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1978

STATEWIDE BOATING SURVEY

Victor Atiyeh Governor

OREGON STATE MARINE BOARD
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Caleb L. Wade, Grants Pass, Chairman
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PLEASURE BOATING IN OREGON - 1978

A Report to the OREGON STATE MARINE BOARD Brad Morris, DIRECTOR

FEBRUARY 1979

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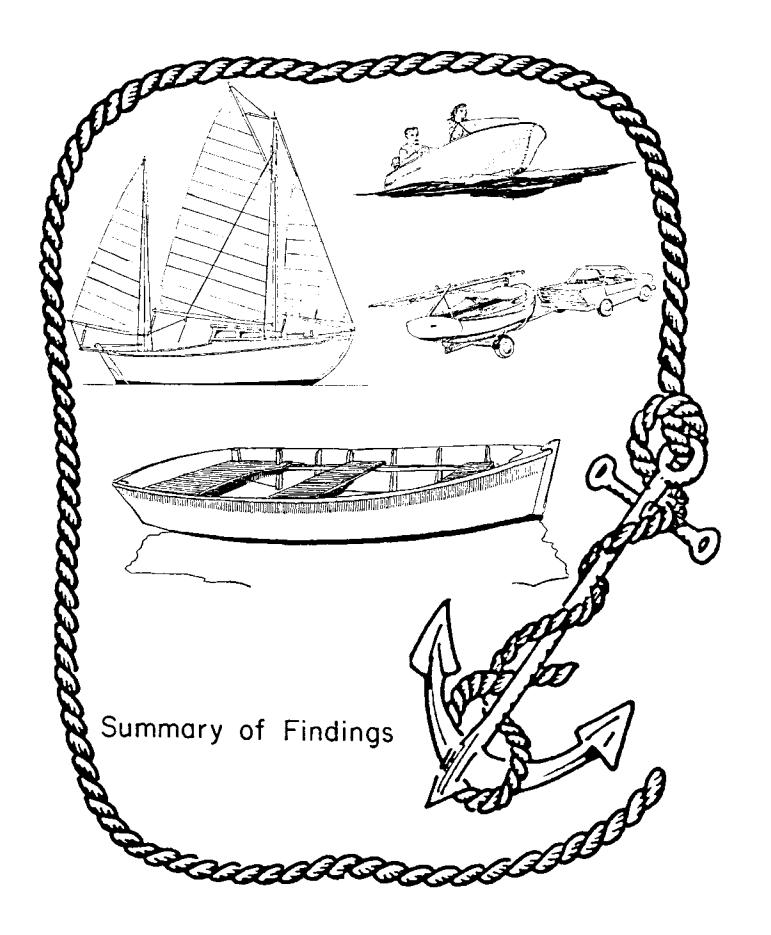
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In addition, special thanks are given to Julie Arana and Maxine Hilfiker for their skill, speed and accuracy during the coding and prepublication phases of the project.



SUMMARY OF FINDINGS

This survey was conducted in compliance with Oregon Revised Statute 488.833. The purpose was to determine the type, location and volume of Boating activity within Oregon during the 1977 - 1978 Boating Season. An approximate ten percent sample of all Boats registered with the Oregon State Marine Board was completed in the Fall of 1978. This report presents the findings of that survey Based on the responses received and other supporting material. The following is a summary of the information reported herein.

Over 66 percent of all registered boats and, in excess of, 69 percent of the State's population are concentrated in eight western counties. On the basis of boats per thousand population, only the two with the lower numbers of boats remain in the top eight.

Approximately 60 percent of Oregon's registered watercraft are less than 16 feet in length and 76 percent are powered by outboard motors. Over 55 percent have hulls that are built out of plastics and slightly under 42 percent have a primary motor of less than 25 horsepower.

The average age for pleasure boat owners, within the State, is 53 and over 34 percent are retired.

Bodies of water in Multnomah County continue to attract the most people and boats. However, the next five most popular counties all border on the Pacific Ocean. The average use for all registered pleasure boats is 22.9 days per year. Projected data indicates a total of 2.7 million days of boat use generating 8.3 million people days of activity each year.

Boating use varies seasonally, with 63 percent of all boating days occurring during the months of May, June, July and August. During the same months, 65 percent of people days occur.

Base data indicates that almost 12 percent of Oregon's pleasure boats are moored or kept in wet storage. Nearly 21 percent were not used, and, over 67 percent were transported duing the boating year. Of those transported, each was launched an average of 15 times during the year.

Fishing remains the number one activity among pleasure boaters and accounted for more than 69 percent of boat days and over 63 percent of people days throughout 1977-1978.

Courtesy motorboat examinations were conducted for approximately ten percent of the State's pleasure boats. In the area of determining the actual numbers, or percent, of boats that were stopped and checked by Law Enforcement personnel, unresolved conflicts remain.

Most respondents to the survey found facilities at their favorite body of water to be adequate for their needs and reported no problems. Of those that did complain, 41 percent cited a lack of courtesy by other boaters and 32 percent said more ramps and parking lots were needed.

Attempts were also made to estimate the non-registered and outof-state boater use within Oregon by statistical projections.

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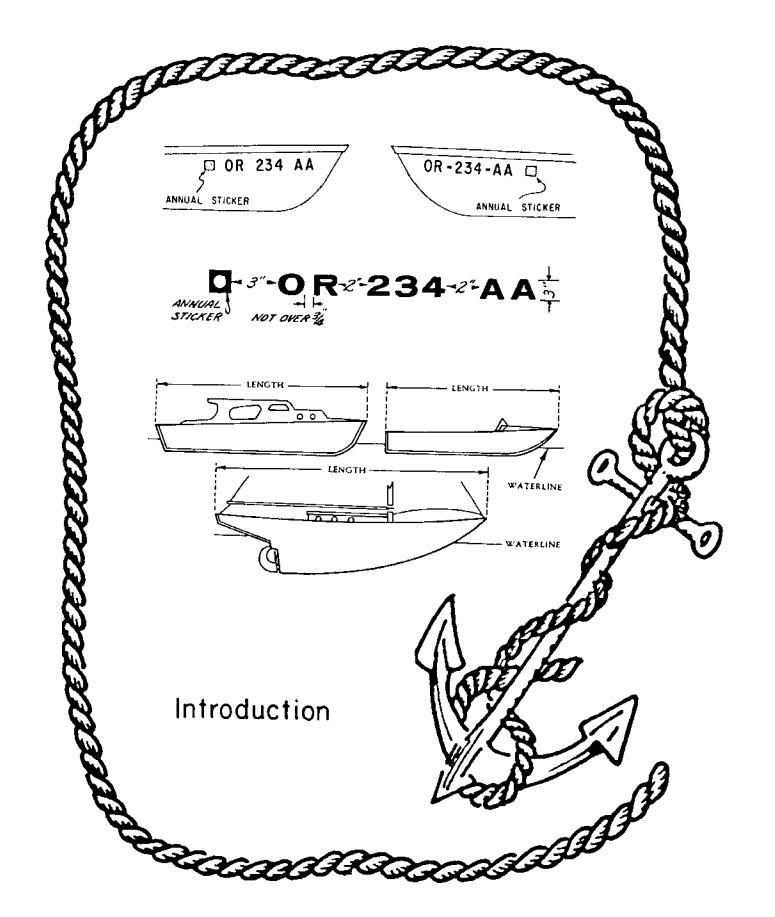
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INTRODUCTION

Background

This report is the latest in a series of triennial surveys conducted under the auspices of the Oregon State Marine Board, (OSMB). The surveys are directed toward answering the basic questions of the who, where, when, why and how of Oregon's boating activities. Results of each survey are utilized by the Board, and its staff, to determine the efficiency of past programs, future problem areas, and the most effective allocation of funds to develop, improve and maintain the State's boating facilities and its boating safety programs. All materials are retained by OSMB for three years and are available upon request to the Board. Reports from each survey are published and made available to the citizenry of the State.

Purpose

The primary purpose of this report is to fulfill the legislated mandate for a timely, accurate, and usable survey of the activities of the pleasure boaters of Oregon. Essentially, the questions asked in this survey are similar to those asked in the 1975 survey and therefore allow for general comparisons between the two. By such comparisons, it should be possible to detect any significant trends in the characteristics and activities of Oregon's pleasure boaters and their craft.

Funds are distributed to counties on the basis of where the boats are used and <u>NOT</u> on the basis of where they are registered. However, any county may submit a proposal to OSMB requesting funds for projects to develop boating programs or improve boating facilities.

Oregon Revised Statutes state that the OSMB:

Shall at least once every three years conduct a survey of owners and others to determine, by county, the kinds of boating activity on the various waters of the state during different periods of the year. Boating activity in a county shall be determined by taking into consideration the number and kinds of boats engaging in different boating activities in the county and the number of days during the last fiscal year that such activities were carried on in the county. (ORS 488.833)

Criteria for the registration of boats has changed since 1960, as a result, all comparisons, conclusions and interpretations of change in this report will use the time frame of 1975 to and through 1978.

A difference between the 1975 and 1978 surveys is the inclusion of "people days" as well as boat days in determining total usage of a specific body of water. ⁴ In a new area of interest, " how many boaters moored or stored their boats where they were used," base line data was gathered. In well established areas, officially recorded information was used rather than asking the boat owner to provide facts that OSMB already possessed, e.g., boat length and hull material.

Sampling and Boat Owner Response

The OSMB selected a sampling system for this survey that totaled ten percent of the boats registered in Oregon through 1 August 1978. Counties were divided into three categories according to the number of boats registered within each county. The groupings were as follows: 1,000 or less boats; 1,000 to 5,000 boats; 5,000 or more boats. Percentages were computed for each county to provide as precise a survey as possible. Basically, the larger the population of boats within a county, the lower the percent of

In 1960 and 1963, registered boats included only those with motors of 8 h.p. or more. From 1967 to 1971, they included boats with motors of 3.5 h.p. or more and sailboats 12 feet and over. For this report, as in 1975, a registered boat refers to a vessel which has been issued a certificate of number by OSMB. All motorized pleasure boats and sailboats 12 feet or over are required to obtain a certificate of number.

A "people day" is the equivalent of an "activity occasion" which is defined as one person being in a boat involved in a boating activity for any portion of a 24 hour period. A boat day is the equivalent of one boat being involved in a boating activity for any portion of a 24 hour period, regardless of the number of people in or using the boat during that time.

owners within that county that were sent questionnaires. An expanded discussion of survey procedures may be found in Appendix A.

In all, 11,995 questionnaires were mailed out and 4,359 were returned and processed for analyzation. This amounted to an overall response rate of 36 percent which is 3.7 percent of the 118,465 pleasure boats registered with OSMB at the time of the survey. Table 1 contains specific response data from the 36 counties. The response rate was approximately 26 percent lower than that attained in the 1975 survey but compares favorably with other surveys, of a similar nature, that were conducted contemporaneously with the 1978 survey. This lowered rate of response may be attributed, at least in part, to the changes in the sampling system from that used in 1975. As was done in the last survey, a follow-up, combination reminder/thank you, post card was mailed two weeks after the initial mailing of questionnaires. Unlike the 1975 survey, the response rates are very consistent for all 36 counties. Only one had a response rate lower than 30. Also, only two of the returned questionnaires were unable to be identified as to their respondents county of registration.

Returned questionnaires were coded, reduced to optical scanning sheets and converted to magnetic tape in preparation for statistical analysis and tabulation. The data was then manipulated and cross referenced by a modified statistical computer program to produce a best estimate of Oregon's total boating population, their activities and characteristics.

For survey purposes the 118,465 boat total was used, but for comparison of population data the registration total of 124,069 boats, as of 31 December 1978, was used.

TABLE 1
QUESTIONNAIRES RETURNED BY COUNTY OF REGISTRATION
1978 BOATING SURVEY

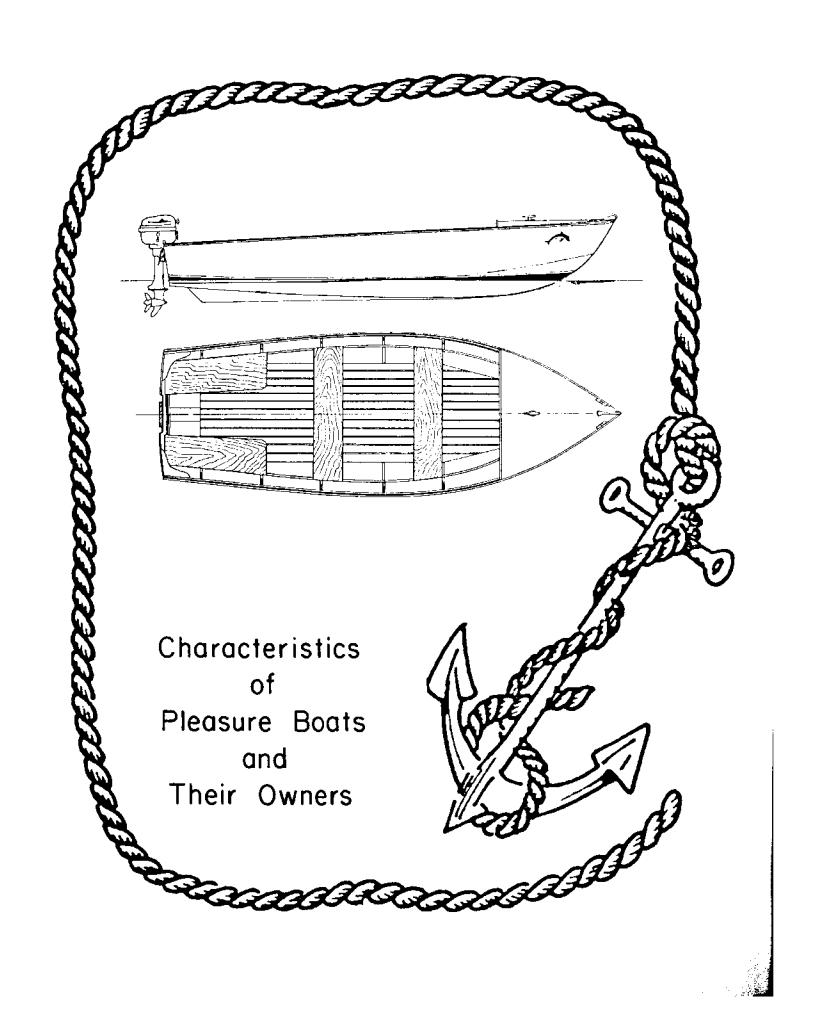
						PERCENT OF
COUNTY	NO. BOATS REGISTERED	NO.QUEST. SENT	NO.QUEST. RETURNED	PERCENT RETURNS	PERCENT OF ALL RETURN.	REG.BOATS
Baker	747	187	81	43	01.86	10.84
Benton	2,382	298	118	40	02.70	05.00
Clackamas	10,791	863	316	37	07.25	02.93
Clatsop	1,945	250	108	43	02.48	05.55
Columbia	2,173	272	103	38	02.36	04.74
Coos	5,286	500	174	35	04.00	03.30
Crook	664	166	56	34	01.28	08.43
Curry	1,410	250	96	38	02.20	06.81
Deschutes	4,016	502	183	36	04.20	04.56
Douglas	5,590	500	166	33	03.81	02.97
Gilliam	81	50	15	30	00.34	18.52
Grant	296	74	31	42	00.71	10.47
Harney	295	74	16	22	00.37	05.42
Hood River	606	152	67	44	01.54	11.05
Jackson	6,670	534	181	34	04.15	02.71
Jefferson	544	136	49	36	01.12	09.01
Josephine	2,600	325	96	30	02.20	03.70
Klamath	4,080	510	169	33	03.88	04.14
Lake	250	63	24	38	00.55	09.60
Lane	13,711	1,000	389	39	08.92	02.84
Lincoln	2,443	305	111	36	02.55	04.54
Linn	4,426	553	170	31	03.90	03.84
Malheur	1,266	250	85	34	01.95	06.71
Marion	7,549	604	241	40	05.53	03.21
Morrow	232	58	21	36	00.48	09.05
Mul tnomah	21,520	1,300	486	37	11.15	02.26
Polk	1,572	250	79	32	01.81	05.03
Sherman	76	50	16	32	00.37	21.05
Tillamook	1,636	250	93	37	02.13	05.69
Umatilla	1,795	250	100	40	02.29	05.57
Union	841	210	94	45	02.16	11.18
Wallowa	283	71	33	46	00.76	11.17
Wasco	894	224	101	45	02.32	11.30
Washington	7,794	624	191	31	04.38	02.45
Wheeler	40	40	18	45	00.41	45.00
Yamhill	1,981	250	80	32	01.84	04.04
Not identified	0	0	2	Ō	00.05	00.00
TOTALS	118,465	11,995	4,359	36	100.00	36.80

A cover letter from the Director of OSMB, printed as part of the questionnaire, was worded in such a manner as to encourage boat owners to respond to the questions and add constructive comments. Twenty-one questions were asked of each boat owner. This number of questions was a compromise between the desire to gather as much useful data as possible and the likelihood of the respondent losing interest and therefore failing to fill out or return the questionnaire. The first fifteen questions dealt with the specific registered watercraft and how or where it was used. The remaining questions concerned other watercraft owned or used by the respondent, various boating courses or training attended and selected socio-economic characteristics of the boat owner.

Boat owner responses to most questions in this survey were much more consistent, when similar information was requested, than for those in the 1975 survey. Specifically, in the questions concerning boating days per month (question two), and days of boating on a given body of water (question eight), the numbers given correlate exceptionally well. In many instances there is evidence that boating days per month were added up by the respondent and used for total days of boating on the body(s) of water and vice versa.

Readers of this report should be aware that certain figures and tables reflect raw survey data and percentages, the remainder are statistical projections of that data and reflect figures for the entire pleasure boating population of the State. Each figure and table is so identified, as are those that reflect officially recorded information.

Selected respondent comments are categorized and included in this report as Appendix C.

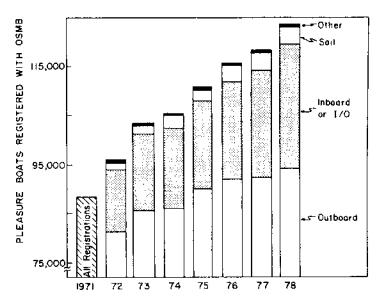


CHARACTERISTICS OF PLEASURE BOATS AND THEIR OWNERS

Trends

During the 1970's total pleasure boat registration in Oregon has increased by 40 percent, (Figure 1A). The annual rate of increase however, has steadily diminished, even though the total number continues to rise. The period of least growth was the 1973-1974 boating year. Registration rolls increased only 2.1 percent compared with 7.4 a year earlier and 5.4 percent the year after. A general assumption attributes this alteration in the growth pattern to the shortage of gasoline and other economic problems following the foreign oil embargos of 1973. The per capita registration rate for the 1970's has also grown steadily from 41.3 to 51.4 boats per thousand population, an average increase of 3.0 percent annually, (Figure 1B). At the same time the State's population has been increasing by only 1.8 percent per year.

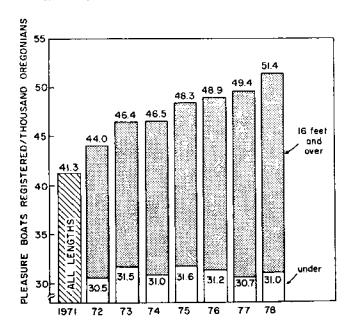
From Figure 1 it can be seen that the popularity of pleasure boats of over 16 feet in length is steadily increasing. Additionally, both Sailboats and Inboard/Inboard-Outboard watercraft are steadily becoming larger portions of the total number of pleasure boats in the State. Currently, some commercial sources are privately reporting 100 percent annual increases in sales of non-motorized watercraft such as kayaks, canoes and rafts. However, there is little confirmable data available on previous numbers of non-registered watercraft owned by Oregonians. Appendix D lists current survey projections on both registered and non-registered watercraft that are owned or used by Oregon boaters.



TOTAL REGISTRATIONS FROM 1971 TO 1978 WERE:

1971 - 88,429 1973 - 103,182 1975 - 111,045 1977 - 118,465

1972 - 96,064 1974 - 105,342 1976 - 115,880 1978 - 124,069



IN 1971, REGISTERED BOATS ONLY INCLUDED BOATS WITH MOTORS OF 3.5 HORSEPONER OR MORE AND SAILBOATS 12 FEET AND OVER. FROM 1972 THROUGH 1978, REGISTERED BOATS INCLUDED ALL MOTORIZED PLEASURE BOATS AND SAILBOATS 12 FEET AND OVER.

Figure 1. Growth of pleasure boat registration in Oregon, 1971-1978.

County of Registration

The boating population of Oregon follows the pattern of the over-all population, with the majority of pleasure boat owners living in counties that are west of the Cascade Mountains. There were eight counties with more than 5,000 registered boats. In descending order they were: Multnomah with 21,819; Lane with 14,402; Clackamas with 11,393; Washington 8,239; Marion 8,065; Jackson 7,399; Douglas 5,839; and Coos with 5,371. These eight counties accounted for 66.5 percent of all pleasure boats registered in Oregon and 69.35 of the State's population.

On a per capita basis other counties take the lead in Oregon's boating population. This is primarily due to the county's proximity to, or containment of, highly desirable bodies of water that are used for a variety of boating activities. The ten counties having more than 50 registered boats per thousand population are: Curry with 102.4; Deschutes with 97.7; Coos at 88.2; Tillamook at 87.2; Lincoln 86.8; Klamath 76.7; Douglas 68.3; Columbia 67.9; Jackson 61.6 and Clatsop with 61.5. A comparison of pleasure boat registrations and pleasure boats per thousand population, for the State's Counties are shown in Figure 2.

Boat Characteristics

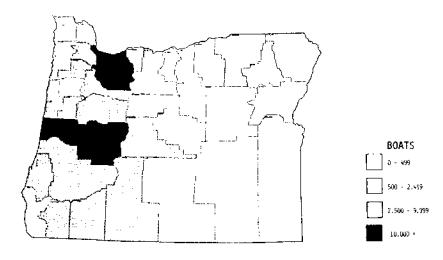
Differences in sample selection procedures and the wording of related but dissimilar questions make direct comparisons between the 1975 and 1978 survey findings tenuous, if not misleading. The reader should note carefully where and how the data was derived before making such comparisons.

1978 survey questions were directed toward the acquisition of information not otherwise available. For example: In the case of boat length (see

These figures were effective as of 31 December 1978.

NUMBER OF PLEASURE BOATS REGISTERED

The total number of boats registered in Oregon for 1978 was 124,060.



PLEASURE BOATS PER THOUSAND POPULATION

The State average for 1978 was 51.4 boats per thousand people.

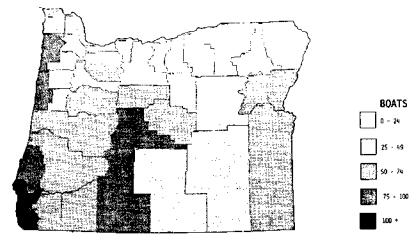


Figure 2. County variation in pleasure boat registration in Oregon, 1978.

Figure 3A), the 1975 survey chart was based on respondent's answers while the 1978 survey chart reflects official information found on form 250LA-1, "Application for Boat Registration," for each registered boat.²

There are close relationships of data between the 1975 and 1978 surveys when looking at the percentage of boats that are over or under 16 feet in length. In 1975, 59.4 percent were under 16 feet while 60.4 are in that class for 1978. Figure 3A gives a further breakdown by class length and Table 2 contains boat length data for each county.

Registration data indicates that 76.2 percent of Oregon's pleasure boats have an outboard motor as their primary propulsion system. This compares with the responses in 1975 which had 78 percent saying their boats had outboard only, power systems. The only other comparable category is sailboats, comprising 2.7 percent in 1975 and now making up 3.0 percent of the State's pleasure boats. Figure 3B gives the state-wide percentages of various power systems.

The horsepower ratings of the primary, and any additional, power systems, on a state-wide basis, are presented in Figure 3C. The data comes from the 1978 survey entirely, because boat owners are not required to inform the OSMB when motors are added, changed or deleted. The only significant change between 1975 and 1978 are those for the 0-24 horsepower class, which decreased 4.7 percent, and the 100 plus horsepower class, which increased 6.9 percent. Figure 4 presents state-wide registration data on primary power systems as related to hull material for the four categories: Outboard; Inboard and Inboard/Outboard; Sailboat; and Steam for the years 1972 to and through 1978.

A sample copy of Form 250LA-1 is included as part of Appendix E.

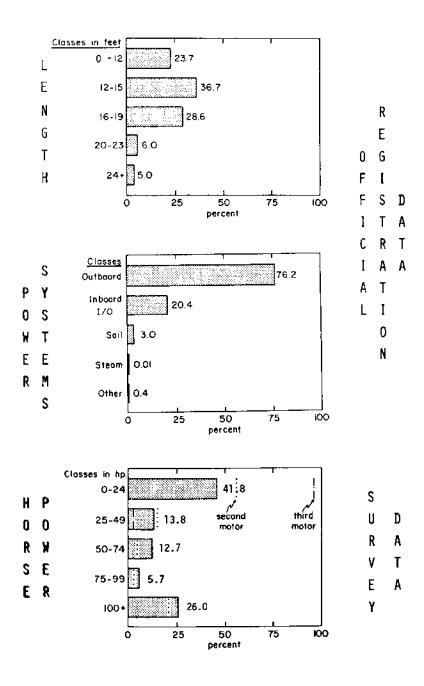


FIGURE 3 Length, Power Systems and Horsepower Characteristics of Pleasure Boats in Oregon, 1978.

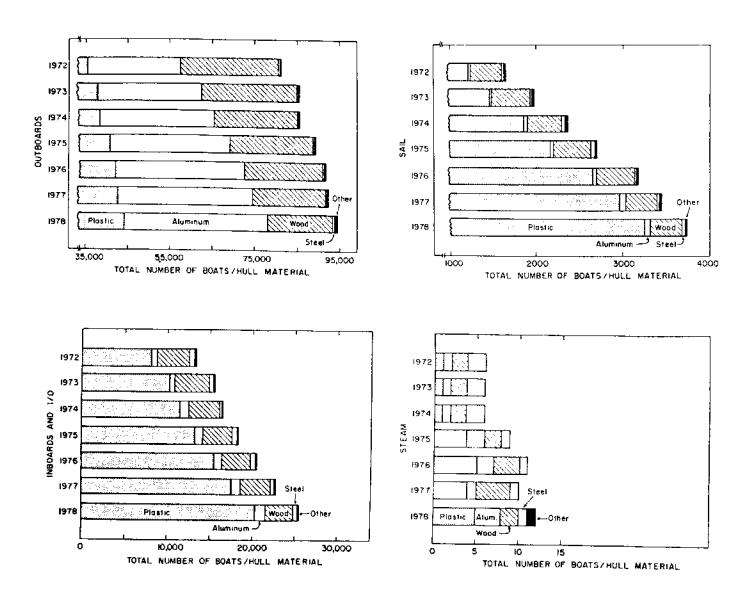


FIGURE 4 Distribution of Hull Materials and Power Systems of Oregon's Pleasure Boats.

TABLE 2
OREGON PLEASURE BOAT CHARACTERISTICS
BY COUNTY OF REGISTRATION

County	Less Than 16 Feet	Over 16 Feet	Avg Primary Motor h.p.	Avg Fuel Used/Day	Times Transported Per Year-Avg	Number* Damaged
Baker	579	247	25-49	7.77	13.61	89
Benton	1,624	850	50-74	7.46	12.67	162
Clackamas	6,190	5,203	50-74	7.57	12.60	651
Clatsop	1,054	814	75-99	10.56	16.00	255
Columbia	1,169	1,115	75-99	8.30	17.10	211
Coos	3,430	1,941	50-74	6.27	14.67	244
Crook	² 518	199	50-74	6.52	12.49	24
Curry	646	847	75-99	6.88	9.03	45
Deschutes	3,407	1,025	50-74	5.74	12.45	154
Douglas	3,632	2,227	50-74	6.07	14.30	99
Gilliam	51	24	50-74	5.90	16.38	5
Grant	253	61	50-74	7.84	10.02	0
Harney	239	52	25-49	4.73	7.34	0
Hood River	421	224	50-74	10.06	9.36	0
Jackson	4,892	2,507	50-74	5.63	10.94	334
Jefferson	378	203	75-99	6.76	7.73	11
Josephine	2,014	825	25-49	5.19	15.30	135
Klamath	3,038	1,296	50-74	6.29	12.37	241
Lake	223	31	25-49	5.17	24.88	0
Lane	8,872	5,530	50-74	6.83	12.76	218
Lincoln	1,606	925	50-74	7.65	8.61	88
Linn	3,067	1,511	50-74	7.35	11.09	104
Malheur	868	476	75-99	9.76	12.80	105
Marion	5,016	3,049	50-74	7.13	11.56	378
Morrow	135	[*] 79	50-74	7.85	4.14	11
Multnomah	11,357	10,462	75-99	8.90	11.12	1,564
Polk	968	627	50-74	5.56	10.35	61
Sherman	41	36	75-99	7.85	14.15	0
Tillamook	1,040	606	50-74	8.22	13.02	54
Umatilla	1,094	763	50-74	7.93	11.56	90
Union	590	320	50-74	6.31	11.02	18
Wallowa	165	113	50-74	5.11	10.68	52
Wasco	536	348	50-74	7.67	11.43	53
Washington	4,540	3,699	50-74	7.17	14.66	452
Wheeler	33	8	50-74	5.45	5.60	0
Yamhill	1,311	829	50-74	8.61	16.86	25
State Totals	74,997	49,072	50-74	7.32	12.47	5,872

 $[\]star$ This number is the projected value from survey data and does not reflect actual numbers of reported boat damages.

As a result of the 1978 survey and its questions of a peripheral nature concerning boat characteristics, a picture of the "Average Boat" can be pieced together. The typical Oregon pleasure boat has a plastic hull of less than 16 feet in length, it has an outboard engine rated at 50 to 74 horsepower that consumes 7.3 gallons of fuel every day that it is used, it was transported from home to its owner's favorite body of water by trailer 12.5 times a year, and stood a one in twenty chance of being damaged in some way while in use. These characteristics of Oregon's pleasure boats, by county of registration, are presented in Table 2 and Appendix E.

Characteristics of Pleasure Boat Owners

Returns from the 1978 survey sketch the following profile of the State's pleasure boat owners. They are 53 years of age and 97.6 percent are males. Retired persons own 34.4 percent of the registered boats. Most owners now work as private enterprise wage earners in a consumer oriented industry, or did so before retirement. Average family income ranges from \$15,000 to \$20,000 per year and most have had some college or technical school training.

Of the boat owners that responded to the survey, 19.4 percent made comments of both a constructive and critical nature, (see Appendix C). Over 50 percent of the respondents sealed their questionnaires with tape (28.9 percent), staples (22.3 percent), or other means (0.8 percent). Almost 10 percent identified themselves and one-half of a percent paid for the return postage for the questionnaire even though they were told that no stamp was necessary.

Survey data also indicated that 1.4 percent of boat owners registered as of 1 January 1978 had sold their boat during the year and had not purchased a replacement. In addition, 1,330 boats initially listed as pleasure

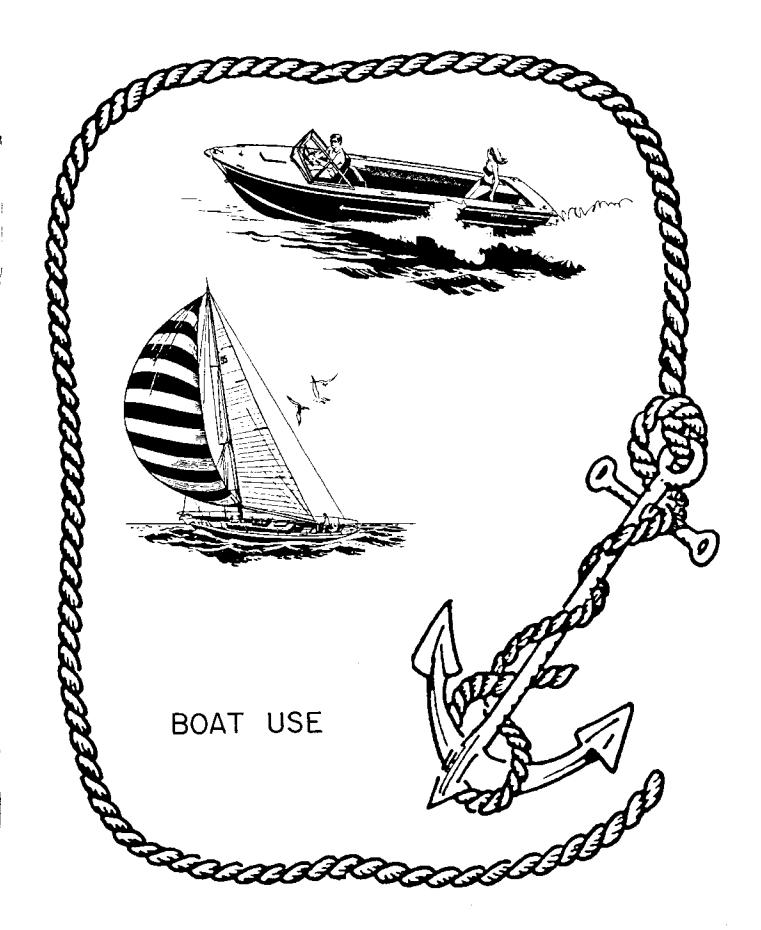
TABLE 3 OREGON PLEASURE BOAT OWNER CHARACTERISTICS BY COUNTY OF REGISTRATION

					Avg	Avg *
	Avg	Percent*	Percent	Percent	Level of	Famil
County	Age	Male	Female	Retired	Education	Incom
Baker	55	98.4	1.6	44.72	H.S. Grad	10-15
Benton	52	97.2	2.8	28.42	Some Coll	20~30
Clackamas	50	97.6	2.4	24.92	Some Coll	20-30
Clatsop	51	98.1	1.9	30.13	Some Coll	15-20
Columbia	51	96. 8	3.2	28.72	H.S. Grad	15-20
Coos	55	95.6	4.4	44.65	H.S. Grad	15-20
Crook	54	100.0	0.0	49.09	H.S. Grad	10-15
Curry	58	97.6	2.4	55.75	Some Coll	15-20
Deschutes	56	96.9	3.1	53.38	Some Coll	15-20
Douglas	54	98.0	2.0	33.55	H.S. Grad	15-20
Gilliam	50	91.5	8.5	37.28	Some Coll	15-20
Grant	56	100.0	0.0	41.52	H.S. Grad	10-15
Harney	47	100.0	0.0	7.88	H.S. Grad	15-20
Hood River	53	9 8.3	1.7	41.39	H.S. Grad	15-20
Jackson	55	99.4	0.6	42.94	H.S. Grad	15-20
Jefferson	51	92.7	7.3	29.23	H.S. Grad	15-20
Josephine	58	96.6	3.4	60.22	H.S. Grad	10-15
Klamath	53	94.8	5.2	37.26	Some Coll	15-20
Lake	50	95.6	4.4	16.60	H.S. Grad	15-20
Lane	53	98.3	1.7	33.99	Some Coll	15-20
Lincoln	55	93.1	6.9	50.98	H.S. Grad	15-20
Linn	52	100.0	0.0	32.10	H.S. Grad	15-20
Malheur	55	94.8	5.2	40.99	Some Coll	15-20
Marion	53	98.2	1.8	34.52	Some Coll	15-20
Morrow	55	95.2	4.8	42.67	H.S. Grad	10-15
Multnomah	52	97.5	2.5	29.12	Some Coll	20-30
Polk	54	98.6	1.4	33.38	2 yrs+ Coll	15-20
Sherman	50	100.0	0.0	27.14	Some Coll	15-20
Tillamook	57	98.8	1.2	48.22	H.S. Grad	10-15
Umatilla	53	97.8	2.2	37.36	Some Coll	15-20
Union	55	98.8	1.2	36.45	H.S. Grad	15-20
Wallowa	59	100.0	0.0	50.00	H.S. Grad	15-20
Wasco	53	97.7	2.3	37.42	H.S. Grad	15-20
Washington	49	97 . 2	2.8	19.78	2 yrs+ Coll	20-30
Wheeler	59	100.0	0.0	41.93	H.S. Grad	10-15
Yamhill	52	98.6	1.4	36.09	H.S. Grad	15-20
State Totals	53	97.6	2.4	34.43	Some Coll	15-20

^{*} Includes married couples who have registered joint ownership.** Expressed in thosands of dollars per year.

boats were projected as not being used as such, but were being used for other activities ranging from commercial fishing vessels to a boat used by a lumber company on one of its mill ponds. Responses also show that registered boat owners in Oregon own many other watercraft. Only 49.8 percent said that they owned no other watercraft. Almost one percent claim that they own or use three or more watercraft in addition to the one on the questionnaire. The three types of watercraft most often indicated as a second or third boat include outboards (27.0 percent), rowboats (26.2 percent), and rafts or other inflatables (21.6 percent). Details on types, length and propulsion systems of additional watercraft are contained, by county of registration, in Appendix D.

Table 3 and Appendix F detail boat owner characteristics by county of registration. Although a characteristic, the ways in which boat owners use their boat will be the subject of the next chapter.



