A Process for Allocating Public Recreation Resources

McCool, S. F. & Utter, J. (1981). A process for allocating public recreation resources. In L. J. Buist (Ed.), *Recreation Use Allocation – Proceedings of the national conference on allocation of recreation opportunities on public land between the outfitted and nonoutfitted publics* (pp. 60-76). Reno, NV: Nevada Agricultural Experiment Station, University of Nevada.

River(s):Salmon (Middle Fork)Research Topic(s):Use allocationType of Publication:Proceedings

1. Abstract

This paper proposes a structure and process for developing allocation systems in river recreation settings. Middle Fork Salmon River users were asked to rank and rate allocation systems, evaluation criteria, and rationing techniques. A workshop of 25 individuals spanning the spectrum of river recreation interests was used to develop and narrow down criteria and techniques. A mail questionnaire was then developed and sent to 1451 river users from three user groups: outfitters, nonoutfitters, and individuals rejected in the lottery. Survey results indicate even pool and the current Middle Fork system are the most acceptable rationing techniques. The most acceptable allocation systems were split by the groups favoring their own experiences on the river: outfitters favored reservation systems, nonoutfitters and lottery rejectees favored lottery systems. Recommendations are provided for developing a national allocation policy.

2. Study Purpose

- Use survey research to identify "potential use allocation techniques and evaluative criteria and…responses of river users to these allocation techniques" (p. 61)
- Review issues of allocating river recreation use
- Develop a process and decision making framework for designing an allocation system

3. Findings

Response rate: 80%.

3.1. Allocation system evaluation criteria

27 criteria identified by workshop participants were narrowed down to eight most important (Table 1, p. 67):

- Fairness and equity
- Minimize resource impacts
- Maintains intent of river management legislation
- The system is legal

- Responds to demand shifts
- Consistent with river management objectives
- The effect of system on river experience
- Ability to monitor recreational demand

3.2. Allotment techniques

- The top five allotment techniques ranked by workshop participants are: Test River, Historical Use, Even Split, Even Pool, and Percentage of Disappointment
- Even Pool and the current Middle Fork system were rated as the most acceptable by each of the three user groups (oufitters, nonoutfitters, and lottery rejectees)
- Lottery rejectees "ranked the 'no allotment' alternative (treat everyone the same) below the other two systems

3.3. Rationing techniques

"The results tend to reflect the experience each group has with its own rationing system as applied in this river setting" (p. 73)

- Outfitters rated reservation systems as most acceptable
- Nonoutfitters rated lottery systems as most acceptable
- Lottery rejectees "overwhelmingly favored [lottery systems] even though it had recently proved unsuccessful for them" (p. 73)
- Priority for Idahoans was one of the techniques rated and "was favored by nearly 63 percent of the Idaho users althoguth they rated the lottery even higher" (p.73)

4. Key Discussion Points

- The no allotment alternative (treat everyone the same) was given a low rating by Middle Fork users, however this may not be the case in other river settings
- "Considerable support was shown for an even-pool system" (p. 75), which "has the potential to respond to changes in demand between the two sectors [outfitters and nonoutfitters] while protecting the economic interests of outfitters" (p. 75)
- There are likely few rivers where one allocation system would work "in its pure form" (p. 76), meaning most settings require a mixture of systems to balance the negative and effects of each

5. Management Recommendations

- A national policy on allocation is needed that identifies "possible goals for allocation techniques, and criteria for evaluating the suitability of techniques in different settings" (p. 75)
- A "distinct formalized process of use allocation" (p. 75) is needed like that illustrated in this study that acknowledges the many levels of decision making inherent in this effort

- When working toward developing an allocation policy, the disparate affected groups should recognize that there is some common ground:
 - I "each wants to protect the resource" (p. 76)
 - I "each wants a quality recreation experience" (p. 76)
 - I "each does not want an expensive bureaucracy" (p. 76)
 - I "each wants a fair and equitable allocation system" (p. 76)

6. Research Design

Survey research, random sample

6.1. Study Area

Middle Fork Salmon River, Idaho

6.2. Data Collection Instruments

- Use allocation workshop
- Mail return questionnaire was sent out to each individual sampled

6.3. Study Population

- Workshop river managers, outfitters, private users, and scientists
- Survey Middle Fork Salmon River users in 1978 and "individuals rejected during 1978 lottery for nonoutfitted floating permits" (p. 61)

6.4. Sample Size

- Workshop 25 participants
- Survey 1,174 river users and 277 rejected lottery applicants

6.5. List of Variables and Operational Definitions

The workshop was used to identify evaluation criteria and rank allocation techniques. The resulting techniques were then presented in survey format to Middle Fork users. River users were grouped by outfitter, nonoutfitter, or lottery rejectee.

6.5.1. Allocation system evaluation criteria

Workshop participants identified and ranked 27 criteria recommended for evaluating allocation systems.

6.5.2. Allotment techniques

- Workshop participants identified 11 techniques to be used to allocate the resource to user groups
- These techniques were evaluated by workshop participants based on four criteria from the research literature:
 - r "responsiveness of the technique to changes to demand among sectors" (p. 68)

1 "the administrative feasibility of the technique in terms of financial and personnel costs imposed upon the managing agency" (p. 68)

- I "fairness in providing equal access to nonoutfitted and outfitted sectors" (p. 68)
- 1 "the technique's economic impact on the outfitting industry" (p. 68)
- The five highest rated techniques were presented in the survey to Middle Fork river users
 - I Survey respondents ranked the techniques using a five-point scale (5=very good to 1=very poor)
- Survey respondents were also asked to evaluate the current Middle Fork system and the circumstances that would result in no differentiation between user groups (e.g., no delineation of outfitter and nonoutfitter user groups)
- 6.5.3. Rationing techniques
 - Workshop participants identified techniques to ration or allocate the nonoutfitter allotment
 - Six rationing techniques were presented in survey format to Middle Fork river users
 Rating scale used: "okay," "good," or "very good"

7. Theories Used in Study

N/A