Whitewater Boating on the Upper Clackamas River

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Research Topic(s): Boater characteristics, Crowding, Human waste, User

experience, Trip characteristics

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1. Abstract

This study was conducted to obtain selected information about unguided whitewater boaters on the Upper Clackamas River. Questions addressed boater characteristics, trip characteristics, preferences for river flows, conditions encountered and experience quality, and opinions about management. On 47 days between late February and early august 2002, 426 private whitewater boaters using the 13-mile stretch of the Clackamas River completed on-site questionnaires. Results indicate the majority of boaters are kayakers, males, living within 50 miles of the river, and are experienced boaters. Use levels have increased to the point that most boaters feel at least slightly crowded, and a substantial number have altered their use of the river to cope with crowding. Nevertheless, few believe that boating should be limited. Other conditions are relatively minor problems, with the exception of vandalism to private property and human waste along the river. Existing services and facilities do not rate high marks, though few boaters support any additional facilities.

2. Study Purpose

"To describe visitor and trip characteristics, understand boaters' perceptions of conditions, and assess level of support for possible management actions" (p. I).

3. Findings

Response rate not reported.

3.1. Boater Characteristics

- 81% kayaks, 3% inflatable kayaks, 9% catarafts, 7% rafts
- Primarily male
- Average age 35 years old
- College graduate
- Income range \$40-60,000
- Experienced whitewater boaters largest group was boaters with more than 10 years of whitewater experience
- Most traveled < 60 miles for their trip

- Distance traveled was independent of the number of past trips
- 3.1.1. Factors for determining when boaters boated:
 - River levels were commonly stated as a determinant for when they boated
 - For kayakers specifically, the most important factors for determining when they boated were: available free time, weather, and lack of crowds
 - For rafters specifically: weather and lack of crowds were most important
 - For catarafters: camping opportunities were important
- 3.1.2. River use boaters paddling the river for more than 5 years were asked about changes in use:
 - Approximately half said they boat about the same amount as in the past
 - 18% said they boat more often
 - 19-30% said they boat less often

3.2. Trip Characteristics

- Group size majority visit the river alone or in groups of two, however, observed guided trips revealed more than 50% had more than 10 people
- Segment of river boated 43% of kayakers just played at Bob's Hole these "tended to be newcomers who came exclusively to playboat" (p. 19)
- Wait time at the put-in 57% of kayakers and 72% of rafters did not have to wait
- Median wait time for those who waited was 5 minutes

3.2.1. Duration of trip

- Most boaters spent between 2-5 hours on the river
- Kayakers tended to spend less time (2-4 hours), while rafters spent more (3-5 hours)
- Bob's Hole boaters spent an average 2.5 hours (sd=1.10) compared to 3.5 hours (sd=1.04) for down-river boaters
- 3.2.2. Time in sight of other parties on river
 - Variable results for down-river boaters
 - Bob's Hole kayakers were nearly always in sight of others
 - Weekday boaters were "in sight of others somewhat less (mean=38% of the time for downriver boaters and 84% for Bob's Hole boaters) than weekend boaters (mean=48% for downriver boaters, 88% for Bob's Hole boaters)" (p. 22)

3.3. Perception of River Flows

- 3.3.1. Flow as a factor in deciding to boat
 - Most boaters did not consider flows as part of decision to boat, except Bob's Hole boaters
 - Flows were factored into decisions slightly more by more experienced boaters, but "differences were not dramatic" (p. 22)

3.3.2. Preferred flow levels

- Mean optimum flow was signified by more respondents and ranged from 1,950-2,350
 cfs Bob's Hole boaters had similar views
- Minimum 600-700 cfs
- Maximum 15,000 cfs for downriver boaters, 19,000 cfs for Bob's Hole boaters
- Large percent of boaters marked "I don't know" for questions asking for minimum, maximum, and optimum flows.