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BOAT USE

Where and When

Oregon pleasure boaters use their boats in all counties of the State and during every month of the year. However, given the seasonal nature of most water related recreational uses, there is a wide variance in the numbers of boats and people involved at any one time or location. Figure 5 displays pictorially the county variations as to where people, and their boats, went to participate in water activities during the 1977-1978 boating year. Figure 6 displays the county variations in how much boating was done by the boats and people from each county by county of registration. As might be expected, Multnomah County leads the State in total volume of use by boats and people but drops back into the pack when one considers the times each boat was used and how many people from that county went boating during the year. As an example; Throughout the 1977-1978 boating year, bodies of water in Multnomah County were used by Oregon boats a total of 454.361 days, thus producing 1,508,613 activity occasions. At the same time, Multnomah County boat owners used their boats for 562,387 days with 1,630,271 people aboard. This means that each boat used by a Multnomah owner spent an average of 33 days of the boating year in operation, either in Multnomah County or elsewhere. This compares with a state-wide average of 22.87 days of use per year by each registered pleasure boat.

The top five counties receiving the most use, after Multnomah, are Lincoln, Lane, Coos, Douglas and Tillamook. Since all five have large numbers of boats registered to their citizens and border the Pacific Ocean, it is little wonder that they should lead the State in popularity.

Tables 4 and 5 present boat days and people days, by activity, for the county of use. Appendix G contains a month by month total, and average, of both boat and people days by county of registration.

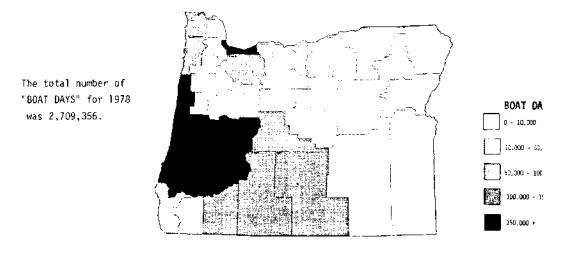


FIGURE 5A "BOAT DAYS" OF Use by Oregon Pleasure Boat Users by County of Use for the 1977-1978 Boating Year.

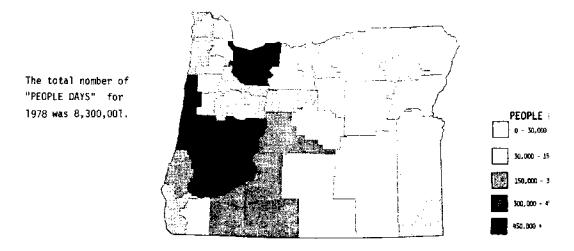
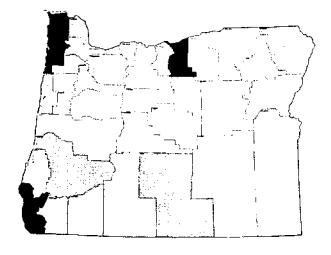


FIGURE 5B "PEOPLE DAYS" of Use by Oregon Pleasure Boat Users by County of Use for the 1977-1978 Boating Year.

The total number of "BOAT DAYS" for 1978 was 2,709,356.



BOAT DAYS PER MONTH 10 - 20 20 - 30 30 - 40

PEOPLE DAYS PER MONTH

90 - 120 120 +

FIGURE 6A "BOAT DAYS" OF USE BY OREGON PLEASURE
BOAT USERS BY COUNTY OF REGISTRATION
FOR THE 1977 - 1978 BOATING SEASON.

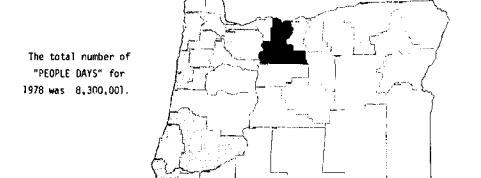


FIGURE 6B "PEOPLE DAYS" of Use by Oregon Pleasure Boat Users by County of Registration for the 1977 - 1978 Boating Season.

TABLE 4
BOAT DAYS OF USE

COUNTY	# BOATS	FISHING	SAILING	CVIINC	COULCING	OTHER.	TOTAL
COUNTY	# DUATS	FISHING	- JAILING	SKIING	CRUISING	OTHER	TOTAL
BAKER	2,075	22,732	18	3,154	1,139	327	27,408
BENTON	509	10,193	76	324	477	899	11,538
CLACKAMAS	5,591	71,663	641	23,148	13,219	3,563	114,544
CLATSOP	4,655	92,573	1,142	2,347	11,830	4,767	111,991
COLUMBIA	3,029		744	5,182	9,163	3,019	83,787
COOS	10,321	141,345	5,404	17,662	24,230	8,999	195,576
CROOK	3,059		0	9,380	2,612	1,066	31,721
CURRY	3,255	83,919	0	314	3,418	1,553	90,525
DESCHUTES	10,321	115,993	1,328	2,607	3,486	1,502	126,801
DOUGLAS	10,268	165,170	1,270	11,123	6,803	5,750	190,721
GILLIAM	88	1,480	0	152	28	42	1,702
GRANT	219	2,330	0	0	0	0	2,330
HARNEY	340	3,308	0	0	0	217	3,525
HOOD RIVER		2,103	958	1,114	2,440	157	6,771
JACKSON	6,947	82,312	3,470	8,218	10,236	1,371	105,389
JEFFERSON	4,478	39,651	669	17,153	6,897	862	65,482
JOSEPHINE	732	17,480	1 78	108	4 60	108	18,336
KLAMATH	6,438	71,710	7,312	14,610	9,429	7,554	110,638
LAKE	510	5,832	0	1,233	0	285	7,350
LANE	11,759	145,079	15,930	25,444	28,660	4,273	220,627
LINCOLN	10,901	214,503	4,771	8,873	6,127	6,765	239,963
LINN	3,605	23,702	81	16,773	5,413	1,183	48,603
MALHEUR	1,349	13,163	419	2,318	1,133	283	17,315
MARION	4,588	36,926	2,274	11,109	8,255	2,400	60,961
MORROW	216	2,853	198	469	329	162	2,985
MULTNOMAH	17,262	187,459	68,902	54,349	133,246	13,618	454,361
POLK	579	6,454	0	3,702	373	869	11,480
SHERMAN	420	3,439	54	637	549	555	5,117
TILLAMOOK	7,109	120,532	350	2,540	3,955	8,295	137,231
UMATILLA	1,028	9,556	0	6,317	5,415	144	21,252
UNION	342	2,202	80	386	_ 54	126	2,856
WALLOWA	903	8,562	80	3,441	1,746	63	13,892
WASCO	920	7,091	0	2,049	4,331	561	14,236
WASHINGTON	2,968	24,264	4,422	4,384	723	839	35,371
WHEELER	4	62	0	0	0	.0	62
YAMHILL	614	923	31	5,392	1,269	743	8,359
UNKNOWNS	100,834	70,853	11,607	10,188	13,767	3,586	110,001
TOTALS 2,	581,493	1,893,029	132,409	276,200	321,212	86,506	2,709,356

TABLE 5
OREGON PLEASURE BOAT "PEOPLE DAYS" OF USE, BY COUNTY OF USE
DURING THE 1977-1978 BOATING SEASON

			TVDE (DE ACTIVIT	v	
COUNTY OF USE	FISHING	SAILING	SKIING	OF ACTIVIT CRUISING		TOTAL
BAKER	66,804	54	12,729	3,770	1,022	84,379
BENTON	27,441	304	1,336	1,231	2,131	32,443
CLACKAMAS	253,167	9,022	128,098	87,188		491,035
CLATSOP	281,516	3,694	8,866	54,891	12,871	361,838
COLUMBIA	176,430	2,932	21,333	34,566		244,563
C00S	318,198	5,660	28,995			408,359
CR00K	60,870	0	47,131	10,860		122,440
CURRY	219,136	0	941	11,656		235,712
DESCHUTES	301,845	2,729			-	332,428
DOUGLAS	431,660	6,859				523,401
GILLIAM	4,652	, O			•	5,138
GRANT	6,437	0			_	6,437
HARNEY	7,788	0		_		8,223
HOOD RIVER	6,238	2,874	4,622			23,835
JACKSON	227,124	11,375		-		312,382
JEFFERSON	139,287	3,870				254,705
JOSEPHINE	49,919					51,791
KLAMATH	184,945	25,236		_		336,767
LAKE	13,739				_	19,185
LANE	372,436					635,235
LINCOLN	583,839			•	-	662,703
LINN	64,855					165,908
MALHEUR	40,389					56,680
MARION	100,940					198,490
MORROW	8,380	720				12,750
MULTNOMAH		241,445				1,508,613
POLK	25,153	0	18,764			47,673
SHERMAN	7,878	216	3,028		1,350	13,853
TILLAMOOK	329,888		9,856			379,981
UMATILLA	27,577	0	27,005	22,627		77,713
UNION	6,473	161	1,218	215		8,319
WALLOWA	25,224	161	14,854	4,958		45,357
WASCO	29,439	0	15,677	32,796		79,564
WASHINGTON		11,543	18,773	2,577	3,350	103,016
WHEELER	107	. 0	0	0	0	107
YAMHILL	3.250	126	22,370	4,018	2,146	31,910
STATE OF IDAHO	1,396	1,206	1,912	134	925	5,573
STATE OF WASH.	130,306	24,683	9,929	25,308	5,304	195,530
STATE OF CALIF.	25,251	0	15,177	1,597	1,392	43,417
STATE OF NEVADA	888	Ō	0	0	45	933
UNKNOWN	90,642	8,578	35,543	20,581	17,908	173,252
				1,138,721		8,300,001

The total number of boat days of use for the 1977-1978 season by boats registered in Oregon is estimated to be 2,709,356 days or 22.87 days per registered pleasure boat. Projected survey data indicates that for every day of use each boat carried an average of three people. Therefore, in terms of people or users, there were over 8.3 million activity occasions of boating in Oregon. This number reflects only Oregon registered boat use and does not include non-registered and out-of-state boaters. ²

Considering the investment in owning a pleasure boat and given the stereotyped Oregonian's attitude of being an avid outdoorsman, it was curious that the survey results point to a probability that 20.8 percent of the State's registered pleasure boats were never used during the past boating year. The variation in non-use ranges from a high of 60.5 percent for Gilliam County to a low of 6.0 percent for Wallowa County. Appendix G contains each county's non-use data.

It appears that most Oregon boaters preferred to conduct their activities within their own county or only as far away as the next county, (see Table 6). This fact raised the number of counties that are net importers of boating and people from 20 in 1975 to 28 in 1978. However, it should be obvious that even though Wheeler County is a net exporter, county residents still account for 100 percent of the use of Wheeler's bodies of water. Table 6 uses launch data to illustrate graphically the counties generating greater boating activity than can be accounted for by their own registered boats. Listed in table form, on page 28, are those counties that are classified as either importers or exporters of boats and people.

Use by non-registered and out-of-state boaters is discussed in Chapters 4 and 5.

TABLE 6

OREGON PLEASURE BOAT LAUNCHES BY COUNTY OF REGISTRATION
AND COUNTY OF LAUNCH, 1977-1978 BOATING SURVEY

	County of Use																		
County of Registration	Вакет	Benton	Clackamas	Clatsop	Columbia	Coos	Crook	Curry	Deschutes	Douglas	Gill lam	Grant	Натеу	Hood River	Jackson	Jefferson	Josephine	Klama th	Lake
aker	518		0	0	10	10	0	0	0	19	0	0	0	0	0	0	0	10 40	0
enton	20	405	0	40	0	0	0	20	121	141	0	0	٥	0	20	61	0	34	0
lackamas	34	0	4,487	309	205	34	446	0	890	274	0	0	0	0	0	686	0	34	18
latsop	. 0	0	36	1,020	18	Ó	0	0	0	0	0	0	0	0	0	18	0	21	0
olumbia	0	0		105	1,077	0	21	0	42	21	21	0	0	0	0	84	0	21 61	31
005	0	0	0	0	0	3,360	0	275	183	825	0	0	0	0	0	31	0		. 0
rook	0	0	ا ہ ا	12	0	0	427	0	95	12	0	0	0	0	12	48	12	0	l
urry	15	0		0	0	89	0	579	30	15	٥	0	0	0	0	0	15	0	0
eschutes	44	0	0	66	٥	0	461	22	2,239	22	Q	22	0	0	44	483	0	110	44
loug las	33	0	0	0	0	1,028	66	99	199	2,982	0	0	0	0	198	66	0	331	33
itlliam	0	0	. 0	0	5	0	5	Ô	0	0	16	0	0	0	0	0	0	0	0
irant	86	. 0	0	0	0	0	0	0	0	10	0	57	19	0	0	0	0	0	
larney	0	0	0	0	0	0	0	0	0	0	0	19	148	0	0	0	0	0	0
lood River	0	0	37	27	0	0	28	0	56	28	0	0	0	230	0	0	0	0	0
Jackson	Č	0	0	a		222	0	630	37	520	0	0	0	0	4,079	0	74	371	0
Jefferson	0	0	٥	0	0	11	33	C	77	11	0	0	0	٥	0	266	0	0	0
Josephine	0	0	0	0	0	27	0	380	54	352	0	0	C	0	894	0	595	162	0
Klamath	٥	0	0	0	o	96	0	241	194	218	0	0	24	0	314	24	0	2,148	120
Lake	0	ŏ	C	0	0	0	0	11	11	0	0	0	11	0	0) 0	0	53	147
Lake	36	. 0	0	0	0	692	72	109	1,492	2,038	0	0	0	0	0	182	36	1,273	0
Lane Lincoln	0	22	22	0	22	44	0	0	22	0	0	0	0	0	0	a	0	22	0
Lineo iii Linn	26	78	0	0		156	78	0	572	260	Ď	0	0	0	0	156	0	156	0
	195	0	15	15	٥	0	0	0	0	15	0	0	15	0	0	0	٥	0	0
Malheur Manda	0	0	189	94	62	63	157	0	723	409	0	0	31	0	63	252	0	314	31
Marion	0	ő		0	0	0	0	0	0	0	0	22	0	0	0	ð	0	0	0
Morrow	0	٥	1,743	1,117	402	45	536	٥ ا	1,251	268	0	89	٥	0	0	983	0	45	0
Multnomah	0	20	0	0	0	20	40	0	262	0	0	0	0	0	20	81	0	50	0
Polk Sharman	0	ő	0	0	0	0	0	0	9	C	5	0	0	0	0	14	0	0	0
Sherman	0	0	Š	54	0	١٠	0	0	54	0	0	0	0	0	0	18	0	0	0
Tillamook	270	0	0	36	o o	٥	18	0	72	18	0	18	0	0	0	0	0	0	0
Umatilla Umdon	420	0		0	9	o	0	0	0	0	0	0	0	0	0	0	0	9	0
Union	52	0	Ö	0	ő	0	0	٥		0	0	0	0	0	0	0	C	0	0
Wallowa	0	0	27	0	0	ŏ	18	0	80	0	0	0	0	35	0	97	0	0	0
Wasco	41	0	410	451	287	0	123	0	492	164	0	0	o	0	41	369	0	0	0
Washington	1	0	2	0	0	0	. 4	0	2	0	0	0	2	0	0	2	0	2	0
Wheeler	2	٥	50	51	0	0	76	0	279	0	0	0	0	0	0	51	0	25	0
Yamhill TOTAL	1,792	525	7,018	3,397	2,097	5,897	2,609	2,366	9,538	8,622	42	227	250	265	6,685	3,981	732	5,207	424

TABLE 6 (cont.)

	IABLE & CONT.)																					
	County of Use																					
Lane	Lincoln	Linn	Malheur	Marion	Могтом	Multnomah	Połk	Sherman	Tillamook	Umatilla	Union	Wallowa	Masco	Washington	Wheeler	Yamhill	Idaho	Washington	California	Nevada	Used where Moored	TOTAL
0	0	0	10	0	0	10	0	0	٥	19	0	10	0	0	0	0	0	10	0	0	58	674
283	850	546	0	0	0	81	20	20	61	0	0	0	20	20	0	0	C	0	0	0	0	2,769
206	548	0	0	377	0	1,576	0	34	685	69	0	۵	138	171	0	0	34	309	0	0	993	12,539
0	36	0	18	18	0	0	0	0	109	18	D	0	0	Ô	0	0	0	0	0	0	473	1,782
0	42	0	0	0	0	42	0	0	232	0	0	0	0	42	0	0	0	126	0	0	486	2.362
123	31	0	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	764	5,715
0	12	12	12	0	0	0	0	0	12	0	0	0	12	0	0	0	0	0	0	0	47	725
0	0	0	15	0	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	C	594	1,367
. 0	176	22	0	22	0	0	0	22	22	0	0	0	D	0	0	0	0	22	44	0	220	4,107
365	33	0	33	0	0	0	0	0	٥	0	0	0	0	٥	0	0	0	33	33	0	895	6,427
. 0	5	5	0	0	11	0	0	5	0	0	0	0	D	0	0	0	0	0	0	0	0	52
. 0	О	0	48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	230
ο '	0	0	19	0	0	0	0	0	Ò	0	0	0	۵	0	0	0	0	0	0	19	0	205
, 0	0	0	0	0	0	2	0	18	0	9	0	0	27	0	0	0	0	0	0	0	64	533
. 0	37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	185	0	445	6,600
. 0	11	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	111	531
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	. 0	0	54	0	27	2,572
24	0	0	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	169	0	507	4,103
11	0	0	11	0	C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	53	308
6,732	436	145	0	36	0	182	0	0	73	0	0	0	0	0	0	0	0	109	109	0	1,128	14,880
132	857	0	0	0	0	0	0	0	22	0	0	22	0	0	0	0	0	44	0	0	1,824	3,055
260	910	1,899	26	182	0	26	0	0	26	0	0	0	0	0	0	0	0	25	0	0	78	4,915
0	0	0	822	0	0	0	0	0	0	0	0	15	0	0	0	0	75	45	0	15	15	1,242
- 378	1,667	378	62	2,611	0	220	252	0	220	0	0	0	31 0	94 0	0	125	0	62 11	0	0	220 11	8,708
0	11	0	0	0	55 0	0	0	. 89	1,788	44 45	0	22 90	89		0	45	45	983	45	0	3,977	176
179	938	45	45	357	0	7,595	283	0	142	0	0	20	69	358 0	0	0	45	20	45		28	23,192
141	323	141 0	0	363 0	ا ا	80	0	52	0	0	c	0	0	0	0	٥	0	0	0	0	0	2,004
0	0	٥	0	0	0	0 18	٥	0	858	0	0	C	0	0	0	0	0	18	0	0	429	80
0	36 0	0	18	0	144	0	0	18	18	756	72	198	36	0	0	0	36	72	0	0	108	1,485
اه	0	9	36	٥	0	Ö	0	0	9	45	232	179	0	0	0	١٠	0	9	0	0	27	975
0	0	0	0	٥	0	١ ،	0	0	17	0	0	189	0	9	0	0	0	0	0	0	95	362
0	9	0	0	٥	0	9	0	88	'/	0	0	109	381	9	0	0	0	45	0	0	71	878
41	533	0	0	287	0	1,601	0	41	1,396	0	0	0	41	1,888	0	82	٥	410	٥	0	82	8,739
2	333	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	. 0	1 0	0	0	2	24
51	430	50	0	126	0	76	25	0	152	0	0	0	0	304	0	329	0	25	ŏ	0	25	2,125
					ŀ <u>*</u>	!					<u>.</u>		-			=	· -		· · · · <u> </u>	ļ <u>-</u> -	ļ .	1.225
8,955	7,931	3,252	1,230	4,379	210	11,525	580	387	5,862	1,020	304	745	775	2,897	2	581	190	2,417	639	34	13,867	129,456
				l	F	L									1	1			L	1	1	

BOATS AND PEOPLE

		IMPORT	ERS			EXPORTE	RS
BAKER	(31)*	GRANT	(28)*	LINN	(59)*	BENTON	(77)*
CLACKAMAS	(68)	HARNEY	(59)	MALHEUR	(67)	JOSEPHINE	(82)
CLATSOP	(39)	HOOD RIVER	(89)	MORROW	(30)	MARION	(62)
COLUMBIA	(61)	JACKSON	(74)	MULTNOMAH	(75)	POLK	(51)
coos	(62)	JEFFERSON	(09)	SHERMAN	(13)	UNION	(78)
CR00K	(18)	KLAMATH	(47)	TILLAMOOK	(20)	WASHINGTON	(66)
CURRY	(40)	LAKE	(42)	UMATILLA	(82)	WHEELER	(100)
DESCHUTES	(25)	LANE	(78)	WALLOWA	(34)	YAMRILL	(58)
DOUGLAS	(41)	LINCOLN	(27)	WASCO	(53)		
GILLIAM	(38)						

^{*} The numbers in parenthesis are the percentage that resident county boats contribute to the total use of that county's bodies of water.

Tables 7 and 8 contain the use data for those bodies of water most used by Oregon boaters. Table 7 is based on boat days of use and Table 8 on people days of use. From the tables it can be seen that certain bodies of water are preferred over others for those water activities involving multiple users, such as water-skiing and cruising. As a result, there are ranking changes in popularity of the bodies of water depending on which criteria is used. For example, Lake Billy Chinook, located in Jefferson County, is ranked 17th in popularity by boat days of use but climbs to 9th place when people days of use is measured. This phenomenon is the result of the multiple uses that certain bodies of water can be put to compared with others. Those that can be used for water-skiing, cruising or sailing will attract more people than those which can only be used for fishing, have limited access and are limited in size. Complete use data for all ranked bodies of water can be found in Appendix G.

TABLE 7
BODIES OF WATER RECEIVING 25,000 OR MORE "BOAT DAYS" OF USE DURING THE 1977-1978 BOATING YEAR

		_		TYPE OF	YTIVITVA		
BODY OF WATER	COUNTY	FISHING	SAILING	SKIING	CRUISING	OTHER	TOTAL
COLUMBIA RIVER	MULTNOMAH	107,662	59,140	27,262	103,100	9,197	306,084
WILLAMETTE RIVER	MULTNOMAH	74,502	9,762	25,300	29,020	4,421	140,078
WILLAMETTE RIVER	CLACKAMAS	69,299	504	23,096	12,247	2,946	110,401
PACIFIC OCEAN	LINCOLN	79,241	1,146	709	1,246	1,175	83,518
YAQUINA BAY	LINCOLN	57,035	2,933	464	1,344	2,828	64,560
COLUMBIA RIVER	CLATSOP	50,575	1,142	1,331	4,041	3,405	60,495
COLUMBIA RIVER	COLUMBIA	43,956	544	3,302	7,827	2,094	57,823
STATE OF WASHINGT	ON	36,606	9,090	2,417	8,572	1,119	57,116
PACIFIC OCEAN	CURRY	51,454	0	54	887	388	53,099
DIAMOND LAKE	DOUGLAS	41,955	1,038	1,261	2,319	556	47,269
KLAMATH LAKE	KLAMATH	24,542	6,470	5,645	4,771	4,028	45,503
TILLAMOOK BAY	TILLAMOOK	36,571	0	1,593	1,950	2,921	43,929
PACIFIC OCEAN	DOUGLAS	40,771	0	1,012	729	851	43,728
DETROIT RESERVOIR	MARION	28,608	2,274	7,087	3,001	483	41,451
PACIFIC OCEAN	CLATSOP	32,950	0	181	6,285	761	39,506
PACIFIC OCEAN	COOS	37,824	0	122	825	886	39,352
LAKE BILLY CHINOO	K-JEFFERSON	25,728	600	9,122	3,420	195	39,335
PACIFIC OCEAN	TILLAMOOK	36,232	22	0	87	914	37,920
UMPQUA RIVER	DOUGLAS	29,949	66	507	1,292	1,137	32,985
HAAG LAKE	WASHINGTON	21,701	4,422	3,487	581	511	31,441
S.TEN MILE LAKE	COOS	21,400	1,520	3,933	2,997	1,703	31,277
SIUSLAW RIVER	LANE	26,189	0	73	4,257	764	31,248
SILTCOOS LAKE	LANE	27,247	0	1,819	680	364	30,111
PACIFIC OCEAN	LANE	25,029	0	764	3,020	328	29,141
CRANE PRAIRIE RES	DESCHUTES	26,674	0	66	511	163	28,599
LAKE OSWEGO	CLACKAMAS	2,398	3,494	9,590	12,163	377	28,021
FERN RIDGE RES.	LANE	2,078	14,584	4,599	4,186	222	25,945

TABLE 8

BODIES OF WATER RECEIVING 75,000 OR MORE "PEOPLE DAYS" OF USE

DURING THE 1977-1978 BOATING SEASON

		-	T	YPE OF AC	TIVITY		
BODY OF WATER	COUNTY	FISHING	SAILING	SKIING	CRUISING	OTHER	TOTAL
COLUMBIA RIVER	MULTNOMAH	307,268	220,078	122,300	357,719	28,211	1,038,949
WILLAMETTE RIVER	MULTNOMAH	202,533	21,367	109,919	103,730	16,159	448,117
WILLAMETTE RIVER	CLACKAMAS	191,520	1,636	89,027	40,475	9,153	333,901
PACIFIC OCEAN	LINCOLN	231,201	4,462	3,018	4,395	2,880	245,957
STATE OF WASHINGT	ON	130,306	24,683	9,929	25,308	5,304	194,105
COLUMBIA RIVER	CLATSOP	157,207	3,694	5,053	13,687	8,955	188,595
YAQUINA BAY	LINCOLN	158,858	8,520	1,305	4,428	9,823	182,758
COLUMBIA RIVER	COLUMB1A	123,140	2,532	18,077	31,051	6,142	178,411
LAKE BILLY CHINOO	K-JEFFERSON	86,383	3,596	42,623	17,185	910	151,919
KLAMATH LAKE	KLAMATH	59,234	22,933	30,274	23,723	11,657	147,918
PACIFIC OCEAN	CURRY	136,547	0	162	2,256	1,136	141,361
PACIFIC OCEAN	CLATSOP	101,816	0	578	35,796	1,932	139,452
TILLAMOOK BAY	TILLAMOOK	104,200	0	5,963	7,081	9,991	130,809
DETROIT RESERVOIR	R-MARION	77,0 7 4	15,370	26,900	9,706	1,095	130,144
DIAMOND LAKE	DOUGLAS	108,273	6,229	4,306	5,135	1,277	125,503
PACIFIC OCEAN	COOS	113,646	0	367	3,758	2,772	119,016
PACIFIC OCEAN	DOUGLAS	109,634	0	3,686	2,154	2,001	118,202
PACIFIC OCEAN	TILLAMOOK	98,753	44	0	348	2,188	104,005
FERN RIDGE RES.	LANE	5,725	54,302	18,176	14,193	468	93,419
HAAG LAKE	WASHINGTON	58,962	11,543	14,649	2,049	2,036	91,455
PRINEVILLE RES.	CROOK	38,148	0	45,658	9,431	2,460	90,974
S.TEN MILE LAKE	COOS	56,126	5,416	16,304	8,942	5,638	90,500
UMPQUA RIVER	DOUGLAS	79,144	133	1,455	6,065	2,566	89,460
PACIFIC OCEAN	LANE	72,5 7 7	0	2,984	10,408	1,638	87,606
LAKE OSWEGO	CLACKAMAS	4,932	6,576	33,428	39,965	960	85,861
FOSTER RESERVOIR	LINN	24,768	323	41,428	9,351	2,372	83,594

Seasonal variation in boating use continues to be the norm with Oregon's boaters. Although there is a peak in use during the month of July, as shown in Figure 7, there has been a trend toward more constant use since 1975. Then the maximum difference was 20.3 percent between the months of July and January, now the maximum is only 18.2 percent between the same months. By utilizing the factor of people days, January, the month of least use, is the month when the number of people, per boat being used, is highest, at an average of 3.7 people per boat. By contrast, November sees the minimum number of 2.8 people per boat. The yearly average of people per boat in use is 3.1. Table 9 lists the numbers of boat days and people days, by month, by county of registration as well as monthly and yearly totals for the State.

How Did They Get There

Base line data indicates that 11.7 percent of Oregon's pleasure boats are moored and used from that moorage. This percentage compares very closely to the percentage of Oregon's registered boats that are 20 feet or longer in length, (see Figure 3). Another 20.8 percent were not used at all. The remaining 67.5 percent were transported primarily by trailer (82.4 percent), car-top carrier (9.8 percent), a combination of means (6.1 percent), and the rest (1.7 percent), got there in vans, the back of pickups, in station wagons or by other ingenious methods. Appendix H gives a county by county listing of the number of times a pleasure boat was transported by some means from its county of registration or location of storage to a body of water for use.

Table 10 shows the number of launchings made by Oregon boaters at the type facility they thought they were launching from, i.e. commercial, private

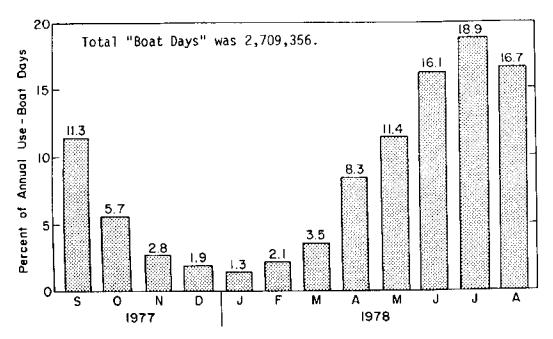


FIGURE 7A Monthly Variation in Pleasure Boat Use for Oregon by "BOAT DAYS" during the 1977-1978 Boating Season.

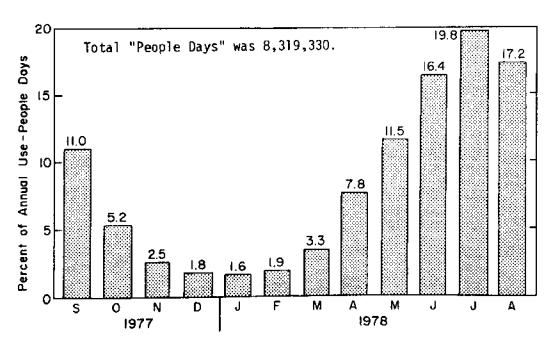


FIGURE 7B Monthly Variation in Pleasure Boat Use for Oregon by "People Days" during the 1977-1978 Boating Season.

TABLE 9

OREGON PLEASURE BOAT USE BY ECUNTY OF REGISTRATION AND MONTH OF YEAR IN "BOAT BAYS" AND "PEOPLE DAYS" DURING THE 1977-1978 BOATING YEAR.

COUNTY	SEPT	OCT	NOV.	D£C	 M Jan	GNTH BY FEB	BOAT DI MAR	AYS/PEOP APR	LC DAYS	Juné	JUL 1	AUG	TOTAL
BAKER	1,056	432	376	394	278	. 54	202	509 1,603	1,277	208, I	2,131	1,910	10,474
BENTUN	5,951 17,528	1,622 2,732 7,489	1,801	1,619	1,518		1,194	7,570 6,760	4,368 4,331 13,905	6,430 7,185 21,580	7,555 7,286 24,268	6,947	36,576 44,161 135,165
CLACXAMAS	26,510 78,741	10,035		3,357	4,007	6.953	13,289	14,593 96,688	31,681	40,626 126,074	48,156	45,895	270,097 824,331
CLATSOP	8,522 22,398	5,536 13,293		2,549 6,610	2,440 6,246	2.445 7,229	3,296 9,360	4,735 13,676	5.827 17,518	6.574 19,995	7,539 23,145	8,595 75,458	61.659 174.106
COLUMBIA	5,829 18,227	2,492 7,033					6,27] 15,121	11,996 34,320	7.498 21,965	8,152 28,005	10,792 35,587	10,743 33,813	70,519 218,443
C00S	11,976 33,116		4,336 11,762		3,299 6,921	3,116 8,921	J.910 11,823	8,798 24,471	12,220 34,002	19,919 54,440	22.301 64.613	20,652 59,664	122,932 345 ,369
CROOK	1, 04 8 3,653	403 1,364			83 285			498 1,720	925 3,368	1,305 4,839	2.218 8.053	1,447 5,610	8,456 30,778
CURRY	8,103 20,776	2.849 7,227				1,261 3,473	1,603 4,348	3,992 10,507	6.040 15.998	8,90 a 21,874	10.03Z 24,546	9,245 22,097	55.88/ 141.£19
OESCHUTES	8,363 22,828	4,214 9,965			241 593	329 680		4,652 12,314	10,031 26,362	13,719 35,888	14,136 40,147	12,226 34,242	69.822 187.364
60UGLAS	17,133 49,843		6,263 14,415			3,977 9,942	5, 534 14,747	10,539 26,810	15,476 42,684	73,563 66,313	26.181 78,277	23,993 72,113	151,417 422,071
GJLL:AM	97 378	65 221	65 211	49 146	16 49	0		16 54	383 767	524 1,102	335 756	54 194	1.604 3.878
GRANT	124 535	86 210	0	D: O	D 0	0	U D	162 592	334 1,347	592 2,254	6 88 2,579	41t 1,509	2,397 9,026
HARNEY	74 185	0	0	0	0	37 111	93 333	130 463	241 814	481 1,369	64B 1,961	795 888	2,000 6,124
HOOD REVER	810 2.855	396 1,455	203 718	147 516	157 571	276 293	295 854	645 1.870	866 2,745	1,391	1.916 6.686	1.547	8,649 28,615
JACKSON	13,275	6,749	2,447 7,824	1,483	1,224 3,486	1,039 3,189	2,336 7,268	9,678 30,628	17,873 56,844	25,734 79,685	28,663 92,515	20,431 66,077	130,931
JEFFERSON	1,243	544 7,131	200 844	89	69 116	67 266	0 D	133	833 3,241	1,454 6,516	1,723	1,421 6,760	7,794 33,644
JOSE PHINE	5,526 16,004	4,116 10,642	2,221 6,553	1,706	1,462	1,354	1,327	3,358 7,939	6,039	7,203 16,248	8,639 22,206	5,551 14,352	49,502 124,784
LAMATH	9.704 28,992	5.166 14,750	2,897 6,880	2.004 4,176	1,376	1.038	1,666	6,156 16,801	12.046 38,769	15,594 51,466	19,071 64,550	14,291 46,469	91.009
LAKE	578 1,365	263 641	74 221	95 189	116	126	231	756 1,754	851 2,079	1,061	935 2,226	714 1,922	5.800 14,219
LAHE	12,278 64,825	17,103	9,279	5.422 15,102	4,112	4,585	7,715	21,980	35,463 107,278	52,256	59,570	54,185	304.946 868,593
LINCOLN	10,660 27,057	5,165 12,397	2,660 6,616		1,385 3,97B	1,385	2,440 5,957	4,176 9,495	8,528 22,134	12,309 32,486	12,968 32,750	12,287	75,897 192,654
LĪNM	7,364 22,924	3,279	1,353	650	260 755	572 1,561	1,275	4,189 12,073	7,962 25,578	13,192	13,687	13,140	56,923 219,322
MARION	16,894 50,556	8,305 22,022	4,782	1,769 3,398 9,469	2,485 7,456	2,706 8,022	3,398 9,753	7,928	16,170 50,273	43,453 24,602	49,152 31,775 103,472	26,143 78,335	148,586 454,061
MORRON	#53 1,525	99	33	33	33	33	55	24,098 133	265	586	486	541	z,750
ALIL THOMAS	66,529	265 32.393	14,208	88 11,439	88 10,813	88 14.789	25,334	354 52,588	751 59,335	1,834 82,345	1,923	1,856 89,628	8,993 562,387
OLK .	3,150	1,837	626	323	182	242	485	1,252	3,796	4,846	6,380	4,785	27,904
SAF RINUN	10,681 272	4,785 131	1,575	1,151	525 Q	303	1,131	5,457	13,588 178	17,162 206	21,543	15,940 310	93,845].524
TTLEAMOOK	854 8.733	394 4,447	103 2.579	75 1,143	0 857	0 857	84 857	131 2,733	403 6.001	643 6,626	990 B,323	7,144	4,803 49,918
MATELIA	21,575 3,744 13,122	11,573	522	3,215 36	2,768 180	2,750 180	648	7,894 2,736 9,576	16,199 4,122	18,324 6,624 22,806	7,884	6,156	137,647 34,362
MION	1,225	5,436 760	1,800 206	36 107	486 63	576 89	1,980 268	778	13,788	2,262	26,694 2,441	2.003	118,854
	3,844 876	2,280	662 43	375 26	?15 0	349 0	948 17	2,458 69	4,676 637	6,955 2,454	7,492 2,221	6,321 1,894	36,575 8,463
HALLONA	3,082 2,218	1,059 985	215 266	103	ō 257	0 248	69 541	198 1,464	2,428 2,173	7,241 3,184	7,026 3,504	6,001 3,468	27,422 18.432
MSCO	12,755	5,801	1,144	523 2,135	1,162	1,854	1,827	20,534	34,646 18,390	42,984	32,278 32,512	31,701 30,295	167,209
MASH ENGTON	50,902	27,257	12,069	6,978	6,896	11,001	21,346	46,345	54,761	83,537		94,004	514,478 346
MEELER	135	14 44	Ō	0	a	Q	13 27	22 55	127	271	344	160	1,163
YAMAN TELL	4,001 13,774	1,620 5,343	709 2,253	481 1,190	608 2,583	430 1,063	962 2,735	2,507 7,824	5,140 17,699	6,634 22,104	7,900 26,940	7,647 25,168	128,676

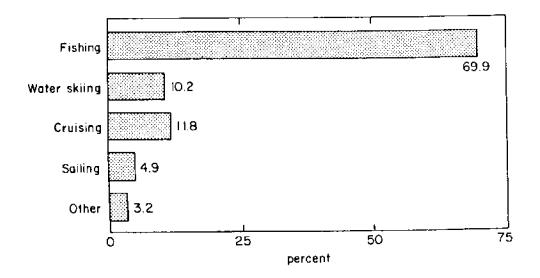


FIGURE 8A Preferred Activities of Pleasure Boat Users by "BOAT DAYS" for the 1977-1978 Boating Season.

