

Motorboat Use on the
Wild Rogue River:
An Investigation of Use Between
Watson Creek and Blossom Bar

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A Report to the
Oregon State Marine Board
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Abstract

A study of private motorboat use on the lower nine miles of the Wild Rogue River was conducted to determine present and historical use levels. Motorized use was monitored daily, and a survey of private motorboaters undertaken using personal interviews. There is a long history of motorboat use in the study area; it was well established by 1968 when part of the Rogue was designated as a Wild River. All types of motorized use have increased since then, especially commercial and administrative use. Private use in 1976 is estimated at 1,000 trips, not all of which was recreational. There is considerable variation in the spatial and temporal patterns of use; over 30 percent of all private use takes place in September and October. Fishing is the primary reason for private motorboat use. The greatest problem reported by private motorboaters was discourtesy by downriver, drift users.

Introduction

Background

The Rogue River, which flows over 200 miles from its source in the Cascade Mountains of southern Oregon to the Pacific Ocean at Gold Beach, Oregon, serves a variety of uses, which include domestic water supply, irrigation, hydroelectric production, waste carriage and assimilation, transportation, fish and wildlife habitat, and outdoor recreation. In 1968, when Congress passed the National Wild and Scenic Rivers Act (PL 90-542), it designated an 84 mile segment of the Rogue, from its confluence with the Applegate River near Grants Pass to Lobster Creek (Figure 1), as one of the initial components in the National Wild and Scenic Rivers System. This Act provided that the river should be preserved in its free-flowing condition and be managed in such a way as to:¹

protect and enhance the values which caused it to be included in said system without, insofar as is consistent therewith, limiting other uses that do not substantially interfere with public use and enjoyment of these values. In such administration primary emphasis shall be given to protecting its esthetic, scenic, historic, archeologic and scientific features.

In 1970, the citizens of Oregon established the Oregon Scenic Waterways System (ORS 390.805 to 390.925) which included this same section of the river in the State system.

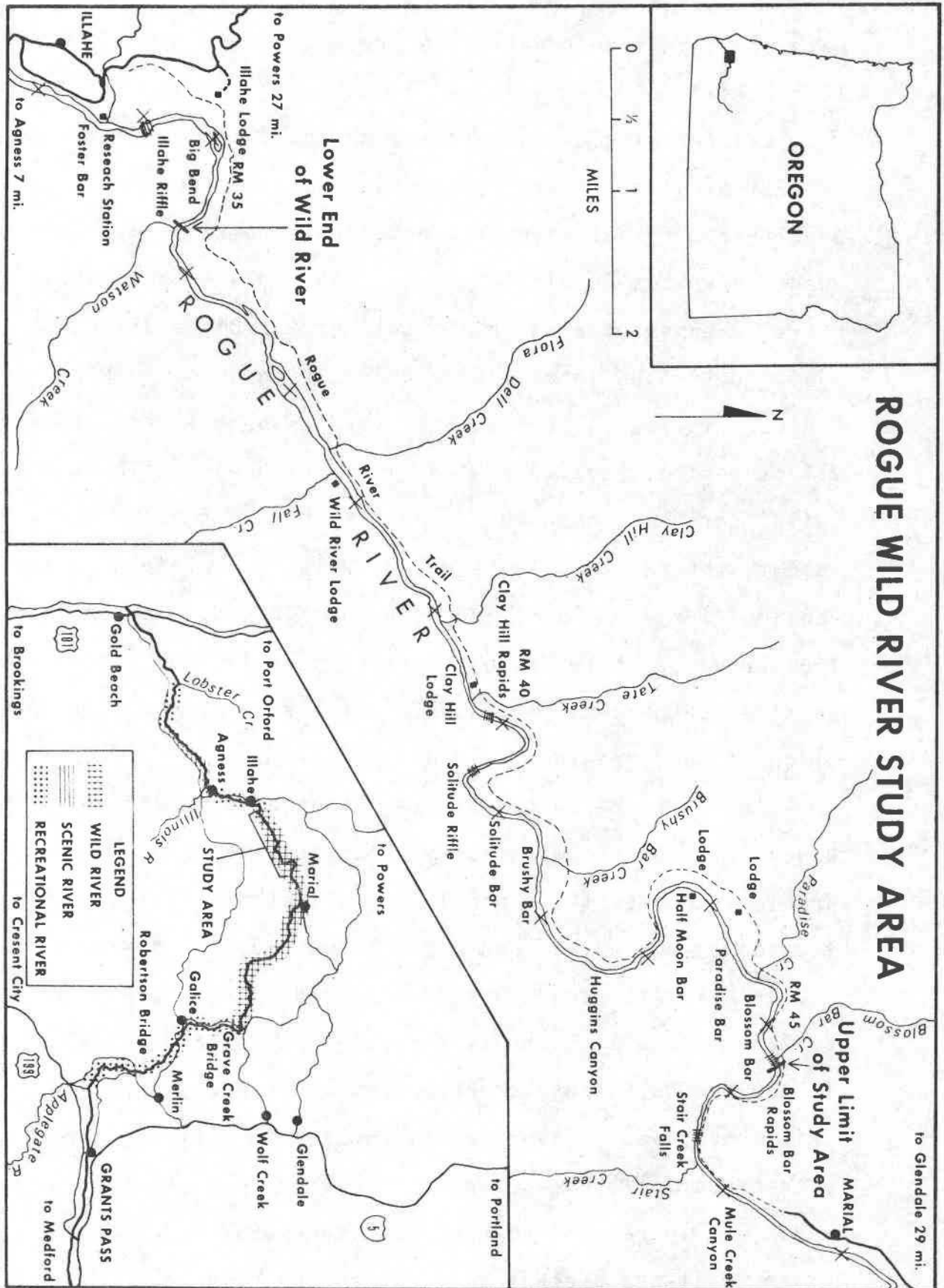


Figure 1

WJM, 1976

Department of Geography, Cartographic Service, OSU

This Act declares that "the highest and best uses of the waters within scenic waterways are recreation, fish and wild-life uses."²

Evidence indicates that the designation of a river in a federal or state rivers system can cause an increase in the popularity of that river for outdoor recreation, with consequent increases in visitation and use.³ This phenomenon appears to have occurred in the case of the Rogue River, which has an estimated 13 million people living within a 500 mile radius. Increased recreational use has been especially prevalent on that portion of the river which was designated as "Wild" pursuant to the Wild and Scenic Rivers Act.⁴ In this report, the use of Wild Rogue, or Wild river refers to the section of river classified as such. This 33 mile section, from Grave Creek to Watson Creek (Figure 1), has received at least a 500 percent increase in total river recreation visits since its designation in 1968.

Increased recreational use in the Wild section of the Rogue has been accompanied by both social and environmental problems. Some of the problems associated with increased use include overcrowding, conflicts between users, damage to plant and animal life, and shoreline erosion. There are several different groups which use the Wild section of the river. In the broadest sense there are nonmotorized downriver, or drift users and upriver motorized users. A list of the users within each of these groups is provided in Table 1. In addition, increasing numbers of hikers who travel the Rogue River Trail are present adjacent to the river.

Table 1. Users of the Rogue Wild River.

<u>Downriver (drift)</u>	<u>Upriver (motorized)</u>
Private drifters	Private motorboaters
Commercial raft trips	Private landowners
Commercial fishing guides	Commercial fishing guides
Administrative (BLM, Sheriff)	Commercial tour boats
	Commercial lodge operators
	Administrative (USFS, Sheriff, State Police)

Unfortunately, as is the case with many other backcountry rivers, reliable use data for the Rogue is absent or poorly developed, especially for private motorboat use.⁵ In the absence of such information, it has been difficult for those agencies charged with administration and management of the river to adequately respond to the task of resolving use conflicts and protecting the riverine environment.

Purpose and objectives

The purpose of this research was to establish a reliable data base on private motorboat use within the lower nine mile section of the Rogue Wild river, from Watson Creek to Blossom Bar (Figure 1). To accomplish this, three specific research objectives were set forth, as follows: (1) to establish present use levels for private motorboats, (2) to document, insofar as possible, historical use levels for the year 1968 when the river was designated as a Wild and Scenic River, and (3) to assess the kinds and types of environmental impacts associated with motorboat use.

The Study Area

The area considered in this research consists of the lower nine miles of the Wild Rogue, from Watson Creek to

Blossom Bar (Figure 1). This section of the Rogue is free of impoundments and inaccessible by road. It flows through an essentially natural environment, although there are four lodges and several private buildings visible from the river, with low-standard airstrips at two of the lodges. Access is provided by small private aircraft and powerboats. The Rogue River Trail provides additional, but limited access to the lodges and homes. While the nonconforming nature of the private uses within this section of the Wild river has been recognized, the area remains essentially primitive in character and meets the other criteria for a Federal Wild river classification.⁶

Administration of the Wild Rogue in the study area is shared by the U.S. Forest Service (Siskiyou National Forest), and the River Program Section of Oregon State Parks. The Oregon State Marine Board has responsibility for the regulation of boats and boating on the river. In addition, the Oregon State Police and the Curry County Sheriff's Marine Patrol are responsible for law enforcement in the study area.

