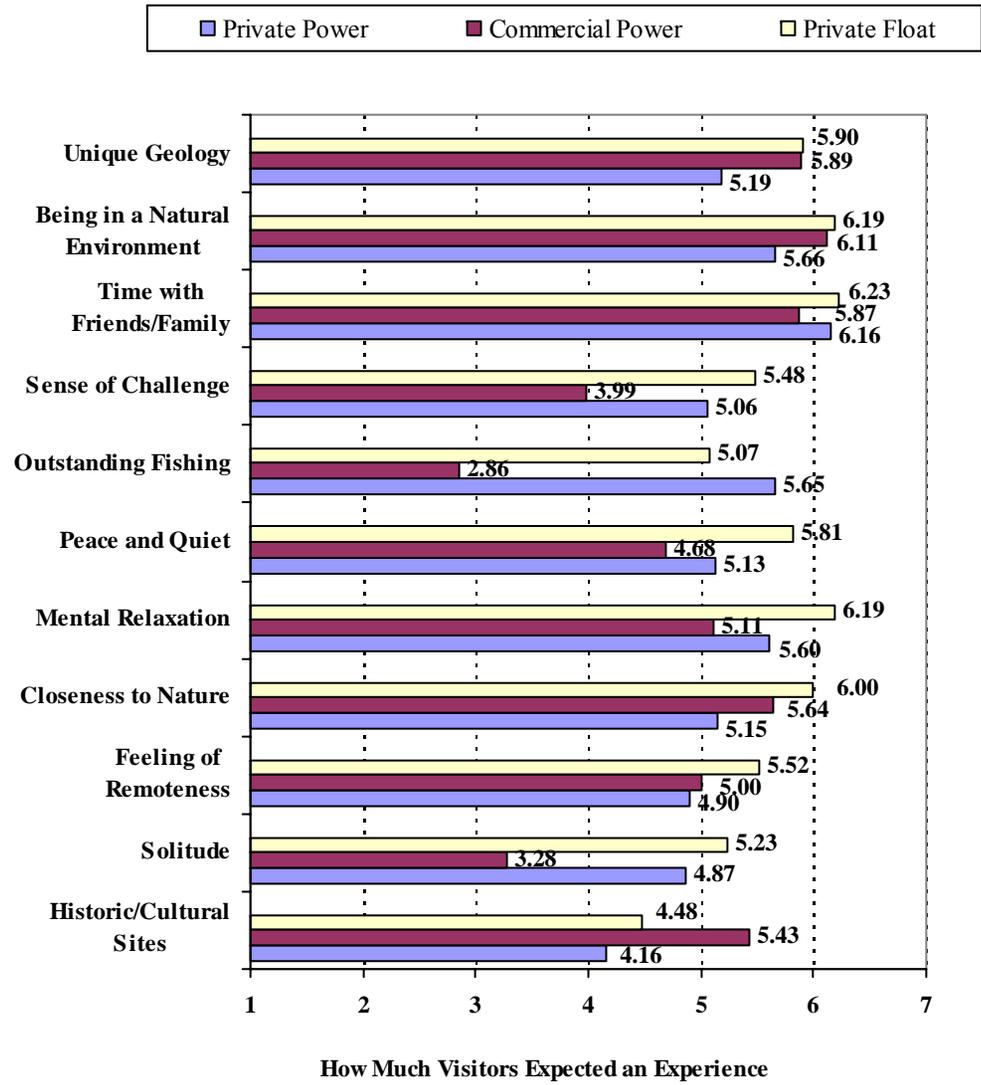
Table 15I Differences in User Groups' *Expectations* for Experiences on the Scenic Section¹

| <i>Expectations Scenic Section</i> | Private Power | Commercial Power | Private Float | Commercial Float | <i>p-value</i> |
|---|--------------------------|-----------------------------|--------------------------|-----------------------------|----------------|
| Learning about historic/cultural sites | 4.16 ^a | 5.43 ^b | 4.48 ^{ab} | | <.0005 |
| Solitude | 4.87 ^b | 3.82 ^a | 5.23 ^b | | <.0005 |
| Feeling of remoteness | 4.90 | 5.00 | 5.52 | | <i>ns</i> |
| Closeness to nature | 5.15 ^a | 5.64 ^{ab} | 6.00 ^b | | .001 |
| Mental relaxation | 5.60 ^{ab} | 5.11 ^a | 6.19 ^b | | .001 |
| Peace and quiet | 5.13 ^{ab} | 4.68 ^a | 5.81 ^b | | .002 |
| Outstanding fishing opportunities | 5.65 ^b | 2.86 ^a | 5.07 ^b | | <.0005 |
| Sense of challenge | 5.06 ^b | 3.99 ^a | 5.48 ^b | | <.0005 |
| Time with friends and family | 6.16 | 5.87 | 6.23 | | <i>ns</i> |
| Being in a natural environment | 5.66 ^a | 6.11 ^b | 6.19 ^b | | .004 |
| Seeing unique geological formations | 5.19 ^a | 5.89 ^b | 5.90 ^b | | <.0005 |
| <i>N</i> | 321 to 329 | 110 to 120 | 31 | 24 | |

¹ns=not significant

Superscripts indicate differences among user types statistically significant at alpha =.05

Figure 1. Differences in User Groups' Expectations for Experiences on the Scenic Section



On the Wild segment, only two experience items had expectations that did not show significant differences among user groups, with all groups having similar expectations for closeness to nature and being in a natural environment (Table 15J). Commercial power users had significantly lower expectations for experiencing peace/quiet and sense of challenge than all other user group. Interestingly, all user groups differed significantly in their expectations for outstanding fishing opportunities, with private power users having the highest expectations and commercial power users having the lowest expectations. Private power users had significantly lower expectations for seeing unique geology than all other user groups, and had significantly lower expectations for historic/cultural sites than both commercial power users and commercial floaters. Commercial power users had significantly lower expectations for mental relaxation than both private power user and private floaters. Private floaters had significantly higher expectations for feelings of remoteness than commercial power users and higher expectations for solitude than both commercial power users and commercial floaters. Figure 2 graphically displays this information.

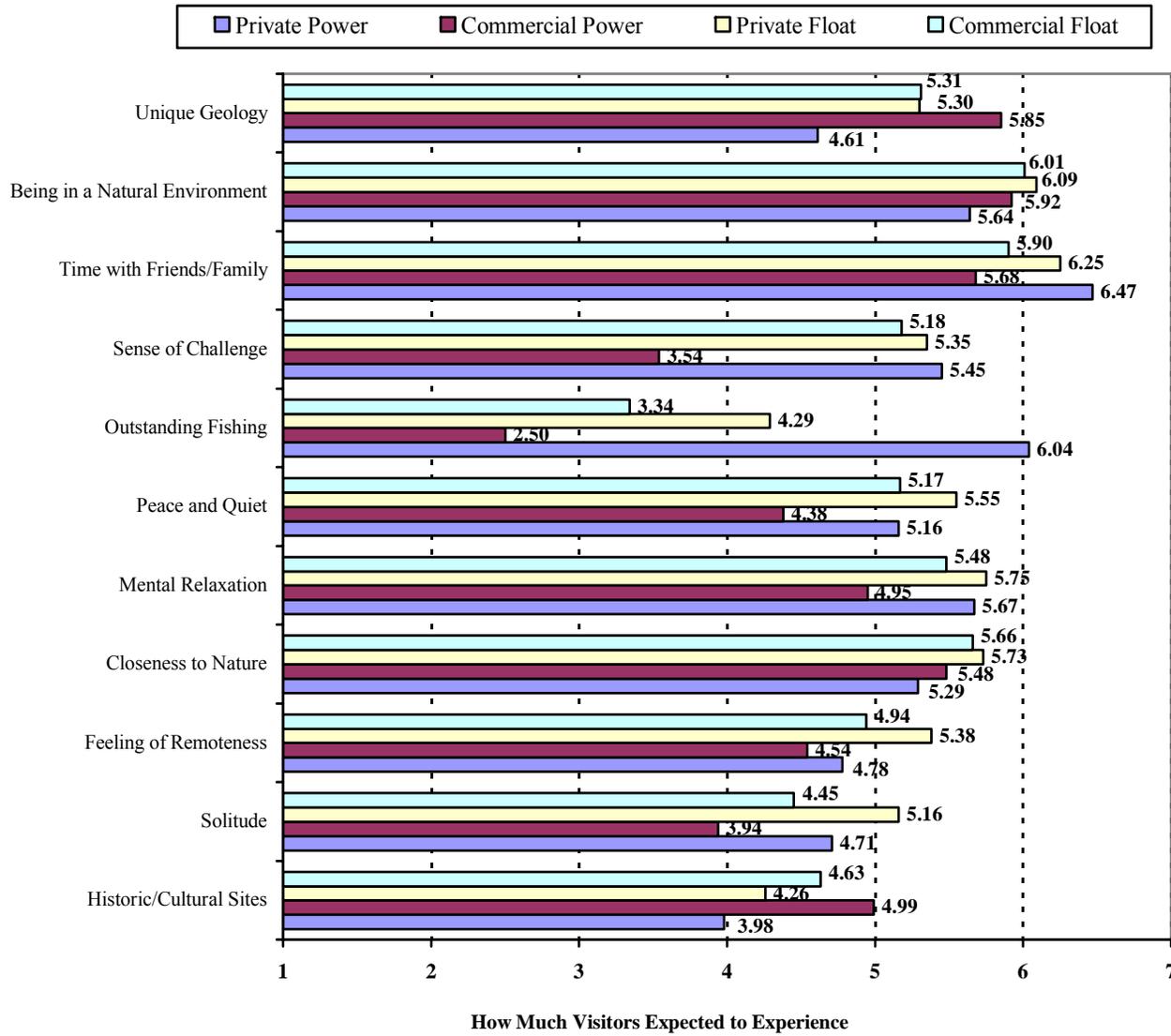
Table 15J Differences in User Groups' *Expectations* for Experiences on the Wild Section¹

| <i>Expectations Wild Section</i> | Private Power | Commercial Power | Private Float | Commercial Float | <i>p-value</i> |
|---|--------------------------|-----------------------------|--------------------------|-----------------------------|----------------|
| Learning about historic/cultural sites | 3.98 ^a | 4.99 ^c | 4.26 ^{ab} | 4.63 ^{bc} | <.0005 |
| Solitude | 4.71 ^{bc} | 3.94 ^a | 5.16 ^c | 4.45 ^{ab} | <.0005 |
| Feeling of remoteness | 4.78 ^{ab} | 4.54 ^a | 5.38 ^b | 4.94 ^{ab} | <.0005 |
| Closeness to nature | 5.29 | 5.48 | 5.73 | 5.66 | <i>ns</i> |
| Mental relaxation | 5.67 ^b | 4.95 ^a | 5.75 ^b | 5.48 ^{ab} | <.0005 |
| Peace and quiet | 5.16 ^b | 4.38 ^a | 5.55 ^b | 5.17 ^b | <.0005 |
| Outstanding fishing opportunities | 6.04 ^d | 2.50 ^a | 4.29 ^c | 3.34 ^b | <.0005 |
| Sense of challenge | 5.45 ^b | 3.54 ^a | 5.35 ^b | 5.18 ^b | <.0005 |
| Time with friends and family | 6.47 ^c | 5.68 ^a | 6.25 ^{bc} | 5.90 ^{ab} | <.0005 |
| Being in a natural environment | 5.64 | 5.92 | 6.09 | 6.01 | <i>ns</i> |
| Seeing unique geological formations | 4.61 ^a | 5.85 ^b | 5.30 ^b | 5.31 ^b | <.0005 |
| <i>N</i> | 54 to 57 | 215 to 234 | 301 to 305 | 210 to 215 | |

¹ ns=not significant

Superscripts indicate differences among user types statistically significant at alpha =.05

Figure 2. Differences in User Groups' Expectations for Experiences on the Wild Section



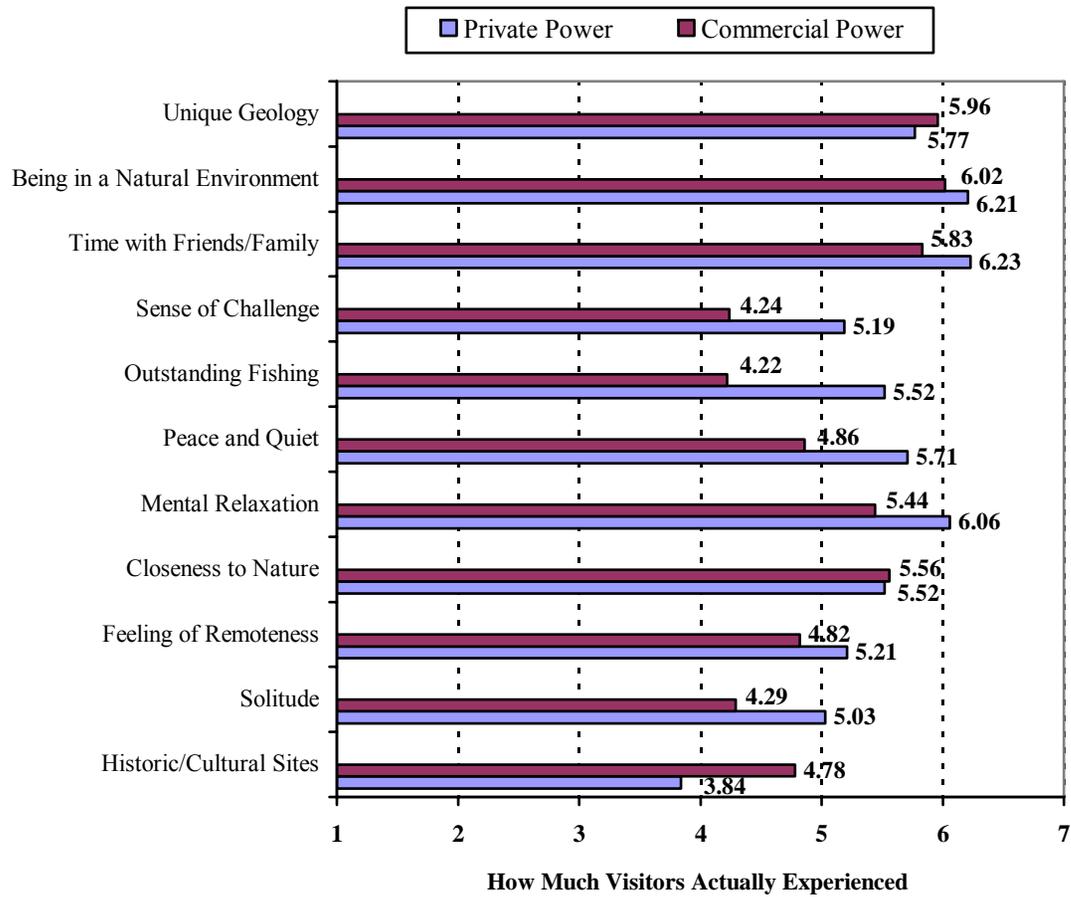
On the Scenic segment, some significant differences in actual experiences between private power and commercial power users emerged (Table 15K). For six of the seven experiences that had significant differences, private power users rated their actual experiences higher than commercial power users. The only exception to this is that commercial power users rated learning about historic/cultural sites higher than private power users. Figure 3 graphically displays this information.

Table 15K Differences in User Groups' *Actual* Experiences on the Scenic Section¹

| <i>Actual Experiences Scenic Section</i> | Private Power | Commercial Power | Private Float | Commercial Float | <i>p-value</i> |
|--|----------------------|-------------------------|----------------------|-------------------------|----------------|
| Learning about historic/cultural sites | 3.84 | 4.78 | | | .002 |
| Solitude | 5.03 | 4.29 | | | .004 |
| Feeling of remoteness | 5.21 | 4.82 | | | <i>ns</i> |
| Closeness to nature | 5.52 | 5.56 | | | <i>ns</i> |
| Mental relaxation | 6.06 | 5.44 | | | .002 |
| Peace and quiet | 5.71 | 4.86 | | | <.0005 |
| Outstanding fishing opportunities | 5.52 | 4.22 | | | <.0005 |
| Sense of challenge | 5.19 | 4.24 | | | <.0005 |
| Time with friends and family | 6.23 | 5.83 | | | .040 |
| Being in a natural environment | 6.21 | 6.02 | | | <i>ns</i> |
| Seeing unique geological formations | 5.77 | 5.96 | | | <i>ns</i> |
| <i>N</i> | 65 to 70 | 84 to 103 | 7 | 7 | |

¹ns=not significant

Figure 3. Differences in User Groups' Actual Experiences on the Scenic Section



On the Wild segment, all but one experience item showed significant differences among user groups (Table 15L). As on the Scenic segment, commercial power users on the Wild segment rated their actual experiences of learning about historic/cultural sites significantly higher than private power users, but rated their experiences of solitude and time with family and friends significantly lower than private power boaters. Commercial power users' experiences of peace/quiet and closeness to nature were significantly lower than both private and commercial floaters, while experiencing challenges and mental relaxation were significantly lower than all other user groups. However, commercial power users rated experiencing unique geology significantly higher than both private and commercial floaters. Private floaters rated feelings of remoteness significantly higher than both private and commercial power users. Private power users rated fishing opportunities significantly higher than all other user groups. Figure 4 graphically represents this information.

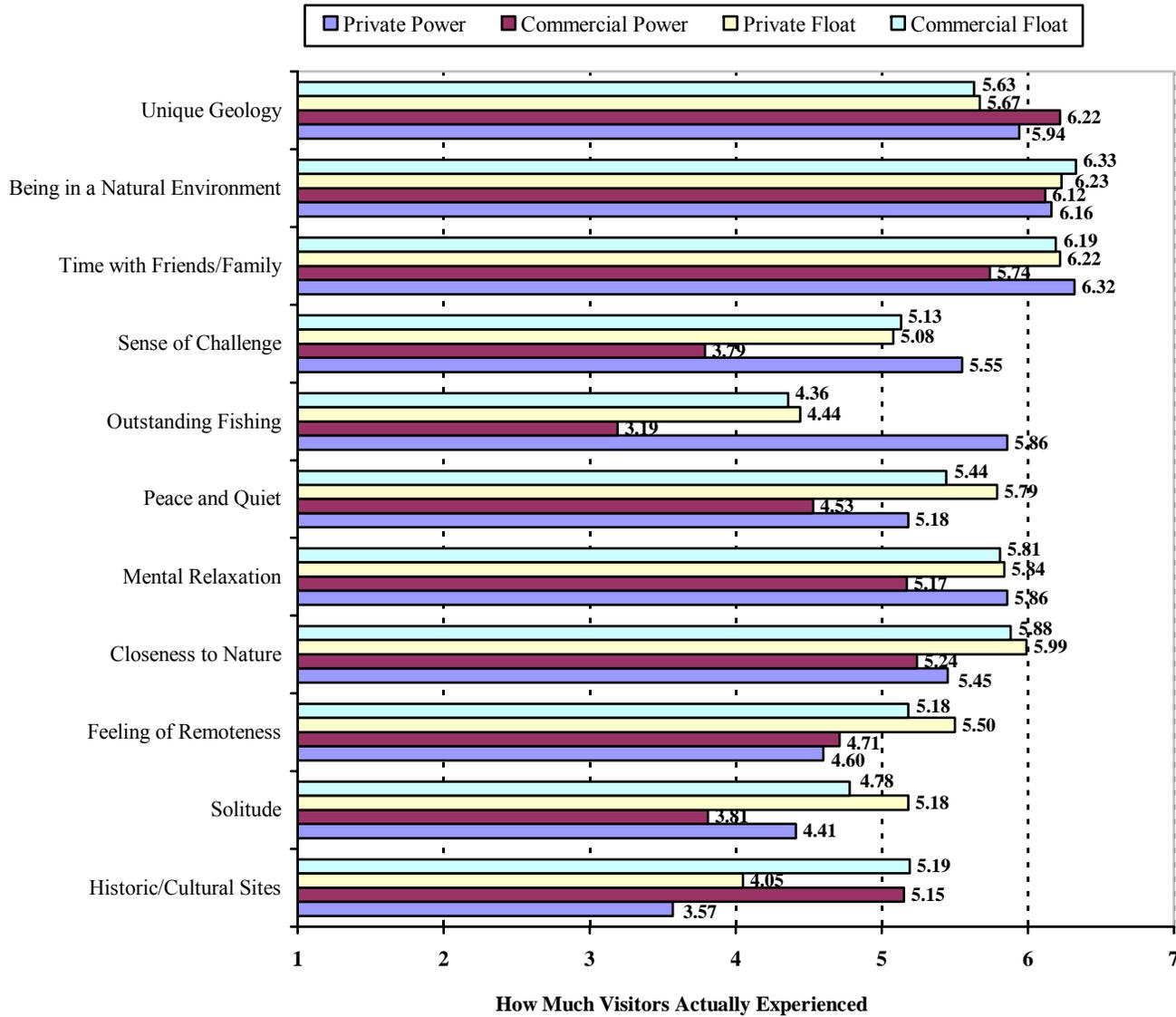
Table 15L Differences in User Groups' *Actual* Experiences on the Wild Section¹

| <i>Actual Experiences Wild Section</i> | Private Power | Commercial Power | Private Float | Commercial Float | <i>p-value</i> |
|--|--------------------------|-----------------------------|--------------------------|-----------------------------|----------------|
| Learning about historic/cultural sites | 3.57 ^a | 5.15 ^b | 4.05 ^{ab} | 5.19 ^b | .001 |
| Solitude | 4.41 ^{ab} | 3.81 ^a | 5.18 ^b | 4.78 ^b | <.0005 |
| Feeling of remoteness | 4.60 ^a | 4.71 ^a | 5.50 ^b | 5.18 ^{ab} | <.0005 |
| Closeness to nature | 5.45 ^{ab} | 5.24 ^a | 5.99 ^b | 5.88 ^b | <.0005 |
| Mental relaxation | 5.86 ^b | 5.17 ^a | 5.84 ^b | 5.81 ^b | .020 |
| Peace and Quiet | 5.18 ^{ab} | 4.53 ^a | 5.79 ^b | 5.44 ^b | <.0005 |
| Outstanding fishing opportunities | 5.86 ^c | 3.19 ^a | 4.44 ^b | 4.36 ^b | <.0005 |
| Sense of challenge | 5.55 ^b | 3.79 ^a | 5.08 ^b | 5.13 ^b | <.0005 |
| Time with friends and family | 6.32 ^b | 5.74 ^a | 6.22 ^{ab} | 6.19 ^{ab} | .050 |
| Being in a natural environment | 6.16 | 6.12 | 6.23 | 6.33 | <i>ns</i> |
| Seeing unique geological formations | 5.94 ^{ab} | 6.22 ^b | 5.67 ^a | 5.63 ^a | .030 |
| <i>N</i> | 49 to 51 | 42 to 49 | 157 to 167 | 80 to 90 | |

¹ ns=not significant

Superscripts indicate differences among user types statistically significant at alpha =.05

Figure 4. Differences in User Groups' Actual Experiences on the Wild Section



Social Conditions (*Take Out Card*)

Visitors were asked to indicate the approximate number of float parties they had seen on a typical day during their river trip (Table 16A).

Commercial power users on the Scenic segment indicated seeing approximately 10 float parties, while private power users saw approximately 6 float parties. Commercial power boaters in the secondary season on the Scenic segment indicated seeing far fewer float parties (m=4.3) than those in the primary season (m=14.9).

Commercial power users on the Wild segment, on average, saw more float parties (12.5) than the other groups. Private power users indicated seeing 9.2 float parties on average, with only 3.9 during the secondary season and nearly 13 during the primary season. Private floaters saw the most float parties during the NMW (7.2), and nearly 6 parties on average over all seasons on the Wild segment. Figures 5 and 6 graphically display this information.

Table 16A Mean Number of Float Trips Seen on a Typical Day During a River Trip

| Number of floaters seen | Scenic | | | | Wild | | | |
|-------------------------|---------|-----------|-----|-------------|---------|-----------|-----|-------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Private power | 5.5 | 5.6 | | 5.9 | 12.6 | 3.9 | | 9.2 |
| <i>N</i> | 6 | 38 | 4 | 48 | 23 | 15 | 4 | 42 |
| Commercial power | 14.9 | 4.3 | | 9.9 | 14.0 | | | 12.5 |
| <i>N</i> | 47 | 41 | 0 | 88 | 33 | 5 | 0 | 38 |
| Private float | | | | | 4.9 | 2.5 | 7.2 | 5.7 |
| <i>N</i> | 1 | 5 | 2 | 8 | 77 | 12 | 62 | 151 |
| Commercial float | | | | | 6.9 | | 6.1 | 6.3 |
| <i>N</i> | 0 | 1 | 1 | 2 | 32 | 3 | 29 | 64 |

Figure 5. Mean Number of Float Trips Seen on a Typical Day During a River Trip on the Scenic Segment

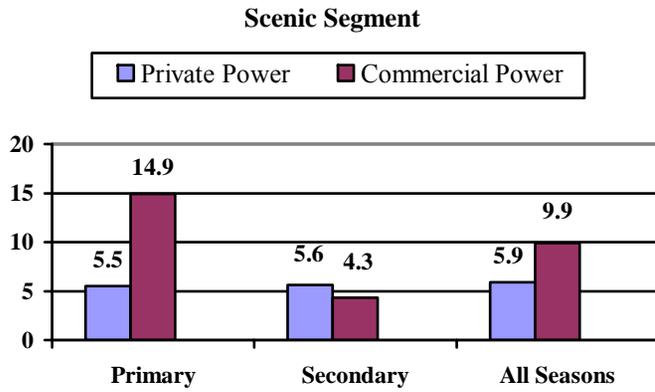
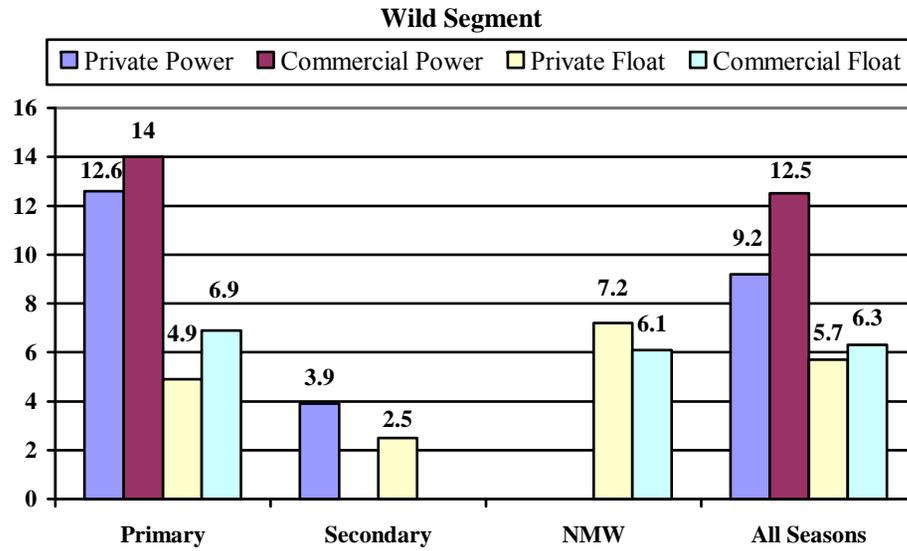


Figure 6. Mean Number of Float Trips Seen on a Typical Day During a River Trip on the Wild Segment



Visitors were also asked to indicate the approximate number of power boat parties they had seen on a typical day during their river trip (Table 16B). Overall, private power and commercial power users indicated seeing similar numbers of power boaters (13.1 and 14.1). Private power users on the Scenic segment in the primary season saw far fewer power boaters (5.0) than those in the secondary season (14.9). Insufficient counts of private and commercial floaters on the Scenic prohibit conclusive statements.

Overall, commercial power users on the Wild segment indicated seeing the largest number of power boat parties (11.3), followed by private power users (9.9). Commercial floaters indicated seeing the fewest power boat parties during their trip (5.5). Interestingly, private and commercial floaters during the NMW saw an average of 3 to 5 power boat parties during their trip. This is likely due to float groups beginning their excursion slightly before the start of the NMW or part way into it and seeing power groups as the window ended. Additionally, power boats are permitted between Hells Canyon Dam and Wild Sheep Rapids during the NMW, and floaters may have seen power boats there. Figures 7 and 8 graphically represent this information.

Table 16B Mean Number of Power Boat Groups Seen on a Typical Day During the River Trip

| Number of power boaters seen | Scenic | | | | Wild | | | |
|------------------------------|---------|-----------|-----|-------------|---------|-----------|-----|-------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Private power | 5.0 | 14.9 | | 13.1 | 9.7 | 10.0 | | 9.9 |
| <i>N</i> | 7 | 48 | 4 | 59 | 23 | 19 | 3 | 45 |
| Commercial power | 15.1 | 13.2 | | 14.1 | 11.9 | | | 11.3 |
| <i>N</i> | 45 | 48 | 0 | 93 | 25 | 5 | 0 | 30 |
| Private float | 2.0 | | | | 6.7 | 10.9 | 4.7 | 6.2 |
| <i>N</i> | 1 | 5 | 2 | 8 | 72 | 11 | 58 | 141 |
| Commercial float | 0.0 | | | | 7.3 | | 3.8 | 5.5 |
| <i>N</i> | 0 | 1 | 1 | 2 | 31 | 3 | 30 | 64 |

Figure 7. Mean Number of Power Boat Groups Seen on a Typical Day During a River Trip on the Scenic Segment

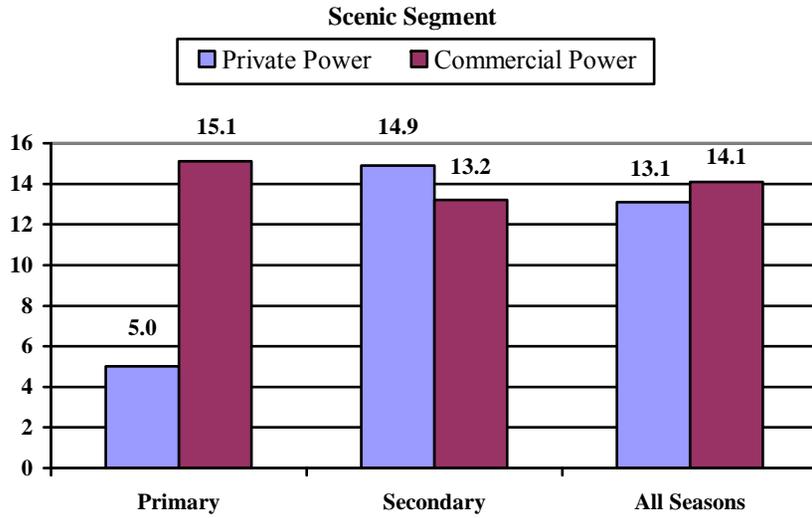
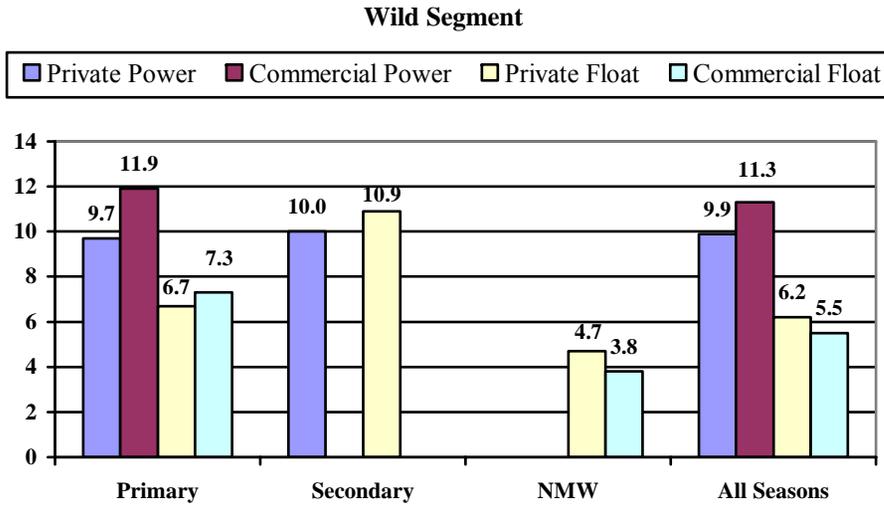


Figure 8. Mean Number of Power Boat Groups Seen on a Typical Day During a River Trip on the Wild Segment



Looking at all user groups on both segments, it is clear that floaters had similar numbers of encounters, regardless of whether they were on a commercial or private trip. They reported 11-12 encounters per day on Wild segment, about half power boat trips and half float trips. Encounter rates of floaters were only slightly lower on the Wild segment during the NMW, about 10-12 groups per day, compared to the primary season, when average encounters were 11-14 groups per day. Private power boaters generally had similar experiences to commercial power users, though commercial power boaters saw slightly more other groups. Power boaters had about 20 encounters on the Scenic and about the same number on the Wild segment.

MAIL SURVEY RESULTS

Visitor Characteristics

Demographic Information

Among private power boaters, men dominated the sample during all time periods and on both river segments. However, women were better represented on the Wild segment, especially during the summer (Table 17). Among commercial power boaters, men made up a larger part of the population during the secondary season, but women outnumbered men in the summer. Among floaters, those with commercial guides tended to be nearly evenly split between men and women on the Wild segment. Approximately two-thirds of those on private float trips on the Wild segment were men. The small sample size of floaters on the Scenic segment does not allow conclusive statements to be made about this population of boaters.

Table 17 Percentage of Males and Females in Each River User Group

| Gender | | Scenic | | | | Wild | | | |
|-------------------------|----------|---------|-----------|-----|-------------|---------|-----------|-----|-------------|
| | | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Private power | Male | 74 | 86 | 83 | 79 | 64 | 81 | 70 | 70 |
| | Female | 26 | 14 | 17 | 21 | 36 | 19 | 30 | 30 |
| | <i>N</i> | 155 | 81 | 18 | 254 | 42 | 21 | 10 | 73 |
| Commercial power | Male | 45 | 63 | | 55 | 46 | 69 | 28 | 47 |
| | Female | 55 | 37 | | 45 | 54 | 31 | 72 | 53 |
| | <i>N</i> | 67 | 80 | 2 | 149 | 119 | 26 | 29 | 174 |
| Private float | Male | | | | 77 | 70 | 65 | 64 | 67 |
| | Female | | | | 23 | 30 | 35 | 36 | 33 |
| | <i>N</i> | 8 | 7 | 7 | 22 | 159 | 31 | 86 | 276 |
| Commercial float | Male | | | | 80 | 47 | 47 | 55 | 49 |
| | Female | | | | 20 | 53 | 53 | 45 | 51 |
| | <i>N</i> | 8 | 1 | 6 | 15 | 104 | 15 | 47 | 166 |

Regardless of river segment (Wild or Scenic) or season, the mean age of boaters was between about 45 and 55 years (Table 18). Commercial clients were on average a few years older than private boaters, with the largest difference being between commercial power boaters on the Scenic segment (56 years) and private power boaters on that segment (46 years).

Table 18 Mean Age of Respondents for Each River User Group

| Age | Scenic | | | | Wild | | | |
|------------------|---------|-----------|-----|-------------|---------|-----------|-----|-------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Private power | 46 | 47 | 46 | 46 | 48 | 49 | 43 | 48 |
| <i>N</i> | 155 | 80 | 17 | 252 | 40 | 21 | 10 | 71 |
| Commercial power | 54 | 58 | | 56 | 51 | 58 | 47 | 51 |
| <i>N</i> | 66 | 80 | 2 | 148 | 118 | 26 | 28 | 172 |
| Private float | | | | 47 | 43 | 43 | 45 | 43 |
| <i>N</i> | 8 | 7 | 7 | 22 | 159 | 30 | 86 | 275 |
| Commercial float | | | | 50 | 44 | 35 | 49 | 45 |
| <i>N</i> | 8 | 1 | 6 | 15 | 104 | 14 | 47 | 165 |

Boaters' education levels were measured using six categories of schooling. For both river segments and all user types, approximately 60% of respondents had either some college education or a college degree (Tables 19A to 19D). As a group, commercial floaters had the highest levels of education, with approximately one third holding a graduate degree. This compares to approximately 20% of private floaters, 25% of commercial power boaters, and 5-10% of private power boaters. Figure xx below displays the variation in education levels among users on both segments.

There were some differences in education within user type depending on the season when boaters were contacted, although these do not appear to follow any clear pattern. For instance, among private power boaters (Table 19A), those contacted in the secondary season on the Scenic section were more likely to have at least a Bachelors degree than those contacted during the primary season. Among this group, a similar pattern was observed for the Wild segment, with more boaters during the secondary season having at least some college. On the other hand, commercial power boaters contacted on the Scenic section during the primary season were much more likely to have a graduate degree than those contacted during the secondary season (Table 19B). Among private floaters (Table 19C), people contacted during the primary motorized season were less likely to hold a graduate degree than those contacted during either the non-motorized window or the secondary season.

Table 19A Distribution of Education Levels for Private Power River Users¹

| Private power | Scenic | | | | Wild | | | |
|-------------------------|---------|-----------|------|-------------|---------|-----------|------|-------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Some high school | 2.6 | 1.2 | 5.6 | 2.4 | 4.8 | 4.8 | 0.0 | 4.1 |
| High school diploma | 21.8 | 14.8 | 11.1 | 18.8 | 28.6 | 28.6 | 10.0 | 26.0 |
| Some college | 37.8 | 25.9 | 44.4 | 34.5 | 38.1 | 42.9 | 40.0 | 39.7 |
| Bachelor degree | 23.1 | 45.7 | 22.2 | 30.2 | 23.8 | 14.3 | 50.0 | 24.7 |
| Master's degree | 8.3 | 9.9 | 0.0 | 8.2 | 2.4 | 4.8 | 0.0 | 2.7 |
| Doctorate or equivalent | 6.4 | 2.5 | 16.7 | 5.9 | 2.4 | 4.8 | 0.0 | 2.7 |
| <i>N</i> | 156 | 81 | 18 | 255 | 42 | 21 | 10 | 73 |

¹ Expressed in percentages

Table 19B Distribution of Education Levels for Commercial Power River Users¹

| Commercial power | Scenic | | | | Wild | | | |
|-------------------------|---------|-----------|-----|-------------|---------|-----------|------|-------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Some high school | 0.0 | 2.5 | | 1.4 | 1.7 | 0.0 | 3.4 | 1.7 |
| High school diploma | 9.0 | 12.7 | | 10.8 | 14.4 | 19.2 | 20.7 | 16.2 |
| Some college | 32.8 | 29.1 | | 31.1 | 26.3 | 26.9 | 31.0 | 27.2 |
| Bachelor degree | 20.9 | 38.0 | | 30.4 | 32.2 | 38.5 | 27.6 | 32.4 |
| Master's degree | 34.3 | 13.9 | | 23.0 | 15.3 | 11.5 | 17.2 | 15.0 |
| Doctorate or equivalent | 3.0 | 3.8 | | 3.4 | 10.2 | 3.8 | 0.0 | 7.5 |
| <i>N</i> | 67 | 79 | 2 | 148 | 118 | 26 | 29 | 173 |

¹ Expressed in percentages

Table 19C Distribution of Education Levels for Private Float River Users¹

| Private float | Scenic | | | | Wild | | | |
|-------------------------|---------|-----------|-----|-------------|---------|-----------|------|-------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Some high school | | | | 4.5 | 2.5 | 0.0 | 1.2 | 1.8 |
| High school diploma | | | | 18.2 | 12.6 | 6.5 | 5.8 | 9.8 |
| Some college | | | | 13.6 | 34.0 | 32.3 | 23.3 | 30.4 |
| Bachelor degree | | | | 45.5 | 34.0 | 32.3 | 34.9 | 34.1 |
| Master's degree | | | | 4.5 | 12.6 | 25.8 | 24.4 | 17.8 |
| Doctorate or equivalent | | | | 13.6 | 4.4 | 3.2 | 10.5 | 6.2 |
| <i>N</i> | 8 | 7 | 7 | 22 | 159 | 31 | 86 | 276 |

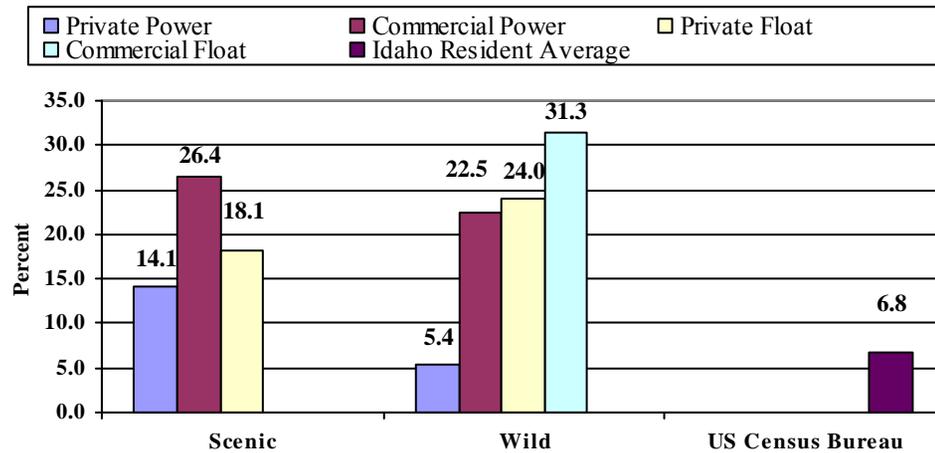
¹ Expressed in percentages

Table 19D Distribution of Education Levels for Commercial Float River Users¹

| Commercial float | Scenic | | | | Wild | | | |
|-------------------------|---------|-----------|-----|-------------|---------|-----------|------|-------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Some high school | | | | 0.0 | 1.9 | 0.0 | 4.3 | 2.4 |
| High school diploma | | | | 13.3 | 10.6 | 6.7 | 8.5 | 9.6 |
| Some college | | | | 13.3 | 16.3 | 46.7 | 12.8 | 18.1 |
| Bachelor degree | | | | 40.0 | 40.4 | 20.0 | 40.4 | 38.6 |
| Master's degree | | | | 20.0 | 21.2 | 0.0 | 27.7 | 21.1 |
| Doctorate or equivalent | | | | 13.3 | 9.6 | 26.7 | 6.4 | 10.2 |
| <i>N</i> | 8 | 1 | 6 | 15 | 104 | 15 | 47 | 166 |

¹ Expressed in percentages

Figure 9 Percent of Boaters Having Earned a Graduate Degree, by User Type and River Segment



Past Experience

Respondents were asked how many river trips they had taken in the past two years. This question paralleled the questions on the contact cards regarding river use. Because the data are highly skewed by many zeros and a few very large numbers, we report medians. Private power boaters, both on the Wild and the Scenic sections, had extensive histories of power boating on the Snake, as well as on other rivers, but they are unlikely to have taken any float trips (Table 20A).

Table 20A Median Number of River Trips Taken by Private Power Boaters in the Last Two Years

| Private power | Scenic | | | | Wild | | | |
|--|-------------------|-----------------|-----------------|-------------------|-----------------|-----------------|-----------|-----------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Float trips on other rivers | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.0 | 0.0 |
| Float trips on the Scenic Section | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Float trips on the Wild Section | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Power boat trips on other rivers | 3.0 | 3.0 | 10.0 | 3.0 | 2.0 | 4.0 | 3.0 | 2.0 |
| Power boat trips on the Scenic Section | 6.0 | 4.0 | 8.0 | 5.5 | 4.0 | 2.0 | 0.5 | 2.0 |
| Power boat trips on the Wild Section | 2.0 | 2.0 | 4.0 | 2.0 | 6.5 | 7.5 | 4.5 | 5.0 |
| <i>N</i> | <i>147 to 156</i> | <i>73 to 79</i> | <i>15 to 17</i> | <i>236 to 252</i> | <i>38 to 40</i> | <i>15 to 18</i> | <i>10</i> | <i>63 to 68</i> |

Commercial power boat passengers contacted on the Scenic segment had taken a median of one power boat trip on the Scenic segment and none on the Wild segment in the past two years (Table 20B). These numbers were much higher than the number of trips they had taken on other rivers. Commercial power boaters on the Wild segment, on the other hand, had taken fewer power trips on the Snake River in the past two years. Commercial power boaters on the Wild segment reported a median of one trip on the Wild segment in the past two years and none on the Scenic segment. The typical commercial power client had no float trips on any rivers.

Table 20B Median Number of River Trips Taken by Commercial Power Boaters in the Last Two Years

| Commercial power | Scenic | | | | Wild | | | |
|-----------------------------------|---------|-----------|-----|-------------|---------|-----------|-----|-------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Float trips on other rivers | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Float trips on the Scenic Section | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Float trips on the Wild Section | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Power boat trips on other rivers | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

| Commercial power | Scenic | | | | Wild | | | |
|--|-----------|-----------------|----------|-------------------|-------------------|-----------------|-----------|-------------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Power boat trips on the Scenic Section | 0.0 | 1.0 | | 1.0 | 0.0 | 1.0 | 0.0 | 0.0 |
| Power boat trips on the Wild Section | 0.0 | 0.5 | | 0.0 | 1.0 | 1.0 | 0.0 | 1.0 |
| <i>N</i> | <i>66</i> | <i>69 to 74</i> | <i>2</i> | <i>138 to 142</i> | <i>117 to 118</i> | <i>26 to 27</i> | <i>28</i> | <i>171 to 173</i> |

Private floaters had taken a median of approximately three to four float trips on other rivers over the past two years, compared to one on the Snake (Table 20C). Thus, they appear to be more “generalist” in their use of rivers than either the private power or commercial power boaters. Interestingly, private boaters who floated the Wild segment during the secondary season had taken more float trips on other rivers (median 10.0), compared to medians of 4.0 for such trips among those contacted during the primary use season and NMW. Private floaters reported not taking power boat trips on the Snake River or elsewhere.

Table 20C Median Number of River Trips Taken by Private Floaters in the Last Two Years

| Private float | Scenic | | | | Wild | | | |
|--|----------|---------------|----------|-----------------|-------------------|-----------------|-----------------|-------------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Float trips on other rivers | | | | 3.0 | 4.0 | 10.0 | 4.0 | 4.0 |
| Float trips on the Scenic Section | | | | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Float trips on the Wild Section | | | | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Power boat trips on other rivers | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Power boat trips on the Scenic Section | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Power boat trips on the Wild Section | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| <i>N</i> | <i>8</i> | <i>5 to 6</i> | <i>7</i> | <i>19 to 21</i> | <i>148 to 155</i> | <i>27 to 31</i> | <i>78 to 81</i> | <i>253 to 268</i> |

Commercial passengers on float trips, in contrast to private floaters, had taken a median of one float trip on other rivers over the past two years and one float trip on the Wild segment of the Snake (Table 20D). This group’s use of the Snake did not vary much by the season when boaters were contacted, but those contacted during the secondary season had taken more float trips on other rivers (median 1.0) than those who were contacted during the NMW (median 2.0). Commercial power passengers had little experience with power boat trips.

Table 20D Median Number of River Trips Taken by Commercial Floaters in the Last Two Years

| Commercial float | Scenic | | | | Wild | | | |
|--|---------|-----------|-----|-------------|----------|-----------|----------|-------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Float trips on other rivers | | | | 0.0 | 1.0 | 1.0 | 2.0 | 1.0 |
| Float trips on the Scenic Section | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Float trips on the Wild Section | | | | 1.0 | 1.0 | 1.0 | 0.0 | 1.0 |
| Power boat trips on other rivers | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Power boat trips on the Scenic Section | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Power boat trips on the Wild Section | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| N | 7 to 8 | 1 | 5 | 13 to 15 | 90 to 97 | 9 to 14 | 40 to 42 | 139 to 153 |

As evident in Tables 20E and 20F, there are substantial differences in median number of trips among the user groups. As would be expected, floaters (especially private floaters) have taken many more float trips than other users and no power trips overall. Power boaters had taken many more power trips than floaters, and they had not taken any float trips.

Table 20E Differences in Median Number of Boat Trips Taken by Each User Group on the Scenic Section

| Scenic Section | Private Power | Commercial Power | Private Float | Commercial Float | p-value |
|--|---------------|------------------|---------------|------------------|---------|
| Float trips on other rivers | 0.0 | 0.0 | 3.0 | 0.0 | <.0005 |
| Float trips on the Scenic Section | 0.0 | 0.0 | 1.0 | 0.0 | <.0005 |
| Float trips on the Wild Section | 0.0 | 0.0 | 1.0 | 1.0 | <.0005 |
| Power boat trips on other rivers | 3.0 | 0.0 | 0.0 | 0.0 | <.0005 |
| Power boat trips on the Scenic Section | 5.5 | 1.0 | 0.0 | 0.0 | <.0005 |
| Power boat trips on the Wild Section | 2.0 | 0.0 | 0.0 | 0.0 | <.0005 |

ANOVA test; results significant alpha=0.05

Table 20F Differences in Median Number of Boat Trips Taken by Each User Group on the Wild Section

| Wild Section | Private Power | Commercial Power | Private Float | Commercial Float | <i>p-value</i> |
|--|----------------------|-------------------------|----------------------|-------------------------|----------------|
| Float trips on other rivers | 0.0 | 0.0 | 4.0 | 1.0 | <.0005 |
| Float trips on the Scenic Section | 0.0 | 0.0 | 0.0 | 0.0 | <.0005 |
| Float trips on the Wild Section | 0.0 | 0.0 | 1.0 | 1.0 | <.0005 |
| Power boat trips on other rivers | 2.0 | 0.0 | 0.0 | 0.0 | <.0005 |
| Power boat trips on the Scenic Section | 2.0 | 0.0 | 0.0 | 0.0 | <.0005 |
| Power boat trips on the Wild Section | 5.0 | 1.0 | 0.0 | 0.0 | <.0005 |

ANOVA test; results significant alpha=0.05

Respondents were also asked if they had used the Snake River during the “secondary” season since 1999. The majority of all boater types, regardless of when or where we surveyed them, had not boated on the Snake during the secondary season (Tables 21A to 21D). Fewer than 15% of commercial passengers had done so. However, 27% of private floaters used the river in the secondary season. The greatest level of secondary season use was among the private power boaters we surveyed on the Wild segment – 32% said they had power boated only and 4% said they had both power boated and floated in the secondary season.

In general, there were few differences in the level of secondary season use within each boater type based on the season when we contacted them. However, there was a tendency for the commercial boaters (both power and float) we contacted on the Wild section during the secondary season to be more likely to have boated that section during the secondary season than those contacted during the primary use season (Tables 21B and 21D). Similarly, while 65% of the private floaters contacted on the Wild section in the secondary season had floated the Snake during the secondary season in the past, more than three quarters of the private floaters on the Wild section contacted during the primary season had not (Table 21C).

Table 21A Private Power Boater Use in Secondary Season¹

| Private power | Contacted on Scenic | | | | Contacted on Wild | | | |
|---|---------------------|-----------|------|-------------|-------------------|-----------|------|-------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Have not boated in the secondary season | 73.0 | 77.5 | 72.2 | 74.4 | 59.0 | 65.0 | 80.0 | 63.8 |
| Power boated during the secondary season | 23.7 | 20.0 | 22.2 | 22.4 | 35.9 | 35.0 | 10.0 | 31.9 |
| Floated during the secondary season | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Both power boated and floated during secondary season | 3.3 | 2.5 | 5.6 | 3.2 | 5.1 | 0.0 | 10.0 | 4.4 |
| <i>N</i> | 152 | 80 | 18 | 250 | 39 | 20 | 10 | 69 |

¹ Expressed in percentages

Table 21B Commercial Power Boater Use in Secondary Season¹

| Commercial power | Contacted on Scenic | | | | Contacted on Wild | | | |
|---|---------------------|-----------|-----|-------------|-------------------|-----------|------|-------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Have not boated in the secondary season | 95.5 | 79.2 | | 86.2 | 95.8 | 74.1 | 89.3 | 91.4 |
| Power boated during the secondary season | 1.5 | 18.2 | | 11.0 | 3.3 | 25.9 | 10.7 | 8.0 |
| Floated during the secondary season | 3.0 | 1.3 | | 2.07 | 0.8 | 0.0 | 0.0 | 0.6 |
| Both power boated and floated during secondary season | 0.0 | 1.3 | | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 |
| <i>N</i> | 66 | 77 | 2 | 145 | 120 | 27 | 28 | 175 |

¹ Expressed in percentages

Table 21C Private Floater Use in Secondary Season¹

| Private float | Contacted on Scenic | | | | Contacted on Wild | | | |
|---|---------------------|-----------|-----|-------------|-------------------|-----------|------|-------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Have not boated in the secondary season | | | | 72.7 | 76.4 | 25.8 | 82.9 | 72.6 |
| Power boated during the secondary season | | | | 0.0 | 3.8 | 3.2 | 2.4 | 3.3 |
| Floated during the secondary season | | | | 27.2 | 15.3 | 64.5 | 13.4 | 20.4 |
| Both power boated and floated during secondary season | | | | 0.0 | 4.5 | 6.5 | 1.2 | 3.7 |
| <i>N</i> | 8 | 7 | 7 | 22 | 157 | 31 | 82 | 270 |

¹ Expressed in percentages

Table 21D Commercial Floater Use in Secondary Season¹

| Commercial float | Contacted on Scenic | | | | Contacted on Wild | | | |
|---|---------------------|-----------|----------|-------------|-------------------|------------|-----------|-------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Have not boated in the secondary season | | | | 86.7 | 94.1 | 53.3 | 95.7 | 90.8 |
| Power boated during the secondary season | | | | 0.0 | 0.0 | 6.7 | 2.2 | 1.2 |
| Floated during the secondary season | | | | 0.0 | 4.9 | 40.0 | 2.2 | 7.3 |
| Both power boated and floated during secondary season | | | | 13.3 | 1.0 | 0.0 | 0.0 | 0.6 |
| | <i>N</i> | <i>8</i> | <i>1</i> | <i>6</i> | <i>15</i> | <i>102</i> | <i>15</i> | <i>46</i> |

¹ Expressed in percentages

Respondents were also given the opportunity to explain why they had chosen to boat or float in Hells Canyon during the secondary season. There were numerous reasons given by visitors for both the Scenic and Wild sections of the river some of which include opportunities to hunt/fish, cooler weather, fewer people/boats, no permits required, and flexibility with schedules. All written comments concerning this question are outlined in detail in Appendix J (Question 4.2).

Respondents were asked how they felt Hells Canyon compared to other rivers they may have visited for recreation. Commercial power boaters appeared to be less involved in river recreation than the other users; approximately one quarter of this group said they “don’t usually visit rivers,” and only about 14% said they consider the Snake to be their favorite river (Table 22B). Commercial floaters, by contrast, were more involved in river recreation, and approximately two thirds said the Snake is one of their favorite rivers (Table 22D). Private floaters mainly (75%) said the Snake is “among their favorite rivers” (Table 22C). Private power boaters stand out from the other user types, in that approximately 45% said the Snake is their favorite river (Table 22A). In general, less than 15% of any other group gave this response.

Interestingly, the level of attachment to the Snake within each user type did not differ by location. Boaters on the Wild and the Scenic segments felt equally attached. (Figure 10 below shows the distribution of users who said the Snake Rivers is their favorite river). However, there were some differences within the user types depending on season of use. For instance, commercial power boaters on the Scenic segment in the primary season were much more likely to say the Snake is one of their favorite rivers (68%) than commercial power boaters contacted during the secondary season (48%). In general, however, the differences by season were minor.

Table 22A Private Power Boater Comparison of the Snake River in Hells Canyon to Other Rivers¹

| Private power | Scenic | | | | Wild | | | |
|----------------------------------|---------|-----------|------|-------------|---------|-----------|------|-------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| It is my favorite river | 46.2 | 42.1 | 38.9 | 44.3 | 53.7 | 45.0 | 20.0 | 46.5 |
| It is one of my favorite rivers | 47.6 | 46.1 | 55.6 | 47.7 | 41.5 | 50.0 | 80.0 | 49.3 |
| It is not one of favorite rivers | 2.1 | 5.3 | 0.0 | 3.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| I don't usually visit rivers | 4.2 | 6.6 | 5.6 | 5.1 | 4.9 | 5.0 | 0.0 | 4.2 |
| <i>N</i> | 143 | 76 | 18 | 237 | 41 | 20 | 10 | 71 |

¹ Expressed in percentages

Table 22B Commercial Power Boater Comparison of the Snake River in Hells Canyon to Other Rivers¹

| Commercial power | Scenic | | | | Wild | | | |
|----------------------------------|---------|-----------|-----|-------------|---------|-----------|------|-------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| It is my favorite river | 7.7 | 19.2 | | 13.6 | 15.2 | 12.0 | 14.3 | 14.5 |
| It is one of my favorite rivers | 67.7 | 47.9 | | 57.9 | 48.2 | 56.0 | 50.0 | 49.7 |
| It is not one of favorite rivers | 0.0 | 5.5 | | 2.9 | 9.8 | 8.0 | 3.6 | 8.5 |
| I don't usually visit rivers | 24.6 | 27.4 | | 25.7 | 26.8 | 24.0 | 32.1 | 27.3 |
| <i>N</i> | 65 | 73 | 2 | 140 | 112 | 25 | 28 | 165 |

¹ Expressed in percentages

Table 22C Private Floater Comparison of the Snake River in Hells Canyon to Other Rivers¹

| Private float | Scenic | | | | Wild | | | |
|----------------------------------|---------|-----------|-----|-------------|---------|-----------|------|-------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| It is my favorite river | | | | 5.0 | 12.9 | 9.7 | 7.5 | 10.9 |
| It is one of my favorite rivers | | | | 75.0 | 71.6 | 74.2 | 72.5 | 72.2 |
| It is not one of favorite rivers | | | | 5.0 | 7.7 | 16.1 | 13.8 | 10.5 |
| I don't usually visit rivers | | | | 10.0 | 7.7 | 0.0 | 6.3 | 6.4 |
| <i>N</i> | 6 | 7 | 7 | 20 | 155 | 31 | 80 | 266 |

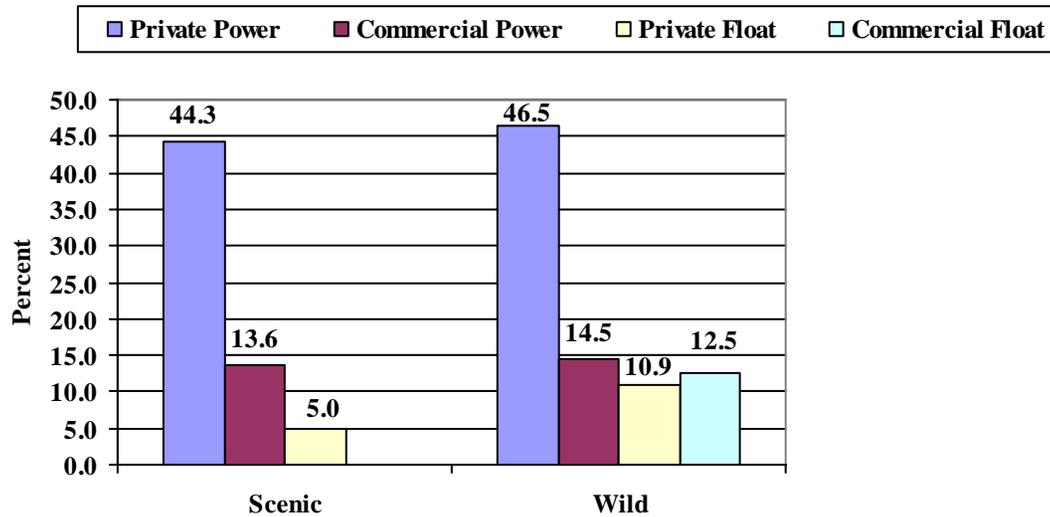
¹ Expressed in percentages

Table 22D Commercial Floater Comparison of the Snake River in Hells Canyon to Other Rivers¹

| Commercial raft/float | Scenic | | | | Wild | | | |
|----------------------------------|---------|-----------|-----|-------------|---------|-----------|------|-------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| It is my favorite river | | | | 20.0 | 11.7 | 14.3 | 13.6 | 12.5 |
| It is one of my favorite rivers | | | | 60.0 | 62.8 | 71.4 | 65.9 | 64.5 |
| It is not one of favorite rivers | | | | 20.0 | 7.4 | 7.1 | 4.5 | 6.6 |
| I don't usually visit rivers | | | | 0.0 | 18.1 | 7.1 | 15.9 | 16.4 |
| <i>N</i> | 8 | 1 | 6 | 15 | 94 | 14 | 44 | 152 |

¹ Expressed in percentages

Figure 10. Percent of Boaters Identifying the Snake River in Hells Canyon as Their Favorite River



Respondents were asked to rate their whitewater boating skill level (Tables 23A to 23D). Figure xx below shows user groups' self-assessed whitewater skill levels. Among private power boaters, most rated themselves as intermediate to advanced, both on the Wild section (72%) and on the Scenic section (66%). Those on commercial power trips were much less experienced, with 72% (Scenic) and 79% (Wild) being novices or beginners. On the Wild section, private floaters were more skilled (58% intermediate to advanced) than commercial floaters (77% beginner to intermediate). Although few floaters were contacted on the Scenic section, they appeared to be more skilled than floaters on the Wild section. Thus, commercial power boaters were the least experienced, primarily being novices or beginners, with commercial floaters more likely to report beginner or intermediate status. Private boaters, whether power boaters or floaters, were mostly intermediate to advanced in skill.

There were not many differences in skill among boaters within each user type based on the season when they were contacted. The only differences of notable magnitude occurred among private power boaters. Among those contacted on the Scenic section, those contacted during the secondary season were slightly more likely to be novices than those contacted during the primary season, and although the sample is quite small, those contacted during the non-motorized window appeared to be much more skilled than those boating the Scenic section at other times.

Table 23A Private Power Whitewater Boating Skill Level¹

| Private power | Scenic | | | | Wild | | | |
|---------------|---------|-----------|------|-------------|---------|-----------|------|-------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Novice | 9.1 | 19.2 | 0.0 | 11.6 | 7.1 | 10.0 | 0.0 | 6.9 |
| Beginner | 15.6 | 14.1 | 11.8 | 14.9 | 23.8 | 0.0 | 20.0 | 16.7 |
| Intermediate | 29.9 | 39.7 | 23.5 | 32.5 | 21.4 | 50.0 | 40.0 | 31.9 |
| Advanced | 38.3 | 20.5 | 52.9 | 33.7 | 42.9 | 35.0 | 40.0 | 40.3 |
| Expert | 7.1 | 6.4 | 11.8 | 7.2 | 4.8 | 5.0 | 0.0 | 4.2 |
| <i>N</i> | 154 | 78 | 17 | 249 | 42 | 20 | 10 | 72 |

¹ Expressed in percentages

Table 23B Commercial Power Whitewater Boating Skill Level¹

| Commercial power | Scenic | | | | Wild | | | |
|------------------|---------|-----------|-----|-------------|---------|-----------|------|-------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Novice | 37.3 | 42.3 | | 39.5 | 38.1 | 28.0 | 33.3 | 35.9 |
| Beginner | 35.8 | 29.5 | | 32.7 | 40.7 | 44.0 | 51.9 | 42.9 |
| Intermediate | 16.4 | 14.1 | | 15.0 | 14.4 | 20.0 | 14.8 | 15.3 |
| Advanced | 9.0 | 7.7 | | 8.2 | 4.2 | 8.0 | 0.0 | 4.1 |
| Expert | 1.5 | 6.4 | | 4.8 | 2.5 | 0.0 | 0.0 | 1.8 |
| <i>N</i> | 67 | 78 | 2 | 147 | 118 | 25 | 27 | 170 |

¹ Expressed in percentages

Table 23C Private Float Whitewater Boating Skill Level¹

| Private float | Scenic | | | | Wild | | | |
|---------------|---------|-----------|-----|-------------|---------|-----------|------|-------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Novice | | | | 4.5 | 8.2 | 6.5 | 4.7 | 6.9 |
| Beginner | | | | 18.2 | 19.6 | 12.9 | 22.4 | 19.7 |
| Intermediate | | | | 9.1 | 28.5 | 35.5 | 27.1 | 28.8 |
| Advanced | | | | 45.5 | 29.1 | 29.0 | 29.4 | 29.2 |
| Expert | | | | 22.7 | 14.6 | 16.1 | 16.5 | 15.3 |
| <i>N</i> | 8 | 7 | 7 | 22 | 158 | 31 | 85 | 274 |

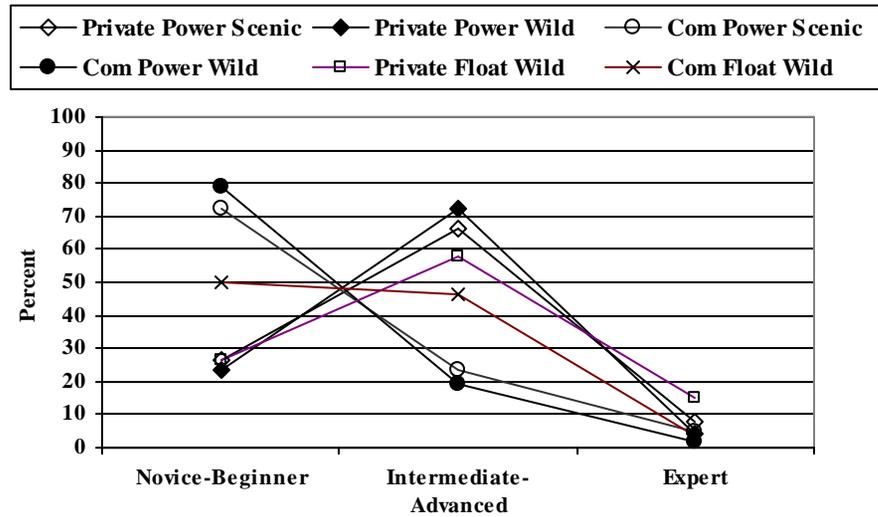
¹ Expressed in percentages

Table 23D Commercial Float Whitewater Boating Skill Level¹

| Commercial float | Scenic | | | | Wild | | | |
|------------------|---------|-----------|-----|-------------|---------|-----------|------|-------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Novice | | | | 0.0 | 13.5 | 13.3 | 6.4 | 11.4 |
| Beginner | | | | 26.7 | 35.6 | 26.7 | 48.9 | 38.6 |
| Intermediate | | | | 53.3 | 35.6 | 46.7 | 40.4 | 38.0 |
| Advanced | | | | 13.3 | 9.6 | 13.3 | 4.3 | 8.4 |
| Expert | | | | 6.7 | 5.8 | 0.0 | 0.0 | 3.6 |
| <i>N</i> | 8 | 1 | 6 | 15 | 104 | 15 | 47 | 166 |

¹ Expressed in percentages

Figure 11 Boaters' Self-Assessed Whitewater Experience Levels



In another question related to boaters' skill, respondents were asked what class of whitewater they were comfortable boating (Tables 24A to 24D). Many commercial power boaters (47%) said they did not know, indicating a lack of familiarity with the river rating system (Table 24B). Nearly 20% of private power boaters also marked "don't know" (Table 24A). Among those power boaters aware of the river rating system, more than 50% of private boaters on the Wild section indicated Class IV or higher, a very high level of skill. Most private power boaters on the Scenic section were capable of handling Class III or IV water, but few felt comfortable in more challenging whitewater. Among those commercial boaters familiar with river ratings, most said they were comfortable with Class III or IV water. Among private floaters (Table 24C), more than two thirds said they were comfortable in Class IV or harder water, with 18% saying they could handle Class V or V+. Commercial floaters, while comfortable with more challenging water than commercial power boaters, tended to be slightly less skilled than private floaters (Table 24D). On the Wild section, 70% of commercial floaters said they could handle Class III or IV water.

Table 24A Whitewater Class Private Power Users Are Comfortable Boating¹

| Private power | Scenic | | | | Wild | | | |
|---------------|---------|-----------|------|-------------|---------|-----------|------|-------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Don't know | 17.9 | 27.3 | 5.9 | 20.0 | 24.4 | 4.8 | 10.0 | 16.7 |
| Class II | 6.6 | 6.5 | 0.0 | 6.1 | 4.9 | 4.8 | 0.0 | 4.2 |
| Class III | 28.5 | 18.2 | 47.1 | 26.5 | 17.1 | 23.8 | 10.0 | 18.1 |
| Class IV | 40.4 | 36.4 | 41.2 | 39.2 | 41.5 | 47.6 | 60.0 | 45.8 |
| Class V | 5.3 | 9.1 | 5.9 | 6.5 | 9.8 | 14.3 | 10.0 | 11.1 |
| Class V+ | 1.3 | 2.6 | 0.0 | 1.6 | 2.4 | 0.0 | 10.0 | 2.8 |
| <i>N</i> | 151 | 77 | 17 | 245 | 41 | 21 | 10 | 72 |

¹ Expressed in percentages

Table 24B Whitewater Class Commercial Power Users Are Comfortable Boating¹

| Commercial power | Scenic | | | | Wild | | | |
|------------------|---------|-----------|-----|-------------|---------|-----------|------|-------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Don't know | 44.8 | 50.0 | | 46.9 | 50.4 | 36.0 | 50.0 | 48.3 |
| Class II | 3.0 | 3.9 | | 4.1 | 4.2 | 4.0 | 3.6 | 4.1 |
| Class III | 28.4 | 26.3 | | 26.9 | 17.6 | 32.0 | 14.3 | 19.2 |
| Class IV | 17.9 | 17.1 | | 17.2 | 22.7 | 20.0 | 28.6 | 23.3 |
| Class V | 6.0 | 1.3 | | 4.1 | 1.7 | 8.0 | 3.6 | 2.9 |
| Class V+ | 0.0 | 1.3 | | 0.7 | 3.4 | 0.0 | 0.0 | 2.3 |
| <i>N</i> | 67 | 76 | 2 | 145 | 119 | 25 | 28 | 172 |

¹ Expressed in percentages

Table 24C Whitewater Class Private Float Users Are Comfortable Boating¹

| Private float | Scenic | | | | Wild | | | |
|---------------|---------|-----------|-----|-------------|---------|-----------|------|-------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Don't know | | | | 9.1 | 4.4 | 9.7 | 2.3 | 4.4 |
| Class II | | | | 0.0 | 3.2 | 0.0 | 1.2 | 2.2 |
| Class III | | | | 13.6 | 12.7 | 12.9 | 23.3 | 16.0 |
| Class IV | | | | 59.1 | 54.4 | 51.6 | 50.0 | 52.7 |
| Class V | | | | 18.2 | 22.8 | 25.8 | 19.8 | 22.2 |
| Class V+ | | | | 0.0 | 2.5 | 0.0 | 3.5 | 2.5 |
| <i>N</i> | 8 | 7 | 7 | 22 | 158 | 31 | 86 | 275 |

¹ Expressed in percentages

Table 24D Whitewater Class Commercial Float Users Are Comfortable Boating¹

| Commercial float | Scenic | | | | Wild | | | |
|------------------|---------|-----------|-----|-------------|---------|-----------|------|-------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Don't know | | | | 0.0 | 8.8 | 6.7 | 4.3 | 7.3 |
| Class II | | | | 6.7 | 7.8 | 0.0 | 8.5 | 7.3 |
| Class III | | | | 40.0 | 24.5 | 20.0 | 23.4 | 23.8 |
| Class IV | | | | 26.7 | 44.1 | 53.3 | 51.1 | 47.0 |
| Class V | | | | 20.0 | 12.7 | 20.0 | 12.8 | 13.4 |
| Class V+ | | | | 6.7 | 2.0 | 0.0 | 0.0 | 1.2 |
| <i>N</i> | 8 | 1 | 6 | 15 | 102 | 15 | 47 | 164 |

¹ Expressed in percentages

Trip Characteristics

Respondents were asked to check from a list all activities that applied to their specific river trip in Hells Canyon during which they had been contacted. Figure 12 below shows the key activities user groups participated in during their river trip. Nearly all private power boaters, regardless of the segment on which we contacted them, reported jet boating, and more than 80% also fished during their trip (Table 25A). Wildlife viewing was very common, especially among those on the Scenic segment (75%). Private power boaters on the Wild section were more likely to camp (52%) than those on the Scenic section (35%), but many in both groups enjoyed visiting cultural and historic sites (52% Wild section, 44% Scenic section) and swimming (44% Wild section, 55% Scenic section).

Participation rates for some of the activities of private power boaters depended on the season when they were contacted. For instance, as might be expected, camping was much more common during the primary season than the secondary season. The same was true for visiting cultural or historic sites. Secondary season boaters on the Wild section were more likely to be hunting than boaters at any other time. Finally, picnicking and swimming were much more common during the primary season.

Table 25A Percent of Private Power Boaters that Participated in Select Activities During a River Trip

| Private power | Scenic | | | | Wild | | | |
|----------------------------------|---------|-----------|-------|-------------|---------|-----------|-------|-------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Camping | 37.6 | 27.2 | 50.0 | 35.2 | 61.9 | 28.6 | 60.0 | 52.1 |
| Visiting cultural/historic sites | 51.0 | 29.6 | 50.0 | 44.1 | 69.0 | 33.3 | 20.0 | 52.1 |
| Fishing | 82.2 | 90.1 | 83.3 | 84.8 | 81.0 | 95.2 | 90.0 | 86.3 |
| Hiking | 25.5 | 21.0 | 33.3 | 24.6 | 23.8 | 38.1 | 10.0 | 26.0 |
| Hunting | 2.5 | 3.7 | 5.6 | 3.1 | 4.8 | 23.8 | 0.0 | 9.6 |
| Jet boating | 95.5 | 81.5 | 100.0 | 91.4 | 88.1 | 85.7 | 100.0 | 89.0 |
| Kayaking | 1.3 | 0.0 | 0.0 | 0.8 | 0.0 | 0.0 | 0.0 | 0.0 |
| Power boating | 1.3 | 4.9 | 0.0 | 2.3 | 2.4 | 4.8 | 0.0 | 2.7 |
| Picnicking | 51.6 | 18.5 | 22.2 | 39.1 | 40.5 | 4.8 | 10.0 | 26.0 |
| Rafting | 4.5 | 0.0 | 5.6 | 3.1 | 9.5 | 0.0 | 0.0 | 5.5 |
| Swimming | 75.8 | 6.2 | 88.9 | 54.7 | 59.5 | 19.0 | 30.0 | 43.8 |
| Wildlife viewing | 77.1 | 72.8 | 66.7 | 75.0 | 61.0 | 66.7 | 40.0 | 59.7 |
| <i>N</i> | 157 | 81 | 18 | 256 | 42 | 21 | 10 | 73 |

Among commercial power boaters, approximately 87% said they used a jet boat during their trip (Table 25B). Wildlife viewing was very popular in this group, with 69% of those on the Scenic and 58% of those on the Wild section indicating this activity. Nearly 60% of those on both sections of the river visited historic and/or cultural sites. Compared to private power boaters, fishing and swimming were much less common. However, fishing was an activity for approximately 40% of commercial power boaters in the secondary season, and about one quarter of commercial power boaters during the primary motorized season said they went swimming.

