

Whitewater Recreation on the Clackamas River

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River(s): Upper Clackamas River
Research Topic(s): Boater characteristics, River use patterns, Perceptions of social and ecological conditions, Boater attitudes, River use levels
Type of Publication: Report

1. Study Purpose

- “1. Identify user perceptions of existing conditions and preferences for river recreation opportunities.
2. Describe the acceptability to users of various management approaches.
3. Determine river use patterns and use levels to aid managers in setting use standards.” (p. 16)

2. Findings

- Response rate 67%
- Total boater count during 26 days of sampling was 865
- Rafts/inflatable kayaks = 480 boaters; hard-shell kayaks = 385
- Of respondents, 79% weekend users and 11% weekday users

2.1. Boater Demographics

- 63% rafts (and inflatable kayaks), 37% kayaks (and canoes)
- Primarily male
- Average age 38 years old
- Well educated
- Income range \$40-45,000
- Urban or sub-urban
- Kayakers are slightly younger than rafters, more likely male, and higher education level
- Boaters were on average 143 miles from home (about half traveling >50 miles, and about half traveling <50 miles)
- Higher percent of kayakers (55%) are single than rafters (36%)

- One third of boaters belong to a boating organization

2.1.1. Boater's past use history

- Almost 40% have been boating 10 years or more, a third have been boating less than one year, and about 35% more than 5 years
- Nearly half have been on the Clackamas 6 or more times
- Rafters had less experience on the Clackamas than kayakers
- Long-term users (5 years or more) reported similar use patterns to five years ago
- Most boaters (76%) report the Clackamas is important to them
- Other regional rivers most boated by Clackamas boaters are: White Salmon, Deschutes, Sandy, and North Santiam

2.2. Trip Characteristics

- Primarily day use; 17% report staying overnight (no trips longer than two days)
- Group size is smaller for kayakers (1-3 vs. 4 or more for rafters)
- Kayakers are more spontaneous (less than a day planning) vs. eight or more days in advance for about 35% of rafters
- Most rafters (79%) begin their trip at Three Lynx and end below Memaloose
- Three distinct kayak trips: 45% put-in at Fish Creek and travel the length of river section, 32% put-in at Three Lynx and travel length of river section, 20% put-in and take-out at Bob's Hole

2.3. Assessment of trends

- Most return boaters (70%) believe use is increasing

2.4. Recreational Motives

- "Good rapids" (p. 33) were rated the most important reason for visiting the Clackamas (nearly 80% of both rafters and kayakers)
- "Testing and developing skills," "natural setting," "peace and solitude," and "being with family/friends" (p. 33) were also ranked important
- "Meeting others, denied permit, camping, weather and fishing" (p. 33) were all fairly unimportant reasons for boaters visiting the Clackamas

2.4.1. Factors affecting timing of visits

- River levels are the most common factor affecting timing of visits (96% kayakers and 80% rafters)
- Weather factors into trip timing for about 1/3 of rafters and 23% kayakers
- Crowding levels are also a factor

2.5. River flow regimes

2.5.1. Optimum flows

- Most kayakers prefer 2500-3000 cfs flow conditions; rafter preferences are distributed fairly evenly along the flow level spectrum
- When reviewing all boaters, about 70% prefer 2000-4000 cfs levels

2.5.2. Minimum flows

- Most kayakers (58%) would boat at levels below 499 cfs
- Rafters prefer higher minimums: 500-999 cfs (29%), 1000-1499 cfs (32%)

2.5.3. Maximum flows

- 35% kayakers report 6000 cfs maximum flow, while 25% report 5000 cfs
- 22% rafters indicate 6000-6999 cfs maximum flow, about 1/3 would boat greater than 7000 cfs, a little less than half of all rafters would prefer maximum levels less than 6000 cfs

2.6. Boater Perceptions of Use Levels

2.6.1. Crowding

- 68% of boaters on-site reported “not at all crowded” on the river that day, while the mail survey (which asked a more general overall crowding level) indicated some level of crowding was perceived by about 1/3 of boaters from each group
- Weekday use: 80% reported “not at all crowded”; Weekend use: 65% reported “not at all crowded”
- Crowding levels are similar across experience levels
- Compared to other rivers assessed for crowding, the Clackamas is “relatively uncrowded” (p. 46)
- Potential responses to crowding ranged from “becoming unhappy” (4-5%), “resign themselves to the experience” (23%), “avoiding others” (40%), “visit on a lower use day” (20%), “go to a more remote river next time” (5%)