This section of the Rogue is characterized by numerous rapids, riffles, and pools. There are at least five major rapids in the study area, which include Clay Hill Rapids, Camp Tacoma Rapids, Solitude Rapids, the Devils Staircase, and Blossom Bar Rapids. Blossom Bar is a powerful rapids, with large waves and dangerous rocks. As such, it forms a natural barrier to motorboats, especially during low water periods. The use of motorboats above Blossom Bar is re-

stricted to the period from November 15 to May 15,⁷ thus eliminating motorized use above Blossom Bar during the summer and fall drift seasons.

The hazardous nature of the Rogue in the study area necessitates great care and skill on the part of those who travel this section of river.⁸ This is especially true of powerboat users, who must travel upstream against the powerful current while avoiding hazardous waves and submerged rocks and ledges. Safe operation of a motorboat through whitewater requires experience in "reading" the river. The ability to select a safe channel is aptly reflected by the words of one user, "It's not a matter of knowing where the rocks are, it's knowing where they ain't."

The discharge of the river varies significantly both seasonally and annually (Appendix A). Peak flows occur from January to March, while low flows generally take place during the summer. Fluctuations in river discharge can have a dramatic effect on the timing and amount of river recreation use. Extremely high water levels discourage most users because of the large waves and powerful currents that develop in rapids during peak flows. Conversely, low water levels tend to discourage use because of the rocks and ledges which are exposed, and the lack of water for safe navigation. Discharge is also a factor in determining water temperatures and the timing of anadromous fish migrations, thus influencing the timing of recreation use which is motivated by fishing.

II. Methodology

In order to determine present use levels for private motorboat use, a field research station was established at Foster Bar landing, which is two miles below the lower end of the Wild river section at Watson Creek. Foster Bar is the closest public road access to the lower Wild river area, and, as such, serves as a popular take-out point for downriver trips, as well as a launch site for private motorboats traveling into the Wild river area. At this site motorboat use was monitored daily from June 22 to September 15, 1976. As a part of this monitoring, permits were issued to private boaters in cooperation with the Oregon State Marine Board.⁹ To study private use in its proper perspective, all motorboats and driftcraft travelling past Foster Bar were observed, and the date, time, direction and type of boat recorded.

Additional private use was generated by users originating from Illahe Lodge, which is located approximately one mile upriver from Foster Bar. The amount of this use was estimated from interviews and Annual Permit data.

To secure additional information regarding private motorboat use, a survey was conducted of private motorboat owners. A copy of the interview form is found in Appendix B. Personal interviews were obtained from motorboaters who presently use the lower section of the Wild Rogue. One of the biggest ob-

stacles to this survey was that of identifying the motorboat user population. Initially, a partial user population was identified from a roster of the Curry County Powerboaters Association. This organization was formally started in 1970 by powerboaters and guides who were concerned about use limits and the conflicts between motorboaters and drift users. Forty-nine of its eighty-one members were tentatively identified as users of the Wild river area. Additional users of the Wild river were identified in the course of interviewing known users, from annual permit data, and from the census of use at Foster Bar. As users of the study area became identified they were contacted by telephone and asked to participate in the survey. During the months of July, August, and September personal interviews were conducted with 46 motorboat users, or 66 percent of the total known user population. The cooperation of motorboaters in the survey was, for the most part, excellent; only one refusal was encountered during the entire survey. The results of the user survey and the census data on daily use were coded and keypunched for tabulation and analysis by computer.

Information regarding historical use of the river was obtained through a variety of sources. Use data for 1973 was obtained from a partial record of motorboat use gathered by a commercial tour boat operator. A 1974 study of drift users also provided some data from a sample of days in July and August of that year. Data concerning historical use was also collected from interviews with early users of the river and

those with local knowledge of river use. Additional data on historical use was gleaned from a search of documents and pertinent newspaper articles.

An assessment of the kinds and types of environmental impacts which might be associated with motorboat use was carried out through a combination of literature reviews, field observations, and the application of an Environmental Assessment Manual developed by the Extension Service at Oregon State University.¹⁰

III. Historical Use of the Rogue

In order to understand private pleasure motorboat use in its proper perspective, it needs to be examined in relation to the other boating uses of the river (Table 1). The history of boating on the Rogue is closely tied to the settlement of the region. The earliest use of boats on the Rogue was for the transportation of people and supplies into what was, and still is, one of the more inaccessible areas of Oregon. The river was travelled from Grants Pass to Gold Beach several times prior to 1900.¹¹ The discovery of gold at Mule Creek in 1891 resulted in an increased use of boats to haul heavy mining equipment and supplies into what is presently the Wild river area. These early wooden boats were rowed downriver as far as Blossom Bar and then dismantled.¹²

On June 15, 1895 a postal route was established from Wedderburn to Big Bend (Illahe). Initially the mail was carried in wooden boats powered by sail, oar, and pike-pole.¹³ In 1900, the 104 foot steamboat "She", which weighed 5 tons and could carry 10 passengers, began to travel the lower Rogue from Gold Beach to Agness. After limited operation, the "She" was wrecked in 1903 below Agness.¹⁴ Henry Moore owned the first gas-powered boat on the Rogue, driven by a single cylinder, four horsepower motor. In 1908 the first motorboat

reached Illahe, but required the use of pike-poles to do so.¹⁵ Improvements in boat design and the advent of larger, more reliable motors resulted in a gradual adoption of their use over the next 20 years. In 1927, Ruell Hawkins ran a boat with an inboard motor to Winkle Bar (River mile 50), which was the greatest distance a powerboat had ever travelled up the Rogue.¹⁶

After World War I, downriver use by private fishing guides began. Motorized use was sporadic during this period, and was primarily oriented towards the hauling of freight and some passengers. The recreational use of motorboats did not begin until after World War II, and was limited to a few local users with the knowledge and skill necessary to navigate the river. In 1947, Glen Wooldridge of Grants Pass made the first successful trip up the Rogue from Gold Beach to Grants Pass, a distance of 120 miles, using a 25 horsepower outboard.¹⁷ Since this initial trip in 1947, motorboat use of the river through what is today the Wild section has gradually increased. The trip from Gold Beach to Grants Pass is now an annual event, with perhaps a dozen boats attempting the trip each spring.

Motorboat use of the Rogue was revolutionized in 1962 with the invention and successful testing of the outboard jet drive.¹⁸ The jet drive is a high-powered water pump which replaces the propeller drive unit on a conventional outboard motor, thereby reducing the depth of water necessary for operation to a few inches and eliminating the possibility of dam-

age to a propeller. Jet drives, together with the use of aluminum hulls, have made motorboat use much more popular, resulting in increased recreational use of the Wild Rogue by powerboats. Motorboat use has also been facilitated by the blasting of rapids to remove rocks blocking the channel, thus clearing an adequate channel and eliminating the need for portages at some rapids. This practice is now prohibited.

In 1968, when the Wild and Scenic Rivers Act was passed, motorboat use was well established on the section of river that was designated as Wild. A description of such use is found in the Federal Register:¹⁹

A commercial jetboat business brings up to 17 passengers at a time to Paradise Bar, about 3 miles downstream from Marial. Normally the boat makes one round trip per day. In addition, all the lodge owners transport people and supplies upstream from Gold Beach via powerboats. Another source of powerboat use...is sport fishermen, both private and commercially guided.... The use of powerboats is established and publicly accepted in this section of the river.

To estimate use levels in 1968, interviews were conducted with persons who used the river in that year, and are knowledgeable about use levels. Based upon these interviews, and on use levels since 1968, the maximum total level of all private use in 1968 is estimated to be 400 trips.²⁰ This does not include use by a commercial tour boat operator, who made an estimated 60 to 100 trips into the Wild river area. Maxi-

Table 2. Motorboat Trips in the Study Area, 1968-1976.

Type of Use

Year	Private	Commercial	USFS Fire ⁽¹²⁾	USFS Rec. Adm. ⁽¹³⁾	Sheriff	Total
1968	400 ⁽¹⁾	60 ⁽⁶⁾	0	0	0	460
1969	NA ⁽²⁾	NA	0	0	0	NA
1970	NA	NA	0	0	0	NA
1971	NA	NA	95 ⁽¹³⁾	18 ⁽¹³⁾	0	NA
1972	NA	70 ⁽⁷⁾	95	30	0	NA
1973	500 ⁽³⁾	124 ⁽⁸⁾	95	22	102 ⁽¹⁴⁾	843
1974	800 ⁽⁴⁾	214 ⁽⁹⁾	106	21	86	1,227
1975	NA	450 ⁽¹⁰⁾	100	24	53	NA
1976	1,000 ⁽⁵⁾	600 ⁽¹¹⁾	100	22	77 ⁽¹⁵⁾	1,799