Table 25B Percent of Commercial Power Boaters that Participated in Select Activities During a River Trip

| Commercial power | Scenic | | | | Wild | | | |
|----------------------------------|---------|-----------|-----|-------------|---------|-----------|------|-------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Camping | 5.9 | 5.0 | | 6.0 | 10.9 | 14.8 | 3.6 | 10.3 |
| Visiting cultural/historic sites | 66.2 | 53.8 | | 60.0 | 59.7 | 55.6 | 50.0 | 57.5 |
| Fishing | 2.9 | 38.8 | | 23.3 | 10.1 | 40.7 | 3.6 | 13.8 |
| Hiking | 8.8 | 10.0 | | 10.0 | 23.5 | 18.5 | 14.3 | 21.3 |
| Hunting | 0.0 | 2.5 | | 1.3 | 0.0 | 3.7 | 0.0 | 0.6 |
| Jet boating | 92.6 | 81.3 | | 86.0 | 87.4 | 81.5 | 92.9 | 87.4 |
| Kayaking | 2.9 | 0.0 | | 1.3 | 1.7 | 0.0 | 0.0 | 1.1 |
| Power boating | 2.9 | 1.3 | | 2.0 | 5.0 | 0.0 | 3.6 | 4.0 |
| Picnicking | 47.1 | 35.0 | | 41.3 | 40.3 | 25.9 | 25.0 | 35.6 |
| Rafting | 2.9 | 0.0 | | 2.0 | 6.7 | 3.7 | 7.1 | 6.3 |
| Swimming | 26.5 | 3.8 | | 14.7 | 26.1 | 3.7 | 14.3 | 20.7 |
| Wildlife viewing | 63.2 | 73.8 | | 69.3 | 55.5 | 77.8 | 50.0 | 58.0 |
| <i>N</i> | 68 | 80 | 2 | 150 | 119 | 27 | 28 | 174 |

The majority of private floaters tended to engage in multiple activities. On the Wild section, for example, more than 90% camped and rafted, more than 70% visited cultural/historic sites, swam, and observed wildlife, and more than 50% went hiking or fishing (Table 25C). There were few differences in activity participation by season among this group. The primary exception was that 22% of those in the primary motorized season said they jet boated, compared to less than 10% at other times, possibly due to the higher rate of jet-back trips in the primary season.

Table 25C Percent of Private Floaters that Participated in Select Activities During a River Trip

| Private float | Scenic | | | | Wild | | | |
|----------------------------------|---------|-----------|-----|-------------|---------|-----------|------|-------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Camping | | | | 100.0 | 88.1 | 96.9 | 94.2 | 91.0 |
| Visiting cultural/historic sites | | | | 63.6 | 67.9 | 60.6 | 77.9 | 70.1 |
| Fishing | | | | 59.1 | 59.7 | 48.5 | 62.8 | 59.4 |
| Hiking | | | | 59.1 | 52.8 | 54.5 | 57.0 | 54.3 |
| Hunting | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Jet boating | | | | 13.6 | 22.0 | 9.1 | 3.5 | 14.7 |
| Kayaking | | | | 50.0 | 19.5 | 18.2 | 19.8 | 19.4 |
| Power boating | | | | 0.0 | 0.6 | 0.0 | 0.0 | 0.4 |
| Picnicking | | | | 40.9 | 36.5 | 36.4 | 31.4 | 34.9 |
| Rafting | | | | 90.9 | 95.0 | 84.8 | 96.5 | 94.2 |
| Swimming | | | | 77.3 | 73.6 | 51.5 | 75.6 | 71.6 |
| Wildlife viewing | | | | 77.3 | 76.1 | 69.7 | 69.8 | 73.4 |
| <i>N</i> | 8 | 7 | 7 | 22 | 159 | 32 | 86 | 278 |

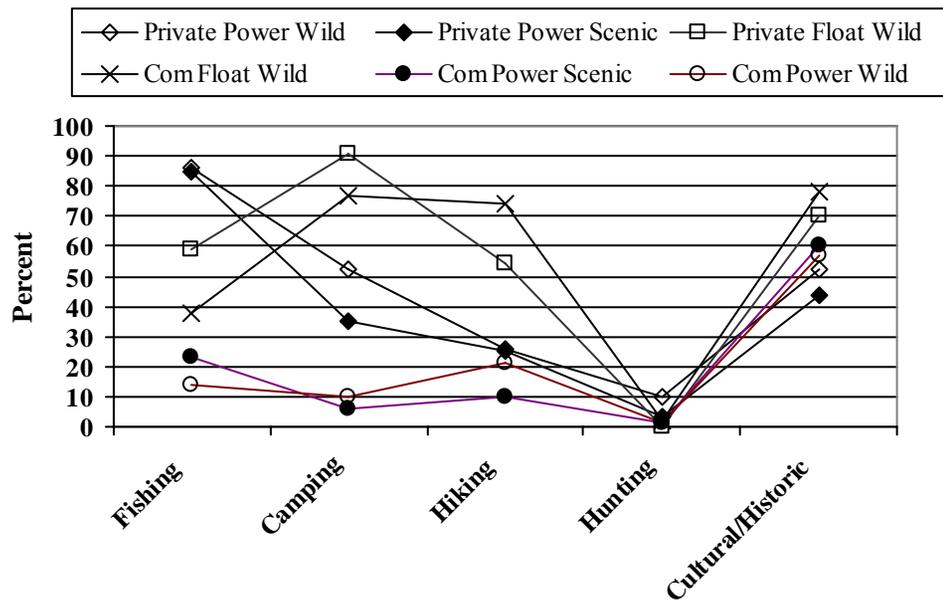
Commercial floaters were only well represented on the Wild section (Table 25 D). Among these boaters, nearly all rafted, and more than 70% camped, visited cultural/historic sites, hiked, and swam. Thus, the activity patterns of commercial and private floaters were quite similar. However, there were more seasonal differences among this group than the other groups. For instance, 68% camped during the primary motorized season compared to nearly 90% at other times. During the non-motorized window, commercial floaters were more likely to hike, fish, and kayak than boaters at other times. One third of commercial floaters during the primary motorized season said they used jet boats, which probably represents those floaters who jet back to Hells Canyon dam at the end of their float trip.

Table 25D Percent of Commercial Floaters that Participated in Select Activities During a River Trip

| Commercial float | Scenic | | | | Wild | | | |
|----------------------------------|---------|-----------|-----|-------------|---------|-----------|------|-------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Camping | | | | 100.0 | 68.3 | 88.2 | 93.5 | 77.2 |
| Visiting cultural/historic sites | | | | 73.3 | 78.8 | 82.4 | 76.1 | 78.4 |
| Fishing | | | | 60.0 | 33.7 | 35.3 | 47.8 | 37.7 |
| Hiking | | | | 60.0 | 65.4 | 70.6 | 93.5 | 73.7 |

| Commercial float | Scenic | | | | Wild | | | |
|------------------|----------|-----------|-----|-------------|---------|-----------|------|-------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Hunting | | | | 0.0 | 1.0 | 5.9 | 2.2 | 1.8 |
| Jet boating | | | | 0.0 | 32.7 | 0.0 | 0.0 | 20.4 |
| Kayaking | | | | 53.3 | 41.3 | 35.3 | 78.3 | 50.9 |
| Power boating | | | | 0.0 | 2.9 | 0.0 | 0.0 | 1.8 |
| Picnicking | | | | 40.0 | 60.6 | 41.2 | 67.4 | 60.5 |
| Rafting | | | | 93.3 | 96.2 | 100.0 | 97.8 | 97.0 |
| Swimming | | | | 73.3 | 76.0 | 76.5 | 80.4 | 77.2 |
| Wildlife viewing | | | | 80.0 | 63.5 | 58.8 | 78.3 | 67.1 |
| | <i>N</i> | 8 | 1 | 6 | 15 | 104 | 17 | 46 |

Figure 12 User Groups' Participation in Key Activities During A River Trip



Expectations

Respondents were asked several questions dealing with certain conditions on the river and if, when encountered, those conditions differed from what they expected to encounter on their river trip. They responded on a 7-point scale, with -3 indicating that conditions were much less than expected and +3 indicating that conditions were much more than expected. Zero indicated that conditions were essentially as expected.

Among private power boaters, experiences of conditions were generally much as expected, with means near zero (Table 26A). The only condition that boaters reported being less than expected was evidence of livestock. Fishing quality, the wild character of the river, the quality of the whitewater, and wildlife viewing all exceeded expectations on average, although the mean values were never greater than 1.0. For the managerially important issue of encounters, these boaters said that the number of people they saw, on average, was slightly less than what they had expected.

There were rather marked differences in responses to these questions among private power boaters on the Scenic section based on the season when we contacted them. Those few contacted during the non-motorized window did not rate responses nearly as high as those boating during other times. Those boating during the secondary season found the wild character of the river and the opportunities for high quality fishing to exceed their expectations more than did boaters during the primary seasons. Fishing and wildlife were better than expected in the secondary season on the Scenic segment.

Table 26A Private Power Boaters' Expectations of River Conditions.¹

| Private power | Scenic | | | | | Wild | | | | |
|--|---------|-----------|-------|-------------|---------------------|---------|-----------|-----|-------------|---------------------|
| | Primary | Secondary | NMW | All Seasons | No Expectations (%) | Primary | Secondary | NMW | All Seasons | No Expectations (%) |
| Number of people at put-in | 0.11 | 0.45 | -0.31 | 0.19 | 11.8 | -0.22 | 0.21 | | -0.08 | 16.9 |
| Number of groups on the river each day | 0.24 | 0.34 | -0.12 | 0.24 | 8.6 | 0.08 | 0.29 | | 0.14 | 8.5 |
| Number of groups camped within sight | -0.13 | -0.14 | -0.71 | -0.17 | 16.4 | -0.19 | -0.25 | | -0.18 | 14.3 |
| Amount of wildlife seen | 0.61 | 0.54 | 0.24 | 0.56 | 2.0 | 0.34 | 0.83 | | 0.41 | 1.4 |
| Wild character of the river | 0.68 | 1.09 | 0.25 | 0.78 | 2.4 | 0.68 | 0.81 | | 0.65 | 11.3 |

| Private power | Scenic | | | | | Wild | | | | |
|---|-------------------|-----------------|-----------------|-------------------|---------------------|-----------------|-----------------|----------------|-----------------|---------------------|
| | Primary | Secondary | NMW | All Seasons | No Expectations (%) | Primary | Secondary | NMW | All Seasons | No Expectations (%) |
| Challenging whitewater | 0.55 | 0.86 | 0.33 | 0.63 | 2.0 | 0.76 | 0.59 | | 0.66 | 5.6 |
| Evidence of livestock | -0.80 | -0.58 | -0.13 | -0.68 | 12.5 | -1.19 | -0.94 | | -1.00 | 15.7 |
| Number of historic or prehistoric sites | 0.43 | 0.55 | 0.00 | 0.44 | 9.4 | 0.33 | 0.06 | | 0.26 | 23.9 |
| Opportunities for high quality fishing | 0.68 | 1.23 | -0.31 | 0.79 | 7.8 | 0.95 | 0.89 | | 0.93 | 2.8 |
| <i>N</i> | <i>136 to 156</i> | <i>64 to 80</i> | <i>14 to 18</i> | <i>214 to 250</i> | <i>256</i> | <i>33 to 41</i> | <i>14 to 19</i> | <i>5 to 10</i> | <i>54 to 69</i> | <i>71</i> |

¹ 7 point scale: -3=Much less; 0=About as much as expected; +3=Much more

Like private power boaters, commercial power boaters' expectations for encounters were quite accurate, and the quality of fishing exceeded expectations (Table 26B). Interestingly, among the commercial power boaters on the Wild section, the challenge of the whitewater was about what was expected, whereas private power boaters thought it exceeded expectations. Among the commercial power boaters on the Scenic section, there were few differences based on season. However, on the Wild section, there appeared to be several differences, although the small sample sizes make confident generalization impossible. One apparent trend was that those commercial power users boating in the primary season said that the number of some types of encounters slightly exceeded expectations, while those boating during either the NMW or the secondary season said the number of encounters they had was slightly less than expected. Secondary season commercial power boaters on the Wild section said that wildlife viewing, the wild character of the river, the challenge of the whitewater, and opportunities for fishing exceeded expectations to a greater degree than for boaters on the other sections. Fishing and wildlife viewing were better than expected in the secondary season.

Table 26B Commercial Power Boaters' Expectations of River Conditions.¹

| Commercial power | Scenic | | | | | Wild | | | | |
|---|-----------------|-----------------|----------|------------------|---------------------|------------------|-----------------|-----------------|------------------|---------------------|
| | Primary | Secondary | NMW | All Seasons | No Expectations (%) | Primary | Secondary | NMW | All Seasons | No Expectations (%) |
| Number of people at put-in | -0.20 | 0.18 | | -0.02 | 28.8 | 0.04 | -0.33 | 0.04 | -0.01 | 32.4 |
| Number of groups on the river each day | 0.16 | -0.07 | | 0.04 | 24.3 | 0.31 | -0.35 | -0.17 | 0.14 | 30.8 |
| Number of groups camped within sight | 0.12 | -0.33 | | -0.12 | 41.4 | 0.27 | -0.71 | -1.00 | -0.10 | 36.1 |
| Amount of wildlife seen | 0.26 | 0.03 | | 0.12 | 2.6 | -0.19 | 0.56 | 0.33 | 0.01 | 8.1 |
| Wild character of the river | 0.38 | 0.84 | | 0.64 | 4.1 | 0.10 | 1.00 | 0.21 | 0.26 | 5.3 |
| Challenging whitewater | 0.15 | 0.65 | | 0.42 | 4.7 | -0.25 | 0.92 | -0.57 | -0.12 | 11.0 |
| Evidence of livestock | -0.40 | -0.52 | | -0.46 | 31.3 | -0.66 | -0.29 | -1.06 | -0.67 | 36.6 |
| Number of historic or prehistoric sites | 0.64 | 0.64 | | 0.63 | 11.3 | 0.62 | 1.04 | 0.42 | 0.66 | 19.1 |
| Opportunities for high quality fishing | 1.00 | 0.98 | | 1.02 | 57.3 | 0.81 | 1.53 | 0.38 | 0.94 | 53.5 |
| <i>N</i> | <i>20 to 66</i> | <i>42 to 79</i> | <i>2</i> | <i>64 to 147</i> | <i>150</i> | <i>53 to 109</i> | <i>15 to 26</i> | <i>10 to 24</i> | <i>80 to 162</i> | <i>172</i> |

¹ 7 point scale: -3=Much less; 0=About as much as expected; +3=Much more

Private floaters on the Wild section were especially likely to say that they saw fewer people than expected (Table 26C). Interestingly, though, those boating during the secondary season were more likely to say they saw slightly more people than expected. Like the other user types, this group rated fishing as better than expected and said they saw less evidence of livestock than they had expected. There were some notable differences in ratings based on season. For instance, secondary season private floaters on the Wild section saw more wildlife than they expected, but those during the primary seasons saw less than expected. Boaters during the primary seasons evaluated the whitewater quality and wild character of the river as better than expected, but those during the secondary season said they got about what they expected.

Table 26C Private Float Boaters' Expectations of River Conditions.¹

| Private Float | Scenic | | | | | Wild | | | | |
|---|---------------|---------------|---------------|-----------------|---------------------|-------------------|-----------------|-----------------|-------------------|---------------------|
| | Primary | Secondary | NMW | All Seasons | No Expectations (%) | Primary | Secondary | NMW | All Seasons | No Expectations (%) |
| Number of people at put-in | | | | 0.33 | 4.5 | -0.37 | 0.20 | -0.76 | -0.42 | 8.3 |
| Number of groups on the river each day | | | | 0.29 | 0.0 | -0.46 | 0.16 | -0.88 | -0.51 | 3.6 |
| Number of groups camped within sight | | | | -0.05 | 0.0 | -0.92 | -0.58 | -1.04 | -0.92 | 6.2 |
| Amount of Wildlife seen | | | | -0.05 | 0.0 | -0.30 | 0.42 | -0.39 | -0.24 | 1.4 |
| Wild character of the river | | | | 0.64 | 0.0 | 0.58 | 0.06 | 0.42 | 0.47 | 1.1 |
| Challenging whitewater | | | | 0.59 | 0.0 | 0.56 | 0.03 | 0.28 | 0.41 | 1.4 |
| Evidence of livestock | | | | 0.00 | 4.5 | -0.80 | -0.37 | -0.59 | -0.68 | 18.5 |
| Number of historic or prehistoric sites | | | | 0.50 | 9.1 | 0.45 | 0.57 | 0.52 | 0.48 | 13.4 |
| Opportunities for high quality fishing | | | | 1.00 | 18.2 | 0.83 | 0.71 | 0.80 | 0.80 | 25.7 |
| <i>N</i> | <i>5 to 8</i> | <i>6 to 7</i> | <i>6 to 7</i> | <i>18 to 22</i> | <i>22</i> | <i>120 to 159</i> | <i>24 to 33</i> | <i>61 to 84</i> | <i>205 to 275</i> | <i>278</i> |

¹ 7 point scale: -3=Much less; 0=About as much as expected; +3=Much more

Commercial floaters were similar to private floaters in how encounters compared to expectations for their evaluations of fishing and in their reactions to the evidence of livestock (Table 26D). More than the other groups, they felt that the historic or prehistoric sites they saw exceeded their expectations. In this group, there were a few differences in responses by season. For instance, those contacted during the secondary season saw fewer people than expected, while those in the NMW were more likely to say their expectations for encounters were met. Those boating during the primary seasons saw less wildlife than they had expected to see, but those in the secondary season had their expectations for wildlife viewing met.

Table 26D Commercial Float Boaters' Expectations of River Conditions.¹

| Commercial Float | Scenic | | | | | Wild | | | | |
|---|---------------|-----------|---------------|-----------------|---------------------|------------------|-----------------|-----------------|------------------|---------------------|
| | Primary | Secondary | NMW | All Seasons | No Expectations (%) | Primary | Secondary | NMW | All Seasons | No Expectations (%) |
| Number of people at put-in | | | | 0.00 | | -0.30 | -0.71 | 0.00 | -0.25 | 21.1 |
| Number of groups on the river each day | | | | -0.36 | | 0.11 | -0.69 | -0.36 | -0.11 | 13.2 |
| Number of groups camped within sight | | | | -0.08 | | -0.81 | -1.00 | -0.87 | -0.85 | 13.2 |
| Amount of wildlife seen | | | | -1.50 | | -0.54 | 0.06 | -0.48 | -0.47 | 1.8 |
| Wild character of the river | | | | -0.71 | | 0.24 | 0.24 | 0.39 | 0.28 | 2.4 |
| Challenging whitewater | | | | -0.71 | | 0.15 | -0.18 | 0.11 | 0.11 | 0.6 |
| Evidence of livestock | | | | -0.50 | | -0.63 | -0.81 | -0.70 | -0.68 | 30.4 |
| Number of historic or prehistoric sites | | | | -0.33 | | 0.84 | 1.25 | 0.86 | 0.89 | 17.3 |
| Opportunities for high quality fishing | | | | -0.11 | | 0.96 | 1.40 | 1.16 | 1.08 | 43.3 |
| <i>N</i> | <i>4 to 7</i> | <i>1</i> | <i>4 to 6</i> | <i>10 to 13</i> | | <i>52 to 104</i> | <i>10 to 17</i> | <i>31 to 46</i> | <i>93 to 167</i> | <i>164</i> |

¹ 7 point scale: -3=Much less; 0=About as much as expected; +3=Much more

Most expectation variables did not show statistically significant differences among the user groups on the Scenic segment, with the exception of amount of Wildlife seen and evidence of livestock (Table 26E). Private power users encountered more wildlife than expected, while commercial power and private floaters encountered about as much as they expected. Private power users encountered less evidence of livestock than expected, while private floaters indicated seeing about as much as expected. Commercial floaters were not considered in this comparison due to a small sample size for the Scenic segment.

Table 26E Differences in Expectation Fulfillment for User Groups on the Scenic Section¹

| Scenic Section | Private Power | Commercial Power | Private Float | Commercial Float | <i>p-value</i> |
|---|--------------------|---------------------|--------------------|------------------|----------------|
| Number of people at put-in | 0.19 | -0.02 | 0.33 | | <i>ns</i> |
| Number of groups on the river each day | 0.24 | 0.04 | 0.29 | | <i>ns</i> |
| Number of groups camped within sight | -0.17 | -0.12 | -0.05 | | <i>ns</i> |
| Amount of wildlife seen | 0.56 ^b | 0.12 ^a | -0.05 ^a | | .009 |
| Wild character of the river | 0.78 | 0.64 | 0.64 | | <i>ns</i> |
| Challenging whitewater | 0.63 | 0.42 | 0.59 | | <i>ns</i> |
| Evidence of livestock | -0.68 ^a | -0.46 ^{ab} | 0.00 ^b | | .044 |
| Number of historic or prehistoric sites | 0.44 | 0.63 | 0.50 | | <i>ns</i> |
| Opportunities for high quality fishing | 0.79 | 1.02 | 1.00 | | <i>ns</i> |
| <i>N</i> | 214 to 250 | 64 to 147 | 18 to 22 | 9 to 13 | |

¹ 7 point scale: -3=Much less; 0=About as much as expected; +3=Much more
 Superscripts indicate statistically significant differences among user types at alpha = .05

On the Wild segment, private and commercial power users were found to be significantly different from private floaters concerning the number of groups encountered on the river each day, with private and commercial power boaters encountering about as many as expected and private floaters encountering slightly less than expected (Table 26F). Private and commercial power users were also found to differ from both private and commercial floaters in the number of groups camped within sight of their party, with floaters encountering fewer than expected and power users encountering about as many as expected. Both private and commercial floaters differed significantly from private power users in evaluation of the amount of wildlife encountered, where private power users encountered slightly more than expected and floaters encountered slightly less than expected. Commercial floaters encountered more historic and prehistoric sites than expected, to a degree that was significantly different than private power users but not from commercial power or private floaters.

Table 26F Differences in Expectation Fulfillment for User Groups on the Wild Section¹

| Wild Section | Private Power | Commercial Power | Private Float | Commercial Float | <i>p-value</i> |
|---|--------------------|--------------------|--------------------|---------------------|----------------|
| Number of people at put-in | -0.08 | -0.01 | -0.42 | -0.25 | <i>ns</i> |
| Number of groups on the river each day | 0.14 ^b | 0.14 ^b | -0.51 ^a | -0.11 ^{ab} | <.0005 |
| Number of groups camped within sight | -0.18 ^b | -0.10 ^b | -0.92 ^a | -0.85 ^a | <.0005 |
| Amount of wildlife seen | 0.41 ^b | 0.01 ^{ab} | -0.24 ^a | -0.47 ^a | .001 |
| Wild character of the river | 0.65 | 0.26 | 0.47 | 0.28 | <i>ns</i> |
| Challenging whitewater | 0.66 ^c | -0.12 ^a | 0.41 ^{bc} | 0.11 ^{ab} | <.0005 |
| Evidence of livestock | -1.00 | -0.67 | -0.68 | -0.68 | <i>ns</i> |
| Number of historic or prehistoric sites | 0.26 ^a | 0.66 ^{ab} | 0.48 ^{ab} | 0.89 ^b | .003 |
| Opportunities for high quality fishing | 0.93 | 0.94 | 0.80 | 1.08 | <i>ns</i> |
| <i>N</i> | 54 to 69 | 80 to 162 | 205 to 275 | 93 to 167 | |

¹ 7 point scale: -3=Much less; 0=About as much as expected; +3=Much more
 Superscripts indicate statistically significant differences among user types at alpha = .05

A separate question asked respondents the number of floaters and power boaters *seen* on the river compared to the numbers they had *expected* to see. Although this repeats information from the prior question, this question was asked to replicate a question asked in an earlier study (Krumpe et al. 1989). Respondents could indicate whether they had no expectations at all, or on a 5-point scale, they could indicate that the numbers of people seen was fewer (-2), more (2), or precisely as expected (0), (-2=Far fewer than expected; -1=Fewer than expected; 0=About as many as expected; 1=More than expected; 2=Far more than expected).

Most private power users had expectations of some degree (i.e., most did not select the “no expectations” category) regarding the number of floaters and power boaters they might see (Table 27A). On the Wild segment, respondents tended to see *fewer* floaters than expected, while on the Scenic segment they tended to see *about the number* of floaters they expected. The same was true of the number of power boaters seen (Table 27B). Sixty-two percent of private power boaters saw *fewer* power boaters on the Wild segment than expected, while 53% saw *about as many* as expected on the Scenic segment. Thirty-seven percent saw *fewer* power boaters than expected on the Scenic segment.

Table 27A Number of Floaters Seen by Private Power Boaters During Their River Trip.¹

| Private Power | Scenic | | | | Wild | | | |
|---------------------------|---------|-----------|------|-------------|---------|-----------|------|-------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Far more than expected | 8.9 | 6.2 | 22.2 | 9.0 | 2.4 | 19.0 | 0.0 | 6.8 |
| More than expected | 25.5 | 12.3 | 11.1 | 20.3 | 2.4 | 9.5 | 0.0 | 4.1 |
| About as many as expected | 50.3 | 37.0 | 50.0 | 46.1 | 9.5 | 4.8 | 40.0 | 12.3 |
| Fewer than expected | 9.6 | 19.8 | 5.6 | 12.5 | 54.8 | 33.3 | 50.0 | 47.9 |
| Far fewer than expected | 4.5 | 4.9 | 5.6 | 4.7 | 16.7 | 28.6 | 10.0 | 19.2 |
| I had no expectations | 1.3 | 19.8 | 5.6 | 7.4 | 14.3 | 4.8 | 0.0 | 9.6 |
| <i>N</i> | 157 | 81 | 18 | 256 | 42 | 21 | 10 | 73 |

¹ Expressed in percentages

Table 27B Number of Power Boaters Seen by Private Power Boaters During Their River Trip¹

| Private Power | Scenic | | | | Wild | | | |
|---------------------------|---------|-----------|------|-------------|---------|-----------|------|-------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Far more than expected | 0.6 | 2.5 | 0.0 | 1.2 | 2.4 | 14.3 | 0.0 | 5.5 |
| More than expected | 3.8 | 10.0 | 0.0 | 5.5 | 16.7 | 4.8 | 0.0 | 11.0 |
| About as many as expected | 52.2 | 51.3 | 61.1 | 52.5 | 23.8 | 14.3 | 30.0 | 21.9 |
| Fewer than expected | 34.4 | 22.5 | 22.2 | 29.8 | 50.0 | 61.9 | 50.0 | 53.4 |
| Far fewer than expected | 7.0 | 7.5 | 11.1 | 7.5 | 7.1 | 4.8 | 20.0 | 8.2 |
| I had no expectations | 1.9 | 6.3 | 5.6 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 |
| <i>N</i> | 157 | 80 | 18 | 255 | 42 | 21 | 10 | 73 |

¹ Expressed in percentages

Approximately one third of the commercial power users on the Scenic segment indicated they had no expectations regarding floaters, but those on the Wild segment generally did have expectations. On the Scenic segment, among those who *did* have expectations, the largest number of commercial power users indicated having seen *about as many* floaters as expected (Table 27C). However, a nearly equal number responded as having seen *fewer* floaters than expected. Commercial power users on the Wild segment were different, with 20% seeing *far more* floaters than expected, but another 20% seeing *far fewer* than expected. A slim majority (55%) reported seeing *fewer* or *far fewer* floaters than expected.

Table 27C Number of Floaters Seen by Commercial Power Boaters During a River Trip.¹

| Commercial Power | Scenic | | | | Wild | | | |
|---------------------------|---------|-----------|-----|-------------|---------|-----------|------|-------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Far more than expected | 1.5 | 2.6 | | 2.0 | 18.6 | 33.3 | 14.8 | 20.3 |
| More than expected | 14.7 | 6.4 | | 10.1 | 5.9 | 3.7 | 22.2 | 8.1 |
| About as many as expected | 42.6 | 16.7 | | 29.1 | 14.4 | 18.5 | 14.8 | 15.1 |
| Fewer than expected | 20.6 | 19.2 | | 20.3 | 35.6 | 22.2 | 40.7 | 34.3 |
| Far fewer than expected | 4.4 | 5.1 | | 4.7 | 22.9 | 22.2 | 7.4 | 20.3 |
| I had no expectations | 16.2 | 50.0 | | 33.8 | 2.5 | 0.0 | | 1.7 |
| <i>N</i> | 68 | 78 | 2 | 148 | 118 | 27 | 27 | 172 |

¹ Expressed in percentages

Commercial power users on the Scenic segment were more likely to have had expectations for the number of power boaters they would see (Table 27D). Approximately 43% indicated they saw *fewer* or *far fewer* power boaters than expected, while only 14% said there were *more* or *far more* power boaters than they had expected. On the Wild segment, 26% reported seeing *far more* power boaters than was expected, with another 13% indicating seeing *more* than expected. Approximately 36% reported seeing *fewer* or *far fewer* power boaters than expected on the Wild segment.

Table 27D Number of Power Boaters seen by Commercial Power Boaters During a River Trip.¹

| Commercial Power | Scenic | | | | Wild | | | |
|---------------------------|---------|-----------|-----|-------------|---------|-----------|------|-------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Far more than expected | 2.9 | 1.3 | | 2.0 | 24.6 | 25.9 | 33.3 | 26.2 |
| More than expected | 16.2 | 8.9 | | 12.1 | 6.8 | 18.5 | 33.3 | 12.8 |
| About as many as expected | 23.5 | 26.6 | | 24.8 | 24.6 | 22.2 | 18.5 | 23.3 |
| Fewer than expected | 33.8 | 34.2 | | 34.9 | 24.6 | 29.6 | 14.8 | 23.8 |
| Far fewer than expected | 4.4 | 11.4 | | 8.1 | 16.9 | 3.7 | 0.0 | 12.2 |
| I had no expectations | 19.1 | 17.7 | | 18.1 | 2.5 | 0.0 | 0.0 | 1.7 |
| <i>N</i> | 68 | 79 | 2 | 149 | 118 | 27 | 27 | 172 |

¹ Expressed in percentages

Private floaters on the Scenic segment generally saw about the number of other floaters they expected to see (Table 27E). However, they tended to report seeing more power boaters than was expected (Table 27F). On the Wild segment, 50% of private floaters saw *fewer* or *far fewer* floaters than expected and 57% saw *fewer* or *far fewer* power boaters than expected.

Table 27E Number of Floaters Seen by Private Float Boaters During Their River Trip¹

| Private Float | Scenic | | | | Wild | | | |
|---------------------------|---------|-----------|-----|-------------|---------|-----------|------|-------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Far more than expected | | | | 0.0 | 5.0 | 9.1 | 4.7 | 5.4 |
| More than expected | | | | 22.7 | 13.2 | 6.1 | 17.4 | 13.7 |
| About as many as expected | | | | 40.9 | 30.2 | 18.2 | 34.9 | 30.2 |
| Fewer than expected | | | | 22.7 | 45.3 | 51.5 | 38.4 | 43.9 |
| Far fewer than expected | | | | 9.1 | 4.4 | 15.2 | 4.7 | 5.8 |
| I had no expectations | | | | 4.5 | 1.9 | 0.0 | | 1.1 |
| <i>N</i> | 8 | 7 | 7 | 22 | 159 | 33 | 86 | 278 |

¹ Expressed in percentages

Table 27F Number of Power Boaters Seen by Private Float Boaters During Their River Trip¹

| Private Float | Scenic | | | | Wild | | | |
|---------------------------|---------|-----------|-----|-------------|---------|-----------|------|-------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Far more than expected | | | | 13.6 | 4.4 | 3.0 | 4.6 | 4.3 |
| More than expected | | | | 40.9 | 6.3 | 0.0 | 3.4 | 4.7 |
| About as many as expected | | | | 27.3 | 13.9 | 9.1 | 17.2 | 14.4 |
| Fewer than expected | | | | 4.5 | 34.2 | 39.4 | 25.3 | 32.0 |
| Far fewer than expected | | | | 4.5 | 25.3 | 27.3 | 29.9 | 27.0 |
| I had no expectations | | | | 9.1 | 15.8 | 21.2 | 19.5 | 17.6 |
| <i>N</i> | 8 | 7 | 7 | 22 | 158 | 33 | 87 | 278 |

¹ Expressed in percentages

Too few commercial floaters were contacted on the Scenic segment to derive reliable conclusions about this group. On the Wild segment, however, 45% of these respondents saw *fewer* or *far fewer* floaters than expected, and only 27% saw *more* or *far more* than expected (Table 27G). These boaters' responses for the number of power boaters seen were different from reactions to the number of floaters seen. Although 28% indicated having *no expectations*, 37% said they saw *far fewer* power boaters than they expected (Table 27H).

Table 27G Number of Floaters Seen by Commercial Float Boaters During a River Trip¹

| Commercial Float | Scenic | | | | Wild | | | |
|---------------------------|----------|-----------|----------|-------------|------------|-----------|-----------|-------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Far more than expected | | | | 0.0 | 15.4 | 23.5 | 10.9 | 15.0 |
| More than expected | | | | 13.3 | 9.6 | 11.8 | 17.4 | 12.0 |
| About as many as expected | | | | 40.0 | 26.9 | 29.4 | 28.3 | 27.5 |
| Fewer than expected | | | | 33.3 | 34.6 | 35.3 | 34.8 | 34.7 |
| Far fewer than expected | | | | 6.7 | 13.5 | 0.0 | 8.7 | 10.8 |
| I had no expectations | | | | 6.7 | 0.0 | 0.0 | | 0.0 |
| <i>N</i> | <i>8</i> | <i>1</i> | <i>6</i> | <i>15</i> | <i>104</i> | <i>17</i> | <i>46</i> | <i>167</i> |

¹ Expressed in percentages

Table 27H Number of Power Boaters seen by Commercial Float Boaters During Their River Trip¹

| Commercial Float | Scenic | | | | Wild | | | |
|---------------------------|----------|-----------|----------|-------------|------------|-----------|-----------|-------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Far more than expected | | | | 46.7 | 10.6 | 11.8 | 19.6 | 13.2 |
| More than expected | | | | 33.3 | 4.8 | 0.0 | 8.7 | 5.4 |
| About as many as expected | | | | 20.0 | 8.7 | 0.0 | 8.7 | 7.8 |
| Fewer than expected | | | | 0.0 | 10.6 | 11.8 | 2.2 | 8.4 |
| Far fewer than expected | | | | 0.0 | 40.4 | 52.9 | 23.9 | 37.1 |
| I had no expectations | | | | 0.0 | 25.0 | 23.5 | 37.0 | 28.1 |
| <i>N</i> | <i>8</i> | <i>1</i> | <i>6</i> | <i>15</i> | <i>104</i> | <i>17</i> | <i>46</i> | <i>167</i> |

¹ Expressed in percentages

Figures 13 and 14 show the mean number of encounters, both float and power trips, on the Wild and Scenic segments of the Snake River (contact card data).

Figure 13 Encounters on the Scenic Segment

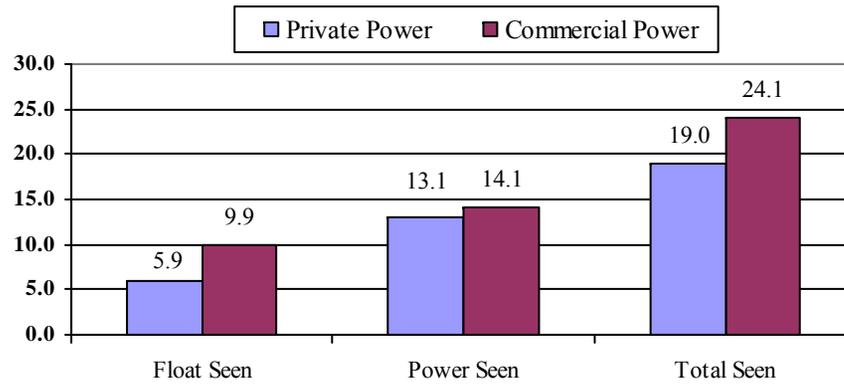
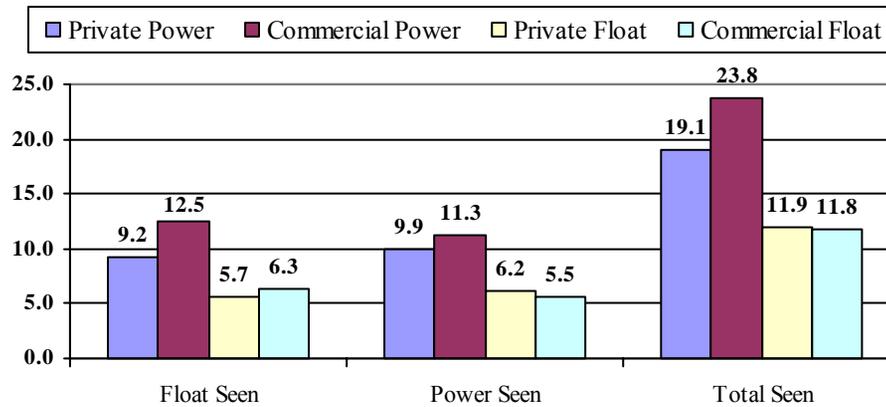


Figure 14 Encounters on the Wild Segment



Motivations and Experiences

Respondents were asked about several feelings or experiences that people sometimes seek on river trips and that are available on the Snake River. The format of this question was similar to the contact cards, except that each respondent indicated both an expectation and actual achievement for each item. (Responses were recorded using a 7-point scale, with 1=not at all and 7=very much.) Additionally, while the contact card asked about expectations, the mail survey asked what people were seeking, which is a measure of motivation or desire. Some of the items were identical to the contact cards, but most differed slightly.

Private power boaters rated nearly all motives as highly important, with no substantial differences between the Scenic and Wild segments (Table 28A). Average scores for *experiences* exceed desires but only by a small amount. There were two exceptions to this. On the Scenic segment, evaluations of *experiencing* good fishing opportunities and *experiencing* opportunities to view wildlife both were lower than the means for *seeking* the experience (5.2 vs. 5.8 for fishing; 5.3 vs. 5.5 for wildlife viewing).

Table 28A Private Power Boaters' Motivations and Experiences During a River Trip¹

| Private power | Scenic | | | | Wild | | | |
|---|---------|-----------|------|-------------|---------|-----------|------|-------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Seeking the ability to relax in a peaceful setting | 5.98 | 5.31 | 5.76 | 5.87 | 5.75 | 6.00 | 5.80 | 5.82 |
| Experiencing relaxation in a peaceful setting | 6.20 | 5.33 | 6.00 | 6.07 | 6.20 | 6.00 | 6.30 | 6.16 |
| Seeking opportunities to view wildlife | 5.53 | 5.61 | 4.94 | 5.50 | 5.23 | 5.68 | 5.60 | 5.41 |
| Experiencing opportunities to view wildlife | 5.23 | 4.50 | 5.25 | 5.29 | 5.27 | 5.50 | 4.80 | 5.27 |
| Seeking scenic views | 6.27 | 5.91 | 5.94 | 6.20 | 5.83 | 6.28 | 6.10 | 5.99 |
| Experiencing scenic views | 6.41 | 5.85 | 6.06 | 6.39 | 6.17 | 6.42 | 6.70 | 6.31 |
| Seeking good fishing opportunities | 5.58 | 5.49 | 5.56 | 5.77 | 6.00 | 5.94 | 6.10 | 6.00 |
| Experiencing good fishing opportunities | 5.17 | 6.49 | 4.93 | 5.21 | 5.65 | 5.68 | 6.30 | 5.75 |
| Seeking the ability to experience solitude | 5.24 | 6.43 | 5.24 | 5.26 | 4.88 | 5.35 | 5.30 | 5.06 |
| Experiencing solitude | 5.27 | 5.43 | 5.56 | 5.36 | 5.07 | 5.79 | 5.60 | 5.34 |
| Seeking the ability to experience a pristine setting | 5.73 | 5.16 | 5.53 | 5.67 | 5.43 | 6.32 | 5.60 | 5.70 |
| Experiencing a pristine setting | 5.88 | 6.18 | 5.75 | 5.88 | 5.76 | 6.55 | 6.10 | 6.03 |
| Seeking the opportunity to experience challenges | 5.16 | 5.14 | 5.18 | 5.16 | 5.48 | 5.39 | 5.40 | 5.44 |
| Experiencing challenges | 5.42 | 4.19 | 5.31 | 5.38 | 5.76 | 5.68 | 5.50 | 5.70 |
| Seeking opportunities to see historic/prehistoric sites | 4.78 | 5.60 | 4.88 | 4.59 | 4.28 | 3.84 | 3.40 | 4.03 |

| Private power | Scenic | | | | Wild | | | |
|---|-------------------|-----------------|-----------------|-------------------|-----------------|-----------------|-----------|-----------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Experiencing historic/prehistoric sites | 4.97 | 5.69 | 4.63 | 4.80 | 4.41 | 4.10 | 4.00 | 4.27 |
| Seeking time with family and friends | 6.39 | 5.30 | 6.06 | 6.38 | 6.62 | 6.29 | 6.90 | 6.58 |
| Experiencing time with family and friends | 6.48 | 6.41 | 6.31 | 6.48 | 6.63 | 6.50 | 7.00 | 6.65 |
| Seeking opportunities to see unique geological features | 5.33 | 6.14 | 5.29 | 5.27 | 4.80 | 5.17 | 5.20 | 4.96 |
| Experiencing unique geological features | 5.57 | 5.56 | 5.50 | 5.58 | 5.17 | 5.47 | 5.60 | 5.31 |
| <i>N</i> | <i>150 to 155</i> | <i>79 to 80</i> | <i>15 to 17</i> | <i>246 to 251</i> | <i>39 to 41</i> | <i>17 to 20</i> | <i>10</i> | <i>68 to 71</i> |

¹ 7 point scale: 1=Not at all; 7=Very much

Commercial power boaters tended to rate fewer of the experiences as highly sought than the private power boaters (Table 28B). For this group, the most highly sought, on both segments (in order from highest ranked) were scenic views, time with friends and family, opportunities to view wildlife, being in a pristine setting, and unique geological features. Among these boaters, relaxation was higher than anticipated, as were opportunities to see historic and prehistoric sites. However, actual opportunities to see wildlife were lower than desired. For all other items, means for experiences sought were approximately equal to respondents' *actual* experiences.

Table 28B Commercial Power Boaters' Motivations and Experiences During a River Trip¹

| Commercial power | Scenic | | | | Wild | | | |
|--|---------|-----------|-----|-------------|---------|-----------|------|-------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Seeking the ability to relax in a peaceful setting | 4.67 | 3.92 | | 4.83 | 4.59 | 5.36 | 4.86 | 4.75 |
| Experiencing relaxation in a peaceful setting | 5.04 | 3.60 | | 5.33 | 4.95 | 5.88 | 4.59 | 5.02 |
| Seeking opportunities to view wildlife | 5.35 | 5.78 | | 5.46 | 5.05 | 5.29 | 5.62 | 5.18 |
| Experiencing opportunities to view wildlife | 4.88 | 5.05 | | 4.80 | 4.05 | 4.96 | 4.30 | 4.22 |
| Seeking scenic views | 6.35 | 5.81 | | 6.26 | 6.05 | 6.04 | 6.07 | 6.05 |
| Experiencing scenic views | 6.29 | 5.57 | | 6.30 | 6.13 | 6.46 | 5.67 | 6.10 |
| Seeking good fishing opportunities | 1.49 | 4.47 | | 2.68 | 2.00 | 3.96 | 2.04 | 2.29 |
| Experiencing good fishing opportunities | 1.59 | 5.93 | | 2.77 | 2.19 | 3.91 | 1.70 | 2.36 |
| Seeking the ability to experience solitude | 3.41 | 6.30 | | 3.78 | 3.46 | 4.12 | 3.48 | 3.56 |
| Experiencing solitude | 3.25 | 4.76 | | 3.92 | 3.54 | 4.57 | 3.38 | 3.67 |
| Seeking the ability to experience a pristine setting | 5.37 | 3.51 | | 5.41 | 5.10 | 5.16 | 5.34 | 5.15 |

| Commercial power | Scenic | | | | Wild | | | | |
|---|----------|-----------------|-----------------|-------------|-------------------|-------------------|-----------------|-----------------|-------------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons | |
| Experiencing a pristine setting | 5.33 | 3.60 | | 5.59 | 5.20 | 5.78 | 4.88 | 5.23 | |
| Seeking the opportunity to experience challenges | 3.75 | 5.24 | | 3.65 | 3.67 | 4.42 | 4.55 | 3.93 | |
| Experiencing challenges | 3.77 | 4.61 | | 3.88 | 3.59 | 4.61 | 2.56 | 3.56 | |
| Seeking opportunities to see historic/prehistoric sites | 4.13 | 5.45 | | 4.38 | 3.77 | 4.04 | 4.48 | 3.92 | |
| Experiencing historic/prehistoric sites | 5.09 | 4.96 | | 5.06 | 4.76 | 4.96 | 4.13 | 4.69 | |
| Seeking time with family and friends | 5.71 | 4.10 | | 5.71 | 5.58 | 5.68 | 6.04 | 5.67 | |
| Experiencing time with family and friends | 5.80 | 5.70 | | 5.87 | 5.85 | 6.13 | 5.79 | 5.88 | |
| Seeking opportunities to see unique geological features | 5.43 | 6.17 | | 5.33 | 4.97 | 4.80 | 5.56 | 5.04 | |
| Experiencing unique geological features | 5.64 | 5.57 | | 5.71 | 5.30 | 5.63 | 5.21 | 5.34 | |
| | <i>N</i> | <i>56 to 67</i> | <i>68 to 76</i> | <i>2</i> | <i>128 to 145</i> | <i>109 to 117</i> | <i>22 to 25</i> | <i>23 to 29</i> | <i>154 to 171</i> |

¹ 7 point scale: 1=Not at all; 7=Very much

Among private floaters, the five most important motivations on the Scenic segment included seeking time with family and friends, scenic views, the ability to experience a pristine setting, unique geological features, and the ability to relax in a peaceful setting (Table 28C). On the Wild segment, the five most important items sought included time with family and friends, relaxation, scenic views, an experience in a pristine setting, and the ability to experience challenges. Experiences were similar to desires for nearly all items, except for opportunity to view wildlife, which was substantially lower than desired. Additionally, on the Scenic segment, opportunities for fishing were substantially less than desired.

Table 28C Private Float Boaters' Motivations and Experiences During a River Trip¹

| Private float | Scenic | | | | Wild | | | |
|--|---------|-----------|-----|-------------|---------|-----------|------|-------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Seeking the ability to relax in a peaceful setting | | | | 5.76 | 6.01 | 6.42 | 6.42 | 6.18 |
| Experiencing relaxation in a peaceful setting | | | | 6.00 | 5.99 | 6.15 | 6.06 | 6.03 |
| Seeking opportunities to view wildlife | | | | 5.57 | 5.37 | 5.21 | 5.53 | 5.40 |
| Experiencing opportunities to view wildlife | | | | 4.36 | 4.25 | 5.12 | 4.33 | 4.38 |
| Seeking scenic views | | | | 6.19 | 6.12 | 6.09 | 6.21 | 6.14 |
| Experiencing scenic views | | | | 6.18 | 6.23 | 6.21 | 6.27 | 6.24 |
| Seeking good fishing opportunities | | | | 4.75 | 4.17 | 3.84 | 4.31 | 4.17 |

| Private float | Scenic | | | | Wild | | | |
|---|---------------|---------------|----------|-----------------|-------------------|-----------------|-----------------|-------------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Experiencing good fishing opportunities | | | | 3.95 | 4.09 | 3.39 | 4.08 | 4.00 |
| Seeking the ability to experience solitude | | | | 5.43 | 5.33 | 5.12 | 5.72 | 5.42 |
| Experiencing solitude | | | | 5.27 | 5.17 | 4.79 | 5.24 | 5.14 |
| Seeking the ability to experience a pristine setting | | | | 6.10 | 5.69 | 5.91 | 5.99 | 5.81 |
| Experiencing a pristine setting | | | | 5.73 | 5.56 | 5.52 | 5.53 | 5.54 |
| Seeking the opportunity to experience challenges | | | | 5.57 | 5.61 | 6.09 | 5.75 | 5.72 |
| Experiencing challenges | | | | 5.36 | 5.57 | 5.70 | 5.70 | 5.62 |
| Seeking opportunities to see historic/prehistoric sites | | | | 4.62 | 4.28 | 3.67 | 4.53 | 4.28 |
| Experiencing historic/prehistoric sites | | | | 4.50 | 4.50 | 4.24 | 4.84 | 4.57 |
| Seeking time with family and friends | | | | 6.38 | 6.31 | 6.42 | 6.35 | 6.34 |
| Experiencing time with family and friends | | | | 6.45 | 6.38 | 6.55 | 6.53 | 6.45 |
| Seeking opportunities to see unique geological features | | | | 5.86 | 5.19 | 5.06 | 5.26 | 5.19 |
| Experiencing unique geological features | | | | 5.77 | 5.44 | 5.61 | 5.54 | 5.49 |
| <i>N</i> | <i>7 to 8</i> | <i>6 to 7</i> | <i>7</i> | <i>20 to 22</i> | <i>150 to 156</i> | <i>31 to 33</i> | <i>79 to 81</i> | <i>261 to 269</i> |

¹ 7 point scale: 1=Not at all; 7=Very much

The top five experiences sought by commercial floaters were similar between groups on the Scenic and Wild segments. (However, the small number of commercial floaters on the Scenic segment makes drawing such comparisons risky.) Commercial floaters rated scenic views as the most important experience they were seeking, followed by time with family and friends, ability to relax in a peaceful setting, ability to experience a pristine setting, and opportunities to experience challenges (Table 28D). For most experiences, conditions matched desires closely. However, opportunities to view wildlife were substantially less than what commercial floaters were seeking, while opportunities to experience historical and prehistoric sites exceeded expectations.

Table 28D Commercial Float Boaters' Motivations and Experiences During a River Trip¹

| Commercial float | Scenic | | | | Wild | | | | |
|---|----------|-----------|----------|-------------|-----------------|-----------------|-----------------|-----------------|-------------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons | |
| Seeking the ability to relax in a peaceful setting | | | | 6.40 | 5.57 | 6.00 | 6.42 | 5.84 | |
| Experiencing relaxation in a peaceful setting | | | | 5.47 | 5.60 | 6.24 | 6.35 | 5.87 | |
| Seeking opportunities to view wildlife | | | | 6.27 | 5.27 | 5.25 | 5.77 | 5.41 | |
| Experiencing opportunities to view wildlife | | | | 3.87 | 3.96 | 5.12 | 4.84 | 4.32 | |
| Seeking scenic views | | | | 6.53 | 6.18 | 5.38 | 6.45 | 6.17 | |
| Experiencing scenic views | | | | 6.33 | 6.35 | 5.94 | 6.45 | 6.33 | |
| Seeking good fishing opportunities | | | | 3.92 | 2.78 | 2.88 | 3.72 | 3.04 | |
| Experiencing good fishing opportunities | | | | 3.46 | 3.10 | 3.31 | 4.27 | 3.44 | |
| Seeking the ability to experience solitude | | | | 5.73 | 4.43 | 4.69 | 5.60 | 4.77 | |
| Experiencing solitude | | | | 4.27 | 4.46 | 5.06 | 5.47 | 4.80 | |
| Seeking the ability to experience a pristine setting | | | | 6.33 | 5.63 | 4.69 | 6.33 | 5.72 | |
| Experiencing a pristine setting | | | | 5.47 | 5.63 | 5.06 | 6.23 | 5.73 | |
| Seeking the opportunity to experience challenges | | | | 5.50 | 5.66 | 5.50 | 5.91 | 5.71 | |
| Experiencing challenges | | | | 4.71 | 5.24 | 5.12 | 5.77 | 5.37 | |
| Seeking opportunities to see historic/prehistoric sites | | | | 4.60 | 4.06 | 3.50 | 4.44 | 4.11 | |
| Experiencing historic/prehistoric sites | | | | 4.20 | 4.89 | 5.76 | 5.35 | 5.11 | |
| Seeking time with family and friends | | | | 6.67 | 6.07 | 5.06 | 6.07 | 5.97 | |
| Experiencing time with family and friends | | | | 6.40 | 6.30 | 5.76 | 6.21 | 6.22 | |
| Seeking opportunities to see unique geological features | | | | 5.33 | 5.03 | 3.81 | 5.53 | 5.04 | |
| Experiencing unique geological features | | | | 5.27 | 5.68 | 5.47 | 6.19 | 5.79 | |
| | <i>N</i> | <i>8</i> | <i>1</i> | <i>6</i> | <i>14 to 15</i> | <i>97 to 99</i> | <i>16 to 17</i> | <i>41 to 43</i> | <i>154 to 159</i> |

¹ 7 point scale: 1=Not at all; 7=Very much

Tables 28E and 28F illustrate differences between groups on the two river segments for experiences sought and attained. Differences between means of more than one point on the 7-point scale can be considered meaningful, and ANOVA tests indicate cases where such differences are unlikely to be due to chance. By these criteria (both practical and statistical significance), three important differences emerged on the Scenic segment, all involving commercial power users. This group was much less likely to seek or experience fishing, to seek or experience solitude, and to seek or experience challenges (Table 28E).

Table 28E Differences in Motivations and Experiences Among User Groups on the Scenic Section¹

| Scenic Section | Private Power | Commercial Power | Private Float | Commercial Float | <i>p-value</i> |
|---|-------------------|--------------------|-------------------|------------------|----------------|
| Seeking the ability to relax in a peaceful setting | 5.87 ^b | 4.83 ^a | 5.76 ^b | | <.0005 |
| Experiencing relaxation in a peaceful setting | 6.07 ^b | 5.33 ^a | 6.00 ^b | | <.0005 |
| Seeking opportunities to view wildlife | 5.50 | 5.46 | 5.57 | | <i>ns</i> |
| Experiencing opportunities to view wildlife | 5.29 ^b | 4.80 ^{ab} | 4.36 ^a | | .001 |
| Seeking scenic views | 6.20 | 6.26 | 6.19 | | <i>ns</i> |
| Experiencing scenic views | 6.39 | 6.30 | 6.18 | | <i>ns</i> |
| Seeking good fishing opportunities | 5.77 ^b | 2.68 ^a | 4.75 ^b | | <.0005 |
| Experiencing good fishing opportunities | 5.21 ^c | 2.77 ^a | 3.95 ^b | | <.0005 |
| Seeking the ability to experience solitude | 5.26 ^b | 3.78 ^a | 5.43 ^b | | <.0005 |
| Experiencing solitude | 5.36 ^b | 3.92 ^a | 5.27 ^b | | <.0005 |
| Seeking the ability to experience a pristine setting | 5.67 | 5.41 | 6.10 | | <i>ns</i> |
| Experiencing a pristine setting | 5.88 | 5.59 | 5.73 | | <i>ns</i> |
| Seeking the opportunity to experience challenges | 5.16 ^b | 3.65 ^a | 5.57 ^b | | <.0005 |
| Experiencing challenges | 5.38 ^b | 3.88 ^a | 5.36 ^b | | <.0005 |
| Seeking opportunities to see historic/prehistoric sites | 4.59 | 4.38 | 4.62 | | <i>ns</i> |
| Experiencing historic/prehistoric sites | 4.80 | 5.06 | 4.50 | | <i>ns</i> |
| Seeking time with family and friends | 6.38 ^b | 5.71 ^a | 6.38 ^b | | <.0005 |
| Experiencing time with family and friends | 6.48 ^b | 5.87 ^a | 6.45 ^b | | <.0005 |
| Seeking opportunities to see unique geological features | 5.27 | 5.33 | 5.86 | | <i>ns</i> |
| Experiencing unique geological features | 5.58 | 5.71 | 5.77 | | <i>ns</i> |

¹ 7 point scale: 1=Not at all; 7=Very much

Superscripts indicate statistically significant differences among user types at alpha = .05

Using the same criteria of statistical and practical significance, on the Wild segment five important differences emerged between user types. First, commercial power users were less likely to seek or experience “relaxation in a peaceful setting.” Second, private power users rated their experiences of seeing wildlife as better than any other group. Third, each group differed from the others with respect to fishing, with private power users experiencing it the most, followed by floaters, and commercial power users not really seeking or experiencing it much at all. The fourth and fifth differences were similar to differences on the Scenic segment. Commercial power users sought and experienced solitude and challenge less than either group of private boaters or the commercial floaters. There were other statistically significant differences among groups, but none of very large (>1.0 point) magnitude.

Table 28F Differences in Motivations and Experiences Among User Groups on the Wild Section¹

| Wild Section | Private Power | Commercial Power | Private Float | Commercial Float | <i>p-value</i> |
|---|-------------------|--------------------|--------------------|--------------------|----------------|
| Seeking the ability to relax in a peaceful setting | 5.82 ^b | 4.75 ^a | 6.18 ^b | 5.84 ^b | <.0005 |
| Experiencing relaxation in a peaceful setting | 6.16 ^b | 5.02 ^a | 6.03 ^b | 5.87 ^b | <.0005 |
| Seeking opportunities to view Wildlife | 5.41 | 5.18 | 5.40 | 5.41 | <i>ns</i> |
| Experiencing opportunities to view Wildlife | 5.27 ^b | 4.22 ^a | 4.38 ^a | 4.32 ^a | <.0005 |
| Seeking scenic views | 5.99 | 6.05 | 6.14 | 6.17 | <i>ns</i> |
| Experiencing scenic views | 6.31 | 6.10 | 6.24 | 6.33 | <i>ns</i> |
| Seeking good fishing opportunities | 6.00 ^c | 2.29 ^a | 4.17 ^b | 3.04 ^a | <.0005 |
| Experiencing good fishing opportunities | 5.75 ^c | 2.36 ^a | 4.00 ^b | 3.44 ^b | <.0005 |
| Seeking the ability to experience solitude | 5.06 ^b | 3.56 ^a | 5.42 ^b | 4.77 ^b | <.0005 |
| Experiencing solitude | 5.34 ^b | 3.67 ^a | 5.14 ^b | 4.80 ^b | <.0005 |
| Seeking the ability to experience a pristine setting | 5.70 ^b | 5.15 ^a | 5.81 ^b | 5.72 ^b | <.0005 |
| Experiencing a pristine setting | 6.03 ^b | 5.23 ^a | 5.54 ^{ab} | 5.73 ^b | <.0005 |
| Seeking the opportunity to experience challenges | 5.44 ^b | 3.93 ^a | 5.72 ^b | 5.71 ^b | <.0005 |
| Experiencing challenges | 5.70 ^b | 3.56 ^a | 5.62 ^b | 5.37 ^b | <.0005 |
| Seeking opportunities to see historic/prehistoric sites | 4.03 | 3.92 | 4.28 | 4.11 | <i>ns</i> |
| Experiencing historic/prehistoric sites | 4.27 ^a | 4.69 ^{ab} | 4.57 ^{ab} | 5.11 ^b | .002 |
| Seeking time with family and friends | 6.58 ^c | 5.67 ^a | 6.34 ^{bc} | 5.97 ^{ab} | <.0005 |
| Experiencing time with family and friends | 6.65 ^c | 5.88 ^a | 6.45 ^{bc} | 6.22 ^{ab} | <.0005 |
| Seeking opportunities to see unique geological features | 4.96 | 5.04 | 5.19 | 5.04 | <i>ns</i> |
| Experiencing unique geological features | 5.31 ^a | 5.34 ^a | 5.49 ^a | 5.79 ^a | .038 |

¹ 7 point scale: 1=Not at all; 7=Very much

Superscripts indicate statistically significant differences among user types at alpha = .05

Outstandingly Remarkable Values

Respondents were asked about certain opportunities and conditions the Forest Service is charged to provide on both the Wild and Scenic segments of the river. They indicated how much they agreed or disagreed with each of twelve outstandingly remarkable value statements, on a 7-point scale from -3 (strongly disagree) to +3 (strongly agree).

On average, private power users agreed with each of the statements (Table 29A). The strongest agreement, among those on the Scenic segment, was with statements related to the Snake River as a unique backcountry river, the diverse and appealing landscape along the river, provision of a wide range of recreation opportunities, and a premier four season whitewater adventure for power boaters. A similar pattern emerged among private power users on the Wild segment, but for this group, the abundant, unique sport fishery was one of the top four items, and the premier four-season whitewater adventure was not. It is important to note that, on average, private power boaters on both segments slightly disagreed that river management treats boaters equally.

There were few differences by season on the Scenic segment. Among private power boaters on the Wild segment, the only substantial difference by season was that the secondary season boaters agreed less strongly with statements about the premier four-season whitewater adventure for power boaters.

Table 29A Private Power Boaters' Responses to Outstandingly Remarkable Values in Hells Canyon¹

| Private power | Scenic | | | | Wild | | | |
|---|---------|-----------|-------|-------------|---------|-----------|-----|-------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| The river provides a wide range of recreation opportunities | 1.93 | 1.82 | 1.25 | 1.85 | 1.66 | 1.95 | | 1.84 |
| The Snake is a unique backcountry river | 2.06 | 2.18 | 1.56 | 2.06 | 1.85 | 1.95 | | 1.96 |
| The river supports an abundant, unique sport fishery | 1.84 | 1.87 | 1.13 | 1.81 | 1.93 | 2.05 | | 2.00 |
| The river provides outstanding opportunities to explore prehistoric and historic sites | 1.56 | 1.22 | 1.13 | 1.42 | 1.15 | 1.35 | | 1.26 |
| The river offers power boaters opportunities for a premier four-season whitewater adventure | 1.98 | 1.68 | 1.19 | 1.83 | 1.78 | 1.20 | | 1.69 |
| The river provides one of the best whitewater | 1.09 | 0.95 | -0.06 | 0.97 | 1.10 | 0.61 | | 1.00 |

| Private power | Scenic | | | | Wild | | | |
|---|-------------------|-----------------|-----------|-------------------|-----------------|-----------------|----------|-----------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| floating experiences in the Pacific Northwest | | | | | | | | |
| River management treats floaters and power boaters equitably | 0.30 | 0.13 | -0.94 | 0.16 | -0.75 | -1.05 | | -0.71 |
| The river provides unique experiences to view Wildlife | 1.86 | 1.87 | 1.00 | 1.81 | 1.63 | 1.50 | | 1.63 |
| The landscape along the river is diverse and appealing | 2.07 | 2.01 | 1.44 | 2.01 | 2.05 | 1.95 | | 2.07 |
| The river provides outstanding opportunities for diverse user groups | 1.86 | 1.51 | 1.31 | 1.72 | 1.46 | 1.45 | | 1.50 |
| There is little evidence of human disturbance in Hells Canyon (outside of historic sites) | 1.53 | 1.30 | 1.19 | 1.43 | 1.50 | 1.30 | | 1.46 |
| River management treats commercial and non-commercial boaters equitably | 0.64 | 0.49 | -0.31 | 0.53 | 0.23 | 0.25 | | 0.29 |
| <i>N</i> | <i>149 to 153</i> | <i>77 to 78</i> | <i>16</i> | <i>243 to 247</i> | <i>39 to 41</i> | <i>18 to 20</i> | <i>9</i> | <i>66 to 70</i> |

¹ 7-point scale: -3=strongly disagree; 0=neutral; +3=strongly agree.

Among commercial power users on the Scenic segment, the top four agreed upon statements included the Snake as a unique backcountry river, the diverse and appealing landscape, the wide range of recreation opportunities, and the opportunities for viewing wildlife (Table 29B). Responses for commercial power users on the Wild segment were similar, with the exception that “the river provides opportunities for diverse user groups” was in the top four agreed upon statements, replacing opportunities to view wildlife.

Among commercial power users on the Scenic segment, boaters in the primary and secondary seasons were very similar in assessments, with the exception of the abundant, unique sport fishery. Secondary season respondents agreed more strongly with this item. More differences emerged within commercial power on the Wild segment, where commercial power users during the NMW agreed much less strongly with many items than users in the secondary season. Those whose trip was during the motorized primary season were intermediate between those in the other two seasons.

Table 29B Commercial Power Boaters' Responses to Outstandingly Remarkable Values in Hells Canyon¹

| Commercial power | Scenic | | | | Wild | | | |
|---|-----------------|-----------------|----------|-------------------|-------------------|-----------------|-----------------|-------------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| The river provides a wide range of recreation opportunities | 1.80 | 1.72 | | 1.76 | 1.59 | 1.93 | 0.71 | 1.50 |
| The Snake is a unique backcountry river | 2.06 | 2.16 | | 2.11 | 1.88 | 2.36 | 1.61 | 1.92 |
| The river supports an abundant, unique sport fishery | 0.82 | 1.33 | | 1.10 | 0.80 | 1.52 | 0.37 | 0.85 |
| The river provides outstanding opportunities to explore prehistoric and historic sites | 1.12 | 1.38 | | 1.26 | 1.13 | 1.54 | 0.79 | 1.14 |
| The river offers power boaters opportunities for a premier four-season whitewater adventure | 1.05 | 1.24 | | 1.15 | 0.85 | 1.56 | 0.59 | 0.93 |
| The river provides one of the best whitewater floating experiences in the Pacific Northwest | 1.00 | 1.07 | | 1.05 | 0.76 | 0.88 | 0.59 | 0.75 |
| River management treats floaters and power boaters equitably | 0.67 | 0.61 | | 0.65 | 0.40 | 0.61 | 0.29 | 0.42 |
| The river provides unique experiences to view wildlife | 1.53 | 1.73 | | 1.63 | 1.14 | 2.07 | 1.30 | 1.32 |
| The landscape along the river is diverse and appealing | 1.93 | 2.23 | | 2.09 | 1.80 | 2.18 | 1.64 | 1.83 |
| The river provides outstanding opportunities for diverse user groups | 1.58 | 1.49 | | 1.53 | 1.47 | 1.68 | 0.93 | 1.42 |
| There is little evidence of human disturbance in Hells Canyon (outside of historic sites) | 1.49 | 1.26 | | 1.36 | 1.26 | 1.57 | 1.07 | 1.28 |
| River management treats commercial and non-commercial boaters equitably | 0.49 | 0.55 | | 0.53 | 0.41 | 0.67 | 0.52 | 0.47 |
| <i>N</i> | <i>63 to 67</i> | <i>74 to 77</i> | <i>2</i> | <i>139 to 146</i> | <i>109 to 113</i> | <i>26 to 28</i> | <i>27 to 28</i> | <i>162 to 169</i> |

¹ 7-point scale: -3=strongly disagree; 0=neutral; +3=strongly agree.

Among the small sample of private floaters on the Scenic segment, the top four items included the Snake as a unique backcountry river, the diverse and appealing landscape, the wide range of recreation opportunities, and the opportunities for diverse user groups (Table 29C). The same items emerged as having the strongest agreement among private floaters on the Wild segment. Private floaters on the Scenic segment, on average,

disagreed with two items: river management’s equitable treatment of float and power users and the equitable treatment of commercial and non-commercial users.

Private floaters on the Wild segment displayed the same patterns of agreement regardless of the season. The only item to show some differences was the one about unique experiences to view wildlife along the river, with which the secondary season respondents agreed more strongly.

Table 29C Private Floaters’ Responses to Outstandingly Remarkable Values in Hells Canyon¹

| Private float | Scenic | | | | Wild | | | |
|---|---------|-----------|-----|-------------|------------|-----------|----------|-------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| The river provides a wide range of recreation opportunities | | | | 1.62 | 1.87 | 2.19 | 1.88 | 1.91 |
| The Snake is a unique backcountry river | | | | 2.19 | 1.97 | 1.94 | 1.89 | 1.94 |
| The river supports an abundant, unique sport fishery | | | | 1.33 | 1.19 | 1.53 | 1.23 | 1.24 |
| The river provides outstanding opportunities to explore prehistoric and historic sites | | | | 1.33 | 1.33 | 1.16 | 1.30 | 1.30 |
| The river offers power boaters opportunities for a premier four-season whitewater adventure | | | | 0.90 | 0.84 | 0.52 | 0.28 | 0.62 |
| The river provides one of the best whitewater floating experiences in the Pacific Northwest | | | | 1.24 | 1.48 | 1.45 | 1.24 | 1.40 |
| River management treats floaters and power boaters equitably | | | | -0.38 | 0.19 | -0.03 | 0.07 | 0.13 |
| The river provides unique experiences to view wildlife | | | | 1.19 | 1.23 | 1.74 | 1.17 | 1.27 |
| The landscape along the river is diverse and appealing | | | | 2.00 | 1.88 | 2.13 | 1.99 | 1.94 |
| The river provides outstanding opportunities for diverse user groups | | | | 1.48 | 1.43 | 1.65 | 1.37 | 1.44 |
| There is little evidence of human disturbance in Hells Canyon (outside of historic sites) | | | | 0.62 | 1.09 | 0.70 | 0.85 | 0.97 |
| River management treats commercial and non-commercial boaters equitably | | | | -0.24 | 0.35 | 0.06 | 0.17 | 0.26 |
| <i>N</i> | 7 | 7 | 7 | 20 to 21 | 147 to 156 | 31 | 82 to 84 | 267 to 271 |

¹ 7-point scale: -3=strongly disagree; 0=neutral; +3=strongly agree.

The few commercial floaters on the Scenic segment generally agreed less strongly with items than the other boater types, although the items eliciting the strongest agreement were similar: the diverse and appealing landscape, a unique backcountry river, opportunities for diverse user groups, and a wide range of recreation opportunities (Table 29D). On average, this group slightly disagreed that river management treats different users equitably.

Interestingly, commercial floaters on the Wild segment were the only group in which “little evidence of human disturbance” appeared among the top four agreed upon items. The other items eliciting the strongest agreement were similar to the responses of the other user groups. In this group, there were a few seasonal differences. The primary season respondents least agreed about the unique sport fishery, while the secondary season respondents agreed most strongly about opportunities to explore prehistoric and historic sites. On average, commercial floaters in the NMW disagreed that the treatment of power and float users is equitable, while those contacted in the other seasons agreed.

Table 29D Commercial Floaters’ Responses to Outstandingly Remarkable Values in Hells Canyon¹

| Commercial raft/float | Scenic | | | | Wild | | | |
|---|---------|-----------|-----|-------------|---------|-----------|-------|-------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| The river provides a wide range of recreation opportunities | | | | 1.13 | 1.79 | 1.88 | 1.77 | 1.79 |
| The Snake is a unique backcountry river | | | | 1.53 | 1.89 | 2.19 | 2.39 | 2.06 |
| The river supports an abundant, unique sport fishery | | | | 1.07 | 0.82 | 1.25 | 1.43 | 1.03 |
| The river provides outstanding opportunities to explore prehistoric and historic sites | | | | 0.60 | 1.30 | 1.88 | 1.36 | 1.38 |
| The river offers power boaters opportunities for a premier four-season whitewater adventure | | | | 0.13 | 0.38 | 0.44 | -0.02 | 0.28 |
| The river provides one of the best whitewater floating experiences in the Pacific Northwest | | | | 0.73 | 1.14 | 1.31 | 1.47 | 1.24 |
| River management treats floaters and power boaters equitably | | | | -0.07 | 0.30 | 0.69 | -0.17 | 0.22 |
| The river provides unique experiences to view wildlife | | | | 0.60 | 1.15 | 1.38 | 1.30 | 1.21 |
| The landscape along the river is diverse and appealing | | | | 1.93 | 1.87 | 1.81 | 1.82 | 1.85 |

| Commercial raft/float | Scenic | | | | Wild | | | |
|---|---------|-----------|-----|-------------|-----------|-----------|----------|-------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| The river provides outstanding opportunities for diverse user groups | | | | 1.33 | 1.19 | 1.50 | 1.20 | 1.22 |
| There is little evidence of human disturbance in Hells Canyon (outside of historic sites) | | | | 0.87 | 1.35 | 1.44 | 1.70 | 1.46 |
| River management treats commercial and non-commercial boaters equitably | | | | -0.20 | 0.22 | 0.56 | 0.19 | 0.25 |
| <i>N</i> | 8 | 1 | 6 | 15 | 97 to 102 | 16 | 42 to 44 | 155 to 162 |

¹ 7-point scale: -3=strongly disagree; 0=neutral; +3=strongly agree.

Although the differences in mean agreement among groups were statistically significant for many items, in several cases the magnitude of difference did not achieve practical significance. As can be seen in Table 29E, on the Scenic segment, the means for most items, among all user groups, were between 0.5 and 1.5, indicating moderate, but not strong agreement. Strong agreement (>2.0) was expressed by all groups regarding the Snake being a unique backcountry river and having a diverse and appealing landscape. The only substantial differences occurring among groups related to 1) the treatment of float and power boaters, with commercial power users in slight agreement that treatment is equitable and private floaters slightly disagreeing, and 2) evaluations of premier four-season whitewater experience for power boaters.

Table 29E Differences in Responses to Outstandingly Remarkable Values Among User Groups on the Scenic Section¹

| Scenic Section | Private Power | Commercial Power | Private Float | Commercial Float | <i>p-value</i> |
|---|--------------------|-------------------|--------------------|------------------|----------------|
| The river provides a wide range of recreation opportunities | 1.85 | 1.76 | 1.62 | | <i>ns</i> |
| The Snake is a unique backcountry river | 2.06 | 2.11 | 2.19 | | <i>ns</i> |
| The river supports an abundant, unique sport fishery | 1.81 ^b | 1.10 ^a | 1.33 ^{ab} | | <.0005 |
| The river provides outstanding opportunities to explore prehistoric and historic sites | 1.42 | 1.26 | 1.33 | | <i>ns</i> |
| The river offers power boaters opportunities for a premier four-season whitewater adventure | 1.83 ^b | 1.15 ^a | 0.90 ^a | | <.0005 |
| The river provides one of the best whitewater floating experiences in the Pacific Northwest | 0.97 | 1.05 | 1.24 | | <i>ns</i> |
| River management treats floaters and power boaters equitably | 0.16 ^{ab} | 0.65 ^b | -0.38 ^a | | .002 |

| Scenic Section | Private Power | Commercial Power | Private Float | Commercial Float | <i>p-value</i> |
|---|-------------------|--------------------|--------------------|------------------|----------------|
| The river provides unique experiences to view wildlife | 1.81 ^b | 1.63 ^{ab} | 1.19 ^a | | .025 |
| The landscape along the river is diverse and appealing | 2.01 | 2.09 | 2.00 | | <i>ns</i> |
| The river provides outstanding opportunities for diverse user groups | 1.72 | 1.53 | 1.48 | | <i>ns</i> |
| There is little evidence of human disturbance in Hells Canyon (outside of historic sites) | 1.43 ^b | 1.36 ^b | 0.62 ^a | | .022 |
| River management treats commercial and non-commercial boaters equitably | 0.53 ^b | 0.53 ^b | -0.24 ^a | | .05 |

¹ 7-point scale: -3=strongly disagree; 0=neutral; +3=strongly agree.
Superscripts indicate statistically significant differences among user types at alpha = .05

Different patterns of agreement emerged on the Wild segment when comparing user groups (Table 29F). No items elicited strong agreement (>2.0) from all four user groups, though in all but one case, means were greater than zero (indicating overall agreement). The user groups differed substantially in their evaluation of the fishery, with private power users agreeing strongly (2.0) that the river has an abundant, unique fishery, and the other groups agreeing less strongly. These differences probably reflect the actual activities and the seasonality of those activities for these groups. Power users also agreed much more strongly than other users that the river offers premier four-season whitewater boating for power boaters. Finally, and opposite to what was observed on the Scenic segment, private power users on average disagreed (-0.71) that management treats floaters and power boaters equitably, while all others agreed slightly with this statement. Also, unlike on the Scenic segment, all groups agreed, albeit only slightly, that management treats commercial and private groups equitably.

Table 29F Differences in Responses to Outstandingly Remarkable Values Among User Groups on the Wild Section¹

| Wild Section | Private Power | Commercial Power | Private Float | Commercial Float | <i>p-value</i> |
|---|--------------------|--------------------|--------------------|--------------------|----------------|
| The river provides a wide range of recreation opportunities | 1.84 ^{ab} | 1.50 ^a | 1.91 ^b | 1.79 ^{ab} | .002 |
| The Snake is a unique backcountry river | 1.96 | 1.92 | 1.94 | 2.06 | <i>ns</i> |
| The river supports an abundant, unique sport fishery | 2.00 ^b | 0.85 ^a | 1.24 ^a | 1.03 ^a | <.0005 |
| The river provides outstanding opportunities to explore prehistoric and historic sites | 1.26 | 1.14 | 1.30 | 1.38 | <i>ns</i> |
| The river offers power boaters opportunities for a premier four-season whitewater adventure | 1.69 ^c | 0.93 ^b | 0.62 ^{ab} | 0.28 ^a | <.0005 |
| The river provides one of the best whitewater floating experiences in the Pacific Northwest | 1.00 ^{ab} | 0.75 ^a | 1.40 ^b | 1.24 ^b | <.0005 |
| River management treats floaters and power boaters equitably | -0.71 ^a | 0.42 ^b | 0.13 ^b | 0.22 ^b | <.0005 |
| The river provides unique experiences to view wildlife | 1.63 | 1.32 | 1.27 | 1.21 | <i>ns</i> |
| The landscape along the river is diverse and appealing | 2.07 | 1.83 | 1.94 | 1.85 | <i>ns</i> |
| The river provides outstanding opportunities for diverse user groups | 1.50 | 1.42 | 1.44 | 1.22 | <i>ns</i> |
| There is little evidence of human disturbance in Hells Canyon (outside of historic sites) | 1.46 ^b | 1.28 ^{ab} | 0.97 ^a | 1.46 ^b | .004 |
| River management treats commercial and non-commercial boaters equitably | 0.29 | 0.47 | 0.26 | 0.25 | <i>ns</i> |

¹ 7-point scale: -3=strongly disagree; 0=neutral; +3=strongly agree.
Superscripts indicate statistically significant differences among user types at alpha = .05

Social Conditions

Several items of the study addressed various social conditions that may or may not occur on the river. Each user group was asked whether or not the actions of another group or person not in their group affected their experience on the river either positively or negatively (Table 30) and were then given the opportunity to explain further (Table 31). Power boaters, especially commercial power boaters, were most likely to say no, that individuals or other groups had not affected their trip. The small samples of floaters on the Scenic segment were evenly split, with 50% having been affected and 50% not.