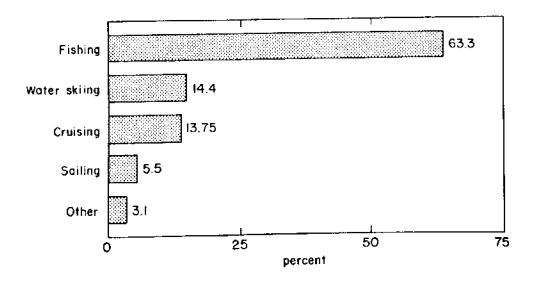


FIGURE 8B Preferred Activities of Pleasure Boat Users by "PEOPLE DAYS" for the 1977-1978 Boating Season.

property, federal, state, or county/city. Responses indicate that many boaters perceive the launch facilities to be different than they actually are, as far as who owns or maintains them. As a result, totals for federal, state and county/city owned or operated marinas and ramps must be used as indicators, which may or may not be accurate. The reader should note that Table 10 is arranged by county of registration not county of use. The results of the survey show that each pleasure boat transported was launched an average of 15 times during the 1977-1978 boating year, twice from commercial marinas, 1.6 times from private property, 1.9 times from a federal ramp, 3.6 times from state facilities and 5.9 times from county or city ramps.

What Did They Do

Figure 8A and 8B depict graphically the participation by Oregon boaters in five categories of water-borne activities. To no ones surprise, fishing is the most popular activity for both boats and people. Over 60 percent of the people and 69.9 percent of the boats are so engaged during the boating year. Water-skiing is the next most popular activity for people (14.4 percent), but more boats are involved in cruising (11.8 percent). Sailing occupies approximately five percent of both pleasure boaters and their boats. However, since there is no requirement for sailboats under 12 feet in length to be registered, this figure is probably underrepresentative of sailboat activity within the State. Hunting and other undifferentiated pursuits took up the boating activity of just over three percent of the State's boats and boaters.

As put forward in the 1975 report, it is very difficult to discuss or delineate where one type of water activity ends and another begins. Most boaters do not just go fishing or cruising, often they do both on the same

TABLE 10
OREGON PLEASURE BOAT LAUNCHES BY COUNTY OF
REGISTRATION AND BY LAUNCH FACILITY TYPE
DURING THE 1977-1978 BOATING SEASON

	COMMERCIAL	PRIVATE	FEDERAL	STATE	COUNTY/CIT
COUNTY	MARINAS	PROPERTY	MARINA/RAMP	MARINA/RAMP	MARINA/RAM
BAKER	308	2,199	2,026	6,893	4,637
BENTON	1,963	891	425	1,903	3,967
CLACKAMAS	8,221	10,618	6,577	18,770	44,354
CLATSOP	4,771	3,988	455	5,981	21,141
COLUMBIA	6,695	5,344	528	6,230	15,376
COOS	17,719	6,324	5,530	13,320	35,132
CROOK	1,141	344	1,055	6,298	3,119
CURRY	3,650	4,408	3,829	2,107	3,561
DESCHUTES	4,676	5,872	30,795	22,960	11,019
DOUGLAS	15,179	7,987	14,482	19,459	49,809
GILLIAM	0	32	54	465	71
GRANT	ŏ	38	306	277	125
HARNEY	Ö	38	482	1,296	925
HOOD RIVER	727	55	212	231	1,086
JACKSON	8,491	2,188	10,605	19,912	22,137
JEFFERSON	355	1,122	2,120	8,026	1,043
JOSEPHINE	460	2,112	1,192	1,598	11,374
KLAMATH	6,493	6,132	12,045	10,163	15,788
LAKE	53	32	2,153	1,124	1,155
LANE	18,650	15,794	23,326	26,892	44,978
LINCOLN	20,749	7,319	1,649	11,298	26,530
LINN	4,606	1,613	6,453	15,299	12,073
MALHEUR	657	553	807	5,542	4,437
MARION	3,146	5,506	4,278	19,915	5,286
MORROW	33	33	54 1	564	1,348
MULTNOMAH	20,598	32,706	7,417	33,331	83,775
POLK	485	1,191	908	848	4,179
SHERMAN	248	14	736	464	61
TILLAMOOK	8,644	2,822	1,143	9,502	22,735
UMATILLA	936	576	4,256	5,598	1,638
UNION	81	36	143	671	1,180
WALLOWA	103	620	525	3,479	345
WASCO	745	603	2,066	2,437	1,818
WASHINGTON	2,422	738	5,419	9,647	16,707
WHEELER	0	0	. 0	18	0
YAMHILL	0	177	152	430	4,532
TOTAL	163,215	130,036	154,700	292,953	477,441
NT OF					
INCHES	13.4	10.7	12.7	24.0	39.2

day. This is especially true if they must cruise a considerable distance to and from or between fishing points as often happens on the Pacific Ocean. Therefore, to ask a boater to indicate how many days he spent doing a particular activity results in only finding out what was perceived as the main, or preferred, activity of the day. While this is useful and desirable information, it does not present the total picture of "pleasure boating activities" or their recreational value to the boater.

Fuel Use and Tax

Response data concerning the amount of fuel used by Oregon's pleasure boats show that 84 percent consumed ten gallons of fuel or less per day of operation. Average consumption rates for each county of registration and state-wide are shown in Table 4. Total fuel consumption is projected to be 686,849 gallons on an average day or 15,708,237 gallons for the 1977-1978 boating year. Of the total fuel consumed, 98.7 percent was gasoline or a gasoline/oil mixture. The remaining 1.3 percent was composed of diesel and other fuels, e.g., propane. There was no attempt made in this survey to estimate the amount of fuel consumed in transporting the boater's vessel to and from its place of use. It might be approximated using the number of times boats were transported by assuming a standard travel distance and vehicle mileage ratings. Other surveys have addressed this problem and conclude that the average mileage from place of storage to launch point is 57.8 miles one way and from residence to moored boat is 39.2 miles one way.

Marine fuel taxes are collected by the Motor Vehicles Division (MVD).

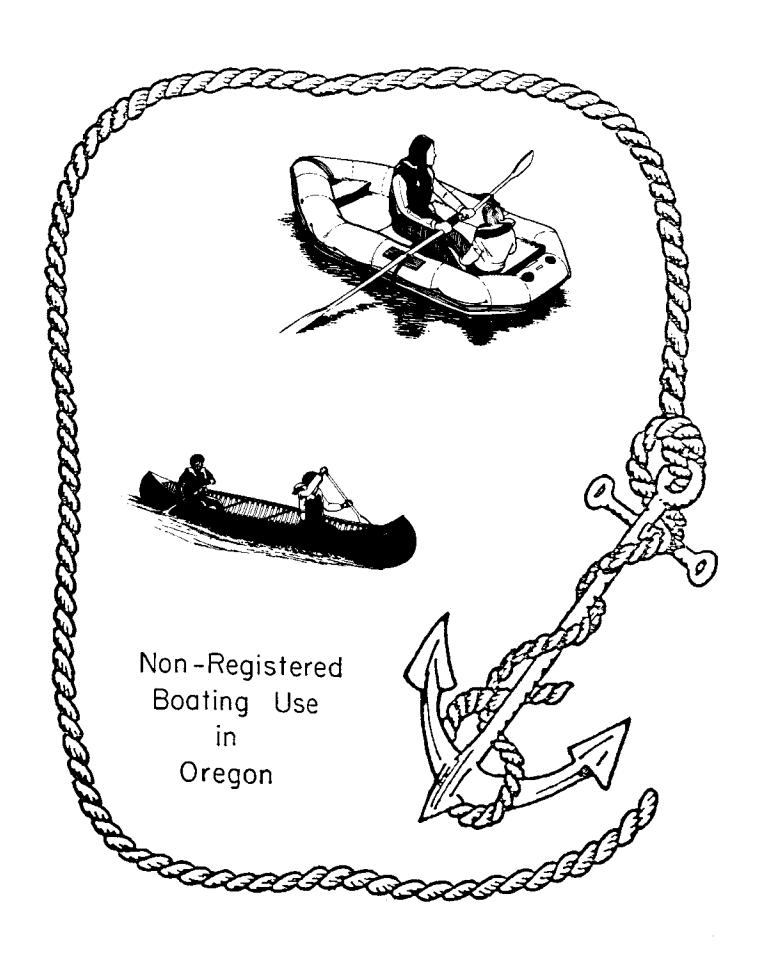
Since the gasoline used in boats is not used on public roads, the MVD refunds,

³First Draft, Part II, "Recreational Boating in Western Oregon," R. Charles Vars, Jr., 22 August 1978.

upon request, the gasoline tax (seven cents per gallon) paid by boat owners on gasoline used in motorboats. The Fuel Tax Branch of MVD has refunded the following amounts since 1975:

<u>1975</u>	<u>1976</u>	<u>1977</u>
\$87,260.95	\$80,612.42	\$75,559.75

The 1978 State-wide Boating Survey, conducted under ORS 488.833, estimates the marine fuel tax in 1978 to be \$1,326,475.00 or a projection of \$2,652,950.00 during the 1977-1979 biennium. Assuming a refund of approximately \$80,000.00/ year (\$160,000.00/biennium), the net income to the MVD should exceed \$2.4 million. In addition, out-of-state boaters benefit from Oregon's boating facilities. They contribute to the recreation and tourism economy of the State and pay marine fuel taxes which are not included in the above estimate of unrefunded fuel taxes. Given the 2.7 million days of boat use by Oregon registered boats, and the assumptions that (1) there is an additional fifteen percent out-of-state use (405,000 days), (2) an average daily fuel use of 7 gallons, and (3) purchase of fuel in Oregon by out-of-state users, then another \$200,000.00 in marine fuel tax would be contributed to the MVD by out-of-state boaters. This money is not refundable and ends up in State Highway Department programs. Appendix E contains the detailed computations used to arrive at the projected fuel taxes.



NON-REGISTERED BOATING USE IN OREGON

Introduction

Oregon Revised Statutes provide the following definition of a boat for numbering, titles and licenses:

"Boat" means every description of watercraft used or capable of being used as a means of transportation on the water, but does not include aircraft equipped to land on water, boathouses, floating homes, air matresses, beach and water toys or single inner tubes. (ORS 488.705-2)

Under this definition, "boats" include not only motorboats and sailboats of various sizes and types, but also canoes, kayaks, inflatable rafts, drift boats, row boats and other non-motorized craft. However, ORS 488.732 does not provide for the registration of sailboats of less than 12 feet in length, nor the registration of other watercraft that are non-motorized. Consequently, no data are available on the actual number of such vessels in the State. This makes it impossible to accurately assess the location and amount of use generated by these boats on a state-wide basis.

Nevertheless, the use of these non-registered boats on individual water-ways can be substantial and may result in serious impacts on the environment, public safety, law enforcement and facilities. Without registration data, there is no way to survey these boaters as was done in the present survey of registered boat owners. However, some use statistics are available for specific bodies of water from other sources. This data will be discussed later in the chapter.

How Many

In the absence of a registration requirement, it is only possible to estimate the quantity of these boats in Oregon. The 1976, "National Rec-

reational Boating Survey" prepared by the United States Coast Guard, indicates that in 1976, 23.9 percent of the boats nation-wide had no motors at all. This figure includes canoes, kayaks, inflatable rafts, drift boats and sailboats without motors. Excluding sailboats 12 feet and over, which would be registered in Oregon, an estimate of 20 percent non-motorized and non-registered boats seems appropriate for the purpose of projecting the population of these boats in Oregon. Therefore, given the assumption that for every five registered boats there is one non-registered boat, and, that in 1978 there were 124,069 registered boats, an estimate of the total number of non-registered vessels in Oregon at present is 24,814.

Extensive additional research would be required to project the distribution of these non-registered boats throughout the State or to fully describe the overall state-wide use, demographic characteristics or other impacts of non-registered boat use. The registration of these boats would provide a more accurate picture of all boating use in Oregon. If all boats were registered, the triennial survey would then include data on the state-wide use of non-motorized vessels. This data would provide much needed information in regard to boating facilities, law enforcement and safety.

Boat Use

The total amount of non-registered boat use state-wide is unknown, but some use data has been collected or estimated for selected water-ways throughout Oregon. A compilation of this data provides only a partial picture of the use generated by non-registered boats. In the absence of additional research, this data is presented in Table 11 in order to provide estimates

. . . .

United States Coast Guard Recreational Boating in the Continental United States in 1973 and 1976: The Nationwide Boating Survey (Washington, D.C.: March 1978, Report Number CG-B-003-78).

as to the potential magnitude of non-registered use on selected bodies of water.

In recent years, the popularity of non-motorized boating, especially white-water boating in canoes, kayaks, inflatable rafts and drift boats, has increased. A dramatic example of this can be found on the "Wild" section of the Rogue River where non-commercial, non-motorized, boating use during a 100 day period increased 380 percent from 1973 to the same period in 1978 along a 33 mile segment of the river. Combined commercial and non-commercial use doubled during this same period. Percentage increases such as this are also taking place on other popular white-water rivers such as the Deschutes, Owyhee, Snake and others. These increases are of special concern to river resource managers, law enforcement officials and others involved in the protection of river resources and the public's safety.

<u>Selected River Use Data</u>

The information presented in Table 11 was collected through a variety of sources, including the United States Forest Service, the Bureau of Land Management (BLM), and the Oregon State Parks Department. This data was collected for different lengths of river, over varying periods of time and by different reasearch methods, (permits, user surveys, aerial counts, etc.). Therefore, reliable comparisons of use levels between rivers with this data are not possible.

Discussion

Based upon the use statistics from Table 11, it is clear that the use of non-motorized, non-registered boats on selected water-ways is substantial and has greatly increased over the past several years. Non-motorized boating

TABLE 11 NON-REGISTERED BOATING USE ESTIMATES

BODY OF WATER	USE YEAR	VISITORS - V	ISITOR DAYS	SOURCE
CLACKAMAS RIVER	1978		6,000 *	U.S.Forest Service
DESCHUTES RIVER	1975 1978	22,815 (97% 20,540 (12 h		Bureau of Land Mg.
DESCHUTES RIVER	1976	25,974***		Bureau of Land Mg.
ILLINOIS RIVER	1978	189	756	U.S.Forest Service
OWYHEE RIVER (Three Forks-Rome)	1974 1975 1976 1977++ 1978	85 74 84 30 189	323+ 281+ 319+ 114 711	Bureau of Land Mg.
OWYHEE RIVER (Rome-Leslie Gulch)	1974 1975 1976 1977++ 1978	397 483 654 50 800	1,786+++ 2,174+++ 2,943+++ 225+++ 3,581+++	Bureau of Land Mg.
BODY OF WATER	USE YEAR	NON-COMM/COMM	VISITORS	TOTAL USER DAYS#
ROGUE RIVER	1973 1974 1975 1976 1977 1978	1,002 1,736 2,520 3,854 3,197 3,889	3,340 2,908 3,091 3,814 3,278 4,414	4,342 13,026 ⁵ 4,644 13,932 5,611 16,833 7,668 23,004 6,475 19,425 8,303 24,909
SNAKE RIVER ⁶ (Hells Canyon)	1973 1974 1975 1976 1977	1,395 1,586 1,982 2,710 4,555	4,776 7,070 7,755 7,449 7,653	
WILLAMETTE RIVER	1978		·	34,080

Number is for "Boating Days," not Visitor days on these Rivers. Figures are for the Deschutes River from Warm Springs Bridge to Maupin.

^{***} Figures are for the Deschutes River from Sherars Falls to the Mouth.

Figure is an estimate based on an average length of stay of 3.8 days.

⁺⁺ Indicates Low Water Years.

⁺⁺⁺ Figure is an estimate based on an average length of stay of 4.5 days.

Figures are for Non-Commercial and Commercial Visitors and based on

Letter Communication from Estacada Ranger District, Mt. Hood Nat. Forest.

Personal communication with Paul W.Arrasmith, Prineville Dist.Mgr., BLM.

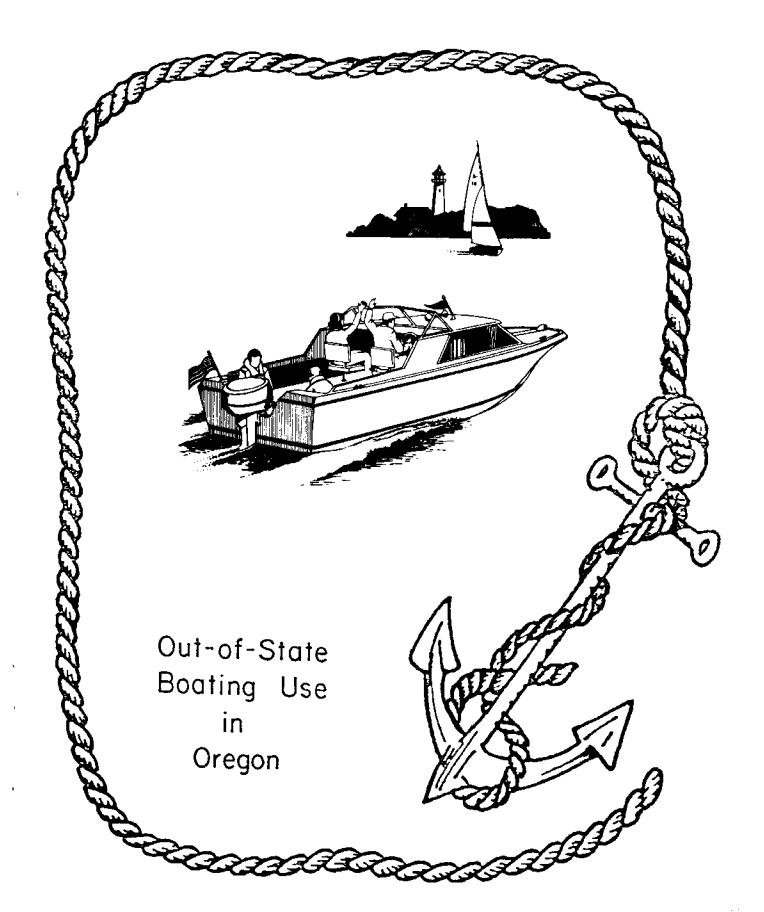
Communication with Mr. Lloyd DeWurff, Siskiyou National Forest. Owyhee River Visitor Statistics, Fearl M. Parker Vale Dist. Mgr., BLM.

Rogue Use Statistics, Siskiyou Nat. Forest and Medford Dist. BLM.

Recreation Use Statistics, Hells Canyon NRA, July 1978, Wallowa-Whitman NF. Based upon aerial user counts on July 8,22, August 2,9,& October 1,1978.

use on the Owyhee, Rogue and Snake Rivers has more than doubled in the last five years. Recently, use regulations have been established for the Rogue to limit use within the 33 mile "Wild" section to a maximum of 12,000 total visitors during the 100 day season. Restrictions on non-motorized boating already exist on portions of the Snake River.

The data presented in Table 11 indicates the popularity of non-motorized boating and the likelihood that it will continue to increase for the forsee-able future. Use statistics are absent or poorly developed for most of Oregon's water-ways on which non-registered boating occurs. The popularity of drift boating, especially for fishing, on Oregon's coastal rivers, such as the Alsea, Siletz, Nehalem, Coquille and others, is known, but reliable use data does not exist. Non-registered boat use of the McKenzie and Umpqua Rivers is also believed to be substantial but is presently undocumented.



OUT-OF-STATE BOATING USE

There is a considerable amount of boating use in Oregon that is generated by out-of-state visitors who transport their boats to Oregon, or travel to the State in their boats. Data on the amount of boating use taking place in Oregon by residents and out-of-state users has been developed by the Pacific Northwest River Basins Commission's (PNRBC), Regional Recreation Data Program for the Northwest. This data program estimated boating activity occasions by means of a computer model which used origins and destinations to project in-state and out-of-state use on a county by county basis. The program defines Boating as,"the recreational use of any type boat or floating device." The PNRBC data for 1975 indicates a state-wide total of 9,799,900 activity occasions of boating in Oregon. Of this, 8,706,700 or 88.8 percent was generated by in-state users, while 1,093,200 occasions or 11.2 percent was generated by out-of-state boaters. The percentages for in-state and out-ofstate use vary considerably when looking at individual counties. Some, especially those bordering other states, where local boating opportunities may be limited, experience a greater percentage of the out-ofstate use. Examples of these latter counties would include Baker, Lake, Clatsop, Curry and Malheur counties.

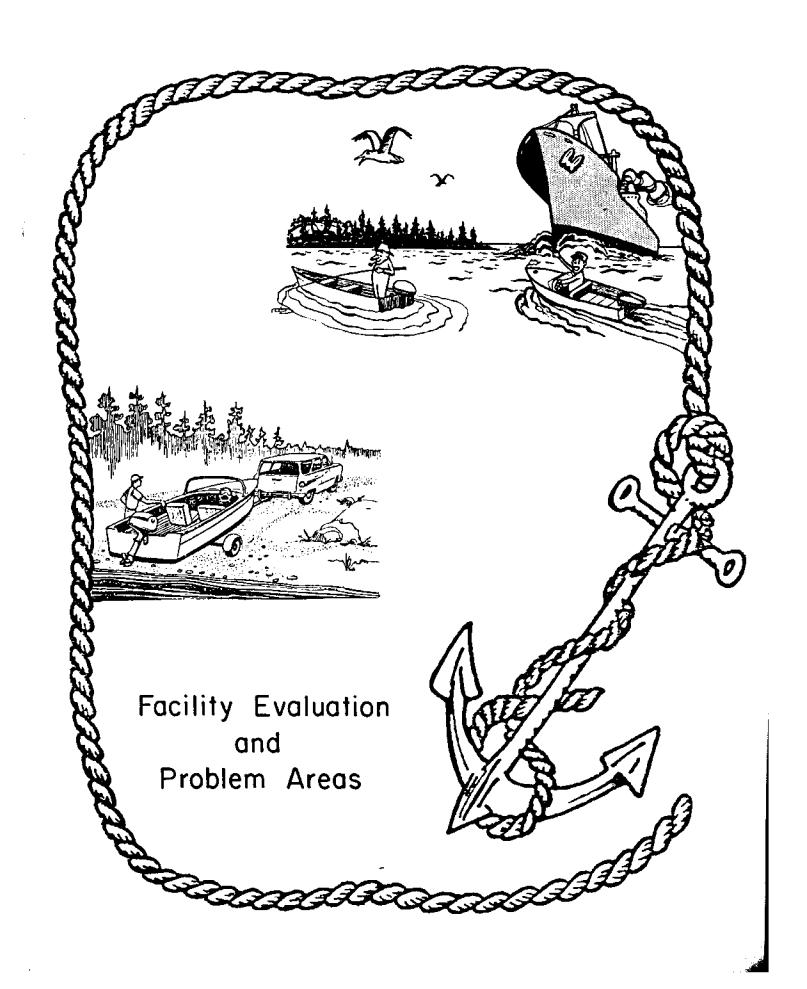
Table 12 presents the boating activity occasions estimated by the PNRBC computer model for 1975. The table indicates total use and the origin of the user by in-state or out-of-state categories.

Pacific Northwest River Basins Commission, Regional Recreation Data Program for the Northwest, June 1975.

² Ibid, p. 53.

TABLE 12
ACTIVITY-OCCASIONS OF BOATING - 1975

COUNTY	TOTAL USE	IN-STATE	PERCENT	OUT-OF-STATE	PERCENT
BAKER	87,000	44,600	50.7	43,200	49.3
BENTON	97,200	93,100	95.8	4,100	
CLACKAMAS	1,504,100	1,443,400	95.9	61,700	4.2 4.1
CLATSOP	83,700	45,000	53.8	38,700	46.2
COLUMBIA	89,000	68,600	77.1	20,400	22.9
COOS	186,200	167,000	89.7	19,200	10.3
CROOK	87,500	61,600	70.4	25,900	29.6
CURRY	101,300	62,000	61.2	39,300	38.8
DESCHUTES	164,100	135,600	82.6	28,500	17.4
DOUGLAS	617,000	567,600	92.0	49,400	8.0
GILLIAM	24,800	6,500	26.2	18,300	73.8
GRANT	47,600	18,200	38.2	29,400	61.8
HARNEY	48,200	23,300	48.3	24,900	51.7
HOOD RIVER	•	12,800	73.1	4,700	26.9
JACKSON	472,100	412,000	87.3	60,100	12.7
JEFFERSON	578,900	509,500	88.0	69,400	12.0
JOSEPHINE	165,500	145,300	87.8	20,200	12.2
KLAMATH	171,300	131,200	76.6	40,100	23.4
LAKE	66,500	28,600	43.0	37,900	57.0
LANĒ	829,300	788,400	95.1	41,200	4.9
LINCOLN	138,700	106,300	76.6	32,400	23.4
LINN	548,000	526,600	96.1	21,400	3.9
MALHEUR	93,100	57,000	61.2	36,100	38.8
MARION	538,100	512,000	95.1	26,100	4.9
MORROW	30,500	8,900	29.2	21,600	70.8
MULTNOMAH	1,765,900	1,733,200	98.1	32,700	1.9
POLK	145,200	131,100	90.3	14,100	9.7
SHERMAN	56,600	21,800	38.5	34,800	61.5
TILLAMOOK	22,900	14,800	64.6	8,100	35.4
UMATILLA	281,900	209,600	74,4	72,300	25.6
UNION	108,400	76,100	70.2	32,300	29.8
WALLOWA	39,100	17,200	44.0	21,900	56.0
WASCO	54,200	43,600	80.4	10,600	19.6
WASHINGTON	180,900	164,700	91.0	16,200	9.0
WHEELER	32,500	11,400	35.1	21,100	64.9
YAMHILL	324,300	308,100	95.0	16,200	5.0
TOTAL	9,799,900	8,706,700	88.8	1,093,200	11.2



FACILITY EVALUATION AND PROBLEM AREAS

As part of the 1978 survey, boaters were asked to designate which of the listed facilities were adequate to meet their boating and personal needs. If they felt all was in order, no response was required. If the facilities were deemed to be inadequate, then the respondent was to indicate the type of facility, the county and the specific body of water involved. Over 40 percent of the respondents found at least one facility that did not meet their standards. Of the total respondents who identified some problem, the largest deficiency was in ramps and parking lots (32.4 percent), closely followed by loading and moorage docks (30.6 percent). A lack of rest rooms affected 21.1 percent and 15.9 percent noted a need for more pump-outs for sanitary systems. The size of the last complaint is an indication of the growing number of boats with onboard self-contained sanitary waste systems. Table 13 lists the bodies of water and the percentage of users that found the facilities inadequate.

A further question asked owners if any of four different problems had been encountered at their favorite boating spot? Almost one third said, "Yes, they had." Of the problems encountered, lack of courtesy by other boaters (40.9 percent), led the list. Approximately half that number (20.5 percent), were bothered by conflicts between one or more additional users of the same body of water. Water pollution problems concerned 19.5 percent of the respondents, while a similar number (19.1 percent), listed a lack or laxity of the enforcement of rules as their perceived problem area. Several comments by respondents dealt with specifics of these and other problem areas. Included is an apparent problem with erratic boat handling that most

boaters attribute to an over indulgence of alcoholic beverages. These comments may be found in Appendix C. Table 14 gives a full listing of those bodies of water where boaters observed or experienced water-related problems.

Note, Tables 13 and 14 reflect raw survey data and are <u>not</u> projected estimates of facilities inadequacies or problem areas. If a body of water was not listed by a respondent, it was not included in the tables. Therefore, no inference should be drawn that there are no problems or that all facilities are fine, if a body of water does not appear in the table.

TABLE 13

REPORTED INADEQUATE FACILITIES BY COUNTY
AND BODY OF WATER, 1978 BOATING SURVEY.

<u> </u>	1370	DON I	1110 201	1761			
			TYPE OF	FACIL	ITY		
# BOATS			DOCKS				ARKING LOTS
0	n	(0)	2 (0)	n	(n)	Λ	(0)
							(25)
	í						(3)
							(19)
							(4)
							(33)
Ť	•	(0)	0 (0)	v	(0)	•	(33)
17	5	(29)	2 (12)	1	(6)	1	(6)
1	ŏ				lai		(ŏ)
	_	,	. (100	, ,	(• /	Ť	()
0	0	(0)	0 (0)	0	(0)	1	(0)
30				ž	75		(20)
				ō			$(\tilde{5})$
			٠,				(11)
				ī			(5)
140							(19)
		• •	(,	_	(-,		(,
97	12	(12)	10 (10)	12	(12)	6	(6)
2	3						(50)
8							(25)
46	2	(4)	0 (0)	ī			(2)
0	0	(0)	1 (0)	2	(0)	2	(0)
4	0	(0)	0 (0)	1	(25)	0	(0)
					•		
	0		0 (0)	2	(40)	0	(0)
						11	(14)
34	2	(5)	1 (3)	2	(6)	3	(9)
				Ō		1	(100)
							(14)
							(18)
							(8)
2			0 (0)				(0)
							(14)
]			(0)
				Ţ			(3)
				Ĭ			(4)
							(50)
48	Z	(4)	0 (0)	3	(6)	0	(0)
40	_	(4)	E /10\	_	1 61	_	
		, ,,,,,	Ph (1 / 1)	71	1 (1)		(0)
49 76	8	(11)	13 (17)	0 5	(0) (7)	4 12	(8) (16)
	# BOATS 0 53 38 54 28 3 17 1 0 30 22 9 20 140 97 2 8 46 0 4 5 78 34 1 49 17 12 2 7 0 30 45 2 48	# BOATS Ri 0 0 0 53 9 38 1 54 4 28 1 3 0 17 5 1 0 0 0 30 4 22 0 9 0 20 1 140 18 97 12 2 3 8 0 46 2 0 0 4 0 5 0 78 14 34 2 1 0 49 8 17 0 12 1 2 1 7 1 0 0 30 1 45 0 2	# BOATS REST ROOMS 0 0 (0) 53 9 (17) 38 1 (3) 54 4 (7) 28 1 (4) 3 0 (0) 17 5 (29) 1 0 (0) 0 0 (0) 30 4 (13) 22 0 (0) 9 0 (0) 20 1 (5) 140 18 (13) 97 12 (12) 2 3 (150) 8 0 (0) 46 2 (4) 0 0 (0) 4 0 (0) 5 0 (0) 4 0 (0) 5 0 (0) 78 14 (18) 34 2 (5) 1 0 (0) 49 8 (16) 17 0 (0) 49 8 (16) 17 0 (0) 49 8 (16) 17 0 (0) 30 1 (8) 2 1 (50) 7 1 (14) 0 0 (0) 30 1 (3) 45 0 (0) 2 0 (0) 2 48 2 (4)	# BOATS REST ROOMS DOCKS 0 0 (0) 2 (0) 53 9 (17) 8 (15) 38 1 (3) 6 (16) 54 4 (7) 10 (19) 28 1 (4) 2 (7) 3 0 (0) 0 (0) 17 5 (29) 2 (12) 1 0 (0) 1 (100 0 0 0 0) 1 (100 0 0 0) 1 (100 0 0) 20 1 (5) 1 (# BOATS REST ROOMS DOCKS SANITAL PUMP PUMP PUMP PUMP PUMP PUMP PUMP PUM	# BOATS REST ROOMS DOCKS SANITARY SYS PUMP - OUTS 0	# BOATS REST DOCKS SANITARY SYS. PAPUMP - OUTS 0

TABLE 13 CONTINUED

COUNTY		· - · · · · · · · · · · · · · · · · · ·	TYPE O	F FACILITY ¹	
BODY OF WATER	# BOATS	REST ROOMS	DOCKS	SANITARY SYS. PUMP - OUTS	PARKING LOTS
CURRY		···			<u> </u>
Chetco Bay	10	0 (0)	4 (40)	0 (0)	4 (40)
Elk River	1	0 (0)	1 (100		1 (100
Garrison Lake	6	1 (17)	0 (0)	´ ĭ (17)	i (17)
Pacific Ocean	84	3 (4)	10 (12)	2 (2)	14 (17)
Roque Diver	36	7 (19)	10 (28)	3 (8)	14 (39)
Other bodies of water ²	0	0 (0)	1 (0)	o (o)	0 (0)
No body of water listed ³	ģ	1 (11)	o (ŏ)	ĭ (ıĭ)	$\tilde{0}$ $(\tilde{0})$
DESCHUTES		. ()	- (0)		0 (0)
Big Lava Lake	12	1 (8)	1 (8)	1 (8)	0 (0)
Crane Prairie Reservoir	64	4 (6)	4 (6)	3 (5)	5 (8)
Cultus Lake	18	o (ō)	4 (22)	1 (6)	4 (22)
Davis Lake	5	o (o)	1 (20)	o (o)	1 (20)
Devils Lake	2	ŏ (ŏ)	0 (0)	ŏ (ŏ)	i (50)
East Lake	84	o (o)	2 (2)	2 (2)	8 (10)
Elk Lake	5	ō (ŏ)	1 (20)	1 (20)	1 (20)
Little Cultus Lake	ž	Ĭ (50)	1 (50)	0 (0)	1 (50)
North Twin Lake	5	i (20)	0 (0)	ŏ (ŏ)	0 (0)
Paulina Lake	59	2 (3)	4 (7)	ĭ (2)	3 (5)
Wickium Reservair	79	4 (5)	5 (6)	i (ī)	6 (8)
No body of water listed ³	27	i (ŏí	ĭ (4)	0 (0)	1 (4)
DOUGLAS	_,	0 (0)	• (•,	0 (0)	1 (4)
Cooper Creek Reservoir	21	0 (0)	2 (10)	0 (0)	2 (10)
Diamond Lake	125	5 (4)	13 (10)		14 (11)
Lemolo Reservoir	8	2 (25)	1 (13)	ŏ (ŏ)	1 (13)
Loon Lake	ğ	ō (ō)	2 (22)	ŏ (ŏ)	2 (22)
Pacific Ocean	37	ŏ (ŏ)	1 (3)	ĭ (3)	0 (0)
Plat I Reservoir	2	ĭ (50)	0 (0)	o (ŏ)	0 (0)
Smith River	ą.	o (ŏ)	ĭ (ii)	ŏ (ŏ)	$\tilde{0}$ (0)
South Umpqua River	9 3	ĭ (33)	0 (0)	ŏ (ŏ)	1 (33)
Tahkentich Lake	8	2 (25)	0 (0)	ŏ (ŏ)	1 (13)
Umpqua River	50	5 (10)	1 (2)	ĭ (ž)	1 (2)
North Fork, Umpqua River	5	2 (40)	0 (0)	o (ō)	i (20)
South Fork, Umpqua River	5	ō ('ō')	ŏ (ŏ)	ŏ (ŏ)	2 (40)
Umpqua River (Tidewater)	3	ŏ (ŏ)	ĭ (33)	ŏ (ŏ)	1 (33)
Winchester Bay	21	2 (10)	4 (19)	3 (14)	2 (10)
HARNEY		- (.0)	. (15)	0 (11)	2 (10)
Krumbo Reservoir	4	0 (0)	1 (25)	0 (0)	0 (0)
Warm Springs Reservoir	3	ĭ (33)	1 (33)	ĭ (33)	1 (33)
HOOD RIVER	- '	- (00)	. (55)	. (00)	. (55)
Columbia River	23	3 (13)	1 (4)	3 (13)	2 (9)
Kingsley Reservoir	7	0 (°0)	i (14)	0 (0)	1 (14)
Lost Lake	3	οζοί	ò (`ò)	i (33)	o (o)
JACKSON		,	- 1 -1	- (/	- (•/
Emigrant Lake	18	1 (6)	4 (22)	0 (0)	2 (11)
Fish Lake	14	i (7)	0 (0)	o (o)	0 (0)
Howard Prairie Reservoir	53	0 (0)	3 (6)	ŏ (ŏ)	1 (2)
		- (-/	- , -/	,	· (-/

TABLE 13 CONTINUED

COUNTY	· · · · · · · · · · · · · · · · · · ·	·	TYPE OI	F FACILITY ¹	44
BODY OF WATER	# BOATS	REST ROOMS	DOCKS	SANITARY SYS. PUMP - OUTS	PARKING LOTS
Hyatt Reservoir Lost Creek Reservoir Rogue River Willow Creek Reservoir ₂ Other bodies of water	19 55 12 11 3	0 (0) 3 (5) 0 (0) 0 (0) 1 (33)	2 (11) 10 (18) 1 (8) 0 (0) 1 (33)	0 (0) 5 (9) 0 (0) 0 (0) 0 (0)	0 (0) 11 (20) 1 (8) 1 (9) 0 (0)
JEFFERSON Deschutes River Lake Billy Chinook Lake Simtustus Olallie Lake Round Butte Reservoir Suttle Lake No body of water listed JOSEPHINE	3 79 2 1 49 22	1 (33) 2 (3) 0 (0) 0 (0) 1 (2) 0 (0) 0 (0)	0 (0) 5 (6) 1 (50) 0 (0) 2 (4) 2 (9) 0 (0)	0 (0) 4 (5) 0 (0) 1 (100) 1 (2) 1 (5) 0 (0)	1 (33) 5 (6) 1 (50) 0 (0) 5 (10) 2 (9) 1 (100)
Illinois River Rogue River Selmac Lake KLAMATH	1 18 5	0 (0) 1 (6) 0 (0)	0 (0) 1 (6) 1 (20)	0 (0) 1 (6) 0 (0)	1 (100) 0 (0) 0 (0)
Agency Lake Crescent Lake Four Mile Lake Gerber Reservoir Hemlock Lake Klamath (upper) Lake Lake of the Woods Lost River Odell Lake Other bodies of water LAKE	7 35 1 13 1 79 24 5 43 5	2 (29) 1 (3) 1 (100) 0 (0) 1 (100) 6 (8) 1 (4) 0 (0) 2 (5) 1 (20)	3 (23)	0 (0) 3 (9) 0 (0) 2 (15) 0 (0) 8 (10) 1 (4) 0 (0) 3 (7) 0 (0)	0 (0) 4 (11) 1 (100) 1 (8) 1 (100) 8 (10) 0 (0) 2 (40) 9 (21) 1 (20)
Dog Lake Drews Lake Hart Lake	12 3 1	0 (0) 2 (67) 1 (100)	1 (8) 0 (0) 0 (0)	0 (0) 0 (0) 0 (0)	1 (8) 0 (0) 0 (0)
LANE Blue River Reservoir Carter Lake Cottage Grove Reservoir Cougar Reservoir Dexter Reservoir Dorena Reservoir Fall Creek Reservoir Fern Ridge Reservoir Hills Creek Reservoir Lookout Point Reservoir McKenzie River Mercer Lake Munsel Lake Pacific Ocean	7 14 12 12 28 20 49 13 1 7 10 1	2 (29) 0 (0) 0 (0) 0 (0) 2 (7) 3 (15) 3 (6) 0 (0) 1 (100) 1 (14) 5 (50) 1 (100) 0 (0)	0 (0) 1 (100) 2 (14) 1 (8) 0 (0) 3 (11) 4 (20) 4 (8) 4 (31) 0 (0) 0 (0) 1 (10) 0 (0) 0 (0)	0 (0) 0 (0) 0 (0) 0 (0) 1 (4) 2 (10) 1 (2) 0 (0) 1 (100) 0 (0) 1 (10) 0 (0)	0 (0) 0 (0) 2 (14) 1 (8) 2 (17) 1 (4) 7 (35) 3 (6) 2 (15) 0 (0) 2 (29) 1 (10) 0 (0) 1 (4)