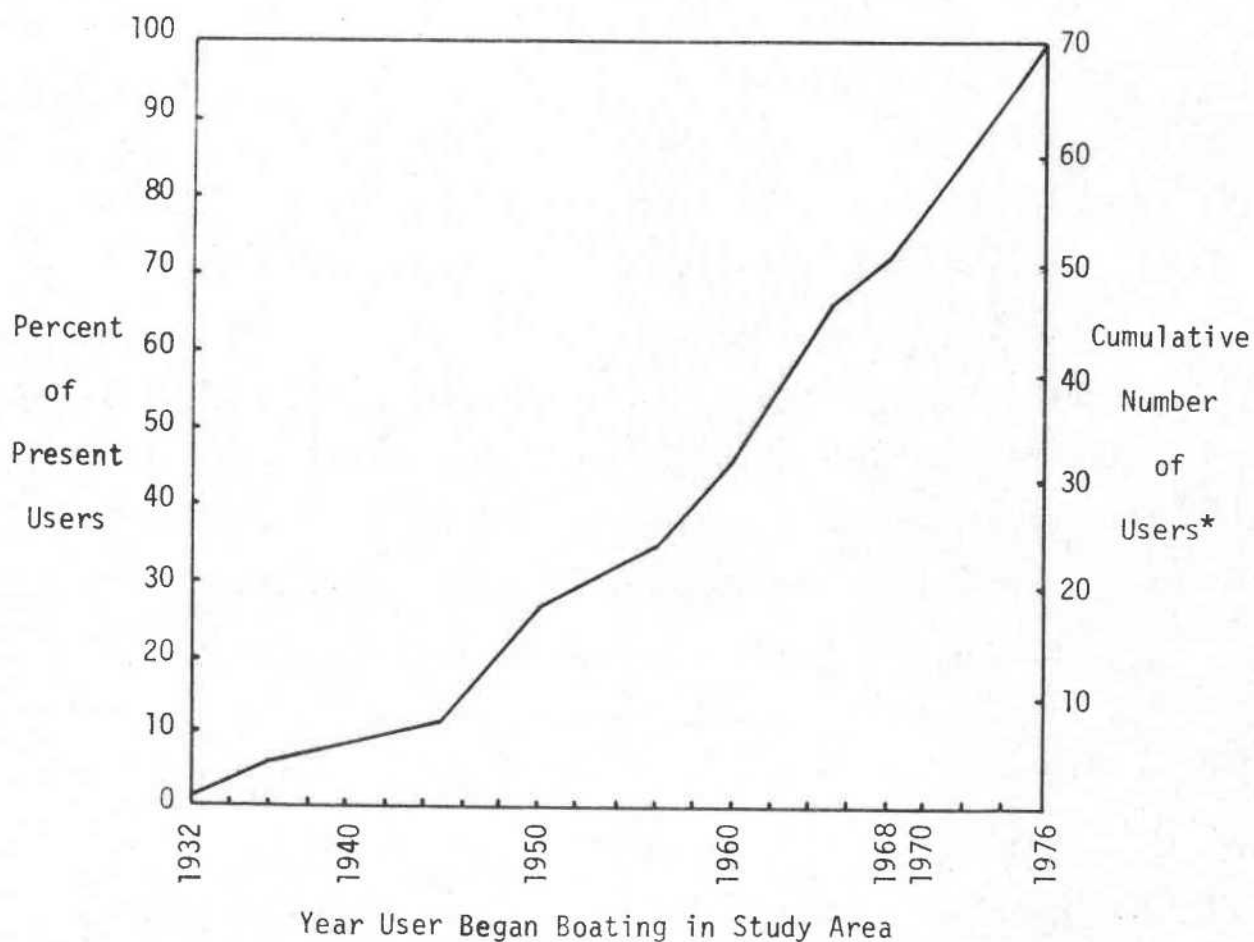
Assumptions and Sources:

- 1 Based on interviews with persons using the river in 1968.
- 2 No reliable data available.
- 3 Data provided by a commercial boat operator from observations while on the river. Because of the limited time this boat would be on the river, the data obtained were expanded to account for this underestimate of actual use.
- 4 Based on data collected by OSU personnel in a 1974 study of drift use during July and August, when it is assumed that 18.9 percent of the total annual use takes place. An estimate of 156 private boats for these two months therefore results in an annual estimate of 800.
- 5 See Chapter IV. Present Use of the Study Area.
- 6 Estimated from interviews with commercial operators and local users.
- 7 Based on an estimate of 700 passengers, 10 passengers per trip.
- 8 Data provided by commercial operator, July and August 1973.
- 9 Data collected by OSU personnel.
- 10 Estimated from passenger totals.
- 11 Four month period June 1 to September 30. Average of 5 Boats/day.
- 12 Data provided by the U.S.F.S., courtesy of Mr. Robert Kiser.
- 13 First year of U.S.F.S. motorboat use.
- 14 Represents an 8 month total.
- 15 Trips for the first 9 months of 1976.

mum total combined motorized use in 1968 is therefore estimated to be between 400 and 500 trips. Changes in motorboat use since 1968 are shown in Table 2.

It is evident that private use has increased since 1968, however, the magnitude of this increase is difficult to assess because of the variation in use from year to year as a result of changes in discharge, variation in fishing, weather, and other factors which influence participation in motorboating. Commercial use has shown the greatest increase since 1968, growing over 500 percent. U.S. Forest Service use began in 1971, and is fairly constant each year, with variation due to changes in fire danger and administrative need. The Curry County Sheriff Marine Patrol began in 1973; this use has remained relatively constant since then.

Another way of measuring private use in 1968 is in terms of the numbers of boat owners who use the study area. As a part of the user survey which was conducted, boaters were asked when they began to use a motorboat to travel above the Foster Bar-Watson Creek area. The growth in private users expressed as a cumulative frequency, is shown in Figure 2.



* Estimated for the entire motorboat user population.

Fig. 2. Growth in Private Motorboat Users, 1932-1976.

Figure 2 indicates that 71.7 percent of the present users were boating in the study area prior to 1968, which would represent approximately 50 users. Since 1968, the number of private motorboat users has increased 28.3 percent, or 20 users. Based upon the latest available data, the total number of private motorboat users is 70. While there may be a few additional users which have not been identified, the total number of such users is probably quite small.

IV. Present Use of the Study Area

There are a variety of boating uses which presently take place within the study area on the Wild Rogue (Table 1). To determine the levels of present motorboat use, a census of boat use was undertaken (see p.8). The results of this census which represent boats passing Foster Bar, for the period from June 22 to September 15, 1976, are presented in Table 3.

Table 3. Monthly Motorboat Use Data,
by Type of Use, Summer 1976.

Month	Commercial	Private	Sheriff	USFS Fire	USFS Adm.	State Police	Unident.	Total
June (8 days)	30	7	1	6	2	0	2	48
July	156	45	11	31	11	1	1	256
August	172	47	9	23	11	1	3	266
September (15 days)	81	37	2	15	4	2	5	146
Total Trips	439	136	23	75	28	4	11	716
Percent of Total Trips	61.3	19.0	3.2	10.5	3.9	0.6	1.5	

The 136 private trips were taken by a total of 37 users, two of whom were from California. Of these 136 trips, 81 were made by only 10 users. A total of 53 permits were issued in

85 man-days of observation at the Foster Bar landing. These 53 permits were issued to 24 individuals, with one user obtaining 16 permits. There were 264 private visitors who entered the Watson Creek-Blossom Bar section of the Rogue while on a private use permit, or an average of 4 persons per private boat. In addition, 42 private boats used this section of the river while operating under an Annual Oregon Scenic Waterways Boat Permit. No record was made as to the number of persons who travelled while under such permit, but a range of two to four persons per boat would seem appropriate. Additional private use was generated above Foster Bar by users originating from the Illahe Lodge. This use is authorized by Annual Permit. There were 19 instances of private motorboat non-compliance, by those who either refused to stop to obtain a permit, or were unaware of the permit system. Commercial non-compliance amounted to 29 cases, all of which were recorded by one boat.

During the 1976 summer season, commercial tour boats contributed the greatest amount of motorized use (61.3 percent), while private and combined administrative use was approximately equal, (19.0 percent and 18.2 percent, respectively). However, when total annual use is considered, an entirely different distribution of use is revealed, as seen in Table 2. The reason for this shift in annual use is the seasonal nature of commercial use (May 15 to October 15) and administrative use (e.g., U.S.F.S. fire patrol), while private use is distributed throughout the year. The monthly variation in pri-

vate motorboat use is shown in Figure 3.

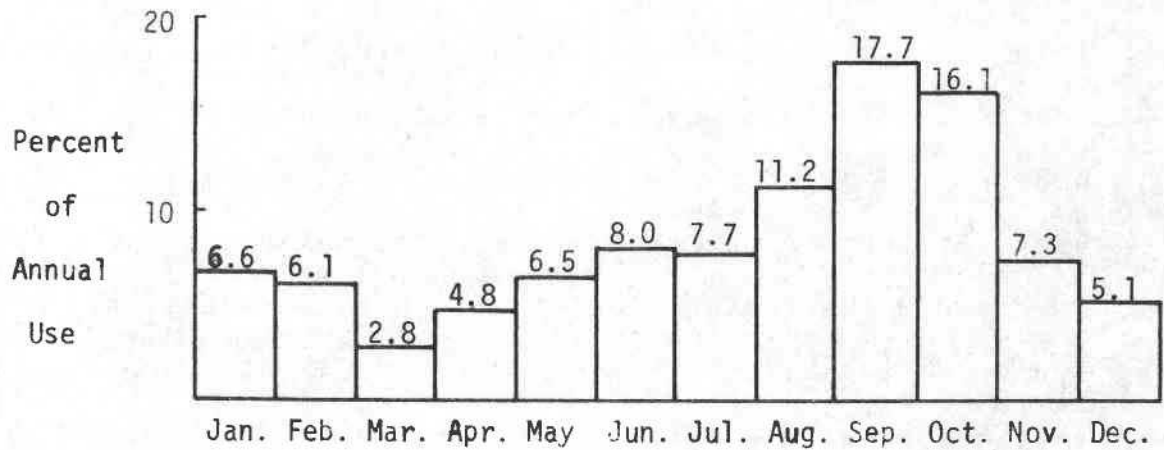


Fig.3. Monthly Variation in Private Motorboat Use on the Wild Rogue River. (Based on user survey).