Among floaters on the Wild segment, both private and commercial, approximately one-third said others had affected their experience either positively or negatively. Among commercial boaters on the Wild segment, those boating in the primary motorized season were much more likely to have been affected (20% of commercial power; 41% of commercial float) than those in the other two seasons (3-7% of commercial power; 23-36% of commercial float). Conversely, private floaters in the primary motorized season on the Wild segment were somewhat *less* likely to have been affected by others than those in the secondary season or the NMW (34% in primary; 41% in secondary; 45% in NMW). This suggests that—in terms of this question—the difference in the social conditions that floaters experience during the NMW than during other times is not extensive.

Table 30 Actions of Others Affecting User Groups' Experiences on the River¹

| Did the actions of another group or person not in your group affect your trip either positively or negatively? | Scenic | | | | Wild | | | | |
|--|----------|-----------|-----|-------------|---------|-----------|-----|-------------|-----|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons | |
| Private power | Yes | 25 | 15 | 24 | 22 | 31 | 50 | 10 | 33 |
| | No | 75 | 85 | 76 | 78 | 69 | 50 | 90 | 67 |
| | <i>N</i> | 154 | 80 | 17 | 251 | 42 | 18 | 10 | 70 |
| Commercial power | Yes | 14 | 15 | | 15 | 20 | 7 | 3 | 16 |
| | No | 86 | 85 | | 85 | 80 | 93 | 97 | 84 |
| | <i>N</i> | 64 | 80 | 2 | 146 | 118 | 27 | 29 | 174 |
| Private float | Yes | | | | 50 | 34 | 41 | 45 | 38 |
| | No | | | | 50 | 66 | 59 | 55 | 62 |
| | <i>N</i> | 8 | 7 | 7 | 22 | 159 | 32 | 86 | 277 |
| Commercial float | Yes | | | | 50 | 41 | 24 | 36 | 38 |
| | No | | | | 50 | 59 | 76 | 64 | 62 |
| | <i>N</i> | 7 | 1 | 6 | 14 | 103 | 17 | 47 | 167 |

¹Expressed in percentages

Of those visitors that indicated “yes” they had been either positively or negatively affected, 298 visitors included open-ended comments explaining the context of the affect (Table 31). Some common themes emerged in the written responses including general negative, general positive, positive encounters with groups or individuals, negative encounters, impacts to solitude (negative), feeling crowded (negative), inconsiderate behavior both at boat launches and on the river (negative), noisy groups (negative), and litter (negative). The common themes and actual visitor responses are presented in Appendix J, question 1.2.

Nearly two-thirds of the time, commercial power users reported having been affected positively on both the Scenic and Wild segments of the river. On the Scenic segment, only 26% of the private power boaters who responded to the open-ended question had interactions that were positive. Likewise, those private and commercial floaters who included responses reported having more negative interactions than positive ones on the Scenic segment.

On the Wild segment, approximately two-thirds of written responses from private power users and commercial and private floaters indicated having been negatively affected during their trip by others on the river.

Table 31 Written Responses Indicating Positive or Negative Effects due to Others¹

| Number of Written Responses Indicating Having Been Either Positively or Negatively Affected by Others on Their Trip | | Scenic | Wild |
|--|----------|---------------|-------------|
| Private power | Positive | 15 (26%) | 9 (39%) |
| | Negative | 42 (74%) | 14 (61%) |
| | <i>N</i> | 57 | 23 |
| Commercial power | Positive | 10 (63%) | 14 (64%) |
| | Negative | 6 (37%) | 8 (36%) |
| | <i>N</i> | 16 | 22 |
| Private float | Positive | 5 (42%) | 34 (33%) |
| | Negative | 7 (58%) | 68 (67%) |
| | <i>N</i> | 12 | 102 |
| Commercial float | Positive | 1 (14%) | 20 (34%) |
| | Negative | 6 (86%) | 39 (66%) |
| | <i>N</i> | 7 | 59 |

¹ See Appendix J Question 1.2 for common themes and specific visitor comments

Visitors were also asked to indicate how crowded they felt while boating on the Wild and Scenic segments of the river. They were asked to rate their feelings on a standard 9-point scale (1=not crowded at all; 9=extremely crowded). With the exception of the small sample of commercial and private floaters on the Scenic segment and private floaters during the secondary season on the Wild segment, means for all user groups were less than 3.0 (slightly crowded), regardless of the segment or season (Table 32).

However, it is important to note that the respondents in the NMW were not substantially less crowded than during the primary motorized season. Thus, crowding levels are similar during NMW, primary motorized, and secondary motorized and on both segments.

Table 32 Feelings of Crowding Among User Groups During the River Trip¹

| How crowded did you feel during your river trip? | Scenic | | | | Wild | | | |
|--|---------|-----------|------|-------------|---------|-----------|------|-------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Private power | 1.88 | 2.10 | 1.39 | 1.92 | 1.81 | 1.62 | 1.90 | 1.77 |
| <i>N</i> | 156 | 81 | 18 | 255 | 42 | 21 | 10 | 73 |
| Commercial power | 2.25 | 1.43 | | 1.81 | 2.26 | 1.38 | 2.11 | 2.10 |
| <i>N</i> | 68 | 79 | 2 | 149 | 117 | 26 | 28 | 171 |
| Private float | | | | 2.59 | 2.06 | 3.55 | 2.23 | 2.29 |
| <i>N</i> | 8 | 7 | 7 | 22 | 159 | 33 | 87 | 279 |
| Commercial float | | | | 4.07 | 2.54 | 1.88 | 2.17 | 2.37 |
| <i>N</i> | 8 | 1 | 6 | 15 | 104 | 17 | 46 | 167 |

¹ Mean on a 9 point scale: 1=Not at all crowded; 9=Extremely crowded

Significant differences in feelings of crowdedness among the user groups are shown in Table 33. Private floaters on the Scenic segment were significantly different from the other user groups in feelings of crowdedness on the river. Commercial and private floaters on the Wild segment were significantly different from private power boaters; with commercial power and private floaters between them in feelings of crowdedness. Also, no significant differences were found when the means for each user group were compared between the Scenic and Wild river segments (alpha=.05).

Table 33 Differences in Feelings of Crowding Among User Groups on Each River Section¹

| How crowded did you feel during your river trip? | Scenic Section | Wild Section | Means compared between river segments |
|--|------------------------------------|-------------------------------------|---------------------------------------|
| Private power | 1.92 ^a <i>n</i> =255 | 1.77 ^a <i>n</i> =73 | <i>ns</i> |
| Commercial power | 1.81 ^a <i>n</i> =149 | 2.10 ^{ab} <i>n</i> =171 | <i>ns</i> |
| Private float | 2.59 ^b <i>n</i> =22 | 2.29 ^{ab} <i>n</i> =279 | <i>ns</i> |
| Commercial float | <i>n</i> =15 | 2.37 ^b <i>n</i> =167 | |
| <i>p-value</i> | .033 | .046 | |

¹ 9 point scale: 1=Not at all crowded; 9=Extremely crowded
Superscripts indicate statistically significant differences among user types at alpha = .05

Respondents were also asked to indicate in an open-ended question which location(s) on the river they felt crowded and why. Tables 34A and 34B show the frequency of locations throughout Hells Canyon that respondents identified as being crowded during their river experience. Most respondents that contributed written responses indicated that various stretches of river were crowded (37.0% on Scenic; 29.0% on Wild). Private power boaters contributed the most written responses for the Scenic Section, while private floaters contributed the most for the Wild Section. Appendix J (question 1.5b & c) outlines respondents written comments on locations and reasons of crowding in detail. Since many respondents indicated stretches of river or various locations as being crowded, viewing the actual comments organized in Appendix J helps to clarify the issues of crowding indicated by respondents.

Table 34A Frequency of Identified Locations of Crowding on the Scenic Section of the Snake River

| Scenic Section Location | Total Number of Responses (n) | Percent (%) | CP | CF | PP | PF |
|---|-------------------------------|-------------|----|----|----|----|
| General Comments | 9 | 6.0 | 5 | 1 | 3 | |
| Cache Creek | 13 | 9.0 | 1 | | 12 | |
| Confluence of the Salmon and Snake Rivers | 18 | 13.0 | 1 | | 17 | |
| Heller Bar | 13 | 9.0 | 3 | | 10 | |

| Scenic Section Location | Total Number of Responses (n) | Percent (%) | CP | CF | PP | PF |
|---|--|------------------------|-----------|-----------|-----------|-----------|
| Pittsburg Landing | 14 | 10.0 | 5 | 1 | 7 | 1 |
| Above and Below the Mouth of the Salmon River | 12 | 9.0 | | 1 | 11 | |
| Stretches of River and Various Locations | 52 | 37.0 | 14 | 3 | 31 | 4 |
| Unknown Locations | 11 | 8.0 | 4 | 1 | 5 | 1 |
| Total | 142 | 100.0 | 33 | 7 | 96 | 6 |

Table 34B Frequency of Identified Location of Crowding on the Wild Section of the Snake River

| Wild Section Location | Total Number of Responses (n) | Percent (%) | CP | CF | PP | PF |
|----------------------------------|--|------------------------|-----------|-----------|-----------|------------|
| General Comments | 38 | 17.0 | 10 | 11 | 1 | 16 |
| Boat Launches | 13 | 6.0 | 2 | 1 | 3 | 7 |
| Hells Canyon Creek Dam | 16 | 7.0 | 6 | 2 | 2 | 6 |
| Kirkwood Ranch | 8 | 3.0 | 1 | 3 | 1 | 3 |
| Pittsburg Landing | 12 | 5.0 | | 4 | | 8 |
| Stretches of River | 66 | 29.0 | 9 | 17 | 6 | 34 |
| Unknown Locations | 15 | 7.0 | 8 | 3 | 2 | 2 |
| Various Rapids | 17 | 7.0 | 3 | 1 | 2 | 11 |
| Various Locations | 44 | 19.0 | 6 | 7 | 4 | 27 |
| Total | 229 | 100.0 | 45 | 49 | 21 | 114 |

Respondents were asked about several social conditions they may have noticed or experienced during their river trip. They were asked to indicate on a 7-point scale (-3=detracted from; 0=no effect; +3=added to) how these conditions affected their experience. They could also indicate “not noticed” for any given situation or condition. Many boaters did not report encountering one or more of the conditions, so the means reported reflect only those who did notice.

Overall, private power users on both the Scenic and Wild segments felt the various social conditions did not have a very large impact on their experience (Table 35A). Private power users on the Scenic segment indicated many of the conditions detracted from their experiences, though not

strongly. The only items that detracted substantially, for those who noticed, were inconsiderate behavior at launches (-0.63) and commercial groups sending boats ahead to claim campsites (-0.60). However, this group felt that private groups sending boats ahead to claim campsites added to their experiences (0.63). Interestingly, this was the only item that varied by season on the Scenic segment.

Private power boaters on the Wild segment also indicated many of the conditions as detracting from their experiences, although generally only to a slight degree. Inconsiderate behavior of other boaters at launch sites most strongly detracted from experiences, followed by noisy groups. No items had very positive effects (i.e., no means >0.5). Since so few private power users on the Wild segment noticed conditions, it made it so that seasonal comparisons are not possible. Table 35B shows the percentage of private power boaters that did not notice conditions.

Table 35A Effects of Social Conditions on Private Power Boaters' River Experience¹

| Private power | Scenic | | | | Wild | | | |
|--|-----------|-----------|---------|-------------|----------|-----------|---------|-------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Area rules/regulations not adequately enforced | -0.30 | -0.20 | | -0.25 | -0.08 | -0.10 | | -0.08 |
| Forest Service rangers or staff | 0.37 | 0.00 | | 0.28 | 0.13 | 0.45 | | 0.27 |
| Uncontrolled dogs | -0.25 | -0.36 | | -0.27 | -0.18 | 0.00 | | -0.11 |
| People carrying or using firearms | 0.09 | 0.00 | | 0.03 | -0.25 | 0.00 | | -0.13 |
| Noisy groups | -0.23 | -0.03 | | -0.17 | -0.75 | -0.29 | | -0.57 |
| Inconsiderate behavior of other boaters at launch sites | -0.74 | -0.46 | | -0.63 | -0.83 | -0.77 | | -0.73 |
| Camping within sight or sound of another group | -0.17 | 0.06 | | -0.08 | -0.14 | -0.08 | | -0.12 |
| Waiting for other boaters to pass through rapids | -0.30 | -0.15 | | -0.25 | -0.42 | -0.23 | | -0.35 |
| Campsites you wanted that were occupied by others | -0.25 | -0.10 | | -0.20 | -0.29 | 0.00 | | -0.17 |
| Private groups sending boats ahead to claim campsites | 1.12 | -0.24 | | 0.63 | -0.29 | -0.10 | | -0.21 |
| Commercial groups sending boats ahead to claim campsites | -0.68 | -0.44 | | -0.60 | -0.70 | 0.00 | | -0.44 |
| Encountering commercial boaters | -0.29 | -0.32 | | -0.30 | -0.10 | 0.06 | | -0.03 |
| Encountering float boaters | -0.37 | -0.13 | | -0.28 | -0.07 | 0.00 | | 0.01 |
| Encountering non-commercial boaters | 0.15 | 0.17 | | 0.15 | 0.18 | 0.11 | | 0.19 |
| Encountering power boaters | 0.22 | 0.23 | | 0.22 | 0.44 | 0.17 | | 0.41 |
| N | 64 to 150 | 29 to 73 | 6 to 16 | 109 to 238 | 16 to 39 | 10 to 19 | 2 to 10 | 28 to 68 |

¹ 7 point scale: -3=Detracted from; 0=No effect; +3=Added to.

Table 35B Percent of Private Power Boaters Who Selected “Did Not Notice” for Social Conditions

| Social Condition | Scenic | Wild |
|--|-------------------|-------------|
| Area rules/regulations not adequately enforced | 48.0 | 49.3 |
| Forest Service rangers or staff | 24.6 | 29.2 |
| Uncontrolled dogs | 59.8 | 60.6 |
| People carrying or using firearms | 55.4 | 57.7 |
| Noisy groups | 54.4 | 58.3 |
| Inconsiderate behavior of other boaters at launch sites | 42.5 | 42.3 |
| Camping within sight or sound of another group | 42.8 | 39.4 |
| Waiting for other boaters to pass through rapids | 13.5 | 15.5 |
| Campsites you wanted that were occupied by others | 45.8 | 42.3 |
| Private groups sending boats ahead to claim campsites | 56.7 | 59.2 |
| Commercial groups sending boats ahead to claim campsites | 56.3 | 54.9 |
| Encountering commercial boaters | 5.6 | 2.8 |
| Encountering float boaters | 9.1 | 4.3 |
| Encountering non-commercial boaters | 5.6 | 4.2 |
| Encountering power boaters | 8.3 | 7.0 |
| <i>N</i> | <i>251 to 252</i> | <i>72</i> |

Commercial power users on both segments who encountered Forest Service rangers and staff said these encounters added to their river experiences (Table 35C). Users on both segments felt that the remaining social conditions only slightly added to or detracted from experiences. No other items had substantial effects, either positive or negative. Commercial power users on the Wild segment felt that certain conditions detracted more from their experiences than users on the Scenic segment, although the differences were only slight. It is important to note that many commercial power users indicated that they had “not noticed” many of the items, so it appears there are few big detractors for these boaters. Table 35D shows the percent of commercial power users that did not notice social conditions during their river experience.

Table 35C Effects of Social Conditions on Commercial Power Boaters' River Experience¹

| Commercial power | Scenic | | | | Wild | | | |
|--|---------|-----------|--------|-------------|----------|-----------|---------|-------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Area rules/regulations not adequately enforced | 0.07 | -0.11 | | -0.05 | 0.18 | | | 0.03 |
| Forest Service rangers or staff | 0.62 | 1.10 | | 0.89 | 1.00 | | | 1.06 |
| Uncontrolled dogs | -0.31 | 0.09 | | -0.06 | -0.42 | | | -0.35 |
| People carrying or using firearms | 0.00 | 0.21 | | 0.16 | -0.31 | | | -0.21 |
| Noisy groups | -0.26 | -0.19 | | -0.21 | -0.30 | | | -0.38 |
| Inconsiderate behavior of other boaters at launch sites | 0.06 | -0.21 | | -0.12 | -0.47 | | | -0.35 |
| Camping within sight or sound of another group | 0.15 | -0.12 | | -0.03 | -0.21 | | | -0.19 |
| Waiting for other boaters to pass through rapids | 0.04 | -0.07 | | -0.01 | -0.40 | | | -0.28 |
| Campsites you wanted that were occupied by others | 0.00 | 0.00 | | 0.00 | -0.24 | | | -0.21 |
| Private groups sending boats ahead to claim campsites | 0.00 | -0.12 | | -0.09 | -0.38 | | | -0.32 |
| Commercial groups sending boats ahead to claim campsites | -0.29 | -0.15 | | -0.18 | -0.38 | | | -0.33 |
| Encountering commercial boaters | 0.21 | 0.05 | | 0.11 | 0.08 | | | 0.06 |
| Encountering float boaters | 0.40 | 0.20 | | 0.32 | 0.34 | | | 0.31 |
| Encountering non-commercial boaters | 0.12 | 0.10 | | 0.11 | 0.16 | | | 0.14 |
| Encountering power boaters | -0.13 | 0.07 | | -0.04 | -0.03 | | | -0.03 |
| N | 7 to 58 | 22 to 59 | 1 to 2 | 31 to 119 | 16 to 87 | 1 to 21 | 7 to 19 | 24 to 137 |

¹ 7 point scale: -3=Detracted from; 0=No effect; +3=Added to.

Table 35D Percent of Commercial Power Users Who Selected "Did Not Notice" for Social Conditions

| Social Condition | Scenic | Wild |
|---|--------|------|
| Area rules/regulations not adequately enforced | 69.5 | 79.4 |
| Forest Service rangers or staff | 31.7 | 41.9 |
| Uncontrolled dogs | 74.8 | 82.1 |
| People carrying or using firearms | 78.2 | 86.1 |
| Noisy groups | 60.8 | 69.2 |
| Inconsiderate behavior of other boaters at launch sites | 63.1 | 71.7 |
| Camping within sight or sound of another group | 71.4 | 75.6 |
| Waiting for other boaters to pass through rapids | 31.9 | 37.0 |
| Campsites you wanted that were occupied by others | 75.0 | 80.3 |

| Social Condition | Scenic | Wild |
|--|-------------------|-------------------|
| Private groups sending boats ahead to claim campsites | 76.1 | 83.8 |
| Commercial groups sending boats ahead to claim campsites | 71.6 | 84.4 |
| Encountering commercial boaters | 17.5 | 33.7 |
| Encountering float boaters | 23.1 | 20.8 |
| Encountering non-commercial boaters | 16.8 | 30.1 |
| Encountering power boaters | 20.3 | 31.8 |
| | <i>N</i> | |
| | <i>140 to 143</i> | <i>171 to 173</i> |

Low numbers of private floaters contacted on the Scenic segment prevent us from making conclusive statements about this group. Overall, private floaters on the Wild segment indicated most of the social conditions as detracting from their experiences to some degree (Table 35E), and only one added substantially. Private floaters on the Wild segment felt most strongly that commercial groups sending boats ahead to claim campsites and encountering power boats detracted from their experiences. Only Forest Service personnel and encountering other float boaters were indicated as adding to their experiences. Several other items detracted much more for this group than for private or commercial power users. Table 35F shows the percent of private floaters that did not notice social conditions during their river trip.

Table 35E Effects of Social Conditions on Private Floaters' River Experience¹

| Private float | Scenic | | | | Wild | | | |
|---|---------------|-----------|-----|-------------|-------------|-----------|-------|-------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Area rules/regulations not adequately enforced | | | | | -0.51 | -0.20 | -0.61 | -0.50 |
| Forest Service rangers or staff | | | | | 0.68 | 0.33 | 0.62 | 0.62 |
| Uncontrolled dogs | | | | | -0.20 | 0.00 | -0.32 | -0.20 |
| People carrying or using firearms | | | | | -0.59 | -0.67 | -0.20 | -0.52 |
| Noisy groups | | | | | -0.54 | -0.79 | -0.62 | -0.60 |
| Inconsiderate behavior of other boaters at launch sites | | | | | -0.92 | -0.62 | -0.24 | -0.69 |
| Camping within sight or sound of another group | | | | | -0.27 | -0.23 | -0.27 | -0.26 |
| Waiting for other boaters to pass through rapids | | | | | -0.36 | -0.50 | -0.38 | -0.38 |
| Campsites you wanted that were occupied by others | | | | | -0.72 | -0.95 | -0.74 | -0.76 |
| Private groups sending boats ahead to claim campsites | | | | | -0.65 | -0.77 | -0.61 | -0.66 |

| Private float | Scenic | | | | Wild | | | |
|--|---------------|---------------|---------------|----------------|------------------|-----------------|-----------------|------------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Commercial groups sending boats ahead to claim campsites | | | | | -1.18 | -1.21 | -1.30 | -1.22 |
| Encountering commercial boaters | | | | | -0.39 | -0.25 | -0.45 | -0.39 |
| Encountering float boaters | | | | | 0.25 | 0.50 | 0.36 | 0.31 |
| Encountering non-commercial boaters | | | | | -0.15 | -0.03 | -0.12 | -0.12 |
| Encountering power boaters | | | | | -0.86 | -1.21 | -1.38 | -1.06 |
| <i>N</i> | <i>1 to 7</i> | <i>3 to 7</i> | <i>4 to 7</i> | <i>8 to 21</i> | <i>46 to 145</i> | <i>12 to 30</i> | <i>26 to 75</i> | <i>61 to 252</i> |

¹ 7 point scale: -3=Detracted from; 0=No effect; +3=Added to.

Table 35F Percent of Private Floaters Who Selected “Did Not Notice” for Social Conditions

| Social Condition | Scenic | Wild |
|--|-----------|-------------------|
| Area rules/regulations not adequately enforced | 52.4 | 60.0 |
| Forest Service rangers or staff | 33.3 | 37.9 |
| Uncontrolled dogs | 61.9 | 76.9 |
| People carrying or using firearms | 66.7 | 75.8 |
| Noisy groups | 42.9 | 60.3 |
| Inconsiderate behavior of other boaters at launch sites | 47.6 | 0.4 |
| Camping within sight or sound of another group | 28.6 | 62.5 |
| Waiting for other boaters to pass through rapids | 23.8 | 27.9 |
| Campsites you wanted that were occupied by others | 25.0 | 50.4 |
| Private groups sending boats ahead to claim campsites | 47.6 | 68.9 |
| Commercial groups sending boats ahead to claim campsites | 47.6 | 55.3 |
| Encountering commercial boaters | 14.3 | 11.1 |
| Encountering float boaters | 9.5 | 7.6 |
| Encountering non-commercial boaters | 14.3 | 12.7 |
| Encountering power boaters | 4.8 | 4.2 |
| <i>N</i> | <i>21</i> | <i>262 to 264</i> |

Small numbers of commercial floaters contacted on the Scenic segment preclude us from making conclusive statements about this group.

However, like private floaters, commercial floaters on the Wild segment indicated that many of the social conditions on the river had detracted from their experiences, and only a few were identified as adding to experiences (Table 35G). On the Wild segment, this group most strongly felt that encountering power boaters and noisy groups detracted from their experiences, with the sentiment regarding power boaters being quite strong

(-1.5). They also felt that Forest Service personnel added to their experiences. Table 35H shows the percentage of commercial floaters who did not notice social conditions during their river trip.

Table 35G Effects of Social Conditions on Commercial Floaters' River Experience¹

| Commercial float | Scenic | | | | Wild | | | |
|--|---------------|-----------|---------------|----------------|-----------------|----------------|-----------------|------------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Area rules/regulations not adequately enforced | | | | | -0.38 | | -0.45 | -0.45 |
| Forest Service rangers or staff | | | | | 0.85 | | 0.32 | 0.69 |
| Uncontrolled dogs | | | | | -0.30 | | 0.00 | -0.27 |
| People carrying or using firearms | | | | | 0.00 | | 0.13 | -0.10 |
| Noisy groups | | | | | -1.21 | | -1.00 | -1.03 |
| Inconsiderate behavior of other boaters at launch sites | | | | | -0.39 | | -0.60 | -0.48 |
| Camping within sight or sound of another group | | | | | -0.39 | | -0.20 | -0.35 |
| Waiting for other boaters to pass through rapids | | | | | -0.64 | | -0.91 | -0.68 |
| Campsites you wanted that were occupied by others | | | | | -0.68 | | -0.44 | -0.60 |
| Private groups sending boats ahead to claim campsites | | | | | -0.50 | | -0.29 | -0.49 |
| Commercial groups sending boats ahead to claim campsites | | | | | -0.43 | | 0.53 | -0.23 |
| Encountering commercial boaters | | | | | -0.29 | | -1.21 | -0.55 |
| Encountering float boaters | | | | | 0.26 | | 0.05 | 0.20 |
| Encountering non-commercial boaters | | | | | 0.06 | | -0.86 | -0.22 |
| Encountering power boaters | | | | | -1.28 | | -2.12 | -1.50 |
| <i>N</i> | <i>1 to 8</i> | <i>1</i> | <i>2 to 6</i> | <i>4 to 15</i> | <i>10 to 96</i> | <i>4 to 12</i> | <i>10 to 38</i> | <i>22 to 152</i> |

¹ 7 point scale:-3=Detracted from; 0=No effect; +3=Added to.

Table 35H Percent of Commercial Floaters Who Selected “Did Not Notice” for Social Conditions

| Social Conditions | Scenic (%) | Wild (%) |
|--|-------------------|-----------------|
| Area rules/regulations not adequately enforced | 73.3 | 74.7 |
| Forest Service rangers or staff | 60.0 | 54.7 |
| Uncontrolled dogs | 86.7 | 86.1 |
| People carrying or using firearms | 86.7 | 87.4 |
| Noisy groups | 53.8 | 61.4 |
| Inconsiderate behavior of other boaters at launch sites | 53.3 | 72.3 |
| Camping within sight or sound of another group | 46.7 | 65.8 |
| Waiting for other boaters to pass through rapids | 26.7 | 34.6 |
| Campsites you wanted that were occupied by others | 46.7 | 62.0 |
| Private groups sending boats ahead to claim campsites | 66.7 | 69.0 |
| Commercial groups sending boats ahead to claim campsites | 46.7 | 61.0 |
| Encountering commercial boaters | 13.3 | 12.0 |
| Encountering float boaters | 13.3 | 10.1 |
| Encountering non-commercial boaters | 6.7 | 12.6 |
| Encountering power boaters | 0.0 | 5.0 |
| <i>N</i> | <i>15</i> | <i>158</i> |

Tables 35I and 35J compare the responses about social conditions among the different user groups. For the Scenic segment, because of the small numbers of floaters, comparisons are only possible between private power and commercial power boaters. It appears that there are few meaningful, large differences (Table 35I). That is, for those who noticed each condition, evaluations are generally similar. The exceptions are 1) commercial power users liked encountering rangers more than private power users, 2) private power users were more bothered by launch behavior, 3) private power users were more favorable toward private power groups claiming sites, and 4) private power users were more bothered with commercial groups claiming sites.

Table 35I Differences in Social Conditions Among User Groups in the Scenic Section¹

| Scenic Section | Private Power | Commercial Power | Private Float | Commercial Float | <i>p-value</i> |
|--|---------------|------------------|---------------|------------------|----------------|
| Area rules/regulations not adequately enforced | -0.25 | -0.05 | | | <i>ns</i> |
| Forest Service rangers or staff | 0.28 | 0.89 | | | <.0005 |
| Uncontrolled dogs | -0.27 | -0.06 | | | <i>ns</i> |
| People carrying or using firearms | 0.03 | 0.16 | | | <i>ns</i> |
| Noisy groups | -0.17 | -0.21 | | | <i>ns</i> |
| Inconsiderate behavior of other boaters at launch sites | -0.63 | -0.12 | | | .002 |
| Camping within sight or sound of another group | -0.08 | -0.03 | | | <i>ns</i> |
| Waiting for other boaters to pass through rapids | -0.25 | -0.01 | | | .003 |
| Campsites you wanted that were occupied by others | -0.20 | 0.00 | | | .045 |
| Private groups sending boats ahead to claim campsites | 0.63 | -0.09 | | | <i>ns</i> |
| Commercial groups sending boats ahead to claim campsites | -0.60 | -0.18 | | | .033 |
| Encountering commercial boaters | -0.30 | 0.11 | | | <.0005 |
| Encountering float boaters | -0.28 | 0.32 | | | <.0005 |
| Encountering non-commercial boaters | 0.15 | 0.11 | | | <i>ns</i> |
| Encountering power boaters | 0.22 | -0.04 | | | .008 |

¹ 7 point scale: -3=Detracted from; 0=No effect; +3=Added to.

Differences among user types statistically significant at alpha = .05

Among those who noticed conditions on the Wild segment, there were few differences by user type (Table 35J). The major differences were: 1) private power users least enjoyed encountering Forest Service rangers and staff, while commercial power users most enjoyed them; 2) commercial floaters were most bothered by noisy groups, while commercial power users were least bothered by them; 3) floaters were more bothered than power boaters when desired campsites were taken; 4) although all groups were bothered by commercial groups sending boats ahead to claim sites, private floaters were substantially more annoyed; 5) commercial floaters were most bothered by encounters with commercial or non-commercial boaters; and 6) floaters, especially commercial floaters, were bothered substantially more by encountering power boaters. Only 5 of 60 values were larger than 1.0, so it is important to note that on average, all groups evaluated all items as slight problems or additions.

Table 35J Differences in Social Conditions Among User Groups in the Wild Section¹

| Wild Section | Private Power | Commercial Power | Private Float | Commercial Float | <i>p-value</i> |
|--|---------------------|--------------------|---------------------|---------------------|----------------|
| Area rules/regulations not adequately enforced | -0.08 ^a | 0.03 ^a | -0.50 ^a | -0.45 ^a | .027 |
| Forest Service rangers or staff | 0.27 ^a | 1.06 ^b | 0.62 ^{ab} | 0.69 ^{ab} | .001 |
| Uncontrolled dogs | -0.11 | -0.35 | -0.20 | -0.27 | <i>ns</i> |
| People carrying or using firearms | -0.13 | -0.21 | -0.52 | -0.10 | <i>ns</i> |
| Noisy groups | -0.57 ^{ab} | -0.38 ^b | -0.60 ^{ab} | -1.03 ^a | .007 |
| Inconsiderate behavior of other boaters at launch sites | -0.73 | -0.35 | -0.69 | -0.48 | <i>ns</i> |
| Camping within sight or sound of another group | -0.12 | -0.19 | -0.26 | -0.35 | <i>ns</i> |
| Waiting for other boaters to pass through rapids | -0.35 ^a | -0.28 ^a | -0.38 ^a | -0.68 ^a | .026 |
| Campsites you wanted that were occupied by others | -0.17 ^b | -0.21 ^b | -0.76 ^a | -0.60 ^{ab} | .001 |
| Private groups sending boats ahead to claim campsites | -0.21 | -0.32 | -0.66 | -0.49 | <i>ns</i> |
| Commercial groups sending boats ahead to claim campsites | -0.44 ^{ab} | -0.33 ^b | -1.22 ^a | -0.23 ^b | <.0005 |
| Encountering commercial boaters | -0.03 ^{bc} | 0.06 ^c | -0.39 ^{ab} | -0.55 ^a | <.0005 |
| Encountering float boaters | 0.01 | 0.31 | 0.31 | 0.20 | <i>ns</i> |
| Encountering non-commercial boaters | 0.19 ^b | 0.14 ^b | -0.12 ^{ab} | -0.22 ^a | .001 |
| Encountering power boaters | 0.41 ^b | -0.03 ^b | -1.06 ^a | -1.50 ^a | <.0005 |

¹ 7 point scale: -3=Detracted from; 0=No effect; +3=Added to.

Superscripts indicate statistically significant differences among user types at alpha = .05

Respondents were also asked about their satisfaction with social conditions such as behavior of others they had encountered and the numbers of float and power trips they had seen during their river trip. Using a 7-point scale (1=not at all satisfied; 3=somewhat satisfied; 5=very satisfied; 7=extremely satisfied), they were asked to indicate how satisfied they were with these conditions.

Overall, all groups on both segments of the river were moderately to very satisfied, with means above 4.0 (Table 36A to 36D). Private power users on the Scenic segment felt most satisfied with the interactions with others in their group, followed by the behavior of other groups (Table 36A). They felt the least positive about the number of float trips seen. Some differences in opinion occurred among users in the different seasons. For instance, private power users in the secondary season felt less satisfied about interaction with people in their group than in other seasons, and they felt much more satisfied about the number of float trips seen during their trip.

Private power users on the Wild segment felt most strongly satisfied with interactions with others in their group (6.10), just below the level of extremely satisfied. They felt the least satisfied about the number of float trips seen (4.43), though this rating is still quite satisfied.

Table 36A Private Power Boaters’ Satisfaction with Social Conditions on the River¹

| Private power | Scenic | | | | Wild | | | |
|--|---------|-----------|----------|-------------|---------|-----------|------|-------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Behavior of other groups | 4.87 | 4.91 | 4.94 | 4.89 | 4.86 | 4.63 | 5.30 | 4.86 |
| Interactions with people in your group | 5.88 | 4.24 | 5.82 | 5.85 | 6.07 | 6.05 | 6.30 | 6.10 |
| The number of float trips seen | 4.07 | 5.80 | 4.18 | 4.13 | 4.05 | 4.90 | 5.10 | 4.43 |
| The number of power boat trips seen | 4.88 | 4.58 | 5.12 | 4.80 | 4.86 | 5.24 | 5.00 | 4.99 |
| <i>N</i> | 156 | 80 to 181 | 16 to 17 | 253 to 254 | 42 | 19 to 21 | 10 | 71 to 73 |

¹ 7 point scale: 1=Not at all satisfied; 3=Somewhat satisfied; 5=Very satisfied; 7=Extremely satisfied.

Commercial power users on the Scenic segment felt at least “somewhat satisfied” or better with the social conditions, with all means > 4.0 (Table 36B). They felt most strongly about the interactions with others in their group (5.64) and felt the least strongly satisfied with the number of float trips they saw (4.53), though this is still near the point of “very satisfied”. A few substantial differences occurred among the boating seasons. For instance, commercial power users in the secondary season felt less satisfied about the interactions with people in their group (4.32) than those in the primary season (5.29). Conversely, commercial power users in the secondary season felt more satisfied about the number of float trips seen (5.94) than those in the primary season (4.72).

On the Wild segment overall, commercial power users felt less satisfied about the conditions than those on the Scenic segment, with means below 5.0, yet still above 4.0. They felt most strongly satisfied with behavior of other groups (4.94) and the least strongly satisfied about the number of power boat trips seen (4.31).

Table 36B Commercial Power Boaters' Satisfaction with Social Conditions on the River¹

| Commercial power | Scenic | | | | Wild | | | |
|--|-----------------|-----------------|----------|-------------------|-------------------|-----------------|-----------------|-------------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Behavior of other groups | 5.15 | 5.39 | | 5.27 | 4.98 | 5.59 | 4.54 | 4.99 |
| Interactions with people in your group | 5.29 | 4.32 | | 5.64 | 4.83 | 5.84 | 4.48 | 4.92 |
| The number of float trips seen | 4.72 | 5.94 | | 4.53 | 4.42 | 5.08 | 4.81 | 4.58 |
| The number of power boat trips seen | 4.49 | 4.76 | | 4.61 | 4.21 | 5.04 | 4.11 | 4.31 |
| <i>N</i> | <i>67 to 68</i> | <i>66 to 78</i> | <i>2</i> | <i>136 to 148</i> | <i>111 to 119</i> | <i>22 to 25</i> | <i>26 to 28</i> | <i>161 to 171</i> |

¹ 7 point scale: 1=Not at all satisfied; 3=Somewhat satisfied; 5=Very satisfied; 7=Extremely satisfied.

The limited number of private floaters contacted on the Scenic segment inhibits our ability to make conclusive statements about users in each season. Overall, private floaters on the Scenic segment felt most strongly satisfied with the interactions with people in their group (5.91), and only somewhat satisfied with the number of power trips seen (3.09) (Table 36C).

Private floaters on the Wild segment had similar results as those on the Scenic segment. They felt most satisfied with the interactions with people in their group (6.10), and the least satisfied with the number of power boat trips (3.50).

Table 36C Private Float Boaters' Satisfaction with Social Conditions on the River¹

| Private float | Scenic | | | | Wild | | | |
|--|----------|-----------|----------|-------------|-------------------|-----------------|-----------------|-------------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Behavior of other groups | | | | 5.18 | 5.16 | 4.97 | 5.06 | 5.11 |
| Interactions with people in your group | | | | 5.91 | 5.96 | 6.56 | 6.18 | 6.10 |
| The number of float trips seen | | | | 4.86 | 5.11 | 4.81 | 5.29 | 5.13 |
| The number of power boat trips seen | | | | 3.09 | 3.56 | 3.61 | 3.34 | 3.50 |
| <i>N</i> | <i>8</i> | <i>7</i> | <i>7</i> | <i>22</i> | <i>153 to 156</i> | <i>31 to 32</i> | <i>81 to 82</i> | <i>266 to 270</i> |

¹ 7 point scale: 1=Not at all satisfied; 3=Somewhat satisfied; 5=Very satisfied; 7=Extremely satisfied.

Once again, the small number of commercial floaters contacted on the Scenic segment does not allow conclusive statements about differences among seasons. Overall, these visitors on both the Wild and Scenic segments exhibited strong satisfaction with interactions with people in their group and felt least satisfied about the number of power trips seen (Table 36D). Commercial floaters on the Scenic segment felt particularly

dissatisfied with the number of power boat trips seen (1.60), but this is based on a very small sample (15). Commercial floaters on the Wild segment felt only somewhat satisfied with the number of power boat trips seen (3.22). Also, commercial floaters in the secondary season felt less satisfied with the number of power boat trips seen (2.82) than those visitors in the primary or NMW seasons, based on a very small sample.

Table 36D Commercial Float Boaters' Satisfaction with Social Conditions on the River¹

| Commercial float | Scenic | | | | Wild | | | |
|--|---------|-----------|-----|-------------|-----------|-----------|----------|-------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Behavior of other groups | | | | 4.47 | 5.09 | 5.71 | 5.15 | 5.17 |
| Interactions with people in your group | | | | 5.73 | 5.86 | 6.29 | 6.45 | 6.07 |
| The number of float trips seen | | | | 4.87 | 4.92 | 4.94 | 5.59 | 5.11 |
| The number of power boat trips seen | | | | 1.60 | 3.26 | 2.82 | 3.27 | 3.22 |
| <i>N</i> | 8 | 2 to 7 | 6 | 15 | 98 to 100 | 17 | 41 to 44 | 156 to 161 |

¹ 7 point scale: 1=Not at all satisfied; 3=Somewhat satisfied; 5=Very satisfied; 7=Extremely satisfied.

Overall, for the Scenic segment, the mean satisfaction levels were quite similar among the different user groups for behavior of other groups, interactions within group, and the number of float trips seen on the river (Table 36E). However, there was a substantial difference between private floaters and power users in satisfaction with the number of power boat trips seen. Figure 15 below graphically displays these differences among user groups on the Scenic Section.

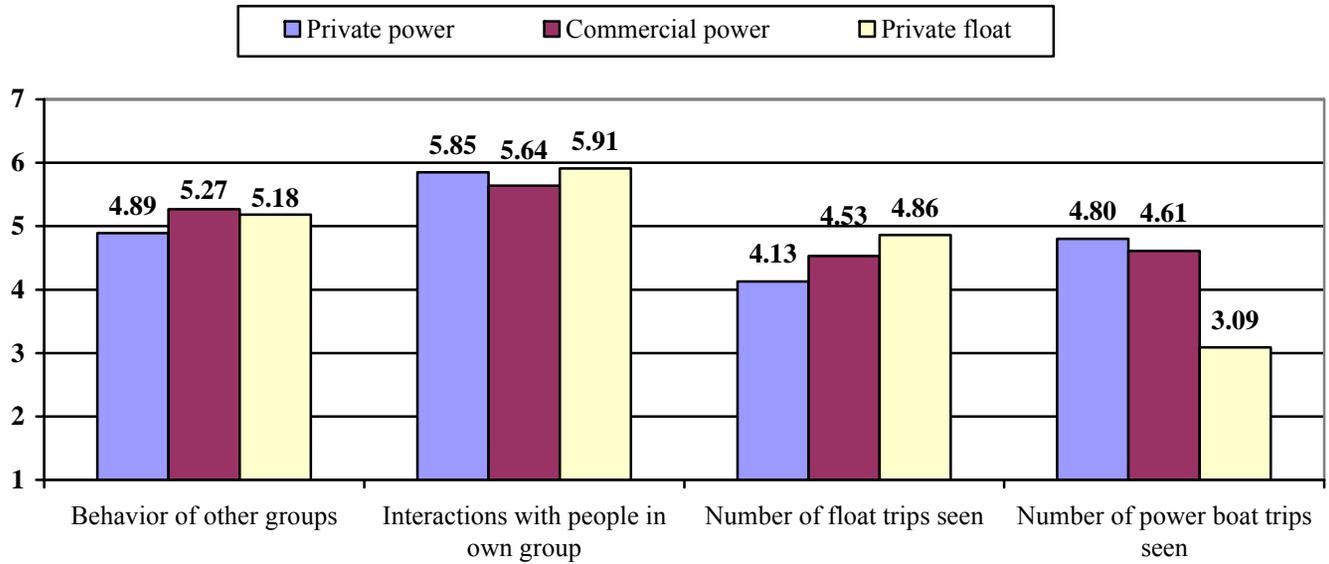
Table 36E Differences in Social Conditions Among User Groups on the Scenic Section¹

| Scenic Section | Private Power | Commercial Power | Private Float | Commercial Float | <i>p-value</i> |
|--|-------------------|-------------------|--------------------|------------------|----------------|
| Behavior of other groups | 4.89 ^a | 5.27 ^b | 5.18 ^{ab} | | .027 |
| Interactions with people in your group | 5.85 | 5.64 | 5.91 | | <i>ns</i> |
| The number of float trips seen | 4.13 ^a | 4.53 ^b | 4.86 ^b | | .019 |
| The number of power boat trips seen | 4.80 ^b | 4.61 ^b | 3.09 ^a | | <.0005 |

¹ 7 point scale: 1=Not at all satisfied; 3=Somewhat satisfied; 5=Very satisfied; 7=Extremely satisfied.

Superscripts indicate statistically significant differences among user types at alpha = .05

Figure 15. Differences in Social Conditions Among Users on the Scenic Section



¹ 7 point scale: 1=Not at all satisfied; 3=Somewhat satisfied; 5=Very satisfied; 7=Extremely satisfied.

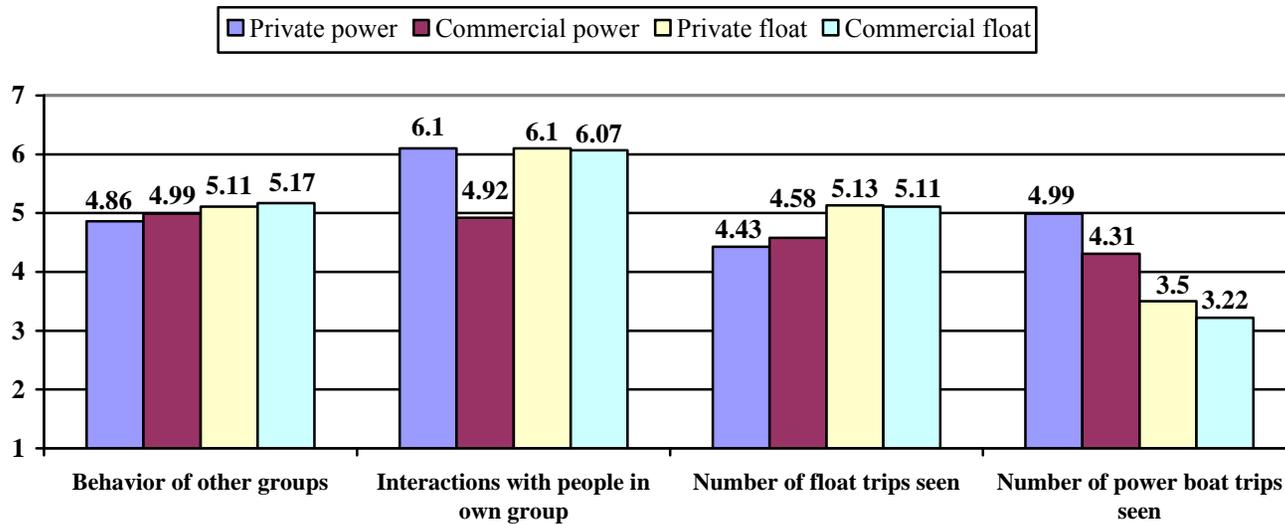
More substantial differences occurred among user groups on the Wild segment (Table 36F). Commercial power users differed significantly from all other user groups, feeling much less satisfied with the interaction with people in their group. Both private power and commercial power users significantly differed from the floating user groups regarding the number of float trips seen during their river trip. Finally, both private and commercial floaters felt significantly less satisfied with the number of power boat trips seen. Figure 16 below graphically displays these differences for the Wild Section.

Table 36F Differences in Social Conditions Among User Groups on the Wild Section¹

| Wild Section | Private Power | Commercial Power | Private Float | Commercial Float | p-value |
|--|-------------------|-------------------|-------------------|-------------------|---------|
| Behavior of other groups | 4.86 | 4.99 | 5.11 | 5.17 | ns |
| Interactions with people in your group | 6.10 ^b | 4.92 ^a | 6.10 ^b | 6.07 ^b | <.0005 |
| The number of float trips seen | 4.43 ^a | 4.58 ^a | 5.13 ^b | 5.11 ^b | <.0005 |
| The number of power boat trips seen | 4.99 ^c | 4.31 ^b | 3.50 ^a | 3.22 ^a | <.0005 |

¹ 7 point scale: 1=Not at all satisfied; 3=Somewhat satisfied; 5=Very satisfied; 7=Extremely satisfied. Superscripts indicate statistically significant differences among user types at alpha = .05

Figure 16. Differences in Social Conditions Among Users on the Wild Section



¹ 7 point scale: 1=Not at all satisfied; 3=Somewhat satisfied; 5=Very satisfied; 7=Extremely satisfied.

Environmental & Cultural Conditions

Respondents were asked about certain environmental and cultural conditions on the river that they may have encountered on their trip and if those conditions added to or detracted from their experience. A 7-point scale (-3=detracted a lot; 0=no effect; +3=added a lot), with an option to select “not noticed,” was used to assess opinions.

Overall, among those conditions boaters noticed, some added to or detracted significantly from private power boaters’ experience, while several had means near zero (Table 37A). Items that added substantially to this group’s experiences included historical sites, rock art, challenging whitewater, and seeing wildlife. Private power boaters who noticed that fluctuating water levels, human waste and toilet paper, and weeds or thorny plants at campsites said these detracted from their experience.

Private power users on the Wild segment also felt the same conditions in the same order of importance most substantially added to their experience. Like those on the Scenic segment, they felt that—when noticed—human waste and toilet paper, weeds and thorny plants at campsites, and fluctuating water levels most strongly detracted from their experiences on the river. On both river segments, private power boaters’ reactions to impacts and conditions followed similar patterns in each season. Table 37B shows the percent of private power boaters that did not notice environmental conditions during their river trip.

Table 37A Conditions that Added to or Detracted from Private Power Boaters’ River Trip.¹

| Private power | Scenic | | | | Wild | | | |
|---|---------|-----------|-----|-------------|---------|-----------|-----|-------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Dog waste | -0.49 | -0.54 | | -0.47 | -0.67 | -0.44 | | -0.53 |
| Erosion of riverbanks | -0.27 | -0.23 | | -0.26 | -0.38 | 0.00 | | -0.24 |
| Fluctuating water levels | -0.90 | -0.80 | | -0.89 | -0.88 | -0.67 | | -0.80 |
| High water levels | 0.38 | 0.16 | | 0.29 | -0.35 | 0.21 | | -0.18 |
| Low water levels | -0.02 | 0.08 | | 0.02 | -0.05 | 0.13 | | -0.03 |
| Historical sites | 1.56 | 1.48 | | 1.50 | 1.65 | 0.92 | | 1.40 |
| Impacts to trees or brush from recreation | -0.08 | -0.17 | | -0.10 | -0.05 | 0.00 | | -0.06 |
| Litter and trash along riverbank | -0.70 | -0.45 | | -0.59 | -0.50 | -0.67 | | -0.59 |
| Indian rock art | 1.55 | 1.44 | | 1.48 | 1.57 | 0.56 | | 1.26 |
| Evidence of livestock | -0.05 | -0.30 | | -0.15 | 0.27 | 0.40 | | 0.28 |

| Private power | Scenic | | | | Wild | | | | |
|-------------------------------------|----------|------------------|-----------------|----------------|------------------|-----------------|-----------------|---------------|-----------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons | |
| Trampled vegetation at campsites | -0.11 | -0.06 | | -0.10 | -0.33 | 0.00 | | -0.21 | |
| Human waste or toilet paper | -1.05 | -0.54 | | -0.86 | -1.00 | -1.40 | | -1.15 | |
| Weeds or thorny plants at campsites | -0.86 | -0.57 | | -0.78 | -1.13 | -0.36 | | -0.94 | |
| Challenging whitewater | 1.75 | 1.64 | | 1.66 | 2.07 | 1.67 | | 1.97 | |
| Seeing wildlife | 2.05 | 2.17 | | 2.06 | 2.34 | 2.00 | | 2.15 | |
| | <i>N</i> | <i>51 to 153</i> | <i>24 to 77</i> | <i>7 to 16</i> | <i>83 to 247</i> | <i>10 to 42</i> | <i>10 to 20</i> | <i>1 to 9</i> | <i>19 to 69</i> |

¹ 7 point scale: -3=Detracted from; 0=No effect; +3=Added to.

Table 37B Percent of Private Power Boaters That Did Not Notice Environmental Conditions During Their River Trip

| Environmental Conditions | Scenic (%) | Wild (%) | |
|---|------------|-------------------|-----------------|
| Dog waste | 67.3 | 72.9 | |
| Erosion of riverbanks | 49.2 | 52.8 | |
| Fluctuating water levels | 15.4 | 8.3 | |
| High water levels | 20.5 | 18.8 | |
| Low water levels | 22.0 | 15.7 | |
| Historical sites | 10.2 | 25.4 | |
| Impacts to trees or brush from recreation | 56.2 | 56.9 | |
| Litter and trash along riverbank | 63.6 | 69.0 | |
| Indian rock art | 26.7 | 50.0 | |
| Evidence of livestock | 49.6 | 59.7 | |
| Trampled vegetation at campsites | 58.4 | 65.7 | |
| Human waste or toilet paper | 64.1 | 71.4 | |
| Weeds or thorny plants at campsites | 34.3 | 30.6 | |
| Challenging whitewater | 5.1 | 4.2 | |
| Seeing wildlife | 1.2 | 5.6 | |
| | <i>N</i> | <i>248 to 256</i> | <i>69 to 72</i> |

Commercial power users on both the Wild and Scenic segments felt most strongly that (in order) seeing wildlife, historical sites, Indian rock art, and challenging whitewater all added most substantially to their river experiences (Table 37C). They also rated high water levels as an important contributor. Boaters on both segments also displayed similarities in the conditions that detracted from their experiences, such as litter and trash along the river, trampled vegetation, and dog waste. However, the degree of detraction for these was not strong. In general, then, few conditions

detracted from commercial power trips, while several conditions added a great deal. Patterns of responses to conditions and impacts were generally consistent across all seasons for the commercial power group. Table 37D shows the percent of private power boaters that did not notice environmental conditions during their river trip.

Table 37C Conditions that Added to or Detracted from Commercial Power Boaters' River Trip.¹

| Commercial power | Scenic | | | | Wild | | | |
|---|-----------------|-----------------|---------------|------------------|------------------|-----------------|-----------------|------------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Dog waste | 0.07 | -0.17 | | -0.06 | -0.32 | 0.00 | -0.25 | -0.28 |
| Erosion of riverbanks | -0.04 | -0.06 | | -0.05 | -0.04 | 0.00 | 0.23 | 0.01 |
| Fluctuating water levels | 0.51 | 0.09 | | 0.24 | 0.20 | 0.81 | -0.13 | 0.25 |
| High water levels | 0.81 | 0.67 | | 0.75 | 0.76 | 0.85 | 0.44 | 0.73 |
| Low water levels | 0.34 | 0.10 | | 0.18 | 0.03 | 0.82 | -0.24 | 0.11 |
| Historical sites | 1.97 | 1.70 | | 1.82 | 1.86 | 2.13 | 1.76 | 1.89 |
| Impacts to trees or brush from recreation | -0.13 | -0.12 | | -0.12 | -0.17 | 0.00 | | -0.15 |
| Litter and trash along riverbank | -0.52 | -0.32 | | -0.40 | -0.18 | -0.33 | -0.22 | -0.20 |
| Indian rock art | 1.80 | 1.60 | | 1.70 | 1.83 | 1.95 | 1.70 | 1.83 |
| Evidence of livestock | 0.31 | 0.15 | | 0.21 | 0.13 | 0.40 | -0.27 | 0.10 |
| Trampled vegetation at campsites | -0.32 | -0.11 | | -0.20 | -0.03 | | -0.50 | -0.13 |
| Human waste or toilet paper | -0.21 | 0.10 | | -0.06 | -0.27 | 0.00 | -0.38 | -0.28 |
| Weeds or thorny plants at campsites | 0.21 | -0.03 | | 0.03 | -0.57 | 0.88 | -0.19 | -0.33 |
| Challenging whitewater | 1.63 | 1.28 | | 1.45 | 1.69 | 2.16 | 0.92 | 1.64 |
| Seeing wildlife | 2.12 | 1.96 | | 2.02 | 1.88 | 2.48 | 1.96 | 1.99 |
| <i>N</i> | <i>14 to 66</i> | <i>18 to 73</i> | <i>1 to 2</i> | <i>34 to 138</i> | <i>19 to 104</i> | <i>10 to 25</i> | <i>10 to 25</i> | <i>29 to 153</i> |

¹ 7 point scale: -3=Detracted from; 0=No effect; +3=Added to.

Table 37D Percent of Commercial Power Boaters That Did Not Notice Environmental Conditions During Their River Trip

| Environmental Conditions | Scenic (%) | Wild (%) |
|--------------------------|------------|----------|
| Dog waste | 77.0 | 83.2 |
| Erosion of riverbanks | 54.5 | 60.1 |
| Fluctuating water levels | 40.1 | 40.9 |
| High water levels | 29.3 | 33.3 |
| Low water levels | 40.5 | 35.7 |
| Historical sites | 6.8 | 16.4 |

| Environmental Conditions | Scenic (%) | Wild (%) |
|---|-------------------|-------------------|
| Impacts to trees or brush from recreation | 58.0 | 65.5 |
| Litter and trash along riverbank | 67.6 | 74.0 |
| Indian rock art | 11.1 | 16.3 |
| Evidence of livestock | 44.6 | 65.7 |
| Trampled vegetation at campsites | 72.8 | 72.1 |
| Human waste or toilet paper | 76.4 | 81.5 |
| Weeds or thorny plants at campsites | 54.6 | 56.6 |
| Challenging whitewater | 9.6 | 22.5 |
| Seeing wildlife | 4.3 | 11.0 |
| <i>N</i> | <i>140 to 148</i> | <i>171 to 173</i> |

Small samples of private floaters on the Scenic segment make drawing conclusive statements about opinions difficult for individual seasons and overall. However, private floaters on the Wild segment indicated four important conditions that added to their river experience, including (in order) challenging whitewater, seeing wildlife, Indian rock art, and historical sites (Table 37E). There were several conditions that strongly detracted from their experience, including human waste and toilet paper, litter and trash on the river bank, and weeds and thorny plants at campsites. Other items also added to and detracted from experiences, though not strongly. Among this group, patterns of responses were largely consistent across the different seasons. Table 37F shows the percent of private floaters who did not notice environmental conditions during their river trip.

Table 37E Conditions that Added to or Detracted from Private Float Boaters' River Trip.¹

| Private float | Scenic | | | | Wild | | | |
|---|---------------|-----------|-----|-------------|-------------|-----------|-------|-------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Dog waste | | | | | -0.66 | -0.30 | -0.50 | -0.56 |
| Erosion of riverbanks | | | | | -0.40 | -0.77 | -0.76 | -0.58 |
| Fluctuating water levels | | | | | -0.34 | -0.58 | -0.82 | -0.51 |
| High water levels | | | | | 0.60 | 0.58 | 0.69 | 0.63 |
| Low water levels | | | | | -0.25 | -0.04 | -0.41 | -0.28 |
| Historical sites | | | | | 1.73 | 1.65 | 1.72 | 1.72 |
| Impacts to trees or brush from recreation | | | | | -0.47 | -0.50 | -0.36 | -0.44 |
| Litter and trash along riverbank | | | | | -0.94 | -1.00 | -0.83 | -0.91 |

| Private float | Scenic | | | | Wild | | | | |
|-------------------------------------|----------|---------------|---------------|---------------|----------------|------------------|-----------------|-----------------|------------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons | |
| Indian rock art | | | | | 1.68 | 1.96 | 1.89 | 1.79 | |
| Evidence of livestock | | | | | -0.22 | -0.88 | -0.34 | -0.34 | |
| Trampled vegetation at campsites | | | | | -0.31 | -0.65 | -0.36 | -0.37 | |
| Human waste or toilet paper | | | | | -1.40 | -1.38 | -1.13 | -1.32 | |
| Weeds or thorny plants at campsites | | | | | -0.82 | -1.03 | -0.64 | -0.79 | |
| Challenging whitewater | | | | | 2.12 | 2.13 | 2.27 | 2.17 | |
| Seeing wildlife | | | | | 2.01 | 2.24 | 1.73 | 1.95 | |
| | <i>N</i> | <i>3 to 8</i> | <i>2 to 7</i> | <i>3 to 7</i> | <i>5 to 21</i> | <i>41 to 139</i> | <i>10 to 33</i> | <i>22 to 79</i> | <i>73 to 257</i> |

¹ 7 point scale: -3=Detracted from; 0=No effect; +3=Added to.

Table 37F Percent of Private Float Boaters That Did Not Notice Environmental Conditions During Their River Trip

| Environmental Conditions | Scenic (%) | Wild (%) | |
|---|------------|-----------|-------------------|
| Dog waste | 76.2 | 72.8 | |
| Erosion of riverbanks | 47.6 | 45.2 | |
| Fluctuating water levels | 9.5 | 14.0 | |
| High water levels | 28.6 | 22.0 | |
| Low water levels | 25.0 | 18.0 | |
| Historical sites | 4.8 | 10.2 | |
| Impacts to trees or brush from recreation | 33.3 | 51.3 | |
| Litter and trash along riverbank | 47.6 | 62.3 | |
| Indian rock art | 50.0 | 31.8 | |
| Evidence of livestock | 28.6 | 50.8 | |
| Trampled vegetation at campsites | 52.4 | 48.3 | |
| Human waste or toilet paper | 61.9 | 62.5 | |
| Weeds or thorny plants at campsites | 14.3 | 16.4 | |
| Challenging whitewater | 13.6 | 2.7 | |
| Seeing wildlife | 0.0 | 5.7 | |
| | <i>N</i> | <i>21</i> | <i>262 to 268</i> |

Low numbers of commercial floaters on the Scenic segment inhibit our ability to make conclusive statements about this group’s reactions to conditions. Commercial floaters on the Wild segment felt the four most important conditions adding to their experiences were challenging whitewater, Indian rock art, seeing wildlife, and historic sites (Table 37G). They felt that the most detracting of conditions were human waste and toilet paper along the river. Other items also added to and detracted from experiences, though none were indicated as strong. As was the case for the other user groups, responses of commercial floaters were generally consistent across all three seasons. Table 37H shows the percent of commercial floaters that did not notice environmental conditions during their river trip.

Table 37G Conditions that Added to or Detracted from Commercial Float Boaters’ River Trip.¹

| Commercial float | Scenic | | | | Wild | | | | |
|---|----------|---------------|----------|---------------|----------------|-----------------|-----------------|-----------------|------------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons | |
| Dog waste | | | | | -0.45 | -0.60 | 0.00 | -0.36 | |
| Erosion of riverbanks | | | | | -0.55 | -0.25 | -0.11 | -0.39 | |
| Fluctuating water levels | | | | | 0.17 | 0.23 | 0.06 | 0.15 | |
| High water levels | | | | | 0.99 | 0.38 | 0.81 | 0.87 | |
| Low water levels | | | | | -0.21 | 0.25 | -0.31 | -0.18 | |
| Historical sites | | | | | 1.88 | 1.63 | 1.88 | 1.85 | |
| Impacts to trees or brush from recreation | | | | | -0.54 | -0.27 | -0.33 | -0.43 | |
| Litter and trash along riverbank | | | | | -0.87 | -0.17 | -0.15 | -0.55 | |
| Indian rock art | | | | | 1.89 | 1.82 | 2.14 | 1.95 | |
| Evidence of livestock | | | | | -0.50 | | -0.23 | -0.33 | |
| Trampled vegetation at campsites | | | | | -0.50 | -0.25 | -0.19 | -0.38 | |
| Human waste or toilet paper | | | | | -1.30 | -0.60 | -0.20 | -0.89 | |
| Weeds or thorny plants at campsites | | | | | -0.55 | -0.25 | -0.46 | -0.50 | |
| Challenging whitewater | | | | | 2.16 | 1.88 | 2.30 | 2.17 | |
| Seeing Wildlife | | | | | 1.89 | 1.93 | 1.93 | 1.91 | |
| | <i>N</i> | <i>1 to 8</i> | <i>1</i> | <i>1 to 6</i> | <i>3 to 15</i> | <i>11 to 99</i> | <i>10 to 17</i> | <i>10 to 44</i> | <i>22 to 159</i> |

¹ 7 point scale: -3=Detracted from; 0=No effect; +3=Added to.

Table 37H Percent of Commercial Float Boaters That Did Not Notice Environmental Conditions During Their River Trip

| Percent of Commercial Floaters Who Selected “Did Not Notice” | Scenic (%) | Wild (%) |
|---|-----------------------|---------------------|
| Dog waste | 86.7 | 86.3 |
| Erosion of riverbanks | 66.7 | 56.9 |
| Fluctuating water levels | 33.3 | 26.9 |
| High water levels | 37.5 | 25.8 |
| Low water levels | 33.5 | 31.9 |
| Historical sites | 0.0 | 4.9 |
| Impacts to trees or brush from recreation | 60.0 | 58.1 |
| Litter and trash along riverbank | 60.0 | 73.9 |
| Indian rock art | 20.0 | 4.3 |
| Evidence of livestock | 33.3 | 55.4 |
| Trampled vegetation at campsites | 66.7 | 63.0 |
| Human waste or toilet paper | 80.0 | 78.3 |
| Weeds or thorny plants at campsites | 13.3 | 23.9 |
| Challenging whitewater | 6.7 | 0.6 |
| Seeing wildlife | 6.7 | 11.3 |
| <i>N</i> | <i>15</i> | <i>158 to 161</i> |

There were only enough boaters in the power boating groups to permit comparisons on the Scenic segment (Table 37I). Only a few notable differences emerged between the two groups on the Scenic segment. Whereas commercial power users were not bothered by fluctuating water levels, private power users were adversely affected. Private power users were not affected very much by high water levels, but commercial power users reported enjoying this a great deal. Private power users who noticed human waste were substantially more bothered than were commercial boaters. Finally, while commercial power users were not affected by weeds or thorny plants at campsites, they were indicated as a problem for private power users.

Table 37I Differences in Environmental Conditions Among User Groups on the Scenic Section¹

| Scenic Section | Private Power | Commercial Power | Private Float | Commercial Float | <i>p-value</i> |
|---|---------------|------------------|---------------|------------------|----------------|
| Dog waste | -0.47 | -0.06 | | | .025 |
| Erosion of riverbanks | -0.26 | -0.05 | | | <i>ns</i> |
| Fluctuating water levels | -0.89 | 0.24 | | | <.0005 |
| High water levels | 0.29 | 0.75 | | | .001 |
| Low water levels | 0.02 | 0.18 | | | <i>ns</i> |
| Historical sites | 1.50 | 1.82 | | | .004 |
| Impacts to trees or brush from recreation | -0.10 | -0.12 | | | <i>ns</i> |
| Litter and trash along riverbank | -0.59 | -0.40 | | | <i>ns</i> |
| Indian rock art | 1.48 | 1.70 | | | <i>ns</i> |
| Evidence of livestock | -0.15 | 0.21 | | | .004 |
| Trampled vegetation at campsites | -0.10 | -0.20 | | | <i>ns</i> |
| Human waste or toilet paper | -0.86 | -0.06 | | | .001 |
| Weeds or thorny plants at campsites | -0.78 | 0.03 | | | <.0005 |
| Challenging whitewater | 1.66 | 1.45 | | | <i>ns</i> |
| Seeing wildlife | 2.06 | 2.02 | | | <i>ns</i> |

¹ 7 point scale: -3=Detracted from; 0=No effect; +3=Added to.
Differences among user types statistically significant at alpha = .05

More differences between groups were apparent on the Wild segment (Table 37J). For instance, private boaters did not like fluctuating water levels, but commercial boaters were not affected. All groups except private power users liked high water on the Wild segment. Private floaters were most adversely affected when they saw human waste. Finally, though all said challenging whitewater added a lot, commercial power users were less positive than either float group about this condition. Many of the differences among groups, though statistically significant, were not large in a practical sense.

Table 37J Differences in Environmental Conditions Among User Groups on the Wild Section¹

| Wild Section | Private Power | Commercial Power | Private Float | Commercial Float | <i>p-value</i> |
|---|---------------------|--------------------|---------------------|---------------------|----------------|
| Dog waste | -0.53 | -0.28 | -0.56 | -0.36 | <i>ns</i> |
| Erosion of riverbanks | -0.24 ^{ab} | 0.01 ^c | -0.58 ^a | -0.39 ^{ab} | .001 |
| Fluctuating water levels | -0.80 ^a | 0.25 ^b | -0.51 ^a | 0.15 ^b | <.0005 |
| High water levels | -0.18 ^a | 0.73 ^b | 0.63 ^b | 0.87 ^b | <.0005 |
| Low water levels | -0.03 ^a | 0.11 ^a | -0.28 ^a | -0.18 ^a | .043 |
| Historical sites | 1.40 ^a | 1.89 ^b | 1.72 ^{ab} | 1.85 ^b | .011 |
| Impacts to trees or brush from recreation | -0.06 ^a | -0.15 ^a | -0.44 ^a | -0.43 ^a | .011 |
| Litter and trash along riverbank | -0.59 ^a | -0.20 ^a | -0.91 ^a | -0.55 ^a | .011 |
| Indian rock art | 1.26 ^a | 1.83 ^b | 1.79 ^b | 1.95 ^b | .003 |
| Evidence of livestock | 0.28 ^b | 0.10 ^{ab} | -0.34 ^a | -0.33 ^a | .002 |
| Trampled vegetation at campsites | -0.21 | -0.13 | -0.37 | -0.38 | <i>ns</i> |
| Human waste or toilet paper | -1.15 ^{ab} | -0.28 ^b | -1.32 ^a | -0.89 ^{ab} | .001 |
| Weeds or thorny plants at campsites | -0.94 ^a | -0.33 ^b | -0.79 ^{ab} | -0.50 ^{ab} | .004 |
| Challenging whitewater | 1.97 ^{ab} | 1.64 ^a | 2.17 ^b | 2.17 ^b | <.0005 |
| Seeing Wildlife | 2.15 | 1.99 | 1.95 | 1.91 | <i>ns</i> |

¹ 7 point scale: -3=Detracted from; 0=No effect; +3=Added to.

Superscripts indicate statistically significant differences among user types at alpha = .05

Visitors were also asked how satisfied they were with weather conditions and temperature during their river trip (Table 38A). Generally, all four user groups in both the Wild and the Scenic segments had means 5.0 or higher, indicating they were very satisfied with weather and temperature conditions during their trip. Commercial power boaters on the Wild segment during the NMW were the exception, with a mean of 4.29. On the Scenic segment, private power users expressed the strongest satisfaction with these conditions (5.59), while on the Wild segment, commercial floaters indicated the strongest satisfaction with conditions (5.82).

Table 38A User Groups' Satisfaction with Weather and Temperature Conditions¹

| Satisfaction with the weather and temperature | Scenic | | | | Wild | | | |
|---|---------|-----------|-----|-------------|---------|-----------|------|-------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Private power | 5.88 | 5.00 | | 5.59 | 6.05 | 5.10 | 5.10 | 5.64 |
| <i>N</i> | 156 | 81 | 1 | 253 | 42 | 21 | 10 | 73 |
| Commercial power | 5.57 | 5.31 | | 5.45 | 5.33 | 6.08 | 4.29 | 5.27 |
| <i>N</i> | 68 | 78 | 2 | 148 | 119 | 25 | 28 | 172 |
| Private float | | | | 5.10 | 5.53 | 6.06 | 5.74 | 5.66 |
| <i>N</i> | 7 | 7 | 7 | 21 | 156 | 32 | 82 | 270 |
| Commercial float | | | | 5.13 | 5.64 | 6.24 | 6.09 | 5.82 |
| <i>N</i> | 8 | 7 | 6 | 15 | 99 | 17 | 43 | 159 |

¹ 7 point scale: 1=not at all satisfied; 3=somewhat satisfied; 5=very satisfied; 7=extremely satisfied.

The means for each user group in both segments were compared for significant differences (Table 38B). There were no differences in overall satisfaction with weather and temperature conditions among the user groups on the Scenic segment. However, on the Wild segment, private power users (5.27) and commercial floaters (5.82) were found to be significantly different in satisfaction with weather and temperature conditions.

Table 38B Differences in Environmental Conditions Among User Groups¹

| Satisfaction with the weather and temperature | Scenic Section | Wild Section |
|---|----------------|-------------------|
| Private power | 5.59 | 5.64 ^b |
| Commercial power | 5.45 | 5.27 ^a |
| Private float | 5.10 | 5.66 ^b |
| Commercial float | 5.13 | 5.82 ^b |
| <i>p-value</i> | <i>ns</i> | .002 |

¹ 7 point scale: -3=Detracted from; 0=No effect; +3=Added to. Superscripts indicate differences among user groups alpha=0.05

Perceptions of Change

Respondents were asked if they had boated on the Scenic or Wild segment of the river in 1998 or before. Overall, a much higher percentage of private boaters and floaters indicated having boated either segment of the river (Table 39). On the Scenic segment, 64% of private power boaters and 35% of private floaters had boated in or before 1998. Overall, less than 20% of commercial power and float boaters had done so on the Scenic segment (18% commercial power; 13% commercial float), although the rate was slightly higher among commercial power boaters in the secondary season (25%).

Among boaters contacted on the Wild segment, the results were similar. Nearly 70% of private power boaters had boated at least five years previously, as had 38% of private floaters. During the primary season, nearly 45% of the private floaters contacted had boated the river in 1998 or previously, but only 26% during the NMW had done so. Only 10% of commercial power boaters and 11% of commercial floaters on the Wild segment had boated in 1998 or before.

Table 39 Percent Boating the Snake River in 1998 or Before, by User Group and Season¹

| Did you boat the Scenic or Wild section of the Snake River in 1998 or before? | | Scenic | | | | Wild | | | |
|---|----------|---------|-----------|-----|-------------|---------|-----------|-----|-------------|
| | | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Private power | YES | 68 | 52 | 81 | 64 | 61 | 68 | | 67 |
| | NO | 32 | 48 | 19 | 36 | 39 | 32 | | 33 |
| | <i>N</i> | 152 | 75 | 16 | 243 | 41 | 19 | 9 | 69 |
| Commercial power | YES | 9 | 25 | | 18 | 12 | 4 | 7 | 10 |
| | NO | 91 | 75 | | 82 | 88 | 96 | 93 | 90 |
| | <i>N</i> | 65 | 76 | 2 | 143 | 115 | 27 | 29 | 171 |
| Private float | YES | | | | 35 | 45 | 31 | 26 | 38 |
| | NO | | | | 65 | 54 | 69 | 74 | 62 |
| | <i>N</i> | 7 | 7 | 6 | 20 | 154 | 29 | 82 | 265 |
| Commercial float | YES | | | | 13 | 13 | 7 | 8 | 11 |
| | NO | | | | 87 | 87 | 93 | 92 | 89 |
| | <i>N</i> | 8 | 1 | 6 | 15 | 101 | 14 | 40 | 155 |

¹Expressed in percentages

If the respondents indicated that they had boated in 1998 or before, then they were asked to specify on a 7-point scale (-3=much worse; 0=the same; +3=much better) whether they thought certain conditions on the river had improved or deteriorated since 1998. It is important to note that the number of respondents for some groups is too small to permit reliable conclusions. Samples are only large enough for private and commercial power users on the Scenic segment and private power users and private floaters on the Wild segment. Additionally, analyses are only valid for these groups for the river segment as a whole, not season by season.

Overall, private power users on both the Wild and Scenic segments displayed similarity in what they felt had changed for the better or worse since 1998, and none of the items had means very far from zero (Table 40A). Many of the conditions were found to have improved at least slightly since 1998. However, private power boaters on both segments felt that effectiveness of management, freedom from regulations, fair treatment of float and power boat users, fair treatment of commercial and non-commercial users, and relationships between float and power boaters have all gotten slightly worse since 1998.

Private power users on the Scenic segment felt most strongly that freedom from regulations (-1.05) had gotten worse, followed by treatment of float/power boaters (-0.65) and commercial/non-commercial users (-0.51). No items were rated as substantially improved by boaters on the Scenic segment. Private power boaters on the Wild segment felt most strongly that fair treatment of float/power users had gotten worse (-1.23), followed by freedom from regulations (-1.02) and treatment of commercial/non-commercial users (-0.42). Further, private power users on the Wild segment felt several other items had also gotten worse, including quality of beach campsites, quality of recreational experiences, the amount of human waste on shore, and scenery. However, these boaters rated facilities at launches as much improved (0.82).

A few other points deserve attention for private power users. First, on the Scenic segment, those contacted in the secondary season felt conditions had deteriorated more than those in the primary season. For example, the means for “naturalness” were -0.02 for the secondary season and 0.29 for the primary season. Second, private power users on the Wild segment rated quality of overall experiences as slightly worse (-0.16), while those on the Scenic segment noted, on average, no change in conditions (0.01). Third, boaters on the Wild segment rated the quality of beach campsites as worse (-0.42), while those on the Scenic segment did not perceive much change (0.05). Finally, on both segments, private power boaters did not notice much change in opportunities for solitude.