TABLE 13 CONTINUED

COUNTY		TYPE OF FACILITY 1				
BODY OF WATER	# BOATS	REST ROOMS	DOCKS	SANITARY SYS PUMP - OUTS	. Р	ARKING LOTS
Siltcoos Lake	36) 1 (3)	1 (3)	1	(3)
Siuslaw Bay	3	2 (67		2 (67)	2	(67)
Siuslaw River	44		i) 5 (11)	3 (7)	4	(9)
Triangle Lake	14		0 (0)	0 (0)	2	(14)
Waldo Lake	3 6		1 (33)	0 (0)	0	(0)
Woahink Lake 🥠	6		0 (0)	0 (0)	1	(17)
Other bodies of water ²	5	0 ((1) 0 (0)	1 (20)	0	(0)
No body of water listed	20	1 (5	5) 0 (0)	2 (10)	0	(0)
LINCOLN					_	4 1
Alsea Bay	38	6 (16		0 (0)	5	(13)
Alsea River	27		1 (4)		2	(7)
Depoe Bay	10	7 (70			15	(150)
Devils (D) Lake	44		7 (16)	0 (0)	3	(7)
Eckman Lake	0) 0 (0)	0 (0)	1	(0)
Pacific Ocean	114		6 (5)	0 (0) 6 (5) 0 (0)	10	(9)
Salmon River Bay	2) 1 (50)		1	(50)
Siletz R i ver	34		0 (0)	1 (3)	2	(6)
Yaquina Bay Other bodies of water No body of water listed	109	26 (24		16 (15)	31	(28)
Other bodies of water 3	2	1 (50		0 (0)	0	(0)
No body of water its ted	5	2 (40)) 1 (20)	2 (40)	2	(40)
LINN				- (-)	_	
Big Cliff Reservoir	0) 1 (0)		0	(0)
Big Lake	5 8 5) 2 (40)]	(20)
Clear Lake	8) 2 (25)	0 (0)	1	(13)
Detroit Reservoir) 1 (20)	0 (0)	0	(0)
Foster Reservoir	70		1) 4 (6)	3 (4)	6	(9)
Green Peter Reservoir	28	5 (18		3 (11)	9	(32)
Lost Lake	2)) 1 (50)	0 (0)	1	(50)
Willamette River	14	3 (2)			2	(14)
Other bodies of water ²	Ţ	0 ()) I (100	0 (0)	1	(100)
MALHEUR						
Malheur Reservoir	5	0 (()) 2 (40)	0 (0)	2 5	(40)
Owyhee Reservoir	52		5) 7 (13)		5	(10)
Snake River	20	0 (()) 2 (10)	2 (10)	3	(15)
MARION						
Detroit Reservoir	100		2) 14 (14)	4 (4)	10	(10)
North Santiam River	2)) 1 (50)	0 (_0)	0	(0)
Willamette River	30	4 (13	3) 9 (30)	3 (10)	7	(23)
MORROW	_			- (_	(1
Columbia River	8	2 (29	5) 1 (13)	1 (13)	3	(38)
MULTNOMAH			(10)	00 (3.1)		(20)
Columbia River	230	23 (10			27	(12)
Willamette River 2	180		28 (16)	8 (4)	32	(18)
Other bodies of water 3	3) 1 (33)	0 (0)	2	(67)
NO DODY OF WALER TISLED	6	0 ((0 (0)	1 (17)	0	(0)
rulk				2 / 51	_	/
Willamette River 2	18	3 (17			3	(17)
Other bodies of water ²	3	1 (3	3) 0 (0)	0 (0)	0	(0)

TABLE 13 CONTINUED

COUNTY	· · · · ·	TYPE OF FACILITY ¹							
BODY OF WATER	# BOATS		REST ROOMS	DOCKS		ARY SYS - OUTS	. PARKING LOTS		
SHERMAN									
Columbia River	4	0	(0)	1 (25)	0	(0)	2 (50)		
John Day River	26	Ī	(4)	1 (4)		(ŏ)	1 (4)		
TILLAMOOK						(0 /			
Lake Lytle	6	1	(17)	0 (0)) 0	(0)	0 (0)		
Nehalem Bay	32	1	(3)	1 (3		(6)	ō (ŏ)		
Nehalem River	20	1	(5)	1 (5)		(o)	ī (5)		
Nestucca Bay	10	0	(0)	1 (10)		(0)	1 (10)		
Nestucca River	17	3	(18)	1 (6)		(6)	2 (12)		
Netarts Bay	17	0	(0)	2 (12)		(0)	0 (0)		
Pacific Ocean	54	3	(6)	4 (7)		(4)	7 (13)		
Tillamook Bay	78	7	(9)	13 (17)		(5)	18 (23)		
Wilson River	4	0	(0)	0 (0		(0)	1 (25)		
JMATILLA				, ,		,	,,		
Columbia River	35	3	(9)	5 (14)	4	(11)	1 (3)		
Indian_Lake	6	1	(17)	0 (0)	0	(0)	0 (0)		
McKay Reservoir	14	7	(50)	2 (14)	4	(29)	5 (36)		
UNION							• •		
Morgan Lake	_7	0	(0)	0 (0)	1	(14)	0 (0)		
Thief Valley Reservoir 3	1 1	1	(9)	1 (9)	1	(9)	0 (0)		
No body of water listed	3	0	(0)	0 (0)	1	(33)	0 (0)		
VALLOWA									
Snake River	5	7	(20)	1 (20)		(20)	0 (0)		
Wallowa Lake	73	3	(4)	5 (7)	2	(3)	4 (5)		
IASCO	_								
Clear Lake	0	1	(0)	0 (0)		(0)	0 (0)		
Columbia River	46	9	(20)	9 (20)		(15)	10 (22)		
Deschutes River	6	2	(33)	0 (0)		(0)	2 (33)		
Frog Lake	1	0	(0)	0 (0)		(0)	1(100)		
Pine Hollow Reservoir	8	3	(38)	1 (13)	2	(25)	1 (13)		
ASHINGTON		_							
Haag Lake	69	1	(1)	1 (1)		(0)	I (1)		
Scoggins Lake	8	0	(0)	1 (13)	2	(25)	1 (13)		
/AMHILL	7.0		>		_				
Willamette River	18	Ì	(6)	2 (11)	1	(6)	6 (33)		
TATE OF IDAHO	10	0	(0)	1 (10)	1	(10)	0 (0)		
TATE OF WASHINGTON	90	ž	(ž)	2 (2)	ż	(2)	2 (2)		
TATE OF NEVADA	Ö	ō	(ō)	ī (ō)	ō	(ō)	0 (0)		
NKNOWN	Ō	Ž	(ō)	8 (ŏ)	15	(ŏ)	9 (0)		
OTALS	4,660	375		• •					
VINES	4,000	3/3	(8)	544 (12)	283	(6)	576 (12)		

The number in parenthesis is the percentage of boats using the body of water whose owners complained of the inadequacy, e.g., Brownlee Reservoir was used by 53 respondents, 9, or 17 percent, complained about inadequate rest rooms. If NO boats actually used the body of water but respondents complained of inadequacies then numbers will appear, but the one in parenthesis will be zero, e.g., Anthony Lakes had no boats but two respondents complained of inadequate docks, this equals a percentage of zero (0), as shown.

Respondents identified a county and listed a body of water other than those presently categorized as useable bodies of water.

 $^{^{3}}$ Respondents identified the county but did not list a body of water.

TABLE 14

REPORTED PROBLEM AREAS BY COUNTY AND

BODY OF WATER 1978 BOATING SURVEY

COUNTY				T	YPE OF	PROB	LEM		
BODY OF WATER	# BOATS		ATER LUTION		USER NFLICT		ORCEMENT F RULES		CK OF URTESY
BAKER Brownlee Reservoir Phillips Reservoir Snake River Unity Reservior BENTON	53 38 54 28	4 0 3 0	(8) (0) (5) (0)	5 1 1 0	(9) (3) (2) (0)	8 1 3	(15) (3) (6) (4)	6 0 3 3	(11 (0 (6
Willamette River	17	2	(12)	1	(6)	0	(0)	1	(6
CLACKAMAS Clackamas River Estacada Lake Lake Oswego North Fork Reservoir Timothy Lake Willamette River No body of water listed ² CLATSOP	30 1 22 9 20 140 3	1 0 2 0 0 12 0	(3) (0) (9) (0) (0) (9)	2 0 2 0 1 18 1	(7) (0) (9) (0) (5) (13) (13)	2 0 1 0 2 15 0	(7) (0) (5) (0) (10) (11) (0)	7 1 4 1 2 31	(23)
Coffenbury Lake Columbia River Cullaby Lake John Day River Pacific Ocean Young's River COLUMBIA	7 97 10 2 46 4	0 5 0 1 0	(0) (4) (0) (50) (0) (0)	0 3 0 0 1 0	(0) (3) (0) (0) (2) (0)	1 1 1 1 0	(100) (1) (10) (50) (2) (0)	1 6 1 0 6 2	(100 (6 (10 (0) (13 (50
Columbia River Willamette River COOS	78 34	15 1	(19) (3)	4 1	(5) (3)	3	(4) (3)	8 4	(10) (12)
Coos Bay Coos River Coquille River Coquille Middle Fork Eel Lake North Ten Mile Lake Pacific Ocean South Ten Mile Lake ROOK	49 17 12 5 7 30 45 48	2 4 4 2 0 2 2 4	(4) (24) (33) (40) (0) (7) (4) (8)	1 2 1 0 0 4 1 2	(2) (12) 8 (0) (0) (13) (2) (4)	0 1 0 0 1 0	(0) (6) (0) (0) (14) (0) (2) (2)	1 1 0 0 8 3	(2) (6) (8) (0) (27) (7) (15)
Ochoco Reservoir Prineville Reservoir URRY	49 76	1 0	(2) (0)	0 13	(0) (17)	1 8	(2) (11)	1 13	(2) (17)
Chetco Bay Garrison Lake Pacific Ocean Rogue River ESCHUTES	10 6 84 36	0 1 10 0	(0) (17) (12) (0)	3 0 4 2	(30) (0) (5) (6)	2 0 0 3	(20) (0) (0) (8)	5 0 5 8	(50) (0) (6) (22)
Big Lava Lake Crane Prairie Reservoir Cultus Lake Deschutes River Devils Lake East Lake Little Cultus Lake Paulina Lake Wickiup Reservoir No body of water listed DUGLAS	12 64 18 24 2 84 2 59 79 27	1 2 0 0 0 0 0 0	(8) (3) (0) (0) (0) (0) (0) (0)	0 1 0 3 0 1 0 0 2 0	(0) (2) (0) (13) (0) (1) (0) (3) (0)	0 4 1 0 1 4 1 0 1	(0) (6) (6) (0) (50) (5) (50) (1) (1)	0 1 0 3 0 4 0 4 3 0	(0) (2) (0) (13) (0) (5) (0) (7) (4)
Cooper Creek Reservoir Diamond Lake Elbow Lake Lemolo Reservoir Loon Lake	21 125 0 8 9	2 6 1 1 0	(10) (5) (0) (13) (0)	6 1 0 1	(29) (1) (0) (13) (0)	4 7 0 2 0	(19) (6) (0) (25) (0)	12 10 0 1	(57) (8) (0) (13) (11)

TABLE 14 CONTINUED

COUNTY			TYPE OF	PROBLEM	
BODY OF WATER	# BOATS	WATER POLLUTION	USER CONLFICT	ENFORCEMENT OF RULES	LACK OF COURTES
Pacific Ocean	37	1 (3)	3 (8)	1 (3)	5 (14)
Smith River	9	2 (22)	0 (0)	0 (0)	0 (0
Tahkentich Lake	_8	0 (0)	0 (0)	1 (13)	0 (0
Umpqua River	50	2 (4)	1 (2)	4 (8)	4 (8
Umpqua River, North Fork	5	1 (20)	0 (0)	0 (0)	0 (0
Umpqua, Tidewater (River)	3 21	0 (0) 3 (14)	0 (0)	0 (0) 4 (14)	1 (33
Winchester Bay Other bodies of water ³	1	3 (14) 1 (100)	0 (5)		7 (33
ARNEY	•	1 (100)	0 (0)	0 (0)	0 • (0
Warm Springs Reservoir	3	0 (0)	1 (33)	0 (0)	0 (0
OOD RIVER				• •	,
Columbia River	23	0 (0)	2 (9)	2 (9)	0 (0
ACKSON	3.0				
Emigrant Lake	18	2 (11)	2 (11)	1 (6)	3 (17
Fish Lake Koward Prairie Reservoir	14 53	1 (7) 0 (0)	0 (0) 3 (6)	0 (0)] (7
Hyatt Reservior	33 19	1 (5)	0 (0)	1 (2) 1 (5)	4 (8 0 (0
Lost Creek Reservior	55	5 (9)	6 (11)	6 (ìi)	8 (15
Roque River	ĩž	ĭ (á)	2 (17)	0 (0)	i (8
Willow Creek	ii	ó (ŏ)	î `(9)	ĭ (ĕ)	o }∂
EFFERSON		- (-/	, (-,	. (-)	
Haystack Reservoir	15	0 (0)	0 (0)	1 (7)	3 (20
Lake Billy Chinook	79	4 (5)	6 (8)	3 (4)	16 (20
Suttle Lake	22	0 (0)	3 (14)	0 (0)	2 (9
Lake Simtustus	2	0 (0)	0 (0)	0 (0)	1 (50
Round Butte Reservoir	4 9	2 (4)	6 (12)	9 (18)	10 (20
OSEPHINE Paris Disease	10	1 (6)	1 /61	0 (11)	2 /33
Rogue River LAMATH	18	1 (6)	1 (6)	2 (11)	3 (17
Agency Lake	7	3 (43)	0 (0)	0 (0)	0 (0
Crescent Lake	35	0 (0)	1 (3)	0 (0)	3 (9
Davis Lake	ĭ	ŏ łŏś	ò löi	ĭ (10ŏ)	1 (1Ò0
Gerber Reservoir	13	o (o)	0 (0)	0 \ (0)	i ` (8
Hemlock Lake	ì	7 (1do)	0 (0)	0 (0)	1 (100
Klamath Lake (Upper)	79	23 (29)	8 (10)	6 (8)	6 (8
Lake of the Woods	24	0 (0)	$\frac{1}{1}$ (4)	3 (13)	1 (4
Lost River	.5	2 (40)	0 (0)	1 (20)	0 (0
Odell Lake	43	1 (2)	0 (0)	0 (0)	3 (7
Sprague Lake	4	0 (0)	1 (25)	0 (0) 0 (0)	0 (0 2 (40
Other bodies of water AKE	5	0 (0)	1 (20)	0 (0)	2 (40
Ana Reservair	3	0 (0)	0 (0)	0 (0)	1 (33
Dog Lake	12	ĭ (8)	0 (0)	ŏ (ŏí	0 (0
Drews Lake	3	0 (0)	1 (33)	o 205	0 (0
Goos Lake	1	1 (100)	0 (0)	a (o)	0 (0
Thompson Valley Reservoir	3	1 (33)	0 (0)	0 (0)	0 (0
ANE	_	. (2.55)	. (0)	A (A)	
Collard Lake	.1	1 (100)	0 (0)	0 (0)	0 (0 3 (21
Cottage Grove Reservoir	14	0 (0)	1 (7) 3 (25)	2 (14) 0 (0)	
Cougar Reservoir	12 12	0 (0) 0 (0)		0 (0) 2 (17)	2 (17
Dexter Reservoir Dorena Reserver	28	0 (0)	0 (0) 4 (14)	ā {ii}	2 (1) 5 (18
Fall Creek Reservior	20	ĭ (5)	7 (35)	ž (10)	5 {2
Fern River Reservior	49	4 (8)	8 (16)	7 (14)	12 (24
Hills Creek	13	i (8)	i (8)	2 (15)	2 (19
McKenzie River	. 7	0 (0)	0 (0)	ō `(ō)	2 (2)
Mercer Lake	10	1 (10)	2 (20)	0 (0)	3 (30
Pacific Ocean	25	i '(4)	0 (0)	1 (4)	1 (4
Siltcoos Lake	36	0 (0)	1 (3)	1 (3)	2 (
Siuslaw Bay	3	2 (67)	0 (0)	1 (33)	0 (0
Siuslaw River	44	6 (14)	0 (0)	3 (7)	6 (14
Sutton Lake	5	0 (0)	0 (0)	0 (0)	1 (20
Triangle Lake	14	0 (0)	0 (0)	0 (0)	3 (2)
Willamette River (Main Fork)	3	1 (33)	0 (0)	0 (0)	0 (0
Willamette River (Middle Fork)	0	1 (0)	0 (0)	0 (0)	0 (0

TABLE 14 CONTINUED

COUNTY				TY	PE OF	PROBLI	EM	_	
BODY OF WATER	# BOATS		TER UTION		JSER NFLICT		RCEMENT RULES		K OF IRTESY
Woahink Lake No body of water listed LINCOLN	6 20	0	(0) (5)	0	(0) (0)	0	(0) (0)	1 2	(17) (10)
Alsea Bay Alsea River Depoe Bay Devils (D) Lake Pacific Ocean Salmon River Bay Siletz River Yaquina Bay Yaquina River Other bodies of water LINN	38 27 10 44 114 2 34 109 4	0 0 4 5 1 1 1 8 1	(0) (0) (40) (11) (50) (3) (7) (25) (0)	1 2 4 7 2 0 1 11 0	(3) (7) (40) (16) (2) (0) (3) (10) (0)	0 2 0 6 2 0 2 12 0	(0) (7) (0) (14) (2) (0) (6) (11) (0) (0)	4 3 5 9 7 0 2 23 0	(11) (11) (50) (20) (6) (0) (6) (21) (0) (50)
Big Lake Clear Lake Detroit Reservoir Foster Reservior Green Peter Reservior North Santiam River Santiam River Smith Reservior South Santiam River Willamette River	5 8 5 70 28 0 1 3 0	0 0 1 2 1 0 0 0	(0) (0) (20) (3) (4) (0) (0) (0) (0)	0 0 2 4 0 0 1 0 0	(0) (0) (40) (6) (0) (0) (100) (0) (7)	1 0 0 2 1 0 0 0	(20) (0) (0) (3) (4) (0) (0) (0)	0 1 1 12 4 1 0 1 0 2	(0) (13) (20) (17) (14) (0) (33) (0) (14)
MALHEUR Bully Creek Owyhee Reservior Snake River	10 52 20	0 1 2	(0) (2) (10)	1 3 0	(10) (6) (0)	2 3 0	(20) (6) (0)	2 4 1	(20) (8) (5)
MARION Detroit Reservior North Santiam River Santiam River Willamette River Other bodies of water MORROW	100 2 1 30 6	9 0 0 3 1	(9) (0) (0) (10) (17)	4 1 0 0 0	(4) (50) (0) (0) (0)	4 0 0 3 0	(4) (0) (0) (13) (0)	15 1 1 3 0	(15) (50) (100) (10) (0)
MULTNOMAH	8	2	(25)	1	(13)	1	(13)	2	(25)
Columbia River Willamette River POLK	230 180	19 11	(8) (6)	18 21	(8) (12)	23 16	(10) (9)	52 30	(23) (17)
Willamette Other bodies of water SHERMAN	18 3	1	(6) (33)	4 0	(22) (0)	1 0	(6) (0)	2 0	(11) (0)
John Day River TILLAMOOK	26	1	(4)	0	(0)	2	(8)	3	(12)
Nehalem Bay Nehalem River Nestucca River	32 20 17	2 1 1	(6) (5) (6)	0 0 0	(0) (0) (0)	0 0 1	(0) (0) (6)	1 1 2	(3) (5) (12)

TABLE 14 CONTINUED

COUNTY		TYPE OF PROBLEM							
BODY OF WATER	# BOATS		TER UTION		SER IFLICT		RCEMENT RULES		K OF RTESY
Netarts Bay	17	0	(0)	0	(0)	0	(0)	1	(6)
Pacific Ocean	54	0	(0)	5	(9)	2	(4)	7	(13)
Tillamook Bay	7 <u>8</u>	0	(0)	3	(4)	4	(5)	8	(10)
Trask River	1	0	(0)	0	(0)	0	(0)		(100)
Wilson River	4	0	(0)	1	(25)	0	(0)	0	(0)
JMATILLA	_								
Columbia River	35	3	(3)	0	(0)	1	(3)	4	(11)
McKay Reservoir	14	2	(14)	1	(7)	0	(0)	0	(0)
JNION									
Grande Ronde	0	1	(0)	0	(0)	0	(0)	0	(0)
Thief Valley Reservoir	11	0	(0)	0	(0)	1	(9)	1	(9)
Other bodies of water	8	0	(0)	1	(13)	1	(13)	2	(25)
WALLOWA									
Snake River	5	0	(0)	1	(20)	0	(0)	1	(20)
Wallowa Lake	73	4	(5)	7	(01)	7	(10)	11	(15)
WASCO			. ,		• •		, ,		` '
Columbia River	46	6	(13)	2	(4)	1	(2)	6	(13)
Deschutes River	6	7	(17)	1	(17)	1	(17)	1	(17)
Pine Hollow Reservoir	8	0	(0)	2	(25)	1	(13)	2	(25)
Other bodies of water	0	0	(0)	0	`(o)	Ó	`(o)	ī	(0)
WASHINGTON					• •		• •		` '
Haag Lake	69	1	(1)	4	(6)	7	(10)	7	(10)
Scoggins Lake	8	0	(0)	0	(o)	1	(13)	Ō	(0)
YAMHILL					` '		• •	·	
Willamette River	18	1	(6)	2	(11)	1	(6)	2	(11)
Idaho	10	0	(0)	0	(0)	1	(10)	0	(0)
Washington	90	3	(3)	1	(1)	1	(1)	2	(2)
California	20	1	(5)	0	(0)	0	(0)	0	(0)
Unknown	0	3	(0)	2	(0)	0	(0)	7	(0)
Total	4,636	277	(6)	290	(6)	271	(6)	580	(13)

The number in parenthesis is the percentage of boats using the body of water whose owners complained of the problem, e.g., Brownlee Reservoir was used by 53 respondents, 8 or 15%,, felt there was a lack of the Enforcement of Rules. If no boats actually used the body of water but respondents said there was a problem then numbers will appear but the one in parenthesis will be zero, e.g., Elbow Lake had no boats using it but one respondent complained of water pollution, this equals a percentage of zero (0) as shown.

Respondents identified this county but did not list a body of water.

Respondents identified a county and listed a body of water other than those presently categorized as useable bodies of water.



BOATING SAFETY AND LAW ENFORCEMENT

Accidents

Fishing, pleasure boating and water-skiing rank as the 5th, 6th and 7th most popular forms of outdoor recreation in Oregon. It is probable that these activities account for over 12 million activity occasions annually. Available statistics show that 27 percent of the State's population participates in motorized boating with an additional 15 percent participating in non-motorized boating. Unfortunately, these boaters are vulnerable to the possibilities of a serious accident which could damage property and injure people. 1978 statistics of the OSMB, list 125 "reported" boating accidents within Oregon. The results were 25 fatalities, 31 non-fatal injuries and over one-half million dollars in property damage. These accidents involved 140 boats and 386 people. Comparable data on accidents since 1975 are listed in Table 15.

TABLE 15 3

REPO	RTED BOATING ACCID	ENTS IN O	REGON FROM OSMB	DATA FILES
YEAR	TOTAL NUMBER OF REPORTED ACCIDENTS		SONS HURT NON-FATAL INJURIES	PROPERTY DAMAGE
1975	125	36	38	\$198,600
1976	147	41	38	\$208,600
1977	113	23	32	\$ 96,100
1978	125	25	31	\$550,000

¹ State-wide Comprehensive Outdoor Recreation Plan, (SCORP), State Parks and Recreation Branch, Oregon Department of Transportation, 4th Ed. 1978,

Only those accidents involving an injury, fatality or more than \$100.00 in property damage are required to be reported.

Source: Data files, Oregon State Marine Board for 1978.

The table reveals that the number of accidents remained near an average of 127. However, property damage has followed a roller coaster path ending the four year period at more than double the 1975 costs. Fortunately, the fatality rate has tended to decline. One reason for the 43 percent drop between 1976 and 1977 was the curtailment of boating activity brought about by the drought. In addition, an intensive safety education campaign was mounted at that time by various State agencies. This effort was primarily directed toward those boaters that were using the Oregon coast, as their numbers were expected to increase above normal as the drought affected water levels on inland waterways.

It must be emphasized that the data in the table reflects only reported accidents! Many accidents go unreported as they might cast doubt on the operator's seamanship. However, boat owner responses, to questions asked in the latest survey, indicate that it is highly probable that over 5,800 of the State's pleasure boats were damaged, in some way, while in operation during the 1977-1978 season, (see Table 2).

Assistance and Law Enforcement

Questions were also asked concerning other areas of marine safety services and various law enforcement agencies. When asked if their boats had received assistance of any kind, (e.g. towing, fuel, emergency repairs, etc.), over 80 percent indicated they had not received or needed assistance, 2.0 percent did not respond and 18.0 percent did get help. The needed assistance came from other boaters (49.9 percent), the United States Coast Guard (25.8 percent), Sheriff's Marine Patrol (6.3 percent) and other or non-specified agencies (6.4 percent). Multiple

responses to the question accounted for the remaining 11.6 percent. 4

Projections of the returns are inconsistent as to the effectiveness and efficiency of law enforcement activities throughout the State. It appears that boaters do not know, or at least do not remember, when they have been stopped or checked for compliance with Federal or State Laws. In fact, only 10.9 percent admitted that they had been stopped or checked at all. This does not correlate with the reports of most law enforcement agencies. The only agency with similar data to that from the survey was the United States Coast Guard. This would point to the conclusion that the average boater remembers vividly being stopped by the Coast Guard but quickly forgets having been the subject of other law enforcement activity or their conversations with a passing Sheriff's Patrol. Almost one-fourth (24.5 percent), of Oregon's boaters do remember however, that they were provided safety or educational material by law enforcement personnel during the last boating season. 4

Safety

A most important facet of marine safety is the condition of the boat being used. Estimates from the survey indicate that 12,548 Oregon boats were given Free Courtesy Motorboat Examinations during 1977-1978. As in 1975, the number approximates ten percent of the registered boats in the State. 4

During the three years preceeding the close of the 1978 survey, 19.7 percent of Oregon's pleasure boaters completed a course in boating skills or safety from one or more agencies. While many respondents indicated that they had not taken courses from certain agencies or did

⁴ Appendix I contains county response projections of all safety and law enforcement related questions by county of registration.

not respond to the question, 37.9 percent specifically noted that they had taken absolutely no courses of any kind. Of those taking courses, Basic Boating from the Coast Guard Auxiliary was the most popular (22.6 percent). For further details on courses and agencies see Appendix I which gives county levels for each type of course and their sponsors.

Two questions in the survey (18 and 19), were asked to test boater reaction and usefulness of the knowledge learned from the safety courses they attended and the Boater's Handbook that is prepared and distributed by OSMB. Of the boaters taking courses, 63.6 percent thought they were very helpful, 28.3 percent said they were useful, 6.3 percent considered them somewhat useful and 1.8 percent indicated that they were not useful. In response to the question on their familiarity and usefulness of the handbook, respondents said they were familiar with it (61.3 percent), were not familiar with it (24.2 percent) or failed to respond (14.5 percent). If they were familiar with the handbook, they thought it was very useful or useful (78.1 percent), somewhat useful (15.4 percent), considered it to be not useful at all (1.3 percent) or did not indicate its usefulness to them (5.2 percent). Table 16 lists county of registration response projections as to the utility of courses taken and the usefulness of the Oregon Boaters Handbook.

TABLE 16

OREGON PLEASURE BOAT OWNER'S REACTIONS, BY COUNTY OF REGISTRATION,
TO SAFETY COURSES TAKEN BETWEEN 1975 AND 1978, AND
THE "OREGON BOATERS HANDBOOK."

		UTILITY	OF SAFETY			ION/UTILI	TY OF HAN	DBOOK
COUNTY	VERY		SOMEWHAT	NOT	VERY		SOMEWHAT	NOT
	USEFUL	USEFUL	USEFUL	USEFUL	USEFUL	USEFUL	USEFUL	USEFUL
BAKER	19	0	0	0	125	202	38	29
BENTON	324	20	40	0	486	648	263	20
CLACKAMAS	1,130	445	171	0	1,644	3,425	1,028	34
CLATSOP	146	0	18	0	310	401	55	18
COLUMBIA	169	63	0	0	422	528	127	84
COOS	397	244	0	0	978	1,589	458	0
CROOK	24	24	0	12	95	202	47	0
CURRY	208	59	0	15	475	371	74	15
DESCHUTES	220	88	0	0	571	7,119	483	0
DOUGLAS	663	199	33	66	829	1,524	56 3	166
GILLIAM	16	0	0	0	16	27	0	0
GRANT	0	0	0	0	29	105	10	0
HARNEY	19	0	0	0	37	111	19	0
HOOD RIVER	28	0	0	0	101	147	55	0
JACKSON	371	148	74	74	1,372	2,002	853	74
JEFFERSON	33	0	0	0	89	189	22	0
JOSEPHINE	108	27	54	0	758	515	190	0
KLAMATH	314	290	0	0	917	1,400	459	24
LAKE	11	0	0	0	32	74	42	0
LANE	983	546	73	73	2,402	4,076	1,565	109
LINCOLN	242	132	22	0	703	747	154	0
LINN	364	260	0	0	859	1,197	390	52
MALHEUR	120	45	0	0	239	388	60	0
MARION	881	315	94	0	1,667	2,076	1,007	63
MORROW	11	0	11	0	55	55	11	11
MULTNOMAH	2,904	1,385	313	45	3,932	6,345	1,564	134
POLK	81	101	20	0	363	363	283	Ò
SHERMAN	5	0	0	Õ	0	23	14	ŏ
TILLAMOOK	179	107	54	Ō	268	464	232	ŏ
UMATILLA	194	54	0	Ō	468	468	144	18
UNION	9	9	Ŏ	ğ	107	223	72	Ö
WALLOWA	9	Ŏ	17	Ö	9	103	69	ŏ
MASCO	80	18	9	ğ	133	284	80	ŏ
MASHINGTON	903	328	41	ó	1,190	2,709	534	82
VHEELER	0	0	0	ŏ	2	27	0	0
YAMHILL	177	15Ž	7 č	ŏ	203	709	228	25
TOTALS	11,346	5,059	1,120	321	21,886	34,836	11,193	958

GLOSSARY

- Activity Occasion one individual participating in one recreational activity during any reasonable portion or all of one day.
- Boat Day one boat being involved in a boating activity for any portion of a 24 hour period. Also, Boating Day.
- Boat Owners those individuals who own a pleasure boat registered with the Oregon State Marine Board. Also, Boaters.
- Boating Population the aggregate of all registered pleasure boat owners in Oregon from which the 1978 survey was drawn.
- Boating Season a 12 month period beginning I September of any year and continuing through 31 August of the following year. This conforms to the guidelines for conducting the 1978 boating survey. Also, Boating year.
- County of Registration the County listed by the principal owner, on Form 250LA-1, when the boat was registered with the Marine Board.
- <u>Exporters</u> counties that lose more of their own boats and people to other counties for boating activities than they gained from the other counties.
- Importers counties that gain more boats and people from other counties that they lose to them for boating activities.
- Launch Facility any designated area from which watercraft may be put into or retrieved from the water. Often it is an inclined surface or ramp leading to the water allowing trailered boats to be floated without the necessity of a lifting device.
- <u>People Day</u> is one person being in a boat while it is involved in a boating activity for any portion of a 24 hour period. Also, an activity occasion.
- Registered Boat a vessel which has been issued a certificate of number by the Oregon State Marine Board. All motorized pleasure vessels and sailboats, 12 feet and over, are required to obtain a certificate of number.
- <u>Sample</u> the percentage of the boating population of a county, or the entire State, that were selected to take part in the 1978 boating survey.
- <u>Watercraft</u> is any object capable of being used as a means of transportation on the water, but does not include aircraft equipped to land on water, boathouses, floating homes, air matresses, beach toys or single inner tubes.

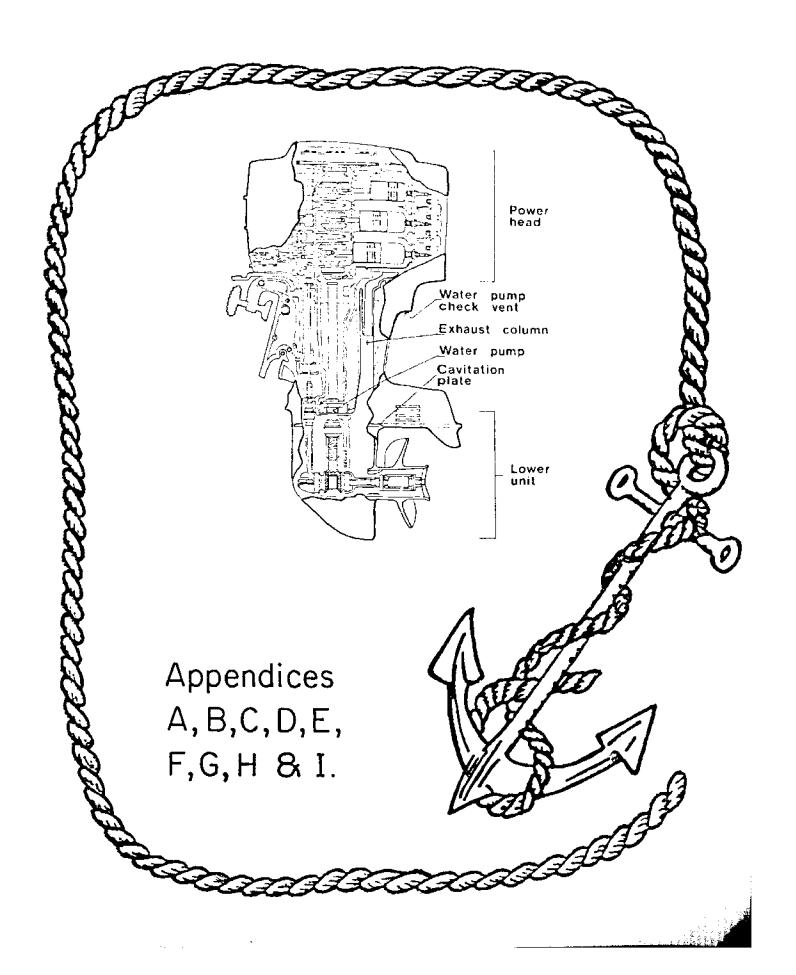
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APPENDIX A

SURVEY PROCEDURES

Population to be Surveyed

In compliance with ORS 488.833, the overall population to be surveyed consisted of those persons engaged in boating activities within the State of Oregon during the period, 1 September 1977 to 31 August 1978. To provide the highest degree of accuracy the population was narrowed to the principal owners of those watercraft, officially described as being used as pleasure boats, currently registered with the State Marine Board. Fiscal restraints limited the sample to those owners with Oregon mailing addresses. The names and addresses used were taken from the State of Oregon computer tapes for the OSMB as of 1 August 1978.

Selection of Survey Participants

Participants were selected from the total population using a modification of the method used in the 1975 OSMB survey, along the lines suggested by Dr. Lyle D. Calvin, Director, Survey Research Center, Oregon State University (OSU). The modifications were necessary to insure a reasonable level of reliability and an accurate overview of statewide boating activities when utilizing a voluntarily returned questionnaire as the survey base. Therefore, the counties were divided into three categories. "A" consisted of those counties with 1,000 or less registered boats. "B" counties had between 1,000 and 5,000 registered boats. "C" counties were those with more than 5,000 registered boats. See Figure 9 and its accompanying data for further information.

Following the division into categories, the questionnaires were

sent to owners within the counties by a formula derived from the number to be sent and the total number of registered boats in the county. As an example, Sherman County has 76 registered boats and it was assigned 50 questionnaires, this resulted in approximately two out of three of the county's owners receiving a questionnaire. In neighboring Wasco County, one out of every four owners received questionnaires. In all, 11,995 questionnaires were mailed out. Only five were returned as undeliverable. Although not a "true" random sample, it will be assumed to be so for all statistical analyses that appear in this puplication.