This graph shows that private use is at a minimum in March and April when peak flows usually take place, (see discharge data, Appendix A). Over one-third of the annual use takes place during September and October when the fall steel-head fishing is generally at its best. A further examination of this graph reveals that 18.9 percent of the annual use takes place during July and August. Thus, the 92 trips observed during the census of use in those months results in an estimate of 500 trips past Foster Bar in 1976. However, exceptionally inclement weather during the month of August may have reduced use in that month.²¹ The possible suppressing effect of poor weather is substantiated to some extent by the fact that Figure 3 indicates a higher use level in August than in July, whereas observed use was nearly identical (47 trips

versus 45 trips, respectively). If the use observed in July is then accepted as "normal", an estimate of annual use past Foster Bar based on July totals would be approximately 600 trips. Given this situation, estimated private use past Foster Bar in 1976 may be expressed as ranging from 500 to 600 trips. Based on Annual Permit data, and interviews with users living upriver from Foster Bar, motorboat use originating from there might contribute up to an additional 400 to 500 trips annually. Thus, the estimated total amount of private motorboat use taking place in the study area during 1976 is 1,000 trips.

While the number of trips as a unit of measurement provides one means of examining use, it fails to represent use in terms of people. Another means of comparing Wild river use is in terms of users and passenger-miles of use. A passenger-mile represents the number of users times the number of miles travelled. The application of passenger-miles to compare motorized and non-motorized use of the Rogue in the nine mile study area and in the entire 33 mile Wild river section is shown in Table 4.²²

Table 4. Passenger-miles of Use on the Wild Rogue, 1976.

	Type of Use			
	Motorized		Non-motorized	
	Commercial Tour Boats	Private Motorboats	Total Downriver (Drift)	Total Use
Number of Passengers	6,200	3,000*	7,675**	16,875
Number of Miles	18 r.t.	18 r.t.	9 o.w.	
Passenger- Miles in Study Area	111,600	54,000	69,075	234,675
Percent	47.6	23.0	29.4	
Passenger- Miles in Entire Wild River Area	111,600	54,000	253,275***	418,875
Percent	26.6	12.9	60.5	

*Based on 3 passengers per boat, 1,000 trips.

**Data supplied by Bureau of Land Management for 1976, summer season only, which represents most of the annual use.

***Based on 33 miles o.w.

A comparison of passenger-miles of use in the study area and the entire 33 mile Wild river section reveals that while motorized use predominates in the study area (70.6 percent), downriver use is the largest use of the entire Wild river (60.5 percent from summer season use alone). Since 1973, the number of summer season downriver parties has increased 112.1 percent, while the number of downriver users has increased

76.8 percent.²³ During this same period, commercial motorboat passengers increased over 400 percent, while the total number of private motorboat passengers may have doubled.

Just as there are differences in the monthly distribution of use, so too is there considerable variation in the weekly and daily patterns of boating use. The daily pattern of boating use is shown in Table 5.

Table 5. Daily Distribution of Motorboat Use in the Study Area, July 1 to September 15, 1976.

Use	Day of Week						
	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Private	19 (15.1)	7 (5.6)	13 (10.3)	12 (9.5)	18 (14.3)	30 (23.8)	27 (21.4)
Commercial	47 (11.5)	56 (13.7)	67 (16.4)	64 (15.7)	58 (14.2)	53 (13.0)	63 (15.4)
USFS Fire	10 (14.5)	10 (14.5)	10 (14.5)	10 (14.5)	10 (14.5)	10 (14.5)	9 (13.0)
USFS Adm.	4 (15.4)	3 (11.5)	4 (15.4)	7 (26.9)	6 (23.1)	0 (0)	2 (7.7)
Sheriff	4 (18.2)	3 (13.6)	4 (13.6)	1 (4.5)	2 (9.1)	6 (27.3)	3 (13.6)
Total	85 (12.8)	81 (12.2)	97 (14.6)	94 (14.1)	96 (14.4)	104 (15.6)	109 (16.4)

Numbers in parentheses () indicate percent of total weekly use.

Commercial boat use has a fairly even weekly distribution of use, whereas over 50 percent of all private use takes place on weekends. The U.S. Forest Service fire patrol show a remarkably even pattern of use, while the use of the river by the Forest Service recreation administration boat is more ori-

ented to use during weekdays. The Curry County Sheriff's Marine Patrol displays no particular pattern, although there is somewhat more use during the weekends.

A temporal analysis of motorboat use is shown in Figures 4 and 5. These figures show the total number of trips observed for each use by the time of day they passed Foster Bar going upriver and downriver. Commercial boats, which travel on a schedule, show the most regular pattern of use, going upriver between 10:30 and 11:30 am, and returning from 1:30 to 2:30 in the afternoon. The U.S. Forest Service fire patrol also has a well defined pattern, travelling into the Wild section between 8:30 and 9:30 am, and leaving it from 10:30 to 11:30 am. Private use and U.S. Forest Service administrative use is less well defined. Generally upriver use is in the morning and downriver use in the afternoon. To some extent private use tends to parallel commercial use because many private boaters prefer to travel in the same direction as commercial boats, often following the commercial boats in order to stay in the main channel.

To complete this analysis, the timing of drift use needs to be examined, as seen in Figure 6. This graph combines all motorized upriver and downriver use, and shows the arrival of drift parties and total drift craft at Foster Bar. This graph indicates that there is a great deal of simultaneous use by motorized and non-motorized users. This is one of the primary reasons for the conflict between the two user groups. Most drift parties prefer to arrive at Foster Bar during the