Table 40A Private Power Boaters' Perceptions of Change in River Conditions Since 1998¹

| Private power | Scenic | | | | | Wild | | | | |
|--|------------------|-----------------|-----------------|-------------------|----------------|-----------------|-----------------|---------------|-----------------|----------------|
| | Primary | Secondary | NMW | All seasons | Don't Know (%) | Primary | Secondary | NMW | All seasons | Don't Know (%) |
| Historic or cultural sites | 0.14 | 0.14 | | 0.11 | 11.9 | 0.00 | | | 0.05 | 19.6 |
| Scenery | 0.23 | 0.00 | | 0.15 | 2.5 | -0.04 | | | -0.02 | 13.7 |
| Quality of recreational experiences | 0.04 | 0.00 | | 0.01 | 4.4 | -0.30 | | | -0.16 | 12.0 |
| Facilities at launches | 0.53 | 0.43 | | 0.48 | 8.1 | 0.57 | | | 0.82 | 12.0 |
| Opportunities to see wildlife | 0.32 | 0.17 | | 0.25 | 3.1 | 0.09 | | | 0.05 | 13.7 |
| Livestock impacts | 0.33 | 0.13 | | 0.27 | 8.1 | 0.16 | | | 0.14 | 30.0 |
| Opportunities for self-reliance | 0.19 | 0.08 | | 0.15 | 6.8 | 0.09 | | | 0.14 | 12.5 |
| Effectiveness of management | -0.19 | -0.24 | | -0.21 | 10.5 | -0.47 | | | -0.13 | 24.0 |
| Opportunities for solitude | 0.12 | -0.02 | | 0.06 | 3.1 | 0.04 | | | 0.11 | 9.8 |
| Sense of naturalness | 0.29 | -0.02 | | 0.18 | 3.7 | 0.35 | | | 0.24 | 9.8 |
| Quality of beach campsites | 0.13 | -0.05 | | 0.05 | 6.8 | -0.39 | | | -0.42 | 15.7 |
| The amount of human waste on shore | 0.24 | -0.06 | | 0.16 | 12.3 | 0.15 | | | -0.05 | 24.0 |
| Freedom from regulations | -1.07 | -1.08 | | -1.05 | 7.4 | -1.26 | | | -1.02 | 17.6 |
| The amount of litter | 0.15 | 0.10 | | 0.15 | 6.8 | 0.23 | | | 0.14 | 16.0 |
| Fair treatment of float and power boat users | -0.59 | -0.75 | | -0.65 | 9.3 | -1.64 | | | -1.23 | 13.7 |
| Fair treatment of commercial and private boaters | -0.47 | -0.54 | | -0.51 | 11.7 | -0.68 | | | -0.42 | 15.7 |
| Opportunities for challenge | 0.21 | 0.05 | | 0.16 | 3.7 | 0.21 | | | 0.24 | 9.8 |
| Relationships between float and power boaters | -0.12 | -0.59 | | -0.27 | 5.6 | -0.33 | | | -0.31 | 11.8 |
| <i>N</i> | <i>91 to 101</i> | <i>35 to 42</i> | <i>11 to 14</i> | <i>141 to 157</i> | <i>162</i> | <i>19 to 24</i> | <i>11 to 15</i> | <i>7 to 8</i> | <i>35 to 46</i> | <i>51</i> |

¹ 7 point scale: -3=much worse; 0=the same; +3=much better.

Small samples of commercial power boaters on both segments were available for analysis, and a sufficiently large sample was available only for the Scenic segment. These boaters felt that several conditions on the river had gotten worse, although for all but one item the means were only

slightly different from zero. They felt most strongly that freedom from regulations and fair treatment of float/power boat users had deteriorated and that historic and cultural opportunities had improved (Table 40B). Again, the very small samples of commercial power boaters necessitate using caution in generalizing from these results.

Table 40B Commercial Power Boaters' Perceptions of Change in River Conditions Since 1998¹

| Commercial power | Scenic | | | | | Wild | | | | |
|--|---------------|-----------------|----------|-----------------|----------------|----------------|-----------|---------------|-----------------|----------------|
| | Primary | Secondary | NMW | All seasons | Don't Know (%) | Primary | Secondary | NMW | All seasons | Don't Know (%) |
| Historic or cultural sites | | 0.50 | | 0.47 | 29.6 | | | | | 36.8 |
| Scenery | | 0.20 | | 0.14 | 21.4 | | | | | 15.8 |
| Quality of recreational experiences | | 0.20 | | 0.24 | 25.0 | | | | | 15.0 |
| Facilities at launches | | 0.36 | | 0.38 | 22.2 | | | | | 25.0 |
| Opportunities to see wildlife | | 0.00 | | 0.26 | 17.9 | | | | | 15.0 |
| Livestock impacts | | 0.00 | | 0.05 | 32.1 | | | | | 30.0 |
| Opportunities for self-reliance | | -0.08 | | -0.06 | 35.7 | | | | | 21.1 |
| Effectiveness of management | | 0.21 | | 0.20 | 28.6 | | | | | 25.0 |
| Opportunities for solitude | | -0.31 | | -0.13 | 17.9 | | | | | 20.0 |
| Sense of naturalness | | 0.06 | | 0.13 | 17.9 | | | | | 15.0 |
| Quality of beach campsites | | -0.29 | | -0.11 | 35.7 | | | | | 31.6 |
| The amount of human waste on shore | | -0.36 | | -0.33 | 35.7 | | | | | 40.0 |
| Freedom from regulations | | -0.73 | | -0.82 | 39.3 | | | | | 40.0 |
| The amount of litter | | 0.07 | | 0.20 | 28.6 | | | | | 45.0 |
| Fair treatment of float and power boat users | | -0.50 | | -0.44 | 42.9 | | | | | 25.0 |
| Fair treatment of commercial and private boaters | | -0.20 | | -0.21 | 50.0 | | | | | 35.0 |
| Opportunities for challenge | | 0.00 | | 0.05 | 28.6 | | | | | 30.0 |
| Relationships between float and power boaters | | -0.08 | | 0.06 | 39.3 | | | | | 21.1 |
| <i>N</i> | <i>3 to 6</i> | <i>10 to 16</i> | <i>1</i> | <i>14 to 23</i> | <i>28</i> | <i>8 to 14</i> | <i>1</i> | <i>1 to 2</i> | <i>11 to 17</i> | <i>20</i> |

¹ 7 point scale: -3=much worse; 0=the same; +3=much better.

The low number of private floaters contacted on the Scenic segment did not allow conclusive statements about perceptions of change (Table 40C). Private floaters on the Wild segment felt most conditions had improved at least slightly since 1998. In particular, these floaters felt moderately strongly that facilities at launches had improved (1.14), as had livestock impacts (0.69), the effectiveness of management (0.49), and the amount of litter (0.42). However, they felt that freedom from regulations, fair treatment of float/power boat users, and the quality of beach campsites had gotten worse, though only slightly. Also, floaters in the NMW felt that the sense of naturalness and the amount of human waste had slightly deteriorated, while floaters in the primary season felt these conditions had gotten better. The small number of private floaters in the NMW season requires caution in accepting these differences as widespread.

Table 40C Private Float Boaters' Perceptions of Change in River Conditions Since 1998¹

| Private Float | Scenic | | | | | Wild | | | | |
|--|---------|-----------|-----|-------------|----------------|---------|-----------|-------|-------------|----------------|
| | Primary | Secondary | NMW | All seasons | Don't Know (%) | Primary | Secondary | NMW | All seasons | Don't Know (%) |
| Historic or cultural sites | | | | | | 0.17 | | 0.06 | 0.15 | 17.7 |
| Scenery | | | | | | 0.29 | | 0.15 | 0.26 | 4.1 |
| Quality of recreational experiences | | | | | | 0.38 | | 0.10 | 0.28 | 4.1 |
| Facilities at launches | | | | | | 1.05 | | 1.35 | 1.14 | 4.1 |
| Opportunities to see wildlife | | | | | | 0.33 | | 0.20 | 0.34 | 3.1 |
| Livestock impacts | | | | | | 0.67 | | 0.84 | 0.69 | 14.4 |
| Opportunities for self-reliance | | | | | | 0.29 | | 0.25 | 0.25 | 4.2 |
| Effectiveness of management | | | | | | 0.47 | | 0.50 | 0.49 | 11.3 |
| Opportunities for solitude | | | | | | 0.38 | | 0.10 | 0.27 | 3.1 |
| Sense of naturalness | | | | | | 0.38 | | -0.05 | 0.32 | 4.1 |
| Quality of beach campsites | | | | | | -0.11 | | -0.05 | -0.12 | 4.2 |
| The amount of human waste on shore | | | | | | 0.30 | | -0.05 | 0.19 | 8.2 |
| Freedom from regulations | | | | | | -0.22 | | -0.26 | -0.25 | 8.2 |
| The amount of litter | | | | | | 0.51 | | 0.35 | 0.42 | 5.2 |
| Fair treatment of float and power boat users | | | | | | -0.14 | | -0.15 | -0.19 | 9.5 |
| Fair treatment of commercial and private boaters | | | | | | 0.09 | | 0.28 | 0.11 | 13.5 |

| Private Float | Scenic | | | | | Wild | | | | |
|---|----------|-----------|---------------|---------------|----------------|-----------------|----------------|-----------------|-----------------|----------------|
| | Primary | Secondary | NMW | All seasons | Don't Know (%) | Primary | Secondary | NMW | All seasons | Don't Know (%) |
| Opportunities for challenge | | | | | | 0.39 | | 0.16 | 0.33 | 6.3 |
| Relationships between float and power boaters | | | | | | 0.33 | | 0.30 | 0.31 | 4.1 |
| <i>N</i> | <i>1</i> | | <i>1 to 3</i> | <i>6 to 7</i> | | <i>52 to 63</i> | <i>8 to 10</i> | <i>18 to 20</i> | <i>79 to 94</i> | <i>97</i> |

¹ 7 point scale: -3=much worse; 0=the same; +3=much better.

The low number of commercial floaters who had boated either the Scenic segment ($N=9$ to 14) or the Wild segment ($N=12$ to 18) before 1998 did not allow conclusive statements about perceptions of change.

On the Scenic segment, the sample sizes for all but private power boaters were too small to compare means about perceptions of change on the river (Table 40D). On the Wild segment, only private power users and private floaters had sample sizes large enough to compare stated perceptions of change, where a few differences occurred between them. Private power users felt significantly different from private floaters about the quality of recreational experiences, scenery, relationships between float and power boaters, effectiveness of management and fair treatment of commercial and power boaters on the river, with private power users expressing all conditions as getting worse and private floaters indicated them all as improving. Both groups felt that evidence of livestock impacts have improved, though private floaters feel significantly stronger than power users. Both groups also felt that freedom from regulations and fair treatment of power and float users have deteriorated, with private power users feeling significantly stronger (indicated conditions as moderately worse) than private floaters (indicated conditions as only slightly worse).

Table 40D Differences in Boaters' Perceptions of Change in River Conditions Since 1998¹

| Wild Section | Private Power | Commercial Power | Private Float | Commercial Float | <i>p-value</i> |
|-------------------------------------|---------------|------------------|---------------|------------------|----------------|
| Historic or cultural sites | 0.05 | | 0.15 | | <i>ns</i> |
| Scenery | -0.02 | | 0.26 | | <i>.006</i> |
| Quality of recreational experiences | -0.16 | | 0.28 | | <i>.009</i> |
| Facilities at launches | 0.82 | | 1.14 | | <i>ns</i> |
| Opportunities to see wildlife | 0.05 | | 0.34 | | <i>ns</i> |
| Livestock impacts | 0.14 | | 0.69 | | <i>.002</i> |

| Wild Section | Private Power | Commercial Power | Private Float | Commercial Float | <i>p-value</i> |
|--|-----------------|------------------|-----------------|------------------|------------------|
| Opportunities for self-reliance | 0.14 | | 0.25 | | <i>ns</i> |
| Effectiveness of management | -0.13 | | 0.49 | | <i>.004</i> |
| Opportunities for solitude | 0.11 | | 0.27 | | <i>ns</i> |
| Sense of naturalness | 0.24 | | 0.32 | | <i>ns</i> |
| Quality of beach campsites | -0.42 | | -0.12 | | <i>ns</i> |
| The amount of human waste on shore | -0.05 | | 0.19 | | <i>ns</i> |
| Freedom from regulations | -1.02 | | -0.25 | | <i>.001</i> |
| The amount of litter | 0.14 | | 0.42 | | <i>ns</i> |
| Fair treatment of float and power boat users | -1.23 | | -0.19 | | <i><.0005</i> |
| Fair treatment of commercial and private boaters | -0.42 | | 0.11 | | <i>.010</i> |
| Opportunities for challenge | 0.24 | | 0.33 | | <i>ns</i> |
| Relationships between float and power boaters | -0.31 | | 0.31 | | <i>.006</i> |
| <i>N</i> | <i>35 to 46</i> | <i>11 to 17</i> | <i>79 to 94</i> | <i>12 to 18</i> | |

¹ 7 point scale: -3=much worse; 0=the same; +3=much better.
Differences statistically significant alpha=0.05

Respondents also had the opportunity in an open-ended question to comment on any other changes they may have noticed on the river since 1998. These comments were organized into common themes for the Scenic and Wild sections some of which include crowding, removal of amenities from the canyon, water level fluctuations, use restrictions, environmental conditions, Forest Service management, and relationships among user groups. The written comments can be viewed in Appendix J (Question 3.3) in full detail.

Opinions about Management & Facilities

Management Actions & Policies

Several questions asked whether user groups supported various management actions or policies that ranged from restrictive actions to those that would provide additional amenities. One such management policy was the non-motorized window on the Wild segment of the river. Visitors were asked if they were aware of days during the summer when power boats are not permitted on the Wild segment. In all seasons for both the Scenic and Wild segments, only commercial power users exhibited below 50% awareness of such closures (Table 41). Private power users during all seasons on both the Wild and Scenic segments had at least 60% or higher awareness of the closure. On the Scenic segment, private floaters had the highest awareness, at 74%. On the Wild segment, private power users had the highest awareness, at 87%. There was higher awareness among the private floaters than the commercial floaters for both segments, and there was higher awareness for private power users on the Wild versus the Scenic segment. It is interesting that, even during the NMW, a substantial proportion of floaters (30% of private, 35% of commercial), were not aware of this restriction.

Table 41 User Group Awareness of Limitations on Power Boats on the Wild Section in the Summer¹

| Are you aware that there are days in the summer when power boats are not permitted on the Wild section of the Snake River? | | Scenic | | | | Wild | | | |
|--|----------|---------|-----------|-----|-------------|---------|-----------|-----|-------------|
| | | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Private power | YES | 73 | 60 | 88 | 70 | 88 | 84 | | 87 |
| | NO | 27 | 40 | 12 | 30 | 12 | 16 | | 13 |
| | <i>N</i> | 154 | 75 | 16 | 245 | 41 | 19 | 9 | 69 |
| Commercial power | YES | 32 | 26 | | 30 | 20 | 25 | 56 | 27 |
| | NO | 68 | 74 | | 70 | 80 | 75 | 44 | 73 |
| | <i>N</i> | 67 | 77 | 2 | 146 | 114 | 28 | 27 | 169 |
| Private float | YES | | | | 38 | 74 | 39 | 70 | 69 |
| | NO | | | | 62 | 26 | 61 | 30 | 31 |
| | <i>N</i> | 7 | 7 | 7 | 21 | 156 | 31 | 83 | 270 |
| Commercial float | YES | | | | 47 | 54 | 12 | 65 | 53 |
| | NO | | | | 53 | 46 | 88 | 35 | 47 |
| | <i>N</i> | 8 | 1 | 6 | 15 | 102 | 16 | 43 | 161 |

¹ Expressed in percentages

There was a second part to the above question in which visitors were asked to express how the NMW has affected their experiences on the river. Tables 42A and 42B show the distribution of visitors' written comments of the NMW either having a positive, negative, or no effect on their experiences. A total of 469 (41% of the total mail surveys) respondents on both river segments provided written comments on the mail survey. One hundred seventy-nine comments (40%) were provided by the 447 mail survey respondents on the Scenic segment, and 290 comments (41%) were provided by the 701 mail survey respondents on the Wild segment.

Of the 179 comments received for the Scenic segment, 50% (90) indicated that the NMW affected experiences negatively. Two-thirds (63) of those negative comments indicated that the NMW caused greater limitations for motorized boating opportunities or caused an increase in planning. The other third (27) of negative comments illustrated a general dislike or disapproval of the policy. Forty-two percent (76) of the comments indicate that the policy had no effect on their experiences. Private and commercial power boaters were the only groups to indicate the NMW had some type of negative effect on their experiences. Though a few boaters from all groups on the Scenic segment said that the NMW had a positive effect, this only accounted for 7% (13) of written comments concerning the effects of the NMW on experiences.

Conversely, of the 290 comments received for the Wild segment, 50% (146) indicated that the NMW had a positive effect on river experiences, and an additional 24% (68) indicated the NMW had no effect on their experiences. Approximately one-fourth of the comments (76) indicated that the NMW had a negative impact on their experiences. The majority of "positive effect" responses were contributed by both commercial and private floaters. Appendix J (Question 2.4) displays the full range of opinions and explanations expressed by the visitors' written comments for both river segments.

Table 42A Frequency of Visitors' Written Comments About the Effects of the NMW (Scenic Section)

| Scenic Section Effect of NMW | Total Number of Responses (n) | Percent (%) | CJ | CF | PJ | PF |
|--|--|------------------------|-----------|-----------|------------|-----------|
| No Effect | 76 | 42.0 | 13 | | 62 | 1 |
| Positively | 13 | 7.0 | 3 | 4 | 3 | 3 |
| Negatively | | | | | | |
| <i>Limits Opportunities/Increases Planning</i> | 63 | 35.0 | 11 | | 52 | |
| <i>Disapprove of Policy</i> | 27 | 15.0 | 3 | | 24 | |
| Total Negative Comments | 90 | 50.0 | 14 | | 76 | |
| Total Number of Written Comments | 179 | 100.0 | 30 | 4 | 141 | 4 |

Table 42B Frequency of Visitors' Written Comments About the Effects of the NMW (Wild Section)

| Wild Section Effect of NMW | Total Number of Responses (n) | Percent (%) | CJ | CF | PJ | PF |
|--|--|------------------------|-----------|-----------|-----------|------------|
| No Effect | 68 | 24.0 | 14 | 12 | 7 | 35 |
| Positive | 146 | 50.0 | 7 | 53 | 5 | 81 |
| Negatively | | | | | | |
| <i>Limits Opportunities/Increases Planning</i> | 60 | 21.0 | 13 | | 31 | 16 |
| <i>Disapprove of Policy</i> | 16 | 5.0 | 2 | | 8 | 6 |
| Total Negative Comments | 76 | 26.0 | 15 | | 39 | 22 |
| Total Number of Comments | 290 | 100.0 | 36 | 65 | 51 | 138 |

Respondents were asked about certain management policies or actions that have been taken on both sections of the river and how each has affected feelings of self-reliance, challenge, and solitude during a river trip. On a 7-point scale (-3=detracted a lot; 0=no effect; +3=added a lot), respondents were asked to indicate how each policy or action affected their experience. It is important to note that—although the question asked people to think about specific types of experiences, namely self-reliance, challenge, and solitude—we believe many users may have answered the question simply in terms of what they liked or disliked.

In general, private power users felt that certain policies and actions on the river affected them quite negatively, while others added to experiences (Table 43A). For all seasons, private power users on the Scenic segment felt that removing navigational markers, picnic tables and outhouses, and limiting the number of trips on some days detracted from feelings of self-reliance, challenge, and solitude. These boaters felt that prohibiting personal watercraft added moderately to their experiences, while requiring portable toilets and fire pans tended to add slightly to their experiences. Educational briefings by the Forest Service tended to have only a slight positive effect on feelings of self-reliance, challenge and solitude, except among private power boaters during the secondary season on the Scenic segment.

Table 43A Effect of Management Policies and Actions on Private Power Boaters’ Experiences of Self-Reliance, Challenge, and Solitude on the Scenic Section.¹

| Private power | Scenic | | | | |
|--|----------|-------------------|-----------------|-------------------|--------------------|
| | Primary | Secondary | NMW | All seasons | Did Not Notice (%) |
| Removal of navigational markers | -1.09 | -0.82 | -0.43 | -0.96 | 15.7 |
| Removal of picnic tables | -1.09 | -0.73 | -1.13 | -0.98 | 15.1 |
| Removal of outhouses from campsites | -1.09 | -0.91 | -1.08 | -1.03 | 16.0 |
| Limits on the number of trips that can launch on some days of the week | -0.34 | -0.60 | -0.88 | -0.46 | 11.2 |
| Prohibition on the use of personal motorized watercraft (jet skis) | 1.23 | 1.45 | 1.33 | 1.30 | 13.1 |
| Requiring all boaters to use portable toilets & pack out human waste | 0.74 | 0.53 | 0.41 | 0.65 | 9.2 |
| Requiring all boaters to use fire pans & pack out ashes | 0.87 | 0.17 | 0.81 | 0.65 | 13.7 |
| Educational briefings for boaters by Forest Service rangers or staff | 0.30 | -0.06 | 0.23 | 0.20 | 24.5 |
| | <i>N</i> | <i>124 to 144</i> | <i>51 to 68</i> | <i>13 to 17</i> | <i>188 to 221</i> |
| | | | | <i>188 to 221</i> | <i>245 to 251</i> |

¹ 7 point scale: -3=detracted from; 0=no effect; +3=added to.

Private power users on the Wild segment felt the same about the four variables that detracted the most from boaters’ experiences on the Scenic segment, though they tended to feel less strongly (Table 43B). In response to the one additional item presented on the Wild survey version (prohibition of motorized craft during the NMW), private power boaters reported this to detract substantially from feelings of self-reliance, challenge and solitude, especially for those contacted during the primary motorized season. Prohibition of jet skis, requiring portable toilets and packing out waste, and requiring fire pans and packing out ashes all added to these boaters’ experiences. In particular, private power users felt the use of portable toilets enhanced their experiences on the Wild segment, much more so than on the Scenic. Further, private power users felt using

fire pans and educational briefings by the Forest Service slightly added to their experience, again more so than on the Scenic. Interestingly, removal of outhouses detracted from experiences but using portable toilets and packing out waste added to them.

Table 43B Effect of Management Policies and Actions on Private Power Boaters’ Experiences of Self-Reliance, Challenge, and Solitude on the Wild Section.¹

| Private power | Wild | | | | | |
|--|----------|-----------------|-----------------|---------------|--------------------|-----------------|
| | Primary | Secondary | NMW | All seasons | Did Not Notice (%) | |
| Removal of navigational markers | -0.69 | -0.50 | | -0.62 | 24.7 | |
| Removal of picnic tables | -1.06 | -0.75 | | -0.85 | 25.0 | |
| Removal of outhouses from campsites | -1.12 | -1.00 | | -0.93 | 25.0 | |
| Limits on the number of trips that can launch on some days of the week | -0.58 | -0.31 | | -0.33 | 15.5 | |
| Prohibiting motorized craft on weekdays in summer (“non-motorized window”) | -2.06 | -1.33 | | -1.77 | 18.6 | |
| Prohibition on the use of personal motorized watercraft (jet skis) | 1.00 | 0.25 | | 0.93 | 22.5 | |
| Requiring all boaters to use portable toilets & pack out human waste | 1.33 | 1.12 | | 1.22 | 6.9 | |
| Requiring all boaters to use fire pans & pack out ashes | 1.27 | 0.67 | | 0.91 | 9.7 | |
| Educational briefings for boaters by Forest Service rangers or staff | 0.47 | 0.29 | | 0.39 | 36.1 | |
| | <i>N</i> | <i>32 to 38</i> | <i>12 to 18</i> | <i>2 to 9</i> | <i>53 to 65</i> | <i>70 to 73</i> |

¹ 7 point scale: -3=detracted from; 0=no effect; +3=added to.

On the Scenic segment, commercial power users felt that the removal of navigational markers, picnic tables, and outhouses slightly detracted from their experience of self-reliance, challenge and solitude (Table 43C). They felt that prohibition of jet skis added to their experiences, as did the use of portable toilets, fire pans, and educational briefings by the Forest Service. Interestingly, the removal of outhouses detracted while the use of portable toilets, fire pans, and packing out waste and ashes added to feelings of self-reliance, challenge, and solitude. Commercial power users in the primary season felt that requiring the use of portable toilets added more to their experiences than commercial power users in the secondary season.

Table 43C Effect of Management Policies and Actions on Commercial Power Boaters' Experiences of Self-Reliance, Challenge, and Solitude on the Scenic Section.¹

| Commercial power | Scenic | | | | |
|--|----------|-----------|-----|-------------|--------------------|
| | Primary | Secondary | NMW | All seasons | Did Not Notice (%) |
| Removal of navigational markers | -0.13 | -0.31 | | -0.21 | 46.1 |
| Removal of picnic tables | -0.50 | -0.13 | | -0.25 | 51.1 |
| Removal of outhouses from campsites | -0.47 | -0.30 | | -0.36 | 47.1 |
| Limits on the number of trips that can launch on some days of the week | 0.30 | 0.26 | | 0.27 | 41.7 |
| Prohibition on the use of personal motorized watercraft (jet skis) | 1.31 | 1.33 | | 1.32 | 35.7 |
| Requiring all boaters to use portable toilets & pack out human waste | 1.36 | 0.65 | | 0.99 | 32.6 |
| Requiring all boaters to use fire pans & pack out ashes | 1.18 | 0.73 | | 0.95 | 39.7 |
| Educational briefings for boaters by Forest Service rangers or staff | 0.69 | 0.93 | | 0.85 | 49.6 |
| N | 28 to 39 | 39 to 51 | 2 | 69 to 95 | 141 |

¹ 7 point scale: -3=detracted from; 0=no effect; +3=added to.

Commercial power users on the Wild segment felt the removal of navigational markers, picnic tables and outhouses all detracted only slightly from their feelings of self-reliance, challenge, and solitude (Table 43D). However, those contacted in the primary season felt that removal of navigational markers and picnic tables slightly added to their experiences. They felt that the prohibition of jet skis, requiring portable toilets, and packing out waste more strongly added to their experience. They also felt the NMW detracted, though only minimally. Educational briefings added to feelings of self-reliance, challenge, and solitude.

Table 43D Effect of Management Policies and Actions on Commercial Power Boaters' Experiences on Self-Reliance, Challenge, and Solitude on the Wild Section.¹

| Commercial power | Wild | | | | |
|--|---------|-----------|-------|-------------|--------------------|
| | Primary | Secondary | NMW | All seasons | Did Not Notice (%) |
| Removal of navigational markers | 0.09 | -0.55 | -0.50 | -0.11 | 57.8 |
| Removal of picnic tables | 0.16 | -0.58 | -0.53 | -0.07 | 50.6 |
| Removal of outhouses from campsites | -0.38 | -0.57 | -1.31 | -0.59 | 49.7 |
| Limits on the number of trips that can launch on some days of the week | 0.84 | -0.38 | 0.07 | 0.53 | 39.2 |
| Prohibiting motorized craft on weekdays in summer ("non-motorized window") | 0.38 | -0.58 | -1.00 | -0.02 | 41.2 |

| Commercial power | Wild | | | | |
|--|-------------------|-----------|----------|-------------|--------------------|
| | Primary | Secondary | NMW | All seasons | Did Not Notice (%) |
| Prohibition on the use of personal motorized watercraft (jet skis) | 1.47 | 2.06 | 0.41 | 1.40 | 36.4 |
| Requiring all boaters to use portable toilets & pack out human waste | 1.21 | 1.00 | 1.00 | 1.14 | 34.9 |
| Requiring all boaters to use fire pans & pack out ashes | 1.11 | 0.75 | 0.07 | 0.91 | 39.4 |
| Educational briefings for boaters by Forest Service rangers or staff | 1.30 | 1.80 | 1.00 | 1.33 | 44.2 |
| | <i>N</i> 47 to 71 | 11 to 19 | 12 to 17 | 70 to 108 | 165 |

¹ 7 point scale: -3=detracted from; 0=no effect; +3=added to.

Due to low numbers of private floaters on the Scenic segment, conclusive statements about seasonal differences are not possible. Overall, however, the items in the survey tended to add to their feelings of self-reliance, challenge, and solitude (Table 43E). In particular, the prohibition of jet skis, packing out of human waste, requiring the use of portable toilets, and requiring the use of fire pans and packing out ashes all strongly added to their experiences. Other items also added to experiences, though not substantially.

Table 43E Effect of Management Policies and Actions on Private Float Boaters' Experiences on Self-Reliance, Challenge, and Solitude on the Scenic Section.¹

| Private float | Scenic | | | | |
|--|-----------------|-----------|--------|-------------|--------------------|
| | Primary | Secondary | NMW | All seasons | Did Not Notice (%) |
| Removal of navigational markers | | | | 0.18 | 47.6 |
| Removal of picnic tables | | | | 0.19 | 23.8 |
| Removal of outhouses from campsites | | | | 0.63 | 23.8 |
| Limits on the number of trips that can launch on some days of the week | | | | 0.67 | 25.0 |
| Prohibition on the use of personal motorized watercraft (jet skis) | | | | 2.39 | 14.3 |
| Requiring all boaters to use portable toilets & pack out human waste | | | | 2.40 | 4.8 |
| Requiring all boaters to use fire pans & pack out ashes | | | | 2.25 | 0.0 |
| Educational briefings for boaters by Forest Service rangers or staff | | | | 1.00 | 23.8 |
| | <i>N</i> 4 to 7 | 3 to 6 | 4 to 7 | 11 to 20 | 21 |

¹ 7 point scale: -3=detracted from; 0=no effect; +3=added to.

Private floaters on the Wild segment felt most strongly that prohibition of jet skis, requiring the use of fire pans and packing out ashes, requiring the use of portable toilets and packing out waste, and the NMW all added substantially to feelings of self-reliance, challenge, and solitude (Table 43F). Limits on the number of trips that can launch each day and educational briefings both also added substantially to experiences. All variables but one added to this group’s experiences to some degree; the exception was the removal of outhouses from campsites, which detracted minimally from experiences (-0.09).

Table 43F Effect of Management Policies and Actions on Private Float Boaters’ Experiences on Self-reliance, Challenge, and Solitude on the Wild Section.¹

| Private float | Wild | | | | | |
|--|----------|------------------|-----------------|-----------------|--------------------|-------------------|
| | Primary | Secondary | NMW | All seasons | Did Not Notice (%) | |
| Removal of navigational markers | 0.11 | 0.81 | 0.79 | 0.40 | 37.9 | |
| Removal of picnic tables | -0.05 | 0.96 | 0.60 | 0.26 | 26.1 | |
| Removal of outhouses from campsites | -0.57 | 0.78 | 0.52 | -0.09 | 20.0 | |
| Limits on the number of trips that can launch on some days of the week | 1.28 | 1.17 | 1.71 | 1.41 | 7.6 | |
| Prohibiting motorized craft on weekdays in summer (“non-motorized window”) | 1.48 | 1.29 | 2.28 | 1.74 | 19.4 | |
| Prohibition on the use of personal motorized watercraft (jet skis) | 2.35 | 1.92 | 2.55 | 2.37 | 15.5 | |
| Requiring all boaters to use portable toilets & pack out human waste | 1.59 | 2.50 | 2.19 | 1.89 | 4.2 | |
| Requiring all boaters to use fire pans & pack out ashes | 1.73 | 2.17 | 2.25 | 1.95 | 7.2 | |
| Educational briefings for boaters by Forest Service rangers or staff | 1.21 | 1.52 | 1.21 | 1.24 | 14.4 | |
| | <i>N</i> | <i>96 to 145</i> | <i>21 to 30</i> | <i>47 to 79</i> | <i>164 to 254</i> | <i>263 to 265</i> |

¹ 7 point scale: -3=detracted from; 0=no effect; +3=added to.

Because of the small number of commercial floaters contacted on the Scenic segment we cannot make conclusive statements about differences by season. However, overall, items in the survey added to feelings of self-reliance, challenge, and solitude to some degree (Table 43G). The top five variables that added substantially include (in order) the prohibition of jet skis, requiring fire pans and packing out ashes, requiring portable toilets and packing out waste, limits on the number of trips that launch per day, and removing outhouses from campsites.

Table 43G Effect of Management Policies and Actions on Commercial Float Boaters' Experiences on Self-reliance, Challenge, and Solitude on the Scenic Section.¹

| Commercial float | Scenic | | | | |
|--|----------|---------------|----------|---------------|--------------------|
| | Primary | Secondary | NMW | All seasons | Did Not Notice (%) |
| Removal of navigational markers | | | | 0.54 | 0.0 |
| Removal of picnic tables | | | | 0.67 | 20.0 |
| Removal of outhouses from campsites | | | | 1.36 | 6.7 |
| Limits on the number of trips that can launch on some days of the week | | | | 1.50 | 0.0 |
| Prohibition on the use of personal motorized watercraft (jet skis) | | | | 2.27 | 0.0 |
| Requiring all boaters to use portable toilets & pack out human waste | | | | 2.07 | 0.0 |
| Requiring all boaters to use fire pans & pack out ashes | | | | 2.23 | 13.3 |
| Educational briefings for boaters by Forest Service rangers or staff | | | | 0.77 | 13.3 |
| | <i>N</i> | <i>7 to 8</i> | <i>1</i> | <i>4 to 6</i> | <i>12 to 15</i> |

¹ 7 point scale: -3=detracted from; 0=no effect; +3=added to.

Again, all items tended toward adding to feelings of self-reliance, challenge, and solitude for commercial floaters on the Wild segment.

Interestingly, the means were much higher in the NMW for all items than in the other two seasons (Table 43H). Overall, the top five items that added most substantially to the experiences of this group include the prohibition of jet skis, requiring the use of portable toilets and packing out waste, requiring fire pans and packing out ashes, the NMW, and limitations on the number of trips launching each day.

Table 43H Effect of Management Policies and Actions on Commercial Float Boaters' Experiences on Self-reliance, Challenge, and Solitude on the Wild Section.¹

| Commercial float | Wild | | | | |
|--|---------|-----------|------|-------------|--------------------|
| | Primary | Secondary | NMW | All seasons | Did Not Notice (%) |
| Removal of navigational markers | 0.40 | | 0.67 | 0.46 | 49.7 |
| Removal of picnic tables | 0.57 | 0.31 | 1.26 | 0.73 | 31.4 |
| Removal of outhouses from campsites | 0.46 | 0.07 | 1.50 | 0.70 | 28.3 |
| Limits on the number of trips that can launch on some days of the week | 1.80 | 1.31 | 2.29 | 1.89 | 11.3 |
| Prohibiting motorized craft on weekdays in summer ("non-motorized window") | 1.81 | 1.58 | 2.50 | 2.00 | 21.0 |
| Prohibition on the use of personal motorized watercraft (jet skis) | 2.30 | 1.67 | 2.55 | 2.32 | 10.0 |
| Requiring all boaters to use portable toilets & pack out human waste | 2.08 | 1.50 | 2.72 | 2.21 | 8.8 |

| Commercial float | Wild | | | | |
|--|----------|-----------|----------|-------------|--------------------|
| | Primary | Secondary | NMW | All seasons | Did Not Notice (%) |
| Requiring all boaters to use fire pans & pack out ashes | 1.89 | 1.83 | 2.40 | 2.04 | 13.8 |
| Educational briefings for boaters by Forest Service rangers or staff | 1.32 | 1.55 | 1.80 | 1.45 | 41.5 |
| N | 50 to 91 | 10 to 14 | 20 to 43 | 80 to 145 | 157 to 160 |

¹ 7 point scale: -3=detracted from; 0=no effect; +3=added to.

There were several significant differences that occurred between private and commercial power user groups on the Scenic segment (Table 43I). Private power users felt significantly stronger than commercial power users that removal of navigation markers, picnic tables, and outhouses from campsites all detracted from their experiences. In particular, private power users felt the limitations on numbers of trips slightly detracted from their experiences, while commercial power users felt it added to their experience, though only slightly. Finally, commercial power users felt educational briefings from Forest Service rangers and staff added to their experience significantly more than private power users.

Table 43I Differences in Opinions About Management Among User Groups on the Scenic Section¹

| Scenic Section | Private Power | Commercial Power | Private Float | Commercial Float | <i>p-value</i> |
|--|---------------|------------------|---------------|------------------|----------------|
| Removal of navigational markers | -0.96 | -0.21 | | | <.0005 |
| Removal of picnic tables | -0.98 | -0.25 | | | <.0005 |
| Removal of outhouses from campsites | -1.03 | -0.36 | | | .001 |
| Limits on the number of trips that can launch on some days of the week | -0.46 | 0.27 | | | .001 |
| Prohibition on the use of personal motorized watercraft (jet skis) | 1.30 | 1.32 | | | <i>ns</i> |
| Requiring all boaters to use portable toilets & pack out human waste | 0.65 | 0.99 | | | <i>ns</i> |
| Requiring all boaters to use fire pans & pack out ashes | 0.65 | 0.95 | | | <i>ns</i> |
| Educational briefings for boaters by Forest Service rangers or staff | 0.20 | 0.85 | | | .002 |
| N | 188 to 221 | 69 to 95 | 11 to 20 | 12 to 15 | |

¹ 7 point scale: -3=detracted from; 0=no effect; +3=added to.

Differences among user types statistically significant at alpha = .05

Opinions about all management items were found to differ significantly among the user groups contacted on the Wild segment (Table 43J). Private power users were different (more negative) from private and commercial floaters in opinions about the removal of navigational markers. They were also significantly different from commercial power, private and commercial floaters concerning the removal of picnic tables, and

commercial power users were different from commercial floaters. Removal of outhouses from campsites elicited significant differences in the opinions of private power, private floaters and commercial floaters. Private and commercial floaters indicated that several of the items added to their experiences significantly more than both private and commercial power users. Private power users differed significantly from commercial power users on several management items. Thus, more than many other things we studied, this set of items generated large significant differences among user groups.

Table 43J Differences in Opinions About Management Among User Groups on the Wild Section¹

| Wild Section | Private Power | Commercial Power | Private Float | Commercial Float | <i>p-value</i> |
|--|--------------------|---------------------|--------------------|-------------------|----------------|
| Removal of navigational markers | -0.62 ^a | -0.11 ^{ab} | 0.40 ^b | 0.46 ^b | <.0005 |
| Removal of picnic tables | -0.85 ^a | -0.07 ^b | 0.26 ^{bc} | 0.73 ^c | <.0005 |
| Removal of outhouses from campsites | -0.93 ^a | -0.59 ^{ab} | -0.09 ^b | 0.70 ^c | <.0005 |
| Limits on the number of trips that can launch on some days of the week | -0.33 ^a | 0.53 ^b | 1.41 ^c | 1.89 ^c | <.0005 |
| Prohibiting motorized craft on weekdays in summer (“non-motorized window”) | -1.77 ^a | -0.02 ^b | 1.74 ^c | 2.00 ^c | <.0005 |
| Prohibition on the use of personal motorized watercraft (jet skis) | 0.93 ^a | 1.40 ^a | 2.37 ^b | 2.32 ^b | <.0005 |
| Requiring all boaters to use portable toilets & pack out human waste | 1.22 ^a | 1.14 ^a | 1.89 ^b | 2.21 ^b | <.0005 |
| Requiring all boaters to use fire pans & pack out ashes | 0.91 ^a | 0.91 ^a | 1.95 ^b | 2.04 ^b | <.0005 |
| Educational briefings for boaters by Forest Service rangers or staff | 0.39 ^a | 1.33 ^b | 1.24 ^b | 1.45 ^b | <.0005 |

¹ 7 point scale: -3=detracted from; 0=no effect; +3=added to.

Superscripts indicate statistically significant differences among user types at alpha = .05

Visitors were also asked an open-ended question about river management on the Scenic and Wild sections. Specifically, visitors were asked that if they could change one thing about the way the Scenic and Wild river sections of the Snake River are managed, what would they change and why. Several common themes emerged in responses for both the Scenic and Wild sections including such things as crowding, limitations/restrictions on users, maintenance of canyon amenities, enforcement of regulations, water level fluctuations and conflict, to identify a few. Tables 44A and 44B show the frequency of visitor responses within these common themes for both river sections.

On the Scenic section, 231 boaters responded with most of the comments contributed by private power boaters (140). The most common response involved “no change” in river management (33.0%) followed by limitations on users (12.0%). On the Wild section, 365 boaters responded with most of the comments contributed by private floaters (174). The most common response for changes in river management was a desire to reduce

motorized use (29.0%) followed by no change in management (18.0%). Appendix J (Question 2.3) displays visitors' written comments within the common themes in detail.

Table 44A Frequency of Visitors' Written Comments Concerning River Management of the Scenic Section and What They Would Personally Change

| Scenic Section Common Themes | Total Number of Responses (n) | Percent (%) | CJ | CF | PJ | PF |
|--|--|------------------------|-----------|-----------|------------|-----------|
| Would Change Nothing | 75 | 33.0 | 30 | | 42 | 3 |
| Crowding | 11 | 5.0 | 2 | | 6 | 3 |
| Limits on Users | 28 | 12.0 | 5 | 2 | 19 | 2 |
| Commercial Boat Use | 14 | 6.0 | 1 | | 12 | 1 |
| Impacts to Solitude | 15 | 7.0 | 4 | 8 | | 3 |
| Enforce Regulations | 8 | 4.0 | 1 | | 7 | |
| Dams and Water Fluctuation | 12 | 5.0 | 3 | 1 | 8 | |
| Forest Service Presence/Management | 7 | 3.0 | 1 | | 4 | 2 |
| Noxious Weeds Management | 6 | 3.0 | 2 | | 4 | |
| Historical Sites and Availability of Information | 6 | 3.0 | 2 | | 4 | |
| Miscellaneous | 14 | 6.0 | 7 | | 6 | 1 |
| <i>Add, Maintain and Restore:</i> | | | | | | |
| <i>Campsites/Campgrounds</i> | 6 | 3.0 | 3 | | 3 | |
| <i>Outhouses, Picnic Tables, Waste Receptacles</i> | 18 | 8.0 | 1 | | 16 | 1 |
| <i>Navigation Markers</i> | 5 | 2.0 | | | 5 | |
| <i>Boat Launches</i> | 6 | 3.0 | 2 | | 4 | |
| Total | 231 | 100.0 | 64 | 11 | 140 | 16 |

Table 44B Frequency of Visitors' Written Comments Concerning River Management on the Wild Section and What They Would Personally Change

| Wild Section Common Themes | Total Number of Responses (n) | Percent (%) | CJ | CF | PJ | PF |
|--|--|------------------------|-----------|-----------|-----------|------------|
| Nothing | 66 | 18.0 | 23 | 16 | 5 | 22 |
| Less Power Boats and Rafts/Prohibit Power Boats | 106 | 29.0 | 6 | 53 | 1 | 46 |
| Water Fluctuations | 23 | 6.0 | 3 | 5 | 2 | 13 |
| Access to Outhouses/Picnic Tables | 33 | 9.0 | 6 | 1 | 4 | 22 |
| Restrictions on Users | 53 | 15.0 | 5 | 5 | 21 | 22 |
| Dams | 7 | 2.0 | 1 | 1 | | 5 |
| Camping in the Canyon | 10 | 3.0 | 1 | | 1 | 8 |
| Enforcement of Regulations | 19 | 5.0 | 1 | 4 | 1 | 13 |
| Access to Information and Educational Materials | 10 | 3.0 | 3 | 5 | | 2 |
| Conflict at Launches/Handicap Access at Launches | 11 | 3.0 | 4 | 1 | 2 | 4 |
| Miscellaneous | 27 | 7.0 | 3 | 2 | 5 | 17 |
| Total | 365 | 100.0 | 56 | 93 | 42 | 174 |

Facilities

Respondents were asked if they had noticed certain facilities during their river trip. If they had, they were asked to indicate on a 7-point scale (-3 = detracted a lot; 0=no effect; +3=added a lot) how those facilities affected their trip. This question focused on the overall effect, not specifically the effects on self-reliance, challenge, and solitude as in an earlier question. The list of items differed slightly depending on whether boaters responded about the Wild or the Scenic segments.

Overall, private power users on the Scenic segment felt that the facilities on the river somewhat added to their experiences during their river trip (Table 45A). Navigational markers and resorts and buildings were indicated as the facilities adding most substantially to experiences on the river. However, nearly all variables had similar means, and no means exceeded 1.0. Private power users in the primary season felt more strongly that information and signs added to experiences than those boating in the secondary and NMW.

Private power users on the Wild segment also felt that the facilities available added moderately to their river experience. The top four items related to facilities that added to experiences were (in order) Kirkwood Ranch, the boat launch at Pittsburg Landing, historical sites, and opportunities for hiking. None of the facilities was indicated as detracting from experiences.

Table 45A Effects of Facilities on Private Power Boaters' Trip on the River¹

| Private power | Scenic | | | | | Wild | | | | |
|--------------------------------------|------------------|-----------------|-----------------|-------------------|--------------------|-----------------|-----------------|----------------|-----------------|--------------------|
| | Primary | Secondary | NMW | All seasons | Did Not Notice (%) | Primary | Secondary | NMW | All seasons | Did Not Notice (%) |
| Outhouse at campsites | 0.75 | 0.88 | 0.33 | 0.77 | 49.2 | 1.17 | 1.17 | | 1.07 | 62.5 |
| Visitor center at Cache Creek | 0.95 | 0.84 | 0.69 | 0.90 | 15.7 | | | | | |
| Kirkwood Ranch | | | | | | 1.92 | 1.10 | | 1.62 | 17.1 |
| Navigation markers | 1.09 | 0.78 | 0.80 | 0.98 | 11.8 | 0.89 | 1.20 | | 0.89 | 33.3 |
| Picnic tables at campsites | 1.07 | 0.78 | 1.14 | 0.99 | 23.1 | 0.67 | 0.50 | | 0.57 | 47.1 |
| Resorts and buildings | 0.05 | 0.17 | 0.07 | 0.09 | 16.5 | 0.32 | 0.30 | | 0.23 | 30.4 |
| Information signs and displays | 1.02 | 0.64 | 0.64 | 0.87 | 19.0 | 1.00 | 1.00 | | 0.90 | 30.0 |
| Opportunities for hiking | 0.91 | 0.92 | 1.14 | 0.93 | 19.8 | 1.22 | 1.00 | | 1.14 | 20.0 |
| Historical sites other than Kirkwood | | | | | | 1.14 | 1.08 | | 1.15 | 32.9 |
| Boat launch at Pittsburg Landing | 1.01 | 0.72 | 1.08 | 0.92 | 31.3 | 0.97 | 1.64 | | 1.20 | 14.3 |
| Campground at Pittsburg Landing | 0.54 | 0.58 | 0.42 | 0.55 | 33.7 | 0.50 | 0.91 | | 0.58 | 24.3 |
| <i>N</i> | <i>83 to 142</i> | <i>40 to 67</i> | <i>12 to 15</i> | <i>129 to 224</i> | <i>254</i> | <i>18 to 39</i> | <i>10 to 14</i> | <i>3 to 10</i> | <i>27 to 60</i> | <i>70</i> |

¹ 7 point scale: -3=Detracted from; 0=No effect; +3=Added to

Commercial power users on the Scenic segment felt that facilities tended slightly toward adding to their experiences (Table 45B). In particular, they indicated Cache Creek visitor center as adding to river experiences with moderate strength. Interestingly, commercial power users in the primary season felt the visitor center at Cache Creek added much more to their experiences than those users in the secondary season.

Across all seasons, commercial power users on the Wild segment felt that the facilities all positively affected their experiences slightly to moderately. In particular, Kirkwood Ranch and other historic sites added to their experiences. Also, opportunities for hiking and information and

signs added moderately to their experiences, though less so than the first two items. Interestingly, the few commercial power users in the NMW on the Wild segment on average did not feel Kirkwood Ranch had an effect on their experiences, which differed from the primary and secondary season users, who felt it moderately to strongly added to their experiences. (This difference could be due to the small number of commercial power users visiting Kirkwood Ranch during the NMW.)

Table 45B Effects of Facilities on Commercial Power Boaters' Trip on the River¹

| Commercial power | Scenic | | | | | Wild | | | | |
|--------------------------------------|-----------------|-----------------|---------------|------------------|--------------------|-----------------|-----------------|-----------------|------------------|--------------------|
| | Primary | Secondary | NMW | All seasons | Did Not Notice (%) | Primary | Secondary | NMW | All seasons | Did Not Notice (%) |
| Outhouse at campsites | 0.53 | 0.36 | | 0.43 | 50.3 | 0.53 | 0.11 | -0.08 | 0.34 | 64.6 |
| Visitor center at Cache Creek | 1.48 | 1.05 | | 1.25 | 16.5 | | | | | |
| Kirkwood Ranch | | | | | | 1.74 | 1.25 | 0.00 | 1.47 | 46.2 |
| Navigation markers | 0.50 | 0.38 | | 0.43 | 24.7 | 0.31 | 0.57 | 0.00 | 0.31 | 55.0 |
| Picnic tables at campsites | 0.98 | 0.65 | | 0.77 | 28.6 | 1.02 | 0.94 | 0.14 | 0.87 | 47.7 |
| Resorts and buildings | 0.21 | 0.38 | | 0.30 | 13.2 | 0.31 | 0.30 | 0.44 | 0.33 | 40.9 |
| Information signs and displays | 0.91 | 0.39 | | 0.62 | 16.4 | 0.99 | 1.07 | 0.70 | 0.94 | 38.1 |
| Opportunities for hiking | 0.93 | 0.59 | | 0.77 | 33.1 | 1.27 | 0.70 | 0.53 | 1.08 | 30.4 |
| Historical sites other than Kirkwood | | | | | | 1.62 | 1.39 | 1.41 | 1.56 | 29.4 |
| Boat launch at Pittsburg Landing | 0.47 | 0.46 | | 0.47 | 23.3 | 0.39 | 0.74 | 0.15 | 0.43 | 41.7 |
| Campground at Pittsburg Landing | 0.57 | 0.14 | | 0.34 | 35.6 | 0.20 | 1.00 | 0.58 | 0.42 | 53.8 |
| <i>N</i> | <i>32 to 57</i> | <i>39 to 66</i> | <i>1 to 2</i> | <i>72 to 125</i> | <i>139 to 146</i> | <i>40 to 85</i> | <i>10 to 20</i> | <i>10 to 20</i> | <i>61 to 120</i> | <i>172</i> |

¹ 7 point scale: -3=Detracted from; 0=No effect; +3=Added to

On the Scenic segment, the few private floaters who responded indicated that the facilities all added to their experiences, with the exception of resorts and buildings having a slightly detractive effect (Table 45C). They felt most strongly that outhouses at campsites and opportunities for hiking added to their river experiences. However, the small number of people in this group does not allow us to make confident conclusions.

Across all seasons, private floaters on the Wild segment felt only resorts and buildings detracted from their experiences, and only slightly. All other facilities were indicated as adding to experiences. Kirkwood Ranch, other historical sites, and opportunities for hiking were the items most strongly indicated as adding to experiences.

Table 45C Effects of Facilities on Private Float Boaters' Trip on the River¹

| Private Float | Scenic | | | | | Wild | | | | |
|--------------------------------------|---------------|---------------|---------------|-----------------|--------------------|------------------|-----------------|-----------------|------------------|--------------------|
| | Primary | Secondary | NMW | All seasons | Did Not Notice (%) | Primary | Secondary | NMW | All seasons | Did Not Notice (%) |
| Outhouse at campsites | | | | 1.17 | 72.7 | 0.83 | 0.92 | 0.95 | 0.88 | 69.6 |
| Visitor center at Cache Creek | | | | 0.56 | 23.8 | | | | | |
| Kirkwood Ranch | | | | | | 1.86 | 0.86 | 1.49 | 1.62 | 12.5 |
| Navigation markers | | | | 0.64 | 33.3 | 0.31 | -0.17 | 0.50 | 0.30 | 50.2 |
| Picnic tables at campsites | | | | 0.78 | 18.2 | 0.65 | -0.09 | 0.35 | 0.50 | 58.9 |
| Resorts and buildings | | | | -0.58 | 5.0 | -0.15 | -0.50 | -0.27 | -0.23 | 26.2 |
| Information signs and displays | | | | 0.33 | 14.3 | 0.76 | 0.15 | 0.49 | 0.61 | 32.0 |
| Opportunities for hiking | | | | 1.20 | 4.1 | 1.33 | 1.29 | 1.24 | 1.30 | 13.3 |
| Historical sites other than Kirkwood | | | | | | 1.49 | 1.37 | 1.35 | 1.43 | 17.7 |
| Boat launch at Pittsburg Landing | | | | 1.05 | 9.1 | 1.24 | 1.25 | 0.82 | 1.11 | 7.2 |
| Campground at Pittsburg Landing | | | | 0.41 | 22.7 | 0.66 | 0.54 | 0.16 | 0.50 | 39.4 |
| <i>N</i> | <i>3 to 8</i> | <i>1 to 6</i> | <i>2 to 7</i> | <i>10 to 20</i> | <i>22</i> | <i>48 to 136</i> | <i>11 to 32</i> | <i>20 to 77</i> | <i>80 to 245</i> | <i>265</i> |

¹ 7 point scale: -3=Detracted from; 0=No effect; +3=Added to

Due to low commercial floater counts in each season, it is difficult to make conclusive statements about their opinions of facilities on the Scenic segment (Table 45D). However, all facility items had only a slight effect on this group's experiences. Resorts/buildings and information signs and displays tended toward detracting from experiences, while the rest of the facilities tended toward slightly adding to experiences. This group most strongly felt Cache Creek visitor center added to their experiences, though not strongly.

Commercial floaters on the Wild segment felt facilities all added to their experiences to some degree, with the exception of resorts and buildings, which slightly detracted from river experiences. Opportunities for hiking, other historic sites, and Kirkwood Ranch all were indicated as having

added moderately to experiences. Commercial floaters in the secondary season felt more strongly that Kirkwood Ranch added to their experiences than those in the primary and NMW seasons. Those in the primary season felt navigational markers detracted slightly, while those in the secondary season and NMW felt they added to experiences.

Table 45D Effects of Facilities on Commercial Float Boaters' Trip on the River¹

| Commercial float | Scenic | | | | | Wild | | | | |
|--------------------------------------|---------------|-----------|---------------|-----------------|--------------------|-----------------|-----------------|-----------------|------------------|--------------------|
| | Primary | Secondary | NMW | All seasons | Did Not Notice (%) | Primary | Secondary | NMW | All seasons | Did Not Notice (%) |
| Outhouse at campsites | | | | 0.60 | 66.7 | 0.79 | 0.50 | 0.50 | 0.66 | 69.1 |
| Visitor center at Cache Creek | | | | 0.67 | 60.0 | | | | | |
| Kirkwood Ranch | | | | | | 1.34 | 1.45 | 0.95 | 1.21 | 26.6 |
| Navigation markers | | | | 0.10 | 33.3 | -0.09 | 0.11 | 0.77 | 0.23 | 59.1 |
| Picnic tables at campsites | | | | 0.43 | 53.3 | 0.50 | 0.36 | 0.22 | 0.39 | 55.3 |
| Resorts and buildings | | | | -0.38 | 13.3 | -0.11 | 0.00 | -0.11 | -0.10 | 40.1 |
| Information signs and displays | | | | -0.33 | 40.0 | 0.54 | 0.75 | 0.78 | 0.63 | 39.5 |
| Opportunities for hiking | | | | 0.54 | 13.3 | 1.46 | 1.56 | 1.67 | 1.53 | 9.4 |
| Historical sites other than Kirkwood | | | | | | 1.45 | 1.56 | 1.45 | 1.47 | 15.8 |
| Boat launch at Pittsburg Landing | | | | 0.07 | 0.0 | 0.25 | 0.93 | 0.44 | 0.38 | 17.9 |
| Campground at Pittsburg Landing | | | | | 20.0 | 0.07 | 0.23 | 0.24 | 0.15 | 40.6 |
| <i>N</i> | <i>1 to 8</i> | <i>1</i> | <i>1 to 6</i> | <i>10 to 15</i> | <i>15</i> | <i>28 to 87</i> | <i>10 to 16</i> | <i>14 to 42</i> | <i>52 to 145</i> | <i>155 to 161</i> |

¹ 7 point scale: -3=Detracted from; 0=No effect; +3=Added to

For these facility and amenity items, there were several statistically significant differences apparent between private and commercial power users on the Scenic segment (Table 45E). Commercial power users felt the visitor center at Cache Creek added to their experience significantly more than private power users, while private power users felt navigation markers, the boat launch at Pittsburg Landing, and information signs and displays all added to their experiences significantly more than commercial power users.

Table 45E Differences in the Effects of Facilities Among User Groups on the Scenic Section¹

| Scenic Section | Private Power | Commercial Power | Private Float | Commercial Float | <i>p-value</i> |
|----------------------------------|-------------------|------------------|-----------------|------------------|----------------|
| Outhouse at campsites | 0.77 | 0.43 | | | <i>ns</i> |
| Visitor center at Cache Creek | 0.90 | 1.25 | | | .011 |
| Navigation markers | 0.98 | 0.43 | | | <.0005 |
| Picnic tables at campsites | 0.99 | 0.77 | | | <i>ns</i> |
| Resorts and buildings | 0.09 | 0.30 | | | <i>ns</i> |
| Information signs and displays | 0.87 | 0.62 | | | .042 |
| Opportunities for hiking | 0.93 | 0.77 | | | <i>ns</i> |
| Boat launch at Pittsburg Landing | 0.92 | 0.47 | | | .002 |
| Campground at Pittsburg Landing | 0.55 | 0.34 | | | <i>ns</i> |
| <i>N</i> | <i>129 to 224</i> | <i>72 to 125</i> | <i>10 to 20</i> | <i>5 to 15</i> | |

¹ 7 point scale: -3=Detracted from; 0=No effect; +3=Added to

Some significant differences also occurred among user groups on the Wild segment (Table 45F). Private power users significantly differed from all other user groups in the opinion that navigational markers added to experiences. Commercial power users differed from private power users concerning resorts and buildings; commercial power users felt they added to experiences and private power users felt they detracted. Commercial floaters felt that opportunities for hiking significantly added to experiences more than commercial power users. Commercial power users and floaters differed from private users concerning the launch at Pittsburg Landing; private users felt it added significantly more to experiences.

Table 45F Differences in the Effects of Facilities Among User Groups on the Wild Section¹

| Wild Section | Private Power | Commercial Power | Private Float | Commercial Float | <i>p-value</i> |
|--------------------------------------|--------------------|-------------------|--------------------|---------------------|----------------|
| Outhouse at campsites | 1.07 | 0.34 | 0.88 | 0.66 | <i>ns</i> |
| Kirkwood Ranch | 1.62 ^b | 1.47 ^b | 1.62 ^b | 1.21 ^a | .046 |
| Navigation markers | 0.89 ^b | 0.31 ^a | 0.30 ^a | 0.23 ^a | .015 |
| Picnic tables at campsites | 0.57 | 0.87 | 0.50 | 0.39 | <i>ns</i> |
| Resorts and buildings | 0.23 ^{ab} | 0.33 ^b | -0.23 ^a | -0.10 ^{ab} | <.0005 |
| Information signs and displays | 0.90 | 0.94 | 0.61 | 0.63 | <i>ns</i> |
| Opportunities for hiking | 1.14 ^{ab} | 1.08 ^a | 1.30 ^{ab} | 1.53 ^b | .010 |
| Historical sites other than Kirkwood | 1.15 | 1.56 | 1.43 | 1.47 | <i>ns</i> |

| Wild Section | Private Power | Commercial Power | Private Float | Commercial Float | <i>p-value</i> |
|----------------------------------|-------------------|-------------------|-------------------|-------------------|----------------|
| Boat launch at Pittsburg Landing | 1.20 ^b | 0.43 ^a | 1.11 ^b | 0.38 ^a | <.0005 |
| Campground at Pittsburg Landing | 0.58 | 0.42 | 0.50 | 0.15 | <i>ns</i> |
| <i>N</i> | 27 to 60 | 61 to 120 | 80 to 245 | 50 to 145 | |

¹ 7 point scale: -3=Detracted from; 0=No effect; +3=Added to

Superscripts indicate statistically significant differences among user types at alpha = .05

Respondents were also asked to evaluate the adequacy of facilities currently provided. Most items were the same on the two survey versions, but the Scenic version included a question about Cache Creek and the Wild version included questions about Hells Canyon Creek.

Private power users had opinions about most items (Table 46A). However, a majority of those on the Scenic segment said they did not know about facilities at Pittsburg Landing or about disabled access. Private power users did not think there are too many of any of the facilities or services, and many felt some items are in short supply. In particular, more than 40% on both river segments wanted more outhouses at campsites, and 44% of those on the Scenic segment wanted tables. More than 30% saw a need for more waste disposal facilities on both river sections, for tables on the Wild segment, and parking at the launches on the Scenic segment. However, among those who had an opinion (gave a response other than “don’t know”), the majority of private power said that most facilities were about right.

Table 46A Private Power Boaters’ Opinions About Development of Recreation Facilities in Hells Canyon¹

| Private power | | Scenic | | | | Wild | | | |
|---|---------------------|---------------|-----------|------|-------------|-------------|-----------|-----|-------------|
| | | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Information and interpretation signs and displays | <i>Right amount</i> | 58.6 | 60.5 | 58.8 | 59.2 | 71.4 | 57.1 | | 67.1 |
| | <i>Too much</i> | 3.9 | 2.5 | 5.9 | 3.6 | 2.4 | 0.0 | | 1.4 |
| | <i>Need more</i> | 28.3 | 21.0 | 35.3 | 26.4 | 14.3 | 9.5 | | 12.3 |
| | <i>Don’t Know</i> | 9.2 | 16.0 | 0.0 | 10.8 | 11.9 | 33.3 | | 19.2 |
| | <i>N</i> | 152 | 81 | 17 | 250 | 42 | 21 | 9 | 73 |
| Outhouses at campsites | <i>Right amount</i> | 28.1 | 42.0 | 23.5 | 32.3 | 46.3 | 28.6 | | 44.4 |
| | <i>Too much</i> | 2.0 | 3.7 | 5.9 | 2.8 | 0.0 | 4.8 | | 1.4 |
| | <i>Need more</i> | 52.3 | 40.7 | 64.7 | 49.4 | 46.3 | 38.1 | | 40.3 |
| | <i>Don’t Know</i> | 17.6 | 13.6 | 5.9 | 15.5 | 7.3 | 28.6 | | 13.9 |
| | <i>N</i> | 153 | 81 | 17 | 251 | 41 | 21 | 9 | 72 |

| Private power | | Scenic | | | | Wild | | | |
|--|---------------------|---------|-----------|------|-------------|---------|-----------|-----|-------------|
| | | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Human waste disposal facilities at take-outs | <i>Right amount</i> | 31.4 | 27.2 | 41.2 | 30.7 | 54.8 | 20.0 | | 43.1 |
| | <i>Too much</i> | 1.3 | 3.7 | 5.9 | 2.4 | 0.0 | 5.0 | | 1.4 |
| | <i>Need more</i> | 41.2 | 33.3 | 23.5 | 37.5 | 31.0 | 35.0 | | 31.9 |
| | <i>Don't Know</i> | 26.1 | 35.8 | 29.4 | 29.5 | 14.3 | 40.0 | | 23.6 |
| | <i>N</i> | 153 | 81 | 17 | 251 | 42 | 20 | 9 | 72 |
| Picnic tables at campsites along the river | <i>Right amount</i> | 37.4 | 37.5 | 47.1 | 38.1 | 34.1 | 25.0 | | 36.6 |
| | <i>Too much</i> | 3.9 | 3.8 | 0.0 | 3.6 | 0.0 | 0.0 | | 0.0 |
| | <i>Need more</i> | 47.7 | 37.5 | 47.1 | 44.4 | 46.3 | 35.0 | | 39.4 |
| | <i>Don't Know</i> | 11.0 | 21.3 | 5.9 | 13.9 | 19.5 | 40.0 | | 23.9 |
| | <i>N</i> | 155 | 80 | 17 | 252 | 41 | 20 | 9 | 71 |
| Vehicle parking at launch sites | <i>Right amount</i> | 60.4 | 61.7 | 76.5 | 61.9 | 73.8 | 52.4 | | 70.8 |
| | <i>Too much</i> | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 |
| | <i>Need more</i> | 32.5 | 33.3 | 17.6 | 31.7 | 23.8 | 38.1 | | 25.0 |
| | <i>Don't Know</i> | 7.1 | 4.9 | 5.9 | 6.3 | 2.4 | 9.5 | | 4.2 |
| | <i>N</i> | 154 | 81 | 17 | 252 | 42 | 21 | 9 | 72 |
| Boat ramp facilities at HCC launch site | <i>Right amount</i> | | | | | 57.1 | 50.0 | | 56.9 |
| | <i>Too much</i> | | | | | 0.0 | 0.0 | | 0.0 |
| | <i>Need more</i> | | | | | 21.4 | 25.0 | | 19.4 |
| | <i>Don't Know</i> | | | | | 21.4 | 25.0 | | 23.6 |
| | <i>N</i> | | | | | 42 | 20 | 9 | 72 |
| Visitor facilities at HCC | <i>Right amount</i> | | | | | 73.8 | 66.7 | | 72.6 |
| | <i>Too much</i> | | | | | 0.0 | 0.0 | | 0.0 |
| | <i>Need more</i> | | | | | 4.8 | 0.0 | | 2.7 |
| | <i>Don't Know</i> | | | | | 21.4 | 33.3 | | 24.7 |
| | <i>N</i> | | | | | 42 | 21 | 9 | 73 |
| Restroom facilities at Cache Creek | <i>Right amount</i> | 69.7 | 48.1 | 58.8 | 62.1 | | | | |
| | <i>Too much</i> | 0.6 | 0.0 | 0.0 | 0.4 | | | | |
| | <i>Need more</i> | 8.4 | 12.3 | 0.0 | 9.1 | | | | |
| | <i>Don't Know</i> | 21.3 | 39.5 | 41.2 | 28.5 | | | | |
| | <i>N</i> | 155 | 81 | 17 | 253 | | | | |
| Boat ramp facilities at Pittsburg Landing | <i>Right amount</i> | 47.7 | 54.4 | 52.9 | 50.2 | 87.8 | 61.9 | | 81.9 |
| | <i>Too much</i> | 1.3 | 0.0 | 0.0 | 0.8 | 0.0 | 0.0 | | 0.0 |
| | <i>Need more</i> | 6.5 | 12.7 | 5.9 | 8.4 | 12.2 | 0.0 | | 6.9 |
| | <i>Don't Know</i> | 44.4 | 32.9 | 41.2 | 40.6 | 0.0 | 38.1 | | 11.1 |
| | <i>N</i> | 153 | 79 | 17 | 249 | 41 | 21 | 9 | 72 |

| Private power | | Scenic | | | | Wild | | | |
|---|---------------------|---------|-----------|------|-------------|---------|-----------|-----|-------------|
| | | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Campsites at Pittsburg Landing | <i>Right amount</i> | 37.7 | 38.0 | 31.3 | 37.3 | 68.3 | 55.0 | | 66.2 |
| | <i>Too much</i> | 3.2 | 2.5 | 18.8 | 4.0 | 4.9 | 0.0 | | 4.2 |
| | <i>Need more</i> | 5.8 | 8.9 | 0.0 | 6.4 | 2.4 | 0.0 | | 1.4 |
| | <i>Don't Know</i> | 53.2 | 50.6 | 50.0 | 52.2 | 24.4 | 45.0 | | 28.2 |
| | <i>N</i> | 154 | 79 | 16 | 249 | 41 | 20 | 9 | 71 |
| Accessible facilities for disabled people | <i>Right amount</i> | 29.7 | 27.2 | 47.1 | 30.0 | 33.3 | 23.8 | | 32.9 |
| | <i>Too much</i> | 2.6 | 1.2 | | 2.0 | 0.0 | 0.0 | | 0.0 |
| | <i>Need more</i> | 9.7 | 13.6 | 5.9 | 10.7 | 14.3 | 19.0 | | 15.1 |
| | <i>Don't Know</i> | 58.1 | 58.0 | 47.1 | 57.3 | 52.4 | 57.1 | | 52.1 |
| | <i>N</i> | 155 | 81 | 17 | 253 | 42 | 21.0 | 9 | 73 |

¹ Expressed in percentages

On the Scenic segment, a majority of commercial power users said they didn't know about waste disposal facilities, facilities at Pittsburg Landing, or disabled access (Table 46B). Those who had opinions were most likely to say all facilities were sufficient, and only signs/displays had more than 20% requesting more.

Commercial power users on the Wild segment were likely to say they had no knowledge of waste disposal facilities, campsite facilities, disabled access, or facilities at Pittsburg Landing. This reflects the way these boaters use the river and the sites they visit. Like commercial power users on the Scenic segment, commercial power users on the Wild segment who had opinions were largely satisfied with existing facilities.

Table 46B Commercial Power Boaters' Opinions About Development of Recreation Facilities in Hells Canyon¹

| Commercial power | | Scenic | | | | Wild | | | |
|---|---------------------|---------|-----------|-----|-------------|---------|-----------|------|-------------|
| | | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Information and interpretation signs and displays | <i>Right amount</i> | 63.2 | 56.4 | | 60.1 | 60.0 | 63.0 | 53.6 | 59.4 |
| | <i>Too much</i> | 0.0 | 2.6 | | 1.4 | 0.9 | 0.0 | 0.0 | 0.6 |
| | <i>Need more</i> | 26.5 | 21.8 | | 23.6 | 24.3 | 14.8 | 25.0 | 22.9 |
| | <i>Don't Know</i> | 10.3 | 19.2 | | 14.9 | 14.8 | 22.2 | 21.4 | 17.1 |
| | <i>N</i> | 68 | 78 | 2 | 148 | 115 | 27 | 28 | 170 |

| Commercial power | | Scenic | | | | Wild | | | |
|--|---------------------|---------|-----------|-----|-------------|---------|-----------|------|-------------|
| | | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Outhouses at campsites | <i>Right amount</i> | 34.8 | 44.0 | | 39.9 | 35.3 | 33.3 | 32.1 | 34.5 |
| | <i>Too much</i> | 0.0 | 1.3 | | 0.7 | 0.8 | 0.0 | 0.0 | 0.6 |
| | <i>Need more</i> | 9.1 | 14.7 | | 12.6 | 12.6 | 11.1 | 10.7 | 12.1 |
| | <i>Don't Know</i> | 56.1 | 40.0 | | 46.9 | 51.3 | 55.6 | 57.1 | 52.9 |
| | <i>N</i> | 66 | 75 | 2 | 143 | 119 | 27 | 28 | 174 |
| Human waste disposal facilities at take-outs | <i>Right amount</i> | 20.0 | 26.0 | | 22.9 | 21.2 | 29.6 | 25.9 | 24.6 |
| | <i>Too much</i> | 0.0 | 0.0 | | 0.0 | 0.8 | 0.0 | 0.0 | 0.6 |
| | <i>Need more</i> | 6.2 | 11.7 | | 10.4 | 12.7 | 7.4 | 11.1 | 12.3 |
| | <i>Don't Know</i> | 73.8 | 62.3 | | 66.7 | 65.3 | 63.0 | 63.0 | 62.6 |
| | <i>N</i> | 65 | 77 | 2 | 144 | 118 | 27 | 27 | 171 |
| Picnic tables at campsites along the river | <i>Right amount</i> | 39.4 | 44.9 | | 43.2 | 39.7 | 33.3 | 82.1 | 36.5 |
| | <i>Too much</i> | 0.0 | 3.8 | | 2.1 | 5.2 | 0.0 | 0.0 | 3.5 |
| | <i>Need more</i> | 15.2 | 11.5 | | 13.0 | 11.2 | 11.1 | 7.1 | 11.2 |
| | <i>Don't Know</i> | 45.5 | 39.7 | | 41.8 | 44.0 | 55.6 | 10.7 | 48.8 |
| | <i>N</i> | 66 | 78 | 2 | 146 | 116 | 27 | 28 | 170 |
| Vehicle parking at launch sites | <i>Right amount</i> | 43.1 | 49.4 | | 47.2 | 57.6 | 69.2 | 53.6 | 63.4 |
| | <i>Too much</i> | 1.5 | 0.0 | | 0.7 | 0.8 | 0.0 | 0.0 | 0.6 |
| | <i>Need more</i> | 6.2 | 13.0 | | 9.7 | 22.9 | 11.5 | 25.0 | 18.6 |
| | <i>Don't Know</i> | 49.2 | 37.7 | | 42.4 | 18.6 | 19.2 | 21.4 | 17.4 |
| | <i>N</i> | 65 | 77 | 2 | 144 | 118 | 26 | 28 | 172 |
| Boat ramp facilities at HCC launch site | <i>Right amount</i> | | | | | 47.0 | 59.3 | 67.9 | 52.3 |
| | <i>Too much</i> | | | | | 0.9 | 0.0 | 0.0 | 0.6 |
| | <i>Need more</i> | | | | | 12.0 | 7.4 | 3.6 | 9.9 |
| | <i>Don't Know</i> | | | | | 40.2 | 33.3 | 28.6 | 37.2 |
| | <i>N</i> | | | | | 117 | 27 | 28 | 172 |
| Visitor facilities at HCC | <i>Right amount</i> | | | | | 63.6 | 59.3 | 67.9 | 63.6 |
| | <i>Too much</i> | | | | | 0.0 | 0.0 | 0.0 | 0.0 |
| | <i>Need more</i> | | | | | 17.8 | 11.1 | 14.3 | 16.2 |
| | <i>Don't Know</i> | | | | | 18.6 | 29.6 | 17.9 | 20.2 |
| | <i>N</i> | | | | | 118 | 27 | 28 | 173 |

| Commercial Power | | Scenic | | | | Wild | | | |
|---|---------------------|---------|-----------|-----|-------------|---------|-----------|------|-------------|
| | | Primary | Secondary | NMW | All Seasons | Primary | Secondary | NMW | All Seasons |
| Restroom facilities at Cache Creek | <i>Right amount</i> | 54.4 | 54.5 | | 54.5 | | | | |
| | <i>Too much</i> | 0.0 | 1.3 | | 0.7 | | | | |
| | <i>Need more</i> | 18.2 | 9.1 | | 13.1 | | | | |
| | <i>Don't Know</i> | 27.3 | 35.1 | | 31.7 | | | | |
| | <i>N</i> | 66 | 77 | 2 | 145 | | | | |
| Boat ramp facilities at Pittsburg Landing | <i>Right amount</i> | 27.7 | 40.8 | | 35.7 | 33.3 | 55.6 | 33.3 | 36.8 |
| | <i>Too much</i> | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | <i>Need more</i> | 6.2 | 5.3 | | 5.6 | 6.8 | 3.7 | 0.0 | 5.3 |
| | <i>Don't Know</i> | 66.2 | 53.9 | | 58.7 | 59.8 | 40.7 | 66.7 | 57.9 |
| | <i>N</i> | 65 | 76 | 2 | 143 | 117 | 27 | 27 | 171 |
| Campsites at Pittsburg Landing | <i>Right amount</i> | 16.9 | 29.9 | | 24.3 | 23.3 | 29.6 | 26.9 | 24.9 |
| | <i>Too much</i> | 0.0 | 2.6 | | 1.4 | 0.9 | 0.0 | 0.0 | 0.6 |
| | <i>Need more</i> | 1.5 | 3.9 | | 2.8 | 4.3 | 7.4 | 0.0 | 4.1 |
| | <i>Don't Know</i> | 81.5 | 63.6 | | 71.5 | 71.6 | 63.0 | 73.1 | 70.4 |
| | <i>N</i> | 65 | 77 | 2 | 144 | 116 | 27 | 26 | 169 |
| Accessible facilities for disabled people | <i>Right amount</i> | 13.6 | 25.6 | | 19.9 | 22.9 | 29.6 | 37.0 | 26.2 |
| | <i>Too much</i> | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | <i>Need more</i> | 6.1 | 15.4 | | 11.6 | 15.3 | 14.8 | 3.7 | 13.4 |
| | <i>Don't Know</i> | 80.3 | 59.0 | | 68.5 | 61.9 | 55.6 | 59.3 | 60.5 |
| | <i>N</i> | 66 | 78 | 2 | 146 | 118 | 27.0 | 27 | 172 |

¹ Expressed in percentages

The majority of private floaters had opinions about most facilities (Table 46C). Generally, these boaters on both segments were satisfied with the existing facilities. However, among private floaters on the Scenic segment, 59% desired more waste disposal facilities at boat landings, and more than 20% desired more informational displays, outhouses at campsites, or picnic tables. Among private floaters on the Wild segment, more than 30% desired more waste disposal facilities at launches, and more than 20% desired additional picnic tables at campsites and more parking at launches.