3.4. Conditions on the River

Of eleven potential problems presented to boaters on the questionnaire, only two were noticed by a majority of any user group: litter and waiting to play at Bob's Hole

- 30% noticed crowding at rapids
- 20% noticed vandalism
- More than 20% noticed human waste or toilet paper
- Extent of problems were rated relatively low across all problems listed
- Ratings were given for number of sanitation facilities, condition of sanitation facilities, and law enforcement – each were generally rated fair or good
- Nearly 20% gave a poor rating for condition of sanitation facilities

3.5. Crowding

- Crowding was higher on weekends than weekdays
- Bob's Hole kayakers felt slightly more crowded than downriver kayakers
- Longtime boaters vs. Newcomers: slight support for more experienced boaters (16-20 prior trips) feeling more crowded than newcomers
- Possible upper threshold for crowding on the Clackamas: boaters do "not feel any more crowded when in sight of others 100% of the time than when in sight of others only 60% of the time" (p. 31)

3.5.1. Coping with crowding by changing behaviors

- Most changed to boating on weekdays rather than weekends
- "nearly 40% of kayakers changed the time of day or the time of year that they boat" (p. 33)

3.6. Views on Management

3.6.1. Potential management actions

- Most boaters were neutral to the potential management actions presented
- One item had substantial response allowing more commercially guided trips was opposed by about 45% of boaters
- Also, 35% of Bob's Hole boaters supported more parking at bob's hole

3.6.2. Limiting use

- "nearly 40% of kayakers fundamentally opposed limiting use" (p. 35)
- Few boaters believed limits were needed
- However, 70% of boaters would limit use if there was a biological basis for it and 50-80% would limit use "if most boaters feel too crowded" (p. 36)

3.6.3. Experience quality

- Of those indicating a threshold for wait time, "most said they could wait up to 10 minutes without impacting experience" (p. 37)
- Of those indicating standards for time in sight of others, "most said that somewhere in the range of 50-70% of time in sight begins to make the experience become unpleasant" (p. 38)

4. Key Discussion Points

- A shift in use from 1994 to 2002 (1994 approximately 40% of boaters said use was increasing, 2002 18% said use is increasing) suggests a "maturation of the market" (p. 16)
- Small group size is unusual among whitewater boaters, but is "probably due to the river's easy access for short trips, as well as the prevalence of kayakers" (p. 17)
- Regardless of travel distance, "kayakers were equally likely to be at the river to playboat" or paddle downriver (p. 19)
- Bob's Hole tends to attracts boaters regardless of the day of the week, while down-river boaters tend to be more concentrated on the weekends
- Boaters on the Clackamas had a high level of neutrality towards management actions, which is unusual for recreation surveys
- It appears that wait times on the Clackamas are well within the stated 10-minute threshold of boaters before it begins to impact their recreational experience

5. Management Recommendations

N/A

6. Research Design

Survey research, random sample, stratified by weekday/weekend

6.1. Study Area

13 miles – three lynx to the north fork reservoir, designated recreational under the wild & scenic rivers act

6.2. Data Collection Instruments

On-site questionnaire (included in report) – researcher traveled up and down the segment looking for potential respondents at take-outs

6.3. Study Population

Private non-commercial whitewater boaters February-August 2002

6.4. Sample Size

47 days sampled, 426 boaters surveyed

6.5. List of Variables and Operational Definitions

6.5.1. Trip Characteristics

Number of people in party, put-in location, wait time, length of time on river, type of boat used, and affect of flow on trip decision.

6.5.2. Conditions on the River

- Crowding used nine-point scale where users rated the experience from "not at all crowded" to "extremely crowded" (p. 43)
- Time in sight of others used 11-point scale from 0-100% with 10% increments
- Problem rating 11 problems were listed and ratings for each ranged on a four-point scale from "not a problem" to "big problem" (p. 44)
- Evaluation of sanitation and law enforcement conditions used five-point scale from "excellent" to "poor" (p. 44)

6.5.3. River use

Number of times floated the river, year of first trip, months floated, reasons for season preference, experience paddling the Clackamas more than five years, coping with crowding

6.5.4. River flow

Questions ask preferences for minimum, optimum, and maximum flows

6.5.5. Management policies

Eight policies were assessed for support of opposition using a five-point scale from "strongly support" to "strongly oppose" (p. 46)

6.5.6. Experience Quality

- Wait time threshold at put-in number of minutes willing to wait
- Time in sight of others threshold used 11-point scale from 0-100% with 10% increments

6.5.7. Use limits

Closed-ended question with four choices ranging from no limits to limits are needed; yes/no questions "...if most boaters feel too crowded...?"; "...if biologists felt they were necessary...?" (p. 47)

7. Theories Used in Study

N/A