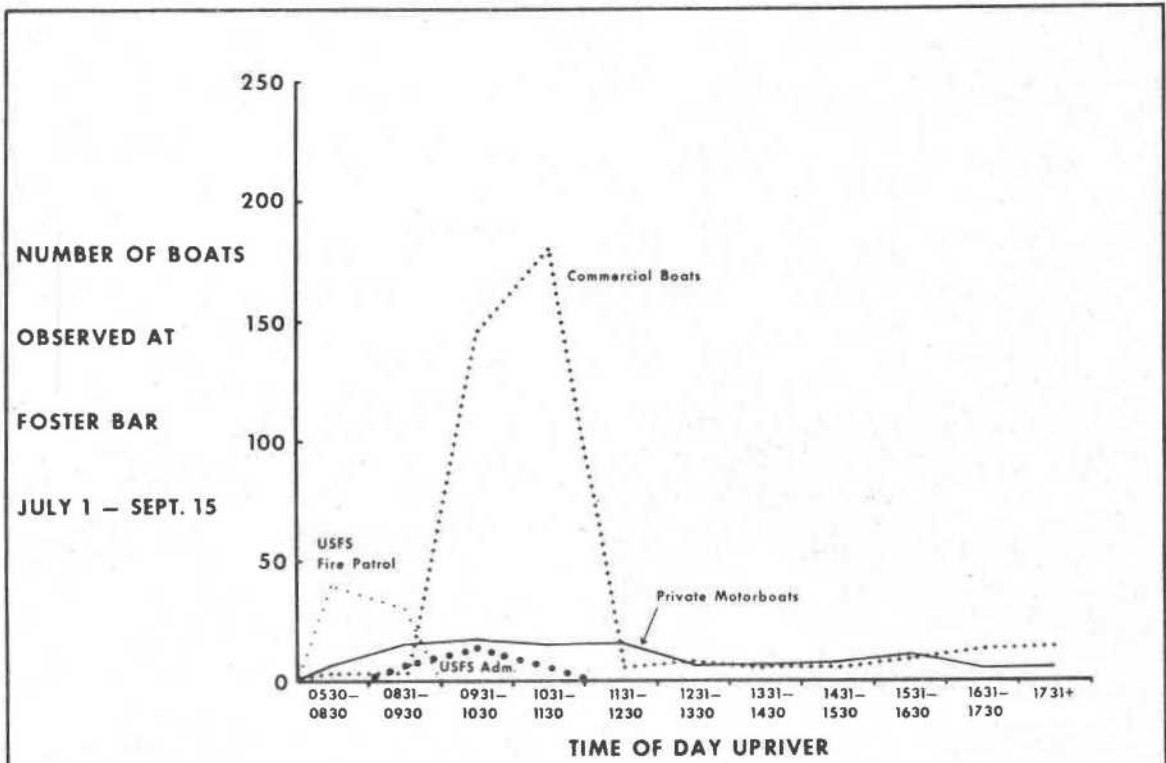


Fig. 4. Motorboat Use by Time of Day Upriver

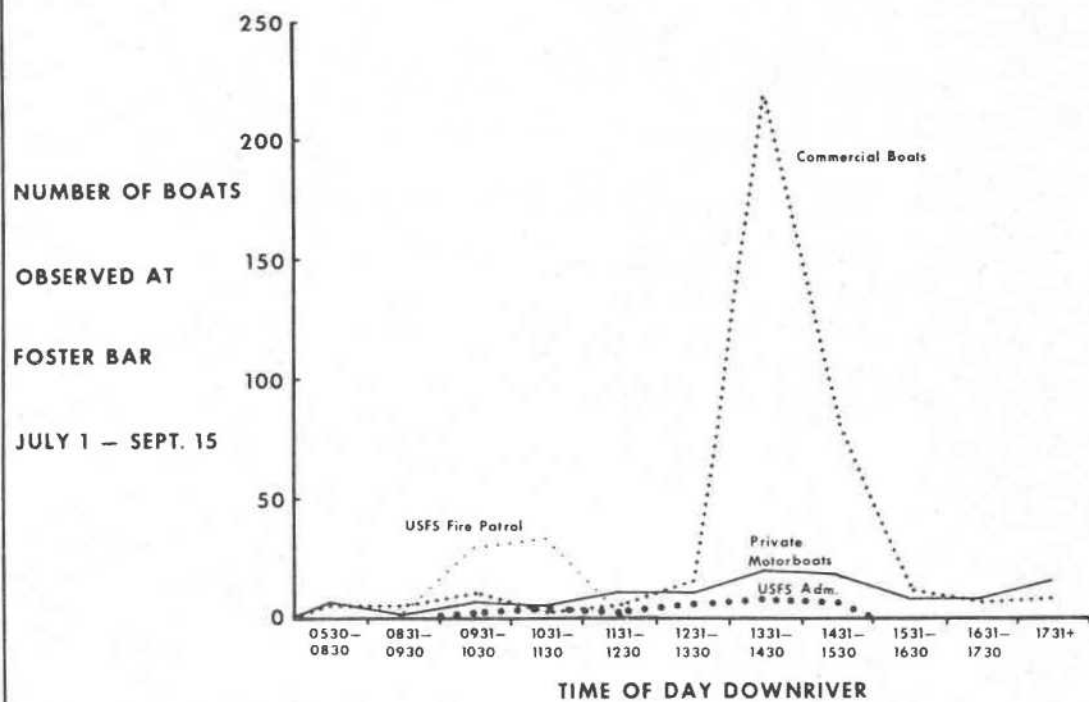
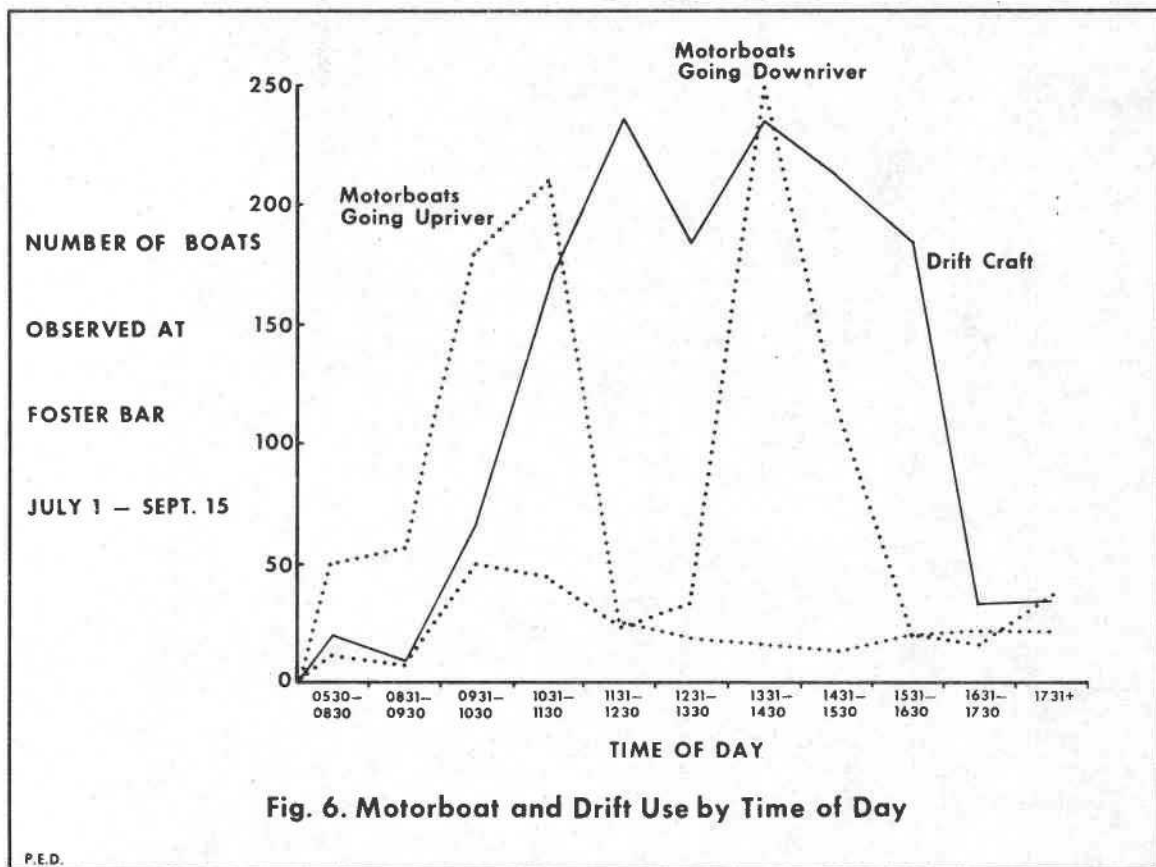


Fig. 5. Motorboat Use by Time of Day Downriver.

P.E.D.

middle of the day, which means they must encounter the commercial tour boats, U.S.F.S. boat(s) and any private boats which are going upriver in the morning, and may also be overtaken by them coming downriver if they don't arrive at Foster Bar before 1:30 - 2:30 pm.



V. Results of the User Survey

User Characteristics

Private motorboat users of the Wild Rogue River are similar in many respects to the other Oregon boaters, with the exception of where they prefer to use their boats.²⁴ The use of motorboats to travel through hazardous whitewater and a dependence on jet drives differentiates Rogue river powerboaters from the users of less demanding bodies of water. The user survey identified three subsets of private users. One-half of the respondents were private recreationists; nearly 20 percent were private property owners with land in the Wild river area, while the remaining 30 percent were private fishing guides. These guides use powerboats to haul passengers and freight into the Wild river area. Their use is considered private for the purpose of this study, although it is not necessarily pleasure use. Similarly, private users with property in the study area may not consider their boating as recreational use per se, but rather as a means of access to their homes and property.

Most of the motorboat users live in southwestern Oregon; 90 percent of the users live within a 75 mile radius of the study area. Two-thirds of the respondents were from either Agness (and Illahe) or Gold Beach. Over 65 percent of the respondents indicated that they had lived on or near the Rogue

River for 20 years or more.

Boat Characteristics

The boats used by private boaters on the Wild Rogue range in length from 15 to 24 feet. One-half of the boats used are either 18 or 20 feet in length. Aluminum is the most popular hull material by a ratio of 2:1 over wood. The popularity of jet drives is indicated by the fact that 90 percent of the respondents use either an inboard or outboard jet drive rather than a conventional propeller. The mean horsepower rating of inboards was from 250 to 275 horsepower, while for outboards the mean rating was 65 horsepower. The average amount of fuel used for a round trip in the study area was 8.3 gallons.

Almost 90 percent of the users trailer their boats in connection with use of the Wild Rogue. The majority of users trailer their boats 20 times or less during the year. Foster Bar is the most popular launch site, receiving use by 41.3 percent of the boaters, while Agness (15.2 percent) and Gold Beach (13.0 percent) serve as additional launch sites.

Private Boat Use

The location of use within the study area varies, depending upon the user's preferences, reasons for use, and skill in running whitewater. Not all private users travel the entire nine miles of the study area. While nearly 70 percent of the users indicated that they travel as far as Paradise Bar (river mile 44.3), only 23.9 percent said they usually travelled beyond this to Blossom Bar (river mile 45.0) at the upper limit of the study area. One-fourth of the respondents said they

usually travel as far as Clay Hill (river mile 39.3), which is only 3.8 miles above Watson Creek (river mile 34.5). The amount of travel time required to reach these destinations is, of course, a function of distance and the speed of travel. Most users reported that a trip from Foster Bar to Blossom Bar takes from 40 to 60 minutes, while a trip to Clay Hill might only require 20 minutes.

The reasons for private use on the Wild Rogue are varied. Fishing is the primary reason for private motorboat use of the Wild Rogue, accounting for almost 70 percent of the reported use. The study area is highly regarded by sport fishermen due to its general inaccessibility and primitive character. Private recreational use is also generated by users who visit the lodges in the study area. Camping, picnicing, and pleasure cruising are additional, but minor, reasons for recreational motorboat use.

While the majority of private use is recreational in nature, there is also private non-recreational use. Access to private property in the study area accounts for 13 percent of the reported use. The hauling of freight by private boat accounts for some additional non-recreational use, as does private use required to travel to work at the lodges. The number of passengers travelling in private boats usually ranges from two to four.

There is a significant difference between the amount of use reported by the users and that which was actually observed and estimated. Motorboat users were asked to estimate, as

best they could, the total number of trips they took in the study area during 1975. The number reported by the respondents totaled 1,781 trips, an average of 38.7 trips per user. If this is expanded to the entire user population, over 2,600 private trips would have taken place in 1975, an average of almost 8 private boat trips each day of the year. Yet the observed use at Foster Bar averaged only 1.4 private trips per day during the entire study period. One source of bias in this overestimate of use by the respondents may be a fear that motorboat use levels will be restricted in the future, thus causing the respondents to exaggerate their actual use.