Table 46C Private Floaters' Opinions About Development of Recreation Facilities in Hells Canyon¹

| Private Float | | Scenic | | | | Wild | | | |
|---|---------------------|---------|-----------|-----|-------------|---------|-----------|------|-------------|
| | | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Information and interpretation signs and displays | <i>Right amount</i> | | | | 50.0 | 66.5 | 68.8 | 80.5 | 71.1 |
| | <i>Too much</i> | | | | 9.1 | 1.3 | 0.0 | 2.3 | 1.4 |
| | <i>Need more</i> | | | | 27.3 | 17.7 | 15.6 | 8.0 | 14.4 |
| | <i>Don't Know</i> | | | | 13.6 | 14.6 | 15.6 | 9.2 | 13.0 |
| | <i>N</i> | 8 | 7 | 7 | 22 | 158 | 32 | 87 | 277 |
| Outhouses at campsites | <i>Right amount</i> | | | | 45.5 | 35.0 | 48.4 | 54.1 | 42.4 |
| | <i>Too much</i> | | | | 9.1 | 2.5 | 19.4 | 1.2 | 4.0 |
| | <i>Need more</i> | | | | 22.7 | 50.0 | 19.4 | 21.2 | 37.7 |
| | <i>Don't Know</i> | | | | 22.7 | 12.5 | 12.9 | 23.5 | 15.9 |
| | <i>N</i> | 8 | 7 | 7 | 22 | 160 | 31 | 85 | 276 |
| Human waste disposal facilities at take-outs | <i>Right amount</i> | | | | 22.7 | 31.8 | 31.3 | 64.4 | 33.8 |
| | <i>Too much</i> | | | | 0.0 | 0.0 | 0.0 | 8.0 | 0.0 |
| | <i>Need more</i> | | | | 59.1 | 40.1 | 43.8 | 16.1 | 39.6 |
| | <i>Don't Know</i> | | | | 18.2 | 28.0 | 25.0 | 11.5 | 26.5 |
| | <i>N</i> | 8 | 7 | 7 | 22 | 157 | 32 | 87 | 275 |
| Picnic tables at campsites along the river | <i>Right amount</i> | | | | 52.4 | 52.5 | 54.8 | 77.0 | 56.5 |
| | <i>Too much</i> | | | | 4.8 | 5.1 | 16.1 | 1.1 | 7.2 |
| | <i>Need more</i> | | | | 28.6 | 28.5 | 12.9 | 13.8 | 22.8 |
| | <i>Don't Know</i> | | | | 14.3 | 13.9 | 16.1 | 8.0 | 13.4 |
| | <i>N</i> | 8 | 7 | 7 | 21 | 158 | 31 | 87 | 276 |
| Vehicle parking at launch sites | <i>Right amount</i> | | | | 77.3 | 70.5 | 68.8 | 80.5 | 72.4 |
| | <i>Too much</i> | | | | 0.0 | 0.6 | 0.0 | 2.3 | 0.7 |
| | <i>Need more</i> | | | | 9.1 | 25.0 | 25.0 | 8.0 | 21.5 |
| | <i>Don't Know</i> | | | | 13.6 | 3.8 | 6.3 | 9.2 | 5.5 |
| | <i>N</i> | 8 | 7 | 7 | 22 | 156 | 32 | 87 | 275 |
| Boat ramp facilities at HCC launch site | <i>Right amount</i> | | | | | 71.9 | 78.1 | 80.2 | 75.2 |
| | <i>Too much</i> | | | | | 0.6 | 0.0 | 0.0 | 0.4 |
| | <i>Need more</i> | | | | | 23.1 | 15.6 | 15.1 | 19.8 |
| | <i>Don't Know</i> | | | | | 4.4 | 6.3 | 4.7 | 4.7 |
| | <i>N</i> | 8 | 7 | 7 | | 160 | 32 | 86 | 278 |

| Private Float | | Scenic | | | | Wild | | | |
|---|---------------------|---------|-----------|-----|-------------|---------|-----------|------|-------------|
| | | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Visitor facilities at HCC | <i>Right amount</i> | | | | | 92.5 | 78.1 | 87.2 | 89.2 |
| | <i>Too much</i> | | | | | 0.6 | 3.1 | 2.3 | 1.4 |
| | <i>Need more</i> | | | | | 4.4 | 3.1 | 3.5 | 4.0 |
| | <i>Don't Know</i> | | | | | 2.5 | 15.6 | 7.0 | 5.4 |
| | <i>N</i> | 8 | 7 | 7 | | 159 | 32 | 86 | 277 |
| Restroom facilities at Cache Creek | <i>Right amount</i> | | | | 45.5 | | | | |
| | <i>Too much</i> | | | | 0.0 | | | | |
| | <i>Need more</i> | | | | 4.5 | | | | |
| | <i>Don't Know</i> | | | | 50.0 | | | | |
| | <i>N</i> | 8 | 7 | 7 | 22 | | | | |
| Boat ramp facilities at Pittsburg Landing | <i>Right amount</i> | | | | 72.7 | 83.1 | 81.3 | 83.9 | 83.2 |
| | <i>Too much</i> | | | | 0.0 | 1.3 | 3.1 | 3.4 | 2.2 |
| | <i>Need more</i> | | | | 0.0 | 7.5 | 9.4 | 8.0 | 7.9 |
| | <i>Don't Know</i> | | | | 27.3 | 8.1 | 6.3 | 4.6 | 6.8 |
| | <i>N</i> | 8 | 7 | 7 | 22 | 160 | 32 | 87 | 279 |
| Campsites at Pittsburg Landing | <i>Right amount</i> | | | | 38.1 | 39.4 | 18.8 | 32.2 | 34.8 |
| | <i>Too much</i> | | | | 0.0 | 1.3 | 12.5 | 3.4 | 3.2 |
| | <i>Need more</i> | | | | 0.0 | 1.3 | 9.4 | 3.4 | 2.9 |
| | <i>Don't Know</i> | | | | 61.9 | 58.1 | 59.4 | 60.9 | 59.1 |
| | <i>N</i> | 8 | 7 | 7 | 21 | 160 | 32 | 87 | 279 |
| Accessible facilities for disabled people | <i>Right amount</i> | | | | 13.6 | 28.1 | 25.8 | 26.4 | 27.3 |
| | <i>Too much</i> | | | | 0.0 | 1.3 | 0.0 | 0.0 | 0.7 |
| | <i>Need more</i> | | | | 4.5 | 3.1 | 6.5 | 6.9 | 4.7 |
| | <i>Don't Know</i> | | | | 81.8 | 67.5 | 67.7 | 66.7 | 67.3 |
| | <i>N</i> | 8 | 7 | 7 | 22 | 160 | 31.0 | 87 | 278 |

¹ Expressed in percentages

Too few commercial floaters were contacted on the Scenic segment to permit confident conclusions about this group's opinions (Table 46D). However, on the Wild segment, commercial floaters either did not know about many facilities (waste disposal at campsites, campsites at Pittsburg

Landing, and disabled access) or felt that current facilities are adequate. There were no items that more than 18% of these respondents said were in short supply.

Table 46D Commercial Floaters' Opinions About Development of Recreation Facilities in Hells Canyon¹

| Commercial Float | | Scenic | | | | Wild | | | |
|---|---------------------|---------|-----------|-----|-------------|---------|-----------|------|-------------|
| | | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Information and interpretation signs and displays | <i>Right amount</i> | | | | 73.3 | 67.6 | 68.8 | 78.3 | 70.7 |
| | <i>Too much</i> | | | | 0.0 | 1.0 | 0.0 | 0.0 | 0.6 |
| | <i>Need more</i> | | | | 13.3 | 11.8 | 6.3 | 10.9 | 11.0 |
| | <i>Don't Know</i> | | | | 13.3 | 19.6 | 25.0 | 10.9 | 17.7 |
| | <i>N</i> | 8 | 1 | 5 | 15 | 102 | 16 | 46 | 164 |
| Outhouses at campsites | <i>Right amount</i> | | | | 66.7 | 48.0 | 52.9 | 73.3 | 55.5 |
| | <i>Too much</i> | | | | 6.7 | 1.0 | 0.0 | 2.2 | 1.2 |
| | <i>Need more</i> | | | | 0.0 | 13.7 | 23.5 | 2.2 | 11.6 |
| | <i>Don't Know</i> | | | | 26.7 | 37.3 | 23.5 | 22.2 | 31.7 |
| | <i>N</i> | 8 | 1 | 5 | 15 | 102 | 17 | 45 | 164 |
| Human waste disposal facilities at take-outs | <i>Right amount</i> | | | | 46.7 | 27.7 | 58.8 | 68.9 | 36.6 |
| | <i>Too much</i> | | | | 0.0 | 0.0 | 0.0 | 2.2 | 0.0 |
| | <i>Need more</i> | | | | 6.7 | 12.9 | 5.9 | 15.6 | 9.9 |
| | <i>Don't Know</i> | | | | 46.7 | 59.4 | 35.3 | 13.3 | 53.4 |
| | <i>N</i> | 8 | 1 | 5 | 15 | 101 | 17 | 45 | 161 |
| Picnic tables at campsites along the river | <i>Right amount</i> | | | | 80.0 | 50.0 | 58.8 | 56.5 | 56.3 |
| | <i>Too much</i> | | | | 13.3 | 6.1 | 0.0 | 0.0 | 4.4 |
| | <i>Need more</i> | | | | 0.0 | 16.3 | 29.4 | 2.2 | 17.5 |
| | <i>Don't Know</i> | | | | 6.7 | 27.6 | 11.8 | 41.3 | 21.9 |
| | <i>N</i> | 8 | 1 | 5 | 15 | 98 | 17 | 46 | 160 |
| Vehicle parking at launch sites | <i>Right amount</i> | | | | 60.0 | 60.0 | 70.6 | 78.3 | 60.1 |
| | <i>Too much</i> | | | | 0.0 | 1.0 | 0.0 | 0.0 | 0.6 |
| | <i>Need more</i> | | | | 0.0 | 3.0 | 5.9 | 10.9 | 3.1 |
| | <i>Don't Know</i> | | | | 40.0 | 36.0 | 23.5 | 10.9 | 36.2 |
| | <i>N</i> | 8 | 1 | 5 | 15 | 100 | 17 | 46 | 163 |
| Boat ramp facilities at HCC launch site | <i>Right amount</i> | | | | | 71.6 | 75.0 | 71.7 | 72.0 |
| | <i>Too much</i> | | | | | 2.0 | 0.0 | 0.0 | 1.2 |
| | <i>Need more</i> | | | | | 4.9 | 0.0 | 2.2 | 3.7 |
| | <i>Don't Know</i> | | | | | 21.6 | 25.0 | 26.1 | 23.2 |
| | <i>N</i> | 8 | 1 | 5 | | 102 | 16 | 46 | 164 |

| Commercial Float | | Scenic | | | | Wild | | | |
|---|---------------------|---------|-----------|-----|-------------|---------|-----------|------|-------------|
| | | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Visitor facilities at HCC | <i>Right amount</i> | | | | | 78.0 | 76.5 | 80.4 | 78.5 |
| | <i>Too much</i> | | | | | 0.0 | 0.0 | 2.2 | 0.6 |
| | <i>Need more</i> | | | | | 3.0 | 0.0 | 2.2 | 2.5 |
| | <i>Don't Know</i> | | | | | 19.0 | 23.5 | 15.2 | 18.4 |
| | <i>N</i> | 8 | 1 | 5 | | 100 | 17 | 46 | 163 |
| Restroom facilities at Cache Creek | <i>Right amount</i> | | | | 50.0 | | | | |
| | <i>Too much</i> | | | | 0.0 | | | | |
| | <i>Need more</i> | | | | 0.0 | | | | |
| | <i>Don't Know</i> | | | | 50.0 | | | | |
| | <i>N</i> | 8 | 1 | 5 | 14 | | | | |
| Boat ramp facilities at Pittsburg Landing | <i>Right amount</i> | | | | 73.3 | 53.5 | 64.7 | 80.0 | 62.1 |
| | <i>Too much</i> | | | | 0.0 | 1.0 | 5.9 | 0.0 | 1.2 |
| | <i>Need more</i> | | | | 6.7 | 4.0 | 0.0 | 2.2 | 3.1 |
| | <i>Don't Know</i> | | | | 20.0 | 41.4 | 29.4 | 17.8 | 33.5 |
| | <i>N</i> | 8 | 1 | 5 | 15 | 99 | 17 | 45 | 161 |
| Campsites at Pittsburg Landing | <i>Right amount</i> | | | | 46.7 | 22.2 | 43.8 | 28.9 | 26.3 |
| | <i>Too much</i> | | | | 0.0 | 3.0 | 0.0 | 2.2 | 2.5 |
| | <i>Need more</i> | | | | 0.0 | 1.0 | 0.0 | 0.0 | 0.6 |
| | <i>Don't Know</i> | | | | 53.3 | 73.7 | 56.3 | 68.9 | 70.6 |
| | <i>N</i> | 8 | 1 | 5 | 15 | 99 | 16 | 45 | 160 |
| Accessible facilities for disabled people | <i>Right amount</i> | | | | 28.6 | 21.8 | 33.3 | 28.3 | 24.7 |
| | <i>Too much</i> | | | | 0.0 | 1.0 | 0.0 | 2.2 | 1.2 |
| | <i>Need more</i> | | | | 0.0 | 4.0 | 6.7 | 2.2 | 3.7 |
| | <i>Don't Know</i> | | | | 71.4 | 73.3 | 60.0 | 67.4 | 70.4 |
| | <i>N</i> | 8 | 1 | 5 | 14 | 101 | 15 | 46 | 162 |

Respondents were also asked how satisfied they were with road access to the river for their trip (Table 47). Overall, the four user groups on both segments felt quite satisfied (5.0), with the exception of commercial power users on the Wild segment (4.85). The low number of private and commercial floaters contacted on the Scenic segment does not allow conclusive statements about seasonal differences for these groups. However, on the Wild segment, the differences across seasons were not pronounced.

Table 47 Visitor Satisfactions with Road Access to the River ¹

| Road access to the river | Scenic | | | | Wild | | | |
|--------------------------|---------|-----------|------|-------------|---------|-----------|------|-------------|
| | Primary | Secondary | NMW | All seasons | Primary | Secondary | NMW | All seasons |
| Private power | 5.19 | 4.83 | 5.41 | 5.09 | 5.19 | 5.57 | 5.90 | 5.40 |
| <i>N</i> | 156 | 81 | 17 | 254 | 42 | 21 | 10 | 73 |
| Commercial power | 4.94 | 5.31 | | 5.14 | 4.85 | 5.70 | 4.18 | 4.85 |
| <i>N</i> | 64 | 74 | 2 | 140 | 117 | 23 | 28 | 168 |
| Private float | | | | 5.23 | 5.31 | 5.75 | 5.39 | 5.39 |
| <i>N</i> | 8 | 7 | 7 | 22 | 156 | 32 | 82 | 270 |
| Commercial float | | | | 5.33 | 5.23 | 5.00 | 5.70 | 5.33 |
| <i>N</i> | 8 | 1 | 6 | 15 | 98 | 16 | 40 | 154 |

¹ Expressed in percentages

CONCLUSIONS

A Representative Sample was Obtained

Regarding the study, the initial conclusion is that the design of the survey and the year-long sampling plan provided opportunity to contact over 2,724 boaters and obtain 1,158 mail surveys. This provides a representative sample of all four types of boaters in Hells Canyon—private power boaters, private floaters, commercial floaters, and commercial power boaters. There was a high level of public cooperation in completing the on-site contact cards and a 65% response rate to the mail survey. This provided detailed information that enables the U. S. Forest Service to monitor how well their river management plan objectives are being met and to evaluate how management actions and policies have promoted or impeded achievement of plan objectives (for boaters' experiences and social conditions in the differing river settings). Specifically, the data describes the similarities and differences in the boaters' perceptions about the conditions they encountered, the kinds of experiences they had, and personal assessments of how the river settings are managed over time. In summarizing the data presented in this report, we offer several broad conclusions about the similarities and differences among the four types of boaters across the primary and secondary seasons on the Wild and Scenic segments of the river.

Outstandingly Remarkable Values Are Being Achieved

First, all four types of boaters reported that their expectations about a variety of social and environmental conditions describing the Outstandingly Remarkable Values were largely being met on the Snake River in Hells Canyon. The one noticeable difference is that the power boaters and floaters tend to disagree on whether river management treats floaters and power boaters equitably. Their disagreement primarily occurred in response to their feelings about the non-motorized window which is implemented in the primary season on the Wild segment (every 10 motorized days are followed by 3 that are motorless, for a total of 21 motorless days).

On the Wild segment, all four types of boaters agreed with most of the 12 items related to the Outstandingly Remarkable Values (ORVs) of the river. There were a few understandable differences. Private power boaters agreed more strongly than other boaters that the Wild segment supports an abundant, unique sport fishery and that it offers power boaters opportunities for a premier four-season whitewater adventure. They disagreed that river management in the Wild section treats floaters and power boaters equitably, whereas the other boater groups slightly agreed.

In the Scenic segment, there also was overall agreement with most of the 12 items related to the ORVs. One exception was that both commercial and private power boaters slightly agreed that river management in the Scenic segment treats floaters and power boaters equitably. The private floaters disagreed with this. The power boaters more strongly agreed that the Scenic segment offers opportunities for a premier four-season whitewater adventure than the floaters, who only slightly agreed. The strongest agreement was that the Snake is a unique backcountry river and that the landscape along the river is diverse and appealing. Overall, the data show that the ORVs for Hells Canyon are being met.

Conditions Encountered on the River

Boaters' expectations are being met.

One way to monitor whether river management is accomplishing its objectives is to ask boaters whether or not their expectations were being met for a variety of physical and social conditions on their trips. Overall, boaters reported that their expectations for a variety of social and environmental conditions were largely being met. Furthermore, the conditions that boaters encountered on the river during the secondary season (when visitor use is lower) exceeded their expectations. Among power boaters (commercial and private), encounter levels with other groups were about as expected, and fishing was better than expected.

Expectations for fishing and the wild character of the river were more likely to be exceeded in the secondary season than during the primary season in the summer. Floaters tended to say they met slightly fewer other boating groups on the river than expected. Commercial floaters, more than other groups, said the cultural and historic sites exceeded their expectations. Among all groups, wildlife viewing exceeded expectations in the secondary season more often than in the primary summer season. All groups said they had seen fewer groups camped within sight of them than they had expected, but this was especially common among floaters. Also, all groups indicated that the wild character of the river somewhat exceeded their expectations.

Few conditions detracted from boaters experiences.

Another way to monitor if river management is accomplishing its objectives is to ask boaters whether or not a variety (30) of physical and social conditions detracted from or added to their trip. For all groups most of the social conditions were either not noticed or had only minimal effects. On a scale from -3 to +3, with 0

meaning “no effect,” the only items with means lower than -0.75 were inconsiderate behavior at launches (private power boaters on the Wild section), commercial groups sending boats ahead to claim campsites (private floaters on the Wild section), encountering power boaters (private floaters and commercial floaters on the Wild section), finding that desired campsites were occupied by others (private floaters on the Wild section), and noisy groups (commercial floaters on the Wild section). In response to a list of 15 potentially negative physical conditions, only three things (seeing litter, human waste, or weeds) were reported by all groups as slightly detracting from their experience. Finally, when boaters were given the opportunity to write and explain if the actions of another group or person not in their own group affected their trip (either positively or negatively), 26% of boaters contributed comments which were fairly evenly split between negative and generally positive remarks.

Perceptions of Effects of Management Actions are Mixed

Boaters had mixed opinions about the effects of some current management actions and policies.

Several management actions have been taken to improve opportunities for self-reliance, challenge, and solitude, including removing navigational markers, picnic tables, and outhouses, along with regulations requiring the use of fire pans and packing out human waste and campfire ashes. Regulations also include a ban on personal watercraft and the implementation of the NMW. Among power boaters on the Scenic section, all facility removal was deemed to detract from the experiences of both commercial and private power boaters. However, both groups felt that prohibiting jet skis was positive, as were the pack-out regulations for human waste.

There were some notable differences among the user groups in their evaluations of the effects of management actions on the Wild section. Similar to the Scenic section, three of the items added moderately or strongly to experiences for all groups: the ban on personal watercraft, requiring pack-out of human waste, and requiring fire pans. However, there were four items that floaters felt added to the experience but power boaters said detracted: removing navigational markers, removing picnic tables, removing outhouses, and implementation of the NMW. Having use limits on some days added moderately for both floater groups, added slightly for commercial power boaters, and detracted for the private power boaters.

Facilities Added Somewhat to Boaters' Experiences.

Boaters were asked if certain types of facility development added to or detracted from their experience on the river. Commercial and private power boaters on the Scenic section rated all 9 types of facility development as adding to their experiences, though not strongly. On the Wild section, all four groups said that Kirkwood Ranch, other historic sites, and hiking opportunities added moderately, while having outhouses and tables at camps, navigational markers, information signs, and the facilities at Pittsburg Landing added slightly to their experiences. Only one item – resorts and buildings – detracted, and this was only among floaters, for whom the impact was slight. Although boaters generally felt that the level of facility development and recreation site services on the Snake River adds to their experience, they also felt that more of some types of facilities are needed. Boaters were also asked whether they think that presently there is the right amount of facility development, too much, or if more is needed on the Wild and Scenic sections of the Snake River. For outhouses at campsites, human waste disposal facilities at take-outs, and picnic tables at campsites along the river, there is some level of support that indicates more of these facilities are needed but it is not uniform across boater groups.

Boaters wanted little change in management.

When asked in an open question if there was anything they would change about river management, about one half of the boaters responded. 231 boaters on the Scenic section offered comments, with most (140) of these being from private power boaters. Answers were quite varied, although the most common was “no change” (33%), followed by changing the limits on users (12%) and adding campsite amenities (8%). Among boaters on the Wild section, 365 responses were obtained, with the most (174) being from private floaters. The most prevalent comment was a desire to reduce motorized use (29%), followed by “no change” (18%), and changes to restrictions on boaters (15%).

The preceding conclusions are broad generalizations and caution is encouraged when making assumptions about the different boater types and their preferences. It is necessary to review the data within the report to understand the dynamics of the boater groups and their differences when assessing how current management plans and policies are achieving the objectives of the river management plan.

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APPENDIX A: COMPUTATION OF SAMPLE SIZES

COMPUTATION OF SAMPLE SIZES

Our approach is a two-stage cluster sample, with the first stage consisting of separate cluster samples of days during the primary and secondary use seasons. A simple one-stage cluster sample: “involves taking a simple random sample of clusters and then sampling every enumeration or listing unit within each sample cluster. In some situations one would achieve greater efficiency if the sampling were performed in more than one stage. ...it is often better to take a sample of listing units within selected clusters” (Levy & Lemeshow 1991, p. 212). In our case, the clusters would be blocks of days and the listing units would be people present. In the second stage, a systematic (interval) sample will be taken from the list of names and addresses generated during the first stage. (See text of proposal for details of procedures.)

To estimate the number of respondents from each group required to generate estimates with specified error bounds and a given level of precision requires some assumptions about response distributions and knowledge of population sizes. Population sizes are displayed in the Table below. We adopt 95% confidence limits for all our estimates.

| | Primary Season | | | | Secondary Season | | | |
|--------|----------------|-------|---------|-------|------------------|-------|---------|-------|
| | Commercial | | Private | | Commercial | | Private | |
| | Float | power | float | power | Float | power | float | power |
| People | 2021 | 23026 | 2289 | 5307 | 59 | 12972 | 721 | 6692 |

For **estimation of means**, two similar formulae are available:

For a systematic sample, the sample size (n) required to estimate μ with a bound B on the error of estimation (Scheaffer et al. 1996, p. 265):

$$(eq1) \quad n = \frac{N\sigma^2}{(N-1)D + \sigma^2}$$

$$\text{Where } D = B^2/4$$

From Levy & Lemeshow 1991:

$$(eq2) \quad n = \frac{z^2 V^2}{\epsilon^2}$$

$$\text{Where } V^2 = \frac{[(N-1)/N]s^2}{\chi^2}$$

Example Calculations, assuming a question using 7-point scales related to experiences, with mean of 5.2, sd = 1.50, $s^2 = 2.25$, $\epsilon = .10$, and $N=2080$. From Eq 2:

$$V^2 = [(2079)/(2080)](2.25)/5.2^2 = .08317$$

$$n = (1.96^2)(.08317)/(.10^2) = 32$$

if $\epsilon = .05$, then $n = 128$

Or using Eq 1, where B is set at 0.5

$n=35$

Using data collected in various recreation studies of hikers, float boaters, and power boaters, we computed several projections for sample sizes, as displayed in the table below.

Sample Sizes Needed to Estimate Means, Given Projected Response Distributions

| Question type | Mean | SD | Error bound ¹ | N | n |
|--|------|------|--------------------------|-------|-----|
| Experiences attained (e.g., solitude, challenge) (7-point scales) | 5.2 | 1.50 | $\epsilon = .10$ | 2080 | 32 |
| Percent of time in sight of other boaters | 26 | 28 | $B = 10$ | 2080 | 31 |
| Evaluation of number of kayakers seen on the Owyhee River ("too many" to "too few") (private boaters) | 2.94 | 0.55 | $\epsilon = .05$ | 2080 | 53 |
| Evaluation of number of kayakers seen on the Owyhee River ("too many" to "too few") (commercial boaters) | 2.97 | 0.64 | $\epsilon = .05$ | 2080 | 71 |
| Evaluation of number of kayakers seen on the Owyhee River ("too many" to "too few") | 2.94 | 0.55 | $\epsilon = .05$ | 35998 | 54 |
| Evaluation of number of rafters seen on the Owyhee River ("too many" to "too few") (private boaters) | 3.26 | 0.65 | $\epsilon = .05$ | 2080 | 61 |
| Evaluation of number of rafters seen on the Owyhee River ("too many" to "too few") (commercial boaters) | 3.28 | 0.62 | $\epsilon = .05$ | 2080 | 55 |
| Comparison of "challenging whitewater" with expectations (private boaters) | 3.09 | 0.90 | $\epsilon = .05$ | 2080 | 130 |
| Comparison of "number of groups seen" with expectations (private boaters) | 3.24 | 0.96 | $\epsilon = .05$ | 2080 | 135 |
| Comparison of "challenging whitewater" with expectations (commercial boaters) | 3.20 | 0.89 | $\epsilon = .05$ | 2080 | 119 |
| Comparison of "challenging whitewater" with expectations (commercial boaters) | 3.01 | 0.96 | $\epsilon = .05$ | 2080 | 156 |
| Crowding on the Owyhee (9-point scale), commercial boaters | 2.72 | 1.66 | $B = .5$ pt | 35998 | 21 |
| Problems noticed (7-point scale) | 2.5 | 1.8 | $B = 0.5$ | 2080 | 51 |

¹In each case, seeking to estimate means with 95% confidence

For **estimation of proportions**, the sample size required to estimate p with a bound of B on the error of estimation:

Scheaffer et al. 1996:

$$(eq3) \quad n = \frac{Npq}{(N-1)D + pq}$$

From Levy and Lemshow (p. 62):

$$(eq 4) \quad n \geq \frac{z^2 NP_y(1-P_y)}{(N-1)\epsilon^2 P_y^2 + z^2 P_y(1-P_y)}$$

Where ϵ is the error bound, expressed as a proportion of the true population parameter

Using Eq 4, and assuming 50-50 splits in proportion data ($P_y = 0.5$); desiring to be within $\pm 5\%$ of the true proportion with 95% confidence ($z=1.96$), needed sample sizes are:

| | Commercial | | Private | |
|-----------------|------------|-------|---------|-------|
| | Float | power | float | power |
| N (2001) | 2080 | 35998 | 3010 | 11999 |
| n (50/50 split) | 324 | 379 | 340 | 372 |
| n (70/30 split) | 152 | 163 | 156 | 162 |

Example calculations:

n (commercial floaters, assuming **50/50 split**)

$$= (1.96^2)(2080)(0.5)(0.5)/[(2079)(0.1^2)(0.5^2) + (1.96^2)(0.5)(0.5)] = 324$$

n (commercial floaters, assuming **70/30 split**)

$$= (1.96^2)(2080)(0.7)(0.3)/[(2079)(0.1^2)(0.7^2) + (1.96^2)(0.7)(0.3)] = 152$$

APPENDIX B: CONTACT CARD FOR THOSE LAUNCHING

2003 Hells Canyon Boater Survey

The University of Idaho is studying visitors to Hells Canyon to help the U.S. Forest Service evaluate its management of the river. We'd like to ask you a few questions about your experiences here. We ask for your name and address so we can send some visitors a survey asking a few more questions. This information is completely confidential and your name will not be released to anyone.

1. Before this trip, how many times have you boated (float or powerboat) in Hells Canyon in the last **two years**?

_____ Boating trips

2. Which sections of the Snake River have you boated (float or power) in Hells Canyon in the last **two years**? Mark the box if you have boated on any part of that section. (*Check all that apply.*)

- Hells Canyon Dam to Rush Creek
- Rush Creek to Pittsburg Landing
- Pittsburg Landing to the Salmon River confluence
- Salmon River confluence to Cache Creek (boundary of the Hells Canyon Recreation Area).

3. Where will you take out of the river on this trip? _____

4. How many days will you spend on the river during this trip? _____ days

5. How many people (including yourself) are in your group on this trip? (*Check one answer*)

- 1-5
- 11-15
- 21-25
- 6-10
- 16-20
- More than 25

6. The following are experiences people sometimes seek on boating trips in Hells Canyon. For each, circle a number to indicate how much you hope to have the experience on this trip.

| | How much are you <i>seeking</i> it? | | | | | | |
|---|-------------------------------------|---|---|-----------|---|---|---|
| | Not at all | | | Very much | | | |
| Learning about historic or cultural sites | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Solitude | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Feeling of remoteness | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Closeness to nature | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Mental relaxation | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Peace and quiet | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Outstanding fishing opportunities | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Sense of challenge | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Time with friends or family | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Being in a natural environment | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Seeing unique geological formations | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

7. We'd like to send you a survey after your trip asking about your perceptions and experiences.

Name: _____

Mailing address: _____

City: _____ State: _____ Zip code: _____

Thanks for your help!

Public reporting burden for this collection of information is estimated to average 2 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Department of Agriculture, Clearance Officer, OIRM, Room 404-W, Washington, DC 20250; and to the Office of Management and Budget, Paperwork Reduction Project (OMB #0596-0108), Washington, DC 20503.

APPENDIX C: CONTACT CARD FOR THOSE TAKING OUT

2003 Hells Canyon Boater Survey

The University of Idaho is studying visitors to Hells Canyon to help the U.S. Forest Service evaluate its management of the river. We'd like to ask you a few questions about your experiences here. We ask for your name and address so we can send some visitors a survey asking a few more questions. This information is completely confidential and your name will not be released to anyone.

1. Where did you launch on this trip? _____
2. How many days did you spend on the river during this trip? _____ days
3. How many people (including yourself) are in your group on this trip?

| | | |
|-------------------------------|--------------------------------|---------------------------------------|
| <input type="checkbox"/> 1-5 | <input type="checkbox"/> 11-15 | <input type="checkbox"/> 21-25 |
| <input type="checkbox"/> 6-10 | <input type="checkbox"/> 16-20 | <input type="checkbox"/> More than 25 |
4. What were the high points – the best parts – of your river trip?

| |
|--|
| What was the high point? What made it so good? |
| |

5. What were the low points – the worst parts – of your river trip?

| |
|--|
| What was the low point? What made it so bad? |
| |

6. On a **typical** day during your trip, about how many boats from other parties did you see? (*Circle a number for each type of boat.*)

Float boats: 0--2--4--6--8--10--12--14--16--18--20--22--24--26--28--30--32--34--36--38--40-->40

Power boats: 0--2--4--6--8--10--12--14--16--18--20--22--24--26--28--30--32--34--36--38--40-->40

7. The following are feelings or experiences that people sometimes seek on river trips. For each, please indicate how much you actually experienced it on this trip. (*Circle a number for each item.*)

| | How much did you <i>experience</i> it? | | | | | | |
|---|--|---|---|-----------|---|---|---|
| | Not at all | | | Very much | | | |
| Learning about historic or cultural sites | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Solitude | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Feeling of remoteness | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Closeness to nature | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Mental relaxation | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Peace and quiet | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Outstanding fishing opportunities | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Sense of challenge | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Time with friends or family | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Being in a natural environment | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Seeing unique geological formations | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

8. Before this trip, how many times have you boated (float or powerboat) in Hells Canyon in the last **two years**?

_____ Boating trips

9. Which sections of the Snake River have you boated (float or powerboat) in Hells Canyon in the last **two years**? Mark the box if you have boated on any part of that section (*Check all that apply.*)

- Hells Canyon Dam to Rush Creek
- Rush Creek to Pittsburg Landing
- Pittsburg Landing to the Salmon River confluence
- Salmon River confluence to Cache Creek (boundary of the Hells Canyon Recreation Area)

We'd like to send you a survey asking about your perceptions and experiences.

Name: _____

Mailing address: _____

City: _____ State: _____ Zip code: _____

Thank You!
Drs. Troy Hall and Ed Krumpe
University of Idaho

Public reporting burden for this collection of information is estimated to average 3 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Department of Agriculture, Clearance Officer, OIRM, Room 404-W, Washington, DC 20250; and to the Office of Management and Budget, Paperwork Reduction Project (OMB #0596-0108), Washington, DC 20503.

APPENDIX D: EXAMPLE OF ON-SITE LOG FORM

ON-SITE LOG FORM

Name: Troy Hall
 Date: July 4, 2003
 Time begin: 8:45 am

Location: Pittsburg
 Weather: sunny and hot
 Time end: 5:15 pm

| Group # | Time | Put in/ Take out | Status | #/Type craft | Kids | Total adults | # asked | # refuse | Survey #s | Comments |
|---------|-------|------------------|--|---|------|--------------|---------|----------|-----------|---|
| 1 | 9:12 | Take out | <input checked="" type="checkbox"/> Pvt <input type="checkbox"/> Comm | <u>2</u> raft <u>2</u> kayak <input type="checkbox"/> jet <input type="checkbox"/> power | 0 | 8 | 6 | 1 | #1-5 | 2 boaters missed - left while talking to others |
| 2 | 9:29 | Take out | <input type="checkbox"/> Pvt <input checked="" type="checkbox"/> Comm | <input type="checkbox"/> raft <input type="checkbox"/> kayak <u>1</u> jet <input type="checkbox"/> power | 7 | 8 | 8 | 0 | #6-13 | Wild River Adventures |
| 3 | 10:15 | Put in | <input checked="" type="checkbox"/> Pvt <input type="checkbox"/> Comm | <u>2</u> raft <input type="checkbox"/> kayak <input type="checkbox"/> jet <input type="checkbox"/> power | 0 | 6 | 6 | 2 | #14-17 | |
| | | | | | | | | | | |

APPENDIX E: MAIL SURVEY for SCENIC SECTION

SECTION 1: YOUR RECENT HELLS CANYON TRIP

The following questions refer to your recent Hells Canyon trip when you were contacted by one of our research team. When answering, please think only about the Scenic section (Pittsburg Landing to Cache Creek).

1.1 How did the following conditions compare to what you expected to see? If you didn't have any expectation, mark "NE" (No Expectation). *(Circle one answer for each)*

| | Much Less | | About as Expected | | | Much More | | No Expectation |
|---|-----------|----|-------------------|---|----|-----------|----|----------------|
| | -3 | -2 | -1 | 0 | +1 | +2 | +3 | NE |
| Number of people at the put-in | -3 | -2 | -1 | 0 | +1 | +2 | +3 | NE |
| Number of groups on the river each day | -3 | -2 | -1 | 0 | +1 | +2 | +3 | NE |
| Number of groups camped within sight | -3 | -2 | -1 | 0 | +1 | +2 | +3 | NE |
| Amount of wildlife seen | -3 | -2 | -1 | 0 | +1 | +2 | +3 | NE |
| Wild character of the river | -3 | -2 | -1 | 0 | +1 | +2 | +3 | NE |
| Challenging whitewater | -3 | -2 | -1 | 0 | +1 | +2 | +3 | NE |
| Evidence of livestock | -3 | -2 | -1 | 0 | +1 | +2 | +3 | NE |
| Number of historic or prehistoric sites | -3 | -2 | -1 | 0 | +1 | +2 | +3 | NE |
| Opportunities for high quality fishing | -3 | -2 | -1 | 0 | +1 | +2 | +3 | NE |

1.2 Did the actions of another group or person not in your own group affect your trip either positively or negatively? *(Check one answer.)*

- Yes No

If yes, please explain:

1.3 How did the number of floaters you saw compare to the number you had expected to see? *(Circle one answer).*

- Far more than Expected More than expected About as many as expected Fewer than expected Far fewer than expected I had no expectations

1.4 How did the number of power boaters you saw compare to the number you had expected to see? (*Circle one answer*).

Far more than Expected More than expected About as many as expected Fewer than expected Far fewer than expected I had no expectations

1.5 How crowded did you feel when boating on the Scenic section of Hells Canyon? (*Circle a number*)

1-----2-----3-----4-----5-----6-----7-----8-----9
 Not at all Slightly Moderately Extremely
 Crowded Crowded Crowded Crowded

If you circled a number “2” or higher, could you please tell us where you felt crowded, and why?

Location: _____

Why? _____

1.6 What activities did you, personally, do on this trip to the Scenic section of Hells Canyon? (*Check all that apply*).

- Rafting Kayaking Wildlife viewing
- Camping Picnicking Jet boating
- Hiking Hunting Power boating (prop)
- Swimming Fishing Visiting cultural/historic sites

1.7 The following are **facilities** you may have noticed on your trip. If you did not notice a facility, circle “NN.” For items you noticed, please indicate if they added to or detracted from your trip. (*Circle one answer for each item.*)

| | Did Not Notice | Detracted From | | | No Effect | Added To | | |
|--------------------------------|----------------|----------------|----|----|-----------|----------|----|----|
| Outhouses at campsites | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| Cache Creek | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| Navigation markers | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| Picnic tables at campsites | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| Resorts and buildings | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| Information signs and displays | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| Opportunities for hiking | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| Pittsburg Landing | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |

- 1.8 The following are conditions you may have noticed on your trip. If you did not notice an item, circle “NN.” For items you noticed, please indicate if they added to or detracted from your trip. (Circle one answer for each item.)

| | Did Not Notice | Detracted From | | No Effect | | | Added To | |
|--|----------------|----------------|----|-----------|---|----|----------|----|
| Historical sites | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| High water levels | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| Low water levels | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| Fluctuating water levels | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| Indian rock art | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| Litter and trash along riverbank | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| Trampled vegetation at campsites | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| Human waste or toilet paper | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| Dog waste | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| Challenging whitewater | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| Seeing wildlife | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| Weeds or thorny plants at campsites | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| Evidence of livestock | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| Impacts to trees or brush from recreational visitors | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| Erosion of river banks | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| Noisy groups | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| Forest Service rangers or staff | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| Camping within sight or sound of another group | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| Waiting for other boaters to pass so you can run rapids | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| Inconsiderate behavior of other boaters at launch sites | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| Area rules/regulations not adequately enforced | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| Uncontrolled dogs | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| People carrying or using firearms | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| Campsites you wanted that were occupied by others | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| People from commercial groups sending boats ahead to claim campsites | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |

| | | | | | | | | |
|---|----|----|----|----|---|----|----|----|
| People from private groups sending boats ahead to claim campsites | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| Encountering power boaters on the river | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| Encountering float boaters on the river | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| Encountering commercial boaters on the river | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| Encountering non-commercial boaters on the river | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |

1.9 River managers want boaters to have opportunities for self-reliance, challenge, and solitude on the Scenic Section of Hells Canyon. The following are management policies or actions that have been taken on the Scenic section of Hells Canyon. Please indicate how each has affected your **feelings of self-reliance, challenge, and solitude**.

| | | Effect on opportunities for Self-reliance, Challenge, Solitude | | | | | | |
|--|----|---|-------------------|-----------|---|----|-------------|----|
| | | Did not Notice | Detracted from | No Effect | | | Added to | |
| Removal of navigational markers | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| Removal of picnic tables | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| Removal of outhouses from campsites | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| Limits on the number of trips that can launch each day | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| Prohibition on the use of personal motorized watercraft (jet skis) | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| Requiring all boaters to use portable toilets & pack out human waste | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| Requiring all boaters to use fire pans & pack out ashes | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| Educational briefings for boaters by Forest Service rangers or staff | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |

Are there any other management policies or actions that have affected your opportunities for self-reliance, challenge, and solitude on the Scenic Section of Hells Canyon? (Please list and explain their effect.)

1.10 Please indicate how satisfied you were with each of the following during your trip on the Scenic section of Hells Canyon.

| | Not at all Satisfied | 1 | 2 | Somewhat | 3 | 4 | Very | 5 | 6 | Extremely Satisfied | 7 |
|--|----------------------|---|---|----------|---|---|------|---|---|---------------------|---|
| Interactions with people in your group | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | | | |
| Behavior of other groups | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | | | |
| The weather and temperature | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | | | |
| Road access to the river | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | | | |
| The number of float trips you saw | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | | | |
| The number of power boat trips you saw | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | | | |
| Other: <i>(Please specify)</i> | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | | | |

1.11 The following are feelings or experiences people sometimes seek on river trips. For each, please indicate how much you hoped to experience it during your trip AND how much you actually felt it on your trip. (Circle two numbers for each item.)

| | How much were you <i>seeking</i> it? | | | | | | | How much did you <i>experience</i> it? | | | | | | | | | | |
|--|--------------------------------------|---|---|---|---|---|---|--|-----------|------------|---|---|---|---|---|---|---|-----------|
| | Not at all | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Very much | Not at all | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Very much |
| Ability to relax in a peaceful setting | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | |
| Opportunities to see wildlife | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | |
| Scenic views | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | |
| Good fishing opportunities | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | |
| Ability to experience solitude | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | |
| Ability to experience a pristine setting | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | |
| Opportunity to experience challenges | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | |
| Opportunities to see historic or prehistoric sites | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | |
| Time with friends or family | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | |
| Opportunities to see unique geological features | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | |

SECTION 2: YOUR GENERAL VIEWS ABOUT THE "SCENIC" SEGMENT OF THE SNAKE RIVER

2.1 We would like to know how you feel about the amount and type of recreation facilities along the Scenic Section of the Snake River in Hells Canyon. For each of the following facilities, please tell us whether you think that presently there is the right amount of development, too much, or if more is needed. (*Check one answer for each type of facility.*)

| | Right amount | Too much | Need more | Don't know |
|---|-----------------------|-----------------------|-----------------------|-----------------------|
| Information and interpretation signs and displays | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Outhouses at campsites | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Human waste disposal facilities at take-outs | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Picnic tables at campsites along the river | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Vehicle parking at launch sites | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Campground at Pittsburg Landing | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Boat ramp facilities at Pittsburg Landing | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Restroom facilities at Cache Creek | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Accessible facilities (launches, toilets) for disabled people | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Other facilities: (<i>Please specify</i>) _____ | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

2.2 The following are statements about opportunities and conditions the Forest Service tries to provide on the Scenic section of the Snake River. Please indicate how much you agree or disagree with each statement. (*Circle one answer for each statement.*)

| | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|--|-------------------|----------|---------|-------|----------------|
| The Scenic river provides a wide range of recreation opportunities | -3 | -2 | -1 | 0 | +1 +2 +3 |
| The Scenic Snake is a unique backcountry river | -3 | -2 | -1 | 0 | +1 +2 +3 |
| The Scenic river supports an abundant, unique sport fishery | -3 | -2 | -1 | 0 | +1 +2 +3 |
| The Scenic river provides outstanding opportunities to explore prehistoric and historic sites | -3 | -2 | -1 | 0 | +1 +2 +3 |
| The Scenic river offers power boaters opportunities for a premier four-season whitewater adventure | -3 | -2 | -1 | 0 | +1 +2 +3 |

| | | | | | | | |
|--|----|----|----|---|----|----|----|
| The Scenic river provides one of the best whitewater floating experiences in the Pacific Northwest | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| River management in the Scenic section treats floaters and power boaters equitably | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| The Scenic river provides unique experiences to view wildlife | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| The landscape along the Scenic river is diverse and appealing | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| The Scenic river provides outstanding opportunities for diverse user groups | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| There is very little evidence of human disturbance in Hells Canyon in the Scenic section (outside of developed historic sites) | -3 | -2 | -1 | 0 | +1 | +2 | +3 |

2.3 If you could change one thing about the way the Scenic section of the Snake River in Hells Canyon is managed, what, if anything, would you change?

Why would you make that change?

2.4 Are you aware that there are days in the summer when power boats are not permitted on the Wild section of the Snake River in Hells Canyon (Hells Canyon Dam to Pittsburg Landing)?

- No. (*Skip to Section 3*)
- Yes.

How has this “non-motorized window” affected your experiences on the river?

SECTION 3: YOUR PERCEPTION OF CHANGE ON THE "SCENIC" SEGMENT OF THE SNAKE

- 3.1 Did you boat on the Scenic section of the Snake River in Hells Canyon in 1998 or before?
 No (*Skip to Section 4*)
 Yes

- 3.2 For each of the following items, please indicate whether you think conditions have improved or deteriorated since 1998, or mark "D.K." (don't know). (*Circle one answer for each*)

| | Since 1998, conditions have become... | | | | | | | | | |
|--|---------------------------------------|----|----|----------|----|----|----|-------------|----|------------|
| | Much Worse | -2 | -1 | The Same | 0 | +1 | +2 | Much Better | +3 | Don't Know |
| Historic or cultural sites | -3 | -2 | -1 | 0 | +1 | +2 | +3 | | | D.K. |
| Scenery | -3 | -2 | -1 | 0 | +1 | +2 | +3 | | | D.K. |
| Quality of recreational experiences | -3 | -2 | -1 | 0 | +1 | +2 | +3 | | | D.K. |
| Facilities at launches | -3 | -2 | -1 | 0 | +1 | +2 | +3 | | | D.K. |
| Opportunities to see wildlife | -3 | -2 | -1 | 0 | +1 | +2 | +3 | | | D.K. |
| Livestock impacts | -3 | -2 | -1 | 0 | +1 | +2 | +3 | | | D.K. |
| Opportunities for self-reliance | -3 | -2 | -1 | 0 | +1 | +2 | +3 | | | D.K. |
| Effectiveness of management | -3 | -2 | -1 | 0 | +1 | +2 | +3 | | | D.K. |
| Opportunities for solitude | -3 | -2 | -1 | 0 | +1 | +2 | +3 | | | D.K. |
| Sense of naturalness | -3 | -2 | -1 | 0 | +1 | +2 | +3 | | | D.K. |
| Quality of beach campsites | -3 | -2 | -1 | 0 | +1 | +2 | +3 | | | D.K. |
| The amount of human waste on shore | -3 | -2 | -1 | 0 | +1 | +2 | +3 | | | D.K. |
| Freedom from regulations | -3 | -2 | -1 | 0 | +1 | +2 | +3 | | | D.K. |
| The amount of litter | -3 | -2 | -1 | 0 | +1 | +2 | +3 | | | D.K. |
| Fair treatment of float and power boat users | -3 | -2 | -1 | 0 | +1 | +2 | +3 | | | D.K. |
| Fair treatment of commercial and private boaters | -3 | -2 | -1 | 0 | +1 | +2 | +3 | | | D.K. |
| Opportunities for challenge | -3 | -2 | -1 | 0 | +1 | +2 | +3 | | | D.K. |
| Relationships between float and power boaters | -3 | -2 | -1 | 0 | +1 | +2 | +3 | | | D.K. |

- 3.3 Are there any other changes you have noticed on the Scenic section of the river since 1998?

SECTION 4: SOME INFORMATION ABOUT YOU

- 4.1 Including your recent Hells Canyon trip, how many times in the **last two years** have you taken each of the following types of river trips? (*Enter a number for each of the following or zero if you have never taken that kind of river trip before.*)

*Number of
Trips*

- _____ Power boat trips on the Wild section of Hells Canyon
- _____ Power boat trips on the Scenic section of Hells Canyon
- _____ Power boat trips on other rivers
- _____ Float trips on the Wild section of Hells Canyon
- _____ Float trips on the Scenic section of Hells Canyon
- _____ Float trips on other rivers

- 4.2 Have you ever floated the Snake River in Hells Canyon during the “secondary” use season (after September 10 and before the Friday before Memorial Day)? (*Check all that apply.*)

- No (*Skip to Question 4.3*)
- Yes, I have power boated on the Snake during the secondary use season
- Yes, I have floated on the Snake during the secondary use season

Why did you choose to boat during the secondary use season?

- 4.3 How does the Snake River in Hells Canyon compare to other rivers you may visit for recreation? (*Check one answer.*)

- It is my favorite river to visit
- It is one of my favorite rivers to visit
- It is not one of my favorite rivers
- I don't usually visit rivers for recreation

- 4.4 How would you rate your whitewater boating skill level? (*Check one answer*)

- Novice (No previous boating experience)
- Beginner (Some previous boating experience)
- Intermediate
- Advanced
- Expert

4.5 What class of whitewater do you feel comfortable boating? (*Mark one*)

- Don't know
- Class II
- Class III
- Class IV
- Class V
- Class V+

4.6 What year were you born? _____

4.7 Are you Male or Female? (*Check one*)

4.8 What is the highest level of education you have attained? (*Check one*)

- Some high school
- High school diploma
- Some college
- Bachelor's degree or equivalent
- Master's degree
- Doctorate degree or equivalent

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APPENDIX F: MAIL SURVEY for WILD SECTION

SECTION 1: YOUR RECENT HELLS CANYON TRIP

The following questions refer to your recent Hells Canyon trip when you were contacted by one of our research team. When answering, please think only about the Wild section (Hells Canyon Dam to Pittsburg).

1.1 How did the following conditions compare to what you expected to see? If you didn't have any expectation, mark "NE" (No Expectation).

| | Much Less | | About as Expected | | | Much More | | No Expectation |
|---|-----------|----|-------------------|---|----|-----------|----|----------------|
| | -3 | -2 | -1 | 0 | +1 | +2 | +3 | NE |
| Number of people at the put-in | -3 | -2 | -1 | 0 | +1 | +2 | +3 | NE |
| Number of groups on the river each day | -3 | -2 | -1 | 0 | +1 | +2 | +3 | NE |
| Number of groups camped within sight | -3 | -2 | -1 | 0 | +1 | +2 | +3 | NE |
| Amount of wildlife seen | -3 | -2 | -1 | 0 | +1 | +2 | +3 | NE |
| Wild character of the river | -3 | -2 | -1 | 0 | +1 | +2 | +3 | NE |
| Challenging whitewater | -3 | -2 | -1 | 0 | +1 | +2 | +3 | NE |
| Evidence of livestock | -3 | -2 | -1 | 0 | +1 | +2 | +3 | NE |
| Number of historic or prehistoric sites | -3 | -2 | -1 | 0 | +1 | +2 | +3 | NE |
| Opportunities for high quality fishing | -3 | -2 | -1 | 0 | +1 | +2 | +3 | NE |

1.2 Did the actions of another group or person not in your own group affect your trip either positively or negatively? (*Check one answer.*)

- Yes No

If yes, please explain:

1.3 How did the number of floaters you saw compare to the number you had expected to see? (*Circle one answer.*)

- Far more than Expected
 More than expected
 About as many as expected
 Fewer than expected
 Far fewer than expected
 I had no expectations

1.4 How did the number of power boaters you saw compare to the number you had expected to see? (*Circle one answer*).

Far more than Expected More than expected About as many as expected Fewer than expected Far fewer than expected I had no expectations

1.5 How crowded did you feel when boating on the Wild section of Hells Canyon? (*Circle a number*)

1-----2-----3-----4-----5-----6-----7-----8-----9
 Not at all Slightly Moderately Extremely
 Crowded Crowded Crowded Crowded

If you circled a number “2” or higher, could you please tell us where you felt crowded, and why?

Location: _____

Why? _____

1.6 What activities did you, personally, do on this trip to the Wild section of Hells Canyon? (*Check all that apply*).

- Rafting
- Kayaking
- Wildlife viewing
- Camping
- Picnicking
- Jet boating
- Hiking
- Hunting
- Power boating (prop)
- Swimming
- Fishing
- Visiting cultural/historic sites

1.7 The following are **facilities** you may have noticed on your trip. If you did not notice a facility, circle “NN.” For items you noticed, please indicate if they added to or detracted from your trip. (*Circle one answer for each item.*)

| | Did Not Notice | Detracted From | | | No Effect | | | Added To | |
|--|----------------|----------------|----|----|-----------|----|----|----------|--|
| Outhouses at campsites | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 | |
| Kirkwood Ranch | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 | |
| Navigation markers | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 | |
| Picnic tables at campsites | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 | |
| Resorts and buildings | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 | |
| Information signs and displays | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 | |
| Opportunities for hiking | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 | |
| Historical sites other than Kirkwood Ranch | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 | |
| Pittsburg Landing | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 | |

1.8 The following are conditions you may have noticed on your trip. If you did not notice an item, circle "NN." For items you noticed, please indicate if they added to or detracted from your trip. (*Circle one answer for each item.*)

| | Did not Notice | Detracted from | | | No Effect | | Added To | |
|--|----------------|----------------|----|----|-----------|----|----------|----|
| Historical sites | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| High water levels | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| Low water levels | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| Fluctuating water levels | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| Indian rock art | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| Litter and trash along riverbank | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| Trampled vegetation at campsites | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| Human waste or toilet paper | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| Dog waste | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| Challenging whitewater | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| Seeing wildlife | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| Weeds or thorny plants at campsites | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| Evidence of livestock | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| Impacts to trees or brush from recreational visitors | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| Erosion of river banks | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| Noisy groups | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| Forest Service rangers or staff | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| Camping within sight or sound of another group | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| Waiting for other boaters to pass so you can run rapids | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| Inconsiderate behavior of other boaters at launch sites | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| Area rules/regulations not adequately enforced | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| Uncontrolled dogs | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| People carrying or using firearms | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| Campsites you wanted that were occupied by others | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| People from commercial groups sending boats ahead to claim campsites | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |

| | | | | | | | | |
|---|----|----|----|----|---|----|----|----|
| People from private groups sending boats ahead to claim campsites | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| Encountering power boaters on the river | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| Encountering float boaters on the river | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| Encountering commercial boaters on the river | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| Encountering non-commercial boaters on the river | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 |

1.9 River managers want boaters to have opportunities for self-reliance, challenge, and solitude on the Wild Section of Hells Canyon. The following are management policies or actions that have been taken on the Wild section of Hells Canyon. Please indicate how each has affected your **feelings of self-reliance, challenge, and solitude**.

| | | <u>Effect on opportunities for self-reliance, challenge, solitude</u> | | | | | | | |
|--|----|---|----------------|----|-----------|----|----------|----|--|
| | | Did not Notice | Detracted from | | No Effect | | Added to | | |
| Removal of navigational markers | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 | |
| Removal of picnic tables | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 | |
| Removal of outhouses from campsites | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 | |
| Limits on the number of trips that can launch each day | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 | |
| Prohibiting motorized craft on weekdays in summer (“non-motorized window”) | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 | |
| Prohibition on the use of personal watercraft (jet skis) | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 | |
| Requiring all boaters to use portable toilets & pack out human waste | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 | |
| Requiring all boaters to use fire pans & pack out ashes | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 | |
| Educational briefings for boaters by Forest Service rangers or staff | NN | -3 | -2 | -1 | 0 | +1 | +2 | +3 | |

Are there any other management policies or actions that have affected your opportunities for self-reliance, challenge, and solitude on the Wild Section of Hells Canyon? (Please list and explain their effect.)

1.10 Please indicate how satisfied you were with each of the following during your trip on the Wild section of Hells Canyon.

| | Not at all Satisfied | 1 | 2 | Somewhat | 3 | 4 | Very | 5 | 6 | Extremely Satisfied | 7 |
|--|----------------------|---|---|----------|---|---|------|---|---|---------------------|---|
| Interactions with people in your group | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | | | |
| Behavior of other groups | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | | | |
| The weather and temperature | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | | | |
| Road access to the river | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | | | |
| The number of float trips you saw | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | | | |
| The number of power boat trips you saw | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | | | |
| Other: <i>(Please specify)</i> | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | | | |

1.11 The following are feelings or experiences people sometimes seek on river trips. For each, please indicate how much you hoped to experience it during your trip AND how much you actually felt it on your trip. (Circle two numbers for each item.)

| | How much were you <i>seeking</i> it? | | | | | | | How much did you <i>experience</i> it? | | | | | | | | |
|--|--------------------------------------|---|---|---|---|---|---|--|------------|---|---|---|---|---|---|---|
| | Not at all | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Not at all | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Ability to relax in a peaceful setting | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | |
| Opportunities to see wildlife | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | |
| Scenic views | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | |
| Good fishing opportunities | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | |
| Ability to experience solitude | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | |
| Ability to experience a pristine setting | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | |
| Opportunity to experience challenges | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | |
| Opportunities to see historic or prehistoric sites | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | |
| Time with family or friends | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | |
| Opportunities to see unique geological features | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | | |

SECTION 2: YOUR GENERAL VIEWS ABOUT THE "WILD" SEGMENT OF THE SNAKE RIVER

2.1 We would like to know how you feel about the amount and type of recreation facilities along the river in Hells Canyon. For each of the following facilities, please tell us whether you think that presently there is the right amount of development, too much, or if more is needed. *(Check one answer for each type of facility.)*

| | Right amount | Too much | Need more | Don't know |
|---|-----------------------|-----------------------|-----------------------|-----------------------|
| Information and interpretation signs and displays | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Outhouses at campsites | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Human waste disposal facilities at take-outs | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Picnic tables at campsites along the river | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Vehicle parking at launch sites | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Boat ramp facilities at Hells Canyon Creek launch site | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Visitor Center at Hells Canyon Creek launch site | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Boat ramp facilities at Pittsburg Landing | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Campground at Pittsburg Landing | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Accessible facilities (launches, toilets) for disabled people | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Other facilities: <i>(Please specify)</i> _____ | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

2.2 **The following are statements about opportunities and conditions the Forest Service tries to provide on the Wild section of the Snake River. Please indicate how much you agree or disagree with each statement. *(Circle one answer for each statement.)***

| | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|--|-------------------|----------|---------|-------|----------------|
| The Wild river provides a wide range of recreation opportunities | -3 | -2 | -1 | 0 | +1 +2 +3 |
| The Wild Snake is a unique backcountry river | -3 | -2 | -1 | 0 | +1 +2 +3 |
| The Wild river supports an abundant, unique sport fishery | -3 | -2 | -1 | 0 | +1 +2 +3 |
| The Wild river provides outstanding opportunities to explore prehistoric and historic sites | -3 | -2 | -1 | 0 | +1 +2 +3 |
| The Wild river offers power boaters opportunities for a premier four-season whitewater adventure | -3 | -2 | -1 | 0 | +1 +2 +3 |

| | | | | | | | |
|--|----|----|----|---|----|----|----|
| The Wild river provides one of the best whitewater floating experiences in the Pacific Northwest | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| River management in the Wild section treats floaters and power boaters equitably | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| The Wild river provides unique experiences to view wildlife | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| The landscape along the Wild river is diverse and appealing | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| The Wild river provides outstanding opportunities for diverse user groups | -3 | -2 | -1 | 0 | +1 | +2 | +3 |
| There is very little evidence of human disturbance in Hells Canyon in the Wild section (outside of historic sites) | -3 | -2 | -1 | 0 | +1 | +2 | +3 |

2.3 If you could change one thing about the way the Wild section of the Snake River in Hells Canyon is managed, what, if anything, would you change?

Why would you make that change?

2.4 Are you aware that there are days in the summer when power boats are not permitted on the Wild section of the Snake River in Hells Canyon?

No. (*Skip to Section 3*)

Yes.

How has this “non-motorized window” affected your experiences on the river?

SECTION 3: YOUR PERCEPTION OF CHANGE ON THE "WILD" SEGMENT OF THE SNAKE

- 3.1 Did you boat on the Wild section of the Snake River in Hells Canyon in 1998 or before?
 No (*Skip to Section 4*)
 Yes
- 3.2 For each of the following items, please indicate whether you think conditions have improved or deteriorated since 1998, or mark "D.K." (don't know). (*Circle one answer for each item*)

| | Since 1998, conditions have become... | | | | | | | |
|--|---------------------------------------|----|----------|---|-------------|----|------------|----------------------------|
| | Much Worse | | The Same | | Much Better | | Don't Know | |
| | -3 | -2 | -1 | 0 | +1 | +2 | +3 | <input type="radio"/> D.K. |
| Historic or cultural sites | -3 | -2 | -1 | 0 | +1 | +2 | +3 | <input type="radio"/> D.K. |
| Scenery | -3 | -2 | -1 | 0 | +1 | +2 | +3 | <input type="radio"/> D.K. |
| Quality of recreational experiences | -3 | -2 | -1 | 0 | +1 | +2 | +3 | <input type="radio"/> D.K. |
| Facilities at launches | -3 | -2 | -1 | 0 | +1 | +2 | +3 | <input type="radio"/> D.K. |
| Opportunities to see wildlife | -3 | -2 | -1 | 0 | +1 | +2 | +3 | <input type="radio"/> D.K. |
| Livestock impacts | -3 | -2 | -1 | 0 | +1 | +2 | +3 | <input type="radio"/> D.K. |
| Opportunities for self-reliance | -3 | -2 | -1 | 0 | +1 | +2 | +3 | <input type="radio"/> D.K. |
| Effectiveness of management | -3 | -2 | -1 | 0 | +1 | +2 | +3 | <input type="radio"/> D.K. |
| Opportunities for solitude | -3 | -2 | -1 | 0 | +1 | +2 | +3 | <input type="radio"/> D.K. |
| Sense of naturalness | -3 | -2 | -1 | 0 | +1 | +2 | +3 | <input type="radio"/> D.K. |
| Quality of beach campsites | -3 | -2 | -1 | 0 | +1 | +2 | +3 | <input type="radio"/> D.K. |
| The amount of human waste on shore | -3 | -2 | -1 | 0 | +1 | +2 | +3 | <input type="radio"/> D.K. |
| Freedom from regulations | -3 | -2 | -1 | 0 | +1 | +2 | +3 | <input type="radio"/> D.K. |
| The amount of litter | -3 | -2 | -1 | 0 | +1 | +2 | +3 | <input type="radio"/> D.K. |
| Fair treatment of float and power boat users | -3 | -2 | -1 | 0 | +1 | +2 | +3 | <input type="radio"/> D.K. |
| Fair treatment of commercial and private boaters | -3 | -2 | -1 | 0 | +1 | +2 | +3 | <input type="radio"/> D.K. |
| Opportunities for challenge | -3 | -2 | -1 | 0 | +1 | +2 | +3 | <input type="radio"/> D.K. |
| Relationships between float and power boaters | -3 | -2 | -1 | 0 | +1 | +2 | +3 | <input type="radio"/> D.K. |

- 3.3 Are there any other changes you have noticed on the Wild section of the river since 1998?
-

SECTION 4: SOME INFORMATION ABOUT YOU

- 4.1 Including your recent Hells Canyon trip, how many times in the last two years have you taken each of the following types of river trips? (*Enter a number for each of the following or zero if you have never taken that kind of river trip before.*)

_____ Power boat trips on the Wild section of Hells Canyon
_____ Power boat trips on the Scenic section of Hells Canyon
_____ Power boat trips on other rivers
_____ Float trips on the Wild section of Hells Canyon
_____ Float boat trips on the Scenic section of Hells Canyon
_____ Float trips on other rivers

- 4.2 Have you ever floated the Snake River in Hells Canyon during the “secondary” use season (after September 10 and before the Friday before Memorial Day)? (*Check all that apply.*)
- No (*Skip to Question 4.3*)
 - Yes. I have power boated on the Snake during the secondary use season
 - Yes. I have floated on the Snake during the secondary use season

Why did you choose to boat during the secondary use season?

- 4.3 How does the Snake River in Hells Canyon compare to other rivers you may visit for recreation? (*Check one answer.*)
- It is my favorite river to visit
 - It is one of my favorite rivers to visit
 - It is not one of my favorite rivers
 - I don't usually visit rivers for recreation
- 4.4 How would you rate your whitewater boating skill level? (*Check one answer*)
- Novice (No previous boating experience)
 - Beginner (Some previous boating experience)
 - Intermediate
 - Advanced
 - Expert

4.5 What class of whitewater do you feel comfortable boating? (*Mark one*)

- Don't know
- Class II
- Class III
- Class IV
- Class V
- Class V+

4.6 What year were you born? _____

4.7 Are you Male or Female? (*Check one*)

4.8 What is the highest level of education you have attained? (*Check one*)

- Some high school
- High school diploma
- Some college
- Bachelor's degree or equivalent
- Master's degree
- Doctorate degree or equivalent

Public reporting burden for this collection of information is estimated to average 15 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Department of Agriculture, Clearance Officer, OIRM, Room 404-W, Washington, DC 20250; and to the Office of Management and Budget, Paperwork Reduction Project (OMB #0596-0108), Washington, DC 20503.

APPENDIX G: COVER LETTER FOR MAIL SURVEY (ROUND 1)

August, 2003

Dear Hells Canyon Visitor:

Recently we talked to you during your trip to Hells Canyon and asked if you would be willing to participate in a study of boaters' experiences on the Snake River. Now we're writing to learn more about your trip and other experiences in Hells Canyon.

The information you provide will be given to the Forest Service managers of Hells Canyon so they are aware of the types of experiences people have and any problems they might encounter.

Because we are contacting only a small number of Hells Canyon visitors, it is important that we hear from you so the results will accurately represent the views of all river users. Please give us your views even if this was your first visit to Hells Canyon.

The questionnaire should take about 15 minutes to complete, and we've included a stamped, addressed return envelope for your convenience. Your identity will be kept confidential and your name will never be associated with your responses. Once we are done with this study, we will destroy the list of names and addresses, and they will never be given to anyone outside of this study.

Thank you for your help. As an added incentive to answer and return the survey, we'll enter your name into a drawing to win one of several gift certificates to REI, LL Bean, or Northwest River Supply.

If you have any questions, please contact me at 208 885-9455. Or you can email me at troyh@uidaho.edu.

Sincerely,

Troy Hall
Study Director

APPENDIX H: POSTCARD REMINDER

Dear Hells Canyon Visitor:

Last week I sent you a questionnaire asking about your recent visit to the Snake River in Hells Canyon. This information will be used by the Forest Service to understand the types of experiences boaters have on the river and to ensure that management actions are maintaining high quality river trips.

If you have already completed and returned the survey, then thank you for your help! Your name has been entered into our drawing for gift certificates to REI and LL Bean. If you haven't returned your survey yet, could you please do so today? Because we sent out questionnaires to just a small random sample of Hells Canyon visitors, we need to hear from everyone to make sure all river users' opinions are accurately represented.

If you did not receive the questionnaire or it got misplaced, please call me (208 885-9455) or email me (troyh@uidaho.edu) right away and I'll send another copy. Once again, thanks for your help.

Sincerely,

Troy Hall,
Study Director

APPENDIX I: MAIL SURVEY COVER LETTER (ROUND 2)

Dear Hells Canyon Visitor:

About three weeks ago, I wrote asking about your experiences on the Snake River in Hells Canyon. As of today, we have not received your completed questionnaire.

We're asking for your help to better understand river use in Hells Canyon. This information will be used by the Forest Service to ensure that their management on the river provides the highest quality trips for boaters. We believe that river users like yourself are the best source of information about recreation in Hells Canyon.

I'm writing again because it's important that all questionnaires be returned. You are one of a small group of boaters randomly selected to receive the survey. For our results to be accurate and represent all boaters, we need to hear back from everyone. Even if you visit Hells Canyon rarely it is important that we hear from you.

I'm enclosing another copy of the questionnaire, in case the original one has been misplaced. We hope you'll enjoy giving us your views on what the river has to offer. It should take only about 15 minutes to complete the survey, and we've included a stamped, addressed return envelope. Your identity will remain confidential and your name will not be associated with your responses.

Thanks for your help. Once you send back the survey you'll be entered into a drawing to receive one of several gift certificates to REI or LL Bean.

If you have any questions, please call me at 208 885-9455, or you can email me at troyh@uidaho.edu.