Construction of Questionnaire

The survey questionnaire was constructed utilizing a design favored by R. Charles Vars, Jr., Professor of Economics, OSU. The questions were worded and positioned so as to minimize biases and to provide maximum information for a thorough assessment of boaters, their activities and how well the OSMB is accomplishing its assigned tasks. The questions evolved out of several discussion sessions with the OSMB Staff, the OSU Research Survey Center personnel and consultation with the project advisor. There was no pre-test sample of the questionnaire.

Mailing and Follow-Up

The questionnaires were bulk-mailed from Corvallis, Oregon on 23

August 1978 to each participant in a sealed envelope and a postcard followup message was sent on 8 September 1978. Examples of both are in Appendix

B. Every effort was made to preclude address mistakes and to comply with
current United States Postal Service directives. However, from letters
received by OSMB, as a result of the follow-up post card, it can be assumed
that a number of questionnaires did not reach their destination. Other

contributing factors to the lowered response rate would include the facts that: Bulk mail is not normally forwarded or returned; There had been a drought the previous year; There were shifts in the age groupings of Oregon boaters; There was a prevailing mood of rejecting any questioning of personal facts by any governmental agency at the time the questionnaires were mailed out. This last fact can be seen by a quick glance at the comments made by the respondents in Appendix C. A total response rate of 36 percent for the State resulted. For county rates of response, see Table 1. The rate is little more than half the rate of response to the 1975 survey but compares almost precisely with a somewhat similar survey conducted between 30 November 1977 and 28 February 1978, "Recreational Boating in Western Oregon." Without further follow-up, such as additional mailing of questionnaires, telephone surveys or more expensive survey techniques, it is doubtful that the response rate could have been substantially increased.

Reception and Processing

All returned questionnaires were received by the OSU Research Survey Center from the Postal Service and were periodically forwarded to the School of Oceanography for processing. Each questionnaire was manually coded and reduced to optical scanning sheets, (4,359 questionnaires, each requiring two sheets). They were subsequently converted to magnetic tape by the Data Reduction Center of the University of Oregon. A specialized computer program developed by Robert N. Falotico of EG&G Idaho, and Mike Drost OSU Computer Center, was utilized in changing the raw data into useable and logically correct information. This information was analyzed

with assistance from the Staff of the Department of Statistics, OSU. but all resultant conclusions and analysis are the responsibility of the principal investigator.

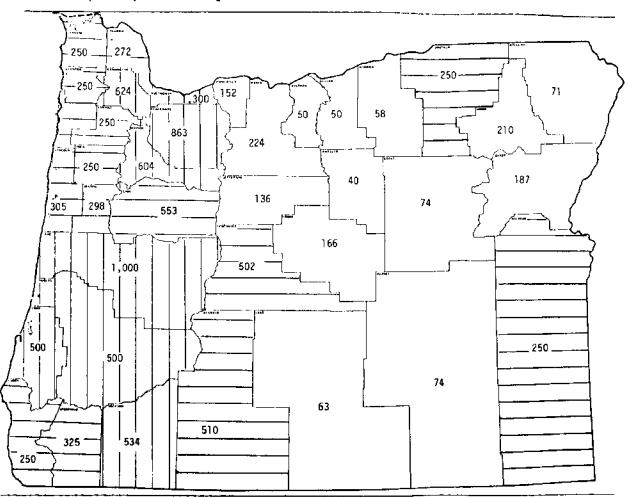


FIGURE 9 County variation in questionnaire distribution.

TOTAL QUESTIONNAIRES SENT OUT - 11,995 TOTAL REGISTERED BOATS - 118,465

Group (A) - 1,000 or less boats - 25% Sample

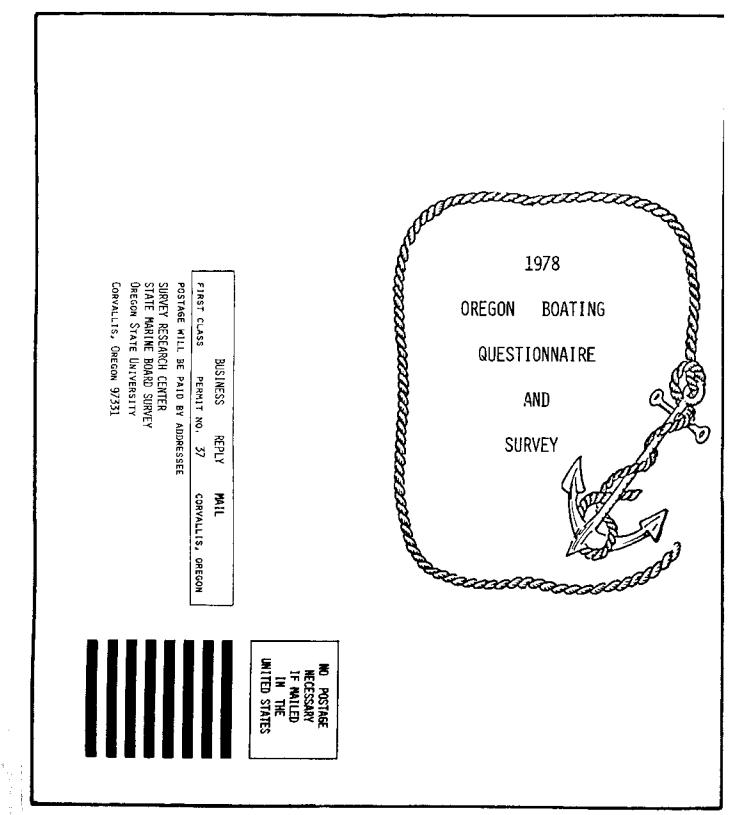
(5,849 boats - 1,555 Questionnaires)* Group (B) - 1,000 to 5,000 boats - 12.5% Sample

(33,705 boats - 4,515 Questionnaires)* Group (C) - 5,000 or more boats - 08% Sample

(78,911 boats - 5,925 Questionnaires)*

* In sample group (A) a minimum of 50 questionnaires were used to provide greater precision, (Wheeler County received only 40 as that is 100% of the boats in that County). In sample group (B) a minimum of 250 questionnaires were sent. In sample group (C) a minimum of 500 and a maximum of 1300 questionnaires were used to provide a corresponding precision of sampling in the groupings and throughout the State.

APPENDIX B 1978 OREGON BOATING QUESTIONNAIRE AND SURVEY



OREGON BOATING QUESTIONNAIRE

ANSWER QUESTIONS I THROUGH IS ONLY FOR THE BOAT IDENTIFIED BY THE REGISTRATION NUMBER WHICH APPEARS APTER YOUR MANE.

State Marine Board
OFFICE OF THE DIRECTOR
3000 MARKET ST. N.E. No. 505
SALEM. OREGON 97310

AUGUST 1978

Dear Oregon Boat Owner:

Oregon law directs that the State Marine Board:

Shall at least once every three years conduct a survey of owners to determine, by county, the kinds of boating activity on the various vaters of the state during different periods of the year. (ORS 468.833)

The results of the survey are used to determine fund distribution to Counties for the construction of new or improved marine facilities, effective and timely safety and law enforcement activities, increased efficiency in educating young and novice boaters in boating safety and courtesy, and the establishment of adequate and reasonable boating regulations for Oregon waters.

We need and request your assistance to complete the 1978 survey. Your boat was selected at random, by registration number, from the total list of registered boats within the State. Replies will be tabulated for boaters as a whole, not for any one person. The results should indicate the general patterns of boating and specific areas of concern where we should focus our efforts to improve your opportunities for boating throughout the State. All information you give us is strictly confidential and in NO way will your responses be linked to your name. Please take a few minutes of your valuable time to complete the questionnaire and drop it in the mail to us before September 10th. NO STAMP IS NECESSARY.

Thank you for helping us help you to better boating.

Sincerety.

BRAD MORRIS DIRECTOR

i. In what County is YOUR BOAT registered? write in name 2. Indicate in the table below, the total number of days, by month, that YOUR BOAT was actually under power or sail between Sep. 1, 1977 and Aug. 31, 1978.* If YOUR BOAT was NOT IN USE, check appropriate block and go to Question 16. *A day is any part of a 24-hour period in which YOUR BOAT was used. BOAT NOT IN USE. SEP. 77 _____ JAN. 78 ____ MAY 78 OCT. 77 _____ FEB. 78 _____ JUN. 78 ____ NOV. 77 _____ MAR, 76 ____ JUL. 78 ____ DEC. 77 _____ APR. 78 ____ AUG. 78 ____ During an average days use, how many persons, includ-ing yourself, were in YOUR BOAT? (Include water-skiers) write in number 4. What is the Horsepower rating of the $\underline{\text{PRIMARY}}$ $\underline{\text{MOTOR}},$ or motors, used in YOUR BOAT? ___ Hp. _____ Hp. What is the Horsepower of any other motors on YOUR BOAT? _____ Hp. Please estimate the number of gallons and type of fuel used in YOUR BOAT during an average day of Boating. ___ gallons actually used. _____ type of fuel. 6. Was YOUR BOAT transported from its place of storage or moorage to a different launching site during the past Boating year, Sep. 1, 1977 to Aug. 31, 1978? YES. If "YES," was it transported CAR-TOP CARRIER, or OTHER MEANS. TRAILER. How many times was it transported specify other means altogether?

YOUR ROAT was most of	w, name the two Counties in which ften launched and the number of times ich type of access point. If YOUR	10. Were the following facilities adequate for your needs? If "NO," please indicate the County and Body of Water involved.
RMAT was used where i	t was moored, check the appropriate County or Counties of moorage.	FACILITIES 1 YES NO COUNTY BODY OF WATER
		HEST HOOMS
BOAT USED WHERE	MOORED IN COUNTY.	Loading/Moorage
<u>H0</u>	OST LAUNCHES 2nd MOST LAUNCHES	DOCKS
NAME OF COURTY		Sanitary Sustem
- Number of times	YOUR BOAT was launched from -	Promp-Outs
COMMERCIAL MARIHAS		Ramps Parking Lots
PRIVATE PROPERTY		
		 Was YOUR BOAT damaged in any way while in operation during the past Boating year, from Sep. 1, 1977 to Aug.
_	Hartnae and Rampe such as -	31, 1978?
FEDERAL		YES. NO.
STATE		
COUNTY/CITY	<u> </u>	12. Was YOUR BOAT given assistance of any kind during the last three years?
		YES. NO. If "YES," by what means?
Water where YOUR BOAT it was used for each	ow, name the Counties and Bodies of I was most used and the number of days* designated activity during the Boat-	OTHER BOATERS. SHERIFF MARINE PATROL
ing year, Sep. 1, 197	77 to Aug. 31, 1978. *A day is any riod in which YOUR BOAT was used.	OREGON STATE POLICE, U. S. COAST GUARD,
ing year, Sep. 1, 197 part of a 24-hour per	77 to Aug. 31, 1978. *A day is any riod in which YOUR BOAT was used. MOST USE 2nd MOST USE	OREGON STATE POLICE, U.S.COAST GUARD, OTHER(Please specify)
ing year, Sep. 1, 197 part of a 24-hour per NAME OF COUNTY	riod in which YOUR BOAT was used.	OTHER(Please specify) 13. While YOUR BOAT was in use was it stopped or checked
ing year, Sep. 1, 197 part of a 24-hour per NAME OF COUNTY BODY OF WATER	riod in which YOUR BOAT was used. MOST USE 2nd MOST USE	OTHER(Please specify)
ing year, Sep. 1, 197 part of a 24-hour per NAME OF COUNTY BODI OF WATER TOTAL DAYS OF BOATIM	riod in which YOUR BOAT was used. MOST USE 2nd MOST USE	OTHER(Please specify) 13. While YOUR BOAT was in use was it stopped or checked for compliance with Federal or State laws from Sep.1,1977
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ing year, Sep. 1, 197 part of a 24-hour per NAME OF COUNTY BODY OF WATER TOTAL DAIS OF BOATIMO - Mumber of days 1	most use 2nd Most used. Most use 2nd Most use	OTHER(Please specify) 13. While YOUR BOAT was in use was it stopped or checked for compliance with Federal or State laws from Sep.1,1977 to Aug. 31, 1978? YES. NO. If "YES," by what agency? SHERIFF MARINE PATROL, OREGON STATE POLICE
ing year, Sep. 1, 197 part of a 24-hour per NAME OF COUNTY BODI OF WATER TOTAL DAIS OF BOATIM - Mumber of days 1 FISHING	most use 2nd Most used. Most use 2nd Most use	OTHER(Please specify) 13. While YOUR BOAT was in use was it stopped or checked for compliance with Federal or State laws from Sep.1,1977 to Aug. 31, 1978? YES. NO. If "YES," by what agency? SHERIFF MARINE PATROL, OREGON STATE POLICE
ing year, Sep. 1, 197 part of a 24-hour per NAME OF COUNTY BODY OF WATER TOTAL DAIS OF BOATIM - Mamber of days 1 PISSING SAILING	most use 2nd Most used. Most use 2nd Most use	OTHER(Please specify) 13. While YOUR BOAT was in use was it stopped or checked for compliance with Federal or State laws from Sep.1,1977 to Aug. 31, 1978? YES. NO. If "YES," by what agency? SHERIFF MARINE PATROL, OREGON STATE POLICE U.S.COAST GUARD, OTHER(Specify) 14. Have you or any operator of YOUR BOAT been provided
ing year, Sep. 1, 197 part of a 24-hour per NAME OF COUNTY BODI OF WATER TOTAL DAIS OF BOATIMO - Mumber of days 1 PISEING SAILING WATER-SKIING	most use 2nd Most used. Most use 2nd Most use	OTHER(Please specify) 13. While YOUR BOAT was in use was it stopped or checked for compliance with Federal or State laws from Sep.1,1977 to Aug. 31, 1978? YES. NO. If "YES," by what agency? SHERIFF MARINE PATROL, OREGON STATE POLICE U.S.COAST GUARD, OTHER(Specify)
ing year, Sep. 1, 197 part of a 24-hour per NAME OF COUNTY BODI OF WATER TOTAL DAIS OF BOATIMO - Mumber of days 1 FISHING WATER-SKIING CRUISING OTHER 9. During the past 1 lems encountered whe operated? If "YES,"	most use 2nd Most used. Most use 2nd Most use	OTHER(Please specify) 13. While YOUR BOAT was in use was it stopped or checked for compliance with Federal or State laws from Sep.1,1977 to Aug. 31, 1978? YES. NO. If "YES," by what agency? SHERIFF MARINE PATROL, OREGON STATE POLICE U.S.COAST GUARD, OTHER(Specify) 14. Have you or any operator of YOUR BOAT been provided with written or verbal, boating safety or educational information, between Sep. 1, 1977 and Aug. 31, 1978, by County or State Law Enforcement personnel? YES. NO.
ing year, Sep. 1, 197 part of a 24-hour per NAME OF COUNTY BODY OF WATER TOTAL DAIS OF BOATIMO - Mumber of days 1 FISHING WATER-SKIING CRUISING OTHER 9. During the past 1 lems encountered whe operated? 1f "YES," of Mater involved.	year, were any of the following prob- re YOUR BOAT was launched, moored or please indicate the County and Body	OTHER(Please specify) 13. While YOUR BOAT was in use was it stopped or checked for compliance with Federal or State laws from Sep.1,1977 to Aug. 31, 1978? YES. NO. If "YES," by what agency? SHERIFF MARINE PATROL, OREGON STATE POLICE U.S.COAST GUARD, OTHER(Specify) 14. Have you or any operator of YOUR BOAT been provided with written or verbal, boating safety or educational information, between Sep. 1, 1977 and Aug. 31, 1978, by County or State Law Enforcement personnel? YES. NO. 15. Has the boat, identified by the registration number after your name, been given the FREE U.S. Coast Guard
ing year, Sep. 1, 197 part of a 24-hour per NAME OF COUNTY BODI OF WATER TOTAL DAIS OF BOATIMO - Mumber of days 1 FISHING WATER-SKIING CRUISING OTHER 9. During the past 1 lems encountered whe operated? If "YES,"	year, were any of the following probere YOUR BOAT was launched, moored or please indicate the County and Body	OTHER(Please specify) 13. While YOUR BOAT was in use was it stopped or checked for compliance with Federal or State laws from Sep.1,1977 to Aug. 31, 1978? YES. NO. If "YES," by what agency? SHERIFF MARINE PATROL, OREGON STATE POLICE U.S.COAST GUARD, OTHER(Specify) 14. Have you or any operator of YOUR BOAT been provided with written or verbal, boating safety or educational information, between Sep. 1, 1977 and Aug. 31, 1978, by County or State Law Enforcement personnel? YES. NO. 15. Has the boat, identified by the registration number
ing year, Sep. 1, 197 part of a 24-hour per NAME OF COUNTY BODY OF WATER TOTAL DAIS OF BOATING - Mumber of days 1 FISHING WATER-SKIING CRUISING OTHER 9. During the past 1 lems encountered whe operated? If "YES," of Nater involved. PROBLEMS	year, were any of the following prob- re YOUR BOAT was launched, moored or please indicate the County and Body	OTHER(Please specify) 13. While YOUR BOAT was in use was it stopped or checked for compliance with Federal or State laws from Sep.1,1977 to Aug. 31, 1978? YES. NO. If "YES," by what agency? SHERIFF MARINE PATROL, OREGON STATE POLICE U.S.COAST GUARD, OTHER(Specify) 14. Have you or any operator of YOUR BOAT been provided with written or verbal, boating safety or educational information, between Sep. 1, 1977 and Aug. 31, 1978, by County or State Law Enforcement personnel? YES. NO. 15. Has the boat, identified by the registration number after your name, been given the FREE U.S. Coast Guard Auxiliary "COURTEST MOTORBOAT EXAMINATION" during the
ing year, Sep. 1, 197 part of a 24-hour per NAME OF COUNTY BODI OF WATER TOTAL DAYS OF BOATIMO - Mumber of days 1 FISHING WATER-SKIING CRUISING OTHER 9. During the past lems encountered whe operated? If "YES," of Water involved. PROBLEMS WATER POLLUTION	year, were any of the following probere YOUR BOAT was launched, moored or please indicate the County and Body IES NO COUNTY BODY OF WATER	OTHER(Please specify) 13. While YOUR BOAT was in use was it stopped or checked for compliance with Federal or State laws from Sep.1,1977 to Aug. 31, 1978? YES. NO. If "YES," by what agency? SHERIFF MARINE PATROL, OREGON STATE POLICE, U.S.COAST GUARD, OTHER(Specify) 14. Have you or any operator of YOUR BOAT been provided with written or verbal, boating safety or educational information, between Sep. 1, 1977 and Aug. 31, 1978, by County or State Law Enforcement personnel? YES. NO. 15. Has the boat, identified by the registration number after your name, been given the FREE U.S. Coast Guard Auxiliary "COURTEST MOTORBOAT EXAMINATION" during the past 12 months?
ing year, Sep. 1, 197 part of a 24-hour per NAME OF COUNTY BODY OF WATER TOTAL DAIS OF BOATIM - Mamber of days 1 FISHING SAILING WATER-SKIING CRUISING CTHER 9. During the past 1 lems encountered whe operated? 1f "YES," of Mater involved. PROSILING WATER POLLUTION WATER USER CONFLICT	year, were any of the following probere YOUR BOAT was launched, moored or please indicate the County and Body IES NO COUNTY BODY OF WATER	OTHER(Please specify) 13. While YOUR BOAT was in use was it stopped or checked for compliance with Federal or State laws from Sep.1,1977 to Aug. 31, 1978? YES. NO. If "YES," by what agency? SHERIFF MARINE PATROL, OREGON STATE POLICE U.S.COAST GUARD, OTHER(Specify) 14. Have you or any operator of YOUR BOAT been provided with written or verbal, boating safety or educational information, between Sep. 1, 1977 and Aug. 31, 1978, by County or State Law Enforcement personnel? YES. NO. 15. Has the boat, identified by the registration number after your name, been given the FREE U.S. Coast Guard Auxiliary "COURTEST MOTORBOAT EXAMINATION" during the past 12 months?

THE FOLLOWING QUESTION CONCERNS OTHER RECREATIONAL WATER-CRAFT THAT YOU MAY OWN, IN ADDITION TO THE ONE IDENTIFIED BY THE REGISTRATION NUMBER WHICH APPEARS AFTER YOUR NAME. 16. In the table below, list the type of watercraft, the length and type of propulsion, for all other watercraft	IN ORDER TO MORE ACCURATELY FORE AST AND MEET THE FUTURE ORMANDS ON BOATING FACILITIES IN ORBOTON, IT IS OF GREAT HELP IF WE CAN CORRELATE FAMILY CHARACTERISTICS WITH PRESENT BOATING PATTERNS. FLEASE ASSIST US BY PROVIDING THE FOLLOWING INFORMATION.
length and type of propulsion, for all three watercraft owned or used by you and members of your immediate family who reside with you. Include any type of watercraft. (Inboards, outboards, sailboats, canoes, rowboats, rafts, inboard-outboards, kayaks, rubber rafts, etc.) If you own no other watercraft, check the appropriate box and go to Question 17.	20. What is the age, sex, primary occupation and level of education of the owner of the boat identified by the requstration number which appears on the address label. AGE: SEX: MALE. FEMALE.
	boot th age
DO NOT OWN OR USE ANY OTHER TYPE OF WATERCRAFT.	OCCUPATION: Please indicate the type of work and general
TYPE OF WATERCRAFT LENGTH TYPE OF PROPULSION	industry. If retired, wheak the appropriate box and list the last type and industry of employment. RETIRED:
	TYPE OF WORX:
	· · · · · · · · · · · · · · · · ·
	GENERAL INDUSTRY:
	EDUCATION: Some Grade School Technical School
 Please indicate whether or not you, or a member of your household, completed a boating course within the past 	Grade School Some College
three years that was sponsored by one of the organizations	
(or others) listed below? (Check all that apply)	Some High School College Degree
BASIC SAFETY OTHER MONE	High School Post Collage
A. U.S. POWER SQUADRON	21. Please estimate your total family income for 1978.
B. COAST GUARD AUXILIARY	Under \$3,000
C. AMERICAN RED CROSS	\$3,000 to \$5,999 S23,000 to \$79,999
	88,000 to \$7,899 \$30,000 to \$33,999
D. OTHER write in name	\$8,000 to \$8,999 S40,000 to \$42,399
18. Did you, or the person taking the course(s), feel it	\$10,000 to \$14,999 \$50,000 and over
was,	If you have any questions or comments about this question-
VERY USEFUL, USEFUL, SOMEWHAT USEFUL, OR	naire, or feel there are areas you would take to have
NOT AT ALL USEFUL?	write to us in care of the DIRECTOR, STATE MARINE BOARD, 3000 Market St. N.E. #505, Salem, Oregon 97310.
19. Are you familiar with the "OREGON BOATERS HANDBOOK?"	
YES. NO. If "YES," have you found it.	
VERY USEFUL, USEFUL, SOMEWHAT USEFUL, OR	
NOT AT ALL USEFUL?	



State Marine Board OFFICE OF THE DIRECTOR 3000 MARKET ST N.E. No. 505, SALEM, OREGON 97310

September 8, 1978

Dear Oregon Boat Owner:

A few days ago we sent you a questionnaire as part of the 1918 Oregon Boating Survey. If you have already returned the questionnaire, please consider this a very special "THANK YOU" for your promptness. If, as we often do ourselves, you have put the questionnaire aside to finish later, please fill it out and return it right away. There will probably never be a better time than now.

Thank you for your help and have a nice day.

Sincerely,

BRAD MORRIS DIRECTOR

FOLLOW-UP POSTCARD

OREGON STATE MARINE BOARD 3000 Market Street N.E.,No.505 Salem, Oregon 97310 NON-PROFIT ORG.
BULK RATE
U.S. POSTAGE PAID
PERMIT NO. 200
CORVALLIS, OR.
97331

APPENDIX C

SELECTED RESPONDENT COMMENTS

The following selected comments were received from participants in the 1978 Boating Survey. They are grouped into the generalized categories of: Comments on the Questionnaire; Safety Matters; Law Enforcement; Boating Courses; The Oregon Boaters Handbook; Boating Facilities; General Comments; and The Oregon State Marine Board. A complete listing of all comments is available, upon request, from the OSMB.

COMMENTS ON THE QUESTIONNAIRE

- "A very well prepared questionnaire. Better than most."
- "This form could be made much simpler and this page is none of your business."
- "It's nobody's business what my total income is. I can't see where this is relative It's a wonder you don't ask for our Social Security numbers."
- "Would it not have been more beneficial to all concerned to have spent the cost of this survey in a general census on who has a mole on their right hip?"
- "The answers would be more accurate if the survey was sent ahead and then a person would keep track of the information and then sent it in upon completion at the end of the year or whatever."
- "Survey does not address the contribution of private facilities to the State's marine industry."
- "Glad to help out."
- "I believe in this questionnaire. As I pilot ships on the Willamette and Columbia River, it is good to know that some boaters know the Rules of the Road and are concerned about safety. Your state and county boat ramps are O.K., well maintained.
- "My sex,age,income and education have nothing to do with this survey and is none of your business. It almost makes me mad enough not to return this survey!"
- "Why spend the time and money when the citizens are demanding less taxation-less snooping and interfering."
- "By your questions, you don't even know if I use some other boat, or how much--it is based on YOUR selection, rather than activities by ME, the USER!"
- "This is some more tax payers money wasted. Also feel you are imposing on my constitutional rights and creating another State agency that is unneeded."
- "I do not understand the importance of the board knowing how many times a person transports a boat from one moorage to another or number of gallons of fuel used in an average day of boating."

SAFETY MATTERS

- "Unloading ramps at Bully Creek and Farewell Bend used by swimmers and skiing.

 Very dangerous as well as difficult to load and unload boats. Need better

 signs to restrict all activities except loading and unloading."
- "Too many boats pulling skiers without an observer in boat. No flags to indicate skier is down in water. Boats that leave ski rope out after skier has dropped off at shore, grown-ups and kids swimming in launch and dock areas."

- "Along the Alsea River between mileposts 8 and 10, there are at least 2 boat docks disintegrating. One at the upstream edge of Little Albany about half-way between milepost 9 and 10, across the river from road has a collapsed boat house and appears likely to break loose from moorings and become a hazard to navigation and property along the river. No correction all summer."
- "Water skiers on Lake Billy Chinook have shown no regard for the lives and safety of fishermen. They cut across the front and back of fishing boats too close for safety. We were almost capsized by skiers on all four sides of our boat on three or four occasions."
- "More time, effort and money should be spent to eliminate recklessness, disregard for others safety and drinking while operating a boat on the Columbia River. We have witnessed a number of serious accidents due to the above mentioned. Also several accidents due to overloading of boats."
- "The largest problem with boating on the Rogue River is the inexperienced boat owner with a small unsafe boat. The river currents are strong and a small boat that works great in a lake will quickly overturn in the Rogue. The boat ramps ramps constructed along the river make it all too inviting for these death traps to be launched."
- "I would get my boat examined but it is currently parked back of Depoe Bay and examinations are being conducted at Devils Lake State Launching ramp."
- "I would like to see a rule prohibiting any canopy on a boat used for going over the ocean bar. In just 20 years I have witnessed many accidents on Columbia and Nehalem bars with loss of life due to cabin trapping or canopy injury."
- "The John Day River is used by <u>many</u> boaters the past 5 years the water has filled up with debris making it <u>highly</u> dangerous for water skiers I know, I am one that has fallen from debris-the worst falls I have <u>ever</u> experienced and I have skied 20 years It seems our tax dollars could be used in cleaning up the debris during low water level periods. Boaters are concerned."
- "I feel new boaters should be taught boat ramp manners and that would speed up the whole procedure and limit traffic jams."
- "Guidelines making boating more fun and safer are thoroughly researched and hazardous areas of concern are posted. Wouldn't it be nice if people were compelled to comply. The above statement is one reason my wife and I will never boat on Foster Reservoir again. Boaters with no degree of responsibility or acceptance of risk. I am a certified safety professional and teach a boating safety course to firms I represent that work over navigable waters and mill ponds."
- "Let's get the alcohol off the water!! OK."

LAW ENFORCEMENT

- "There seems to be a total lack of enforcement of the 10 mph speed limit on East Lake in Deschutes County. Almost all of the larger boats with 50+ h.p. motors are running 20-30 mph. Boats of this size and power constitute an estimated 30-40% of the users on the lake."
- "We have noted Sheriff patrols with 2 officers on Devils Lake on some weekdays with little or no boat traffic, it seems they might have more important needs elsewhere."
- *Public education and posting of marine boating laws is very lax. Even enforcement officers are unsure of many marine inland boating laws."

- "Something needs to be done about enforcement of rules and regulations concerning speed and safety, courtesy, game fishing laws and pollution. Out-of-staters are the worst violators, but Oregonians are a close second."
- "Through June and most of July 1978, speeding and recklessly driven boats caused both discomfiture and danger to fishermen and pleasure cruisers in the 5 mph zone of Willow Lake; water-skiers were the worst violators. The Sheriff's marine patrol was too infrequently present; it took pressure from the Director of County Parks and from the Marine Board to effect a marine patrol of the lake in late July; this patrol effectively solved the problem in late July, too late for many boaters."
- "My feeling is that this state requires drivers licenses to run a car, the Federal government requires pilots to be tested for their licenses. As most Oregon Boaters are unsafe, they should be tested and licensed."
- "1)Paint the cop's boat red;2)Make the fly the National;3)Take guns from them (we won't hurt them);4)Make Charleston a bigger harbor. Open up the slew."
- "Spending a major portion of my free time on Timothy Lake, it is evident that boating rules are enforced on <u>very few</u> select weekends. The balance of the boating season the lake is ruled by only the courtesy of the few that care! Education should be manatory, as we cannot afford to patrol every lake, every day! Thanks."
- "Coast Guard examination should be mandatory."
- "Baker County has the poorest water supervision and water law enforcement of any place I've ever seen."
- "Boating rules and regulations and a traffic pattern should be posted at all public landings. Official patrol is very lax. We need more public information."
- "You are to be congratulated on your concern for water safety. It is a pity that more people cannot be exposed to Power Squadron courses. They provide an excellent backup for the job you are working on."
- "I would like to see more money spent on facilities and less on Sheriff Patrols, leave people alone."
- "Make it against the law to drink and drive a boat of any kind!!!"
- "I really think the time has come to have an operator's license for boat drivers.

 Even if it were just a written exam, it would make people aware there is more
 to boating than a throttle and a steering wheel."
- "I do not like the manner in which the O.S.P. Game Commission check you out in the ocean-they come at you wide open and turn, at the last few feet. Their wake put water inside my boat one time and another put one passenger out of his seat."
- "I think there is a serious law enforcement/courtesy problem on the lower Willamette. Speeds are excessive as is alcohol use. Would like to see stricter enforcement of laws."
- "I have had repeated problems with drunk boat operators! What can be done?"
- "Strict enforcement of laws concerning the abuse of alcohol by boat operators."
- "U.S.Coasy Guard and Coast Guard Auxiliary do not agree how things should be on a boat."
- "Increase Sheriff Patrol,get State Police off the lakes."

BOATING COURSES

- "All boaters should be examined after Power Squadron or Coast Guard Auxiliary course and issued a license to operate a boat if they pass. Liability insurance is a must. The above for their own sake."
- "I feel that anyone under 18 years of age should have a mandatory course completion to operate a power boat. More enforcement boating and safety rules."
- "Started course with my son,age 14, too boring, dropped out."
- "I would like a boating course when available in this area. As of now I haven't known of any in the Milton-Freewater, Oregon area!"
- "Friends of mine took the U.S.Coast Guard Auxiliary course. All of them were well impressed. I hope to take a training course within 1 year."
- "Not an advocate of licensing boat operators, but should they not have to prove successful completion of an approved <u>boating safety course</u> before boat is licensed? There are a lot of numb skulls operating boats who obviously don't know what they are doing."
- "It was very difficult to get into Adcanced Piloting not having a husband or father in Power Squadron. Basic boating is excellent and I feel it should be mandatory for acquiring the boat registration but it does not go far enough in teaching charting, figuring tides, etc.. If the subject were offered anywhere else, I'd have taken it, but this type of class isn't offered. Optional educational classes like advanced piloting should be offered to the public-not necessarily free. We want safe boaters but if no one gives the opportunity to learn except 'private organizations,'it is no wonder there are many unecessary accidents."

OREGON BOATERS HANDBOOK

- "In, "Oregon Boaters Handbook"-emphasis should be made of numbering anywhere on front one half of hull and not on bow flare."
- "Some boaters are very discourteous when they get into the water-I believe for safety as well as pleasure that the Oregon Handbook'should be enforced."
- "Make sure all "US" boaters get'Oregon Boaters Handbook."
- "I would like to have one of these hanbooks, where may I get one?"
- "Could I get a copy of Oregon Boaters Handbook in Russian?"
- "Where do I find the Oregon Boaters Handbook?"

BOATING FACILITIES

- "At Paulina Lake the launching side restroom plumbing was not repaired all summer. Turned off because of a leaking pipe."
- "Since the private hoist at Depoe Bay is not in operation, the <u>only</u> ramp available is not only inadequate but extremely dangerous to launchers. There are no docks-only jagged and slippery rocks. Many minor accidents occur each year! I would appreciate a study. Private moorage in the bay is impossible. Thanks."
- "The free camping spaces at Diamond Lake are marvelous for which we are grateful, however, the toilet facilities are inadequate. After one has been out in a boat for hours you know what happens if the biffie is full."
- "We do not need any more launching ramps in Clatsop County. Quit wasting money!"

- "Why isn't there any boat launch ramps on th Illinois River? Why isn't there a free boat ramp at Chetco Harbor/"
- "My use limited, but would say State and County facilities OK."
- "I live next to the Columbia River in The Dalles. We need more and better refueling facilities."
- "Oregon City has about the poorest boat launching ramps and parking in the State."
- "Yes,I would like to know why the dock rent at Charleston Boat Basin raised from \$180.00 to \$290.00 in a year,plus \$10.00 for a finger to board the boat. Also rest rooms open approximately 1/2 year,plus roads torn up and not repaired."
- "Being as the State doesn't care anything about spending any money on facilities in Harney County, it's difficult to own a big boat and get it in the water."
- "Parking too far from lake at Antelope Reservoir, Crook County. Too hard for older people to walk up hill where campers must park. Was a great place to go <u>before</u> they "fixed" it up."
- "The State facilities are far superior to County or City facilities. Let's have more of them."
- "We need some pump stations for the marine heads. NOW!"
- "More unloading ramps with docks needed on the Columbia River as well as lakes for unloading trailerable craft. Sewage pumping stations need to be installed to handle boats complying with new regulations on sewage disposal."
- "The Oregon or Federal law requires toilets with holding tanks. But-does not provide means of disposal!"

GENERAL COMMENTS

- "When new marina was opened at Newport why was golden age not honored and therefore we can go fishing less?"
- "Can't water be left in Detroit Reservoir longer each year? Really, <u>flood control?</u>
 Why does it have to be completely drained?"
- "Usually keep my boats on Devils Lake but algae is so thick near shore you can't run your motor or fish."
- "Washington County should not receive any boat license money because they charge for use of their boat launches."
- "I would like to see more lakes restricted from water-skiing or "power" boat use. I would favor a 10 mph limit. Power boaters have <u>no</u> respect for sailboats."

THE OREGON STATE MARINE BOARD

- "My boat is a Bonair Inflatable. Due to the expansion and contraction of the 'skin,' it is not possible to keep the registration sticker affixed in position specified adjacent to boat number. I have been attaching it to the transom instead. I believe some provision should be made for this in your rules."
- "I am totally against any move by our Oregon State Legislature to abolish the Oregon State Marine Board and against any taxation. We must defeat these proposed bills for 1979."
- "It would do no good to write to the board or any other government agency. They or you are so tied up in your own paper work there is no end result of anything."
- "You are doing a good job and we appreciate it."