Similarly, the amount of use reported on Annual Permits²⁵ is a misleading indicator of actual use. These permits require the user to declare the total number of trips taken in the highest year of use. However, there is a difference between the highest year of use and an average or typical year of use. A summary of the permits issued as of December 1, 1976 appears in Table 6.

Table 6. Annual Motorboat Permit Data.

Type of User	Number of Permits*	Total Number of Trips Reported**	Average Trips Per User
Commercial Fishing	27	1,393**	55.7
Commercial Whitewater	3	70**	--
Commercial Lodge, Private Home and Property Owners	7	501	72.0
Total	37	1,964	

*As of December 1, 1976.

**Data missing from 2 permittees.

(Source: Oregon State Marine Board)

Problems of use

To identify problems and conflicts in private motorboat use, two questions dealing with problems of use were posed to the respondents. When asked if they had ever encountered any problems, 63 percent indicated no problems, while 37 percent mentioned some type of problem in use of the study area. The responses to specific problems are found in Table 7.

Table 7. Problems Encountered by Private Motorboat Users in the Study Area

Type of Problem	Percent indicating YES, a problem.	Percent indicating NO, not a problem
River traffic	21.7	78.3
Mechanical difficulties	15.2	84.8
Encounters with drift users	45.7	54.3
Encounters with commercial boats	10.9	89.1
Water pollution	10.9	89.1
Sanitary facilities	17.4	82.6
Boat access	26.1	73.9
Overcrowding	17.4	82.6
Law enforcement	0.0	100.0

The greatest problem cited by motorboaters was that of encountering drift users. In meeting drift users, 41 percent of the respondents mentioned some form of discourtesy (obscene gestures, hostile comments, failure to yield, blocking of rapids) as a problem. Encountering nudity in the study area was a problem for 15 percent of the motorboaters interviewed. The comments received regarding problems are found in Appendix C.

The fact that motorized users in the study area are encountering discourteous drift users may reflect the attitudes

reported in a study on drift use conducted in 1974. This study found that 80 percent of the downriver users oppose the use of motorboats on the Wild Rogue.²⁶ Thus, the conflict between motorized and non-motorized use on the Wild Rogue is similar in many respects to the conflicts reported in other studies which have found, in general, that motorized users are more tolerant of non-motorized users.²⁷

Regulation of Use

As a part of the survey, motorboat users were asked how many other parties they would be willing to encounter in the study area before they felt crowded. Most of the respondents felt that they really couldn't say, because it would depend upon the place where they encountered other users, the frequency of the encounters, and who they encountered. However, of those who did respond, most felt that if they encountered between 10 and 20 parties in the study area, the river would be crowded. Several users felt the river was already too crowded, while a few were of the opinion that everyone should be allowed to use and enjoy the river.

When asked what the effect of increased river use might have on their own use, 45 percent responded that such increases would have no effect, while the remaining 55 percent felt there would be some effect. Over 25 percent felt increased use would limit their own use; another 15 percent reported it would change the timing of their own use to avoid peak use periods (e.g., summer drift season, major holiday weekends). A few users felt increased use of the river would eliminate

their own use. A summary of the comments received in response to this question is found in Appendix D.

The subject of proposed use regulation in the Wild river area brings out some very strong feelings and opinions from private motorboaters. Most private boaters, especially those who were using the study area prior to 1968, are upset at the idea of possible restrictions on their use. They view private motorboating as a legitimate and established use of the Wild Rogue river. Interestingly, several expressed the opinion that the Rogue was much more "wild" before its official designation as such. Typical responses to the question of use regulation are found in Appendix E.

One-third of the users feel there is no need to impose any use regulations; their feelings are typified by the statement, "The river will take care of itself." However, the majority of private motorboat users favor some form of use regulation. Over 50 percent responded with a qualified yes. They feel downriver drift use and/or commercial tour boat use should be regulated, but not private motorboat use, (i.e., "the other fellow, but not me.")

At the end of each interview, the respondents were asked to express their opinion as to "what should be done and by whom?". Comments received to this question are found in Appendix F. Many of the comments relate to drift use and reflect the concern of motorboaters for the conflict which has developed since 1968 when this portion of the river was designated as Wild.

VI. Environmental Impacts

In assessing the potential kinds and types of environmental impacts associated with motorboat use on the Rogue Wild River, there are several important factors which need to be considered. The possible environmental impacts that are associated with motorboat use must be examined in relation to the impacts of other river uses, and, in addition, need to be examined in the broader context of natural environmental processes. Furthermore, potential environmental impacts should be considered in terms of their cause (direct, indirect, and synergistic), duration (long term or short term), permanence (reversible or irreversible), degree (slight, moderate, severe), and scale (local, regional). The assessment of the potential environmental impacts related to motorboat use conducted as a part of this study was not intended to quantify the magnitude of these impacts, but rather, to identify them. The quantification of these impacts would require a research effort of much greater scope than this study.

To assist in the identification of potential environmental impacts associated with motorboat use, an Environmental Assessment Manual was used. This form, developed by the Extension Service, is oriented towards the assessment of potential impacts, and, as such, was very useful in this

portion of the research. A list of the major potential impact categories considered by this form is found in Table 8.

Table 8. The Major Kinds and Types of Environmental Impacts Considered by the Assessment Manual.

A. Natural Environmental Effects	G. Community Facilities/Services
B. Environmental Hazards	H. Community Structure
C. Resource Conservation and Use	I. Open Space and Recreation
D. Water Quality and Quantity	J. Historic Resources
E. Air Quality	K. Visual Resources
F. Noise	L. Economic Impacts

The use of motorboats and the resultant presence of humans in the study area may have impacts upon the fish and wildlife resources found there. Fishing pressure in the area by motorized sport fishermen, both private and commercially guided, may impact the fisheries resource in the area. However, in considering the impact of motorized fishermen, recognition must also be given to the fact that substantial numbers of downriver, drift guides also fish in this section of the river. The noise generated by motorboats may affect wildlife in and adjacent to the riverine environment.

Motorboat use in the study area may have potential impacts upon water quality. The passage of a motorboat may, at least temporarily, result in increased turbidity. In addition, the wakes of motorboats may cause some bank erosion and damage to

riverine vegetation. Of course, when these impacts are viewed in the broader context of natural processes, the erosion and turbidity created by motorboats may be insignificant. Nevertheless, erosion and turbidity are potential impacts which should be considered.

The release of potentially hazardous substances as a result of motorboat use may also have affects on water quality. In recent years there has been considerable controversy regarding the release of toxic substances by outboard motors. A review of these potential effects revealed that raw gasoline, nonvolative oil, volative oil, lead, and phenols were among the substances which can be discharged by outboard motor operation.²⁸ However, a recent study funded by the U.S. Environmental Protection Agency has found that outboard motor operation does not significantly impair water quality. There is, at present, no conclusive evidence as to the long term, or synergistic effects of outboard motor exhaust.²⁹

Related to this are potential impacts resulting from energy consumption. An estimate of the fuel used by private motorboats might be as high as 8,300 gallons annually. Additional fuel is consumed by commercial and administrative motorboats; this amount may actually exceed that used by private motorboats. The consumption of this fuel by motorboats may have some short term impacts upon air quality in the study area. Perhaps the odor of motorboat exhaust is the most severe impact on air quality, especially to downriver drift users emerging from a wild river experience.

The present use of motorboats in the study area appears to have some potential impacts on community facilities, services, and structure. In the absence of roads, motorboats provide an important means of access to private property, homes, and lodges in the study area, and therefore directly influence the use of these properties. Indirectly, motorboats are related to the environmental impacts which result from the use of these properties. Without motorboats to haul freight and supplies, many of the homes and lodges in the study area wouldn't exist in their present state.

Perhaps some of the greatest environmental impacts associated with motorboat use are those which impact upon those persons seeking a wilderness experience by drifting down the Wild Rogue or hiking the Rogue River Trail. The noise, odor, and visual intrusion of motorboats into an otherwise natural environment has several types of negative impacts on these users. The 1974 study of drift use on the Wild Rogue found that over 50 percent of the negative feelings by drift users towards motorboats related to either (1) some form of pollution (water, air, sound), or (2) the conflict between motorized use and the wild river experience.³⁰ These negative feelings, in turn, have apparently manifested themselves in discourtesy by downriver users towards motorized users, (see Problems of Use, p. 32). Thus, the conflict between motorized and non-motorized use must be considered as one kind of environmental impact associated with motorboat use. No potential impacts upon historic resources were found in this assessment.

Economic impacts which may result from motorboat use include those directly related as a result of the commercial tour boat businesses and private fishing guides who use powerboats to carry passengers and freight for hire. There are also indirect economic impacts which relate to the value of private property in the study area as a result of the developments on them which were made possible because of motorboats.

VII. Summary of Findings

This study of motorboating on a nine mile section of the Wild Rogue river was conducted to determine present and historical levels of use. Some of the more significant results of this research are summarized below.

The earliest use of motorboats in the study area began prior to World War I, but was very limited until the advent of larger, more reliable motors. Motorized use before World War II was oriented primarily towards the hauling of passengers and freight by a few local users. Since 1945, recreational use has gradually increased. The availability of the jet drive since 1962, and the use of aluminum hulls have contributed significantly to the increased use of motorboats in the study area. When a portion of the Rogue river was designated as a Wild and Scenic River in 1968, motorized use in the study area was well established. Private use in 1968 is estimated at 400 trips. Since 1968 the number of private users has increased by 30 percent, but their total number remains relatively small (less than 100 users).