Sincerely,

Troy Hall
Study Director

**APPENDIX J:
WRITTEN RESPONSES TO OPEN-ENDED SURVEY QUESTIONS**

Written Responses for Contact Cards

Trip Experiences

Question 4 (Take-Out Card): What were the high points—best parts—of your river trip? What made it so good?

| Common Themes for Trip High Points | Total Number of Responses (n) | Percent (%) | CJ | CF | PJ | PF |
|---|-------------------------------|--------------|------------|-----------|------------|------------|
| The Whole Trip | 28 | 5.7 | 10 | | 8 | 10 |
| Fishing | 104 | 21.5 | 22 | 4 | 52 | 26 |
| Scenery | 89 | 18.4 | 39 | 10 | 15 | 25 |
| Rapids/Whitewater | 98 | 20.2 | 19 | 22 | 10 | 47 |
| Weather | 17 | 3.5 | 4 | 2 | 4 | 7 |
| Wildlife | 28 | 5.7 | 9 | 1 | 7 | 11 |
| History and Geology | 15 | 3.1 | 12 | | | 3 |
| Quiet/Solitude/NMW | 20 | 4.1 | 1 | 9 | | 10 |
| River Guides/Companionship | 35 | 7.2 | 12 | 6 | 9 | 8 |
| Ways of Experiencing the River and its Features | 24 | 5.0 | 4 | 8 | 2 | 10 |
| General Comments | 26 | 5.4 | 9 | 3 | 6 | 8 |
| Total | 484 | 100.0 | 141 | 65 | 113 | 165 |

| Number | User Type | High Points |
|---|-----------|--|
| The Whole Trip n=36 (CJ=10; PJ=8; PF=18) | | |
| 594 | CJ | going through the canyon, I thought the high mountains on either side of the river |
| 777 | CJ | everything |
| 783 | CJ | everything |
| 848 | CJ | everything |
| 849 | CJ | just going |
| 1190 | CJ | being outdoors, the scenery |
| 1326 | CJ | enjoyed all of the trip |
| 1336 | CJ | the whole trip |
| 1583 | CJ | the whole river was great |
| 1627 | CJ | all of it |
| 364 | PJ | just being here |
| 520 | PJ | good to be out |
| 559 | PJ | good day on the river |
| 622 | PJ | the canyon |
| 636 | PJ | just being outdoors, being with family |
| 707 | PJ | being on the river, wildlife, fishing |
| 1603 | PJ | just being here, not many places left like this |
| 1604 | PJ | whole trip |
| 103 | PF | being away from everything |
| 508 | PF | Just being here & not at work. |
| 544 | PF | everything about the trip |

| | | |
|--|----|--|
| 545 | PF | just getting away |
| 867 | PF | the whole trip |
| 1598 | PF | being on the river |
| 1606 | PF | entire river |
| 1610 | PF | being on the river with good friends |
| 1770 | PF | being on the snake again |
| 1818 | PF | being with family and friends |
| Fishing n=104 (CJ=22; CF=4; PJ=52; PF=26) | | |
| 362 | CJ | fishing |
| 504 | CJ | Good fishing, hunting, weather |
| 521 | CJ | all the fish |
| 525 | CJ | catching fish, visiting with friends and family |
| 529 | CJ | caught 4 fish and very scenic great company |
| 530 | CJ | 2 steelhead |
| 534 | CJ | first 3 hours 4 steelhead |
| 549 | CJ | Plenty of steelhead, beautiful country |
| 551 | CJ | one large fish |
| 554 | CJ | the fishing and guide service |
| 555 | CJ | fishing and guide service |
| 588 | CJ | catching fish |
| 637 | CJ | fishing |
| 639 | CJ | great fishing and scenery, wildlife |
| 689 | CJ | fishing |
| 695 | CJ | catching sturgeon, being on the river |
| 782 | CJ | sturgeon fishing |
| 784 | CJ | boat ride, catching fish |
| 785 | CJ | seeing a sturgeon |
| 843 | CJ | fishing, quiet |
| 844 | CJ | good fishing |
| 880 | CJ | sturgeon fishing |
| 162 | CF | catching a sturgeon |
| 164 | CF | fishing; historic sites |
| 1829 | CF | fishing, whitewater, time with family and friends, seeing wildlife |
| 1830 | CF | catching fish, seeing wildlife |
| 95 | PJ | excellent fishing |
| 353 | PJ | fishing, scenery |
| 363 | PJ | fish, mines |
| 365 | PJ | fish, river |
| 516 | PJ | Catching Fish |
| 519 | PJ | fished with my son, his first trip |
| 522 | PJ | catching a steelhead, friendly ranger, good weather |
| 524 | PJ | catching fish |
| 528 | PJ | fishing and the goats |
| 547 | PJ | Bring in a wild steelhead |
| 548 | PJ | 11 lbs. Steelhead |
| 560 | PJ | fishing |
| 589 | PJ | steelhead |

| | | |
|------|----|---------------------------------------|
| 603 | PJ | Catching lots of steelhead |
| 604 | PJ | fishing |
| 608 | PJ | Catching Fish |
| 609 | PJ | caught fish |
| 610 | PJ | good fishing |
| 611 | PJ | catch fish, beauty of canyon |
| 612 | PJ | catching fish, the whole experience |
| 613 | PJ | good fishing |
| 614 | PJ | caught fish |
| 621 | PJ | fishing results |
| 623 | PJ | fishing, scenery, wildlife |
| 699 | PJ | bass fishing |
| 703 | PJ | fishing, scenery |
| 704 | PJ | great fishing |
| 706 | PJ | bass fishing was good |
| 708 | PJ | fishing |
| 709 | PJ | sturgeon fishing |
| 763 | PJ | bass, sheep, petroglyphs |
| 769 | PJ | fishing |
| 770 | PJ | fishing, scenery |
| 771 | PJ | fishing, rafting, bass, good food |
| 791 | PJ | fishing |
| 845 | PJ | good fishing, quiet, few people |
| 846 | PJ | good fishing, quiet, few people |
| 847 | PJ | lots of bass |
| 856 | PJ | fishing, being with friends, relaxing |
| 857 | PJ | fishing, drinking |
| 858 | PJ | catching sturgeon |
| 859 | PJ | catching sturgeon |
| 876 | PJ | fishing, rapids |
| 878 | PJ | catching sturgeon, scenery, guides |
| 879 | PJ | bass fishing, sturgeon |
| 1592 | PJ | fishing for sturgeon, clean, scenery |
| 1593 | PJ | sturgeon, family time |
| 1600 | PJ | fishing, friends |
| 1602 | PJ | big sturgeon |
| 1801 | PJ | fishing |
| 1807 | PJ | fishing |
| 1814 | PJ | fishing, swimming, sun |
| 175 | PF | fishing and rapids |
| 187 | PF | fishing for smallmouth |
| 511 | PF | Bass Fishing |
| 543 | PF | fishing and friends |
| 692 | PF | sturgeon fishing |
| 786 | PF | fishing, camping, hiking |
| 787 | PF | sturgeon fishing |
| 788 | PF | fishing |
| 793 | PF | bass |

| | | |
|--|----|---|
| 888 | PF | fishing, scenery |
| 889 | PF | fishing |
| 891 | PF | catching sturgeon, rescuing flipped rafters |
| 1612 | PF | fishing, wildlife, whitewater |
| 1613 | PF | sturgeon, bears, good camp cook |
| 1757 | PF | catching fish |
| 1758 | PF | fishing |
| 1760 | PF | fishing, rapids |
| 1761 | PF | fishing |
| 1763 | PF | fishing, scenery |
| 1764 | PF | fishing, company, surroundings |
| 1767 | PF | fishing |
| 1782 | PF | fishing, scenery |
| 1783 | PF | fishing, whitewater |
| 1795 | PF | fishing, drinking |
| 1808 | PF | fishing was good |
| 1832 | PF | fishing |
| Scenery n=89 (CJ=39; CF=10; PJ=15; PF=25) | | |
| 25 | CJ | Scenery, wildlife, weather |
| 121 | CJ | scenery and ride |
| 351 | CJ | scenery |
| 532 | CJ | natural environment, scenery, fishing fair |
| 542 | CJ | beautiful location fantastic fishing |
| 552 | CJ | scenery and wildlife |
| 586 | CJ | the natural beauty, wildlife, fish |
| 593 | CJ | Canyon scenery |
| 598 | CJ | views of the canyon |
| 599 | CJ | scenery, wildlife |
| 601 | CJ | scenery, wildlife-deer, sheep |
| 602 | CJ | Hell's Canyon, scenery |
| 635 | CJ | scenery, catching fish |
| 693 | CJ | scenic views, rapids, cleanliness of beach areas |
| 694 | CJ | scenery, whitewater |
| 697 | CJ | scenery |
| 767 | CJ | the scenery, rapids, boat driver was a lot of fun |
| 779 | CJ | scenery, green hills, fish |
| 789 | CJ | boat trip, scenery and wildlife, rapids |
| 839 | CJ | the scenery, peaceful, quiet |
| 842 | CJ | scenery and fishing |
| 872 | CJ | scenery, wildlife and wildflowers, big water |
| 1182 | CJ | the view overall |
| 1193 | CJ | beautiful cliffs and the water |
| 1194 | CJ | scenic |
| 1319 | CJ | scenery |
| 1320 | CJ | scenery, wildlife, excitement of river |
| 1321 | CJ | scenery, cool water, great captain |
| 1327 | CJ | view, wildlife, history |

| | | |
|------|----|---|
| 1329 | CJ | scenery, wildlife, tour info |
| 1332 | CJ | great views |
| 1340 | CJ | scenery and history |
| 1342 | CJ | scenery |
| 1343 | CJ | scenery and white water, wild country |
| 1584 | CJ | scenery and wildlife, rush creek rapids |
| 1586 | CJ | the scenery, running the rapids |
| 1588 | CJ | various scenery, geology, cultural sites |
| 1628 | CJ | nice scenery, wild |
| 1629 | CJ | beauty of the river |
| 94 | CF | beautiful river; the rapids; limited amt of people |
| 105 | CF | views |
| 106 | CF | scenery; peaceful; guides were nice |
| 122 | CF | scenery |
| 1622 | CF | scenery, rapids |
| 1752 | CF | views in canyon |
| 1754 | CF | beauty of the river |
| 1755 | CF | beauty of canyon, peace and quiet |
| 1785 | CF | natural beauty, silence, wildlife |
| 1809 | CF | scenery, peace and quiet |
| 1810 | CF | beautiful scenery, great friends, all good |
| 467 | PJ | great scenery, good fishing |
| 500 | PJ | The scenery was amazing. Abundant wildlife. Great fishing |
| 515 | PJ | Countryside, the river |
| 550 | PJ | spectacular scenery; enjoyed the rapids |
| 556 | PJ | scenery and fish |
| 606 | PJ | scenic beauty, ability to run power boats. |
| 607 | PJ | Beautiful Scenery, fishing |
| 642 | PJ | scenery, wildlife |
| 700 | PJ | the mountains, river |
| 701 | PJ | scenery, weather, fishing |
| 772 | PJ | scenic view points |
| 792 | PJ | sights, geology, fishing, people |
| 877 | PJ | scenery, fishing and catching sturgeon, weather |
| 1599 | PJ | scenery, fishing, rapids |
| 1839 | PJ | beautiful view |
| 196 | PF | wilderness scenery |
| 343 | PF | beautiful scenery, clean river |
| 346 | PF | scenic views, river |
| 347 | PF | scenery, being in wilderness |
| 350 | PF | beauty of the canyon, wild sheep |
| 354 | PF | beautiful canyon, good rapids |
| 691 | PF | scenery; lack of other boaters/people |
| 850 | PF | scenery, wildlife and rapids |
| 863 | PF | scenery, rapids, comradeship |
| 871 | PF | beautiful canyon, nice weather, rapids |
| 886 | PF | scenery |
| 890 | PF | scenery |

| | | |
|--|----|--|
| 897 | PF | showing friends the canyon |
| 1608 | PF | scenery and company |
| 1609 | PF | great scenery |
| 1611 | PF | scenery, wildlife, clean |
| 1614 | PF | country is pretty |
| 1615 | PF | pristine scenery, granite and wild sheep rapids |
| 1759 | PF | scenery and cold water |
| 1793 | PF | scenery, fishing, solitude |
| 1796 | PF | scenery, first time here |
| 1799 | PF | scenery, warm weather, partying |
| 1816 | PF | beautiful scenery, rapids, wildlife |
| 1823 | PF | friends, beautiful river and scenery |
| 1825 | PF | scenery, water and rapids, wildlife |
| Rapids/Whitewater n=98 (CJ=19; CF=22; PJ=10; PF=47) | | |
| 1 | CJ | Rapids, scenery, the fire in action |
| 184 | CJ | rapids and scenery |
| 352 | CJ | water, rapids |
| 600 | CJ | the rapids |
| 764 | CJ | the rapids, the river and the scenery |
| 765 | CJ | white water was exciting |
| 780 | CJ | whitewater was thrilling |
| 781 | CJ | rapids |
| 790 | CJ | rapids in a jet boat |
| 1186 | CJ | rapids |
| 1188 | CJ | rush creek, my out of boat experience |
| 1189 | CJ | the rapids, geology, the thrill, expanding knowledge |
| 1192 | CJ | rapids |
| 1322 | CJ | rapids |
| 1328 | CJ | rapids, views, wildlife, pristine conditions |
| 1334 | CJ | rapids |
| 1335 | CJ | upper snake rapids |
| 1585 | CJ | the rapids, scenery, safety |
| 1587 | CJ | whitewater |
| 120 | CF | rapids; no jet boats; historic sites |
| 139 | CF | good whitewater |
| 143 | CF | the rapids; good guides |
| 146 | CF | the rapids |
| 150 | CF | the rapids and food |
| 181 | CF | rapids were fun; no noise; pristine environment |
| 774 | CF | wild sheep rapids |
| 775 | CF | rapids, beauty |
| 776 | CF | rapids, seeing the canyon, sturgeon |
| 1620 | CF | the rapids, excitement |
| 1623 | CF | running rapids, the scenery |
| 1624 | CF | rapids |
| 1625 | CF | big rapids |
| 1626 | CF | rapids |

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| 1750 | CF | the rapids and scenery |
| 1751 | CF | exciting rapids, good food |
| 1786 | CF | rapids |
| 1790 | CF | rapids, wildlife |
| 1826 | CF | rapids, fishing |
| 1827 | CF | rapids |
| 1828 | CF | rapids |
| 1831 | CF | rapids, beauty, sturgeon |
| 115 | PJ | running the rapids |
| 127 | PJ | the rapids and fishing |
| 133 | PJ | running granite and sheep rapids |
| 152 | PJ | Ability to run wild sheep and granite rapids |
| 605 | PJ | the river |
| 768 | PJ | thrilling ride through the rapids, scenery |
| 901 | PJ | running rapids, fishing |
| 1594 | PJ | running rapids, catching sturgeon, history, scenery |
| 1838 | PJ | rapids, fishing, view |
| 1840 | PJ | whitewater was thrilling |
| 108 | PF | nice rapids; no jet boats |
| 161 | PF | big water; non-motorized window |
| 192 | PF | when we dumped the dog at granite |
| 197 | PF | rapids; history of the area |
| 198 | PF | running the rapids |
| 341 | PF | warm water and clean up sites |
| 342 | PF | big rapids, |
| 355 | PF | good water, good food, undisturbed nature, wildlife |
| 356 | PF | good rapids, history of area, wildlife |
| 358 | PF | great rapids and wildlife |
| 366 | PF | whitewater, night fishing |
| 367 | PF | rapids, food, weather, no litter |
| 368 | PF | rapids, |
| 506 | PF | The class 4 rapids of course; and the amazing scenery of the canyon. |
| 507 | PF | We rafted the 2 big rapids on our own for the first time successfully. Granite and Wild Sheep. Group comradeship, Bald Eagle, wildlife, whitewater |
| 852 | PF | great rapids |
| 854 | PF | rapids, scenery |
| 855 | PF | water flow, rapids |
| 861 | PF | granite hole--big water |
| 862 | PF | water, people, the outdoors, beer |
| 865 | PF | big water, no people |
| 866 | PF | big rapids, being on the water |
| 884 | PF | whitewater rapids |
| 885 | PF | granite creek and rapids |
| 892 | PF | water flow |
| 894 | PF | the rapids, nature |
| 896 | PF | the rapids, nature |
| 1590 | PF | making it through the rapids, 4 bighorns |
| 1596 | PF | good rapids, decent fishing, nice camps |
| 1597 | PF | rapids, varied weather |

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| 1616 | PF | rapids, excitement |
| 1618 | PF | rough water, friends, weather |
| 1762 | PF | rapids, hiking, fishing |
| 1773 | PF | rapids, clean water, relaxing |
| 1774 | PF | rapids, the campsites, museum at kirkwood |
| 1776 | PF | rapids, fishing |
| 1777 | PF | rapids, undisturbed nature, rattlesnake, deer |
| 1778 | PF | rapids, wildlife, clear water for swimming |
| 1781 | PF | granite and waterspout rapids |
| 1792 | PF | rapids and big water |
| 1794 | PF | going through green room |
| 1797 | PF | granite rapids |
| 1800 | PF | whitewater |
| 1802 | PF | rapids, no jet boats, wilderness |
| 1804 | PF | the water, scenery |
| 1819 | PF | fun rapids, hot sun, scenery |
| 1820 | PF | major rapids |
| Weather n=17 (CJ=4; CF=2; PJ=4; PF=7) | | |
| 531 | CJ | nice day |
| 587 | CJ | weather, animals, fish, food |
| 773 | CJ | nice weather, good fishing |
| 1330 | CJ | good weather, deer |
| 536 | CF | sunshine! Not a drop of rain. Seeing the capsized kayaker make it to shore. The sound of silence |
| 1784 | CF | nice weather, historical sites, NMW |
| 199 | PJ | cool nights; Kirkwood is nice |
| 523 | PJ | good weather, good fishing first day, site seeing |
| 590 | PJ | weather |
| 624 | PJ | nice day, no wind |
| 155 | PF | good weather; good water |
| 159 | PF | great weather; friends |
| 169 | PF | weather; non-motorized days, small groups |
| 505 | PF | The weather, the animals, the birds |
| 513 | PF | Weather was great for October. We saw bears and the river was running high so water was good for riding rapids |
| 870 | PF | nice weather, campsites, guide book, helpful personnel |
| 1769 | PF | nice weather, scenery, history, water |
| Wildlife n=28 (CJ=9; CF=1; PJ=7; PF=11) | | |
| 24 | CJ | wildlife |
| 526 | CJ | saw big horn sheep |
| 584 | CJ | Chukar hunting |
| 585 | CJ | bird hunting |
| 903 | CJ | the canyon, watching wildlife |
| 904 | CJ | the sheep, Kirkwood ranch |
| 1183 | CJ | Seeing wildlife and the cliffs |
| 1315 | CJ | wildlife, stops, good guide, the canyon |
| 1317 | CJ | sheep, fossils, rapids, good guides |
| 1595 | CF | wildlife, rapids in a kayak, good guides |

| | | |
|--|----|--|
| 501 | PJ | Shooting deer close to river. Drinking "Rebel Yell" and howling at the moon. |
| 502 | PJ | Shot deer close to river. Wildlife |
| 503 | PJ | Hunting deer in Oregon. Cougar |
| 512 | PJ | Seeing wildlife |
| 638 | PJ | wildlife |
| 640 | PJ | wildlife, fishing, help from neighbors |
| 705 | PJ | wildlife |
| 348 | PF | wildlife scenery, river rapids |
| 357 | PF | seeing wildlife, running rapids |
| 359 | PF | bears, lack of people |
| 361 | PF | seeing wildlife, no crowds, getting wet a lot |
| 509 | PF | Saw a bear cub and a bald eagle by the put-in |
| 510 | PF | Seeing bears & eagles |
| 851 | PF | bald eagle, big horns, rapids |
| 868 | PF | lots of wildlife, good water, nice people |
| 899 | PF | bear, solitude of canyon |
| 1617 | PF | baby bears |
| 1772 | PF | sheep, rapids, wilderness, Kirkwood ranch |
| History and Geology n=15 (CJ=12; PF=3) | | |
| 596 | CJ | unusual rock formations, fun to see rapids & fly over them |
| 1333 | CJ | tour guide explaining history at stops on river |
| 1325 | CJ | the history, the sights |
| 778 | CJ | looking at the geology, terrain |
| 875 | CJ | history |
| 1331 | CJ | history and people that lived in the canyon |
| 1337 | CJ | history of river and settlers |
| 766 | CJ | history, whitewater |
| 72 | CJ | history; beauty of the area; pristine |
| 1341 | CJ | homesteads on the river |
| 1195 | CJ | geology, boat ride |
| 1185 | CJ | the stops that included historical background |
| 869 | PF | geology, experience and big rapids |
| 83 | PF | Kirkwood ranch |
| 1775 | PF | Kirkwood ranch museum, rapids |
| Quiet/Solitude/NMW n=20 (CJ=1; CF=9; PF=10) | | |
| 15 | CJ | the quiet of river |
| 77 | CF | silence for two days; no jet boats |
| 79 | CF | no power boats; few others on river; guides |
| 82 | CF | not crowded |
| 86 | CF | the natural quiet; beauty |
| 129 | CF | non motorized window; fishing; great guides |
| 1756 | CF | solitude, wildlife, natural beauty, rapids |
| 1835 | CF | peace and quiet |
| 1836 | CF | NMW was nice |
| 1837 | CF | no powerboats |
| 84 | PF | no jet boats; good company |

| | | |
|--|----|---|
| 349 | PF | quiet, solitude, lack of people, floating |
| 369 | PF | no garbage, getting rafting footage |
| 882 | PF | away from civilization, whitewater |
| 898 | PF | the quiet |
| 900 | PF | solitude of canyon |
| 1765 | PF | no jet boats around |
| 1766 | PF | peace, quiet |
| 1779 | PF | secluded and natural setting, clean, wildlife, no jet boats |
| 1824 | PF | peace and quiet, fun rapids, clean |
| River Guides/Companionship $n=35$ (CJ=12; CF=6; PJ=9; PF=8) | | |
| 634 | CJ | a great guide |
| 873 | CJ | instruction from captain, water |
| 874 | CJ | guides and their level of knowledge |
| 902 | CJ | the people on the river |
| 905 | CJ | narrative by captain and crew, scenery, wildlife |
| 1187 | CJ | good guide, float/jet trip |
| 1316 | CJ | the guides |
| 1318 | CJ | lots of info, great guide, enjoyed the stops |
| 1324 | CJ | great guide, good food, fun people |
| 1339 | CJ | good captain and scenery |
| 1631 | CJ | great crew, neat scenery, great rapids |
| 1632 | CJ | great guides, history and points of interest |
| 80 | CF | the food and people; views |
| 178 | CF | other people on the trip; fun rapids |
| 185 | CF | the guide; the river; the scenery |
| 1621 | CF | good guides |
| 1812 | CF | great company |
| 1833 | CF | people, scenery |
| 165 | PJ | all of the different boaters |
| 518 | PJ | Being with friends |
| 537 | PJ | meeting old friends |
| 538 | PJ | good friends |
| 539 | PJ | Friendship |
| 540 | PJ | being with friends. The food and the peacefulness |
| 641 | PJ | company |
| 1591 | PJ | camping with family |
| 1601 | PJ | the company we kept |
| 170 | PF | company; scenery; whitewater |
| 344 | PF | companionship; being outdoors |
| 864 | PF | people, scenery, wildlife |
| 893 | PF | the company we kept |
| 1768 | PF | great camp, friends, NMW |
| 1780 | PF | company we kept |
| 1805 | PF | companionship |
| 1821 | PF | friends, fun rapids |
| Ways of Experiencing the River and Its Natural Features $n=24$ (CJ=4; CF=8; PJ=2; PF=10) | | |

| | | |
|---|----|--|
| 20 | CJ | Up the river and back in one day |
| 592 | CJ | the jet boat ride |
| 840 | CJ | rafting and fishing |
| 841 | CJ | nice camps, bass fishing |
| 142 | CF | swimming; nice people |
| 153 | CF | nights by the river; fishing; pictographs |
| 173 | CF | sleeping outside; scenery; good guides |
| 1753 | CF | clean river, scenery, quiet nights |
| 1787 | CF | rafting the river |
| 1788 | CF | kayaking, rapids, fishing |
| 1813 | CF | nice campsites, |
| 1834 | CF | kayaking |
| 546 | PJ | Great beaches & good water to run boat on |
| 1806 | PJ | rustic nature, primitive sites |
| 345 | PF | navigable river; river; wildlife; sleeping under stars |
| 360 | PF | floating the river, the water |
| 690 | PF | floating through beautiful country |
| 860 | PF | falling out of the raft |
| 881 | PF | on the river |
| 1619 | PF | rafting some big rapids |
| 1771 | PF | nice beaches, NMW |
| 1815 | PF | kayaking, rapids, no jet boats |
| 1817 | PF | excellent camping, great rapids |
| 1822 | PF | rafting, beauty of the canyon, friends and family |
| General Comments n=26 (CJ=9; CF=3; PJ=6; PF=8) | | |
| 22 | CJ | going up Granite Creek instead of Rush Creek |
| 533 | CJ | pine bar tight |
| 558 | CJ | lot of fun |
| 595 | CJ | continuous, ongoing starkly beautiful scenery |
| 597 | CJ | going up Hell's Canyon |
| 1184 | CJ | enjoyed God's great world; his creation |
| 1191 | CJ | courtesy shown to rafters, geology of canyon |
| 1338 | CJ | food, weather and fishing |
| 1630 | CJ | the adventure of going up the snake river |
| 194 | CF | cleanliness of campgrounds; no jet boats |
| 1789 | CF | pristine |
| 1811 | CF | immersion in a new experience |
| 514 | PJ | Hells Canyon Rec. (OR) Yearly trip |
| 517 | PJ | In the canyon |
| 535 | PJ | relaxing, away from city |
| 541 | PJ | beer, scenery |
| 698 | PJ | wilderness and fishing |
| 702 | PJ | we worked |
| 131 | PF | limited crowds |
| 853 | PF | getting dumped |
| 883 | PF | hanging out |
| 887 | PF | food and boat trip |

| | | |
|------|----|---------------------------------|
| 895 | PF | stretch of river, the rapids |
| 1589 | PF | few jet boats |
| 1605 | PF | river, scenic, wildlife, rapids |
| 1798 | PF | beer, drinking |

Question 5 (Take-Out Card): What were the low points—worst parts—of your river trip? What made it so bad?

| Common Themes for Trip Low Points | Total Number of Responses (n) | Percent (%) | CJ | CF | PJ | PF |
|------------------------------------|-------------------------------|--------------|------------|-----------|-----------|------------|
| None/Nothing | 198 | 47.4 | 84 | 25 | 41 | 48 |
| Other User Types/Interactions | 39 | 9.3 | 1 | 13 | 4 | 21 |
| Weather | 56 | 13.4 | 10 | 6 | 15 | 25 |
| Crowding on the River/Launches | 10 | 2.4 | 1 | 2 | 2 | 5 |
| Facilities/Amenities | 31 | 7.4 | 2 | 4 | 8 | 17 |
| Ending the Trip | 17 | 4.1 | 4 | 5 | 4 | 4 |
| Fishing/Wildlife Viewing | 30 | 7.2 | 6 | 4 | 14 | 6 |
| Litter/Human Waste | 8 | 1.9 | 1 | | 1 | 6 |
| Forest Service Presence/Management | 8 | 1.9 | 4 | | 2 | 2 |
| Water Level Fluctuation | 6 | 1.4 | | 1 | 1 | 4 |
| Insects | 7 | 1.7 | | 1 | 2 | 4 |
| Mechanical Problems/Injury | 8 | 1.9 | 1 | | 5 | 2 |
| Total | 418 | 100.0 | 114 | 61 | 99 | 144 |

| Number | User Type | Low Points |
|--|-----------|--|
| None/Nothing n=198 | | |
| n=84 | CJ | none/nothing |
| n=25 | CF | none/nothing |
| n=41 | PJ | none/nothing |
| n=48 | PF | none/nothing |
| Other User Types/Interactions n=39 (CJ=1; CF=13; PJ=4; PF=21) | | |
| 905 | CJ | a disgruntled passenger |
| 86 | CF | jet boats disrupting solitude |
| 105 | CF | power boats |
| 185 | CF | jet boats |
| 536 | CF | seeing our kayaker clinging to his kayak, sounds of jet boats coming nearer. The large passenger jet boats seldom slowed for us, the raft and kayak. The permit required was not visible from boat, we recovered a ticket for not having a fire permit |
| 774 | CF | seeing powerboats, noise |
| 775 | CF | jet boats, sound of engines |
| 1623 | CF | jet boats were annoying |
| 1754 | CF | jet boats |
| 1785 | CF | jet boats |
| 1827 | CF | teenagers, jet boats |

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| 1828 | CF | teenagers, jet boats |
| 1833 | CF | power boats |
| 1837 | CF | seeing power boats |
| 127 | PJ | float boats sometimes |
| 605 | PJ | rafters |
| 612 | PJ | disgruntled bank fishermen |
| 846 | PJ | rude jet boaters, rubbish and feces in campsites |
| 131 | PF | jet boats |
| 159 | PF | jet boats |
| 169 | PF | mail boat had no courtesy to slow down |
| 343 | PF | jet boats |
| 347 | PF | could do without power boats |
| 349 | PF | jet boats |
| 350 | PF | jet boats (not all that bad though) |
| 509 | PF | Had to watch a bunch of jet boaters shoot at deer from the beach. No choice, they did it as we floated by. |
| 545 | PF | the only low point was all of the noisy, stupid jet boats |
| 897 | PF | boat not slowing to no wake speed |
| 899 | PF | jet boats |
| 900 | PF | jet boats |
| 1589 | PF | jet boats didn't slow down to reduce wake |
| 1609 | PF | rude riverboat drivers |
| 1762 | PF | jet boats |
| 1763 | PF | jet boats |
| 1766 | PF | jet boats |
| 1777 | PF | stopping to take this survey, powerboats |
| 1780 | PF | negative encounter with another boater |
| 1802 | PF | jet boats |
| 1816 | PF | jet boats |
| Weather n=56 (CJ=10; CF=6; PJ=15; PF=25) | | |
| 555 | CJ | heat |
| 593 | CJ | cold weather |
| 764 | CJ | no sun |
| 767 | CJ | overcast, would have enjoyed sun |
| 779 | CJ | cloudy, cool |
| 839 | CJ | the rain |
| 843 | CJ | rain |
| 1339 | CJ | rain |
| 1340 | CJ | rain |
| 1588 | CJ | high temps |
| 146 | CF | hot sun |
| 776 | CF | rain |
| 1622 | CF | rain storms and power boats |
| 1787 | CF | heat of the day, insects |
| 1788 | CF | heat, poison ivy |
| 1829 | CF | heat and insects |
| 364 | PJ | weather wasn't great |
| 589 | PJ | cold |

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| 609 | PJ | cold |
| 613 | PJ | cold, wet! |
| 636 | PJ | it rained |
| 705 | PJ | rain |
| 706 | PJ | rain |
| 792 | PJ | weather |
| 856 | PJ | weather |
| 1591 | PJ | rain got the gear wet |
| 1594 | PJ | raining |
| 1600 | PJ | wind, rowing |
| 1601 | PJ | wind |
| 1602 | PJ | wind |
| 1838 | PJ | hot weather |
| 368 | PF | rain |
| 543 | PF | nothing, a little rain |
| 850 | PF | weather |
| 851 | PF | rain |
| 854 | PF | rain storms |
| 855 | PF | rain |
| 861 | PF | rain |
| 863 | PF | couple of rain storms |
| 864 | PF | weather could have been better |
| 868 | PF | rain |
| 892 | PF | rain, boat waking us |
| 893 | PF | rain |
| 894 | PF | rain |
| 898 | PF | weather |
| 1590 | PF | heavy rain and high water |
| 1597 | PF | rain |
| 1598 | PF | being cold, rain |
| 1607 | PF | rain and wind |
| 1608 | PF | weather, rain |
| 1611 | PF | rain |
| 1613 | PF | rain |
| 1619 | PF | getting sun-burned |
| 1796 | PF | very hot weather |
| 1808 | PF | very hot weather |
| 1822 | PF | hot weather |
| Crowding on the River/Launches $n=10$ (CJ=1; CF=2; PJ=2; PF=5) | | |
| 530 | CJ | too many people, too many boats |
| 162 | CF | too many big jet boats |
| 1813 | CF | crowded launch |
| 152 | PJ | float boater congestion at boat ramp; ramp condition and appropriateness for boats |
| 527 | PJ | crowd |
| 192 | PF | too many big jet boats |
| 786 | PF | meeting people on ramp bugging you |
| 871 | PF | many jet boats |

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|---|----|---|
| 1772 | PF | crowded launch |
| 1778 | PF | high human activity, jet boats, riverside homes |
| Facilities/Amenities $n=31$ (CJ=2; CF=4; PJ=8; PF=17) | | |
| 15 | CJ | lack of facilities available |
| 521 | CJ | stinky bathrooms |
| 80 | CF | bathroom at Pittsburg landing |
| 153 | CF | I'm still alive; restrooms at Pittsburg |
| 1621 | CF | no restroom facilities |
| 1755 | CF | lack of shade at campsites |
| 115 | PJ | ramp at HCC is too small; hard to launch rafts at low water |
| 199 | PJ | handy cap access |
| 546 | PJ | Boat launch needs to be redone |
| 560 | PJ | boat launch |
| 590 | PJ | no toilets above Cache Creek |
| 768 | PJ | lack of restrooms |
| 769 | PJ | needing to use restroom |
| 1814 | PJ | no campfires |
| 84 | PF | no sandy beaches |
| 155 | PF | bathroom at Pittsburg landing |
| 161 | PF | no toilets |
| 197 | PF | no toilets |
| 345 | PF | washroom facilities; river rage from jet boaters |
| 348 | PF | lack of toilets |
| 510 | PF | Rocky camps |
| 511 | PF | No water in campground |
| 1616 | PF | bathroom facilities |
| 1758 | PF | less camps with sand, commercial tours |
| 1760 | PF | campsites too far from river |
| 1767 | PF | no tables at campsites |
| 1771 | PF | no outhouses |
| 1774 | PF | lack of restrooms |
| 1775 | PF | rocky beaches |
| 1799 | PF | no outhouses |
| 1820 | PF | campsites hard to get to |
| Ending the Trip $n=17$ (CJ=4; CF=5; PJ=4; PF=4) | | |
| 121 | CJ | trip not long enough |
| 902 | CJ | having to come back |
| 1322 | CJ | going back |
| 1586 | CJ | trip ended |
| 1620 | CF | ending the trip |
| 1784 | CF | end of the trip |
| 1811 | CF | ending the trip |
| 1826 | CF | getting here and ending the trip |
| 1831 | CF | the end |
| 500 | PJ | Too short of trip |
| 518 | PJ | going home |

| | | |
|--|----|--|
| 702 | PJ | having to leave |
| 1806 | PJ | leaving |
| 108 | PF | going home |
| 890 | PF | going home |
| 1779 | PF | ending the trip |
| 1783 | PF | having to leave |
| Fishing/Wildlife Viewing n=30 (CJ=6; CF=4; PJ=14; PF=6) | | |
| 525 | CJ | not catching fish |
| 526 | CJ | no steelhead on my pole |
| 552 | CJ | not enough fish |
| 554 | CJ | not enough fish |
| 585 | CJ | fish and game wasting money to fly overhead to watch our group hunting |
| 637 | CJ | no fish |
| 1750 | CF | like to see more wildlife |
| 1751 | CF | more wildlife |
| 1753 | CF | more wildlife |
| 1812 | CF | few trout |
| 130 | PJ | No rams |
| 133 | PJ | No rams |
| 363 | PJ | not as many sturgeon as there used to be |
| 515 | PJ | no fish |
| 520 | PJ | no fish |
| 522 | PJ | not eating a steelhead |
| 604 | PJ | Haven't caught a fish yet |
| 621 | PJ | lost my pole |
| 641 | PJ | no fish |
| 642 | PJ | bad fishing |
| 703 | PJ | bad salmon fishing |
| 707 | PJ | didn't catch enough fish |
| 709 | PJ | sturgeon got away |
| 1593 | PJ | losing fish |
| 356 | PF | lousy fishing |
| 366 | PF | no trout |
| 367 | PF | no trout |
| 505 | PF | Watching hunters get off their boat and shoot a buck we had stopper to look at |
| 506 | PF | The mix of hunting and scenic use of the river & canyon creates conflict; different expectations of the intended use of public spaces can frustrate people |
| 507 | PF | Saw a buck we had been watching get shot at... We don't know if it was killed but it was not a pleasant thing. |
| Litter/Human Waste n=8 (CJ=1; PJ=1; PF=6) | | |
| 841 | CJ | trash around camps and outhouses |
| 845 | PJ | lack of use of portable toilets, radios |
| 342 | PF | finding human waste on the beaches |
| 344 | PF | sanitation |
| 690 | PF | coral creek was dirty camp |
| 691 | PF | corral creek was trashed |
| 862 | PF | cigarette butts and jet boats |

| | | |
|---|----|---|
| 889 | PF | lots of cigarette butts and micro-trash |
| Forest Service Presence/Management $n=8$ (CJ=4; PJ=2; PF=2) | | |
| 599 | CJ | visitor center was closed |
| 600 | CJ | you weren't home at Hells Canyon NRA |
| 842 | CJ | bad interaction with FS employee at Pittsburg landing; was rude |
| 1342 | CJ | Forest Service management |
| 541 | PJ | having to check in |
| 857 | PJ | negative interaction with FS employee at Pittsburg |
| 359 | PF | salt creek cabin burned |
| 870 | PF | poor trail maintenance at granite falls |
| Water Level Fluctuation/Current $n=6$ (CF=1; PJ=1; PF=4) | | |
| 1626 | CF | slow current |
| 95 | PJ | water fluctuations; inconsiderate rafters at boat launch |
| 187 | PF | fluctuating river levels |
| 1606 | PF | slow current |
| 1776 | PF | flat water |
| 1832 | PF | raft high and dry, low water |
| Insects $n=7$ (CF=1; PJ=2; PF=4) | | |
| 142 | CF | bugs and spiders; jet boats |
| 502 | PJ | Flies, they were everywhere |
| 901 | PJ | bugs |
| 360 | PF | spiders and bugs |
| 1596 | PF | spiders, wind |
| 1773 | PF | big spiders, ramp at put-in was too small |
| 1817 | PF | spiders, rocky paths |
| Mechanical Problems/Injury $n=8$ (CJ=1;PJ=5; PF=2) | | |
| 584 | CJ | blisters on foot |
| 516 | PJ | hitting a rock |
| 519 | PJ | kicker motor problem |
| 608 | PJ | Battery Problems with boat |
| 640 | PJ | our battery failed |
| 1839 | PJ | boat broke |
| 358 | PF | got sick |
| 1617 | PF | burned by the Dutch oven |

Written Comments from Wild and Scenic Surveys

Visitor Characteristics

Question 4.2: Why did you choose to boat during the secondary use season?

| Scenic Segment | CJ | CF | PJ | PF | Total |
|----------------|----|----|----|----|-------|
|----------------|----|----|----|----|-------|

| | | | | | |
|-------------------------------|----|----|----|----|----|
| Both Power Boated and Floated | 1 | 1 | 7 | | 9 |
| Floated | 3 | | | 6 | 9 |
| Power Boated | 13 | | 49 | | 62 |
| Wild Segment | | | | | |
| Both Power Boated and Floated | | 1 | 3 | 10 | 14 |
| Floated | 1 | 11 | | 55 | 67 |
| Power Boated | 12 | 2 | 20 | 6 | 40 |

Scenic Segment:

| Number | User Type | Why User Chose to Boat in the Secondary Season |
|---|-----------|---|
| Both Power Boated and Floated n=9 (CJ=1; CF=1; PJ=7) | | |
| 639 | CJ | Hunting and fishing |
| 536 | CF | No permit/Less people |
| 278 | PJ | Chukars/Fishing |
| 698 | PJ | Fewer people and better fishing |
| 758 | PJ | Hunting/Fishing |
| 804 | PJ | Chukar season |
| 1256 | PJ | Hunting, fishing, being in the canyon |
| 1526 | PJ | No people |
| 1709 | PJ | Cause I didn't need a permit |
| Floated n=9 (CJ=3; PF=6) | | |
| 320 | CJ | No permit required |
| 694 | CJ | Cabin fever |
| 840 | CJ | No permit |
| 57 | PF | Fewer people and boats |
| 468 | PF | Fit in schedule, less people |
| 469 | PF | No permit required; less people |
| 471 | PF | No permit required |
| 543 | PF | No reason, fishing |
| 737 | PF | I had time, avoided crowds, no permit |
| Power Boated n=62 (CJ=13; PJ=49) | | |
| 553 | CJ | Fishing |
| 554 | CJ | Fishing |
| 564 | CJ | Better weather, less people, chukar hunting and fishing |
| 566 | CJ | Steelhead fishing |
| 596 | CJ | That's when my cruise was scheduled |
| 598 | CJ | Lindbald tour |
| 600 | CJ | Hosted a UCLA trip |
| 627 | CJ | Guided steelhead trip |
| 635 | CJ | Fishing |
| 668 | CJ | Worked with the schedule |
| 744 | CJ | Prime fishing opportunities |
| 816 | CJ | Fishing |
| 1324 | CJ | Family reunion |
| 27 | PJ | Fishing |
| 33 | PJ | Hunting/Fishing |
| 35 | PJ | Fishing |
| 39 | PJ | Fishing/cooler |

| | | |
|------|----|--|
| 41 | PJ | Time |
| 51 | PJ | Fish/relax |
| 252 | PJ | That is how we use it |
| 257 | PJ | Fishing |
| 262 | PJ | Fishing/Whitewater wild |
| 264 | PJ | Fishing/Hunting |
| 282 | PJ | We could |
| 283 | PJ | Fishing |
| 287 | PJ | You can go anytime you want! |
| 292 | PJ | Because we have cabins in Hells Canyon |
| 487 | PJ | Less regulation, less people |
| 490 | PJ | Fishing, hunting, river running |
| 498 | PJ | Fishing |
| 620 | PJ | Fishing |
| 621 | PJ | Fishing and time |
| 644 | PJ | Like the spring and fall in the canyon |
| 704 | PJ | Fishing |
| 726 | PJ | Fishing |
| 741 | PJ | Cooler |
| 743 | PJ | No restrictions; enjoy river all seasons |
| 792 | PJ | That when the group of friends could make it |
| 795 | PJ | Fishing |
| 845 | PJ | I use the river almost year round |
| 846 | PJ | Fishing and privacy |
| 1206 | PJ | Why not? |
| 1222 | PJ | Too cold for me to raft; I like warm weather |
| 1241 | PJ | Fishing opportunities |
| 1247 | PJ | I boat all year round, season doesn't matter |
| 1257 | PJ | Nice weather |
| 1258 | PJ | Steelhead fishing |
| 1491 | PJ | Steelhead fishing |
| 1499 | PJ | Fishing |
| 1501 | PJ | Went with friends to their cabin |
| 1502 | PJ | Don't need a permit |
| 1513 | PJ | We own a boat but also love rafting |
| 1531 | PJ | Don't need a permit |
| 1540 | PJ | Fishing/hunting access |
| 1553 | PJ | Fishing |
| 1562 | PJ | Fishing; less people on river |
| 1633 | PJ | Fishing for steelhead |
| 1706 | PJ | Quieter place with less users |
| 1708 | PJ | Didn't have to have a permit and had time |
| 1748 | PJ | Steelhead fishing |
| 1749 | PJ | Fishing and camping |
| 1807 | PJ | Bird hunting |

Wild Segment:

| Number | User Type | Why User Chose to Boat in the Secondary Season |
|---|-----------|--|
| Both Power Boated and Floated n=14 (CF=1; PJ=3; PF=10) | | |
| 1367 | CF | Because its heaven in Hells Canyon |
| 815 | PJ | It just worked out that way |
| 1239 | PJ | Chukar hunting and steelhead season and less float boats` |
| 1591 | PJ | Cool weather hunting and fishing |
| 354 | PF | Opportunity without a permit |
| 359 | PF | Wildlife, fishing and work |
| 444 | PF | Second chance to float then a trip for steelhead fishing |
| 453 | PF | No permits required, great weather |
| 1380 | PF | Recreation purposes, fishing and hunting |
| 1402 | PF | Water level; no permit required |
| 1612 | PF | To enjoy the canyon without the regulation of a permit |
| 1687 | PF | Hunting, fishing, cooler weather |
| 1688 | PF | Why stop recreating |
| 1771 | PF | Steelhead fishing on powerboat and didn't get float trip permit during lottery |
| Floated n=67 (CJ=1; CF=11; PF=55) | | |
| 1044 | CJ | Because my parents had a draw and I wasn't able to go |
| 80 | CF | Convenience |
| 128 | CF | When people wanted to. |
| 167 | CF | Cooler weather and guide availability |
| 200 | CF | High water |
| 401 | CF | College orientation |
| 409 | CF | Planned through school |
| 424 | CF | Less crowded and weather not as hot. |
| 427 | CF | I always prefer September/October months |
| 429 | CF | Less tourists |
| 1095 | CF | Fit with family schedule |
| 1109 | CF | The commercial guide we use were free to run another trip then |
| 132 | PF | Hunting |
| 156 | PF | Easier access and ability to get on the river |
| 218 | PF | Fall fishing, less crowded |
| 219 | PF | Did not need a permit |
| 236 | PF | Sometimes less crowded and can go as often as I like |
| 247 | PF | Easier to get on river |
| 350 | PF | Much better, solitude |
| 357 | PF | Didn't have to draw a permit |
| 358 | PF | No permit needed |
| 368 | PF | Didn't draw a permit |
| 430 | PF | Summer goes fast doesn't it? |
| 431 | PF | Unsuccessful permit application during summer; less crowded in fall; no permit necessary |
| 432 | PF | Haven't ever gotten the permit for 3 years; September is a great time to float anyway |
| 434 | PF | Didn't have a permit and wanted relatives to experience the river |
| 437 | PF | Didn't need a permit |
| 443 | PF | Wasn't awarded a permit during summer season |
| 448 | PF | Friends invited me |
| 450 | PF | No permit wait |

| | | |
|---|----|---|
| 454 | PF | No permit required, there was water, to fish and hunt chukars |
| 459 | PF | No permit required |
| 460 | PF | We didn't draw from the lottery, like the weather in October |
| 461 | PF | Didn't need a permit |
| 506 | PF | Fewer boaters, quieter, weather still quite nice |
| 507 | PF | Beautiful time of year--has become our tradition |
| 508 | PF | Busy during the summer with the forest service, no permit needed in fall |
| 510 | PF | Enjoy being on the river at that time of year |
| 690 | PF | Didn't have permit; wanted to float |
| 691 | PF | Less river traffic |
| 692 | PF | No people on river |
| 788 | PF | Don't need a reservation |
| 850 | PF | Peaceful, good weather |
| 853 | PF | Convenience |
| 868 | PF | One of the few floats you can do in the fall |
| 893 | PF | Cast and blast tribe |
| 897 | PF | Hunting and fishing |
| 1007 | PF | Early spring and I had cabin fever |
| 1013 | PF | Tradition |
| 1181 | PF | No permit needed |
| 1187 | PF | Good weather |
| 1307 | PF | So the guys could hunt chukars and we didn't draw a permit |
| 1312 | PF | Did not draw a permit |
| 1400 | PF | I was in the area |
| 1404 | PF | Timing for group |
| 1406 | PF | Less traffic |
| 1414 | PF | No permit |
| 1634 | PF | Because that's when my friends went and the weather is nice |
| 1642 | PF | Something new |
| 1657 | PF | No permit required; can go at this time |
| 1661 | PF | No permit |
| 1663 | PF | Didn't need a permit; one last chance to be on the river |
| 1667 | PF | Its beautiful; sturgeon fishing |
| 1691 | PF | That's when the trip leader wanted to go |
| 1699 | PF | Don't need a permit |
| 1780 | PF | Guided a commercial float |
| 1823 | PF | For recreation and fishing |
| Power Boated n=40(CJ=12; CF=2; PJ=20 PF=6) | | |
| 124 | CJ | Steelhead fishing |
| 328 | CJ | Only time available for us |
| 376 | CJ | Weather wasn't great |
| 381 | CJ | Fit schedule determined by other commitments |
| 384 | CJ | Part of the Lewis and Clark trail; planned vacation |
| 464 | CJ | In September for low water and bigger rapids |
| 465 | CJ | Time to get off at work |
| 695 | CJ | Fishing- took friends to see the canyon |
| 732 | CJ | Steelhead and bass fishing; hunting deer and birds all of which are during the secondary season |
| 974 | CJ | Didn't; just happened to get there then |

| | | |
|------|----|--|
| 976 | CJ | Didn't; it was when we traveled there |
| 1040 | CJ | Fishing |
| 201 | CF | Hunting and fishing |
| 426 | CF | I'm a guide |
| 314 | PJ | Fewer people, cooler, hunting birds |
| 319 | PJ | Less regulations and fewer people |
| 325 | PJ | Good fishing, not as many people. |
| 326 | PJ | Good fishing, didn't have to apply for permit |
| 327 | PJ | To fish, camp, and relax |
| 332 | PJ | Fishing, whitewater boating, scenery |
| 333 | PJ | Fishing |
| 334 | PJ | Cooler weather and less crowded. |
| 335 | PJ | Its our spring trip |
| 337 | PJ | Less crowded and weather not as hot. |
| 503 | PJ | Oregon hunting season |
| 512 | PJ | Hunting season, steelhead |
| 574 | PJ | Fishing |
| 612 | PJ | Fishing with no day restrictions |
| 651 | PJ | Why wait for summer? |
| 746 | PJ | I like the area |
| 857 | PJ | It was a way to bypass the permit system |
| 879 | PJ | Fishing opportunities |
| 1303 | PJ | Great hunting and fishing, less summer recreation people |
| 1490 | PJ | Fishing, enjoy the canyon, sight seeing, tours |
| 91 | PF | Jet boats more available |
| 93 | PF | More flexible scheduling for jet back and less users |
| 248 | PF | Easy to get on river |
| 1089 | PF | For the fishing and hunting |
| 1448 | PF | Colder weather |
| 1614 | PF | Invited by friends |

Concerning Social Conditions on the River

Question 1.2: Did the actions of another group or person not in your group affect your trip either positively or negatively?

| Common Themes for Social Conditions on the River | Total Number of Responses (n) | Percent (%) | CJ | CF | PJ | PF |
|---|--------------------------------------|--------------------|-----------|-----------|-----------|-----------|
| General Positive Comments | 14 | 15.2 | 4 | 1 | 7 | 2 |
| Positive Interactions between Users | 17 | 18.5 | 6 | | 8 | 3 |
| General Negative Comments | 9 | 9.8 | 2 | | 7 | |
| Negative Interactions between Users | 13 | 14.1 | | | 12 | 1 |
| Inconsiderate Behavior on the River | 18 | 19.6 | 3 | 1 | 11 | 3 |
| Behavior at Launches | 5 | 5.4 | | | 5 | |
| Feeling Crowded | 10 | 10.9 | 1 | 2 | 7 | |
| Impacts to Solitude | 6 | 6.5 | | 3 | | 3 |
| Total | 92 | 100.0 | 16 | 7 | 57 | 12 |

Scenic Segment:

| Number | User Type | Comment |
|--|-----------|---|
| General Positive Comments n=14 (CJ=4; CF=1; PJ=7; PF=2) | | |
| 533 | CJ | Other boats were good to have around |
| 664 | CJ | Brother and wife visiting from Montana |
| 673 | CJ | Very positive experience |
| 1579 | CJ | Liked the way the locals all seemed to know and watch out for each other; loved squirt guns |
| 965 | CF | A jet boat full of topless women made my day |
| 282 | PJ | I was impressed at how friendly and courteous other boaters and rafters were; they seemed proud of the area and excited to share it. |
| 546 | PJ | Most boaters and rafters get along but there's always a bad apple. |
| 648 | PJ | First jet boat experience and loved it all |
| 1544 | PJ | We've been either floating or power boating in Hells Canyon for the last 20yrs; everything was and is as expected |
| 1555 | PJ | The way boaters help each other is excellent |
| 1713 | PJ | We're fortunate to have relatives with a cabin on the river and a jet boat so we do not use the Camping facilities nor do we raft but we have a great time and it's beautiful and wonderful |
| 1720 | PJ | Larry Knewbow was very courteous and knowledgeable of the river |
| 28 | PF | We had an excellent rower who knew the river well |
| 543 | PF | Friendly; inexperienced |
| Positive Interactions n=17 (CJ=6; PJ=8; PF=3) | | |
| 481 | CJ | Fishermen provided information |
| 657 | CJ | Few groups but those we met were pleasant and friendly |
| 765 | CJ | People at historic sites were very informative |
| 828 | CJ | Watched a large boat pull in a sturgeon |
| 1341 | CJ | Everyone was very polite and waited their turn to move up or down stream; slowed down when passing |
| 1573 | CJ | They were having fun just like us and friendly when we met them on the beaches |
| 48 | PJ | Everyone was very polite; cache creek ranger (Mark) is a wonderful young man, very helpful; some rafters were rude. |
| 60 | PJ | Spoke with several other boaters/campers; everyone was friendly and polite, making for a positive experience |
| 61 | PJ | Rescued 14 floaters (positive) |
| 250 | PJ | Met two families rafting on the river for a full week; learned their experiences and adventures. |
| 259 | PJ | Nice people told good fishing spots |
| 751 | PJ | My first time, everyone was friendly and helpful |
| 1216 | PJ | Good conversation, meeting people who love the river the same as I do |
| 1503 | PJ | Rafters and jet boaters were cordial with one another |
| 979 | PF | We met some new friends who were on another boating permit |
| 1496 | PF | They (jet boaters) served as guides on how to handle the green room |
| 1805 | PF | Jet boats that slowed down to maximum wake speed before passing raft and kayaks |
| General Negative Comments n=9 (CJ=2; PJ=7) | | |
| 1333 | CJ | Another group drinking gin or vodka; wondered about safety of people |
| 1350 | CJ | A child afraid of the water |
| 36 | PJ | Cocky rafters |
| 298 | PJ | Having to cater to the rafters like we are trespassing on their water. |
| 499 | PJ | Guide trips, we catch a lot of fish with barbed and barbless hooks and some had the entire lead and hook setup. This crap bothers me. |

| | | |
|---|----|---|
| 589 | PJ | Excessive hunting and fishing—extremely busy landing |
| 645 | PJ | Too many law officers around |
| 1553 | PJ | We left camp for a while and when we returned, some rafters had stolen our portable BBQ and grill. |
| 1814 | PJ | Saddened to hear about how little support the host had at the Kirkwood Ranch; boaters were passing too fast |
| Negative Interactions/Conflicts n=13 (PJ=12; PF=1) | | |
| 41 | PJ | I get mad when a group of 5 rafts tied together wants a power boat to slow down which makes a bigger wake than staying on plane and saving fuel. |
| 720 | PJ | Got a ticket from Oregon fish and game and left us beached from the dam being lowered over night |
| 756 | PJ | Rafters were not friendly |
| 804 | PJ | Unfriendly floaters |
| 1222 | PJ | Rafters are not nice people; obscene gestures toward boaters |
| 1238 | PJ | Slowing down for rafters |
| 1247 | PJ | A few problems with one group of rafters that were rude |
| 1258 | PJ | We were in a jet boat; there was one group of rafters that gave us the finger and waved us off; thought they were rude and ignorant. |
| 1513 | PJ | Rafters were very rude at Heller Bar; tried to fight; would take up to 2 hours or more |
| 1725 | PJ | One older group of rafters were very rude with comments about jet boaters |
| 1742 | PJ | Other boaters we met on beaches were friendly and helped us see things we would have missed; rafters were not friendly |
| 1745 | PJ | Commercial outfitter who was quite pushy about campsites on the river |
| 983 | PF | A few jet boaters seemed hostile toward rafts |
| Inconsiderate Behavior on River n=18 (CJ=3; CF=1; PJ=11; PF=3) | | |
| 10 | CJ | Inconsiderate actions of other tour boats as it relates to other rafters and boaters on shore |
| 220 | CJ | Commercial jet boats washed our rafts off the beach numerous times |
| 693 | CJ | Some rafters moon and flip off passengers |
| 536 | CF | Some rafters were rude to us |
| 38 | PJ | A group at Pittsburg Landing campground was using a lot of profanity, very loud, obviously drunk. |
| 266 | PJ | Rafters with small engines would give us the finger when we passed them down river; if they have an engine then they're a power boat. |
| 273 | PJ | Mooned by floaters |
| 292 | PJ | Some rafters flipped us off for not completely powering back when going by them. |
| 353 | PJ | Beamers boat created a large wake that slammed our tied up boat into rocks on shore |
| 535 | PJ | Some rafters used vulgar sign language |
| 705 | PJ | Tour boats created huge waves that crashed over our transom and into the boat |
| 846 | PJ | Filthy campsites; discourteous power boaters who will not reduce speed when passing floaters and other boats tied to rocks |
| 1229 | PJ | A little noise down river |
| 1249 | PJ | Wakes from tour boats are ridiculous |
| 1729 | PJ | Rude rafters |
| 57 | PF | Jet boats don't slow down for floaters; one big company even yelled at us to move over |
| 985 | PF | Only problems we had were with snake river adventures jet boaters; they wouldn't slow down and made huge wakes |
| 1171 | PF | Fishing boat ran engine for a long time; just upriver from our camp |
| Behavior at Ramps n=5 | | |
| 27 | PJ | Forest Service woman at Pittsburg immediately wanted to know our name when we stopped, in order to check our permit (like we sneaked by Cache Creek). |

| | | |
|--|----|---|
| 51 | PJ | At Heller Bar rafters dominate the landing while disassembling their rafts making it impossible to load or unload your own boat. |
| 473 | PJ | More than expected at the Pittsburg Landing. Most groups were polite. |
| 1714 | PJ | Rafters should be encouraged to keep boat ramps clear so boaters can launch and get out without delays |
| 1730 | PJ | We were jet boating; a large group of floaters clogged the ramp at Heller Bar for an unreasonable period; very unfriendly |
| Feeling Crowded n=10 (CJ=1; CF=2; PJ=7) | | |
| 1471 | CJ | Jet boats were too loud and too many of them |
| 1149 | CF | Too many motorized boats, too much noise |
| 1264 | CF | Too many jet boats |
| 58 | PJ | There are too many outfitters on the river (power and raft) that think the river is for their own private use and show no courtesy to others. |
| 69 | PJ | This day there were a large amount of rafters floating the Salmon River |
| 276 | PJ | Float parties strung out too far |
| 520 | PJ | Too many river guides with filled boats affecting fish negatively (too crowded.) Power tour boats for scenic much to big and rude (boating respect) Lack of it. |
| 590 | PJ | Three jet boats with 40+ people went by within 20 minutes |
| 1708 | PJ | Floaters had large groups on beaches so no one else could use beaches |
| 1709 | PJ | More than the number in raft groups took over most of the prime beaches with a greater number of people in the party than expected |
| Impacts to Solitude n=6 (CF=3; PF=3) | | |
| 963 | CF | Jet boats were loud and detracted from the river |
| 1463 | CF | Jet boats made a lot of racket but I guess we have to share; keep their numbers low please |
| 1470 | CF | The damn jet boats were nothing more than annoying noise pollution |
| 1806 | PJ | Tour boats were distracting but vital; without them , many people would not be able to see the canyon and support its protection |
| 981 | PF | The jet boats take away from the wild/scenic feeling |
| 1166 | PF | The jet boats took away from the back to nature feeling |

Wild Segment:

| Common Themes for Social Conditions on the River | Total Number of Responses (n) | Percent (%) | CJ | CF | PJ | PF |
|--|-------------------------------|--------------|-----------|-----------|-----------|------------|
| General Negative Comments | 18 | 8.7 | | 4 | 1 | 13 |
| General Positive Comments | 77 | 37.4 | 14 | 20 | 9 | 34 |
| Inconsiderate Behavior on the River | 46 | 22.3 | 6 | 13 | 5 | 22 |
| Inconsiderate Behavior at Launches | 14 | 6.8 | | | 4 | 10 |
| Noisy Groups | 9 | 4.4 | | 4 | 1 | 4 |
| Litter | 3 | 1.5 | | | 1 | 2 |
| Negative Interactions | 6 | 2.9 | | 2 | | 4 |
| Impacts to Solitude | 6 | 2.9 | | 4 | | 2 |
| Feeling Crowded | 27 | 13.1 | 2 | 12 | 2 | 11 |
| Total | 206 | 100.0 | 22 | 59 | 23 | 102 |

| Number | User Type | Comment |
|---|-----------|----------------------|
| General Negative Comments n=18 (CF=4; PJ=1; PF=13) | | |
| 105 | CF | Motor boats-negative |

| | | |
|---|----|--|
| 113 | CF | Constant jet boat activity, jet boats leaving their gear at camp then spending the day at another site. |
| 215 | CF | I did not enjoy boats with engines |
| 964 | CF | Private jet boats were obnoxious |
| 612 | PJ | Animosity between bank fishermen and boat fishermen |
| 450 | PF | Didn't like the jet boats |
| 506 | PF | A lot of my group was upset to see hunters in a jet boat kill a deer we'd been watching. |
| 507 | PF | Jet boaters who were hunting and fishing compromised the rafting experience |
| 508 | PF | We were admiring a deer on the shoreline then a group of hunters on a jet boat shot the deer in front of us—spoiled the time for some of us |
| 510 | PF | Didn't like the hunting aspect |
| 935 | PF | It was a bummer to wake up to the sound of power boats; it would have been much better without seeing power boats |
| 1274 | PF | Apparently there was an illegal boat on July 14 |
| 1310 | PF | All jet boats on the 2 nd and 3 rd days of the trip were very obnoxious |
| 1609 | PF | Jet boats not obeying rules |
| 1667 | PF | Jet boaters-negative |
| 1703 | PF | A hunter camped right by our camp first morning shot a bear; pretty rude awakening |
| 1746 | PF | Jet boaters are annoying |
| General Positive Comments n=77 (CJ=14; CF=20; PJ=9; PF=34) | | |
| 82 | CJ | Positively |
| 109 | CJ | Ranger assisted my husband who was walking with a cane as well as the boat captain who was looking out for his semi-handicapped needs |
| 111 | CJ | The younger set enjoyed the water fights |
| 189 | CJ | Other boats and rafts waved and talked to us |
| 318 | CJ | Another boater landed a 7ft sturgeon while we watched |
| 383 | CJ | Enjoyed seeing such diverse use of the river |
| 463 | CJ | Able to watch a sturgeon landed, our guide held the boat for 20 minutes |
| 823 | CJ | I was quite pleased to see the jet boats slow down and leave no wake whenever other boats or rafts were encountered even when they were docked |
| 1052 | CJ | Fishers were fun to watch |
| 1054 | CJ | The guy fishing for sturgeon was awesome |
| 1127 | CJ | It was fun to watch some of the other boats on challenging water situations |
| 1136 | CJ | Excellent guide |
| 1138 | CJ | Excellent guide |
| 1190 | CJ | Our jet boat was very considerate of rafters and they responded with smiles and waves; it was nice on both sides |
| 1351 | CJ | The Taiwanese kids lots of fun |
| 92 | CF | Got along great |
| 129 | CF | Positively—our guides were so patient with each age of person on the trip whether it was fishing, kayaking, etc. |
| 139 | CF | Good guides, food and entertainment |
| 163 | CF | All groups were pleasant and friendly |
| 216 | CF | Nude hikers gave us a good laugh |
| 388 | CF | Guides were great |
| 392 | CF | All nice and helpful |
| 424 | CF | I thought everyone was courteous on the river; Friday afternoon there were lots more people so I don't know what the weekend would be like. |
| 960 | CF | The guides were awesome |
| 1135 | CF | Other groups were fun |
| 1286 | CF | They were all friendly and fun |

| | | |
|------|----|---|
| 1390 | CF | We saw fishermen land a sturgeon |
| 1426 | CF | Everyone was very friendly |
| 1469 | CF | Guides were very important to my 12 yr old son in helping him learn to fish. |
| 1472 | CF | Very nice trip |
| 1595 | CF | Other groups were respectful and friendly |
| 1678 | CF | Super guide; good company |
| 1682 | CF | Loved the water fights and very friendly nature of people in the environment |
| 1684 | CF | The other group was very enthusiastic |
| 1686 | CF | Watching the other rafters on the river is fun |
| 255 | PJ | Friendly encounter with another group camped on the same beach |
| 268 | PJ | All people encountered on the trip were friendly and courteous. |
| 338 | PJ | I met some nice people. |
| 604 | PJ | Jet boaters with helpful tips—FS personnel also helpful |
| 607 | PJ | Great fishing |
| 1489 | PJ | Most was positive; we had fun having water fights with some of the rafters; it was disappointing that the drivers from one of the outfitters out of Lewiston did not feel the need to show common courtesy by slowing down as he passed us when we were tied up which waked our boat up onto the rocks. |
| 1490 | PJ | We enjoyed water fights with rafters |
| 1592 | PJ | Interesting talking to other the users |
| 1600 | PJ | Had to share a campsite with a small jet boat party due to inclement weather, they were nice |
| 356 | PF | Folks at Kirkwood were very knowledgeable of history of the area |
| 360 | PF | Everyone at the stops we made were very informative |
| 460 | PF | All persons worked and played well together |
| 690 | PF | Enjoyed watching fisherman catch and release sturgeon |
| 891 | PF | Jet boater gave us a great ride back up the river, which was unexpected |
| 930 | PF | Guide of commercial trips were helpful |
| 931 | PF | Commercial guides at put in gave us valuable advice and were friendly and helpful |
| 984 | PF | Great trip |
| 1089 | PF | Wildlife was pointed out to me |
| 1115 | PF | People we encountered came and went quickly and were very pleasant |
| 1270 | PF | River guide who helped us at put-in was wonderful; gave us valuable information that made our trip safer and more fun; he was very pleasant and informative Especially since he did not have to help us |
| 1271 | PF | great group of friends |
| 1272 | PF | Advice from the commercial guide at the put-in was invaluable |
| 1273 | PF | Professional guides offered good advice; jet boats on lower section on the last day were unpleasant |
| 1276 | PF | River guide was extremely helpful in describing the most significant rapids; this helped our group immensely in getting through these rapids safely. |
| 1401 | PF | Very helpful person at information area volunteered that a permit was unclaimed; she was knowledgeable and helpful |
| 1410 | PF | People on the river are nicer than when you're in the city |
| 1417 | PF | Great guides and group made it a memorable experience |
| 1437 | PF | Jet boater was very helpful with a flipped raft |
| 1439 | PF | Everyone was very polite and friendly |
| 1441 | PF | How it's such a friendly place, where jet boaters and rafters get along so well |
| 1443 | PF | Friends-positive-great time |
| 1480 | PF | Everyone we spoke to was very easy going; it was a positive experience |
| 1486 | PF | Positively; someone was catching a sturgeon out of a jet boat |
| 1596 | PF | Shared beach with family of four in jet boats for lunch; they were pleasant |
| 1606 | PF | They were warm, friendly and helpful |
| 1617 | PF | We had very much fun with one of the jet boat pilots; water fights and sturgeon fishing |

| | | |
|--|----|---|
| 1669 | PF | Positive-jet boat captains in general showed courtesy when passing rafters |
| 1670 | PF | In a positive way, people were very friendly and helpful |
| 1696 | PF | Jet boaters were extremely courteous |
| 1757 | PF | The interaction of the groups were slim, but good |
| 1796 | PF | We spoke with lots of people at the put-in and everyone was very enjoyable to be around and speak with |
| 1822 | PF | We had friends in another group so it was fun |
| Inconsiderate Behavior on the River n=46 (CJ=6; CF=13; PJ=5; PF=22) | | |
| 1159 | CJ | Leader of another raft group tied up at what was supposedly our previously agreed upon site |
| 1162 | CJ | Place our guide planned to stop for lunch was full of rafts; we came back a while later and they were still there; we had to eat in the boat |
| 1163 | CJ | Rafters who refused to move raft so boat could land to allow people access to Native American site |
| 1175 | CJ | Kayakers blocked the river so our boat could not proceed |
| 1176 | CJ | Kayakers blocked the river and were oblivious to the needs of others to pass by |
| 1200 | CJ | Being mooned by rafters coming in from the salmon river |
| 90 | CF | We were appalled by a group that invaded us at our lunch site; they were loud, walked through our spot and began sunbathing with too much exposed. We saw them the next day and one was definitely drunk and jumping into the river without life vests. |
| 112 | CF | Three rafts people put in and roamed around us as we were eating lunch; they planned to camp for the night and did not have the courtesy to wait until we left the site. |
| 162 | CF | Jet boat tours went by at full speed |
| 200 | CF | Rude and illegal outfitters |
| 427 | CF | Jet boats not slowing down |
| 1095 | CF | Jet boats; some did not slow down while passing |
| 1098 | CF | Some of the jet boats were not as careful as they should have been around our kayaks |
| 1105 | CF | One commercial jet boat did not slow down, actually changed sides of the river on purpose; all others were very considerate. |
| 1107 | CF | Jet boats not slowing down for rafts |
| 1277 | CF | A powerboat came by on the last day at above not wake speed; pulled the bowtie up line snapped taut and I fell hurting myself pretty badly |
| 1281 | CF | There were a lot of motor boats on the third day; many slowed down but some did not; one of the wakes from a jet boat pulled the raft rope tight and knocked my brother down, injuring his leg. |
| 1367 | CF | A few rude jet boats |
| 1643 | CF | Jet boat traffic was very constant; sometimes they did not slow down; we were constantly edged out of prime campsites and a group of 5 jet boaters took a Huge beach that would be appropriate for a group of 20 |
| 314 | PJ | We had one floating group that were rude to us as we passed by, by saying we were driving too fast. We were idling, no wake! |
| 324 | PJ | Rude floaters, Jet boat outfitters too fast when tied to bank.. |
| 501 | PJ | Rude rafters; some boaters not slowing down while going by camp |
| 512 | PJ | Mooned by a group of floaters |
| 745 | PJ | Not recognizing boat speeds |
| 159 | PF | Some commercial jet boats did not slow speed |
| 223 | PF | Jet boater went by at high speed while people were swimming |
| 232 | PF | Some boaters were drinking alcohol |
| 240 | PF | Some power boaters don't slow down for rafters |
| 434 | PF | Rude person in a red boat made a lewd comment |
| 448 | PF | Jet boat parties went by really fast and made lewd comments |
| 856 | PF | There were no actions on this particular trip but there is a constant problem with jet boaters not slowing down when our rafts were on the bank which is very negative for me. |
| 862 | PF | Jet boat failed to slow down, causing serious wakes |
| 868 | PF | Got buzzed by a few jet boats, inconsiderate |

| | | |
|---|----|---|
| 897 | PF | A research boat passed twice at high speed without following the no wake rule beating our equipment and boats on rocks |
| 898 | PF | FS boat did not honor no wake near our camp |
| 938 | PF | Commercial jet boat drivers were very professional but some of the private drivers flew by our camp |
| 1181 | PF | Jet boats not slowing down when our rafts are tied to shore |
| 1307 | PF | Jet boats that don't even bother to slow down when they pass rafters |
| 1366 | PF | Jet boats were rude |
| 1369 | PF | Jet boats buzzing by us; once through a rapid and several when we were rafting; even flipped off by one boat as they sped by |
| 1370 | PF | Jet boaters were rude to rafters in the water |
| 1372 | PF | Not personally affected, however the other raft in our party was nearly hit by a jet boat in rush creek rapids |
| 1373 | PF | Not me personally but bothered other people; jet boat speed interrupting our sturgeon raft |
| 1634 | PF | A few obnoxious jet boaters whizzing by leaving big wakes |
| 1635 | PF | Inconsiderate jet boaters were present on the river and did not respect the space or the rules |
| 1660 | PF | Two women in a jet boat camped close to us were completely naked in front of where our younger children could see them |
| Inconsiderate Behavior at Ramps n=14 (PJ=4; PF=10) | | |
| 95 | PJ | Rafters at boat launch very inconsiderate of boat launches. |
| 115 | PJ | Rafters at HCC use the boat ramp to prepare for there trips; they completely block the ramp. When you find the trip leader and ask them to let you launch they will but sometimes it is a 20-30 min. wait for a 5 min launch for us. If the raft slide is inadequate it needs to be fixed and floaters need to use it. |
| 152 | PJ | Rafters at HCC do not use the raft slide and consequently use the ramp to stage/prepare to launch- from the point of inflating their rafts at the ramp-tying up the ramp for jet boat launches. |
| 611 | PJ | Rafters taking up too much space on boat launches |
| 93 | PF | Commercial outfitter took over ramp at put-in and delayed our launch time |
| 116 | PF | Groups that was really slow to rig their rafts |
| 442 | PF | Rafters on the boat ramp unloading instead of using their own ramp |
| 1011 | PF | Private group at boat ramp at launch hogged the ramp, delaying our launch |
| 1085 | PF | Rafters loading and unloading on the boat ramp instead of using the ramp provided for rafts seems to be a problem |
| 1086 | PF | Rafters using the jet boat ramp instead of using the rafting ramp slick |
| 1088 | PF | Rafter/floaters were slow at the ramp, they should have been ready |
| 1092 | PF | Loading gear on rafts on launch ramp keeping ramp tied up |
| 1614 | PF | Putting in a group took up the whole ramp and it took them 1.5 hours to clear out and suggested we get up earlier to avoid the problem |
| 1688 | PF | There was the usual group who doesn't have their act together who took up way too much ramp time; but they did provide some enjoyment |
| Noisy Groups n=9 (CF=4; PJ=1; PF=4) | | |
| 86 | CF | Jet boats were loud and obtrusive; no peace from their staccato exhaust echoing off the canyon walls. |
| 1147 | CF | Some of the smaller private boats were very loud |
| 1279 | CF | Jet boats are loud and great annoyance; both private and commercial jet boats were operating at 6:10 AM Past our campsite and came very close to the rafts/kayaks. |
| 1478 | CF | Loud campers next to us 2 nd night |
| 337 | PJ | We were camped at Sturgeon rock on the Idaho side. A group of rafters camped just down river from us one night. They were loud until midnight. One man particularly enjoyed the sound of his own loud voice echoing off the canyon walls. Occasionally while fishing from the boats, a passing boat that didn't slow down created a wake that tossed our boats around on the rocks. |
| 218 | PF | Jet boats are noisy, stinky, too fast, and out of place in a "wild" area |
| 219 | PF | Jet boaters that were loud and obnoxious |
| 1657 | PF | Jet boaters had a very loud, drunk camp |

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| 1704 | PF | The one group camped across from us and partied until early morning yelling and echoing |
| Litter n=3 (PJ=1; PF=2) | | |
| 606 | PJ | A lot of trash left behind along the banks |
| 852 | PF | Family who launched before us left a dirty diaper at wild sheep |
| 889 | PF | People were friendly but there were lots of cigarette butts in camps that created a bad feeling |
| Negative Interactions n=6 (CF=2; PF=4) | | |
| 125 | CF | Negative run in with guide from Idaho Afloat |
| 190 | CF | Confrontation with rafting guide |
| 236 | PF | Jet boaters told us that we couldn't use the ramp to launch our float trip |
| 343 | PF | Angry encounter with a tour boat and a tour jet boat swamping our boat |
| 1451 | PF | Negative encounter with outfitter jet boat at granite rapids |
| 1780 | PF | Another inexperienced boater interfered with our group at granite creek rapids |
| Impacts to Solitude n=6 (CF=4; PF=2) | | |
| 87 | CF | Jet boats detract from experience |
| 128 | CF | Private jet boat users sometimes have a different idea of what a "wilderness river experience" is. |
| 1150 | CF | Motorized boats disturbed tranquility of river |
| 1785 | CF | Jet boats were a huge negative intrusion on the wilderness experience |
| 906 | PF | Jet boats detract from experience |
| 1637 | PF | Jet boats passing detracted from camping and floating; one jet boat pulled into our camp and wanted to camp there |
| Feeling Crowded n=27 (CJ=2; CF=12; PJ=2; PF=11) | | |
| 825 | CJ | We had to wait for a parking spot when we tried to stop at the old homestead for lunch |
| 1160 | CJ | A smaller rubber raft pulled up on the spot where our boat was to tie up for lunch and refused to move; the passengers apologized |
| 153 | CF | Lots of jet boats |
| 191 | CF | Surprised to see jet boats running up and down rapids |
| 213 | CF | A lot of power boats on river |
| 880 | CF | Fishermen boated up and down constantly; reduced feeling secluded |
| 988 | CF | Way too many powerboats |
| 995 | CF | Too many motor boats with tourists; it caused us to watch out and took away from the wilderness experience. |
| 1094 | CF | Jet boat traffic was high; a little annoying; sometimes they would shoot the same rapids 4 or 5 times then move on. |
| 1108 | CF | Too many commercial jet boats |
| 1465 | CF | Simply the number of jet boats was much higher than our last trip 13 years ago; disappointing; one particular outfitter's boat consistently failed to slow down for rafters. |
| 1622 | CF | Another gut took the campsite we were headed for |
| 1645 | CF | It was awful-the number of motor boats and their noisy disturbance to the desired serenity was very annoying; so much so that we might not return to Idaho rivers |
| 1790 | CF | Had to wait on others at rapids |
| 583 | PJ | Fishermen moving on top of you because there is no room for everyone |
| 814 | PJ | Fishermen took our fishing hole as we were pulling in a sturgeon |
| 580 | PF | Put in was crowded, but everyone was willing to share river info |
| 582 | PF | Lots of jet boats made it loud and wavy but I expected it |
| 882 | PF | HCC overloaded with powerboats who park cars without thinking and stare in wonder at rafters |
| 899 | PF | Negatively affected by the presence of a jet boat landing at our camp in the morning |
| 900 | PF | Was very disappointed by the number of jet boats on the river |

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| 907 | PF | It's difficult to avoid noise/wake of jet boats; also, crowds of people on jet boats take away from the wilderness experience. |
| 980 | PF | Jet boats were annoying and I was very surprised at the high number using the upper river |
| 1091 | PF | Excessive amount of commercial and private float parties |
| 1311 | PF | Too many jet boats and tours with some show of disregard towards permitted float groups |
| 1636 | PF | Too many jet boats, too many passes and too many motor noises |
| 1775 | PF | Put-in was too crowded |

Question 1.5b & c: At what location on the river did you feel crowded? Why?