APPENDIX D Type, Length and Propulsion Systems of Other Owned or Used Watercraft by Respondents to the 1978 Boating Survey

TYPE OF FIRST WATERCRAFT BY COUNTY OF REGISTRATION

County	Inboard	Outboard	Sail	Canoe	Rowboat	1/0*	Raft	Kayak	Inf**	0ther
Baker	0	58	0	0	38	10	19	0	10	10
Benton	40	344	20	101	243	0	40	0	142	20
Clackamas	34	1199	103	343	1096	343	445	69	308	137
Clatsop	36	237	36	36	237	91	0	18	73	73
Columbia	42	317	0	42	211	42	63	21	21	0
Coos	0	672	61	31	550	214	92	31	183	0
Crook	0	71	0	0	47	0	0	12	12	0
Curry	30	74	15	15	119	59	15	0	59	45
Deschutes	22	549	0	66	198	44	110	0	88	22
Douglas	66	729	99	166	398	66	66	Ō	133	133
Gilliam	0	11	5	5	5	0	0	0	0	O
Grant	0	19	0	10	10	10	10	Ō	Ō	Ŏ
Harney	0	56	0	0	19	0	Ō	Ō	Ō	Ŏ
Hood River	0	74	0	0	64	9	9	ŏ	ŏ	ŏ
Jackson	74	482	111	74	482	37	111	ō	334	148
Jefferson	0	44	0	0	11	22	22	11	33	0
Josephine	27	162	0	54	108	27	27	Ö	135	54
K1 ama th	48	555	48	193	338	121	121	24	97	72
Lake	0	32	0	0	21	0	11	0	0	ō
Lane	73	1346	146	255	1346	437	764	73	364	146
Lincoln	44	308	22	44	110	132	22	22	88	66
Linn	52	390	0	52	468	156	130	26	286	78
Malheur	15	60	30	30	120	90	30	15	-00	Ö
Marion	63	566	0	283	566	94	126	31	37 8	126
Morrow	0	33	Ô	0	22	Ö	11	Ö	0	0
Multnomah	313	2100	581	268	2100	402	1028	89	402	402
Polk	0	103	20	40	121	40	20	ő	40	20
Sherman	0	0	0	Ô	5	ō	ŏ	ŏ	Ö	ő
Tillamook	18	268	Ō	18	250	36	18	ŏ	71	ŏ
Umatilla	18	144	18	18	90	18	54	ŏ	54	ŏ
Union	0	63	9	9	36	9	27	š	Õ	Ö
Wallowa	Ö	43	Ŏ	Ō	17	ő	Õ	ő	ŏ	ŏ
Wasco	35	44	Õ	Ŏ	80	18	27	ŏ	27	9
Washington	82	657	205	123	616	287	205	82	369	ő
Wheeler	Ö	2	0	0	7	0	4	Ö	0	ŏ
Yamhill	51	203	25	ō	<u> 177</u>	ŏ	25	ŏ		76
Total	1183	12013	1554	2276	10326	2814	3652	533	3783	1637

Inboard/outboard Inflatable

APPENDIX D

LENGTH IN FEET OF FIRST WATERCRAFT BY COUNTY OF REGISTRATION

County	1-4	4-6	6-12	12-15	15-20	20-24	24-27	27-30	30-35	35+
Baker	0	0	38	29	67	0	10	0	0	0
Benton	0	0	101	405	364	40	40	ŏ	ŏ	ŏ
Clackamas	0	34	788	1507	1336	240	103	34	ŏ	34
Clatsop	0	36	219	164	255	55	18	36	36	18
Columbia	0	0	169	211	317	21	Ö	21	21	0
Coos	0	31	397	825	489	31	61	Ö	Ö	ŏ
Crook	0	0	12	95	36	Ö	Ö	Õ	ŏ	Õ
Curry	0	0	30	134	148	104	15	ŏ	ő	ŏ
Deschutes	0	2 2	176	439	439	0	Ō	22	ŏ	ŏ
Douglas	0	0	232	829	630	66	33	0	33	33
Gilliam	0	0	5	11	11	0	0	ŏ	0	0
Grant	0	0	19	19	19	Ö	ŏ	ŏ	Ö	Ŏ
Harney	0	0	0	56	19	õ	Ö	Ŏ	ŏ	Ö
Hood River	0	0	55	46	46	ŏ	9	ŏ	ŏ	ŏ
Jackson	0	Ò	445	816	519̈́	37	37	ő	Õ	Ö
Jefferson	0	0	44	67	22	ĭi	ő	ŏ	ŏ	ŏ
Josephine	0	0	81	217	271	27	ŏ	ŏ	ŏ	Ö
Klamath	0	0	386	652	435	97	24	ŏ	24	ŏ
Lake	0	Ö	32	21	11	Ő	0	ŏ	0	ŏ
Lane	0	36	1419	1856	1274	255	73	ŏ	0	36
Lincoln	0	0	44	352	286	110	ő	22	22	22
Linn	0	0	442	546	572	52	ŏ	-0	0	26
Malheur	Ó	Ō	75	75	209	30	ŏ	ŏ	Ö	0
Marion	0	31	503	787	881	0	ŏ	ŏ	Ö	31
Morrow	0	0	22	22	22	ŏ	ŏ	ő	ŏ	Ö
Multnomah	0	89	2457	2234	1832	491	134	134	134	179
Po1k	Ô	0	40	141	162	61	0	0	0	0
Sherman	Ö	Ŏ	5	0	Õ	Ö	ŏ	ŏ	ŏ	ŏ
Tillamook	Õ	ō	161	286	125	89	ŏ	18	Ö	Ö
Umatilla	0	Ō	144	162	108	ő	ŏ	Ö	Ö	0
Union	Ō	Õ	27	98	27	ŏ	9	ŏ	ŏ	Ö
Wallowa	ŏ	Ŏ	17	26	17	ŏ	Ó	Ö	0	0
Wasco	Ö	ŏ	9	98	89	9	Ö	9	18	9
Washington	ō	82	410	821	862	287	82 82	41	0	41
Wheeler	ŏ	0	7.7	7	002	0	0	0	0	0
Yamhill	<u> </u>	Ŏ	152	203	253	. ŏ	ŏ	25	ő	Ö
Total	0	361	9163	14257	12153	2113	648	362	288	429

APPENDIX D

PROPULSION OF FIRST WATERCRAFT BY TYPE AND BY COUNTY OF REGISTRATION

County	Inboard	Outboard	Sail	Paddle	0ars	I/0*	Float	Jet	Air	Other
Baker	0	106	0	0	29	10	0	0	0	0
Benton	20	526	20	81	304	0	0	0	0	0
Clackamas	34	1987	137	445	1062	343	0	34	0	34
Clatsop	36	492	18	36	91	109	18	0	0	18
Columbia	42	507	0	63	106	42	0	0	0	D
Coos	0	1130	61	61	305	214	0	0	0	61
Crook	0	119	0	0	24	0	0	0	0	0
Curry	15	223	15	0	74	59	0	15	0	30
Deschutes	22	812	0	44	132	44	22	0	0	22
Douglas	66	1094	99	133	331	66	0	33	0	3 3
Gilliam	0	11	5	5	5	0	0	0	0	0
Grant	Ō	29	Ō	10	19	Ō	0	0	0	0
Harney	Ó	56	Ö	Ö	19	0	0	0	0	0
Hood River	Ō	120	Õ	9	18	9	0	0	0	0
Jackson	ŏ	853	111	148	556	37	Ō	74	0	74
Jefferson	Ŏ	67	Ö	33	22	11	11	0	0	0
Josephine	Ö	217	Ŏ	54	217	27	Ö	81	0	0
Klamath	48	893	7Ž	169	290	121	Ď	0	0	24
Lake	ŏ	42	ō	0	21	Ö	Ō	Ò	0	0
Lane	73	2220	182	364	1346	437	73	73	0	182
Lincoln	44	418	22	66	110	132	Ō	44	Ō	22
Linn	26	703	0	104	598	156	ŏ	26	Ō	26
Malheur	15	149	15	60	45	90	ō	ō	Ŏ	0
Marion	31	881	ŏ	315	724	126	31	63	ŏ	63
Morrow	0	44	ŏ	0.0	22	0	Ö	Õ	Ŏ	0
Multnomah	313	4066	67Ŏ	313	1608	402	45	89	ŏ	179
Polk	9,0	222	ő	40	40	40	20	ő	ŏ	20
Sherman	Ö	5	ŏ	Ö	0	Ö	0	ŏ	ŏ	0
Tillamook	18	37Š	ŏ	18	214	54	ŏ	ŏ	ŏ	ŏ
Umatilla	18	216	36	36	54	18	18	ŏ	ŏ	18
Union	Ö	98	9	9	36	9	.0	ŏ	ŏ	ő
Wallowa	ŏ	52	ó	ő	9	ő	ŏ	ŏ	ŏ	ŏ
Wasco	35	106	ŏ	9	7 1	18	ŏ	ŏ	ŏ	ŏ
Washington	82	1108	205	287	534	246	ŏ	82	ŏ	41
Wheeler	0	4	203	207	9	0	Õ	0	ŏ	0
Yamhill	51	304	25	<u> </u>	177	. 0	0	25	0	<u>51</u>
Total	989	20255	1702	2912	9222	2820	238	639	0	898

^{*} Imboard/outboard

APPENDIX D TYPE OF OTHER WATERCRAFT BY COUNTY OF REGISTRATION

County	Inboard	Outboard	Sail	Canoe	Rowboat	I/0*	Raft	Kayak	Inf**	Other
Baker	10	29	0	0	10	0	0	0		· · · · · · · · · · · · · · · · · · ·
Benton	40	81	40	81	61	40	40	40	20	10
Clackamas	0	137	206	68	411	0	480	103	60	40
Clatsop	36	109	0	18	237	110	18	0	206	172
Columbia	0	63	Ō	0	84	0	21	ŏ	145	36
Coos	31	305	62	62	275	62	123	31	84	0
Crook	0	0	0	0	0	Ö	12	0	62	92
Curry	15	60	Ō	Ŏ	15	15	60	0	0	0
Deschutes	Ö	110	44	ŏ	66	ő	110	0	74	0
Douglas	33	232	33	33	199	66	ŏ	0	22	0
Gilliam	0	0	ő	0	5	0	Ö	0	99	33
Grant	ŏ	Ö	ŏ	ŏ	ő	0	10	0	0	0
Harney	38	Ŏ	Ö	Ö	0	ŏ	0	0	0	0
Hood River	0	18	Ö	Ö	27	9	9	_	0	0
Jackson	ŏ	148	37	74	445	37	74	0	0	_9
Jefferson	ů.	22	0	0	33	0	11	37	148	74
Josephine	Ö	54	0	27	33 162	0	54	0	22	0
Klamath	24	241	96	93	241	48	96	54	27	0
Lake	0	11	90	22				0	48	0
Lane	72	655	145	146	0 509	0 36	0 473	0	0	0
Lincoln	0	44	22	22				0	374	36
Linn	26	78			198	22	44	0	44	0
Malheur	0	30	0	0	130	26	78	78	78	0
Marion	31		15	0	30	0	0	0	15	0
		125	31	63	188	94	251	0	31	0
Morrow Multipage b	0	0	0	0	0	0	22	0	11	0
Multnomah	89	402	223	268	849	134	581	45	313	45
Polk	0	40	0	0	40	0	0	0	0	20
Sherman	.0	5	0	0	0	0	0	0	0	0
Tillamook	18	125	36	0	161	0	18	0	36	0
Umatilla	0	90	0	0	72	0	18	0	36	0
Union	0	_9	0	18	18	0	27	0	0	0
Wallowa	0	77	0	9	0	0	9	0	0	9
Wasco	0	_ 36	9	0	36	9	54	9	27	
Washington	0	164	41	82	246	0	287	82	41	0
Wheeler	0	0	0	0	2	0	2	0	0	0
Yamhill	0	25	25	25	51	0	. 0	0	25	25
Total	463	3525	1065	1211	4801	708	2982	477	2038	601

^{*} Inboard/outboard
** Inflatable

APPENDIX D

LENGTH IN FEET OF OTHER WATERCRAFT BY COUNTY OF REGISTRATION

County	1-4	4-6	6-12	12-15	15-20 ————	20-24	24-47	27-30	30-35	35+
Baker	0	0	39	10	10	0	10	10	0	0
Benton	0	0	101	142	263	0	20	0	0	0
Clackamas	0	34	822	685	137	34	0	0	34	0
Clatsop	0	18	310	145	146	18	0	36	36	0
Columbia	0	0	147	42	42	0	0	0	0	0
Coos	0	62	306	366	275	31	62	0	0	0
Crook	0	0	12	0	0	0	0	0	0	0
Curry	0	0	60	104	30	45	0	0	0	0
Deschutes	0	0	154	88	66	0	0	0	0	44
Douglas	0	0	132	298	265	0	33	0	0	0
Gilliam	0	0	0	0	5	0	0	0	0	0
Grant	0	10	0	0	0	0	0	0	0	0
Harney	0	0	0	0	19	19	0	0	0	0
Hood River	Ō	0	28	18	9	9	0	9	0	0
Jackson	0	Ō	260	445	333	37	37	0	0	0
Jefferson	ō	Ō	44	44	0	0	0	0	0	0
Josephine	Ò	27	189	81	18	0	0	0	0	0
Klamath	Ó	24	313	411	241	0	0	0	0	0
Lake	0	0	0	11	22	0	0	0	0	0
Lane	0	0	728	910	655	36	72	0	0	0
Lincoln	Ó	22	132	154	88	0	0	0	0	0
Linn	0	52	208	104	78	26	26	0	Ō	Ō
Malheur	Ō	Ō	0	60	30	0	0	Ö	Ò	Ö
Marion	Ō	Ō	377	188	188	Õ	62	Ò	Ō	Ō
Morrow	Ŏ	Ŏ	33	0	0	ō	70	Ō	Ŏ	Ŏ
Multnomah	45	89	1162	760	894	ō	ŏ	Ŏ	Õ	ō
Polk	Ö	Ö	0	81	20	ŏ	ŏ	ŏ	ō	ŏ
Sherman	ā	Ō	Š	0	0	ŏ	ŏ	Ŏ	ŏ	ō
Tillamook	ŏ	ō	107	179	54	18	Ö	18	ŏ	18
Umatilla	ŏ	Ŏ	72	108	18	18	Ö	.0	ŏ	Ö
Union	ŏ	ğ	9	18	18	9	ŏ	ŏ	ŏ	ŏ
Wallowa	ŏ	ŏ	34	51	9	ő	ŏ	ŏ	ŏ	ğ
Wasco	ŏ	ŏ	62	70	36	0	9	Ö	ŏ	Ő
Washington	ŏ	ŏ	410	287	205	41	0	0	ő	ŏ
Wheeler	ŏ	ŏ	4	207	203	0	0	0	0	ŏ
Yamhill	ŏ	Ö	127	25	25	0	0	0	ŏ	_ <u>ŏ</u> _
Total	45	356	6387	5885	4262	341	331	73	70	71

APPENDIX D

PROPULSION OF OTHER WATERCRAFT BY TYPE AND COUNTY OF REGISTRATION

	·-· · · · · · · · · · · · · · · · · · ·							20 KAI	LUN	
County	Inboard	Outboard	Sail	Paddle	0ars	I/0*	Float	Jet	Air	Other
Baker	10	48	0	0	10	0	0			
Benton	40	121	40	81	182	40	Ö	0	0	10
Clackamas	69	548	206	240	582	ő	34	20	0	0
Clatsop	36	419	18	0	110	110	0	0	0	103
Columbia	0	148	Ö	ŏ	105	0	ő	0	0	0
Coos	62	519	3 <u>1</u>	184	153	62	0	0	0	0
Crook	0	0	Ö	0	12	0	Ö	0	0	31
Curry	1Š	6Ŏ	ŏ	Ö	119	15	30	0	0	0
Deschutes	Ö	154	44	Ö	154	0	0	0	0	0
Douglas	33	397	33	33	132	66	ő	0	0	0
Gilliam	ő	5	0	0	0	0	0	33	0	0
Grant	ŏ	ŏ	Ö	0	10	ő	0	0	0	0
Harney	38	ŏ	Ő	Ö	0	Ö	0	0	0	0
Hood River	0	28	Ŏ	Ů	18	9	0	0	0	0
Jackson	Õ	556	37	111	334	37	0	9	0	9
Jefferson	ŏ	44	0	0	44	0	0	37	0	0
Josephine	ŏ	162	Ö	81	135	Ö	0	0	0	0
Klamath	24	458	96	231	120	48	=	0	0	0
Lake	0	11	0	22	0	40	0 0	0	0	0
Lane	72	1201	146	328	582	36		0	0	0
Lincoln	0	110	22	44	198	22	0	0	0	73
Linn	26	104	0	130	156	26	0	0	0	0
Malheur	0	75	15	0	120	26 0	0	0 0	0	52
Marion	31	220	31	94	346	94	0	0	0 0	0
Morrow	0	0	٥ ا	0	346	94	0	0	0	0 0
Multnomah	89	1027	313	491	804		0	0	0	0
Polk	0	1027	313	0		179	45	Ö	0	ő
Sherman	ŏ	5	ŏ		0 0	0	0	Ö	0	Ö
Tillamook	18	215	36	0 0	125	0	0	Ö	0	ő
Umatilla	0	126	0	18	72	0	0	0	Ö	ŏ
Union	0	18	0	18		0	0	0	Ö	ŏ
Wallowa	Ö	86			36	0	0	0	0	ŏ
Masco Wasco	0	62	0 9	8	9	0	0	0	0	Ö
masco Washington	0	328		9	88	9	0	0	0	Ö
Masnington Wheeler			41	205	369	0	0		0	ŏ
wneerer Yamhill	0	2	0	0	2	0	0	0 25	0	ŏ
i dumi i i i	<u> </u>	76	25	25	25	0	0			
Total	563	7434	1143	2364	5060	753	109	124	0	278

APPENDIX E

Characteristics of Oregon Pleasure Boats by County of Registration for Motors, Fuel Useage and Damage from 1978 Boating Survey.

Explanation of fuel tax computations and example of Form 250LA-1, "Application for Boat Registration."

MOTORS - PROJECTED BOAT DAMAGE

		e Primary otor		Primary Motors		ther otors	Boat Damaged
County	No.	Avg HP	No.	Avg HP	No.	Avg HP	(Yes)
Baker	605	25-49	77	50-74	163	0-24	19
Benton	1882	50-74	405	25-49	385	0-24	162
Clackamas	8700	50-74	1267	50-74	1987	0-24	651
Clatsop	1548	75-99	200	100-124	310	0-24	255
Columbia	1774	75-99	317	50-74	444	0-24	211
Coos	4308	50-74	764	50-74	886	0-24	244
Crook	534	50-74	119	25-49	95	0-24	24
Curry	1247	75-99	312	25-49	252	0-24	45
Deschutes	3117	50-74	439	25-49	549	0-24	154
Douglas	4408	50-74	696	50-74	829	0-24	99
Gilliam	38	50-74	0	0	5	0-24	5
Grant	191	50-74	29	0-24	57	0-24	Õ
Harney	185	25-49	19	0-24	0	0	0
Hood River	405	50-74	55	75-99	37	0-24	9
Jackson	5265	50~74	667	50-74	742	0-24	334
Jefferson	444	75~99	33	0-24	100	0-24	11
Josephine	1896	25-49	460	25-49	190	0-24	135
Klamath	3090	50-74	435	25-49	676	0-24	241
Lake	200	25-49	32	25-49	32	0-24	Ö
Lane	10808	50-74	2111	25-49	1674	0-24	218
Lincoln	1890	50-74	550	50-74	242	0-24	88
Linn	3357	50~74	755	50-74	598	0-24	104
Malheur	956	75-99	134	50-74	269	0-24	105
Marion	6072	50-74	1510	25-49	1290	0-24	378
Morrow	1 <i>77</i>	50-74	22	50-74	33	0-24	11
Multnomah	16710	75-99	2770	75-99	3396	0-24	1564
Polk	1373	50-74	22 2	0-24	262	0-24	61
Sherman	66	75-99	9	0-24	14	0-24	Ö
Tillamook	1286	50-74	268	25-49	304	0-24	54
Umatilla	1314	50-74	252	100-124	468	0-24	90
Union	635	50-74	116	25-49	304	0-24	18
Wallowa	267	50-74	34	0-24	77	0-24	52
Wasco	683	50-74	115	50-74	106	0-24	53
Washington	6075	50-74	1026	50-74	1355	0-24	452
Wheeler	22	50-74	0	0	4	0-24	0
Yamhill	1494	50-74	405	50-74	304	0-24	25
Total ,	93022	50-74	16625	50-74	18439	0-24	5872

APPENDIX E

FUEL USAGE IN GALLONS BY COUNTY OF REGISTRATION

County	Gas Premium/Regular	Gas/Oil Mix	Diesel	Propane/Butane Other	Total
Baker	4138	326	0		
Benton	12508	1680	202	0	4464
Clackamas	63465	4247		61	14451
Clatsop	12492	1256	0 1803	206	67918
Columbia	14615	444		0	15551
Coos	20560	6324	0 122	0	15059
Crook	3368	344		0	27006
Curry	6886		0	0	3712
Deschutes	14750	1068 2875	119	Ō	8073
Douglas	23695		0	0	17625
Gilliam	189	3645	365	0	27705
Grant	1232	0	0	0	189
Harney	759	38	0	0	1270
Hood River	759 3380	111	0	0	870
Jackson		83	230	0	3693
Jefferson	24695	4895	0	37	29627
	2631	222	0	0	2853
Josephine Klamath	8476	1219	0	0	9695
Lake	17357	2583	24	97	20061
	788	179	0	0	967
Lane Limanla	68413	4840	0	473	73726
Lincoln	14353	242	220	0	14815
Linn	24667	1535	0	26	26228
Malheur	9098	583	0	45	9726
Marion	41181	3115	0	535	44831
Morrow	1094	122	0	0	1216
Multnomah	138240	7640	3217	313	149410
Polk	7490	283	Ð	61	7834
herman	413	113	0	Ô	526
fillamook	9412	661	Ö	ŏ	10073
Jmatilla -	9648	486	Ō	108	10242
Inion	3934	188	Õ	0	4122
lallowa	99 0	370	ŏ	ŏ	1360
lasco	4781	718	ŏ	ŏ	5499
lashington	41789	2135	164	Õ	44088
lhee1er	98	11	0	0	
<u>amhil</u> l	10331	1924	õ	0	109
otal	621916	56505	6466	1862	12255 686849

APPENDIX E FUEL TAX COMPUTATIONS

Total Oregon registered boats, during the 1977-1978 boating survey, totaled 118,485. Subtracting the boats that were not used, (24,627), leaves 93,858 Oregon registered boats in use during the 1977-1978 boating season. There were 3,473 sailboats registered with OSMB which equals 2.93 percent of all registered boats, (3,473/118,485). Assuming the same relationship exists between used and not used sailboats, as exists for all registered boats, then 721 sailboats were not used, (24,627 x .0293). This results in a total of 2,751 sailboats in use, (3,473 - 721). Subtracting these sailboats, which are assumed as not using fuel, from all boats, (93,858 - 2,751), there remain a total of 91,107 powered Oregon registered boats used during the 1977-1978 boating year.

The 1978 Survey estimates indicate a total of 2,709,356 boat days of use during 1977-1978. This equals 28.86 days of use per boat, (2,709,356/93,858). Subtracting those days attributed to sailboats, (2,709,356-131,046), results in 2,578,310 powered boating days or an average of 28.999 days per powered boat in use, (2,578,310/91,107). Diesel and other types of propulsion systems accounted for 1.3 percent of all powered boats. Therefore, this percentage was subtracted from the average, $(28.3 \times .013 = .36)$, resulting in a final figure of 27.932 average days of boat use, (28.299 - .367).

During the 1977-1978 boating year there was an estimated 678,421 gallons of gasoline or gasoline/oil mixture used on an average boating day. This equals 18,949,655 gallons of fuel per year, (678,421 x 27.932). Multiplying this total by seven cents (.07) results in a marine fuel tax of \$1,326,475.80 per year. Assuming an average refund to boaters of \$80,000.00 per year, (\$1,326,475.80 - \$80,000.00), the State receives \$2,492,950.00 per biennium in unrefunded marine fuel taxes, (\$1,246,475.00 x 2).

No attempt was made to estimate the contribution to marine fuel taxes by out-of-state users that purchase fuel in Oregon for use on the State's waterways.



(SIGNATURE)

APPLICATION FOR BOAT REGISTRATION

(REQUIRED FOR ALL ORIGINAL REGISTRATIONS AND TRANSFER OF OWNERSH(P)

OUT OF STATE CERTIFICATES OF NUMBER MUST BE SURRENDERED WITH OREGON APPLICATION.

	(1) () NUMBER	-1.78774.80	(2) [] TITLE		-	
	(FOR M	IARINE BOARD USE OF	NLY)				
(3) PRINCIPAL OWNERS	PLEASE PRINT CLEARLY		TELEPHON				
		<u> </u>	NUMBER		-	141 DOR SURVIVOR	ł
						IF THIS BLOCK I	IS CHECKED
ILANT NAME:	ITIRST NAME!			INIDOLE INITIAL		BION BECTION I	t į
						(5) CITITEDEN	
(MAILING ADDRESS)	(CITY)	OTATE1		(I)F G00E) (-	COUNTY	VIII 25 N. 11	
							ALIEN
(CO-OWNER'S LAST NAME)		(FIRST)		IMIDDLE INITIAL		IF ALIEN GIVE NAT	IONALITY
(6) FIRST BECURITY INT	THEST HOLDER						
(NAME)							
(HARE)						TH PRESENT NU	MEER
							
(MAILING ADORESS)	ICITYI	,10,	(TE)	71P	CODE:		
(7) SECOND SECURITY I	NTEREST HOLDER			9 WHERE WAS B	OAT ACQUIR	ED	
(NAME)				101 NAME OF PRE	VIOUS OWNE	R	
(MAILING ADDRESS)	(CITY)	(STATE)	٠ (14)	DEALE	R'S REPORT	
	10(1),	1010101	_#	TRANSF	ER OF UN	DOCUMENTED VES	4 2 1
(11) SI	URVIVORSHIP CLAUSE					NT OF PRIOR OWNERS	
	GON CERTIFICATE OF BOAY TITLE B					THE VESSEL DESCRIBE	
RIGHT OF SURVIVORSHIP	IT IS OUR INTENTION IN MAKING	THIS REQUEST THAT	ř	APPLICATION WAS	ACQUIRED	(NEW USED	FROM
OF SURVIVORSHIP SO THE	SHOW JOINT OWNERSHIP IN THE BO AT UPON THE DEATH OF EITHER, TI	PAT WITH THE RIGHT ITLE MAY BE TRANS					
	WITHOUT PROBATE PROCEEDINGS			OF			
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				AND ON		WAS SO	LD BY THE
SIGNATURE				UNDERSIGNED TO		<u> </u>	
							<u>-</u> _
			-	OF			
(12)	FEES ENCLOSED		:	TO MY (DUR) KNO	WLEDGE TH	ADDRESS HAS NOT BE	EN TITLED
CERTIFICATE OF TITLE OF	R TRANSFER OF TITLE	5	-1			IN ANY STATE. (IF P	REVIOUSET
CERTIFICATE OF NUMBER		•		TITLED OR REGIS	rered). INC	DICATE WHERE	
DUPLICATE TITLE AND/OR	R DUPLICATE BER			THE VESSEL DESC	RIBED ON TI	HIS APPLICATION IS FR	EE OF ALL
				ENCUMBRANCES CERTIFICATE OF T	EXCEPT AS	SHOWN IN APPLICA	TION FOR
TOTAL FEES ENCLOSED	<u></u>	· · · · · · · · · · · · · · · · · · ·		SIGNATURE			_
(13) A	MPHIBIOUS VEHICLES			FOR			
IF AMPHIBIOUS VEHICLE CH	ECK THIS BOX 🗖 AMPHIBIOUS	VEHICLES (INCLUDING	a		REGISTERE	NAME OF DEALERSHIP	
CERTIFICATE OF NUMBER 1881	AMPRIMIOUS TRAILER HOUSES ARE RE JED BY THE STATE MARINE BOARD AN	ND A MOTOR VEHICLE	τ 📗				ELIPHONE
LICENSE AND CERTIFICATE OF	TITLE ISSUED BY THE DEPARTMENT	OF MOTOR VEHICLES		DEALER'S ADDR	K11	كالمستراب المسايد	
(15)	-	BOAT DESC	CRIPTIC	N			
HULL LENGTH	MULL	_	_	_	_	4 PLASTIC	□ • • • • • • • • • • • • • • • • • • •
	MATERIA	AL I ALUMINI	UM .	3 8 7 EEL 3 3	woop	(INCLUDING FIREIGLASS)	<u> </u>
					5 COMP	ERCIAL T	☐ . oth
DOAT I PLEASURE	2 LIVERY DEALER	A MANUFAC	TURER	S COMMERCIAL FIBRING	PASE	INGER	UJ & UIN
	TYPE OF PROPULSION	_			TYPE OF	F-1	П
MATED HORSEPOWER OF MOTOR TO BE USED	1 OUTBOARD 1 INBOARD	OR DUTORIVE 3 SAI	. 🗆	4 STEAM B OF	THER	GAS 2 DIESEL	s OTHE
		CONSTRUCTION					
MANUFACTURER'S OR BUILDER	'S NAME (HULL)	OPEN BOAT	, D	2 CABIN CRUISES	A CAUTAIN	IOAT	
				IF VESSEL	NOT BUILT IN	THE U.S.	
WODEL YEAR	12 CHARACTER MULL NUMBER			INDICATE	WHAT COUNTE	Y	
NOTE: ALL BOATS LESS 1	12 CHARACTER HULL NUMBER THAN 20 FT. IN LENGTH, BUILT ATE.	AFTER NOVEMBER	1, 1972	AND REGISTERED I	N OREGON.	RE REQUIRED TO HAVE	: A WEIGHT
AND CAPACITY PL	ATE.					NAU CARH	
AUTHENTICATION-THIS S	SECTION MUST BE COMPLETED S	Y ALL APPLICANT	rs	PL	EASE DO	NOT MAIL CASH	BLE TO
I HEREBY CERTIFY UNDER	PENALTY OF LAW THAT THE INFORMATRUE, CORRECT AND COMPLETE TO	THE BEST OF HE		MAKE ALL C	HECKS AND	MONEY ORDERS PAYAG	
	AND THAT OREGON IS THE STATE			STA	ATE MA	RINE BOARD	
4			j				
(SIGNATURE)			93			REGOT TO	p • 506#7- 67
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(DATE)

APPENDIX F

Characteristics of Oregon pleasure boat owners by age group, sex, retired status, type of work, general industry and education by county of registration, including the number of owners that sold their boats and those boats that are not now used as pleasure boats as well as the number of respondents who made comments, identified themselves and sealed their questionnaires from the 1978 Boating Survey.

Age Group (Number of Boat Owners)

County	Less than 24 yrs.	24-34 yrs.	35-44 yrs.	45-54 yrs.	55-64 yrs.	65-74 yrs.	More than 74 yrs.	Total Number of Boat Owners
Baker	0	67	86	1144	240	116	0	653
Benton	40	162	404	729	486	304	81	2206
Clackamas	240	1028	2227	3014	2466	993	171	10139
Clatsop	198	164	309	474	492	237	54	1839
Columbia	63	233	443	359	549	317	42	2006
Coos	31	367	825	916	1283	1131	183	4736
Crook	24	36	118	83	213	94	36	604
Curry	Ö	89	104	208	430	312	75	1218
Deschutes	22	264	417	856	1054	812	88	3513
Douglas	66	530	596	1260	1491	928	166	5037
Gilliam	Õ	16	5	16	16	0	5	58
Grant	10	19	38	48	105	38	29	287
Harney	Ŏ	56	74	19	74	19	0	242
Hood River	28	65	92	64	184	92	46	571
Jackson	37	296	964	1743	1706	1224	259	6229
Jefferson	11	44	123	89	100	78	22	467
Josephine	27	162	270	325	812	487	271	2354
Klamath	96	362	604	893	821	917	48	3741
Lake	Ō	32	42	106	32	43	Ö	255
Lane	72	1383	2038	3057	3639	2329	364	12882
Lincoln	66	198	242	396	704	528	110	2244
Linn	78	468	650	1092	1118	676	104	4186
Malheur	15	135	135	269	314	254	45	1167
Marion	157	598	1227	1762	1761	1353	125	6983
Morrow	0	22	33	55	77	44	0	231
Multnomah	224	2457	2770	5272	5585	2636	760	19704
Po1k	20	142	142	404	424	161	101	1394
Sherman	0	19	5	18	14	14	0	71
Tillamook	18	108	142	322	428	393	107	1518
Umatilla	54	180	234	342	522	234	72	1638
Union	Ō	27	134	223	197	107	72	760
Wallowa	Ö	9	51	26	78	69	35	268
Wasco	36	98	106	133	177	240	18	808
Washington	123	903	1929	2217	1273	780	82	7307
Wheeler	0	Ō	9	2	8	4	6	61
Yamhill	127	76	278	507	481	304	51	1824

Total |

APPENDIX F
CHARACTERISTICS OF OREGON PLEASURE BOAT OWNERS
BY COUNTY OF REGISTRATION

				···		-		
COUNTY	MALE*	FEMALE	RETIRED	SOLD BOAT	NOT PLEASURE	MADE COMMENTS	RESPONDENT IDENTIFIED	SEALED RETURN
DAKED	624	10	000					
BAKER	634	10	288	29	0	14	9	39
BENTON	2145	61	627	20	0	25	9	57
CLACKAMAS	9933	240	2535	69	0	61	23	161
CLATSOP	1839	36	565	0	237	21	14	50
COLUMBIA	1922	63	570	21	21	15	10	51
COOS	4644	214	2169	122	61	50	21	100
CROOK	605	0	297	12	0	14	8	25
CURRY	1247	30	712	45	30	26	12	57
DESCHUTES	3468	110	19 10	44	0	43	20	92
DOUGLAS	4938	99	1690	33	66	32	20	81
GILLIAM	54	5	22	11	0	7	2	9
GRANT	277	0	115	0	10	5	1	18
HARNEY	241	0	19	0	0	3	j	8
HOOD RIVER	525	9	221	28	Ô	12	8	38
JACKSON	6267	37	2707	74	111	34	18	105
JEFFERSON	422	33	133	33	0	8	ž	23
JOSEPHINE	2302	81	1435	27	ŏ	24	12	56
KLAMATH	3500	193	1376	24	24	27	17	84
LAKE	242	11	42	Ö	ō	6	3	12
	12846	218	4440	29Î	146	6 Ĭ	40	213
LINCOLN	2088	154	1376	0	22	25	8	52
LINN	4215	0	1353	26	0	40	13	80
MALHEUR	1106	60	478	15	ŏ	14	5	46
MARION	6890	126	2422	126	157	44	25	137
MORROW	221	11	99	0	0	3	1	16
	19302	491	5764	447	268	87	53	255
POLK	1433	20	485	20	0	14	6	40
SHERMAN	70	0	19	0	5	4	1	8
TILLAMOOK	1500	18	732	18	71	28	10	43
UMATILLA	1602	36	612	36	0	28 18	10	43 53
UNION	751	9	277	9	0	14	9	53 52
WALLOWA	276	0	138	0	17	3	3	52 18
WASCO	789	18	302	35	18	22	3 8	18 45
WASHINGTON	7061	205	302 1437	35 41	41	22 29	17	
WHEELER	31	203 0	1437	2	41 0	29 3		84
YAMHILL	1798	25	658	25	25	3 10	2 6	7
148.017.F.F	1730		000	23	20	10	0	33

^{*} Includes those boats with joint ownership registrations.

APPENDIX F

CHARACTERISTICS OF OREGON PLEASURE BOAT OWNERS
BY TYPE OF WORK AND COUNTY OF REGISTRATION

COUNTY *	UNEMP*	WAGE PRIV	WAGE GFED	WAGE GLOC	SUPER PRIV	SUPER GFED	SUPER GLOC	PROF L/M	PROF OTHER	OTHER
B &KEP	10	221	48	4.5	→ 5	29	38	19	19	48
3ENTON	10	648	61	121	263	40	223	e 1	5€6	142
CLACKAMA	34	3631	137	377	2569	274	377	246	1028	266
CLATSOP	18	765	36	91	+92	36	119	3 t	154	5
CCLUMBIA	ê	887	3	169	380	42	÷ 3	٠.٠	169	42
	9	1894	153	275	635	133	42	153	275	92
0005	12	237	12	12	59	24	12	ŧ	59	59
SSOOK	15	341	74	j	252	39	53	5 <u>9</u>	74	5 9
CURRY			88		537	56	176	44	176	198
DESCHUTE	9	1854		9.6			293	133	232	464
DCUGLAS	0	1356	99	99	795	133			2 3 2 5	22
GILLIAM	Ē	22	ū	j	5	0	j An	(1 (
GRANT	ð	96	29	19	19	១	13		₹.₹	19
HARNEY	ŝ	148	Q	19	19	Ĉ	J	Ĺ	37	ê
HCCO RIV	e	154	.	9	64	_0	23	č	55	55 33:
JACKSON	37	2339	185	185	1261	74	334	74	408	371
JEFFERSO	Û	144	O	56	56	3	33	£.	0	122
JCSEPHIN	2 7	765	51	C	4 06	162	54	27	162	2 7
KLAMATH	24	1159	≒ ∂	241	579	145	193	46	290	43.5
LAKE	5	165	32	21	21	21	11	ζ	11	21
LANE	146	5386	364	473	2365	1 + c	255	132	983	615
LINCOLN	t	637	عة بد	66	418	3	18	3 c	220	198
LINN	C	1978	52	104	729	52	78	2€	334	44 2
MALHEUR	C	329	15	36	194	60	30	áί	คม	149
MARION	31	1982	220	252	1416	220	538	53	503	31 5
MORROW	8	22	11	11	33	22	-1	ľ	3	66
MULTNOHA	134	7283	313	491	47 3ö	432	5 i 1	715	2189	447
FOLK	ŧ	354	26	1 62	2 62	ت 2	20	4 G	23 2	81
SHERMAN	C	14	•	ű	ί	3	Û	Ę	5	47
TILLAMOO	3	482	15	71	321	18	54	Ę	125	143
UMATILLA	C	324	18	144	324	18	72	3.6	72	288
UNION	Ö	232	C	+5	161	g	3€	18	36	72
WALLOWA	õ	- 6 C	9	17	52	17	9	ې	ð	4.3
WASCO	9	316	35	27	124	9	ġ	35	őŹ	35
WASHINGT	ć	2331	41	3 2 8	2217	Ĉ	257	24€	657	41.0
HHEELER	õ	13	Ž	2	4	ð	1	C	2	2
YAMMILL	51	582	51	Ē	35-	25	76	51	51	152

^{*} UNEMP = UNEMPLOYED, WAGE/PRIV = Wage earner in Private Enterprise, WAGE/GFED = Wage earner in Federal Government, WAGE/GLOC = Wage earner in State or Local Government, SUPER/PRIV = Supervisor in Private Enterprise, SUPER/GFED = Supervisor in Federal Government, SUPER/GLOC = Supervisor in State and Local Government, PROF/L/M = Professional in Law or Medicene, PROF/OTHER = Other Professionals, OTHER = All other types of work including agricultural.