Private motorboats provide an important means of access to lodges and private property in the study area, and contribute to the income of private fishing guides. There are several factors which influence the amount of private use. These

include the discharge of the river, the timing of anadromous fish migrations, weather conditions, the experience of the user, and other factors which influence participation in motorboating. There is considerable variation in the annual, weekly, and daily patterns of boating use. The greatest amount of private use takes place in September and October when fall steelhead fishing is usually best. Over half of all private use takes place on weekends. Most private users travel as far as Paradise Bar (R.M. 44.3), while 25 percent travel only as far as Clay Hill (R.M. 39.3). Over 90 percent of the private motorboaters live within 75 miles of the study area; most are long time residents.

Commercial tour boat and administrative use (U.S. Forest Service, Sheriff's Patrol, State Police) has increased significantly since 1968. During the summer commercial boats contribute over 60 percent of the use, while administrative use is nearly equal to private use (18.2 and 19.0 percent respectively). Private use in the study area during 1976 is estimated to be, at most, 1,000 trips. Fishing is reported as the primary reason for private use; however, not all private use is recreational.

Motorboat use on the Wild Rogue river conflicts with downriver drift use which has increased rapidly since designation of the Rogue as a Wild and Scenic River in 1968. One of the biggest problems cited by motorboaters is a lack of courtesy on the part of downriver users. Most private motorboaters have strong feelings about proposed regulations of river use. Most

favor some form of use regulation for other users, but oppose regulation of their own use. Many motorboaters feel that the education of downriver, drift users about the long established use of motors below Blossom Bar, and some rules of river etiquette, could help to reduce the conflict between the two groups.

There are several potential kinds and types of environmental impacts associated with motorboat use in the study area. In assessing environmental impacts, many factors must be taken into consideration including the cause, duration, permanence, magnitude, and scale of the impacts. Some of the potential impacts related to motorboat use include effects on fish and wildlife, air and water quality, community structure (access to property), and economic impacts. Perhaps the greatest impacts are those associated with the conflict between motorized and non-motorized use. Motorboat use is perceived by downriver, drift users as an intrusion into an essentially primitive environment, with its resultant sound, odor, and visual impacts. As such, motorboat use may impact upon the "wild" experience of downriver users.

VIII. Implications for Management

The data presented in this report has several implications for the management of the Wild Rogue in the study area. First, private motorboat use in the lower nine miles of the Wild Rogue is well established. This use has gradually increased, and is continuing to do so, with the addition of a few new users each year. Therefore, use restrictions on pre-existing users are likely to encounter strong resistance; and non-compliance may be a problem for any agency trying to enforce restrictions on use levels. Second, the amount of reported use may not be a very good indicator of actual use, and should be interpreted with care. Third, scheduling of uses may mitigate conflicts between users. This is particularly needed during the summer drift season when most of the motorized versus non-motorized conflict takes place and when commercial tour boat use predominates. Fourth, administrative use is nearly equal to private use during the summer, and it will be difficult to justify restrictions on private use under these circumstances. Fifth, well planned education programs may be able to alleviate some of the conflict between users. For example, if downriver, drift users are aware of motorboat use below Blossom Bar, some of the discourtesy encountered by private motorboaters may be eliminated. A downriver courtesy

code, similar to the motorboat user courtesy code (see Appendix G) developed by the Curry County Powerboaters Association, might be used to educate and inform drift users about camping, river safety, etiquette, the types and timing of motorized use, environmental ethics, and other aspects of river use. Similarly, motorboat users should be encouraged to follow the present courtesy code, which should be made available to all powerboat users.

Footnotes

1. Wild and Scenic Rivers Act, Statutes at Large 82, Sec. 10(2), 916 (1968).
2. Oregon Revised Statutes 390.835.
3. For a discussion of this phenomenon, see Clay E. Peters, "A National System of Wild and Scenic Rivers," Naturalist, Vol. 26 (1975), pp. 28-31.
4. PL 90-542, Section 2(b)(1) classifies a Wild River as:
"Those rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. These represent vestiges of primitive America."
5. For an excellent discussion of backcountry river recreation needs, see David W. Lime, "Backcountry River Recreation: Problems and Research Opportunities," Naturalist, Vol. 26 (1975), pp. 2-6.
6. U.S. Department of Agriculture. Rogue Wild and Scenic River: Classification, Boundaries, and Development Plan. Federal Register, Vol. 34, No. 192. October 7, 1969, p. 15569.
7. Oregon Revised Statutes 488.600 (3) and Oregon Administrative Rule 250-30-030(1)(f).

8. Oregon Administrative Rule 250-40-010(1) designates the Rogue as a hazardous river from its headwaters to Lobster Creek.
9. Oregon Administrative Rule 30-040 requires permits be obtained by private motorboat users of the Watson Creek-Blossom Bar segment of the Wild Rogue. There is no limit on the number of permits issued each day.
10. Richard C. Smardon, James R. Pease and Paul E. Donheffner, Environmental Assessment Manual, Special Report 465, (Corvallis: Oregon State University Extension Service, 1976), 41 pp.
11. Oregon Observer, September 1, 1894.
12. Bob Pierce, "Early Days on the Rogue," Mazama Bulletin, Vol. 44, (1962), p. 42.
13. Henry Teller Price, Up the Rogue River and the First Mail Route, (Portland: Metropolitan Press, 1967), pp. 10-11.
14. Personal communication with Mr. Larry Lucas, Agness, Oregon, September 1976.
15. Price, op. cit., footnote 12, p. 14
16. Rogue Coast, supplement to the Curry County Reporter, August 29, 1974. See also: Pierce, op. cit., footnote 11.
17. Personal communication with Mr. Glen Wooldridge, Grants Pass, Oregon, August 1976.
18. For a description of the outboard jet and its initial testing on the Rogue, see Bert Goldrath, "Conquering the Wild, White Rogue," Popular Mechanics, Vol. 118 (1963), pp. 104-

- 106; _____, "Jets Beat the Rogue," Popular Boating, Vol. 13 (1963), pp. 68, 153, 157.
19. U.S. Department of Agriculture, op. cit., p. 15569.
 20. A trip has been used as a unit of measurement in this study. It represents the use of a boat to travel into (upriver) and out of (downriver) the study area (i.e., one round trip). In that it does not include use within the study area, it is an underestimate of the actual use in the study area.
 21. There was abnormally heavy rainfall in the study area during August. The actual total precipitation at the Illahe Weather Station was 2.97 inches (7.54 cm). Mean precipitation there is .62 inches (1.57 cm). Environmental Data Service. Climatological Data, Oregon, Vol. 82, no. 7 and 8 (Ashville, North Carolina: National Climatic Center, NOAA, 1976), p.2.
 22. Motorized use takes place in the lower 9 miles of the Wild Rogue from May 15 to November 15, when over two-thirds of all private use and all of the commercial tour boat use takes place. Thus, 18 miles has been used as the approximate round trip (r.t.) distance. Downriver use in the Wild section is 33 miles one way (o.w.).
 23. Downriver use data provided by Mr. Robert Alward, Bureau of Land Management, Medford, Oregon.

24. For the characteristics of private pleasure boating in Oregon, see Robert E. Pfister, Paul E. Donheffner, and Thomas E. Hartsook, Pleasure Boating in Oregon-1975, (Corvallis: Water Resources Research Institute, 1976) 73 pp.
25. Oregon Revised Statute 488.600(3) and Oregon Administrative Rule 250-30-050(1) established a permit system for motorboat users of the Wild Rogue.
26. Robert E. Pfister and Robert E. Frenkel, Interim Report: Field Investigations of River Use Within the Wild River Area of the Rogue River, Oregon, (Corvallis: Department of Geography, Oregon State University, 1974), pp. 33, Appendix C, pp. 97-110.
27. See Robert C. Lucas, "Wilderness Perception and Use: The Example of the Boundary Waters Canoe Area," Natural Resources Journal, Vol. 3 (1964), pp. 394-411.
28. Thomas P. Jackivicz and Lawrence N. Kuzinski, "A Review of Outboard Motor Effects on the Aquatic Environment," Journal of the Water Pollution Control Federation, Vol. 45 (1973), pp.1759-1770.
29. U.S. Environmental Protection Agency, Summary Report: Analysis of Pollution from Marine Engines and Effects on Environment, (n.p., n.d.), 62 pp.
- 30 Pfister and Frenkel, op. cit., footnote 26, p.35.

Appendix A

Rogue River Discharge Data, Agness, Oregon

Year	Month												Total Annual Discharge (acre-feet)
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	
1968	1766	1721	4259	8099	14496	6502	3341	2548	1507	864	986	935	2,819,000
1969	1420	4649	10629	14948	13590	6886	7376	7008	3674	1646	1161	1206	4,439,000
1970	1805	1881	10646	30779	9490	8180	3939	4416	2444	1264	995	1108	4,656,000
1971	1527	8604	14004	29048	9607	16956	11465	8906	5685	2738	1645	1799	6,774,000
1972	1975	5553	10400	21460	13740	25590	8680	5699	4062	2010	1588	1655	6,203,000
1973	1870	2341	6855	8248	4774	5289	4605	2979	1485	988	877	1124	2,500,000
1974	1631	20240	20730	32610	14670	21960	13920	6883	5669	2447	1643	1504	8,679,000
1975	1662	2203	5278	9065	15200	18770	8795	9024	6128	2582	1716	1628	4,918,000
1976a									3046	1845	2207	1595	-
Average 1968- 1975	1707	5899	10350	19282	11946	13767	7748	5933	3832	1917	1326	1370	

a Provisional data for the 1976 water year.

