

Recreational Use Associated with the Snake River in the Hells Canyon National Recreation Area

Brown, M. (2003). Recreational use associated with the Snake River in the Hells Canyon National Recreation Area, Technical Report Appendix E. 5-3, Hells Canyon Complex, FERC No. 1971. Idaho Power Company.

River(s): Snake (Hells Canyon)
Research Topic(s): Boater characteristics, Use levels, Trip characteristics, Use estimation methods
Type of Publication: Report

1. Study Purpose

This study reviews information from 1992 to 1999 to describe the recreational use associated with the section of Snake River flowing through Hells Canyon National Recreation Area.

2. Findings

2.1. USFS Boater Registration

2.1.1. Use numbers

- Annual use numbers ranged from 43,361 (1997) to a high of 51,560 (1995)
 - | Number of floaters ranged from 4,018 (1997) to 9,319 (1994)
 - | Number of power boaters ranged from 39,343 (1997) to 42,711 (1995)
- Commercial and private float numbers varied widely over the years
- Commercial power boater numbers were fairly stable, while private power boaters was more variable

2.1.2. Permits

- Power boating permits steadily decreased from 1994 to 1999
- Float boating permits was highest in 1994 and lowest in 1997
- The number of passengers per commercial float permit ranged from 8.1 to 12
- Private floaters per permit ranged from 8 to 9.2
- Commercial power boaters per permit increased over the period from 14.8 to 18.9
- Private power boaters per permit was consistent – 3.7 to 3.9

2.1.3. Trip type

- Most floaters camped during their trip

- Up to 40% of commercial floaters took day trips, while less than 5% of private floaters did day trips
- Majority of power boaters took day trips

2.1.4. Location of activities

- Pattern of use remained fairly consistent throughout the time period
- Pittsburg Landing to Kirkwood Ranch and Kirkwood Ranch to Rush Creek Rapids saw decreases of about 30% from 1992 to 1999, likely due to regulation changes
- Floaters were consistent in their use locations – generally Hells Canyon Creek to Pittsburg Landing

2.2. Mail Survey

65.9% response rate

2.2.1. Recreational activities

- Private floaters: 91% camping, 71% sightseeing, 70% swimming, 68% wildlife viewing, 67% cultural sites, 66% photography, 63% fishing, and 49% hiking
- Commercial floaters were similar to private floaters, but less likely to swim or fish and more likely to hike or picnic
- Private power boaters: 76% fishing, 72% sightseeing, 68% wildlife viewing, 51% photography, and 41% camping
- Commercial power boaters were similar to private power boaters, but less likely to fish or camp, and more likely to visit cultural sites

2.2.2. Location of activities

- Non-boaters primarily used portals with vehicle access
 - | Wild Sheep Rapids to Hells Canyon Dam was the most visited reach, followed by the reaches on either side of Pittsburg Landing
- Power boaters used all reaches
- Floaters were consistently high from Pittsburg Landing to Hells Canyon Dam

2.3. Dispersed Recreational Use Sites

- Very High use sites: all campsites accessed by road near Pittsburg Landing
- High: Copper Creek Resort, Battle Creek, Bernard Creek, Johnson Bar, Kirkwood Bar, Oregon Hole, and Pine Bar
- Remaining sites were medium low (19), medium (31), low (17), very low (51), and no use (13)

3. Key Discussion Points

- Four distinct boater groups exist: commercial power boaters, private power boaters, commercial floaters, and private floaters.
- While commercial passenger numbers were stable throughout the season, trips were reduced.
- Travel patterns changed with regulation changes for commercial power trips.
- Hells Canyon Creek portal accounted for most float boating trip launches, and were most commonly begun on a weekday.
- Recreation activities that occur within the Snake River corridor are strongly influenced by topography and access limitations.
- Use numbers fluctuated during flow extremes or regulation changes.
- "Boaters generally prefer medium flow levels." (p. 40)

4. Management Recommendations

N/A

5. Research Design

Data compilation and survey research (stratified by season and weekend/weekday), and inventory

5.1. Study Area

167 miles of the Snake River – Hells Canyon reach

5.2. Data Collection Instruments

Boater registration records; on-site contact card and mail questionnaire; and dispersed recreation inventory

5.3. Study Population

Registered boaters from 1992 to 1999; recreationists within the Hells Canyon National Recreation Area from January 1 to December 31, 1999; dispersed recreational use areas near or adjacent to the Snake River within the Hells Canyon National Recreation Area

5.4. Sample Size

2,317 boaters surveyed

5.5. List of Variables and Operational Definitions

5.5.1. USFS Boater Registrations

Use trends, patterns by season and type (commercial or private, floater or power boater)

5.5.2. Mail Survey

User profile, trip length, recreation activities, and location of activities

5.5.3. Dispersed Recreation Inventory

Relative use levels (7-point scale, no use to very high), mapping of dispersed sites, and condition assessments

6. Theories Used in Study

N/A