APPENDIX F

CHARACTERISTICS OF OREGON PLEASURE BOAT OWNERS
BY GENERAL INDUSTRY AND COUNTY OF REGISTRATION

COUNTY *	GOV *	ED	MANF LT	MANF HV	BUSN Land	BUS MAR	SERV CONS	SERV BUSN	SERV MEDN	OTHER
	456	19	19	0	115	10	115	3 e		······································
IAKER	154		262	142	162	50	405	182	19	4.8
ENTON	385	324	1096	582	1781	206	2089	1473	61	50 5
CLACKAMA	856	480	182	902 55	328	473	219	91	103	274
LATSOP	200	91		21	380	317	148	148	16	9.1
CLUMBIA	190	84	380	153	764	244	611	367	63	6.3
COS	519	305	519			12	47	71	61	122
CROOK	47	12	83	24	119	59	297	104	_0	7 1
URRY	163	30	74	15	1 63				7	4.5
DESCHUTE	439	44	3^7	66	4.63	22	680	285	44	132
COUGLAS	530	133	497	3 31	1360	66	663	265	99	464
GILLIAM	8	5	5	5	0	0	11	ē	9	1 6
GRANT	48	10	10	10	86	0	19	Ç	10	10
HARNEY	37	0	C	19	111	0	37	19	a	9
HCCO RIV	28	9	46	Ű	101	9	101	9	_ 9	9 2
JACKSON	667	260	519	111	1112	0	1446	519	74	33 4
JEFFERSO	33	67	22	11	22	22	67	56	0	11.1
JOSEPHIN	298	54	135	0	352	198	379	352	27	27
CLAMATH	483	26 6	241	97	676	4.6	603	314	24	435
AKE	84	11	21	C	53	0	42	21	0	11
LANE	837	728	1310	400	30 57	182	2511	1055	216	61 9
LINCOLN	176	66	132	132	308	132	396	196	44	196
LINN	312	234	650	416	833	26	520	364	78	39 (
HALHEUR	105	45	45	30	179	0	239	90	45	164
MARION	1195	189	566	220	724	63	1636	692	31	31 9
HCRROW	33	33	Ċ	Q	22	0	11	11	0	66
MULTNOMA	1519	760	1653	1519	2860	626	4111	2631	936	67 (
	182	141	81	61	182	0	222	222	20	8.1
POLK	5	170	č	5	5	Ġ	5	í	0	4)
SHERMAN	161	36	71	18	268	250	214	107	18	10
TILLAMOO	198	90	98	54	144	9	216	144	90	324
UMATILLA		36	63	, j	161	ā	116	45	27	6 !
UNION	72 26	26	03	0	34	¥3	17	2€	9	3 4
MALLOMA	26		27	53	168	35	151	71	18	43.0
H ASCO	89	9	657	944	862	a 2	1396	11:6	246	410
KASHINGT	452	410		944	9	6	1330	2	_0	150
WHEELER	4 101	0 101	2 279	51	203	ū	384	152	51	152

^{*} GOV = All levels of Government, ED = Education, MANF/LT = Light Manufacturing, MANF/HV = Heavy Manufacturing, BUSN/LAND = Land Related Business, BUS/MAR = Marine Related Business, SERV/CONS = Consumer Service Related Business, SERV/BUSN = Business Service Related Business, SERV/MEDN = Medicine Service Related Business, OTHER = All other categories of Industries.

APPENDIX F

CHARACTERISTICS OF OREGON PLEASURE BOAT OWNERS
BY EDUCATION LEVELS AND COUNTY OF REGISTRATION

COUNTY	SOME	COMP	SOME	COMP	TECH	SOME	COMP COLL	POS1
COUNTY	GRDE	GRDE	HIGH	HIGH	SCH00L	COLL	CULL	COLL
4KER	ū	77	10 6	192	48	96	67	50
BENTON	0	191	81	385	182	486	263	648
CLACKAMA	34	514	891	21.58	1233	2466	1541	1267
CLATSOP	36	91	146	492	255	473	127	146
COLUMBIA	42	211	127	676	211	422	148	1 27
CCOS	31	519	58 C	1136	672	703	305	5 8 0
CROOK	12	59	8.3	1.30	71	95	95	24
CUFRY	15	74	119	371	69	193	208	148
DESCHUTE	0	263	461	812	505	768	307	220
DOUGLAS	199	365	653	1425	563	829	464	4 31
GILLIAM	0	5	5	Ð.	16	2 2	5	5
GRANT	0	19	29	76	29	67	10	10
HARNEY	Ō	19	19	1.30	0	37	19	19
HCOD RIV	Õ	74	54	157	37	92	37	37
JACKSON	111	482	779	1669	593	1224	593	482
JEFFERSO	11	11	111	144	44	ليا في	22	56
JOSEPHIN	27	190	325	785	190	596	81	1 3 5
KLAHATH	48	217	531	845	410	789	483	386
LAKE	11	21	53	53	32	32	21	32
LANE	36	764	1346	3748	1237	2766	1274	1310
LINCOLN	4	176	33 C	615	154	396	198	2 42
LINN	78	416	494	1197	312	937	338	3 49
MALHEUR	15	75	154	284	165	269	75	105
PARTON	31	409	724	1699	724	1699	1133	472
MOPROM	ā	33	44	77	22	2.2	0	33
MULTNOMA	134	983	1787	4423	3457	4557	2681	2323
FOLK	S	121	26.2	303	61	323	161	262
SPERMAN	õ	5	0	.23	5	23	- 9	5
TILLAMOO	18	161	21 4	447	161	179	232	71
UMATILLA	9	54	13 fi	486	95	396	252	1 26
UNICH	9	89	54	236	72	116	18	98
HALLOHA	ย์	26	ĵ,	95	17	26	43	43
W45CO	27	53	124	186	39	160	€2	71
MASHINGT	52	246	452	1476	862	1396	1396	1231
HHEELER	3	7	4/2	1410	9	1350	7220	1231
					127	-		203
A WHITE	25	127	279	5 8 2	127	304	76	

APPENDIX G

COUNT	T MONTH	TOTAL RCAT DAYS	SORFIVA 27AG LAGE	FEOPLE DATS	AVERAGE PEOPLE DAYS	COUNTY	MONTH	TOTAL IDAT DAYS	AVERAGE	TOTAL PEOPLE DAYS	INTRAGE PEGALE DATE
94 4 E 9	SEP	1656 +32	2	3974	7	CCLUHSI	4 SkP	5 6 2 9	······································	19227	
	NEW	126	i	1622 1114	3		PC T	2497 1774	1 1	7933	10
	JAN LEC	394 278	1 0	1573 776	1		DE C.	1436	i	463 <u>6</u> 45 [3 2
	F F M	154 202	•	345 557	1		FEB	2648	1	4477 7943	į
	AFR	509	į	1523	3		APR	6273 11996	3 7	10121 34321	ļ.
	JUN	1805	5	4566 64 4 0	11		NI'N FEA	7498 1152		21 469 24009	19 17
	AUG AUG	2131 1410	3	79 5 5 67 8 7	12 11		JULE	18792 18243	6	35587	18 18
	Tetal	10474	17	36574	6 1		TOTAL	78519	39	33018 33018	130 14
96 N T ON	007	5951 2732	1	17528 7489	?	ccos	SEP	11976	3	33116	
	F.O.W C.E.C.	1601 1619	i	4104	\$		1.00	4334	1	23787 11762	į
	744	1514	į	1947	Ž		UE C	3666 3799	1	9929 1921	į
	FE B Mer	1194	1	2672 5137	1 2		≠ £ ti m à Q	3116 J914	1	8921 11023	2
	FPR Mar	2570 +:31	1 2	6768 £1905	3 7		APQ May	6798 12220	j S	24471	;
	JUL JUL	7165 7165	i.	21500 24266	12		JUN JUL	19919	5	34012 5464G	1.9
	AUG Tetal	6942 44161	25	21074 135165	12 70		AUG Tutal	24852	5	64613 59664	19
CLACKA		26519		7 47 4 1				122932		345369	66
*****	CCT	10635	i	27469	9	Ç#GD ≪	OCT SEP	1044	2	3653 1366	:
	NOV DEC	6795 3357	1 q	12810 9796	1		CEC	166 95	•	5 14 2 5 5	1
	JAN FEB	6951	0 L	11200 1912a	1 2		JAN FEB	83 59	ě	205	1
	##S Pr	13289	į,	39223 96686	4 11		MAA Adr	215	į	\$30 237	1
	MAT Jun	31661 40826		41105 126074	i 0 14		HAT	4 9 8 9 2 5	į.	1725 1364	3
	JUL	49156 452 4 5	, ,	161934 151967	1.0		يا√ال يا√ال	1365 2218		4434 8453	3
	10141	270097	31	824331	17 92		AUG Total	[447 8456) 17	5618 39778	i 9
9021413		9528	6	22398	15	CUPRY	SEP	8163	7	20778	
	739 404	5536 3606	ž	1329J 917 0	9		130	2849 1682	ž	7227	17
	PĒC Jām	2449 2448	2 2	6648	i		LEC	1004	ļ	2998	;
	FE S MAR	2 44 7 1296	2	722 9 936 9	5		FEB	1187	1	3294 1473	;
	APR	4735	į	13676	9		MAR APR	1603 1992	1	4348 10587	;
	HUL	5827 8574	:	1751 8 19 3 95	12		MAT Jun	49 B4	9 7	15998 21874	: i
	JUL AUG	7539 8595	:	23145 25458	15 17		JUL AUS	160 32 9245	•	2454 5 22097	21
	TOTAL	61659	*1	174104	117		TOTAL	550 67		161619	149 119
		TOTAL	AVERAGE	TOTAL	AVERAGE			TOTAL	AVERAGE	TOTAL	AVEALER
******	MCNTH	SCAT DAYS	AVERAGE BOAT DATS	PEOPLE DATS	AVERAGE PEOPLE DAYS	COUNTY		BOAT DAYS	AVERAGE BOAT DAYS	PEOPLE DAYS	
COUNTY	SEP OCT	4041 0AYS 4363 4354		PEOPLE DAYS 22020 9965	AVERAGE PEOPLE DAYS 7 3	COUNTY HARMET	HOHTH SEP CCT				
******	DEC NOA NOA SEb	4041 0AYS 4364 4306 417	ODAT DAYS	PEOPLE DAYS	AVERAGE PEOPLE DAYS 7 3 1 0		SEP CCT NOV	BOAT DAYS		PEOPLE DAYS	
******	SEP OCT NOV PEC JAN FEB	# CAT OAYS 4363 4214 900 417 241 329		PEOPLE DAYS 	AVERAGE PEOPLE DAYS 7 1 1 0 0		SEF CCT NOV DEC JAN	BOAT DAYS 74 8 8 9		PEOPLE DAYS	
******	SEP OCT NOV DEC JAN	4047 0445 4344 400 412 244 329 493	ODAT DAYS	PEOPLE CAYS 2228 9965 2019 1155 993 660 LL41	AVERAGE PEOPLE DAYS 7 3 1 0 0		SEP CCT NOV DEC JAN FEB MAR	BOAT DAYS TA 0 0 0 0 0 9 9 93 93		PEOPLE DAYS 165 8 8 111 111 333	
******	SEP OCT NOV DEC JAN FEB HAR APR NAT	401 0445 1363 4214 900 417 241 329 593 4653 18031	BOAT CATS 1 0 0 2 2 J	PEOPLE OAYS 22428 9965 2029 1185 993 668 1141 12314 26352	PEQPLE DAYS 7 3 1 0 8 8 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7		SEP CCT NOV DEC JAN FEB MAR APR MAT	8047 DAYS 74 1 1 9 9 37 93 136 241	EVAC TACE	PEOPLE GAYS 105 0 0 111 333 663 644	
******	SEP OCT NOV PEC JAN FE8 MAR APR MAT JUN JUL	4363 4214 900 41? 241 329 193 4653 18031 13719	60AT 0ATS 3 1 6 8 0 4 0 2	PEOPLE OAYS 22828 9965 2019 1185 393 688 4141 12314 26362 40147	PEOPLE DAYS 7 3 1 0 0 8 9 4 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		SEP CCT NOV DEC JAN FEB MAR APR MAT JUN JUL	BOAT DAYS 74 9 9 9 37 93 139 241 481 668		#EOPLE OAYS 185 8 8 111 333 463 614 1309	PEOPLE DAYS (
******	SEP OCT NOV DEC JAN FEB HAR APR HAT JUH JUL JUS TOTAL	9CFT OAYS 1363 4214 900 417 241 329 495 18031 13719 14136 12226 61822	BOAT CATS 1 0 0 0 2 J 5 2 3	PEOPLE OAYS 22428 9965 2019 1155 393 600 1111 1231-6 22362 35448 60147 JA242 107364	PEOPLE DAYS 7 3 1 0 0 8 9 4 4 12 13 11 11 11 11 11		SEF CCT NOV DEC JAN FEB MAR APR PAT JUN	BOAT DAYS 74 0 0 0 0 0 9 9 37 93 130 241 461	EVAC TACE	FEOPLE DAYS 18 8 2 9 3 111 233 651 104 1091 444 422	FEOPLE DAYS
******	SEP OCT NOV PIC JAN FEB HAR APR NAT JUN JUL JUL JUS TCTAL	907 0AYS 1163 4214 900 617 241 329 591 4653 18031 13719 14136 12226 51822	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	PEOPLE OAYS 22428 9965 2019 1155 993 600 1441 12314 22352 35440 40147 J4242 107364	PEGFLE DAYS 7 1 1 0 8 8 9 4 9 62 11		SEP CCT MOY DEC JAN FEB MAR APR PAY JUN JUL AUG TOTAL	BOAT DAYS 74 9 9 9 37 93 1.30 2.41 481 649 206	80AT DAYS 9 8 8 8 8 8 1 1 2 2 2	FEOPLE DAYS 145 4 3 4 111 333 463 414 1309 1981 484	FEOPLE 04VS 4 8 7 1 2 1 5 5 5
DESCHUTE	SEP OCT NOV PIC JAN FEB MAR APR MAT JUH JUL AUG TCTAL SEP OCT NOV	GCFT ORYS 1363 4214 900 417 244 329 493 4653 18031 18719 14136 51822	0 AT 0 ATS 1 9 8 9 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	PEOPLE OAYS 22424 9965 2014 1105 993 600 1141 12114 25302 15448 40147 14242 107344	PEGFLE DAYS 7 1 1 0 8 8 8 9 4 9 12 11 11 16 61	HARMET	SEP OCT HOV DEC JAN FEB HAR APR MAT JUN JUL AUG TOTAL SEP OCT	BOAT DAYS 7 4 9 9 9 37 93 130 201 401 603 204 201 401 401 401 401 401 401 401 401 401 4	80AT DAYS 9 8 9 8 8 8 1 1 1 1 1 1 1	FEOPLE DAYS 145 8 8 111 33 461 1369 1461 2489 2489 1495	FEOPLE 04VS 4 8 7 1 2 1 5 5 5
DESCHUTE	SEP OCT NOV CEC JAM FEB HAR APR NAT JUH JUL JUS TCTAL SEP OCT	40AT OAYS 1363 4214 900 617 241 329 593 4653 18031 13719 11326 51022	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	PEOPLE OAYS 2012 9965 2014 1105 993 660 1141 12314 22302 35410 40147 J4242 107364 41043 25313 L4016 11936	PEGFLE DAYS 7 3 1 0 8 8 9 4 4 4 11 11 11 65	HARMET	SEP OCT NOV DEC JAN FEB MAR APR APR JUN JUN JUN JUN TOTAL SEP OCT HOY DEC	BOAT DAYS 7 9 9 9 37 93 130 241 481 648 204 204 814 396 203	80AT DAYS 5 8 8 8 8 8 8 1 5 5 5 1 7 7 7 2 1 1	FEOPLE DAYS 185 8 8 8 8 111 333 661 1369 1961 450 452 2858 1455 7136	FEOPLE 04VS 4 8 7 1 2 1 5 5 5
DESCHUTE	SEP OCT MOV CLC AND FEB MAR APR MAY JUN JUS TCTAL SEP OCT JAM FEB DEC JAM	4CAT CAYS (163 4214 900 617 241 329 591 4653 18031 18719 14136 \$7226 61022 27133 19188 \$263 4739 1911	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	PEOPLE OAYS 2012 9965 2014 1105 993 660 1141 12314 22302 15448 40147 J4242 167364 44013 28313 1418 1418 1418 1418 1418 1418	PEGFLE DAYS 7 1 1 0 8 8 9 1 1 1 1 1 1 1 1 1 2 2 2	HARMET	SEP CCT NOV DEC JAN FEB MAPR MAP JUL AUG TOTAL SEP OCT DEC JAN FEB	BOAT DAYS 7 4 9 9 37 93 130 241 481 649 204 818 396 203 147 157	80AT DAYS 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	FEOPLE DAYS 185 8 8 8 8 111 333 663 1961 444 1368 124 2859 1175 718 518 571 893	FEOPLE 04VS 4 8 7 1 2 1 5 5 5
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DESCHUTE	SEP OCT MOV PEC JAM FEE MAR APR JUL JUL SEP OCT DCT JAM FEE MOT JUL AUG JAM HAF MAR MAPR MAPR MAPR MAPR MAPR MAPR MAPR	4047 OAYS 4163 4214 900 417 241 329 18031 18031 18131 18136 \$7226 51022 17133 1808 42563 4739 1911 1977 56166 27563 24161 21993	0 AT DAYS 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	PEOPLE ON'S 22128 9965 2019 1105 3737 680 1141 12314 22362 15483 5483 25113 14416 11936 9377 9592 14747 2684 66313 76277 76213	PEGFLE DAYS 7 1 1 0 8 8 9 1 1 1 1 1 1 1 6 7 2 2 2 2 3 6 18 18 18 17 16	HARMET	SEF OCT NOY DEC JAN FER HAR APR JUH JUL AUG TOTAL SEP DCT HOY DEC JAN FER HAR APR	BOAT DAYS 7 4 9 9 9 9 37 93 130 241 481 643 200 814 396 203 147 274 295 645	80AT DAYS 8 8 8 8 1 3 4 2 1 1 1 1 2 2 4 5 6 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	### ##################################	FEGPLE DAYS (
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BCUEL AS	SEP OCTY OCTY PER APR JUH JUG TOTAL SEP OCTY OCCH JABB HAPR JUN LUN LUN LUN LUN LUN LUN LUN LUN LUN L	GCFT CAYS 1163 1264 1070 1163 1271 1291 1291 1303 13031 13136 1222 17133 1808 6263 17133 1808 6263 17133 1808 6263 17133 1808 6263 17133 1808 6263 17133 1808 6263 17133 1808 6263 17133 1808 6263 17133 1808 6263 17133 1808 6263 17133 1808 6263 17133 1808 6263 17133 1808 6363 1808 6363 1808 6363 1808 6363 1808 6363 1808 6363 1808 6363 6363 6363 6363 6363 6363 6363 6	0 0 4 5 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	PEOPLE OAYS 2019 9965 2019 105 9975 9986 640 1141 12114 22102 3548 5419 JALEP J	PEOPLE DAYS 7 1 1 0 0 0 0 1 1 1 1 1 1 1 1 1 1 1 1	HODO RIV	SEF CCT V DEC V FER APR JUN AUGAL SEP TOTAL JUNGS JARR MAPR MAPR JUNGS JARR MAPR JUNGS SEP MARR MAPR JUNGS JARR MAP JUNGS JARR M	BOAT DAYS 7 4 9 9 9 9 37 53 139 241 481 681 684 208 614 396 203 147 277 277 275 665 1391 1414 1597 1425 4764 2467 1488 1286 1396 1396 1396 1487 2488 2488 2488 2488 2488 2488 2488 2	BOAT DAYS 5 6 8 8 8 8 1 1 1 2 1 1 2 1 1 8 4 6 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	FEOPLE OBYS 185 185 195 49 49 111 323 601 1961 450 1976 450 1978 516 571 693 604 1978 460 50628 50604 77865 60677 413557 413557 411 311 311 324 466	FEORE CAVS 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
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APPENDIX G

	COUNTY	MONTH	TOTAL	AVERAGE BOAT DAYS	TOTAL PEOPLE DAYS	AVERAGE PEOPLE DAYS	COURTY	MONTH	TOTAL ROAT DAYS	AUCHAGE BOAT DAYS	TOTAL PEOPLE DAYS	AVERAGE PEOPLE DAYS
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STATE 1988												<i>t</i>
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PCLK SEP 13-55	wagadu	SEP GET NEW CEC JAM FES FES HAR APR JUN JUL AUG TOTAL TOTAL SEP OCT SEP JAM FES HAR APR HAP JUN JUN JUN JUN JUN JUN JUN JUN JUN JUN	RCAT DAYS 433 99 93 33 33 33 33 35 55 566 666 581 2799 1428 1428 1428 14789 21334 21789 21334 21789 21354 21789 21354 21789 21789 21789 21789 21789 21789 21789 21789 21789 21789 21789 21789 21789 21789	BOAT DAYS	### ##################################	##OPLE ONYS 14 2 1 1 1 1 1 2 12 12 12 1	TTLL4HOS	SEP OCT WOCC JAMB HARR APRY JUNL AUG TOTAL SEP OCEN HARR HARR JUNL JAUN JULG JANN JUNL JUNL JUNL JUNL JUNL JUNL JUNL JU	80AF DAYS 4231 4447 7679 1143 657 657 675 2733 6801 8626 8323 7144 1530 3744 1530 188 644 2736 4922 6624 7864 6156 33362	BQAT OAYS 7 4 2 1 1 2 5 7 6 2 3 1 0 8 4 5 7 5 6 5 5 6 7 6 8 7 6 8 8 8 8 8 8 8 8 8 8 8 8 8 8	#EDPAE DAYS 21979 21973 6805 3215 2768 2793 7059 16199 18124 23022 25749 137647 13122 5418 168 168 576 13764 22066 26064 26554	#EGPLE DAYS 17 9 5 5 2 2 2 6 13 15 10 11 10 10 11 11 11 11 11 11 11 11 11
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CEC 323	MG Q R G M	SEP GET NGY CEC JAM FES NSS NSS NSS NSS NSS NSS NSS NSS NSS N	ROAT DAYS 491 99 35 33 33 33 38 58 133 265 566 566 2759 66524 3/393 14769 1438 14789 14789 22334 52587 52587	8 0 AT DAYS 3 1	### ##################################	##OPLE ONYS 14 2 1 1 1 1 1 1 2 12 12 12	TILLAMOS	SEP OCT Y OEC HARRYM JULG HARRYM JULG FOTAL SEP OCT Y OF SEP HARRYM JULG FOTAL SEP TOTAL SEP TOT	80AT DAYS 4231 4447 7679 1143 657 677 677 677 6701 6626 1323 7144 49918 3746 1530 522 7144 6436 1530 146 6436 2716 6524 7884 6556 34362	BQAT OAYS 7 4 2 1 1 1 2 5 7 40 8 1 1 2 5 7 6 9 7 8 8 8 8 8 1 7 7 8 8 8 8 8 8 8 8 8 8 8	#EDPLE DAYS 21979 21973 4805 2758 2766 2793 7059 16199 16199 16122 25769 137647 13122 25769 137647 15126 1400 9576 1760 2766 2766 2766 2766 2766 2766 2766 2	#EGPLE DAYS 17 9 5 5 2 2 2 7 6 13 15 10 17 10 10 11 11 11 11 11 11 11 11 11 11 11
FER 24-2 9 365	MG Q R G M	SEP OET HBY CEC JAM FEB HBY APR HAY JUL AUG TOTAL SEP OCT OCC JAM HAY JUN JUN JUN JUN JUN JUN JUN JUN JUN JUN	ROAT DAYS 49 99 35 33 33 33 35 55 56 586 5750 66524 32393 14760 14.36 14.780 22.334 52.69 54.33 14.780 23.34 52.69 54.33 63.35 63.35 63.35 63.35 63.35 63.35 63.36 64.35 64.35 65.367	80AT DAYS 3 1 8 9 9 1 2 6 3 16 15 15 15 17 17 17 17 17 17 17 17 17 17 17 17 17	### ##################################	##OPLE ONYS 14 2 1 1 1 1 1 1 2 12 12 12	TILLAMOS	SEP OCT VOICE OF SEP OEC JAB HARRY JULG AL SEP TOTAL SEP GEVE JAB HARRY JULG AL SUITAL	80AF DAYS 6231 4447 7679 1143 657 657 675 2731 6801 8626 8323 7144 1532 36 100 148 644 2736 4922 6624 7864 6356 34362 1225 7867 624 7867 624 7867 624 7867 624 7867 624 7867 624 7867 624 7867	BQAT OAYS 7 4 2 1 1 1 2 5 7 40 8 1 1 2 5 7 6 9 7 8 8 8 8 8 1 7 7 8 8 8 8 8 8 8 8 8 8 8	#EDPLE DAYS 21979 21973 6105 2706 2793 7039 16109 16109 18122 25709 137647 13122 25709 137647 13122 25709 137647 13122 25709 137647 13122 25709 137647 13122 25709 137647 13122 25709 137647 13122 25709 137647 13122 25709 137647 13122 25709 137647 13122 25709 137647 13122 25709 137647 13122 25709 13764	#EOPLE DAYS 17 9 5 5 2 2 2 6 13 15 10 17 110 10 10 110 10 10 110 110 110
MAR 485	MG Q R G M	SEP OET NBY CEC JAM FES MAR MAY JUL AUG TOTAL TOTAL SEP OCT TOTAL AUG TOTAL AUG CEC JAM FES MAY JUN AUG CEC JAM FES MOU CEC JUN AUG CEC MOU CE MOU CEC MOU CEC MOU CEC MOU CEC MOU CEC MOU CEC MOU CEC MOU CEC MOU CEC MOU CEC MOU CEC MOU CEC MOU CE MOU MOU CE MOU CE MOU CE MOU CE MOU MOU CE MOU CE MOU CE MOU CE MOU MOU MOU CE MOU MOU MOU MOU MOU MOU MOU MOU MOU MOU	RCAT DAYS 491 99 35 33 33 33 35 33 36 37 38 38 38 38 38 38 38 38 38 38 38 38 38	80AT DAYS 3 1 8 9 1 1 2 4 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	### ##################################	##OPLE ONYS 14 2 1 1 1 1 1 1 2 12 12 12	TILLAMOS	SEPT OCT VOICE HARRYN LUGAL LANGE HARRYN LUGAL LANGE HARRYN LUGAL SCOTT NGERRAL AND LUGAL SCOTT NGERRAL SCOTT NGERRAL AND LUGAL SCOTT NGERRAL AND LUGAL SCOTT NGERRAL SCOTT NGERRAL SCOTT NGERRAL SCOT	80AF DAYS 6231 4447 7679 1143 657 657 675 2731 6801 8626 8323 7144 1530 3744 1530 384 2736 49918 4991	BQAT OAYS 7 4 2 1 1 1 2 5 7 40 8 1 1 2 5 7 6 9 7 8 8 8 8 8 1 7 7 8 8 8 8 8 8 8 8 8 8 8	FEDPLE DAYS 21-573 410-5 321-5 327-6 27-9 27-04 27-9 27-05 1610-9	#EOPLE DAYS 17 9 5 5 2 2 4 13 15 10 17 110 10 17 110 10 17 110 18 21 21 21 21 21 21 21 21 21 21 21 21 21
HAY 1796 3 1334 2 JUN 2262 3 6985 11	MG Q R G M	SEP GET NBY CEC JAN FES MAY JUN JUL AUG TOTAL SEP GET MOY JUN JUL AUG TOTAL SEP GET JAN JUL AUG TOTAL SEP JUN JUL AUG JEC TOTAL JUN MAY MAY MAY MAY MAY MAY MAY MAY MAY MAY	RCAT DAYS 491 99 35 33 33 35 33 35 33 35 36 56 66 5750 665 47750 65524 34393 1436 14436 14436 14436 14786 25334 5246 14786 14	80AT DAYS 3 1 8 9 1 1 2 4 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	### ##################################	##OPLE ONYS 14 2 1 1 1 1 1 1 2 12 12 12	TILLAMOS	PTYCHARRYNLGAL DOOLAEARRYNLGAL HANDUUGAL TOGALAFALUUUT EGGGAAAAAUUUT EGGGAAAAAUUUT EGGGAAAAAUUUT EGGGAAAAAUUUT EGGGAAAAAAUUUT EGGGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	80AF DAYS 6231 4447 7679 1143 657 657 675 2731 6801 8626 8323 7144 1532 364 1532 364 1532 2736 160 148 644 2736 4918 2736 4918 2736 4918 2736 492 6624 7869 63362 1225 766 286 147 63 69 268	BQAT OAYS 7 4 2 1 1 1 2 5 7 40 8 1 1 2 5 7 6 9 7 8 8 8 8 8 1 7 7 8 8 8 8 8 8 8 8 8 8 8	FEDPLE DAYS 21573 410573 410573 410573 410573 2764 2759 2731 77554 15199 16199	#EGPLE DAYS 17 9 5 5 2 2 2 4 13 15 10 11 10 10 11 10 11 10 11 10 11 11 11
JUN 1400 0 21551 15 JUL 2411 4 7492 11 201 10 10 10 10 10 10 10 10 10 10 10 10 1	MG Q R G M	SEP OLI HBY OEC JAM FEB HBR HBR HBR HBR HBR HBR HBR HBR HBR HB	RCAT DAYS 491 99 35 33 33 35 133 265 586 686 581 2750 68524 34393 1438 1438 1438 22334 9248 9248 9248 16437 8262 922 485 1222	80AT DAYS 3 1 8 9 1 1 8 1 1 1 1 1 1 1 1 1 1 1 1 1 1	### ##################################	## ## ## ## ## ## ## ## ## ## ## ## ##	TILLAMOS	SECT YEARRY IN LEAL PTYCHERRY IN LEAL PTYCHERRY IN LEAL LUUGAL SCONGERRALUUUT ECONGERRY IN LUUT ECONGE	80AT DAYS 6231 4447 7679 1143 657 657 657 651 6626 1323 7144 1530 364 1530 364 2736 49918 1225 6524 7866 34362 1225 6524 786 34362 1225 6524 786 774	BQAT OAYS 7 4 2 1 1 1 2 5 7 40 8 1 1 2 5 7 6 9 7 8 8 8 8 8 1 7 7 8 8 8 8 8 8 8 8 8 8 8	#EDPAE DAYS 21979 21979 11973 6105 2706 2750 2706 2750 10199 10122 25706 137647 13122 25706 137647 15126 1406 1760 1760 1760 17760 1760 1760 1760 1	#EGPLE DAYS 17 9 5 5 6 13 15 18 17 18 18 19 4 1 11 10 27 11 10 21 11 11 11 11 11 11 11 11 11 11 11 11
AUG 1785 3 12991 65 TOTAL 11733 16 36575 96 TOTAL 27906 19 93685 65 TOTAL 11733 16 36575 96 TOTAL 27906 19 93685 65 TOTAL 11733 16 36575 96 SMERNAM SEP 272 4 MS4 13 MALLOWA SEP 878 3 3082 12 DOT 131 2 396 6 OCT 226 1 1859 6 MOV 33 1 1 188 2 MOV 43 8 21.5 1 DOED 19 4 79 1 DEC 26 6 124 8 AND 4 4 9 8 1 MOV 43 8 21.5 1 DOED 19 4 79 1 DEC 26 6 124 8 AND 268 8 8 FEB 8 8 6 8 FEB 8 8 8 FEB 8 8 8 8 MOV 43 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	MG Q R G M	SEP OLI HBY OEC JAM FEB HBR HAR HAR HAR HAR HAR HAR HAR HAR HAR HA	ROAT DAYS 491 99 35 33 33 35 55 133 265 265 266 266 2750 86528 32393 14383 14780 14483 14780 1	80 AT DATS 1	### ##################################	##OPLE ONYS 14 2 1 1 1 1 2 12 12 12 12	TILLAMOS	PTYCHARRYMLIGAL SECUNDERRYMLIGAL APAYNCHARRYMLIGAL SCONGERRYMLIGAL SCONGERRYMLIGAL TECHNORRYMIN TO SCONGERRYMLIGAL TO SCONGERRYMLIGAL TO SCONGERRYMIN TO SCONGERRYMIN TO SCONGERRYMIN TO SCONGERRYMIN	80AT DAYS 4231 4447 7679 1143 657 675 875 875 8001 8626 8123 7144 1530 3744 1530 346 648 2736 648 2736 648 2736 648 2736 648 2736 648 2736 648 2736 648 2736 648 2736 659 768 639 268 268 278 630 268 278 631 647 631 647 648 278 659 278 659 278 659 278 1551 2262	BQAT OAYS 7 4 2 1 1 1 2 5 7 6 0 4 6 1 2 2 5 5 7 6 7 6 0 4 6 6 1 2 2 1 8 6 6 8 1 2 3 5 6 8 7 2 1 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	#EDPLE DAYS 21979 21979 11973 6105 2706 2709 2709 2709 10199 10122 25700 137647 13122 55700 137647 15126 602 2706 2706 2706 2706 2706 2706 270	#EGPLE DAYS 17 9 5 5 6 13 15 10 11 10 10 10 11 10 10 11 10 10
SEP 272	MG Q R G M	SEP GET HBY CEC JAM FER APR HAY JUN JUL AUG TOTAL TO SEP GET MOP CEC JAM FER APR APR APR APR APR APR APR APR APR AP	ROAT DAYS 493 99 99 935 33 33 33 35 55 133 265 265 266 266 2750 466 2750 4652 2750 4652 2750 4652 2750 4652 2750 4652 2750 4652 2776 4652 2776 4656 485	80 AT DATS 1	### ##################################	PEOPLE GAYS 14 2 1 1 1 1 2 1 1 2 1 1 2 1 1	TILLAMOS	PTYCHARRYMLGAL SCOUPERARRYMLGAL TOTSCOUPERARRYMLGAL TOTSCOUPERAFALUJUUT ECCERTAFAAAUJUUT ECCERTAFAAAUJUUT ECCERTAFAAAUJUUT ECCERTAFAAUJUUT ECCERTAFAAUJUUT	80AT DAYS 4231 4447 7679 1143 657 657 675 2733 6626 1323 7144 1530 3744 1530 364 2736 642 2736 642 2736 643 643 2736 643 643 2736 644 2736 647 7884 653 69 268 7887 7887 1871 1822	BQAT OAYS 7 4 2 1 1 2 5 5 7 6 2 1 1 2 2 5 5 7 6 2 1 1 2 2 1 1 1 2 2 1 1 1 1 2 2 1	#EDPLE DAYS 21979 11973 6805 3215 2768 2793 7859 18199 18129 18122 20709 137647 13122 8418 1680 137647 15120 14180 1576 1768 2768 2768 2768 2768 2768 2768 2768 2	#EGPLE DAYS 17 9 5 5 2 2 2 6 13 15 10 11 10 11 10 11 11 11 11 11 11 11 11
Sep 272 396 6 OCT 224 5 1859 6 OCT 226 5 1859 6 OCT 231 2 396 2 OCT 231 2 396 2 OCT 231 3 1 165 2 OCT 256 6 123 8 OCT 231 3 1 165 2 OCT 256 6 123 8 OCT 231 3 0 OCT 231 3 0 OCT 231 3 0 OCT 232 3 0 0 0 0 0 0 0 0 0	MG Q R G M	SEP GET HBY CEC JAM FER APR HAY JUH JUL AUG TOTAL IR SEP GET MON FER APR APR APR APR APR APR APR APR APR AP	ROAT DAYS 491 99 35 33 33 35 36 37 36 38 37 38 38 38 38 38 38 38 38 38 38 38 38 38	80AT DAYS 3 1 8 9 1 1 1 2 4 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1	### ##################################	##OPLE ONYS 14 2 1 1 1 1 1 1 1 1 1 1 1 1	TILLAMOS	SEPT VC NERRY NILGAL SECTION OF CHARRY NILGAL APAY C NERRY NILGAL SECTION OF CONTRACT	80AT DAYS (233 4447 7679 1143 657 675 2733 6001 0626 1323 7144 45918 3744 1530 346 2736 468 2736 468 2736 468 2736 468 2736 468 2736 468 2736 468 2736 4736 689 268 268 268 268 268 268 268 268 268 268	BQAT OAYS 7 4 2 1 1 1 2 2 5 7 6 0 4 6 1 2 3 5 6 5 7 6 6 2 7 2 1 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	#EDPAE DAYS 21979 11973 6805 2758 2766 2759 7059 16199 16124 18122 25769 137647 13122 25766 137647 13122 25766 25766 13766 25766 2766 2766 2766 2766 2766 2766	#EGPLE DAYS 17 9 9 5 5 2 2 2 6 13 15 10 11 11 14 4 5 2 7 11 10 4 6 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
NOT 33 1 143 2 100 25 6 163 1 100 10	MULT FROM	SEP GET HBY CEC JAM FER APR HAY JUH JUL AUG TOTAL TOTAL SEP OCT MON FER APR APR APR APR APR APR APR APR APR AP	ROAT DAYS 491 99 35 33 33 38 33 38 38 38 38 38	80AT DAYS 3 1 8 9 1 1 6 6 1 1 2 4 2 1 1 1 1 1 1 1 3 5 6 5 3 3 1 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	### ##################################	## ## ## ## ## ## ## ## ## ## ## ## ##	TTLL4M05	SEPT OCT VOICE HARRY NULL AUGAL SEPT Y C NG C	80AT DAYS 6231 4447 7679 1143 657 675 875 875 8001 8626 8123 7144 1530 3744 1530 346 648 2736 648 2736 648 2736 648 2736 648 2736 648 2736 648 2736 648 2736 648 2736 648 2736 648 2736 648 2736 648 2736 648 2736 652 673 673 673 674 673 674 674 677 673 1511 2266 2441 2863	BQAT OAYS 7 4 2 1 1 1 2 5 5 7 6 0 4 6 1 2 3 5 6 5 7 2 1 8 6 6 1 2 3 5 6 6 7 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	#EDPAE DAYS 21979 21973 4805 2750 2750 2750 2750 2750 2750 15199 16124 20764 2192 20766 137647 13122 20766 21966 2206 2206 2206 2206 2206 2206 2206 2	### ##################################
### ### ### ### ######################	MULT FROM	SEP OLI NBY CEC JAN FEB NBR HAR HAV JUN AUG TOTAL	ROAT DAYS 491 99 35 35 33 35 55 133 265 265 266 266 2750 88524 32,993 14,38	80AT DAYS 3 1 8 9 1 1 6 9 1 1 2 4 2 1 1 1 1 1 1 1 3 5 6 5 3 3 1 9 8 8 8 8 9 8 9 9 9 9 9 9 9 9 9 9 9 9	### ##################################	## ## ## ## ## ## ## ## ## ## ## ## ##	TTLL4M05	SEPT OCT VOICE HARRY NULL SEPT VC NOSCH APRY JUIL AUGAL SEPT VC NOSCH NO	80AF DAYS 6233 427 7679 1143 657 675 2733 6801 8626 8123 7144 45918 3746 1530 348 648 2736 648 2736 624 7864 6156 33362 1225 6524 7867 6187 63 69 788 286 147 63 69 788 147 63 69 788 147 63 69 788 147 63 69 788 147 63 69 788 147 63 69 788 147 63 69 788 147 63 69 788 147 63 69 788 147 63 69 788 147 63 69 788 147 63 63 69 788 147 63 69 788 147 63 69 788 147 63 69 788 147 63 69 788 147 63 69 788 147 63 69 788 147 63 69 788 147 63 69 788 147 63 648 788 788 788 788 788 788 788 788 788 7	BQAT OAYS 7 4 2 1 1 2 5 7 6 0 3 1 0 8 6 9 1 1 2 3 1 8 6 6 5 7 2 1 1 8 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	#EDPAE DAYS 21979 21973 41973 4219 2764 2793 7039 16129 16129 16129 13142 25768 137647 13122 5418 1468 13764 2266 2266 2266 2266 2266 2266 2266 2	### ##################################
FEB U 0 1 MAR 17 2 64 3 MAT ES U 0.0 1 10.1 2 APR 69 3 1.24 1 MAT APR 69 3 1.24 1 1.27 2 2.24 9 MAT APR 697 2 2.24 9 7 2.21 2 2.21 2 2.21 2 2.21 2.21 2.21 2.21 2.21 2.21 2.21 2.21 2.21 2.21 2.22 3.22 2.70 2.21 3.21 2.70 2.22 3.22 2.70 2.22 3.22 2.70 2.22 3.22 2.70 2.22 3.22 2.70 2.22 3.22 2.70 2.22 3.22 2.70 2.22 3.22 2.70 2.22 3.22 2.70 2.22 3.22 2.70 2.22 3.22 2.70 2.22 3.22 2.70	MULT FROM	SEP OLI NBY CEC JAN FEB NBR NAV JUH AUG TOTAL	RCAT DAYS 431 99 35 33 33 35 33 35 35 36 666 581 2790 665 2790 6736 6736 6736 6736 6736 6736 6736 673	80AT DAYS 3 1 8 9 1 1 6 9 1 1 2 4 2 1 1 1 1 1 1 1 3 5 6 5 3 3 1 9 8 8 8 8 9 8 9 9 9 9 9 9 9 9 9 9 9 9	### ##################################	## ## ## ## ## ## ## ## ## ## ## ## ##	TTLL4M05	SEPT OCCUPANTA NUMBER APRY NUM	80AT DAYS 6233 447 7679 1143 657 675 2733 6801 8626 8123 7144 1530 3746 1530 386 100 148 648 2736 624 7864 6156 33362 1225 6624 7864 6156 33362 1225 624 7864 6156 33362 1225 624 7864 6156 33362 1225 624 7864 6156 33362	BQAT OAYS 7 4 2 1 1 2 5 7 6 0 3 1 0 8 6 9 1 1 2 3 1 8 6 6 5 7 2 1 1 8 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	#EDPLE DAYS 21979 21973 41973 41973 4219 2764 2779 16199 16124 2194 2194 2194 2194 2194 2194 2194 2	### ##################################
######################################	MULT FROM	SEP OLI NBY CEC JAN FES HAR	ROAT DAYS 431 99 35 333 333 35 55 133 265 566 666 5750 666 571 2750 6661 2750 6662 2750 667 4750 6745 14760	80AT DAYS 3 1 8 9 1 1 6 9 1 1 2 4 2 1 1 1 1 1 1 1 3 5 6 5 3 3 1 9 8 8 8 8 9 8 9 9 9 9 9 9 9 9 9 9 9 9	### ##################################	## ## ## ## ## ## ## ## ## ## ## ## ##	TTLL4M05	SEPT OCO LA SEPT O	80AT DAYS 4231 4447 7679 1143 657 657 677 677 6701 6626 1323 7144 47918 3746 1530 3662 1323 7144 47918 3746 1530 3662 1323 7144 47918 3746 1530 3662 1471 678 2681 1671 1671 274 274 1773 274 43 274 43 274	BQAT OAYS 7 4 2 1 1 2 5 7 6 0 3 1 0 8 6 9 1 1 2 3 1 8 6 6 5 7 2 1 1 8 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	#EDPLE DAYS 21979 21973 41973 41973 4219 2764 2779 16199 16124 2194 2194 2194 2194 2194 2194 2194 2	### ##################################
### 17# \$ 668 10 JUN 2656 9 7241 27 ### 266 \$ 948 15 JUL 2721 0 7026 26 ### 15 JUL 2721 0 7026 26 ### 15 9 1126 17 446 17 6801 22 #### 1526 23 MBRS 73 FOTAL 6663 32 27422 183	MULT FROM	SEP GET HBY CEC JAM FER APR HAY JUH JUL AUG TOTAL IR SEP GET MOV FER APR APR APR APR APR APR APR APR APR AP	ROAT DAYS 491 99 35 33 33 33 35 55 133 2655 5266 666 78750 6665 78750 6661 78750 6673 7876 7876 7876 7876 7876 7876 7876	80AT DAYS 3 1 8 9 1 1 6 9 1 1 2 4 2 1 1 1 1 1 1 1 3 5 6 5 3 3 1 9 8 8 8 8 9 8 9 9 9 9 9 9 9 9 9 9 9 9	### ##################################	## ## ## ## ## ## ## ## ## ## ## ## ##	TTLL4M05	SEPT VENERRY MLGAL TOTAL PTVENERRY MLGAL SCOOL SEPT VENERRY MLGAL TOTAL SCOOL SCOOL SEASON SEPTIMENT SCOOL SCOOL SEASON SEPTIMENT SCOOL S	80AT DAYS 4233 4447 7679 1143 657 657 657 675 2731 6001 6626 1323 7144 49918 3744 1530 36 148 2135 6624 263 31362 1225 7864 624 7864 2135 6122 624 1603 11713	BQAT OAYS 7 4 2 1 1 2 5 7 6 0 3 1 0 8 6 9 1 1 2 3 1 8 6 6 5 7 2 1 1 8 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	#EDPLE DAYS 21979 11973 6105 2706 2793 7030 16199 16199 16126 2793 137647 13122 25740 1400 576 137647 13122 25740 1400 576 137647 13122 34576 1400 576 13764 2206 2206 2206 2206 2206 2206 2206 22	### ##################################
JUL 266 6 998 139 JUL 2661 8 (926 69 616 318 9 1126 17 646 1546 7 6861 22 7076 319, 23 682 73 FOTAL 6663 32 27422 183	MULT FROM	SEP GET HBY CEC JAN FER APR HAY JUH JUL AUG TOTAL IR SEP GET MON FER APR APR APR APR APR APR APR APR APR AP	ROAT DAYS 491 99 35 33 33 35 35 36 37 37 38 38 38 38 38 38 38 38 38 38 38 38 38	80AT DAYS 3 1 8 9 1 1 6 9 1 1 2 4 2 1 1 1 1 1 1 1 3 5 6 5 3 3 1 9 8 8 8 8 9 8 9 9 9 9 9 9 9 9 9 9 9 9	### ##################################	## ## ## ## ## ## ## ## ## ## ## ## ##	TTLL4M05	SEPT VC NERRY HILGAL SCONERRY	60AT DAYS 6231 4447 7679 1143 657 657 657 657 6501 6626 1323 7144 45918 3744 1530 36 148 2736 4322 6624 7804 6156 33362 1225 7804 627 807 141 637 63 69 768 147 63 147 63 69 768 11713	BQAT OAYS 7 4 2 1 1 2 5 7 6 0 3 1 0 8 6 9 1 1 2 3 1 8 6 6 5 7 2 1 1 8 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	#EDPLE DAYS 21979 21973 41973 4195 2764 2793 7799 16199 16194 16124 219767 13122 57767 13122 5418 1668 9776 12764 2266 2266 2266 2266 2266 2266 2266	### ##################################
TOTAL 1676 25 MERS 73 TOTAL 4465 32 27422 183	MULT FROM	SEP OLI NBY OECH JES HAPR HAY JUM AUG TOTAL TOTAL AUG TOTAL SEP MARR APA JUM JUM JUM JUM JUM JUM JUM JUM JUM JUM	ROAT DAYS 491 99 35 35 33 35 36 37 36 37 37 38 38 38 38 38 38 38 38 38 38 38 38 38	80AT DAYS 3 1 8 9 1 1 6 9 1 1 2 4 2 1 1 1 1 1 1 1 3 5 6 5 3 3 1 9 8 8 8 8 9 8 9 9 9 9 9 9 9 9 9 9 9 9	### ##################################	## ## ## ## ## ## ## ## ## ## ## ## ##	TTLL4M05	SEPT VC NERRY HILLS A PROFILE ALL SECTIVE NERRY HILLS A PROFILE A PROFILE ALL SECTIVE NERRY HILLS A PROFILE A PROFILE A PROFILE A PROFILE A PR	80AT DAYS 6231 4247 7679 1143 657 675 2733 6801 8626 8123 7144 1530 3746 1530 384 2736 100 148 644 2736 652 7864 6156 33362 1225 6624 7864 6156 33362 1225 624 7864 6156 33362 1225 624 7864 617 617 617 617 617 617 617 617 617 617	BQAT OAYS 7 4 2 1 1 2 5 7 6 0 3 1 0 8 6 9 1 1 2 3 1 8 6 6 5 7 2 1 1 8 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	#EDPAE DAYS 21979 21973 3195 32764 2793 7799 16199 16199 161924 23747 13122 57767 137647 13122 57764 2266 2766 2766 2766 2766 2766 2766	### ##################################
	MULT FROM	SEP OLI NBY OEC JES HERR HAY JUH AUG TOTAL AUG APR	ROAT DAYS 431 99 35 333 333 35 55 133 265 586 686 551 2756 88524 34393 4436 1436 1436 1436 1436 1436 1436 143	80AT DAYS 3 1 8 1 8 1 1 8 1 1 1 1 1 1 1 1 1 1 1	### ##################################	## ## ## ## ## ## ## ## ## ## ## ## ##	TTLL4M05	SEPT VC NERRY HILGAL SCONDERRY HANDLE APPT VC NERRY HILGAL SCONDERRY HILGAL SCONDERRY HANDLE SCONDERRY HANDL	80AT DAYS 6231 4247 7679 1143 657 675 2733 6801 8626 8123 7144 1530 3746 1530 384 2736 100 148 644 2736 644 2736 647 657 657 657 758 286 147 637 637 147 637 637 637 637 637 637 637 637 637 63	BQAT OAYS 7 4 2 1 1 1 1 2 5 7 40 3 1 0 4 6 1 2 2 1 1 1 1 2 2 3 5 6 5 2 7 2 1 1 1 1 2 2 1 1 1 1 2 2 3 5 6 5 7 4 0 0 4 6 1 2 3 5 6 5 7 6 6 7 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	#EDPAE DAYS 21979 21973 3195 32764 2793 7799 16199 16199 161924 21747 13122 57767 13767 13767 13767 2266 2766 2766 27767 3867 3867 3867 3867 3867 3867 3867	### ##################################