Scenic Segment:

| Location | Total Number of Responses (n) | Percent (%) | CJ | CF | PJ | PF |
|---|-------------------------------|--------------|-----------|----------|-----------|----------|
| General Comments | 9 | 6.3 | 5 | 1 | 3 | |
| Cache Creek | 13 | 9.2 | 1 | | 12 | |
| Confluence of the Salmon and Snake Rivers | 18 | 12.7 | 1 | | 17 | |
| Heller Bar | 13 | 9.2 | 3 | | 10 | |
| Pittsburg Landing | 14 | 9.9 | 5 | 1 | 7 | 1 |
| Above and Below the Mouth of the Salmon River | 12 | 8.5 | | 1 | 11 | |
| Sections of River and Various Locations | 52 | 36.6 | 14 | 3 | 31 | 4 |
| Unknown Locations | 11 | 7.7 | 4 | 1 | 5 | 1 |
| Total | 142 | 100.0 | 33 | 7 | 96 | 6 |

| Number | User Type | Location | Why |
|--|-----------|--|---|
| General Comments n=9 (CJ=5; CF=1; PJ=3) | | | |
| 320 | CJ | I really didn't feel crowded just had to slow down for other boaters | |
| 840 | CJ | Lots of power boaters | |
| 1146 | CJ | I never felt crowded except when there were powerboats | |
| 1536 | CJ | Overall, I didn't feel crowded at any time; but I had expected a little more solitude; I was surprised by the sheer number of powerboats | |
| 1569 | CJ | Numerous water craft and floaters | Understanding, weather was 106 degrees |
| 1264 | CF | Everyday we encountered power boats | They are not accommodating to rafters when entering rapids |
| 55 | PJ | No crowds | |
| 499 | PJ | I fish the Snake and Salmon rivers every fall. | I thought it was average. |
| 847 | PJ | Tour boats on river | Not much respect for small boats |
| Cache Creek n=13 (CJ=1; PJ=12) | | | |
| 1331 | CJ | Cache creek | We saw several rafting parties lined up to go through the rapids; but it did not detract from my experience |

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|---|----|---------------------------------|--|
| 53 | PJ | Above Cache Creek | Lots of rafters |
| 263 | PJ | Cache Creek | Lots of boats |
| 297 | PJ | Above Cache creek | Floater coming out |
| 298 | PJ | Past Cache creek | Rafters having to be babied in narrow parts of canyon. |
| 304 | PJ | Cache Creek upriver | Waiting for rafters strung out to float thru rapids |
| 483 | PJ | Below Cache creek | Lots of outfitter lodges and cabins |
| 535 | PJ | Cache creek to Salmon | Several rafting groups |
| 546 | PJ | Cache creek to Salmon | Lots of rafts coming down Salmon |
| 636 | PJ | Cache Creek | Lots of fishing |
| 1230 | PJ | Cache creek and mouth of Salmon | Floaters give no room for boaters |
| 1533 | PJ | Cache creek check in | Did not expect to see two tour boats |
| 1706 | PJ | Cache creek | Presence of tour boats, floaters, private boaters |
| Confluence of Salmon and Snake Rivers n=18 (CF=1; PJ=17) | | | |
| 536 | CF | Mouth of Salmon | Lots of jet boats |
| 40 | PJ | Mouth of Salmon | Congested with rafts |
| 41 | PJ | Mouth of Salmon | Floaters clog area |
| 44 | PJ | Mouth of Salmon | Waiting for rafters |
| 71 | PJ | Mouth of Salmon | Floaters and Tour boats |
| 258 | PJ | Mouth of Salmon | Lots of boats |
| 491 | PJ | Mouth of Salmon river | Just a large number of folks fishing the mouth. Not too unexpected, however. |
| 522 | PJ | Confluence of Salmon and Snake | Everyone wants to fish there. |
| 538 | PJ | Mouth of Salmon river | Popular spot/ hunters and fishers |
| 804 | PJ | Mouth of Salmon | Too many floaters |
| 1237 | PJ | Salmon/Snake confluence | Rafters |
| 1245 | PJ | Snake and Salmon confluence | Four separate parties at confluence |
| 1499 | PJ | Mouth of the salmon | Large raft group camped in excess of 20 people |
| 1550 | PJ | Mouth of the salmon | Several power boats and rafters in the same spot at the same time |
| 1553 | PJ | Lower salmon | Rafters, too many large groups |
| 1729 | PJ | Mouth of salmon | Rafters |
| 1730 | PJ | Mouth of Salmon | Large group of floaters camped |
| 1744 | PJ | Mouth of Salmon | A lot of rafters taking out at mouth loading on boats |
| Heller Bar n=13 (CJ=3; PJ=10) | | | |
| 554 | CJ | Heller Bar | The launch was a bit crowded |
| 564 | CJ | Heller Bar and cache creek | Lots of rafts, boats and rigs |
| 584 | CJ | Heller Bar | Boats came in every 15 to 30 minutes |
| 48 | PJ | Heller Bar | |
| 480 | PJ | Grande Ronde/Snake | Too many guide boats |
| 519 | PJ | Near Heller Bar | |
| 520 | PJ | Heller Bar down 5 plus miles | Too many power boats |
| 537 | PJ | Heller Bar | People catching steelhead drew other boats to that area. |
| 540 | PJ | Heller Bar | Lots of drift fishing |
| 640 | PJ | Heller Bar | Limited access |
| 1222 | PJ | Heller Bar and Cache creek | Summer and spring seem to have an influx of people recreating |
| 1247 | PJ | Above Heller Bar | A lot of floaters |
| 1259 | PJ | Heller Bar | Floaters waiting to load/unload |

| Pittsburg Landing n=14 (CJ=5; CF=1; PJ=7; PF=1) | | | |
|--|----|---|--|
| 220 | CJ | Downstream of Pittsburg | |
| 595 | CJ | Closer to Pittsburg Landing | Many small power boats with fishermen; some with as many as six aboard |
| 744 | CJ | Above Pittsburg | Encountered very large group of kayakers |
| 1344 | CJ | At Pittsburg | Lots of rafts |
| 1535 | CJ | Pittsburg Landing | Lots of other jet boat tours docked; crowded beach |
| 839 | CF | Snake below Pittsburg | Groups of powerboats trying to come up through a rapid that we were already going down |
| 500 | PJ | Pittsburg Landing | Due to boat ramp |
| 521 | PJ | Pittsburg Landing | Due to boat ramp |
| 807 | PJ | Pittsburg Landing | Much more traffic than I had seen in many years |
| 846 | PJ | Pittsburg Landing | Floaters dominate the ramp |
| 1262 | PJ | Around Pittsburg Landing | Many floaters taking out and several tour boats |
| 1556 | PJ | Below Pittsburg | More powerboats up that far than expected |
| 1748 | PJ | When we took out at Pittsburg all the rafts on the ramp | |
| 469 | PF | Above Pittsburg | Lots of loud sightseers and hunters |
| Above and Below Salmon River n=12 (CF=1; PJ=11) | | | |
| 1269 | CF | Right before the confluence of the Salmon and Snake | Power boats made too much noise, smell, and large wakes. |
| 36 | PJ | Below Salmon | Rafters clogging river |
| 69 | PJ | Below Salmon | Lots of rafters |
| 306 | PJ | Below Salmon | Lots of rafters in rapids make traversing difficult |
| 641 | PJ | Above Salmon | Crowded fishing |
| 1238 | PJ | Below Salmon | Boat traffic |
| 1549 | PJ | Rapids below Salmon | Five rafts coming down we had to wait while they passed |
| 1552 | PJ | Upstream of Salmon river confluence | Too many floaters |
| 1708 | PJ | Beach below Salmon and beach on OR side before Cherry creek | Float parties were huge |
| 1709 | PJ | Below the Salmon | Beaches were all full of people; outfitter groups were bigger than expected |
| 1732 | PJ | Below Salmon | A lot of rafters |
| 1734 | PJ | Below the Salmon | There were several boats and rafts |
| Sections of River & Various Locations n=52 (CJ=14; CF=3; PJ=31; PF=4) | | | |
| 6 | CJ | All stops | Just seemed to be at our boat landings |
| 526 | CJ | Up river | |
| 542 | CJ | Near boat landing | Lots of activity |
| 593 | CJ | Later part of trip | Quite a few fishing boats |
| 656 | CJ | Kirkwood | |
| 872 | CJ | At the ranch we stopped at for lunch | All of a sudden, lots of people |
| 1189 | CJ | First five miles below the dam | There were several rafts on the water; but this was not a problem |
| 1328 | CJ | Entire trip | Boat had to make numerous detours around other boats |
| 1333 | CJ | Lunch stop—many groups of people | Did enjoy the stop |
| 1350 | CJ | All along the river | Too many people |

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|---|----|---|--|
| 1352 | CJ | In the narrow areas and by campers | Lots of boats anchored out from shore |
| 1537 | CJ | Historic sheep ranch site | Jet boats pulled in there for lunch |
| 1575 | CJ | Most of river | My experiences in HC involved few if any people besides who I was with |
| 1576 | CJ | Occasionally at rapids | |
| 963 | CF | On the river | By jet boats |
| 965 | CF | Most of river | Jet boat parade |
| 1470 | CF | Multiple | Jet boats got in our way and one even honked at us. |
| 58 | PJ | Salmon to Heller | |
| 60 | PJ | Salmon to Cougar | |
| 249 | PJ | Imnaha rapids | Two Jet boats did not yield right of way |
| 252 | PJ | Boat launches | Rafters blocking launch |
| 257 | PJ | Imnaha rapids | Had to wait for other boaters |
| 276 | PJ | Cougar Bar to Salmon | Floater stalling to stay together |
| 289 | PJ | Mouth of Salmon to Cottonwood | Where camping was done. |
| 484 | PJ | Bear creek | Three boats |
| 550 | PJ | Chinamen landing | Lots of boats |
| 589 | PJ | Pittsburg to salmon | Outfitters everywhere |
| 630 | PJ | Above FS station | Good holes taken |
| 685 | PJ | Near the HCC dam | Noticed many more boats here |
| 688 | PJ | Various locations | Didn't expect as many floaters |
| 720 | PJ | China caves | Couldn't pull boat in due to outfitters |
| 758 | PJ | Cottonwood creek | Our first choices in beaches were taken |
| 791 | PJ | Whole canyon | Thought there would be only a few boats |
| 792 | PJ | Fishing holes where every fisherman wanted to be | |
| 1212 | PJ | Jim Creek | Large raft groups |
| 1216 | PJ | Start of rapids and narrow section | Just waiting for rafters to clear, no big deal! |
| 1217 | PJ | Different sections | Lots of rafters this time |
| 1249 | PJ | Mouth of Salmon to Cottonwood | A lot of groups camping |
| 1251 | PJ | Cherry creek | Everyone wants to stop at this site |
| 1491 | PJ | Sheep Creek Rapids | Numerous large parties of rafters bunched up |
| 1503 | PJ | Willow Creek | Not crowded, just busy due to swimming opportunities there. |
| 1561 | PJ | Lone tree beach | A lot of rafters stopped at this location |
| 1725 | PJ | Salmon river to Heller Bar | Rafters grouping up into large groups |
| 1728 | PJ | The falls upriver were occupied | It is a nice place to visit |
| 1736 | PJ | Scenic throughout | Floater |
| 1739 | PJ | Most whitewater | |
| 1742 | PJ | Rapids | Floater hung around the rapids |
| 1814 | PJ | Narrow rapids, floaters with long lines and large groups | |
| 57 | PF | In narrow canyons especially | Jet boats not slowing down |
| 979 | PF | Throughout the river | Too many power boaters |
| 985 | PF | Pine bar | Seven jet boats that were rude when we floated by |
| 1745 | PF | From Tryon creek down past Bob creek, clear to Heller bar | Too many other people; everywhere both rafts and powerboats |
| Unknown Location n=11 (CJ=4; CF=1; PJ=5; PF=1) | | | |
| 1315 | CJ | I don't know the name of the locations | |

| | | | |
|------|----|------------------------------------|---|
| 1317 | CJ | Up near where we turned around | There were quite a few boats and floaters |
| 1337 | CJ | Unknown for sure but in the rapids | Floater/boat conflicts with ROW |
| 1534 | CJ | Don't remember name | There were other people there |
| 1425 | CF | Not sure | Too many power boats |
| 43 | PJ | Don't know | Too many rafters |
| 251 | PJ | Don't know | Big tour boats intimidating |
| 277 | PJ | | Make way for rafters |
| 308 | PJ | Not sure where | Too close to other boats in rough water |
| 523 | PJ | Not sure | Too many boats to fish |
| 983 | PF | | Did not slow down when passing |

Wild Segment:

| Location | Total Number of Responses (n) | Percent (%) | CJ | CF | PJ | PF |
|------------------------|-------------------------------|--------------|-----------|-----------|-----------|------------|
| General Comments | 38 | 17.0 | 10 | 11 | 1 | 16 |
| Boat Launches | 13 | 6.0 | 2 | 1 | 3 | 7 |
| Hells Canyon Creek Dam | 16 | 7.0 | 6 | 2 | 2 | 6 |
| Kirkwood Ranch | 8 | 3.0 | 1 | 3 | 1 | 3 |
| Pittsburg Landing | 12 | 5.0 | | 4 | | 8 |
| Sections of River | 66 | 29.0 | 9 | 17 | 6 | 34 |
| Unknown Locations | 15 | 7.0 | 8 | 3 | 2 | 2 |
| Various Rapids | 17 | 7.0 | 3 | 1 | 2 | 11 |
| Various Locations | 44 | 19.0 | 6 | 7 | 4 | 27 |
| Total | 229 | 100.0 | 45 | 49 | 21 | 114 |

| Number | User Type | Location | Why |
|---|-----------|--|--|
| General n=38 (CJ=10; CF=11; PJ=1; PF=16) | | | |
| 11 | CJ | Not really crowded | |
| 81 | CJ | We noticed quite a number of boat traffic along the river | The crowdedness was not unpleasant |
| 184 | CJ | Waiting for rafts at rapids | Long wait |
| 380 | CJ | In general | I like being alone in the wild |
| 949 | CJ | There was a lot of people on the boat, not from the location | |
| 950 | CJ | Actually on the jet boat | It was a full load |
| 975 | CJ | I was on a jet boat with lots of other people | |
| 1117 | CJ | In the boat | No complaints, surprised how many people were on the trip |
| 1160 | CJ | We had to wait for rubber rafts to get through as we approached rapids | |
| 1174 | CJ | It was a short trip, so lots of people along the entire way | So many boaters that we often have to take turns going through narrow sections |
| 80 | CF | Days with jet boats | Too loud-too many people |
| 401 | CF | 2 nd to last day | More power boats |
| 427 | CF | Anywhere | Powerboats |

| | | | |
|---|----|--|---|
| 994 | CF | Powerboats along the river | |
| 1139 | CF | Jet boat ride returning | There were more people on the boat than expected, no problems though |
| 1284 | CF | Last two days | Many power boats zooming back and forth |
| 1454 | CF | Jet boaters waiting for floaters | |
| 1625 | CF | I didn't feel crowded | |
| 1678 | CF | Didn't feel crowded | |
| 1755 | CF | 5 day trip with Hughs Outfitters | Tourist boats were rude to rafters |
| 1836 | CF | We experienced motor boats at 7am | It was certainly nice to have had 2 NMW days but some motor boaters were respectful |
| 814 | PJ | Not familiar with river | Lots of large showboats |
| 169 | PF | Large boat parties in 24L | |
| 239 | PF | Commercial boats all along | |
| 244 | PF | Need more powerboats—felt too secluded | |
| 343 | PF | No power boats | They decrease the wild character and experience |
| 360 | PF | This was the first time for me | |
| 444 | PF | Hard to find campsite for our large group | |
| 580 | PF | Everyday in the morning and evening | Jet boats flying by rafters |
| 891 | PF | Last day on river | Jet boats able to go above in the wild section |
| 980 | PF | Powerboats along the river | They took all the good sites |
| 1017 | PF | First day was a zoo, too many groups bunched up | |
| 1070 | PF | Powerboats along the river | |
| 1308 | PF | Jet boaters | Noise and some were not considerate as others |
| 1373 | PF | If you can't appreciate your surrounding at that moment then go home | |
| 1413 | PF | Lots of jet boats | Going fast |
| 1611 | PF | During time to set camp, there were people where we wanted to camp | |
| 1772 | PF | We waited a long time at put-in before we could launch | |
| Boat Launches n=13 (CJ=2; CF=1; PJ=3; PF=7) | | | |
| 956 | CJ | At the put-in just below HCC dam | |
| 1164 | CJ | Landing | Not enough parking or backing room |
| 426 | CF | Boat ramps/Camps | Jet boats have advantage on claiming camp |
| 319 | PJ | Boat launch at Pittsburg landing | Rafting groups too large |
| 339 | PJ | Take out at Pittsburg Landing | Floaters using main ramp to unpack |
| 611 | PJ | Boat ramp to dam | Lots of bank fishermen and boats |
| 193 | PF | Put in | Need more ramp space |
| 450 | PF | Put in | Packed with people, had to wait to launch |
| 1086 | PF | Boat ramp | Rafters using the ramp and tying it up |
| 1091 | PF | Floaters on ramps and at campsites | |
| 1092 | PF | Ramp area | 6 rafts tied us up for 35 minutes |
| 1187 | PF | At launch | People not being considerate and blocking the ramp for nearly an hour |
| 1617 | PF | Boat ramps at the launch site | Boat ramp not capable of number of launches |
| Hells Canyon Dam n=16 (CJ=6; CF=2; PJ=2; PF=6) | | | |

| | | | |
|--|----|--------------------------------------|---|
| 74 | CJ | Hells canyon dam to Pittsburg | A lot of people |
| 462 | CJ | Put in below dam | It was really rushed with stacks of people waiting to get into the water |
| 733 | CJ | Hells canyon dam | Jockeying for fishing position |
| 1055 | CJ | River close to dam | Lot of groups starting out |
| 1165 | CJ | Near Hells Canyon Dam | Because there were a lot of people there; is there any other reason for feeling crowded |
| 1195 | CJ | At the landing just below the dam | Several boats stopped for lunch and seemed to be several that came by car for a day trip |
| 424 | CF | Near dam | Lots of fishing boats |
| 1623 | CF | Close to Hells canyon dam | The power boats were distracting |
| 575 | PJ | Below dam | |
| 583 | PJ | Hells canyon dam | Only so many fishing holes |
| 369 | PF | Hells canyon dam to Pittsburg | Quite a few guided tours visible, more than in the past |
| 459 | PF | HCC to Pittsburg | Jet boaters |
| 850 | PF | Near HCC dam | Tour boats |
| 882 | PF | HCC put in | |
| 1089 | PF | HCC boat ramp | It takes a lot of time for floaters to launch |
| 1770 | PF | HCC dam to the first camp | Competition for campsite |
| Kirkwood Ranch n=8 (CJ=1; CF=3; PJ=1; PF=3) | | | |
| 875 | CJ | Kirkwood ranch | 2 to 3 groups at a time |
| 120 | CF | Kirkwood ranch, takeout | Many power boaters |
| 167 | CF | Below Kirkwood | Jet boats all over |
| 1306 | CF | Section at and beyond Kirkwood ranch | Reference word doc. |
| 1591 | PJ | Kirkwood ranch | Boats where I wanted to fish |
| 1368 | PF | Kirkwood ranch | Tourist trips on jet boats |
| 1369 | PF | Kirkwood | Jet boats |
| 1661 | PF | Above Kirkwood | Camping areas were sparse |
| Pittsburg Landing n=12 (CF=4; PF=8) | | | |
| 125 | CF | Pittsburg landing | Too many unloading |
| 216 | CF | Pittsburg | It was a shock being with people again |
| 914 | CF | Farm near Pittsburg | Very large tour boats |
| 1107 | CF | Pittsburg Landing | Everyone taking out at the same time |
| 247 | PF | Pittsburg | Crowded boat ramp |
| 439 | PF | Near Pittsburg Landing | Many power boats |
| 856 | PF | Just above Pittsburg | More guided tours than I was expecting |
| 935 | PF | 5 miles up river from Pittsburg | Powerboats |
| 1271 | PF | Above Pittsburg | Powerboats |
| 1272 | PF | Near Pittsburg Landing | Power boats |
| 1400 | PF | Pittsburg Landing | More power boats were present |
| 1445 | PF | Pittsburg Landing | Number of people trying to take out |
| Sections of River n=66 (CJ=9; CF=17; PJ=6; PF=34) | | | |
| 109 | CJ | On several occasion | Had to slow down for groups along the shore |
| 136 | CJ | All along the river | We had to stop our jet boat many times to allow floaters to go ahead |
| 141 | CJ | All along the river | Had to slow down or stop every few minutes; not really wilderness because there were so many people |

| | | | |
|------|----|--|--|
| 328 | CJ | Between Pittsburg and granite | Had to wait for two power boats and several rafters |
| 835 | CJ | Up river | A few times we slowed down to let smaller boats pass |
| 1081 | CJ | Whole way | Several other boats and rafts on the river |
| 1157 | CJ | Various stop offs that were planned but could not get into; waiting to go through rapids | |
| 1173 | CJ | Hells Canyon | I thought it would only be our boat group; it was nice to see other groups |
| 1176 | CJ | On the river | The actions of kayakers |
| 139 | CF | The river | Jet boats |
| 195 | CF | Everyday | Number of powerboats |
| 988 | CF | From HCC to Pittsburg | Frequent powerboats |
| 990 | CF | Various places | Jet boaters, too much |
| 1066 | CF | Whole trip down the river | Number of powerboats going up and down river |
| 1105 | CF | On the water, one beach | That had about 5 jet boats |
| 1108 | CF | Everywhere | Power boaters |
| 1148 | CF | Upper1/3 | Passed by many jet boats |
| 1268 | CF | No exact location | Too many power boats and not enough room |
| 1367 | CF | More on lower end of trip from Johnson Bar down river | Wanted to fish certain areas |
| 1468 | CF | Everywhere | Too many powerboats |
| 1643 | CF | Everywhere, everyday | Just a constant roar of jet boats |
| 1645 | CF | All along the river | Powerboats every place |
| 1646 | CF | On the river; powerboats | Campsites already taken |
| 1684 | CF | On the river | There were quite a lot of jet boater pass us by |
| 1752 | CF | Various locations | Powerboats |
| 1790 | CF | The first 18 miles of river | Had to wait for others to proceed |
| 323 | PJ | Up river | Lots of boats |
| 324 | PJ | Pittsburg to Johnson bar | Lots of float camps |
| 325 | PJ | Pittsburg landing to Rush creek | Sometimes crowded, sometimes not. |
| 613 | PJ | Hells canyon | Weekdays are much less crowded |
| 1239 | PJ | Pittsburg to Kirkwood ; rush to granite | Too many float boats |
| 1600 | PJ | Whole river | A lot of small jet boats |
| 217 | PF | Lower portion | Lots of jet boats |
| 218 | PF | Between Kirkwood and rush creek | Too many jet boats |
| 232 | PF | Whole river | Power boats were not slowing down |
| 348 | PF | Different locations | Powerboats very noisy and disturbing |
| 356 | PF | All along the river | Jet boaters screaming by |
| 368 | PF | Lower section below Johnson bar | We saw a lot of power boaters |
| 440 | PF | Lower section | Jet boats |
| 443 | PF | While floating | A lot of rafts and jet boats |
| 454 | PF | Wild section of the river | More people than I've seen in 25 years |
| 508 | PF | All along the river | River manners were lost, a lot of jet boaters made big wakes for us |
| 862 | PF | Jet boats on whole river | Felt like I was on display |
| 871 | PF | Entire section | Crowded at times with powerboats |
| 899 | PF | Lower section | Presence of jet boats |
| 900 | PF | Lower canyon section | Number of powerboats |
| 907 | PF | Throughout float | Jet boats have big footprint, noise travels up/down canyon |
| 934 | PF | Lower section and power boats | Occasional meetings in rapids but not a big deal |

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|---|----|---|--|
| 1014 | PF | Jet boat traffic on river | Traveled on the weekend |
| 1069 | PF | Whole river | Powerboats |
| 1172 | PF | Only toward the end at Heller Bar | Tons of people on 4 th of July |
| 1273 | PF | Lower section above Pittsburg | Lots of jet boats |
| 1290 | PF | All along the river | When the power boaters passed constantly |
| 1311 | PF | Lower 10 miles towards Pittsburg Landing | Jet boats and tours |
| 1314 | PF | HCC dam to Pittsburg | Jet boats have big footprint, noise travels up/down canyon |
| 1366 | PF | On all of the river | Jet boats had no respect for rafts |
| 1451 | PF | Bernard to pine bar | Empty camp spot had to find |
| 1596 | PF | Various points in camp | Early morning and late evening I prefer not to see jet boats |
| 1606 | PF | Wild section of the river | The jet boats were loud, intrusive and out of character from what exploring the Snake is all about |
| 1636 | PF | Entire float | Too many passes by jet boats |
| 1637 | PF | Section below rush creek | Higher incidence of jet boats and lack of available campsites |
| 1654 | PF | Several locations | Times when there were several powerboats either passing us or waiting for us |
| 1657 | PF | Lower section below granite | Too many jet boats |
| 1658 | PF | Entire river | Not a big fan of jet boats |
| 1669 | PF | Various locations where large tour boats passed by | The large numbers of passengers on board these boats |
| 1771 | PF | Between launch site and Bernard creek | There are too few campsites for the first day |
| Unknown Location n=15 (CJ=8; CF=3; PJ=2; PF=2) | | | |
| 5 | CJ | Don't recall section | River is narrow and boats are large |
| 7 | CJ | Not sure | Had to wait for other boaters |
| 905 | CJ | Not sure of location | The floaters seemed abundant |
| 1042 | CJ | Don't know | Just more than I expect to see; it's cool to see people use the river! |
| 1043 | CJ | Don't know where | Had to wait a few minutes for another boat to pass |
| 1045 | CJ | Don't know | Had to wait for a few minutes for a boat |
| 1141 | CJ | Don't know exact locations; just wherever we stopped | |
| 1142 | CJ | Through one rapid there was three powerboats; don't know exact location | |
| 1094 | CF | Don't know, put in was pretty | Busy but only jet boat traffic after that |
| 1426 | CF | Don't know | There were power boats on the weekend |
| 1460 | CF | Don't know | Had to wait to go over a rapid |
| 1594 | PJ | Unknown | Occasionally met two boats while traveling |
| 1700 | PJ | Don't know where | 2 tour boats were coming up the river at once |
| 430 | PF | Not sure | Many people on the scout trails |
| 431 | PF | Unsure | Several parties floating through without stopping |
| Various Rapids n=33 (CJ=3; CF=17; PJ=2; PF=11) | | | |
| 189 | CJ | Rapids | Some rapids required us to wait for other boats/rafts |
| 322 | CJ | Upper rapids | Because animals were there and people stopped to watch |
| 1410 | CJ | Wild sheep | We just had to wait for group in front of us |
| 86 | CF | Major rapids | Loud exhaust killed wilderness experience |
| 87 | CF | Below Granite | Jet Boats |
| 113 | CF | Below Granite | Lots of Jet Boats |

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|---|----|--|---|
| 128 | CF | Wild sheep to Pitt | Private jet boats |
| 163 | CF | Wild sheep rapids | Several boats beached and lines of people on trail to viewpoint |
| 190 | CF | Rush creek, wild sheep | More powerboats than ever seen in 18 years |
| 200 | CF | Past granite rapids to Pittsburg | Surrounded by jet boats |
| 995 | CF | At the rapids | Waiting to go and number of power boats |
| 1093 | CF | Major rapids | Number of jet boats |
| 1101 | CF | Large rapids where powerboats would charge up and down | |
| 1109 | CF | Several of the mid-class rapids | Jet boat proximity and numbers |
| 1190 | CF | Around rapids | People sort of bunched up-understandably |
| 1458 | CF | Granite falls/green room | There were several boats in late afternoon |
| 1462 | CF | Wild sheep | More rafters this year |
| 1595 | CF | Wild sheep rapids | Rafters together; boats waiting |
| 1682 | CF | Several rapids | Just a slight hiccup and lesson in manners on the river |
| 1685 | CF | 3-4 level rapids | Waiting for other floaters and boaters |
| 314 | PJ | Granite Creek | Group after large group of floaters staying in rapids and not allowing us to progress. |
| 859 | PJ | Granite rapids down | Lot of jet boaters |
| 131 | PF | At many of the rapids | Power boats coming up the river make running rapids uncertain |
| 159 | PF | Below granite and wild sheep | Too many jet boats |
| 187 | PF | Wild sheep rapids | Had to wait for rafts to go through |
| 236 | PF | Below granite | People crowded into limited space and campsites |
| 507 | PF | Below granite and wild sheep | Uncomfortable about getting through rapids safely with so many jet boaters |
| 861 | PF | Big sheep | Jet boats staging to go up river |
| 1020 | PF | Rapids class 3 and 4 | Jet boat excursions |
| 1443 | PF | Granite creek | Powerboat from tourist company at rapids of granite creek |
| 1457 | PF | Wild sheep and granite | Reference word doc. |
| 1699 | PF | Entering rapids | Felt crowded by power boaters down near rush creek they're coming up while we're going down |
| 1767 | PF | At wild sheep rapids and granite | People scouting the rapid |
| Various Locations n=43 (CJ=6; CF=7; PJ=4; PF=27) | | | |
| 183 | CJ | Museum | At least six boats there |
| 318 | CJ | Some of the campgrounds | Seemed rather crowded |
| 825 | CJ | At the homestead | No room to pull into shore |
| 1044 | CJ | First sandy beach | I've floated and seen less people |
| 1123 | CJ | At the turn around | There were 3 or more jet boats waiting to go past us |
| 1200 | CJ | Cache creek | Congestion at the check-in point |
| 90 | CF | Pictographs on ID side | Group in lunch spot |
| 137 | CF | Oregon Hole area | Hard to find camp |
| 774 | CF | Speedboats at various locations | |
| 880 | CF | Oregon hole camp | People/boaters fished just up from us and across from campsite most of the day |
| 1263 | CF | Where salmon river comes in | A lot of powerboats |
| 1428 | CF | At various historic sites | Had to wait while other parties moved on |
| 293 | PJ | Salt creek | Float groups looking for camp |
| 335 | PJ | Sturgeon rock | Lots of good fishing |
| 813 | PJ | Going around bends, entering/exiting rapids | Meeting powerboats and rafters at each one |
| 1838 | PJ | Sturgeon rock | A lot of people fishing |

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| 78 | PF | A few times in the corners of the river | Power boaters came thru with big wakes |
| 93 | PF | Above wild sheep | Lack of available camp sites |
| 132 | PF | Below rush creek | Less campsites more power boats |
| 157 | PF | Saddle creek | Popular campsite |
| 219 | PF | Below Johnson bar | Jet boats |
| 242 | PF | Pine bar | A lot of people and boats |
| 342 | PF | Bernard creek, Pine Bar, Kirkwood | |
| 437 | PF | Granite | Man had rude comment to my uncle |
| 448 | PF | First 10 miles from put in | Lots of parties trying to run the rapids at the same time |
| 460 | PF | At the pictograph site | A jet boat came to our camp and asked if he could show his customers the pictographs |
| 788 | PF | Quartz creek | Several boats pulled in while catching a sturgeon |
| 889 | PF | Near museum | Wanted to fish but too many powerboats |
| 938 | PF | Around the ranches | Visitors to ranch sites |
| 984 | PF | Pine bar | Seven jet boats said there was no room for rafters here |
| 1007 | PF | Historical sites | Number of people |
| 1016 | PF | Looking for camps at granite | Busy guided trips with large groups |
| 1310 | PF | Below granite to Pittsburg | A jet boat went by every 30 minutes |
| 1370 | PF | Sluce creek | Jet boat almost hit us head on |
| 1416 | PF | At some of the stopping spots | There were usually 2 or 3 other boats also stopping |
| 1441 | PF | Below rush creek | Seemed to be lots of boats, for the record, I also own a jet boat |
| 1590 | PF | Rapids/museum/ Pittsburg | A large group of other rafters |
| 1605 | PF | Campsites one day float from HCC | |
| 1634 | PF | First 15 miles or so seemed | Busy and active and a little noisy |
| 1639 | PF | Museum | Several tour boats at once |
| 1660 | PF | Sturgeon rock | 4 jet boats camped close by |
| 1667 | PF | Last 25 miles or so | Jet boaters |
| 1702 | PF | Above granite | Powerboat guides, fisherman, hunters |

Concerning Visitors' Opinions About Management of the River

Question 1.9: Are there any other management policies or actions that have affected your opportunities for self-reliance, challenge, and solitude on the Snake River in Hells Canyon?

Scenic Segment:

| Common Themes about River Management | Total Number of Responses (n) | Percent (%) | CJ | CF | PJ | PF |
|---|--------------------------------------|--------------------|-----------|-----------|-----------|-----------|
| Nothing | 16 | 22.9 | 4 | | 11 | 1 |
| Removal of Navigation Markers | 12 | 17.1 | 1 | | 11 | |
| Removal of Outhouses and Picnic Tables | 9 | 12.9 | | | 8 | 1 |
| Use Limits and Non-motorized Window | 15 | 21.4 | 4 | 2 | 7 | 2 |
| Crowding | 4 | 5.7 | | | 4 | |
| Forest Service Presence/Management | 8 | 11.4 | 1 | 1 | 6 | |
| Hunting | 2 | 2.9 | | | 2 | |

| | | | | | | |
|------------------|-----------|--------------|-----------|----------|-----------|----------|
| General Comments | 4 | 5.7 | 2 | | 2 | |
| Total | 70 | 100.0 | 12 | 3 | 51 | 4 |

| Number | User Type | Comment |
|--|-----------|--|
| Nothing n=16 (CJ=4; PJ=11; PF=1) | | |
| 529 | CJ | None |
| 627 | CJ | Things were awesome |
| 1344 | CJ | Were grateful for the jet boat opportunity so we could also experience the river |
| 1575 | CJ | Overall, I think the management is fine even if I am prone to seeking a little more solitude than what there is now; that a thing of the past and proper management is the key |
| 43 | PJ | No |
| 55 | PJ | Only out for day |
| 249 | PJ | None |
| 279 | PJ | No |
| 306 | PJ | None |
| 309 | PJ | None noticed |
| 537 | PJ | I did not find the management policies detrimental to my enjoyment of the river. We all need to know and obey the policies so each of us can enjoy the river in our own way. |
| 709 | PJ | No |
| 1211 | PJ | We enjoyed our trip into H.C. we tried to abide by the rules of packing out human waste and trash. We felt the amount of rule compliance and enforcement was about right. |
| 1258 | PJ | Less management is better |
| 1736 | PJ | No |
| 63 | PF | No |
| Removal of Navigation Markers n=12 (CJ=1; PJ=11) | | |
| 840 | CJ | Removing the navigational markers is partly destroying the history |
| 60 | PJ | Navigational aids restored |
| 562 | PJ | Navigational markers are extremely important in decreasing danger and possible loss of life |
| 703 | PJ | Removing navigation markers is senseless and dangerous to out of area boaters |
| 705 | PJ | Removing outhouses has caused me to encounter more human waste that hasn't been taken out |
| 796 | PJ | Navigation markers should be there |
| 1207 | PJ | Upkeep of navigational markers would be nice |
| 1224 | PJ | I feel that navigational markers are a great asset to all boaters whether they choose to use them or not; the markers have been poorly maintained over the past few years. |
| 1225 | PJ | The river markers are a great addition to jet boaters on the river |
| 1245 | PJ | Why has the FS placed "self-reliance, challenge, and solitude" ahead of boater safety by removing river navigational markers? |
| 1540 | PJ | Unsure why navigational markers are not being maintained? |
| 1709 | PJ | The navigational markers should be put back in place and maintained for the safety of the boaters and floaters |
| Removal of Outhouses/Picnic Tables n=9 (PJ=8; PF=1) | | |
| 487 | PJ | Removal of toilets at campsites was the worst decision made on the river-they were unobtrusive and high enough on bank as to not cause problems. |
| 698 | PJ | I camp in HC on a regular basis and feel as if I'm the only one who uses a portable toilet. Either enforce or put back the outhouses |
| 1222 | PJ | Removal of outhouses: we all know if the honey huts are gone, river users will use the brush; toilet paper and smell are distracting at best |
| 1226 | PJ | The outhouses and picnic tables add to our camping trips; I feel more comfortable when there are |

| | | |
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| | | good navigational markers. |
| 1539 | PJ | Outhouses are set on the areas that you can not walk to; rather climb up the trails if one present so not actually utilized creating waste along the beach |
| 1553 | PJ | We saw a woman on a commercial rafting trip use the beach for her bathroom. |
| 1725 | PJ | The removal of outhouses is not working; been tried in other areas and has not worked out; just check the brush around campsites |
| 1726 | PJ | The removal of outhouses; people still use areas under trees and not all pack out human waste; the picnic tables are a real plus to have |
| 1166 | PF | Keep outhouses; they're very handy; good to keep jet skis out too |
| Use Limits and Non-motorized Window n=15 (CJ=4; CF=2; PJ=7; PF=2) | | |
| 4 | CJ | The use limits on the river segment are not yet needed; limits should be implemented only when and where needed |
| 352 | CJ | When we begin putting limitations on the way to have fun we have to ask ourselves what direction our government is taking |
| 693 | CJ | Don't think the NMWs are working, see less float traffic on those days than on others |
| 1536 | CJ | Happy to not see jet skis |
| 1264 | CF | I realize that everybody has to be somewhere but to allow jet boats and power boaters on this river is a tragedy To me; there is no such thing as solitude around these types of boats. |
| 1470 | CF | Limit jet boats to weekends only |
| 283 | PJ | Difficult to plan ahead for permits |
| 743 | PJ | Non-motorized days have limited days that could be enjoyed on the river |
| 1253 | PJ | Do not limit access further |
| 1491 | PJ | I dislike NMW days; I dislike seeing rafters on the river as much as they dislike my jet boat. Why are there days allotted to them to be on the river alone? Perhaps there should be blackout times for rafters to make it fair. I do not believe in the elite practices of elevating any particular users' privileges above another's. |
| 1510 | PJ | Not too crazy about seeing jet skis anywhere up the river from Heller bar on up. |
| 1568 | PJ | We've been turned back at the Cache Creek check-in due to too many boats a couple of times. |
| 1806 | PJ | No motors period makes it more logistically difficult to be a conservation officer but 3 day NMW can be worked around |
| 979 | PF | Limit motorized to designated stops/spots |
| 985 | PF | Why private floaters can't use a motor in wild section, but power boaters can |
| Crowding (n=4) | | |
| 546 | PJ | Too many rafts running salmon into Snake river. |
| 624 | PJ | Rafters using boat ramps |
| 748 | PJ | Over abundance of fishing guides ruined my own experience |
| 1256 | PJ | Allowing too many and too large of tour boats |
| Forest Service Presence/Management Needs n=8 (CJ=1; CF=1; PJ=6) | | |
| 836 | CJ | Never saw a forest ranger |
| 839 | CF | Forest service staff at Pittsburg landing needs to be more friendly |
| 46 | PJ | No guns on rangers |
| 259 | PJ | Like Forest Service's nice attitude |
| 645 | PJ | Yes, bothered too much by law enforcement |
| 845 | PJ | Add creek, rapids, historical site signage |
| 846 | PJ | Better monitoring of parking and human waste disposal |
| 1560 | PJ | All parties included the Forest Service; need to get their heads out of their butts |
| Hunting (n=2) | | |
| 1706 | PJ | Hunters shooting chukars from their boats or rafts; should be illegal |

| | | |
|----------------------------------|----|---|
| 1707 | PJ | Reduce fluctuation of water levels; outlaw shooting upland game birds from boat or raft |
| General n=4; (CJ=2; PJ=2) | | |
| 482 | CJ | Feel as if this study is leaning toward putting more regulations on the river |
| 596 | CJ | This is a lousy survey, it doesn't apply to our experience |
| 252 | PJ | Poorly written survey questions |
| 1229 | PJ | Please leave the canyon alone, don't change anything |

Wild Segment:

| Common Themes about River Management | Total Number of Responses (n) | Percent (%) | CJ | CF | PJ | PF |
|--|-------------------------------|--------------|-----------|-----------|-----------|-----------|
| General Comments | 12 | 10.9 | 6 | 2 | | 4 |
| Nothing | 16 | 14.5 | 4 | | 2 | 10 |
| Removal of Navigation Markers | 1 | 1.0 | | | 1 | |
| Removal of Outhouses and Picnic Tables | 12 | 10.9 | 2 | | 1 | 9 |
| Use Limits and Non-motorized Window | 30 | 27.3 | 4 | 9 | 3 | 14 |
| Litter and Waste | 8 | 7.3 | 3 | | | 5 |
| Crowding and User Interactions | 9 | 8.2 | | 2 | 4 | 3 |
| Forest Service Presence/Management | 11 | 10.0 | 3 | 1 | 4 | 3 |
| Hunting | 2 | 1.8 | | | | 2 |
| Water Fluctuations | 3 | 2.7 | | | | 3 |
| Education, Culture and Information | 4 | 3.6 | | 2 | | 2 |
| Use of Boat Ramps | 2 | 1.8 | | | 1 | 1 |
| Total | 110 | 100.0 | 22 | 16 | 16 | 56 |

| Number | User Type | Comment |
|---|-----------|--|
| General n=12 (CJ=6; CF=2; PF=4) | | |
| 11 | CJ | Very little time on the wild section |
| 328 | CJ | This was my first time |
| 957 | CJ | We were only there on a 2hr jet boat tour |
| 1028 | CJ | I took a jet boat ride one time; not the guy to ask |
| 1043 | CJ | I am aware of managements policy, I just went with family and enjoyed the weekend |
| 1165 | CJ | I just wanted to take a boat ride and see the canyon; I wasn't going there for therapy for crying out loud |
| 1452 | CF | The experience was positive and peaceful |
| 1643 | CF | Just the items discussed |
| 852 | PF | Not familiar with other policies |
| 906 | PF | Jet boats detract from overall experience |
| 1115 | PF | Least amt of human presence the better; historical sites excluded |
| 1823 | PF | What has been done is a great step forward; all in all the trip was an enjoyable experience |
| Nothing n=16 (CJ=4; PJ=2; PF=10) | | |
| 189 | CJ | None |
| 380 | CJ | None that I'm aware of |

| | | |
|--|----|--|
| 1039 | CJ | No--all good policies; but my view was only 5 hours from a tour boat |
| 1117 | CJ | No, just went on jet boat ride |
| 1424 | CF | None, other than the nuisance of the power boaters |
| 1810 | CF | Excellent job |
| 332 | PJ | No |
| 467 | PJ | No |
| 366 | PF | Love it the way it is managed |
| 431 | PF | None, it was a wonderful trip |
| 582 | PF | None |
| 1404 | PF | No |
| 1669 | PF | None |
| 1698 | PF | No |
| 1757 | PF | None |
| 1796 | PF | No; I think what has been done is great; I was completely engulfed by the canyon |
| Removal of Navigation Markers (n=1) | | |
| 327 | PJ | I believe that the navigational markers were a good asset for jet boaters and should be put back |
| Removal of Outhouses/Picnic Tables n=12 (CJ=2; PJ=1; PF=9) | | |
| 1045 | CJ | Need to provide outhouses; people don't follow rules of packing out waste; it would be great if they would but they don't |
| 1173 | CJ | The restroom near a picnic area was closed and it was inconvenient |
| 503 | PJ | Your requiring all boaters to use portable toilets is not working. You can go to almost any camp and see human waste and toilet paper. It would have been better to leave toilet at camps. |
| 91 | PF | Picnic tables and outhouses |
| 93 | PF | Replace the outhouses and picnic tables |
| 179 | PF | Need more outhouses |
| 193 | PF | Should put outhouses back in |
| 359 | PF | Better, cleaner bathrooms at Pittsburg |
| 439 | PF | Outhouses at campsites would help |
| 1007 | PF | People do not comply with port-a-potty policy well enough, outhouses may help |
| 1380 | PF | A few toilets would be welcome at the larger, more popular site |
| 1640 | PF | We should investigate installing outhouses in the campgrounds; still evidence of campers not using their portable toilets |
| Use Limits/Restrictions and Non-motorized Window n=30 (CJ=4; CF=9; PJ=3; PF=14) | | |
| 74 | CJ | Fewer numbers of permits issued particularly to motorized boats would be a positive management step |
| 465 | CJ | Allow people to use and see the river; use common sense; most people don't want solitude, they want to enjoy nature |
| 910 | CJ | Only one jet boat ride that day for 2 hours; NMW made for a non-encountering or challenging day |
| 974 | CJ | It was very disappointing that we were not allowed to go farther down river at the time we were there |
| 113 | CF | Limit # jet boats |
| 914 | CF | Extend NMW to all weekends |
| 988 | CF | More limits on powerboats |
| 995 | CF | Too many power boats; should be allowed to have a fire because it adds to the experience (when conditions are not too dry). |
| 1108 | CF | Further limit the number of jet boaters |
| 1279 | CF | Enforce the prohibition of the motorized boats |
| 1367 | CF | I would like to see jet boaters draw permits like floater and be accountable for actions |
| 1428 | CF | Prohibit all motorized craft; traveling under your own power is more challenging and self-reliant |

| | | |
|--|----|--|
| 1752 | CF | Please don't allow powered craft on the river; it ruins the back to nature experience and the peaceful solitude |
| 606 | PJ | Non-motorized blocks are unneeded if people are aware of courteous river usage |
| 1490 | PJ | Restricted for jet boats; limited times to take our young kids and enjoy the canyon |
| 1600 | PJ | We like to jet back from Johnson bar but that is not an option anymore |
| 132 | PF | Limiting number of boats or people per party |
| 159 | PF | Need to increase the non-motorized days in wild section |
| 219 | PF | Outlaw jet boats |
| 369 | PF | I really love the days I don't have to listen to jet boats |
| 444 | PF | Getting a permit is tough but okay |
| 454 | PF | Restrict all private jet boat usage above Johnson bar |
| 935 | PF | Longer NMW would be better; we saw tons of power boats on our last day and it totally detracted from our experience |
| 937 | PF | First two days in wild section were not motorized and were great; last day not so great due to high # of jet boats |
| 1089 | PF | Too many restrictions for private power boaters |
| 1400 | PF | Scenic section has a large number of powerboats and a wide variance of competence of the pilots |
| 1402 | PF | All use of wild section should be by permit only; there should be no distinction between rand and jet boat |
| 1612 | PF | Limiting the use of powerboats is not a good thing; the canyon should be used by all equally |
| 1637 | PF | NMW had no affect because there is still too much use; the river is designated wild in that section and should be managed as non-motorized |
| 1656 | PF | Definitely like the NMW; really it was the only thing I very much disliked about the trip |
| Litter and Waste n=8 (CJ=3; PF=5) | | |
| 732 | CJ | On numerous prior trips, we've camped in the canyon and toilet paper is all along the river shore; I'd rather see a discreet outhouse every 3 miles than hardly being able to walk along the shore without seeing used toilet paper; the current policy of packing out human waste is not enforceable and ridiculous |
| 833 | CJ | Ban all smoking along river and its banks |
| 1042 | CJ | People (rafters) are unprepared to be self-reliant when it comes to packing out waste; they don't do it; need to place outhouses in high use sites |
| 236 | PF | Pack-in pack-out policy |
| 342 | PF | People need to use port-a-potties |
| 1642 | PF | The pack it out policies are not being enforced; boaters may have portable toilets but someone's not using them; need more control of this problem |
| 1661 | PF | As rafters we were very aware of the need to conserve the environment; every trip we see jet boaters not using fire pans or port-a-potties even though they carry them with them |
| 1819 | PF | Please enforce toilet regulations; assign campsites at launch like the middle fork |
| Crowding and User Interactions n=9 (CF=2; PJ=4; PF=3) | | |
| 162 | CF | Jet boaters need to be more considerate |
| 1066 | CF | Too many powerboats, they were constant; lack of toilets for day trippers is not helpful in keeping the area pristine |
| 314 | PJ | Float parties. Too large and too many if floaters can have 21 non motorized days jet boaters should have 21 non-floater days. Where is the equality and parity? |
| 325 | PJ | Large groups of rafters one after another showing displeasure towards power boats. |
| 583 | PJ | Need to enforce camping limits near the dam |
| 859 | PJ | Jet boaters not slowing down when rafters are tied to bank; It really can hurt rafts when jet boats do not slow down; commercial boats were great, just private jet boats did not have respect. |
| 218 | PF | Too many jet boats and negative interactions between jet and floaters |
| 230 | PF | Only problem encountered was a group that was too large |
| 1017 | PF | Use of power boats on all weekends--can't get away from them |

| Forest Service Presence/Management Needs <i>n</i>=11 (CJ=3; CF=1; PJ=4; PF=3) | | |
|--|----|---|
| 109 | CJ | The mechanized chair at the boat launch was inoperable |
| 180 | CJ | Need to repair handicap facilities at boat launch |
| 183 | CJ | Center at dam was supposed to close at 4:00 and was locked at 3:40 |
| 201 | CF | FS needs to check for mandatory equipment and to see if it was used |
| 316 | PJ | Fee for campground use at Pittsburg |
| 323 | PJ | Forest service police are very rude! |
| 339 | PJ | The \$8.00 per day fee charge at the campground Pittsburg, we will avoid using the area as much as possible in the further. This was never supposed to be a charge camping area. |
| 1489 | PJ | The lady at Pittsburg was great in keeping traffic moving; the people at HCC would not come down and direct ramp traffic at the river and there was a group of rafters that took 1 hour 20 min to get out of the way! |
| 867 | PF | It is good to see FS rangers keeping an eye on things |
| 1274 | PF | The availability of Forest Service rangers and staff was really helpful |
| 1596 | PF | Appreciate Forest Service presence at put-in and takeout which are potentially the most stressful part of the trip |
| Hunting (<i>n</i>=2) | | |
| 507 | PF | Floated in October during hunting season and had to witness animals being killed |
| 1704 | PF | Not allowing people to hunt within 100 yards of where your are sleeping and using dogs to hunt bears |
| Water Fluctuations (<i>n</i>=3) | | |
| 434 | PF | It would be cool if they could raise the CFS so the rapids would be huge |
| 907 | PF | Beaches are gone; dam fluctuations are extreme and what are the effects on the native fish species? These would provide quality fishing experiences. |
| 1778 | PF | Daily fluctuations of water level from the dam takes away from the feeling of solitude and natural conditions |
| Education, Culture and Information <i>n</i>=4 (CF=2; PF=2) | | |
| 1466 | CF | Boaters should know more about the geology of the canyon |
| 1682 | CF | Appreciated the educational opportunities given we had a guide with us; he gave us much of the history with the Hells Canyon adventures that may have been missed otherwise |
| 356 | PF | Old homes and historic places allowed to burn really upsets me, these markers should be preserved |
| 1366 | PF | Third river trip and would like to see more historical markers and place names for rapids |
| Use of Boat Ramps (<i>n</i>=2) | | |
| 1086 | PJ | Rafters using the jet boat ramp and tying it up for hours instead of using their own ramp slides |
| 1614 | PF | Need to hurry people at the launch site |

Question 2.3: If you could change one thing about the way the Snake River in Hells Canyon is managed, what would you change? Why?

Scenic Segment:

| Common Themes | Total Number of Responses (n) | Percent (%) | CJ | CF | PJ | PF |
|----------------------|-------------------------------|-------------|----|----|----|----|
| Would Change Nothing | 75 | 32.5 | 30 | | 42 | 3 |
| Crowding | 11 | 4.8 | 2 | | 6 | 3 |

| | | | | | | |
|--|------------|--------------|-----------|-----------|------------|-----------|
| Limits on Users | 28 | 12.1 | 5 | 2 | 19 | 2 |
| Commercial Boat Use | 14 | 6.1 | 1 | | 12 | 1 |
| Impacts to Solitude | 15 | 6.5 | 4 | 8 | | 3 |
| Enforce Regulations | 8 | 3.5 | 1 | | 7 | |
| Dams and Water Fluctuation | 12 | 5.2 | 3 | 1 | 8 | |
| Forest Service Presence/Management | 7 | 3.0 | 1 | | 4 | 2 |
| Noxious Weeds Management | 6 | 2.6 | 2 | | 4 | |
| Historical Sites and Availability of Information | 6 | 2.6 | 2 | | 4 | |
| Miscellaneous | 14 | 6.1 | 7 | | 6 | 1 |
| <i>Add, Maintain and Restore:</i> | | | | | | |
| <i>Campsites/Campgrounds</i> | 6 | 2.6 | 3 | | 3 | |
| <i>Outhouses, Picnic Tables, Waste Receptacles</i> | 18 | 7.8 | 1 | | 16 | 1 |
| <i>Navigation Markers</i> | 5 | 2.2 | | | 5 | |
| <i>Boat Launches</i> | 6 | 2.6 | 2 | | 4 | |
| Total | 231 | 100.0 | 64 | 11 | 140 | 16 |

| User Type | Number | Comment | Why? |
|---|--------|---------------------------------|---|
| Nothing/Don't Know n=75 (CJ=30; PJ=42; PF=3) | | | |
| CJ | 12 | don't know | |
| CJ | 526 | nothing | |
| CJ | 529 | don't know enough about it | |
| CJ | 531 | none | |
| CJ | 554 | nothing, it's great | |
| CJ | 596 | nothing | |
| CJ | 625 | nothing | |
| CJ | 627 | nothing | |
| CJ | 654 | nothing | |
| CJ | 664 | none | |
| CJ | 667 | none | |
| CJ | 671 | nothing | |
| CJ | 675 | okay | |
| CJ | 711 | enjoyed the way it was | |
| CJ | 719 | fine the way it is | |
| CJ | 765 | no change | |
| CJ | 777 | none | |
| CJ | 785 | nothing | |
| CJ | 789 | nothing | |
| CJ | 790 | No change | |
| CJ | 794 | nothing | |
| CJ | 828 | No change | |
| CJ | 840 | nothing | |
| CJ | 1315 | I think its great; I'll be back | |
| CJ | 1332 | No change | |
| CJ | 1344 | nothing | this boat was our only option for exploring the river |
| CJ | 1572 | none-managed well | |
| CJ | 1575 | I wouldn't change anything | |

| | | | |
|----|------|---|----------------------------------|
| CJ | 1586 | it was great | |
| CJ | 1588 | satisfied with the jet experience | |
| PJ | 43 | nothing | |
| PJ | 46 | Leave us alone | Too much interference |
| PJ | 50 | nothing | |
| PJ | 258 | nothing | |
| PJ | 259 | Not sure | |
| PJ | 262 | Nothing(scenic) | |
| PJ | 274 | No problem | |
| PJ | 279 | Not anything | |
| PJ | 301 | Nothing | |
| PJ | 308 | nothing at all--managed well | |
| PJ | 309 | not sure | |
| PJ | 500 | nothing | |
| PJ | 521 | nothing | |
| PJ | 537 | Nothing. I have made about 100 plus trips up the Snake and all have been wonderful. I always look forward to the next trip. | |
| PJ | 550 | keep the canyon as it is--cut down on jet boaters | |
| PJ | 572 | nothing | |
| PJ | 615 | none | |
| PJ | 624 | No change | |
| PJ | 632 | No change | |
| PJ | 636 | It is well managed | |
| PJ | 645 | nothing | |
| PJ | 709 | none | |
| PJ | 725 | nothing | |
| PJ | 751 | nothing | |
| PJ | 761 | wouldn't change anything | |
| PJ | 768 | nothing | |
| PJ | 769 | nothing | |
| PJ | 770 | nothing | |
| PJ | 792 | nothing | |
| PJ | 1227 | happy | |
| PJ | 1229 | don't change anything | |
| PJ | 1236 | it is fine now | |
| PJ | 1247 | nothing; its everything I expected | |
| PJ | 1261 | don't know | |
| PJ | 1510 | I am always the passenger; I enjoy the experience every time. | |
| PJ | 1511 | nothing | |
| PJ | 1546 | nothing | |
| PJ | 1552 | nothing should be changed | it is very well managed as it is |
| PJ | 1568 | nothing | |
| PJ | 1715 | nothing | |
| PJ | 1716 | No change | no change |
| PJ | 1736 | nothing | |
| PF | 543 | nothing | |
| PF | 544 | I like it. | |

| | | | |
|--|------|--|--|
| PF | 1169 | nothing | |
| Use Regulations | | | |
| Crowding n=11 (CJ=2; PJ=6; PF=3) | | | |
| CJ | 1146 | it gets a bit crowded with all the powerboats | |
| CJ | 1352 | allow fewer boats | it's too congested |
| PJ | 58 | Limit outfitters and size of boats | Too many outfitters |
| PJ | 267 | Restrictions on non-commercial rafters | Too many rafters |
| PJ | 480 | Guide boats; too many | They take all the fishing spots and fish |
| PJ | 546 | Too many rafts from Salmon to Snake river. Commercial boats getting too large. | Summer time there is so many rafts coming out of Salmon its hard to dodge all of them; Plugs up river access. Large boats are eroding river banks. |
| PJ | 748 | too many fishing guides during peak season | take pressure off the resource and non-commercial boaters |
| PJ | 1734 | less permits; too much interaction between boaters and floaters on scenic section; too many rafters | decrease amount of rafts on scenic |
| PF | 28 | ban power boaters | its noisy, disturbing, overcrowding, and creates big waves |
| PF | 224 | less jet boaters and commercial trips | keeps the traffic down |
| PF | 983 | camp sites are hard to count on as the jet boats travel upstream | |
| Limitations on Users n=25 (CJ=5; PJ=19; PF=1) | | | |
| CJ | 4 | drop use limits for time being; install more toilets | use levels don't warrant limits at this time; carryout waste is not working well--can find human waste and toilet paper along the river |
| CJ | 352 | freedom of access by all river boaters at all times | keeps options open |
| CJ | 533 | more numbers per day for jet boats and no non-motorized days | to have more people in the canyon |
| CJ | 629 | allow power boats at all times | floaters have plenty of rivers with no power access |
| CJ | 1521 | less limitations over boats | we can all get along without this having to be a rule |
| CF | 839 | better educate and restrict power boaters | improve the experience |
| CF | 1264 | stop the power boats | they are out of place and think they own the river |
| PJ | 252 | Allow personal watercraft | Allow personal watercraft |
| PJ | 287 | Opportunity to use it. Do not fluctuate water like they do! | Everyone as an American has a right to use forest! |
| PJ | 298 | The amount of power boater to rafter ratio in summer. | It basically shuts down river to a limited amount of power boaters to unlimited floaters. |
| PJ | 490 | remove non-motorized days | negatively effects the ability for all users to have river access |
| PJ | 491 | I am not sure, but if they don't limit float trips it seems to only be fair if they limit jet boat users. The use should be equal. | It both limits the number of people in the canyon and is fair to both types of users. If jet boats are going to be limited then floaters should as well. This may be the case-not familiar with float rules. |
| PJ | 535 | allow use for all | so everyone can use it |
| PJ | 723 | allow more permits for powerboats in summer | gets booked up in summer |
| PJ | 798 | the discrimination towards power boaters | float boats especially commercial should not have an advantage |
| PJ | 1222 | access | leave it open for all users at all times |
| PJ | 1262 | I would not allow overnight camping or limit it. | some people can not be depended upon to properly dispose of trash and waste |
| PJ | 1491 | non-motorized window | either do away with it or add an equal number of "non-float days." |

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| PJ | 1500 | Eliminate permits for private boaters; add toilets and campgrounds | permits are not necessary |
| PJ | 1502 | need more power boat permits | to have better access |
| PJ | 1538 | no limit on number of boats in canyon | I think everyone should get to see it |
| PJ | 1714 | put rafters and boaters equal; no special time for rafters | there is enough room for both at all times |
| PJ | 1729 | limit floaters | to equalize power boaters and floaters |
| PJ | 1730 | limit floaters | Power boaters are limited |
| PJ | 1732 | less permits | too much interaction with rafters and boaters on scenic section |
| PJ | 1742 | only allow so many floaters in a row so jet boats don't have to wait so long to go in a rapid | jet boaters should be able to relax and enjoy too; waiting for 12 floaters is not relaxing |
| PF | 1171 | no power boats on some sections | not a wild river; use that makes sense |
| PF | 1745 | control the power boater camping a little tighter | so they don't dominate the good camps for long periods of time |
| Commercial Boats n=14 (CJ=1; PJ=12; PF=1) | | | |
| CJ | 1569 | limit use of power boats over 24 feet | wake |
| PJ | 249 | Less Big boat tours | Beach erosion |
| PJ | 292 | Less large tour boats | Their wakes are large and beat down beaches. |
| PJ | 520 | Get the ocean going boats (power) out! | They are ridiculously large. |
| PJ | 847 | restrictions on length of tour boats | big boats do damage to little boats when they are careless |
| PJ | 1212 | use of commercial tour boats | they leave large wake and cause damage |
| PJ | 1249 | less large tour boats | they are not courteous and they erode shoreline |
| PJ | 1256 | cut back on number of tour boats | load and very large boats the throw an enormous wake |
| PJ | 1633 | reduce the size of some of the largest tour boats | the large boats cannot go off plane due to their size in shallow water; they are an annoyance to all craft |
| PJ | 1708 | limit use of commercial LARGE powerboats on the river (Beamers) | their huge wake is destroying the shorelines |
| PJ | 1709 | take the huge commercial power boats off the river and make the raft groups smaller | more room for every interest group; the huge wakes are destroying beaches and miserable on boats tied up |
| PJ | 1740 | limit size of commercial boats | wakes they leave and downstream turbulence |
| PJ | 1807 | decrease number of tour boats on river | large, very visible and not always courteous boats |
| PF | 469 | tour boaters | they should float and if they can't, don't |
| Impacts to Solitude n=15 (CJ=4; CF=8; PF=3) | | | |
| CJ | 569 | fewer boats | more boats reduce beauty, serenity |
| CJ | 1328 | fewer boats allowed at eh same time | greater solitude |
| CJ | 1348 | I would definitely limit jet boat frequency and numbers; I don't know regulations though | Jet boats although fun spoil the peacefulness |
| CJ | 1471 | no jet boats | ruin the solitude experience |
| CF | 963 | eliminate power boats | detract from the reason of being there |
| CF | 1145 | eliminate power boats | encourage a more natural experience |
| CF | 1149 | no power boats | noise, pollution, respect for nature |
| CF | 1265 | restrict the power boats | disturbs the peace |
| CF | 1425 | limit motor boats | increase experience of wilderness |
| CF | 1464 | fewer power boats | noise, waves |
| CF | 1467 | no power boats | sound |
| CF | 1470 | the amount of jet boats allowed | they disrupt peace and solitude |
| PF | 471 | manage amount of jet boats | peace and quiet |
| PF | 979 | limit power boats | noisy, smelly and very disturbing |

| | | | |
|---|------|---|--|
| PF | 981 | less power boats | It's hard to enjoy the peaceful setting when loud jet boats cruise past your camp and gawk and take pictures |
| Add, Maintain or Restore Facilities | | | |
| Campsites/Campgrounds n=6 (CJ=3; PJ=3) | | | |
| CJ | 375 | better overnight facilities for seniors | |
| CJ | 532 | camping areas are too dark | more lights |
| CJ | 694 | fire sites | its part of camping |
| PJ | 39 | More campsites/outhouses | More places to stay |
| PJ | 306 | certain campground areas maintained and managed | campground on the river |
| PJ | 845 | add campsites on river, add signage, require or enforce the use of self-contained toilets | |
| Outhouses, Picnic Tables, Waste Receptacles n=18 (CJ=1; PJ=16; PF=1) | | | |
| CJ | 693 | more outhouses | it's more comfortable |
| PJ | 40 | Trash cans | |
| PJ | 276 | Toilets | People not packing it out |
| PJ | 365 | need outhouses | to rid the beaches of human waste and toilet paper |
| PJ | 487 | Add outhouses to campsites | could enjoy the trip more comfortably |
| PJ | 562 | better access to some type of bathroom | clean up campsites |
| PJ | 590 | outhouses at campsites | there is so much toilet paper on the beach from people not being able to them |
| PJ | 698 | replace outhouses | very few are following the pack it out regulations |
| PJ | 1224 | Add outhouses at campsites, better upkeep of navigational markers | Less human evidence |
| PJ | 1226 | more outhouses at campsites | because people don't pack out human or animal waste |
| PJ | 1251 | eliminate picnic tables and outhouse at campsites | encourage "pack in and pack out" only and human signs |
| PJ | 1529 | more outhouses | in July the beaches get so much use |
| PJ | 1539 | provide better access to outhouses, so people will use them | It would make for a more comfortable stay at camps; the markers help in areas of confusion or disorientation |
| PJ | 1566 | more portable outhouses and garbage cans | litter |
| PJ | 1725 | bring back outhouses | |
| PJ | 1726 | more picnic tables and more outhouses | so waste won't be in water or on beaches |
| PJ | 1739 | have facilities for collecting human waste if staying in the canyon for a long time | more efficient for people headed to areas without facilities |
| PF | 468 | human waste disposal at take-outs | I believe that explains itself |
| Navigation Markers n=5 | | | |
| PJ | 48 | Markers back up | Safety |
| PJ | 60 | Restores navigational aids | safety |
| PJ | 1207 | upkeep of navigational markers | safer for boats |
| PJ | 1225 | add more navigational markers and outhouses | markers make the trip safer; outhouses make the trip more appealing |
| PJ | 1540 | I would update the navigational markers; I would make river use fair to both floaters and jet boaters | There are many rivers in our great state that offer premier rafting opportunities, but few that offer such a jet boating experience if any |
| Boat Launches n=6 (CJ=2; PJ=4) | | | |
| CJ | 639 | better launch at Heller | too small for the use it gets |
| CJ | 655 | handicap access at launches | gives those with disabilities a chance to see the river |
| PJ | 483 | Leave the boat launch sites primitive | More natural setting and solitude |

| | | | |
|--|------|---|---|
| PJ | 705 | more ramps at Heller, more outhouses | takes away unpleasant encounter with groups |
| PJ | 1206 | more launches at Heller bar | rafters block it for boaters |
| PJ | 1513 | fix launch ramp at Heller bar; needs to be twice as wide and a separate takeout for rafters | |
| Enforcement of Regulations n=8 (CJ=1; PJ=7) | | | |
| CJ | 220 | commercial boats need to pass beached boats with no wake | rafts get washed off the beach |
| PJ | 51 | Ramp rules | |
| PJ | 283 | Requires floater to not plug the launch site at Heller Bar | I have sometimes waited 45 min. to launch because float groups used the whole boat ramp. |
| PJ | 648 | monitor rafting groups more closely for trash issues | so that opinions about jet boaters change, we have educational seminars to help with this issue |
| PJ | 846 | like to see the FS boat cruise by every camp and issue fines for human waste in the area | its disgusting, unhealthy, abusive and unnecessary |
| PJ | 1237 | give tickets to raft groups tied together when they are 30ft long and a kicker motor, they need numbers they are illegal without | so it's fair |
| PJ | 1238 | When there are four rafts tied together 20ft wide, 30ft long and a kicker motor, check their numbers if they have them; if they don't cite them, you would do it to boaters | so it's fair |
| PJ | 1814 | more forest service law enforcement | |
| Dams and Water Fluctuations n=12 (CJ=3; CF=1; PJ=8) | | | |
| CJ | 542 | water level fluctuation | safer for boaters/better for wildlife |
| CJ | 564 | control flow fluctuations, limit size of large boats | more natural conditions will stabilize bank erosion |
| CJ | 635 | outflows at the dam | affects fishing |
| CF | 1463 | we went through on low water; kind of ho-hum experience | |
| PJ | 38 | Extreme low water | Not as fun to boat |
| PJ | 499 | Take down the dams! | It's not natural! |
| PJ | 720 | remove dams | better fishing, more natural |
| PJ | 753 | more wildlife, less fluctuation of water flows | better fishing, more enjoyable |
| PJ | 755 | more consistent water flow | took away from natural experience and affected the fishing |
| PJ | 1706 | keep river levels more stable | to improve fishing |
| PJ | 1707 | water fluctuation | reduce stranded boats overnight and reduce litter washed into river by rising water at night |
| PJ | 1728 | minimize variation in water flow | the river would appear to be more natural |
| Forest Service Presence and Management n=7 (CJ=1; PJ=4; PF=2) | | | |
| CJ | 838 | listen to established outfitters and have less government intervention; be wary of eco-minded groups | not broken, don't fix it |
| PJ | 35 | FS favors floaters | equal treatment to both groups |
| PJ | 804 | get rid of Forest Service | they limit use and opportunity |
| PJ | 1258 | What do managers manage? Quit trying to add a user fee to the public's use of the river like day fees, we don't need them | Makes me mad, there were river boats hauling equipment and supplied on this river long before floater starting using it |
| PJ | 1560 | Forest Service | They usually have their head up their butt |
| PF | 57 | forest service Sunday jet boat permits | floaters have to obtain permits |
| PF | 63 | take gate down from silver mine | not dangerous |

| Noxious Weed Management n=6 (CJ=2; PJ=4) | | | |
|--|------|---|--|
| CJ | 816 | manage poison oak | water level is high--difficult to let people out of boat without contact |
| CJ | 1359 | get rid of poison oak and blackberries--keep trails open | sluice creek was really bad; not passable and poorly managed |
| PJ | 538 | 1. Burn down and clean up old abandoned cabins and outhouses. 2. Need more noxious weed control | Grasses hold soil better then weeds- less silt more fish/ less weeds more game |
| PJ | 644 | Pittsburg weeds in campsite are a nuisance | for better looking campsites and lower fire danger |
| PJ | 803 | spray noxious weeds | prevent spreading |
| PJ | 1550 | beach at Jim creek | remove brush from beach, add outhouse |
| Availability of Information and Historical Sites n=6 (CJ=2; PJ=4) | | | |
| CJ | 597 | have the museum open--the cat was glad to see us | would have provided insights about the canyon |
| CJ | 653 | make special scenic areas and sites more noticeable | so uneducated may be more aware of them |
| PJ | 303 | Improve historical site for better access | Safety and enjoyment |
| PJ | 523 | More info | Didn't know much |
| PJ | 791 | more signs for historical sites | more info for visitors |
| PJ | 1245 | more informative signs, more drunk drivers in jail | education |
| Miscellaneous n=14 (CJ=7; PJ=6; PF=1) | | | |
| CJ | 6 | the houses being built on the Idaho side | leave it for the natural status of the land |
| CJ | 320 | be more friendly to commercial power boaters | they are disrespected by rafters |
| CJ | 595 | difficult issue of jet tours vs. powered boats with fishermen | interfere with each other often |
| CJ | 634 | return to pre-wild and scenic designation | it was a much better experience then |
| CJ | 826 | buy private homes | it detracts from beauty |
| CJ | 904 | reduce the built presence in the canyon | at no time did I feel I was in a place free of human management |
| CJ | 1355 | would like to see a better walking path with stairs to walk up from th river to the visitor center at Cache Creek | I was with elderly folks and I was worried about them falling because of the loose rocks and unstable path we had to walk on |
| PJ | 266 | Frowns of rafters to smiles | Out for same reason |
| PJ | 284 | Check in check out | Allow others to use it |
| PJ | 289 | Commercial outfitters more respectful to others | Better experience |
| PJ | 700 | fighting between floaters and jet boaters | room for all to enjoy |
| PJ | 1553 | no livestock near the river | for health reasons, also fluctuation of the river levels |
| PJ | 1720 | check in/check out | some people stay for an hour/ do not limit if they leave |
| PF | 985 | floaters should be able to use motors also in the wild section | it doesn't make sense; would like to use our motor at times too |

Wild Segment:

| Common Themes | Total Number of Responses (n) | Percent (%) | CJ | CF | PJ | PF |
|----------------------|--------------------------------------|--------------------|-----------|-----------|-----------|-----------|
| Nothing | 66 | 18.1 | 23 | 16 | 5 | 22 |

| | | | | | | |
|--|------------|--------------|-----------|-----------|-----------|------------|
| Less Power Boats and Rafts/Prohibit Power Boats | 106 | 29.0 | 6 | 53 | 1 | 46 |
| Water Fluctuations | 23 | 6.3 | 3 | 5 | 2 | 13 |
| Access to Outhouses/Picnic Tables | 33 | 9.0 | 6 | 1 | 4 | 22 |
| Restrictions on Users | 53 | 14.5 | 5 | 5 | 21 | 22 |
| Dams | 7 | 1.9 | 1 | 1 | | 5 |
| Camping in the Canyon | 10 | 2.7 | 1 | | 1 | 8 |
| Enforcement of Regulations | 19 | 5.2 | 1 | 4 | 1 | 13 |
| Access to Information and Educational Materials | 10 | 2.7 | 3 | 5 | | 2 |
| Conflict at Launches/Handicap Access at Launches | 11 | 3.0 | 4 | 1 | 2 | 4 |
| Miscellaneous | 27 | 7.4 | 3 | 2 | 5 | 17 |
| Total | 365 | 100.0 | 56 | 93 | 42 | 174 |

| Number | User Type | What Should Be Changed? | Why? |
|---|-----------|--|--|
| Nothing n=66 (CJ=23; CF=16; PJ=5; PF=22) | | | |
| 19 | CJ | none | |
| 100 | CJ | none | |
| 107 | CJ | nothing | |
| 114 | CJ | it was spectacular | |
| 136 | CJ | its good | |
| 184 | CJ | nothing | |
| 378 | CJ | nothing | |
| 383 | CJ | no changes | |
| 412 | CJ | none | |
| 417 | CJ | nothing | |
| 465 | CJ | nothing, improve communication for emergencies | |
| 734 | CJ | I've been there twice and it is wonderful | |
| 736 | CJ | nothing | |
| 823 | CJ | nothing | |
| 953 | CJ | no change | |
| 978 | CJ | we came from out of town and were disappointed that we couldn't see more of the canyon | because I thought that we didn't get our money's worth |
| 1033 | CJ | none | |
| 1055 | CJ | well managed as is | don't eliminate any groups; everyone can share |
| 1127 | CJ | I was only there for one day; did not experience difficulties; it was lovely | |
| 1131 | CJ | nothing | |
| 1165 | CJ | I've only been once; so I'm really not qualified to answer | |
| 1188 | CJ | no change | |
| 1583 | CJ | none | |
| 94 | CF | nothing | |
| 174 | CF | would not change anything | |
| 181 | CF | no changes | |
| 386 | CF | It was great | |
| 388 | CF | nothing | Everything was great |
| 392 | CF | nothing | |

| | | | |
|---|----|---|--|
| 429 | CF | Wonderful experience | |
| 1107 | CF | nothing | |
| 1139 | CF | first experience and it was wonderful, not sure I would change anything | |
| 1277 | CF | none | |
| 1391 | CF | none | |
| 1469 | CF | nothing they did an excellent job | |
| 1478 | CF | nothing I can think of | |
| 1685 | CF | it was great | |
| 1810 | CF | nothing | |
| 1831 | CF | nothing needs changed | |
| 332 | PJ | nothing | |
| 467 | PJ | I am happy with the status quo. It suits my use of this river system. | |
| 514 | PJ | none | |
| 876 | PJ | nothing | because it is perfect |
| 1599 | PJ | none | |
| 366 | PF | I like it as it is | |
| 431 | PF | no changes | |
| 458 | PF | nothing | |
| 860 | PF | no | |
| 861 | PF | nothing; perfect | |
| 867 | PF | was happy with what I saw | |
| 888 | PF | don't change anything | |
| 891 | PF | keep doing a great job | |
| 1301 | PF | nothing | |
| 1407 | PF | none | |
| 1410 | PF | nothing | |
| 1422 | PF | nothing | |
| 1441 | PF | not a thing | |
| 1445 | PF | nothing | |
| 1485 | PF | nothing | |
| 1669 | PF | it appears to be well balanced | |
| 1693 | PF | I wouldn't change a thing | |
| 1698 | PF | nothing | |
| 1700 | PF | nothing; it was awesome | |
| 1757 | PF | nothing | |
| 1793 | PF | nothing | |
| 1822 | PF | no changes | |
| Less/No Motorized Boats/Rafts n=106 (CJ=6; CF=53; PJ=1; PF=46) | | | |
| 9 | CJ | reduce and limit access | to preserve wilderness and wild nature of location |
| 74 | CJ | prohibit access to all motorized watercraft | motorized crafts defeat the purpose of designating a river as 'wild' |
| 82 | CJ | less power boats | too noisy |
| 1044 | CJ | maybe less jet boaters | floaters are less destructive |
| 1081 | CJ | no powerboats except mail boat | would be more peaceful; more wildlife they would be less spooked |
| 1136 | CJ | outlaw powered vehicles | they ruined the peace and natural beauty |
| 80 | CF | no powerboats | Destructive and disturbing |

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|------|----|--|---|
| 86 | CF | Forbid power boats | Don't fit in "wilderness" |
| 87 | CF | no power boats | Allow true "wild" exp. |
| 98 | CF | Down with Jet Boaters | Disturbs wild scenery |
| 105 | CF | no powerboats | The noise and distraction |
| 112 | CF | decrease traffic, especially motorized | power boaters often do not slow down, scaring and endangering kayakers; furthermore, frequent passing interrupts solitude, disturb peacefulness, create resort-area experience, not a wilderness experience |
| 113 | CF | Limit # of jet boat opportunities | Floaters are restricted |
| 120 | CF | no powerboats | Shouldn't be there |
| 129 | CF | Less power usage | Detracts' from wild experience |
| 153 | CF | less powerboats | they take away the wild |
| 162 | CF | fewer jet boat | they interrupt the wild experience |
| 195 | CF | limit number of jet boat to lower number | Jet boats detract from the wild character of the river |
| 216 | CF | no power boats | I like the peace and quiet |
| 409 | CF | no motor boats | Rafting: rare, Power: anywhere |
| 424 | CF | no motorboats | noisy and disruptive |
| 426 | CF | Reduce jet boats | Detracts from solitude |
| 428 | CF | Less motorized boats | Take away beauty of river |
| 880 | CF | less jet boater use, more commercial rafters | jet boaters disturb wildlife and solitude of river |
| 912 | CF | no jet or powerboats | noise |
| 913 | CF | no power or jet boats | quiet and solitude are ruined |
| 914 | CF | no power boats during weekend | detracts from entire experience |
| 964 | CF | limit all power crafts | it takes away from the wild experience and is unappealing |
| 988 | CF | more limits on powerboats | they are almost constant and when they appear, the destroy the sense of nature in the canyon |
| 990 | CF | keep jet boaters out | |
| 994 | CF | power boat tourists | takes away from the solitude, no noise |
| 995 | CF | significantly reduce or get rid of power boat tours | the mix with floaters is difficult and it takes away from the floaters' experience |
| 1108 | CF | less commercial jet boat | detracts from the peacefulness and wildlife viewing |
| 1109 | CF | fewer power jet boat trips | they are loud often not courteous and take away from the quiet solitude sought on the river |
| 1148 | CF | fewer jet boats | less noise |
| 1152 | CF | remove power boats except for official use | the noise from the boats totally disrupts the environment that we seek on the river |
| 1268 | CF | I would not allow any power boats | they produce a lot of waste and are a detriment to the "natural" experience |
| 1279 | CF | Ban power boaters except for management/conservation; keep flow levels of the river up | encourage and add to the wild nature experience |
| 1280 | CF | limit private boaters and Idaho power boats | I'm not sure , good luck |
| 1281 | CF | less power boats | they seemed to not care about the rafters |
| 1284 | CF | I would allow no motor boats | |
| 1306 | CF | more limits on number of commercial power boats | |
| 1367 | CF | make jet boaters draw permit and limit numbers | I feel on the lower end there are too many or jet boaters |
| 1424 | CF | get rid of the power boaters, strictly rafts or canoes | the polluting of the outboard motors, jet boats |
| 1434 | CF | less power boats | enhance wilderness rafting experience |
| 1466 | CF | Increase number of days/season power boaters are banned so we could come back then | the same reason motorized vehicles are banned from wilderness areas |