2.6.2. Time in sight of others/Encounters

- Most boaters (81% rafters, 96% kayakers) spent less than 40% of time in sight of others
- Weekends showed more time in sight of others than on weekdays; 65% weekday users saw no other groups while only 14% weekend users reported seeing no other groups
- Those who spent 100% of time in sight of others were Bob’s Hole boaters
- Majority of boaters reported 5 to 10 contacts with others
- Most boaters (84%) felt the amount of contacts was “about right” (p. 51)

2.6.3. Boater standards for use levels

- 44% indicate “it doesn’t matter” (p. 52) how many boaters they see, suggesting encounters are not a big issue with Clackamas boaters
- 56% provided a standard for encounter levels: less than 15 (72% rafters, 69% kayakers)
- For time in sight of others, 52% of rafters and 45% of kayakers indicated less than 49% of the time for a standard

2.7. Ecological Conditions

- 71% of respondents reported seeing litter along the banks
- 54% of those observing litter rated this as a “moderate or large problem” (p. 57)
- Vegetation loss at put-in and take-out locations was the second most common reported problem (about 1/2 of all boaters observed); this was not deemed a large issue
- Other issues noticed: vandalism of signs and human waste

2.8. Boater Attitudes Towards Management Approach

2.8.1. Facilities

- Boaters were generally satisfied with number and types of facilities (80% report “facilities are adequate” (p. 58))
- 40% of rafters supported more launches and parking while kayakers responded negatively to additional improvements

2.8.2. Present management approach

- “Half of rafters and 44% of kayakers reported that they had complied with the registration request” (p. 59) for voluntary registration at the launches
- Only 6% indicated a “major inconvenience” (p. 60) to fill out the registration cards
- Overall there was support of the permit system, with rafters more supportive (84%) than kayakers (63%)
- “Boaters feelings overall about the level of commercial use are not particularly strong” (p. 61)

2.8.3. Future management approaches

- Over 60% of boaters agreed that no limits are needed now, but if needed in the future then they should be put in place, 26% felt there should never be limits, 13% felt limits were needed now
- If biologists recommended limits for ecosystem protection, 82% would support limits
- 51% would support limits if most boaters felt too crowded

- “Rafters in general were more likely to support use limits than kayakers” (p. 63)

2.9. Levels of Use

- Highest number of boaters was recorded April 16 (136 boaters on river)
- Weekdays usually saw less than 10 boaters
- Rafters are generally more prevalent on weekends with higher numbers than kayakers

3. Key Discussion Points

- Rafters have different use patterns than kayakers
- Quality of whitewater is the primary reason for visiting the Clackamas
- Flow level is the most influential factor in trip planning
- Overall, the Clackamas is considered uncrowded and levels are not exceeding tolerable levels; however, there are certain periods when use levels “may be more than capacity” (p. 69), which is likely to occur “during weekends, when flow levels are optimum, when the weather is favorable, and when special events are occurring” (p. 69)
- Most boaters support the voluntary registration system, however in practice nearly half of all boaters are not participating
- Boaters like the easy access the river offers and are willing to deal with the consequences of greater use levels

4. Management Recommendations

- There are only a few days during the season when use appears to be approaching or exceeding capacity, therefore use limits do not seem necessary at this time
- Need to devote some resources to use counts and monitoring
- Permit system needs adjustment to clarify the need for only one member of each party to fill out the permit, which is contrary to the current direction for each boat to have a permit (which results in over counting of parties that have more than one boat per party)
- If commercial use is increased, it should not be allocated to weekends which are the higher use periods – weekdays appear to be able to accommodate a certain amount of increased use
- Sport fishing impacts need researching
- “A more comprehensive investigation of use levels [should] be conducted” (p. 73)
- Use monitoring should be conducted in 5 years

- Forest Service should track the use at special events and the associated impacts of these higher use levels

5. Research Design

Survey research, random sample

5.1. Study Area

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

5.2. Data Collection Instruments

One page on-site questionnaire and 11-page mail questionnaire (included in report) – distributed at put-ins and take-outs

5.3. Study Population

All whitewater boaters March 12 – May 30, 1994

5.4. Sample Size

26 days sampled, 365 on-site and 320 mailed to boaters

5.5. List of Variables and Operational Definitions

5.5.1. Boater perceptions of existing conditions and use levels

Measured by asking questions that dealt with: “contacts with others,” “personal standards,” and “crowding” (p. 18)

5.5.2. Acceptability of management approaches and perceptions of use limits

Measured by asking questions that dealt with: “facilities” and “river use permits” (p. 18)

5.5.3. Patterns of use

Measured by asking questions that dealt with: “flow levels,” “time and location of trips,” and “type and amount of use” (p. 18)

6. Theories Used in Study

N/A