Source: U.S. Geological Survey, courtesy of Mr. Clyde Alexander, Northwest Water Resources Data Center.

Appendix B

Rogue River Motorboat Survey

Good (morning/afternoon), I'm (name .) from the Geography Department at Oregon State University. Presently, we are conducting a survey of private motorboat users who travel on the Rogue River above Foster Bar. The purpose of this study is to see who uses the river, where, and when. Very little is presently known about private motorboat use. Your cooperation in answering a few questions would be greatly appreciated.

First of all, I would like to ask you a few questions about your boat. (If they don't own one, ask: Have you ever owned a boat that you used on the Rogue River? Yes No What type of boat? _____ When did you own it? _____ Why did you give it up? _____)

Continue with questions about boat characteristics for present boat, or if previously owned, it's characteristics.

1. What is the length of your boat? _____ feet
2. What is the horsepower rating of your engine? _____ h.p.
3. Does your motor have a jet drive? Yes _____ No _____
4. What is your boats hull material? Wood _____ Aluminum _____ Fiberglass _____
5. Do you trailer your boat? Yes _____ No _____ 5a. How often do you trailer it each year? _____ times.
6. Where do you put it in and take it out? _____ (specific location)

"Now I would like to ask you a few questions about your use of the Rogue River."

7. How many years have you lived on or near the Rogue River? _____ Years
8. How many years have you been boating on the river above Foster Bar? _____ Years Never have _____
9. When did you begin to travel by motorboat on the river? _____ Year Never have _____
10. Can you tell me how the following uses of the Rogue river have changed above Foster bar since 1968? (Probe for the percentage increase or decrease.) How much change?

	Has it?:		
	Increased	Remained the Same	Decreased
a. Private pleasure motorboat use	_____	_____	_____
b. Commercial upriver tour boat use	_____	_____	_____
c. Private downriver drift use	_____	_____	_____
d. Commercial downriver drift use	_____	_____	_____

11. Could you estimate how many times you used the Rogue above Foster Bar last year? _____ specific #
12. How many people usually travel with you when you use the river above Foster bar? _____ specific #
13. When during the year do you use this section of the river above Foster Bar? ((Run through the months and get the approximate number of trips in each))

Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec.

14. When you travel the river above Foster Bar, how far upriver do you usually go above Foster? _____ miles
Where do you go? _____ specific location.
15. How long does it take you to travel this distance? _____ Hours _____ Minutes
16. What time of day do you usually go up in? _____ Come down in? _____ (Probe for times)
17. How much fuel do you need for a round trip from Foster Bar, up and down? _____ gallons.
18. What is the primary reason for your use of the river above Foster bar?

Fishing _____	Cruising _____
Visit a Lodge _____ (which one) _____	Picnicing _____
Visit Home _____	Camping _____ (where?) _____
Work _____ (type)	Hauling Freight _____
	Other (specify) _____

19. How many other boats would you be willing to encounter while on the river before you felt the river was crowded? _____ (Probe for a number)
20. If use of the river continues to increase, how will this effect your use of the Rogue above Foster bar?

21. If use of the river continues to increase, do you feel there is a need to regulate use of the river?
- Yes _____ No _____ No opinion _____

Comments:

22. Have you encountered any problems in using the Rogue above Foster Bar? Yes _____ No _____
 Could you describe these:

23. Have you ever had any of the following problems in using the Rogue above Foster bar?
- | | <u>Yes</u> | <u>NO</u> | |
|--|------------|-----------|--------|
| a. river traffic congestion | _____ | _____ | |
| b. mechanical difficulties | _____ | _____ | |
| c. encounters with drift users | _____ | _____ | |
| d. encounters with commercial tour boats | _____ | _____ | |
| e. water pollution | _____ | _____ | |
| f. sanitary facilities | _____ | _____ | |
| g. boat access (ramps) | _____ | _____ | |
| h. overcrowding | _____ | _____ | where? |
| i. lack of law enforcement | _____ | _____ | |
| j. other (specify) | _____ | _____ | |

24. What, if anything, do you feel should be done to alleviate these problems? By whom?

Thank you very much for your time and cooperation. Are there any other comments you have regarding motorboat use of the Rogue River?

Appendix C

Comments received regarding problems in use:

Blocking of riffles by drifters and failure to yield. (9)

Discourtesy by drifters. (8)

Nudity (7)

Need more sanitary facilities; take better care of the present ones. (3)

Meeting people floating through riffles in life jackets is a problem, you can't see them till you're about to run them over.

Wakes from commercial tour boats are a problem, especially when fishing or moored to the bank.

Litter and garbage left by drifters.

Bank fishermen who wade out into mid channel.

Appendix D

Comments relating to the effects of increased use:

"Wouldn't effect my own use." (17)

"The river will take care of itself." (10)

"Increases in use would lessen my own use, but I would still go up." (10)

"Would change the timing of my use to avoid the heavy summer use season." (8)

"Will require greater care in running the river; increased use will make it more hazardous in rapids." (3)

"Would force my use into a more confined area to avoid other guides." (3)

"It would make the experience less pleasurable." (2)

"Would eliminate my own use." (2)

"It would limit my fishing business."

"Has already reduced my use; when the traffic came I left."

Appendix E

Comments regarding regulation of use:

"Drift use should be regulated. There is no need to regulate private motorboat use at present, there isn't enough use to bother with." (20)

"There are plenty of commercial tour boats already." (9)

"License, educate, and inform drift users." (5)

"Need to be fair; can't compare motorboat use with drift use." (4)

"More emphasis on regulating drift use than motorboat use. Balance use as to the number of people or craft allowed by drift and motor." (4)

"Regulate slowly and carefully, all views need to be represented." (4)

"Yes, there is a need to regulate if it increases, but who decides when enough is enough?" (2)

"There is a need to regulate the use of camping facilities along the river rather than boat use as such." (2)

"No limit on numbers; any limits are unfair and discriminate." (2)

"Motorboat use takes care of itself." (2)

"Regulate the timing of use to make it more attractive and to lessen the congestion; try to balance the use."

"'Grandfather' in the old time users and those with a bona fide need to go up the river."

"Timing is important; no real problem after Labor Day, and less need for any regulation then."

"If it's too crowded people will stay away or go elsewhere."

"Regulate commercial users rather than private ones."

Appendix F

Comments: "What should be done and by whom?"

"Develop a courtesy code for drift users." (10)

"Educate drift users about powerboats, courtesy, and safety below Blossom Bar." (9)

"We need better access. Foster Bar is in need of better facilities." (7)

"Stop the use of jets, then propeller use would be very low." (4)

"Everyone should have the right to use and enjoy the river." (2)

"CB's help inform of boats whereabouts and traffic ahead." (2)

"The Marine Board is more receptive to local opinions and needs."

"Let the drifters use the river in the summer when they don't conflict with fishing."

"Try time zoning."

"Paint boats less obtrusively; better mufflers could help."

"Space the timing of drift use to prevent a constant stream of traffic."

"Why should boaters need permits?"

"Drifters should be qualified to use and run the river."

"Motorboaters pay fees and taxes for upkeep and maintenance, while drifters use facilities and the river. The drifters should be regulated to pay their share."

"Commercial and private motorboaters should travel together at a scheduled time to avoid periods of heaviest drift traffic."

"Group boat trips so they come through in bunches rather than all spread out with stragglers."

"Improve fishing and everyone would be happier."

"Private boaters should have a boat safety course or training."

"Educate drifters as to the fact that people live in the 'wild' section; tell them this to discourage nudity and obscenity."

"Maintain the courtesy code for motorboaters and give it to people when they get their permits."

"Keep commercial boats on a time schedule."

"Lack of central authority is the problem, we need one agency to handle everything."

"Let the Marine Board control the river, not Scenic Waterways."

"The USFS and BLM should regulate lands only, and leave boating to the Marine Board."

"Eliminate or limit non-essential administrative use. The Government should coordinate their trips."

"Let's work together with drifters in a harmonious spirit."

Appendix G

The Curry County Powerboaters Association Courtesy Code

Purpose: There is a definite need to create and maintain goodwill among all users of Rogue River; bank fishermen, floating craft, hikers and power boats. This is our purpose, and in an effort to promote a climate of harmony we have set up the following Courtesy Code.

1. Down river craft have the right of way.
2. Floating craft will indicate by hand signal which side the power boat will pass.
3. Power boat operators are asked to slow to a reasonable speed in the following circumstances: exception, the condition of the water or location.
 - a. When passing floating craft unless given a signal to proceed.
 - b. When floating craft are pulled up to the bank.
 - c. When boats are being loaded and unloaded.
 - d. When passing bank fishermen.
 - e. When passing salmon boards.
 - f. When passing fishermen who have fish on line.
4. Power boat operators will make scenic and freight trips during the middle of the day whenever possible.
5. Do not litter and carry out whatever litter you encounter.
6. Be alert for swimmers.

We suggest that all power boat operators observe the above code whether or not they are members of our group.