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|------|----|--|--|
| 1468 | CF | no powerboats | too noisy |
| 1595 | CF | more limitations on powerboats | make the wild section more natural |
| 1622 | CF | limit power boats | solitude |
| 1623 | CF | omit the power boats and the jet boats | they distract from the wilderness experience |
| 1643 | CF | limit the jet boat use, way too much traffic | they impact the wilderness experience, ace rafters out of all the good camps, hurt the riparian zone of the river corridor |
| 1645 | CF | eliminate completely all power driven boats | these powerboats ruin the quiet backcountry effect that I so strongly seek after |
| 1648 | CF | less motor boats | detracted from serenity and peacefulness of the trip |
| 1684 | CF | allow less private jet and power boaters | preserve the pristine setting |
| 1752 | CF | do not allow any powered craft | need peace and quiet out in nature |
| 1754 | CF | not as many powerboats | they ruin things with noise and waves |
| 1755 | CF | fewer tourist boats; not always respectful to rafters | |
| 1785 | CF | exclude the jet boaters | because they destroy the peace and quiet of the wilderness |
| 1835 | CF | no power boats | more natural |
| 133 | PJ | Less rafters | Because there's too many |
| 131 | PF | less motors on the river | too noisy, and too many tour groups |
| 159 | PF | remove powerboats | motors are a major distraction |
| 169 | PF | limit powerboat use | the noise and fumes interfere with the wild and scenic experience |
| 218 | PF | get rid of power boats | noisy, smelly, rude |
| 343 | PF | eliminate or decrease the number of tour boats | increase the quality of experience with noise reduction |
| 355 | PF | less jet boaters | they take away from the peace of the river |
| 367 | PF | less powerboats | the noise does not belong in such a pristine place |
| 432 | PF | maybe no powerboats | just for the peace and quiet |
| 443 | PF | too many jet boats | to preserve the natural tranquility of the area |
| 447 | PF | no power boats | wild and power boats don't fit well together |
| 448 | PF | eliminate jet boaters | motorized use detracts from the wild characteristic and user experiences |
| 450 | PF | get rid of jet boat | too loud |
| 454 | PF | restrict private power boat usage | they have plenty of other places to run besides the wild section of the snake river |
| 580 | PF | no jet boats | its not wild |
| 850 | PF | less or no power boats | safety and solitude |
| 856 | PF | the number of private float trips allowed | we've had a really hard time getting permits at this |
| 870 | PF | no motorized crafts | detracts from wild and scenic nature and solitude |
| 871 | PF | limit the amount of powerboats to amount similar to floaters | too many powerboats on river |
| 899 | PF | don't allow power boats | they're noisy and disrupt the natural flow |
| 900 | PF | ban jet boats from the 2 large rapids | too great a risk of sinking and polluting the river |
| 906 | PF | get rid of jet boat | disproportionately interfere with others ability to enjoy the wilderness |
| 930 | PF | first trip; would like all days free of jet boaters | enhance the quiet/solitude of the experience |
| 935 | PF | too many powerboats; not long enough NMW | add at least 1 day to NMW so that kayakers and rafters could at least think they are on a wild and scenic river |
| 937 | PF | keep powerboats out of the wild section | peace and quiet |
| 1011 | PF | fewer power boats on upper section (wild) | detracts from wilderness experience of floaters |
| 1069 | PF | no powerboats | to restore peace to the natural river |
| 1070 | PF | number of power boats | they're noisy, dominating, and unnatural |
| 1072 | PF | limit powerboats | too loud |

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| 1110 | PF | less number of huge tour boats | there are so many; they take away the solitude |
| 1170 | PF | reduce number of jet boat commercial trips | most boats had few passengers; they should also be limited to a small number of trips similar to the floaters |
| 1187 | PF | reduce # of private jet boats and only up to rush creek | too few quality campsites that jet boaters have the advantage; loss of solitude |
| 1271 | PF | reduce the number of jet boat | noise, campsite degradation, crowds |
| 1310 | PF | limit the jet boat | reduce the noise and waves |
| 1311 | PF | severely restrict the number of commercial and non-commercial jet boats | to make the experience for lottery selected float groups much more unique, wild and scenic along the lines of the Selway River |
| 1370 | PF | more days where jet boat aren't allowed | they're rude and unsafe |
| 1401 | PF | fewer private motor boats | I found them disturbing; motorboats not to slow, reduce wake for my kayak |
| 1590 | PF | no powerboats in wild section or at least as limited as floaters | motors are definitely not wild |
| 1606 | PF | ban power boats except for emergencies | it would return the river to a natural state |
| 1609 | PF | get rid of power boats | they are intrusive, rude and don't follow the rules |
| 1618 | PF | less commercial jet boats | disturbance of natural setting and waves |
| 1636 | PF | reduce number of jet boat per day | the roar of jet boat is not wild and scenic |
| 1637 | PF | eliminate powerboats; it's supposed to be wild | provide a higher quality wild experience and be in compliance with the applicable law |
| 1654 | PF | more restrictions on powerboats | they detract from the pristine environment that could be; bank erosion, noise, the smell of gas and visible oil in the water |
| 1675 | PF | more limited use for powerboats | it would seem more peaceful and natural |
| 1767 | PF | no powerboats above Pittsburg landing | some powerboats do not slow down and if you are fishing, they drive boats onto the rocks or shore |
| 1778 | PF | less jet boat | the wake of 35 foot jet boat creates accelerated erosion of the shoreline, not to mention noise and air pollution |
| Water Fluctuations n=23 (CJ=3; CF=5; PJ=2; PF=13) | | | |
| 944 | CJ | more water flow | dam releasing more water |
| 1024 | CJ | we came from Ohio to ride the jet boat all the way down but were unable because of the water level; | it was very disappointing; need more input fro state or whomever on release of water from dam |
| 1195 | CJ | I would try to keep the water level close to what it was; it seemed to be right for jet boaters and rafters | don't know |
| 101 | CF | Release more water | More whitewater |
| 190 | CF | river fluctuations | effects fishing, prey, boats, beaches |
| 1134 | CF | if possible higher flows down stream of dam | a better rafting experience |
| 1137 | CF | higher water levels | to guarantee true rapid classification |
| 1678 | CF | more water flow for more challenging whitewater | compared to 30 years ago the rapids are flat |
| 323 | PJ | Fluctuating water | Better camping and fishing |
| 819 | PJ | the drastic changes in water flow | it effects the fishing in a negative way; many boats and rafts are left high and dry in the mornings |
| 83 | PF | more even river flows | regain rivers natural state |
| 187 | PF | manage the water flow better | alleviate the impacts to fishing |
| 217 | PF | limit flow fluctuation | to reduce erosion and associated problems |
| 342 | PF | control water fluctuations | leaves a white line along the canyon |
| 456 | PF | the amount of water released, need more | unrestricted waterways |
| 460 | PF | higher water levels after season sep-march | I'd go more often |
| 691 | PF | regulate water flows | allow more beaches to exist |

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|---|----|--|---|
| 938 | PF | less variation in daily river fluctuations | hard to deal with in camp |
| 1013 | PF | more water flow during the summer | boring float |
| 1273 | PF | extreme fluctuation of water levels made rapids more challenging but seemed to have surprisingly little apparent effect on the natural environment | government policy should encourage alternative energy use but I'm not sure that would effect this usage |
| 1276 | PF | the significant fluctuations in the water level | it's the constant reminder of human's attempt at controlling the river; makes experience less natural |
| 1314 | PF | river levels | I don't want to drag the raft a long way to water in A.M. |
| 1780 | PF | change water flow discharge fluctuation | preserve sandy beaches |
| Access to Outhouses/Picnic Tables n=33 (CJ=6; CF=1; PJ=4; PF=22) | | | |
| 732 | CJ | add some outhouses along the river | too much toilet paper on the shoreline |
| 956 | CJ | more ladies rooms at launch below dam | heavy use makes them less pleasant and clean |
| 1041 | CJ | provide outhouses | people won't follow the pack out rule |
| 1045 | CJ | provide outhouses on bank in the upper section | to keep people from leaving it everywhere |
| 1160 | CJ | more restroom facilities at boat launch | when the boat comes in there is quite a line |
| 1164 | CJ | more toilets | |
| 150 | CF | potty bucket in enclosed place for privacy | weird sitting in the open to go to the bathroom |
| 313 | PJ | put in picnic tables | |
| 339 | PJ | Restore navigational markers, outhouses, tables | 1. Make the river safer 2. Clean up the banks now littered with toilet paper ect 3. Have places to stop enjoy and have a meal |
| 808 | PJ | replace outhouses and picnic tables | convenience and less waste |
| 879 | PJ | a few restrooms | waste is now uncontrolled |
| 88 | PF | tables and outhouses | easier travel |
| 91 | PF | more picnic tables at campsites | I liked them there |
| 93 | PF | bring back outhouses and picnic tables | more enjoyable and convenient trip |
| 116 | PF | add outhouses | enforcing pack out of human waste |
| 179 | PF | more outhouses | |
| 441 | PF | provide outhouses | clean and convenient |
| 1006 | PF | more restrooms | |
| 1393 | PF | picnic tables back at the campsites | add to the comfort factor without reducing the wilderness factor |
| 1406 | PF | replace the picnic tables and outhouses | convenience and less waste |
| 1436 | PF | outhouse facilities | carry buckets through the rapids is a disgusting form of handling human waste |
| 1439 | PF | outhouses | so I didn't need to pack it out |
| 1616 | PF | bathroom facilities | I think people would use the facilities rather than go to the bathroom anywhere they feel like it |
| 1641 | PF | toilets and picnic tables | charge each person on the river a fee |
| 1642 | PF | have floated the river 40 times when they had outhouses in the camps, I think it was a better experience; it was cleaner in and around the camps; now people will do their business in the bushes instead of using the portable toilet | |
| 1661 | PF | availability of toilets enforcing use of port-a-potties | human waste |
| 1663 | PF | take out all outhouses and enforce the pack it in pack it out especially for port-a-potties; also designate camp spots | too much toilet paper stuffed under bushes and rocks; too few camp sites for too many people |
| 1699 | PF | outhouses at campsites even in the wild section | very inconvenient not having them |
| 1705 | PF | a couple more outhouses, perhaps | obvious reasons |
| 1770 | PF | re-install and maintain outhouses | too many people not packing out their waste |

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| 1771 | PF | put back the outhouses that used to exist | too many people won't use the portable systems and end up just digging a hole |
| 1782 | PF | campsite outhouses; didn't see any | |
| 1832 | PF | put in outhouses | there is ample evidence that many boaters don't use their portable toilets |
| Restrictions n=53 (CJ=5; CF=5; PJ=21; PF=22) | | | |
| 3 | CJ | do away with the non-motorized window | it is unfair and counter to the intent of the HCNRA Act; ineffective as well |
| 695 | CJ | no restriction on powerboats during the summer | it is everyone's river |
| 955 | CJ | there needs to be a solution to block-out times for jet boaters when the floaters choose not to use their time | education is the key to people learning about the river, wildlife and environment; if people have every opportunity to see and experience what is possible to see, preservation will be easier to sell |
| 976 | CJ | boaters can not go far enough | we only went a short distance and most of it was going in circles |
| 1200 | CJ | less restrictions on boat numbers and boat days | allow more of the public to use public restrooms |
| 167 | CF | harder jet boat permits | encountering jet boaters with no etiquette |
| 174 | CF | require the group to stay together | outfitters have first choice of most campsites |
| 960 | CF | more trips/ day | accessible to more people |
| 1790 | CF | limited entry | too many other parties |
| 1836 | CF | more motorless window time | 3 days every two weeks doesn't seem to be equal for those who would like to enjoy the solitude and hear the wildlife on the rivers |
| 115 | PJ | Discontinue the non-motorized window | It is unfair to give any one user group special privileges. |
| 152 | PJ | Discontinue the non-motorized window | It is unfair to give any one user group special privileges. |
| 293 | PJ | More jet boats on weekends and less during the week | Jet boating for me is usually a weekend adventure and some weekends you can't get on the wild river. |
| 314 | PJ | Stop the non motorized days of the river. | not fair to the jet boats. Equal time for all users. |
| 319 | PJ | Having days for power boaters only | What's fair for one is fair for the other |
| 325 | PJ | Get rid of the non motorized window | Fairness to powerboats |
| 326 | PJ | Being able to go anytime, any day, like it used to be. | It should be that everyone is treated equal and be able to get along |
| 327 | PJ | The restrictions for days power boaters can go boating | So that power boaters and rafters can equally use the river |
| 338 | PJ | Less restrictions for jet boats | Rafters need to be less |
| 512 | PJ | eliminate non-motorized days | to give floaters and boaters equal recreational opportunities |
| 604 | PJ | powerboats at any time | rafters do not own the river |
| 606 | PJ | don't like the limitation--wild portion should be enjoyed by all | |
| 612 | PJ | more jet boating opportunities all times of the year | more opportunities for use in summer |
| 613 | PJ | allow more power boats | more opportunities |
| 651 | PJ | eliminate non-motorized days | fairness to all |
| 809 | PJ | no non-motorized days | floaters and boaters should be able to get along; boaters have always been on the river |
| 818 | PJ | eliminate NMW or add non-floating days | equality of treatment |
| 1239 | PJ | get rid of non-motorized window | it's b.s. limit the floaters more |
| 1488 | PJ | stop the non-motorized time | not equitable to power boaters |
| 1490 | PJ | equitable time on river for jet boaters as rafters | equality |
| 1592 | PJ | the non-motorized window | it's ridiculous and unnecessary. All boaters should get along |
| 442 | PF | let power boaters run more | because I own one |
| 453 | PF | require a lottery system for jet boaters as well | this would make the system more equitable for all |

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| | | | parties |
| 461 | PF | more launches for private rafters | it takes forever to get a permit for the river |
| 788 | PF | NMW days every week | lessen impact on river corridor, more peaceful experience |
| 868 | PF | reduce max group size to 18 to 20 and add additional launch/permit day | |
| 984 | PF | rafters should be able to motor also | what difference is there from a raft to a motor boat; stupid rule |
| 1017 | PF | give floaters alternating weeks without power boaters | they take all the good camps, you lose your solitude |
| 1086 | PF | jet boat having the same amount of trip permits as rafters have | because I won a jet boat |
| 1088 | PF | same # raft days as powerboat days (NMW vs. NFW) | to be equitable and fair |
| 1089 | PF | more powerboat launches | hard to schedule time to go |
| 1091 | PF | reduce number of float parties or number in groups | excessive |
| 1092 | PF | same amount of non-float days as non-motorized days to be equitable and fair | equal opportunity to each group |
| 1270 | PF | equal number of days with no power boats as with | the river without powerboats is a completely different experience than with powerboats and needs to be more available |
| 1312 | PF | make more NMW times | powerboats detract from pristine experience |
| 1402 | PF | powerboats need permits | equality |
| 1417 | PF | treat power/float equally | why not allow float trips more regularly |
| 1448 | PF | open it up more (permits for jet boaters) | so more people can experience it |
| 1612 | PF | more powerboat user days | powerboats and floaters should both have good opportunity for user days |
| 1634 | PF | maybe some non-jet boat weekends too | to give people who can't always take the week off a break |
| 1635 | PF | stricter rules for the jet boaters; fewer jet boaters | it seems that they do not have to go through the same education as rafters do; their numbers are not as closely regulated; there should be fewer permits for jet boats available |
| 1656 | PF | motor boat and raft balance | the noise, rudeness, smell and lack of campsites due to inability to get home fast enough; didn't like it; would like to go without that |
| 1823 | PF | make the jet boaters have the same lottery as floaters; assign campsites as in the middle fork | it is not equitable; floaters need a permit all the time while jet boaters only have a non-motor window; permits all around during the permit season is equitable |
| Dams n=7 (CJ=1; CF=1; PF=5) | | | |
| 1192 | CJ | Un-dam the river for the salmon | more of a natural river environment |
| 1458 | CF | breach the dam | |
| 582 | PF | take hells canyon dam down | anadromous fish |
| 862 | PF | remove lower dams on the snake | restore natural flow regime; restore sediment transport thru river system; restore passage of fish |
| 884 | PF | remove the dams | improve the salmon run, unappealing to the eye |
| 907 | PF | Alter/remove the dams to restore Hells Canyon fisheries, beaches and ecology | so salmon and other fish would thrive |
| 1181 | PF | no dams wild or scenic | fewer and fewer places available to experience unaltered rivers; human population seeking solitude, quality fishery increases. |
| Camping in the Canyon n=10 (CJ=1; PJ=1; PF=8) | | | |
| 825 | CJ | make rafters hide their stuff on the banks better | we saw lots of chairs and ice chests awaiting the rafters; it was like it was their beach |

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| 583 | PJ | enforcing limits on length of stay | too many people leave campers cheating others out of camping spots |
| 231 | PF | assign campsites as other rivers do | to make the day float more leisurely |
| 357 | PF | not sending boats ahead to claim campsites | unfair to private groups |
| 444 | PF | specify campsites for large groups only | hard for large groups to find sites to overnight |
| 1007 | PF | make camp sites | to limit impact on the rest of the canyon |
| 1014 | PF | campsite reservation system similar to the Middle Fork of Salmon, except include power boaters | to offer some predictability of an open camp site downstream |
| 1451 | PF | assign campsites | makes planning your days better if you know where your next campsite is and that it will be open when you get there |
| 1596 | PF | assign campsites | at times I have had trouble finding an open camp |
| 1817 | PF | campsite-upper area; pathways are very rocky and dangerous | is there some way to decrease the danger? |
| Enforce Regulations n=19 (CJ=1; CF=4; PJ=1; PF=13) | | | |
| 1193 | CJ | be sure all groups pack out trash and waste | |
| 128 | CF | the urine policy--everyone needs to pee in the river and not on the arid desert environment | urine stinks and builds up in camp making it NASTY, not to mention the impact on the fragile arid environment |
| 201 | CF | check equipment before and after trips and check for permits | make campsites cleaner |
| 427 | CF | power boaters need to slow down near rafters/kayakers, not all do | noise and wake of boats detracts from experience of non-motorized boats |
| 1465 | CF | enforcement of a 'no wake' for power boaters when passing rafts | |
| 268 | PJ | Cite crafts with kicker gas motors | Launch regulations. Are bias towards rafters |
| 157 | PF | education on waste removal | less human waste on shore |
| 889 | PF | enforce not trash or human waste | the abundance of trash on the river |
| 931 | PF | enforcement /education of power boaters | most were nice but a few buzzing the rafts, approaches too quickly and operate their craft carefully |
| 1019 | PF | less law enforcement | it needs to be done nationwide |
| 1115 | PF | emphasize to power boater the importance of limiting trips up and down the river | I felt I saw far more jet boat going back and forth this year than any other |
| 1404 | PF | jet boat speed limits near parked floaters | wakes are big and troublesome |
| 1414 | PF | require power boaters to carry and use a toilet | it's not realistic to expect them to run back to the toilet; they don't |
| 1443 | PF | policies from commercial boaters; regarding rafters having the right of way to rapids | commercial boater interfered with our path through granite creek |
| 1639 | PF | make sure that jet boat have adequate toilets | they have a greater opportunity to impact the river because of their mobility |
| 1658 | PF | more control over jet boat | some follow the river rules and slow down; most do not |
| 1688 | PF | regulation of ramp time | because people get really annoying and I hate waiting |
| Access to Information n=10 (CJ=3; CF=5; PF=2) | | | |
| 189 | CJ | provide better info on who can use the river and when | many people want to float the river but don't understand the limits |
| 318 | CJ | more interpretive sites/wildlife education | to ensure that visitors can really appreciate what they are seeing |
| 910 | CJ | more information | at time of arrival, there are no raft trips and one 2 hour jet boat ride |
| 79 | CF | learn more about the historic aspect and geologic aspect before arriving; also the management techniques and changes that have occurred | to better appreciate the environmental setting while experiencing it |

| | | | |
|--|----|--|---|
| 92 | CF | Better maps | Know where you are |
| 1135 | CF | more road signs (how to get there | had problems finding the location |
| 1140 | CF | map of river pointing out rapids, historical sites, etc at the landing sites | |
| 1682 | CF | make more information available for the history of the area | there is so very much you could miss |
| 1085 | PF | post signs on jet boat ramps, they are for powerboats not rafts | Power boaters are inconvenienced by having to wait for rafters to load or unload |
| 1112 | PF | adding a few signs to remind you of poison ivy | 3 out of 7 of us had an allergic reaction to poison ivy |
| Conflict at Ramps and Handicap Access n=11 (CJ=4; CF=1; PJ=2; PF=4) | | | |
| 833 | CJ | more handicapped accessibility | so handicapped don't have to eat lunch alone on the boat |
| 835 | CJ | boat docks and canyons need to be handicap accessible | so handicapped individuals could enjoy the total experience too |
| 1125 | CJ | more parking and picnic access at boat launch | more emphasis on day visitors who do not bring camping gear and own a boat |
| 1175 | CJ | better accessibility for other groups including elderly or handicapped | inadequate facilities parking bathrooms and places to eat |
| 177 | CF | handicap access | broaden opportunities for all to enjoy |
| 416 | PJ | use the river at the same time--leave boat ramps free more often | takes floaters too long to gear up |
| 857 | PJ | the forest service rangers at Pittsburg landing could be less abrasive | no explanation needed |
| 359 | PF | additional ramps at hells canyon dam | only one ramp there causes conflicts with other users |
| 1009 | PF | HCC dam was backed up; some ramp supervision to move folks along is needed | caused crowding for several miles |
| 1380 | PF | make a more user friendly launch site | it's a bottleneck at the ramp, need more room to launch multiple trips |
| 1617 | PF | the launch site at the put-in should be bigger | so it could accommodate more rafts and groups |
| Miscellaneous n=27 (CJ=3; CF=2; PJ=5; PF=17) | | | |
| 141 | CJ | manage jet or power boats on different days than rafters | to give rafters more quiet and natural time |
| 183 | CJ | have FS maintain posted hours | everything is remote and takes a long time to travel in between--the centers need to be open at scheduled times |
| 577 | CJ | markers | so more novice boaters could experience the rivers |
| 1101 | CF | a collaborative group of commercial and private motorized and non-motorized users to help give managers ideas on better managing the wild snake to reduce conflict | |
| 1383 | CF | nice to have more sandy beaches | aesthetics, boating beach areas |
| 331 | PJ | The way you get permits. | It's a first come first serve system. It is hard to be one of the first to get permits. |
| 337 | PJ | The area would be perfect if there were a way to eliminate all the rattle snakes. | Because I really, really don't like them. |
| 745 | PJ | rattlesnake management | would make campground safer |
| 815 | PJ | would allow kicker engines on float boats | it helps gear boatmen and I have no idea what it hurts |
| 1489 | PJ | get forest service guides to do their jobs | less chance for fights to break out with someone present. |
| 156 | PF | eradicate poison ivy, tables and outhouses, restrict jet boaters | benefit for all users |
| 239 | PF | floaters and commercial powerboats sharing river at the same time | commercial boats detract from experience and add an element of uncertainty at the rapids |
| 243 | PF | dressing area at Pittsburg had wasps and hornets--extremely unkept | |
| 356 | PF | preserve historic buildings and artifacts | provide a powerful testament to the historic people's lives |

| | | | |
|------|----|---|---|
| 430 | PF | Power boaters respect of floaters | noise, wake, exhaust |
| 506 | PF | no hunting from boats | its too confrontational |
| 507 | PF | no hunting and jet boat use in wild section | impact on wildlife and natural setting |
| 1307 | PF | would have had a more positive experience if jet boat would slow down; it was obnoxious | |
| 1366 | PF | jet boat should be more respectful; we cant stop in the middle of a rapid to let them through | solitude |
| 1437 | PF | poison ivy should be controlled better | some campsites have entirely too much of it |
| 1703 | PF | I would not let hunters in | it was very disturbing to me to be woken by someone shooting a gun; makes wildlife hide |
| 1704 | PF | no hunting within people's camps | noisy, dangerous, wished police were there to arrest illegal hunting of bears with dogs |

Question 2.4: How has the “non-motorized window” affected your experiences on the river?

Scenic Segment:

| Effect of NMW | Total Number of Responses (n) | Percent (%) | CJ | CF | PJ | PF |
|--|-------------------------------|--------------|-----------|----------|------------|----------|
| No Effect | 76 | 42.0 | 13 | | 62 | 1 |
| Positively | 13 | 7.0 | 3 | 4 | 3 | 3 |
| Negatively | | | | | | |
| <i>Limits Opportunities/Increases Planning</i> | 63 | 35.0 | 11 | | 52 | |
| <i>Disapprove of Policy</i> | 27 | 15.0 | 3 | | 24 | |
| Total Negative Comments | 90 | 50.0 | 14 | | 66 | |
| Total Number of Written Comments | 179 | 100.0 | 30 | 4 | 131 | 4 |

| Number | User Type | Comment |
|--|-----------|---|
| No Effect n=76 (CJ=13; PJ=62; PF=1) | | |
| 375 | CJ | none |
| 542 | CJ | rarely use this section of river |
| 657 | CJ | not affected |
| 658 | CJ | none |
| 661 | CJ | no effect |
| 664 | CJ | none |
| 826 | CJ | no |
| 828 | CJ | none, we were able to plan and go when there were motorized days |
| 838 | CJ | not this time but could in the future |
| 1336 | CJ | none |
| 1337 | CJ | it hasn't yet but may in the future for recreational travel and adventure |
| 1343 | CJ | no effect |
| 1573 | CJ | none |
| 40 | PJ | has not |
| 48 | PJ | none |
| 49 | PJ | no affect |
| 53 | PJ | no |
| 60 | PJ | No affect |

| | | |
|------|----|--|
| 70 | PJ | Has not |
| 249 | PJ | none |
| 258 | PJ | Not at all |
| 259 | PJ | It Hasn't |
| 263 | PJ | None |
| 264 | PJ | Little, I adjust |
| 274 | PJ | no-go up Salmon |
| 278 | PJ | Has not |
| 279 | PJ | no affect |
| 297 | PJ | Has not |
| 306 | PJ | none |
| 353 | PJ | no effect |
| 479 | PJ | has not had a direct effect but could in the future |
| 483 | PJ | It hasn't affected myself. But I believe there should be no privileges to either side. |
| 487 | PJ | Very little, if not expanded |
| 562 | PJ | no effect--equal access if fine |
| 620 | PJ | no affect |
| 621 | PJ | Not much |
| 624 | PJ | So far no affect |
| 636 | PJ | Has not |
| 641 | PJ | has not |
| 686 | PJ | none |
| 688 | PJ | hasn't affected me yet, hope it never does |
| 698 | PJ | no affect |
| 723 | PJ | Doesn't affect me |
| 741 | PJ | none |
| 753 | PJ | it hasn't |
| 754 | PJ | no effect |
| 797 | PJ | no affect |
| 845 | PJ | it hasn't |
| 1212 | PJ | it hasn't |
| 1215 | PJ | it hasn't |
| 1224 | PJ | no effect at all |
| 1225 | PJ | not at all |
| 1226 | PJ | no effect at all |
| 1230 | PJ | none |
| 1238 | PJ | no effect at all |
| 1251 | PJ | no effect we rarely boat upriver beyond Imnaha |
| 1262 | PJ | it did not effect me, but I'm sure it effected the floaters |
| 1501 | PJ | it hasn't; we used to own a jet boat but don't anymore; we were boating with friends |
| 1504 | PJ | I've never been that far |
| 1511 | PJ | Did not affect |
| 1513 | PJ | none |
| 1526 | PJ | not at all |
| 1540 | PJ | no affect |
| 1549 | PJ | we don't usually go that far up |
| 1550 | PJ | none |
| 1552 | PJ | not at all |

| | | |
|--|----|---|
| 1553 | PJ | none |
| 1568 | PJ | not very much, it is a good policy to preserve the location |
| 1633 | PJ | no affect |
| 1725 | PJ | no change |
| 1729 | PJ | don't use this section of water anyway |
| 1730 | PJ | not at all, as I am not skilled enough to navigate this section anyway |
| 1732 | PJ | it hasn't; it would be nice if rafters weren't allowed in scenic section on certain days; too much start and stop for jet boaters to reduce wake in slow sections |
| 1740 | PJ | no affect |
| 1807 | PJ | no affect |
| 28 | PF | no, we put in at Pittsburg |
| Negative Effect | | |
| Limits Opportunities/Increased Planning n=63 (CJ=11; PJ=52) | | |
| 20 | CJ | not able to access wild section any time I want by powerboat |
| 481 | CJ | reduced--becomes available only to those with time to commit to float trips |
| 564 | CJ | limited access when I had short notice for a trip |
| 588 | CJ | only use the river in early spring and fall when it is not an issue |
| 625 | CJ | it limits experiences on the river |
| 634 | CJ | it motivated me to sell my jet boat and direct my recreation elsewhere |
| 639 | CJ | have to make plans way in advance |
| 663 | CJ | disabled and elderly would not be able to visit this river |
| 816 | CJ | reduced amount of time or days that can be spent on the river |
| 1521 | CJ | sometimes couldn't go |
| 1522 | CJ | we were there on a day when this was permitted; I would have been disappointed if it had been otherwise |
| 27 | PJ | prevents me from river |
| 30 | PJ | No boating |
| 33 | PJ | Limited experience |
| 38 | PJ | Limits trip planning days |
| 39 | PJ | Had to reschedule |
| 58 | PJ | Avoid it |
| 267 | PJ | Hard to get on river |
| 276 | PJ | Difficult to plan trips |
| 284 | PJ | Disrupted visitors experience |
| 287 | PJ | It makes it hard to go if our family has not called ahead. |
| 288 | PJ | Takes away from ones choice to use that section of the river on those days. |
| 289 | PJ | Less opportunity |
| 292 | PJ | We have a jet boat and cabins up there so we have to plan what day we can go. |
| 298 | PJ | Because you can't get into these areas by power boat. |
| 305 | PJ | have to schedule it |
| 307 | PJ | family and friends can't go and river is crowded on permitted days |
| 309 | PJ | have to schedule trip when permitted--maybe rafting should not be permitted on certain days as well |
| 535 | PJ | weren't able to go all the way |
| 572 | PJ | don't go then |
| 589 | PJ | had a trip planned for summer but had to cancel |
| 590 | PJ | not able to use the river in the summer |
| 615 | PJ | Changed plans |
| 619 | PJ | Limits opportunity |
| 644 | PJ | must plan way ahead instead of what is convenient for us |

| | | |
|--|----|--|
| 648 | PJ | it prohibits a trip we may plan |
| 685 | PJ | has limited my use during key summer months |
| 700 | PJ | greatly disturbed and inconvenienced me |
| 703 | PJ | prevented me from making a trip to the dam |
| 705 | PJ | reduced potential for wild trips |
| 739 | PJ | negatively, it limits my time on the preferred wild section and favors floaters |
| 743 | PJ | limiting access to wild section is discriminating and affects ability to plan accordingly |
| 756 | PJ | can't go anytime I would like |
| 761 | PJ | has limited the days I can boat; there should also be non-floater days too |
| 796 | PJ | don't get to use the river as much as we would like to |
| 847 | PJ | limits our ability to use the wild section |
| 1206 | PJ | yes, we hunt taking friends up there |
| 1217 | PJ | allowing less people to enjoy this "water of the world!" |
| 1222 | PJ | turned a power boat trip into a poor experience |
| 1241 | PJ | limits a spontaneous trip |
| 1249 | PJ | don't agree with NMW; make days busier and limits people |
| 1253 | PJ | we limit our trips to off season |
| 1257 | PJ | somewhat of an inconvenience |
| 1499 | PJ | I don't go into the wild section |
| 1502 | PJ | it has restricted use, very poor policy by the forest service |
| 1503 | PJ | creates more planning, there are other summer activities we enjoy. |
| 1529 | PJ | A lot; we like to go more often |
| 1538 | PJ | it has effected me if I want to run above Pittsburg on any given day |
| 1707 | PJ | don't use that section of river anymore |
| 1709 | PJ | not able to enjoy the river in the prime time like the rafters |
| 1720 | PJ | sometimes disappointed company from out of town |
| 1726 | PJ | had to wait a year to go to Kirkwood; all permits were filled |
| 1806 | PJ | reduced my opportunity to both float and powerboat |
| Disapprove of Policy n=27 (CJ=3; PJ=24) | | |
| 320 | CJ | I think it is stupid not to allow power boaters on the river when rafters are in trouble the power boaters are able to save them |
| 352 | CJ | Negatively |
| 629 | CJ | its and outrage, there are no non-floater days |
| 51 | PJ | Do not like |
| 61 | PJ | Unnecessary |
| 273 | PJ | Not Fair |
| 365 | PJ | too much traffic in lower snake |
| 491 | PJ | If one group of users is limited during the summer I think both or all groups should have limitations. |
| 498 | PJ | Very negative-unconstitutional |
| 519 | PJ | there should not be a limitation on days |
| 645 | PJ | its not right |
| 748 | PJ | should be a non-floater window as well |
| 795 | PJ | unfairly limiting access for power boaters while other user groups are unaffected. |
| 798 | PJ | yes, and I have seen outboard motors on rafts during this time |
| 803 | PJ | unfair to power boaters; there's room for everyone |
| 804 | PJ | it is unfair, should be open for everyone, or have non-floater days |
| 1207 | PJ | power boaters should not be regulated |
| 1228 | PJ | not needed and not fair |

| | | |
|------|----|---|
| 1245 | PJ | a real slap in the face, very negative affect |
| 1256 | PJ | has made scenic portion more crowded |
| 1258 | PJ | there were steam boats hauling stuff on this river long before floaters used it |
| 1532 | PJ | there should be days rafters should not be permitted, they should not have priority |
| 1544 | PJ | its just a way to appease certain groups of people |
| 1546 | PJ | It has frustrated us power boaters because we have just as many rights to enjoy our beautiful river |
| 1560 | PJ | it stinks |
| 1714 | PJ | this is prime time for boating |
| 1814 | PJ | non-equality for boaters; may get power boaters to raft into situations or rapids not ready for |

| Positive Effect | | |
|--|----|---|
| Approve of Policy n=13 (CJ=3; CF=4; PJ=3; PF=3) | | |
| 220 | CJ | It was excellent—no noise or wake to deal with |
| 665 | CJ | Its good |
| 1189 | CJ | Okay- but a further limitation of jet boats is not warranted |
| 961 | CF | Anything that cuts down on powerboats is good; more peaceful days |
| 965 | CF | It was better without them |
| 1264 | CF | It enhanced my experience but I must say that I wish they had no place on the river |
| 1269 | CF | We had 3 delightfully peaceful powerboat-free days. |
| 44 | PJ | It's fine. |
| 550 | PJ | It has enhanced the experience |
| 846 | PJ | We need times when motor noise is banished; I'm happy with the policy |
| 224 | PF | Makes it much nicer for private rafters |
| 1745 | PF | I apply for permits during this time; it is nice not to have to worry about the constant large wakes disrupting the boats/rafts and camps |
| 1805 | PF | Yes, we planned our trip to coincide with NMW day |

Wild Segment:

| Effect of NMW | Total Number of Responses (n) | Percent (%) | CJ | CF | PJ | PF |
|--|-------------------------------|--------------|-----------|-----------|-----------|------------|
| No Effect | 68 | 24.0 | 14 | 12 | 7 | 35 |
| Positive | 146 | 50.0 | 7 | 53 | 5 | 81 |
| Negatively | | | | | | |
| <i>Limits Opportunities/Increases Planning</i> | 60 | 21.0 | 13 | | 31 | 16 |
| <i>Disapprove of Policy</i> | 16 | 5.0 | 2 | | 8 | 6 |
| Total Negative Comments | 76 | 26.0 | 15 | | 39 | 22 |
| Total Number of Comments | 290 | 100.0 | 36 | 65 | 51 | 138 |

| Number | User Type | Comment |
|---|-----------|--|
| No Affect n=68 (CJ=14; CF=12; PJ=7; PF=35) | | |
| 9 | CJ | not at all |
| 166 | CJ | not at all |
| 182 | CJ | not affected |
| 362 | CJ | it didn't |
| 465 | CJ | does not affect my experience on the river |

| | | |
|------|----|---|
| 733 | CJ | no effect |
| 734 | CJ | not much; we had to plan ahead |
| 825 | CJ | didn't |
| 827 | CJ | no |
| 946 | CJ | it didn't affect our experience; we went on a power boat day; we just adjusted our schedule to accommodate the boating schedule |
| 947 | CJ | no effect; we were going on a motorized boat; we made plans to accommodate the schedule |
| 956 | CJ | It didn't; we happened to visit on a day when powerboats were allowed so we were able to boat |
| 957 | CJ | none |
| 966 | CJ | didn't |
| 137 | CF | not much-usually see and hear them |
| 1096 | CF | did not |
| 1108 | CF | none |
| 1134 | CF | it hasn't |
| 1137 | CF | did not, we visited on a weekend |
| 1383 | CF | none |
| 1454 | CF | has not; but now that I know those are the days I will try to schedule float trips |
| 1460 | CF | didn't affect but I think it is a great thing |
| 1595 | CF | didn't hit the right days |
| 1625 | CF | it hasn't |
| 1645 | CF | not at all since I had 1 time frame to come on my trip |
| 1682 | CF | none |
| 95 | PJ | Has not. |
| 316 | PJ | no effect |
| 323 | PJ | no effect. We should work together |
| 337 | PJ | Our trips are planned for before and after the busy summer season so there is no impact. |
| 467 | PJ | Has no effect. I only utilize the river from Hells Canyon Dam to Wild Sheep rapids which has no motorized window use. |
| 611 | PJ | has not` |
| 815 | PJ | it hasn't, but I think its an okay thing |
| 83 | PF | none |
| 88 | PF | no effect |
| 116 | PF | none |
| 132 | PF | has no affect |
| 156 | PF | has made no difference because most days rafters are limited |
| 179 | PF | no |
| 196 | PF | not at all |
| 247 | PF | not much, a little quieter |
| 349 | PF | not much |
| 350 | PF | it didn't affect us this time but it works well for rafters on the Deschutes |
| 358 | PF | doesn't bother me |
| 508 | PF | we always go in October after permit season so it doesn't affect our trips |
| 582 | PF | floated in November so it didn't affect me |
| 853 | PF | not yet |
| 856 | PF | not at all, I've seen power boats every time on the river |
| 893 | PF | not really |
| 898 | PF | none |
| 1011 | PF | since I launched on a weekend, it did not effect my experience; If I were to go on the snake again, I would time my launch to coincide with a NMW |
| 1016 | PF | did not affect trip because the dates were on boater week |

| | | |
|------|----|---|
| 1073 | PF | did not apply |
| 1368 | PF | have not encountered any problems; there were conflicts on campsites |
| 1372 | PF | no effect, powerboats were running while we rafted |
| 1393 | PF | no change; I've never been able to float on NMW |
| 1406 | PF | has not` |
| 1422 | PF | no |
| 1437 | PF | has not affected my floating at all, I enjoy the power boaters; they helped us a lot this year |
| 1486 | PF | not at all |
| 1597 | PF | doesn't; most power boaters seem courteous |
| 1616 | PF | it didn't because the only time I was one was not during the NMW |
| 1617 | PF | this has not affected me, but it could if we needed medical attention fast |
| 1637 | PF | has not affected my experience; the window is too small to provide me with a non-motorized experience |
| 1639 | PF | have not been on an NMW trip yet |
| 1687 | PF | no effect |
| 1698 | PF | it hasn't |
| 1699 | PF | not at all; since I've only boated on weekends |

| <i>Negative Effect</i> | | |
|---|----|--|
| Limits Opportunities/Increased Planning n=60 (CJ=13; PJ=31; PF=16) | | |
| 3 | CJ | it denies me access to the hear of Hells canyon where the best scenery, fishing and whitewater is |
| 124 | CJ | guest have to call ahead to find out mainly fish on the bank on the Idaho side |
| 731 | CJ | limits older people's access to the river and its sights |
| 732 | CJ | I don't go then; power boating is important because it allows a more diverse group of people to see the canyon; on our most recent trip we had an 80 year old and a 10 year old; it makes no sense to me to build handicapped bathrooms at launches and not allow the means for handicapped people to see the canyon |
| 823 | CJ | hampered vacation plans |
| 950 | CJ | I wanted to do a longer jet boat trip but this was not possible; although I do agree with sharing the river |
| 955 | CJ | we were unable to experience as much of the river and the whitewater |
| 977 | CJ | if I knew prior to my trip, I would have changed the date |
| 978 | CJ | we thought we were going to see more of the canyon and the river but we arrived on a day when you couldn't go down the river any farther |
| 1040 | CJ | makes it harder to plan for trips; there should be days when no floaters are allowed |
| 1047 | CJ | remember: power boat rides provide the opportunity for older non-physically active people to experience white water, to see a wild part of country that they would never have experienced if not for large comfortable boats |
| 1188 | CJ | limited the days I could plan a trip due to jet boat trip back up |
| 1200 | CJ | restricts my recreational opportunities |
| 115 | PJ | It unfairly limits the number of days I can boat in the wild section. |
| 152 | PJ | It unfairly reduces the number of days I can boat in the wild section. |
| 293 | PJ | Being a jet boater, I have to stay away from the wild section. no big deal. |
| 314 | PJ | Hurts my ability to enjoy the river equally to the floaters. Give jet boats an equal 21 days of no floaters. |
| 319 | PJ | Don't come to the river at that time |
| 325 | PJ | I farm so I can't schedule ahead. Times are taken when I can go. |
| 326 | PJ | Because I can't get to go a lot of times on days indicated. |
| 327 | PJ | A lot of times we can't go if we have to work on certain days and the days we have off are restricted. |
| 331 | PJ | It makes it harder to get a permit for that section of the river. |

| | | |
|------|----|--|
| 332 | PJ | Limits vacation time on river. |
| 338 | PJ | I still see rafters with kicker motors on rafts. I do not go as much. |
| 339 | PJ | We have stopped using the river during the controlled period |
| 503 | PJ | It only designates when I can take my jet boat up river. I usually go up river only 1 day each trip. |
| 512 | PJ | makes it very hard to schedule my trips |
| 574 | PJ | Hard to get times I need |
| 603 | PJ | cuts down on trip opportunities |
| 606 | PJ | my family has never been able to enjoy the canyon in the summer because of the non-motorized window. |
| 612 | PJ | makes summer use much more difficult |
| 613 | PJ | less opportunities to boat |
| 651 | PJ | reduced opportunities to schedule private launches |
| 808 | PJ | forced us to plan ahead |
| 809 | PJ | we can not use the river on NMW which gives us less opportunity to use the river |
| 818 | PJ | limited ability to use the river |
| 819 | PJ | it has taken away from my right to access the river during this window |
| 879 | PJ | don't go then |
| 1239 | PJ | It takes a lot away from the experience not to be able to see the big rapids and the deepest gorge |
| 1488 | PJ | Limits the time we can go; also puts rafters at risk--if there's an injury, there's no way out. |
| 1490 | PJ | it has limited and reduced our family's usage and unforgettable experiences on the river |
| 1592 | PJ | Wasn't able to stay Friday through Monday because of the NMW |
| 1594 | PJ | had to reschedule |
| 1838 | PJ | shortened it |
| 84 | PF | I always apply for permits at this time |
| 91 | PF | less options for a jet-back |
| 93 | PF | eliminated the option for a jet back on the day we wanted it |
| 359 | PF | hard to plan trips for power boaters |
| 1017 | PF | can't always go midweek |
| 1086 | PF | it has made me not come down there in the summer to boat, fish and relax |
| 1092 | PF | kept power boaters off and out of wild section while float groups are never restricted |
| 1274 | PF | I will always go on the NMW |
| 1276 | PF | specifically requested a permit for NMW days |
| 1416 | PF | we had to adjust the day we wanted to float |
| 1417 | PF | limited experiences available |
| 1448 | PF | we don't get to go as often with our jet boat |
| 1612 | PF | it has hurt my experience; as a floater and powerboat user I feel that both shall have equal opportunity |
| 1658 | PF | I will certainly go on those days next year |
| 1667 | PF | I will always try to go whether there are zero or 100 jet boats; I would just enjoy it more with fewer jet boats |
| 1702 | PF | reduces chances of getting permits on those days |

| Negative Effect | | |
|--|----|--|
| Disapproval of Policy n=16 (CJ=2; PJ=8; PF=6) | | |
| 695 | CJ | there should be no NMW because many of the visitors to this area have not had the opportunity to see the upper river |
| 976 | CJ | it was very disgusting, we went there with the idea we were going to see the snake |
| 313 | PJ | poorly |
| 324 | PJ | Should have days for power boats only |
| 333 | PJ | We treat floaters with utmost respect. no reason to keep power boaters off anytime. |
| 416 | PJ | how about boaters only? |
| 501 | PJ | its wrong |
| 514 | PJ | Doesn't make any sense to me. |
| 604 | PJ | it is ridiculous |
| 1591 | PJ | I don't like it; it keeps power boaters to stay over or certain weekends |
| 342 | PF | it is needed but would like to see floaters off the river as well |
| 442 | PF | I don't like it |
| 897 | PF | I do not like excluding this user group |
| 1091 | PF | I don't think it is necessary |
| 1380 | PF | in case of injury emergency it sucks, you need motorized support for injury accidents |
| 1688 | PF | I don't think its fair to jet boaters and would like to see them on the river more |

| Positive Effect | | |
|--|----|--|
| Approval of Policy/Enhanced Experience n=146 (CJ=7; CF=53; PJ=5; PF=81) | | |
| 74 | CJ | this is a positive influence on the wild river experience |
| 100 | CJ | even though I said no, I am now aware of the rule and really support it; quiet and solitude are very possible on the river without motorized boats |
| 141 | CJ | if I were rafting it would be wonderful |
| 160 | CJ | enjoyed the sense of solitude |
| 318 | CJ | it's a good thing |
| 410 | CJ | greatly enhanced our experience in the canyon |
| 1044 | CJ | its less noisy |
| 79 | CF | Absolutely outstanding and unexpected pleasure; we did not know about this before our arrival |
| 80 | CF | Very helpful |
| 86 | CF | Best days |
| 87 | CF | Great if you get to launch then |
| 90 | CF | Increased pleasure |
| 94 | CF | Enjoyed it |
| 105 | CF | Best time on the river |
| 120 | CF | Lucky to have window |
| 125 | CF | Made it great |
| 128 | CF | It has greatly increased the wilderness experience and made it possible to get camps traditionally saved by power boaters only |
| 129 | CF | It was delightful to not fear seeing a huge craft coming up at you |
| 146 | CF | improved natural experience |
| 151 | CF | better to view natural river |
| 153 | CF | very improving |
| 162 | CF | enjoyed the experience much more |
| 163 | CF | didn't seem overrun with boaters |
| 167 | CF | much more peaceful |

| | | |
|------|----|--|
| 181 | CF | made experience more enjoyable |
| 200 | CF | don't have to worry about encounters with powerboats all day |
| 201 | CF | nice not to have boats whizzing by |
| 202 | CF | we benefited from the non-motorized window--no noisy motors |
| 203 | CF | improved the situation |
| 213 | CF | wonderful quiet |
| 216 | CF | a big plus |
| 426 | CF | Love it! |
| 880 | CF | those days are great, but on other days the jet boats are a constant distraction |
| 912 | CF | it greatly enhanced it |
| 913 | CF | it greatly enhanced that time |
| 914 | CF | not long enough |
| 964 | CF | very lucky we did experience one of the NMW days; you could really notice the difference |
| 1100 | CF | noise level is better |
| 1107 | CF | made it better |
| 1139 | CF | We were there on a day that power boats were allowed; I like the idea of days with no power boats |
| 1277 | CF | much more pristine, quiet and peaceful; it helped make it a picture perfect trip |
| 1279 | CF | It would have been great had the non-motorized window been enforced |
| 1280 | CF | I enjoyed the quiet and natural flow of the river without the boats. |
| 1282 | CF | made it more pleasurable |
| 1284 | CF | We happened to have a few days of no motor boats, so peaceful and then, awful noise brought us back to a civilization feeling |
| 1306 | CF | Absence of boats on non-motorized days makes the impact of presence of boats on motorized days all the more significantly noticeable |
| 1432 | CF | Positive; more serene; However, we had a member of our group get hurt and it would have been nice to get a power boat to help transport to a hospital. |
| 1452 | CF | yes, in a positive way (I.e. noise reduction) |
| 1643 | CF | obviously we weren't lucky enough to hit the window |
| 1646 | CF | wish I had the experience |
| 1678 | CF | keep it; it's a good idea |
| 1684 | CF | its made it much better |
| 1752 | CF | very beneficial |
| 1753 | CF | wonderful; keep it |
| 1784 | CF | very positively |
| 1785 | CF | the one day we had without the boats was much more real and enjoyable |
| 1789 | CF | much better, more peaceful, no disturbances |
| 1831 | CF | loved it; motor boats are noisy and would detract from the experience |
| 1835 | CF | it was wonderful |
| 1836 | CF | it was great to have been able to enjoy tow of these days |
| 133 | PJ | Very much |
| 255 | PJ | it gives the rafters that despise power boaters the experience they look for--the rafters on the powerboat days seem friendly to other groups |
| 330 | PJ | Very strongly |
| 859 | PJ | It is peaceful but I do like having jet boats on the river; if rafters get hurt it is the only way to get out. |
| 1489 | PJ | it would be nice to have equal time for boaters w/ no rafters to worry about. |
| 131 | PF | days without motors on the river were more controllable |
| 155 | PF | very peaceful and quiet |
| 169 | PF | tremendous benefit |
| 187 | PF | chose this time specifically to get better campsites |
| 193 | PF | more peaceful |

| | | |
|------|----|---|
| 205 | PF | it was great, no noise but the guides liked the jet boaters because they have offered help in the past |
| 207 | PF | very peaceful time |
| 208 | PF | made it feel more secluded and quiet |
| 217 | PF | prohibition on powerboats was best part of trip |
| 218 | PF | great way to phase-out powerboats |
| 223 | PF | peaceful |
| 230 | PF | first choice is a trip during the non-motorized window |
| 232 | PF | was great |
| 236 | PF | very positive |
| 240 | PF | for the better |
| 343 | PF | would create a more peaceful, natural experience |
| 348 | PF | wished my visit had coincided with a NMW |
| 354 | PF | as a rafter, it is nice without power boats but if they are polite I don't mind them |
| 366 | PF | made is a more natural experience without the noise and presence of power boats |
| 369 | PF | I love not listening to jet boats or having them blast through an area |
| 432 | PF | I think its perfect |
| 453 | PF | a couple of trips were quieter |
| 454 | PF | it helps but this is a new thing and needs to be expanded all year long |
| 788 | PF | improved it |
| 850 | PF | good, desire to float during NMW |
| 855 | PF | made it better, probably would not raft the snake if allowed; especially if uncontrolled number allowed |
| 868 | PF | have run since 1980 and have seen time when powerboats are out of control; NMW has a positive affect |
| 871 | PF | non-motorized days are better |
| 888 | PF | enhanced solitude experience; reduced noise |
| 889 | PF | loved it; floated during NMW and felt our trip was better |
| 891 | PF | helped make it a better float trip |
| 892 | PF | a break from the noise |
| 899 | PF | it increased my ability to enjoy the experience dramatically |
| 900 | PF | greatly enhanced; would not go during motorized time however, the window isn't long enough |
| 906 | PF | we planned for a NMW and several friends who wanted to go couldn't because it didn't span the weekend |
| 907 | PF | it has enhanced it |
| 930 | PF | greatly enhanced our experience; jet boats are so loud |
| 931 | PF | greatly improves it |
| 932 | PF | greatly increased my enjoyment; I would only go during NMW |
| 933 | PF | we planned for this window for our launch date |
| 934 | PF | our first 2 days were quite pleasant (no motors) |
| 936 | PF | helped it |
| 937 | PF | NMW days were great |
| 938 | PF | very pleased to have a window of quiet, although we did see official jet boats at this time |
| 1014 | PF | attempt to use this in the future to enhance the availability of campsites |
| 1110 | PF | positively; I am a jet boater but choose to float more instead; it's less disturbing |
| 1115 | PF | I am all for it and hope this practice continues |
| 1172 | PF | I really appreciated those days |
| 1181 | PF | I enjoy peaceful, do not use a kicker on rafting trips |
| 1187 | PF | greatly enhances the experience |
| 1270 | PF | the NMW days were wonderful; the short time we shared the river with powerboats made it clear I will only do the river on days without powerboats |
| 1271 | PF | immensely affected us; would like to see as many NMWs as motorized |

| | | |
|------|----|---|
| 1272 | PF | the chance to be on the river without powerboats was great; should have more NMWs |
| 1273 | PF | made our trip much more enjoyable; quiet, pristine, peaceful and even safer |
| 1275 | PF | a wonderful improvement |
| 1307 | PF | it is a fantastic to float without motors |
| 1370 | PF | window needs to be longer |
| 1404 | PF | its been great |
| 1414 | PF | very good |
| 1451 | PF | improved my experience |
| 1480 | PF | allows floaters to make better time when progressing down river |
| 1590 | PF | improvement; make it all the time; they have no place there |
| 1605 | PF | it made the trip better |
| 1640 | PF | NMW days are very quiet and peaceful; there is less competition for campsites on the lower section |
| 1641 | PF | it's quiet |
| 1642 | PF | I had my first NMW trip this year and it was quiet; I kind of missed seeing all the people enjoying the canyon |
| 1657 | PF | it's great; unfortunately this trip was not during the window |
| 1660 | PF | I was able to take advantage of it once and enjoyed it immensely |
| 1661 | PF | made it better |
| 1663 | PF | it has been enjoyable; however jet boaters are a good thing in case of emergencies |
| 1675 | PF | it helps |
| 1704 | PF | as a rafter, It is nice; it is not equal treatment but the jet boats are noisy and invade other peoples camps at all hours; I applaud the balance |
| 1767 | PF | fabulous |
| 1770 | PF | fewer campers |
| 1771 | PF | they have made them much better; powerboats have a place on the river but it is nice to not have to fight for camping spots with jet boaters |
| 1778 | PF | our river experience was much better when we didn't see powerboats |
| 1793 | PF | very well, it feels more isolated without the boats |
| 1796 | PF | it was nice to have the river all to ourselves for a day or 2 but the boats don't bother me |
| 1817 | PF | we were floating during this window and it was fabulous |
| 1823 | PF | it has helped during those days but do not mind the power boaters if they were on the same playing field |
| 1832 | PF | makes it easier to find campsites and moored rafts aren't knocked around as much |

Concerning Visitors' Satisfaction with Conditions on the River

Question 1.10: Expressing level of satisfaction with other conditions or things on the river.

Scenic Segment:

| Number | User Type | Comment |
|---|-----------|-----------------------------------|
| Not At All Satisfied n=20 (CF=3; PJ=17)) | | |
| 839 | CF | Forest service staff at Pittsburg |
| 1145 | CF | Too much poison ivy |
| 1470 | CF | Jet boats |
| 39 | PJ | Fluctuating water |
| 44 | PJ | Number of outhouses |
| 51 | PJ | Ramp rules |
| 58 | PJ | Outfitters |
| 267 | PJ | Lack of Navigation Markers |

| | | |
|---|----|--|
| 303 | PJ | The mine was closed |
| 306 | PJ | Heller bar boat launch |
| 498 | PJ | Horrible launch at Heller bar |
| 499 | PJ | Guides |
| 520 | PJ | Too many large tour boats |
| 562 | PJ | To many commercial boats |
| 590 | PJ | Crowded boat launch at Heller bar |
| 615 | PJ | Rafters clog take outs |
| 748 | PJ | Number of fishing guides |
| 1513 | PJ | Too many rafts from salmon river |
| 1633 | PJ | Commercial jet boat wakes especially the mail boat |
| 1730 | PJ | Attitude of floaters |
| Somewhat Satisfied n=4 (CF=1; PJ=3) | | |
| 70 | CF | Large Tour boats |
| 287 | PJ | More floaters than power boats |
| 705 | PJ | Large power boat encounters |
| 309 | PJ | Hoping for lower water |
| Very Satisfied n=2 (CJ=1; PJ=1) | | |
| 629 | CJ | Steelhead fishing |
| 743 | PJ | Weather limited trip |
| Extremely Satisfied n=5 (CJ=2; PJ=2; PF=1) | | |
| 352 | CJ | Jet boat experience was great |
| 592 | CJ | Beauty of the canyon |
| 632 | PJ | Lots of wildlife |
| 1539 | PJ | Sturgeon fishing |
| 985 | PF | Too many jet boats |

Wild Segment:

| Number | User Type | Comment |
|---|-----------|---|
| Not At All Satisfied n=24 (CJ=1; CF=6; PJ=5; 12) | | |
| 1066 | CJ | Lack of toilets |
| 79 | CF | Quality of Idaho Afloat |
| 137 | CF | Poison Ivy at Granite |
| 388 | CF | Powerboats sucked |
| 914 | CF | Fluctuation of water level |
| 1045 | CF | Human waste |
| 1088 | CF | Rafts were slow putting in, we had to wait |
| 327 | PJ | Getting reservations to jet boat, we all need to share the river and enjoy it-when we want. |
| 339 | PJ | Camping along the river; Tables and outhouses |
| 583 | PJ | No campsites available due to people leaving campers for a month at a time |
| 604 | PJ | Going around rafts in river |
| 606 | PJ | Trash left by bank fishermen and hikers |
| 91 | PF | Lack of picnic tables and outhouses |
| 93 | PF | Lack of picnic tables and outhouses |
| 179 | PF | Outhouses |
| 233 | PF | Trout fishing |
| 234 | PF | Trout fishing |

| | | |
|--|----|---|
| 580 | PF | Derogatory name calling by jet boaters |
| 907 | PF | Dam fluctuations |
| 1110 | PF | Big tour boats |
| 1312 | PF | Too many jet boats |
| 1617 | PF | Bigger launch site |
| 1636 | PF | Speed of powerboats when passing |
| 1667 | PF | Too many jet boats |
| Somewhat Satisfied n=11 (CJ=2; CF=4; PJ=1; PF=4) | | |
| 835 | CJ | Restroom breaks |
| 1000 | CJ | Number of people on jet boat |
| 167 | CF | Too many jet boats |
| 1060 | CF | Number of rapids |
| 1153 | CF | Wildlife were scarce |
| 1280 | CF | Private power boats and Idaho power boats |
| 1592 | PJ | Big commercial boat wakes |
| 367 | PF | Little wildlife to be seen |
| 369 | PF | Trout fishing used to be better |
| 1016 | PF | Quantity of visible wildlife |
| 1380 | PF | Organization at ramps |
| Very Satisfied n=6 (CF=2; PF=4) | | |
| 151 | CF | Row group |
| 203 | CF | Wildlife seen |
| 169 | PF | Times of solitude |
| 356 | PF | Historic artifacts and trails along river |
| 431 | PF | Kayaks |
| 1181 | PF | Wildlife |
| Extremely Satisfied n=18 (CJ=3; CF=7; PJ=2; PF=6) | | |
| 147 | CJ | Info by crew |
| 376 | CJ | Didn't see any powerboats |
| 833 | CJ | Our host from Snake Dancer |
| 94 | CF | Idaho Afloat |
| 181 | CF | Peace and serenity |
| 215 | CF | Raft guides |
| 964 | CF | Raw beauty of the area |
| 1139 | CF | Our guide Fred |
| 1452 | CF | Low impact, cleanliness |
| 1684 | CF | The quality of lunch |
| 607 | PJ | Great trip |
| 876 | PJ | The number of fish I caught |
| 432 | PF | Perfect trip |
| 867 | PF | Outhouses |
| 1089 | PF | Just being there |
| 1401 | PF | Waterproof river map |
| 1642 | PF | Fishing opportunities |
| 1669 | PF | Fishing opportunities |

Concerning Visitors' Opinions about Facilities on the River

Question 2.1: Expressing opinions about “other” facilities not mentioned on the survey.

Scenic Segment:

| Number | User Type | Comment |
|---|-----------|---|
| Right Amount (n=2) | | |
| 550 | PJ | Don't change cache creek-leave it as it is |
| 1229 | PJ | Everyone was very nice |
| Too Much (n=2) | | |
| 41 | PJ | Rafts on launch |
| 1745 | PF | Need the staff at Pittsburg to stop managing the launch traffic and worry about other parts of her job; we floaters will work it out just fine |
| Need More n=28 (CJ=4; PJ=23; PF=1) | | |
| 4 | CJ | Ramp at Pittsburg is too flat; ramp at Heller bar is broken up and damages trailers; ramp at dug bar is too short; need accessible boat dock at Pittsburg |
| 639 | CJ | Access for disabled at Pittsburg |
| 694 | CJ | Permanent fire sites for camping |
| 778 | CJ | Seats for handicap to rest |
| 33 | PJ | Pave road to Heller Bar |
| 49 | PJ | Free litter bags |
| 66 | PJ | Launch ramps for rafts |
| 266 | PJ | Take out area for rafts |
| 279 | PJ | More guide markers |
| 288 | PJ | Navigational markers |
| 306 | PJ | Heller bar boat launch |
| 479 | PJ | Need separate areas for rafts to take out |
| 498 | PJ | Launch at Heller bar |
| 522 | PJ | Garbage disposal facilities at Heller bar |
| 644 | PJ | Shower stalls at Pittsburg |
| 645 | PJ | Garbage cans |
| 698 | PJ | Need waste disposal facility at Heller bar |
| 705 | PJ | Boat ramp at Heller |
| 845 | PJ | Require usage of the large parking lot at Pittsburg; toilets at Pittsburg are disgusting and need work |
| 1206 | PJ | Need more boat launches at Heller bar; rafters monopolize the space and block the only two ramps for over 45min; they are rude when it comes to this |
| 1222 | PJ | Users at boat ramps; don't clog up, use it and get out of the way; don't tie is up for hours |
| 1502 | PJ | Outhouses at campgrounds |
| 1513 | PJ | Heller bar launch sucks |
| 1560 | PJ | More restrooms down river below Cache Creek |
| 1633 | PJ | Fueling station at Pittsburg |
| 1724 | PJ | Put outhouses back at campsites |
| 1740 | PJ | Jet boat access on any day to the Kirkwood Ranch |
| 469 | PF | Signs at tributaries |

Wild Segment:

| Number | User Type | Comment |
|--------|-----------|---------|
|--------|-----------|---------|

| Right Amount n=3 (CF=1; PF=2) | | |
|--|----|---|
| 1367 | CF | Very pleasing |
| 356 | PF | Hells Canyon Creek is well done |
| 432 | PF | Loved it |
| Too much n=3 (CF=1; PF=2) | | |
| 167 | CF | Jet boats |
| 223 | PF | Bees in bathroom |
| 1401 | PF | Pittsburg road steepness |
| Need More n=43 (CJ=8; CF=5; PJ=10; PF=20) | | |
| 3 | CJ | Handicap access at Kirkwood |
| 82 | CJ | Cleaner bathrooms at takeout would be great |
| 160 | CJ | Toilets at Pittsburg were in deplorable condition-absolutely disgusting |
| 188 | CJ | Parking at dock for disabled |
| 577 | CJ | Navigational markers |
| 833 | CJ | At Kirkwood, handicapped facilities are needed for people to get to the lunch picnic area |
| 1117 | CJ | Restrooms at dam and concessions at visitor center |
| 1125 | CJ | Picnic tables at launch |
| 80 | CF | Clean facility at Pittsburg Landing |
| 86 | CF | Pittsburg outhouses dirty |
| 153 | CF | Toilets at Pittsburg in bad shape |
| 177 | CF | Disabled ramp was broken which posed a problem for a member of our group |
| 202 | CF | Restrooms at Pittsburg were smelly |
| 152 | PJ | Boat docks-3 |
| 268 | PJ | More outhouses-Any camp area or beach |
| 314 | PJ | Garbage disposal |
| 327 | PJ | Fish cleaning station |
| 337 | PJ | potable water at landings |
| 512 | PJ | More dumpsters at Pittsburg |
| 612 | PJ | Rafters don't use their launch site at hell canyon creek |
| 859 | PJ | Trail work by campsites |
| 1489 | PJ | Give boats priority over rafts at launches; that's why we helped pay for a raft launch, so it would not be used for jet boats; Get FS to enforce this when boats are present and want to launch; I have no problem with rafters using them if they are ready to launch, but waiting 1.5 hours for them is unacceptable to me. |
| 1490 | PJ | Toilets at Pittsburg always smell |
| 91 | PF | Picnic tables in wild section |
| 93 | PF | Picnic tables in wild section |
| 233 | PF | Drinking water in Hells Canyon, Pittsburg |
| 354 | PF | Need raft launch at Hells Canyon Dam |
| 355 | PF | Drinking water at Pittsburg |
| 359 | PF | Additional boat ramps at Pittsburg |
| 430 | PF | Garbage receptacle at Pittsburg |
| 690 | PF | Need human waste disposal receptacle for Pittsburg |
| 692 | PF | Water level forecasts |
| 867 | PF | Pit toilets |
| 870 | PF | Maintenance of trails around wild sheep and granite rapids |
| 884 | PF | Floating launch space |
| 907 | PF | Breach/remove dams to restore whitewater |
| 1014 | PF | Campsite reservation system |

| | | |
|------|----|---|
| 1085 | PF | Food vendors on weekends |
| 1088 | PF | Outhouses would help the human waste problem |
| 1092 | PF | Toilets shut down at the upper parking lot at HCC |
| 1366 | PF | I would like to see pictures of dam construction |
| 1636 | PF | Garbage at Pittsburg |
| 1767 | PF | showers at Pittsburg Landing |

Concerning Visitors' Perceptions of Change in Conditions on the River since 1998

Question 3.3: Are there any other changes you have noticed on the river since 1998?

Scenic Segment:

| Common Themes | Total Number of Responses (n) | Percent (%) | CJ | CF | PJ | PF |
|--|-------------------------------|--------------|----------|----------|-----------|----------|
| No Change | 22 | 28.2 | | 1 | 19 | 2 |
| Crowding | 23 | 29.5 | 3 | | 19 | 1 |
| Removal of Amenities from Canyon | 8 | 10.3 | | | 8 | |
| Interactions/Relationships Among User Groups | 7 | 9.0 | 1 | | 6 | |
| Forest Service Presence | 4 | 5.1 | 1 | 1 | 2 | |
| Restrictions on the River | 6 | 7.7 | | | 6 | |
| Water Fluctuations | 2 | 2.6 | | | 2 | |
| General Comments | 6 | 7.7 | 1 | | 4 | 1 |
| Total | 78 | 100.0 | 6 | 2 | 66 | 4 |

| Number | User Type | Comment |
|--|-----------|------------|
| No Change/Don't Know n=22 (CF=1; PJ=19; PF=2) | | |
| 536 | CF | No |
| 50 | PJ | No |
| 58 | PJ | No |
| 249 | PJ | No |
| 258 | PJ | None |
| 262 | PJ | No |
| 279 | PJ | No |
| 306 | PJ | None |
| 572 | PJ | No |
| 620 | PJ | No |
| 624 | PJ | No change |
| 688 | PJ | None |
| 1207 | PJ | No |
| 1215 | PJ | No |
| 1501 | PJ | No |
| 1550 | PJ | No |
| 1566 | PJ | Don't know |
| 1706 | PJ | None |
| 1729 | PJ | No |

| | | |
|--|----|---|
| 1730 | PJ | No |
| 543 | PF | No |
| 981 | PF | No |
| Crowding n=23 (CJ=3; PJ=19; PF=1) | | |
| 481 | CJ | Last time was in the 80s when there was much less traffic |
| 693 | CJ | More traffic from salmon river down to cache creek |
| 1324 | CJ | More homes/cabins |
| 70 | PJ | More commercial |
| 266 | PJ | More sturgeon fishing commercial |
| 276 | PJ | More private users |
| 307 | PJ | More people using the area |
| 537 | PJ | Just more people using and enjoying the river. |
| 546 | PJ | Larger commercial boats and floaters from Salmon. |
| 562 | PJ | Too many commercial fishermen |
| 632 | PJ | It seems less crowded |
| 633 | PJ | More floaters and rafts |
| 723 | PJ | More rafters |
| 807 | PJ | Many more people and vehicles but all seemed considerate of each other |
| 1249 | PJ | Just more users |
| 1251 | PJ | It seems that too many commercial boaters and rafters from the Salmon clog the stretch between Heller Bar and the Salmon River |
| 1256 | PJ | More people, more and larger tour boats |
| 1513 | PJ | Much more crowded; rafters are rude; not all of them but most of them |
| 1538 | PJ | Number of boats per day in canyon |
| 1544 | PJ | Not enough boaters |
| 1553 | PJ | More people |
| 1709 | PJ | Less power boats |
| 1745 | PF | Many, many more power boaters |
| Removal of Amenities from the Canyon n=8 | | |
| 267 | PJ | No navigational markers |
| 487 | PJ | Removal of markers, removal of toilets. |
| 644 | PJ | Less outhouses at campsites |
| 803 | PJ | Removal of navigational markers; they are a part of the history of the canyon |
| 1258 | PJ | The navigation markers have been allowed to deteriorate, and some have been removed; there has also been an effort to drive private landowners out of Hells Canyon, like the cabin at Coon Hollow, and the William Ranch at Kirkwood Bar--not good. |
| 1500 | PJ | Removal of toilets; deterioration of navigational markers |
| 1502 | PJ | River navigation markers have deteriorated I also believe there are less toilets |
| 1541 | PJ | Navigational markers not as visible |
| Interactions/Relationships Among User Groups n=7 (CJ=1; PJ=6) | | |
| 533 | CJ | Boater and floaters respect each other more |
| 283 | PJ | Rafters sometimes seem more hostile. |
| 305 | PJ | A lot of nudity--not appropriate |
| 641 | PJ | More harmony between users |
| 748 | PJ | More animosity between power boaters and floaters |
| 1222 | PJ | Bigger thumb on boaters, obscene and drunk rafters |

| | | |
|---|----|--|
| 1546 | PJ | We increasingly see attitudes of rafters and floaters to be sour, we slow down in respect of them! Most of the attitudes come from the rafting guides, not their clients. |
| Forest Service Presence n=4 (CJ=1; CF=1; PJ=2) | | |
| 4 | CJ | New toilets at cache creek; less FS actively in cleaning sites; protecting cultural and historic structures better |
| 839 | CF | Forest service has a larger presence and OR state police enforcing fishing regulations have a large presence |
| 39 | PJ | Guns on FS |
| 1807 | PJ | More attendants at Pittsburg Landing launch site; not really an improvement; probably don't need someone there all the time; their presence has not improved the quality of the experience |
| Restrictions on the River (n=6) | | |
| 35 | PJ | Favors Floaters |
| 615 | PJ | Restrictions on Power boats |
| 645 | PJ | Needing permits in advance between memorial and labor days |
| 743 | PJ | Restrictions affect all river enthusiasts |
| 1206 | PJ | The nuisance of getting permit is a real interruption |
| 1633 | PJ | The gates are locked at mountain chief mine |
| Water Fluctuations (n=2) | | |
| 1728 | PJ | Water flow variation is more noticeable |
| 1806 | PJ | Fishing is worse; water fluctuations are detrimental |
| General Comments n=6 (CJ=1; PJ=4; PF=1) | | |
| 482 | CJ | Add on to cabins |
| 259 | PJ | Learned a lot more |
| 274 | PJ | Fire of Mahoney Cr. Gone away |
| 498 | PJ | Better fishing |
| 1533 | PJ | Did not start boating till 2000 |
| 224 | PF | Less poison ivy |

Wild Segment:

| Common Themes | Total Number of Responses (n) | Percent (%) | CJ | CF | PJ | PF |
|--|-------------------------------|--------------|----------|----------|-----------|-----------|
| No Change | 12 | 17.9 | 1 | 4 | 4 | 3 |
| River Use and Crowding | 15 | 22.4 | 2 | 1 | 1 | 11 |
| Interactions/Relationships Among User Groups | 6 | 9.0 | | 1 | 2 | 3 |
| Removal of Amenities in the Canyon | 8 | 11.9 | | | 4 | 4 |
| Environmental Conditions | 13 | 19.4 | | 2 | 2 | 9 |
| Restrictions on Users | 4 | 6.0 | | | 1 | 3 |
| Forest Service Management | 4 | 6.0 | 2 | | 2 | |
| General Comments | 5 | 7.5 | 1 | 1 | | 3 |
| Total | 67 | 100.0 | 6 | 9 | 16 | 36 |

| Number | User Type | Comment |
|---|-----------|---------|
| No Change/Don't Know n=12 (CJ=1; CF=4; PJ=4; PF=3) | | |

| | | |
|--|----|--|
| 1047 | CJ | No |
| 120 | CF | No |
| 137 | CF | No |
| 201 | CF | None |
| 1454 | CF | No |
| 316 | PJ | None |
| 416 | PJ | None |
| 813 | PJ | Don't know |
| 815 | PJ | No |
| 349 | PF | No |
| 882 | PF | Can't remember any details |
| 888 | PF | None |
| River Use and Crowding n=15 (CJ=2; CF=1; PJ=1; PF=11) | | |
| 189 | CJ | More people using the river |
| 1157 | CJ | More activity, more rafters |
| 190 | CF | Fewer powerboats |
| 313 | PJ | Too many more floaters |
| 132 | PF | More people |
| 156 | PF | Lots more people, more poison ivy |
| 218 | PF | More powerboats, fewer airplanes, more sheep, campsites are better without tables and outhouses |
| 350 | PF | Fewer boats, less crowded |
| 1110 | PF | I've floated the Snake 8 times and the only thing that is bothersome is the tour boats |
| 1486 | PF | It seems like there are more jet boats than before |
| 1596 | PF | There seem to be fewer jet boats taking over campsites but I see more jet boats on the river |
| 1612 | PF | Not as much power boat use |
| 1637 | PF | Campsites are more difficult to get; need a reservation campsite system to be fair |
| 1770 | PF | More people |
| 1771 | PF | More private jet boaters |
| Interactions/Relationships Among User Groups n=6 (CF=1; PJ=2; PF=3) | | |
| 128 | CF | A little bit better rapport between float and power boaters |
| 268 | PJ | Out of state rafters with total negative attitude towards power boaters. I.e.:ROW |
| 808 | PJ | Snotty attitude of some float outfits think they own the river |
| 453 | PF | River user groups are not treated the same |
| 1663 | PF | Some powerboats are rude; they don't slow down when passing |
| 1823 | PF | Motorless window; more friendly interactions between floaters and power boaters |
| Removal of Amenities from the Canyon n=8 (PJ=4; PF=4) | | |
| 325 | PJ | Removal of markers and toilets |
| 334 | PJ | Removal of navigation markers. |
| 512 | PJ | Loss of picnic tables and outhouses at campsites |
| 514 | PJ | Removing channel markers doesn't make any sense. Also, removal of some toilet vac. Doesn't make any sense. |
| 187 | PF | No picnic tables or outhouses |
| 193 | PF | Outhouses being gone |
| 850 | PF | Screens gone for port-a-potties |
| 1092 | PF | Less camp site facilities (tables and toilets) |

| Environmental Conditions n=13 (CF=2; PJ=2; PF=9) | | |
|---|----|--|
| 1367 | CF | Less poison ivy/ more tables and better outhouses |
| 1678 | CF | Whitewater not as challenging |
| 339 | PJ | A weed problem in a lot of the use to be used camp sites due to none use, goat heads, thistle, overgrowth. |
| 1600 | PJ | Poison ivy has spread |
| 91 | PF | More weeds at campsites |
| 93 | PF | Weeds are taking over campsites--lack of maintenance; canyon was nicer when livestock were present |
| 219 | PF | Jet boaters don't slow down and major river fluctuations |
| 368 | PF | Trout fishing is worse |
| 434 | PF | Fishing decline |
| 460 | PF | Water is lower, rapids are smaller |
| 1436 | PF | Less rapids |
| 1819 | PF | increase in human waste |
| 1832 | PF | Beaches are washing away |
| Restrictions on Users n=4 (PJ=1; PF=3) | | |
| 314 | PJ | More regulations, longer reservation period |
| 159 | PF | Non-motorized days are an improvement |
| 454 | PF | The fact that private power boats are restricted during per season |
| 897 | PF | Requiring jet boat permits reduced conflict for camp sites and improved rafter access to camps |
| Forest Service Management n=4 (CJ=2; PJ=2) | | |
| 3 | CJ | Lack of involvement by management in actual management of the river |
| 1358 | CJ | Less trail maintenance |
| 1489 | PJ | Doesn't seem like the Forest Service is doing much to keep up the few remaining old homesteads except for Kirkwood, very sad |
| 1239 | PJ | Seasonal employees are gone at Cache Creek that is now run by volunteers; need seasonals back. |
| General Comments n=5 (CJ=1; CF=1; PF=3) | | |
| 955 | CJ | I have floated the salmon and joined the snake at the confluence; I took a jet boat up from Lewiston and twice since then I've taken the jet boat from Lewiston; this summer I took a short trip from oxbow down and I don't see changes and management seems to be doing a good job |
| 1645 | CF | Yes-powerboats |
| 1115 | PF | Other than a bit less trash, only new mail boxes at historical sites I did not notice a difference |
| 1181 | PF | Did not see wild sheep |
| 1414 | PF | Quiet |