CCUNIT	MONTH	ATOTAL 2740 TADB	AVERAGE BOAT DAYS		AVERAGE PEOPLE DAYS
M N S CO	SEP	2218	3	12755	18
	007	985	1	5001	•
	MOA	266	0	1144	2
	DEC Jan	124	4	52J	1
	FEB	257 248	6 B	1162 1854	2
	MAR	541	ĭ	1027	í
	APR	1464	ž	20534	10
	MAY	2173	3	14646	50
	THM	3166	5	42984	62
	JUL	3504	5	75516	4.7
	AUG Tutal	3468 18432	5 27	31701 L87209	46 271
		·			
HASMINGT	SEP OCT	17651 9441	3 2	50932 27257	
	NOV	3736	í	15069	2
	CEC	21.55	ā	6978	ì
	JAN	2011	ā	6696	ī
	FEB	3571	1	11031	Z
	HAR	7348	1	213+6	3
	APR HAY	16902 18790	3	46545 54761	7
	JUN	27.500	3	#3537	ī,
	JUL,	32:12	š	99302	16
	AUG	30295	5	94034	15
	TOTAL	170972	2.6	514478	83
HHEELER	SEP	4.C	2	(35	7
	OCT	11	i.	*4	ž
	DEC MOA	o o	0	g 0	0
	JAN	ŏ	ů	ŏ	ě
	FEB	ä	Ď	ĭ	j
	MAR	13	1	27	1
	LPR	22	1	55	3
	PAT	44	ž	127	6
	JUL JUN	91 78	5	272 344	14 17
	AUG	47	2	165	, ,
	TOTAL	346	17	1163	56
FAHHILL	SEP	4001	3	13774	9
	OCT	1670	1	5343	•
	NOU	709	•	2253	2
	TEC	481 608	0	1190 2583	1 2
	FEB	+30	ij	1063	í
	MAR	586	1	2739	ě
	APP	2507	2	7024	5
	MAY	5140	5	17699	15
	JUN	6634	5	22164	15
	JUL AUG	7988 7647	,	26940 25160	18 17
	TOTAL	38539	26	124676	ií
		DOAT	e need	MUMDED OF 1	TC ICTEC
COUNTY	,	WHERE	S USED Moored	NUMBER OF I BOATS NO	L IN OSE Verio 12 lebet
KER			58	177	ζ
ANEA ENTON			58 N	177 177	2

COUNTY	BOATS USED WHERE MOORED	NUMBER OF REGISTERED BOATS NOT IN USE
BAKER	58	173
BENTON	ΩŪ	. 445
CLACKAMAS	233	Τ^βΪΖ
CLATSOP	462	4/3
COLUMBIA	427	338
COOS	/別	3 / 8
CROOK CURRY	53/1	253
DESCHUTES	<u> </u>	ซีน์เ
DOUGLAS	ጷቒጜ	1,027
GILLIAM	, Ņ	1,026
GRANT	ıň	1₹⊈
HARNEY	ŤŇ	† 17
HOOD RIVER	64	53 4
JACKSON	445	1.409
JEFFERSON	111	-^1 <u>122</u>
JOSEPHINE	_27	73I
KLAMATH	5QZ	893
LAĶE	53	- 63
LAÑE	1;824	2,9][
LINCOLN	1,824	506
LINN	.γĕ	829
MALHEUR	245	. 328
MARION	249	1,238
MORROW	3,977	4.736
MULTNOMAH POLK	7,3/1	4,458
SHERMAN	-X	102
TILLAMOOK	42 q	A1 7
UMATILLA	ให้ส์	3.76
UNION	-3 7	188
WALLOWA	9 5	-17
WASCO	71	204
WASHINGTON	82	1,642
WHEELER	<u>,2</u>	_20
YAMHILL	25	557

APPENDIX G

USE DATA FOR ALL RANKED BODIES OF WATER, EXCLUDING THOSE IN TABLES 7 AND 8.

			BOAT DAYS	OF USE				
COUNTY	BODY OF WATER	ON STACE	FISHING	SAILING	SKIING	CRUISING	OTHER	TOTAL
BAKER	BALM CREEK	9	54	a	0	0	0	54
	BROWN LEE RESERVOIR	582	9506	٥	1930	601	299	12201
	HIGGINS RESERVOIR	18	255	0 0	0 421	6	0	255
	PHILLIPS RESERVOIR	402 19	4252 118	č	461	28	10	4729
	POWDER RIVER	641	5708	Č	487	0 328	. 0	118
	SNAKE RIVER	326	2567	18	200	182	18	6746
BENTON	UNITY RESERVOIR ALSES RIVER	61	1012	ē	0	102	0	2968
DEMICH	WILLAMETTE RIVER	357	6030	Ð	142	425	899	1012
	LONG TOM RIVER	25	760	76	0	ō	ŝ	7399
CLACKAMAS		1072	13867	ű	1127	1679	223	506 16836
•••••	ESTACADA LAKE	34	274	Ø	0	Q.	Č	274
	HARRIET RESERVOIR	79	515	j	a	0	ō	515
	NORTH FORK RESERVOIR	350	2341	0	9	45	0	2248
	ROSLYN LAKE	45	69	0	0	0	0	89
	TIMOTHY LAKE	645	8115	25.8	Đ	2	283	8666
CLATSOP	COFFENBURY LAKE	18	219	G	164	a	164	546
	CULLABY LAKE	257 86	992 1014	Đ	289	484	36	1791
	FISH HAWK LAKE	36	215	0	ú	ã	0	1014
	JOHN DAY RIVER KLASKANINE RIVER	150	2248	Č	702	ū	0	218
	NECANICUM RIVER	18	146	Č	382 0	0 0	182	2813
OLUMBIA	CLATSKANIE RIVER	90	2302	11	190	136	127	146
OLUMBIA	WILLAMETTE RIVER	976	19166	89	16 90	1230	798	2735 23018
00S	BRADLEY LAKE	33	66	ő	Č.	0	Õ	66
	COOS BAY	1477	17959	ě	31	560	3176	22034
	COOS RIVER	531	8734	Ċ	155	114	609	9613
	COQUILLE BAY	102	177	a	0	65	31	272
	COQUILLE RIVER	369	5239	6	٥	0	9	5239
	MIDDLE FORK, COQUILLE	153	3086	0	9	0	275	3360
	SOUTH FORK, COQUILLE	46	676	Q	0	Œ	0	676
2004	EEL LAKE	218	5306	0	6	Q.	۵	2306
OOK	ANTELOPE FLAT RESERVOI		180	0	0	G	0	160
	LITTLE HOUSTON LAKE	12 936	12	0	. 0	0		12
	OCHOCO RESERVOIR PRINEVILLE RESERVOIR	1656	6308	0	104	322	492	7227
	WALTON LAKE	91	12281 590	0	9100	2195	574	22837. 590
JRRY	CHETCO BAY	227	5504	ŏ	0 G	0	0	5504
	ELK RIVER	31	92	ő	Ö	å	31	122
	FLORAS LAKE	46	165	ŏ	ŏ	ă	ā	165
	GARRISON LAKE	127	164	ă	260	364	ā	787
	ILLINOIS RIVER	15	1336	C	Ō	Ö	134	1469
	ROGUE RIVER	697	19454	C	ō	2167	100 C	18655
SCHUTES	BIG LAVA LAKE	295	3236	0	Ó	20	0	3256
	CULTUS LAKE	541	1905	26 a	1236	381	103	3813
	DAVIS LAKE	168	580	0	8	0	q	580
	DESCHUTES RIVER	658	12248	8	123	1294	199	13854
	DEVILS LAKE	51	114	ŏ	ı.,	123	- 'é	114
	EAST LAKE Elk lake	2062	19530	Ō	127	306	423	20567
	HOSMER (MUD) LAKE	118	735	988	22	22	0	1767
XUGLAS	CLEAR LAKE	12	107	Ĵ	0	g.	Q	1 07
	COOPER CREEK RESERVOIR	45	45	0	Ó	J	đ	45
	LEMOLO RESERVOIR	679 252	2758	Ō	4635	1179	285	10449
	LOON LAKE	284	5569	ē	_ 0	0	291	5060
LLIAM	COLUMBIA RIVER	15	3122 394	5	265 a	244	244	6268
	JOHN DAY RIVER	37	356	0		0	42	436 678
ANET	BULL PRAIRIE IMPOUND	111	1619	ō	152	28	Ğ	538 1619
	CANYON CREEK MEADOUS DE	5 29	56	8	9	Ü	4 0	1017
	JUMEN DAY RIVED	18	160	Ö	đ	3	0	184
	MENTAL LAND	19		_	Ģ	0	-	220
	MAGONE LAKE	17	EEU					
	SPOOUL LAKE	10	220 38	0	Ô	3	0	38
WEY WE	SPOOL LAKE GUCKAHOMINY RESERVOIR WEINTHENT LAKE			0 0	0 0 a	j G D	9	

BOAT DAYS OF USE CONTINUED

COUNTY	BODY OF WATER	NO.			•			
	FTSH LAKE	BOATS	FISHING	<u>SAILING</u>	SKII NG	CRUISING	OTHER	TOTAL
HÄRNEY	KRUMBO RESERVOIR	24 57	507 292	O O	0	1	217	7 24
	MANN LAKE	39	210	0	0	0 0	0	292
HOOD RIVE	R COLUMBIA RIVER	211	1013	95 å	1114	2440	129	210 5653
	KINGSLEY RESERVOIR	73	749	0	8	a	Ő	749
Mostan	LOST LAKE AGATE RESERVOIR	27	101	٥	a	0	28	129
JACKSON	EMIGRANT LAKE	175 621	1834 2381	0 7 6	222	148	_ 0	1406
	FISH LAKE	460	2361	74 0	3694 0	445 7342	74 551	6670
	HOWARD PRAIRIE RES	1726	19791	3178	1298	579	221	16377 24844
	HYATT RESERVOIR	615	7785	0	0	166	ā	7951
	LOST CREEK RESERVOIR ROGUE RIVER	1920	20835	37	556	1001	287	22679
	SQUAW LAKES	416 57	11277 249	8	556	222	0	12056
	WILLOW CREEK RES	391	8288	Ö	5 409	0 259	220 250	249
JEFFERSON	BLUE LAKE	34	69	õ	ő	2,7	220	8991 5 9
	DESCRITES RIVER	56	1088	0	٥	a	Č	1088
	HAYSTACK RÉSERVOIR LAKE SIMTUSTUS	305	2055	0	94	22	ē	2150
	METOLIAS RIVER	100 41	545 657	Q 0	9	Đ	1	545
	OLALLIE LAKE	34	171	ů	Ü	a 0	0	657
	ROUND BUTTE RESERVOIR	1177	5746	ō	5685	2455	298	171 14186
JOSEPHINE	BOLAN LAKE	54	162	G	D	2	81	244
	TLLINOIS RIVER ROGUE RIVER	27	135	Q.	0	Ð	0	135
	SELMAC LAKE	504 120	1 € 1 2 7 1 0 5 6	47.4	188	374	9	16614
KLAMATH	AGENCY LAKE	176	4837	17 8 B	0 121	81 169	547	1316 5673
	ASPEN LAKE	44	564	č	0	103	4	564
	CRESCENT LAKE	1098	10574	0	2087	725	297	13681
	DAVIS LAKE FOUR MILE LAKE	24	97	0	Ō	Q	0	97
	GERBER RESERVOIR	24 265	145 1736	0	-0	0		145
	HEMLOCK LAKE	24	241	8	74 0	1 8	0 217	1810 459
	KENO RECREATION AREA	24	24	ŏ	ŏ	ğ		24
LAKE	LAKE OF THE WOODS	639	3687	619	5801	3414	386	14062
LAKE	ANA RESERVOIR CAMPBELL LAKE	32	767	0	21	ð	0	7 58
	COTTONWOOD MEADOWS LAKE	79 11	48 347	Ů O	0 0	j	285	333
	COTTONWOOD RESERVOIR	11	284	ű	٥	0	O Đ	347 284
	CRUMP LAKE	24	1014	õ	ŏ	ā	ŏ	1014
	DEADHORSE LAKE	12	178	0	Ö	ā	ē	178
	DOG LAKE Drews reservoir	163	2175	O_	0	0	0	2175
LANE	BLUE RIVER RESERVOIR	46 234	74 770	0 D	1075	9	Ó	1149
	CARTER LAKE	36	73	e e	0	Ç O	ð	770 73
	CLEAWOX LAKE	72	73	õ	139	ă	7,3	255
	COLLARD LAKE	36	364	Ð	D	ō	Ĩ	364
	COUGAR RESERVOIR	488	946	D	4809	73	0	5828
	DEXTER RESERVOIR	422 436	8114 983	0 95 2	36	216	i i	8368
	DORENA RESERVATE	992	8933	73 <u>C</u>	364 1369	1819 345	182 0	4112 10627
LINCOLN	FALL CREEK RESERVOIR	712	7363	ō	5968	1633	36	15006
ETHOUGH	ALSEA BAY ALSEA RIVER	1004	12139	626	20	62	780	13627
	BEAVER CREEK	722	22983	Ċ	110	886	224	23279
	DEPOE BAY	75 335	1886	0	0	.0	127	2013
	DEVILS (D) LAKE	1367	5503 11742	0	123 6434	82 2122	369 811	6977 20999
	SALMON RIVER BAY	48	96	66	0	6	22	464
LINN	SILETZ BAY BIG LAKE	128	974	G	0	ā	•	974
	CLEAR LAKE	154	327	Q	536	0	•	551
	DETROIT RESERVOIR	202 124	1217	8	1171	309	4	2697
	POSTER RESERVATO	1745	364 9614	0 61	781 9027	416 2399	9 596	1561 23476
	PREFINAL TWRL % 1	31	1161	Ö	Ö	26	770	1107
MALHEUR	GREEN PETER RESERVOIR BULLY CREEK	725	3765	0	3906	1947	Ť	9618
	MALHEUR RESERVOIR	150	224	299	404	90		1016
	UNTHEE LAKE BEGEDUATA	66 792	1321	420	134	9 470	14.0	1455
	SNAKE RIVER	792 301	0466 3068	120 8	941 839	879 164	149 134	10555 4217
				-	4-3			751

BOAT DAYS OF USE CONTINUED

		NO. BOATS	FISHING	SAILING	SKIING	CRUISING	OTHER	TOTAL
COUNTY	BODY OF WATER	141	1761	Û	0	0	0	
MAR10N	BIG CLIFF RESERVOIR	26	781	0	26	a	ŏ	1761 897
	NORTH SANTIAM RIVER	62	598 220	g a	0	0	<u> </u>	598
	CANTIAM RIVER	31 943	3889	ď	0 3996	9 5228	1301	220
	WILLAMETTE RIVER	111	1858	162	469	275	162	14413
MORROW	COLUMBIA RIVER PENLAND PRAIRIE IMP.	87	977	36	8	36		1049
MULTNOMAK	SANDY RIVER	86 45	1 <i>122</i> 89	₽ 0	Ü	0	9	1422
	STURGEON LAKE	50	606	ŏ	ŏ	ů	۵	89 606
POLK	VALSETZ LAKE WILLAMETTE RIVER-	453	4575	Q	3662	373	687	9376
	YAMRILL RIVER	25	506 9	0		0	4	506
SHERMAN	BIBBY RESERVOIR	5	848	0 54	14 42	23 412	8 374	47
	COLUMBIA RIVER	73 43	1302	2	92	716	18	1730 1320
	DESCHUTES RIVER JOHN DAY RIVER	299	1283	Ċ	581	114	163	2020
TILLAMOOK	CAPE MEARES LAKE	31	0	a	0	ā	31	31
112274 2001	KILCHIS RIVER	59	386	C	363	9	9	346
	LAKE LYTLE	157 18	1725 554	C C	357 0	0	1 161	2063 714
	LITTLE NESTUCCA RIVER NEHALEM BAY	964	16145	328	54	738	1309	18573
	NEHALEM RIVER	568	9905	0	O	42	829	10777
	NESTUCCA BAY	278	1436	9	0	0	0	1436
UKATILLA	COLD SPRINGS RESERVOIR	43 596	143 £122	D J	0 5669	0 5397	144	143 17152
	COLUMBIA RIVER INDIAN LAKE	101	393	Ö	2007	24.21	277	393
	McKAY RESERVOIR	234	1764	ě	648	18	ō	2430
UNION	GRANDE RONDE RIVER	9	384	3	54	9	Ò	4 30
	JUBILEE IMPOUND	27	99	0	36	0 4	4.95	135
	MORGAN LAKE THIEF VALLEY RESERVOIR	61 108	474 367	80	162 134	54	126 0	762 643
	WALLOWA RIVER	9	27	Ö	0	ď	ğ	27
WALLOWA	SNAKE RIVER	64	489	0	558	Đ	4	1047
useco	WALLOWA LAKE	638	8073	80	2883	1746	54	12836
WASCO	BADGER LAKE COLUMBIA RIVER	9 507	53 3158	0	6 16 1	0 4295	240	53 9374
	DESCHUTES RIVER	79	2081	ŏ	10 11	0	250	2331
	FROG LAKE	9	55	8	ō	ē	0	55
	JOHN DAY RIVER	46	615	¢	9	18	0	643
	PINE HOLLOW RESERVOIR ROCK CREEK RESERVOIR	162 45	526 447	0	359	18 0	a a	1107
WASHINGTON	SCOGGINS LAKE (RES)	238	1107	-			_	447
MEELER	JOHN DAY RIVER	5	1107	0	40 6 0	191 9	326 8	1942 18
YAMITEL	ROCK CREEK LAKE	ž	44	ă	ū	ă	ğ	44
INCHEST	WILLAMETTE RIVER YAMHILL RIVER	538	796	31	5392	1269	692	8181
STATE OF I	DAHO	51 205	76		0	0	51	127
STATE OF C	ALIFORNIA	603	609 9044	402 D	475 2901	45 375	308 302	1834 12622
STATE OF N	EVADA	34	444	ă	0	ű	15	459
APLIFICATION OF	TRILLIUM LAKE TUALATIN RIVER	177	785	ė	D	ā		785
CLATSOP	SUNSET LAKE	45	223	4	G	0	6	\$23
COOS	TOUNG'S RIVED	36 73	16 2822	0	0	0	55	73 4886
1003	tigh Jige Takk	36	109	ű	0	1020	164 0	119
	NORTH TEN MILE LAKE SAUNDERS LAKE	919	11622	122	2704	565J	947	19591
DESCHUTES	LITTLE CITY THE LAVE	62	305	0	Q	0		305
	MAKIN IMIN LANG	48 127	182	0	8	44	9	226
	PAULINA : AKE	1517	1405 1524 9	0 72	8	0 122	2	1405 15749
	SOUTH THIN LAKE TAYLOR LAKE	80	402	'Ğ	182	122	i	584
NACIONAL DE	COST TWEE	22	439	Q	8	ā	ē	4 39
	PLAT I DESCRIPTION	41 66	41 1786	G 444	9	a		41
	SMITH BIACO	245	1756 4650	166 0	0 0	<u>0</u> 0	9 33	438 4683
	SOUTH UMPOUR RIVER TANKENTICH LAKE	100	3251	ŏ	Ö	ő	166	3542
	PLANTIK FOODY (Barrers	252	1166	0	0	. 0	392	1459
ta e e	SOUTH FORK, UNPOLL	176 1 63	1043	0	166	199	162	1598
		≠ 44	5568	0	0	166	265	2690

BOAT DAYS OF USE CONTINUED

COUNTY	BODY OF WATER	NO.BOATS	FISHING	SAILING	SKIING	CRUISING	OTHER	TOTAL
	TIDEMATER, UMPQUA	99	5666	4	D	a	298	5965
	WINCHESTER BAY	667	13507	ō	684	365	580	15135
HARNEY	WARM SPRINGS RESERVOIR	56	222	Ġ	Ð	Ď	1	222
DARALI	YELLOW JACKET IMPOUND	79	1602	8	Ď	o	ā	1602
JEFFERSON	SUTTLE LAKE	126	3530	Ö	ā		434	3964
KLAMATH	LOST RIVER	105	607	0	0	0	0	607
KERIKI	MILLER LAKE	1367	18040	223	375	326	¢	15966
	ODELL LAKE	26	130	0	0	0	ø	130
	PETRIC LAKE	108	712	٥	٥	24	763	1499
	SPRAGUE LAKE	70	136	ð	0	đ	0	136
	SUMMIT LAKE	24	290	9	0	٥	217	507
	WILLIAMSON LAKE	24	Ď	a	0	a	121	1 21
	WOOD RIVER	11	525	3	0	J	a	5 2 5
LAKE	GOOSE LAKE	11	q	Ð	11	3	Q	11
	HART LAKE	11	53	3	0	۵	ā	53
	LOFTEN RESERVOIR	22	84	8	O	0	Ū	84
	THOMPSON VALLEY RES.	77	283	3	126	C	Đ	439
LANE	GOLD LAKE	36	255	J	Ġ	0	0	255
	HILLS CREEK RESERVOIR	468	9404	¢	73	109	328	9914
	LAKE CREEK	36	364	Œ	Q.	Q	0	364
	LOOKOUT POINT RES.	36	364	٥	٥	٥	a	364
	McKENZIE RIVER	255	3603	0	218	1237	655	5713
	MERCER LAKE	365	5865	G	73	3421	a	9362
	MUNSEL LAKE	36	109	0	0	G	0	
	SIUSLAW BAY	93	2667	0	ū	315	228	3213
	SUTTON LAKE	177	813	8	0	0	0	813
	TRIANGLE LAKE	415	1649	G	3089	838	Œ	6123
	WALDO LAKE	88	681	Ō	Q	472	0	1153
	WILLAMETTE RIVER	109	655	Q	0	109	328	1092
	WOAHINK LAKE	196	291	36+	345	4640	656	6494
LINÇOLN	SILETZ RÍVER	986	15319	C	O	23	319	16658
	YACHATS RIVER	31	94	9	O	3	. 0	94
	YAQUINA RIVER	88	2418	0	G	242	110	2550
LINN	LOST LAKE	52	52	0	ō	<u> a</u>	0	52
	SANTIAM RIVER	31	2265	0	0	a	Q.	2265
	SMITH RESERVOIR	99	307	Q	O	109	. 0	416
	WILLAMETTE RIVER	318	3147	q	815	211	587	4760
TILLAMOOK	NESTUCCA RIVER	381	9269	Q.	0	679	464	10412
	NETARTS BAY	513	5172	0	Ğ	441	1469	70 82 20
	SALMON RIVER BAY	20	20	0	0	0	9	71
	SAND LAKE	18	71	Ů,	0	0	Q 0	536
	TRASK RIVER	18	536	0	-	_	161	1751
	WILSON RIVER	72	1854	0	536	a	101	F1.77

APPENDIX I

SAFETY AND LAW ENFORCEMENT RESPONSES TO THE 1978 BOATING SURVEY BY COUNTY OF REGISTRATION

			9041 45	STATE OF THE STATE OF	!				FREE COURTESY HOTOPROAT EXAMINATION				
t _C Unity	*+5	No.	ganie Boatta	TIPE SHE	STATE POLICE	Crauf Guio:	C THI M	G2#40	COUNTY	762	HO.		
						10	LC	0	84164	19	614		
4214		***	11	2.5	à	14 L	ť	3	PLIMSP	243	1740		
CHICH	9	1973	* * * * * * * * * * * * * * * * * * * *	69	3	708	337	171	CLACKAMA	784	8597		
[# C x # = #	0	47.15	713	10	à	127	€	L a	C 0150P	182	1975		
41534	•	1.74 6	723	17	ō	21	21	1	CCLUMBIA	275	1584		
1034114	Ţ	1175	1 K-1	••1	i	187	6 1	11	eccs	155	4199		
7.1	ð	1000	110		ā	Ü	E-	17	CACCK		534		
cor	0	E 4 4	3.1		5	121	Ċ	30	CLERT	445	r a r		
441	¢	44.1		15	á	65	ŏ	1	G (SCHUTE	144	3451		
₹¢HU11	q	34.1	1.75	0	ā	265	Ď	i	CC1GLAS	547	3911		
T CLAS	0	1927	143	3	j.	Ť	,	à	GILLIAM	36	27		
LLTER	0	17	10	0	ă	à		ì	GRAMI	•	177		
I B M T		177	17	ō	š	ā		à	MAGNET		1 4 5		
an't	ه	117		19	,	,	ě	š	HCCD WIN	6.1	125		
C3 Biv	•	1 **	1.5	ن	å	247	37	97	JACKSON	630	4746		
CH'IN		N F G S	647	D		, ,	ii	, i	JEFFERSO	7.1	166		
F1F950	q	377	*: K	G	å	27	11	2)	762E4H1#	375	1652		
STREET		1856	71	a		44	7.	Ψó	16754414	459	2669		
4-414		1152	24	4.8	8			10		71	149		
. < £	0	213	9	C	0		Ç.	1	LAKE	1045	10371		
t M E	•	10109	ed:	16	4	509	11		LINE	176	1780		
FREDUM		1+49	21	27		242	22	2.2	LINCOLN	195	117-		
NE	٥	3395	317	E	4	9	0	26	LINN	224	742		
E - 104	ė	941	1,	3 🖟	ą.	9	٥	0	MALMEUR	1070	5-11		
1104		94.00	544	9 %	ð	144	۰	3 L	HARTON		144		
4 90 F	i	131	11	٥	D.	11	r	0	HORMON	11	1 1945		
L 16044	PÝ	11/94	1754	268	0	760	2 4 8	31.3	MULTHONE	3351 182	1232		
061401E		1 2 4 2	151	۵	3	5.3	۰	٥	#CLK		1636		
-Equin	-	56	1	a	D	ů	a	۵	2+E ###H		1181		
LLENJO	ě	1147	1+3	a		36	38	0	1 1FF 8#00	161	1152		
4871114	ň	1296	11	1.5	•		1.6	16	UPATILLA	55.5	1176		
EC+		408	21	D	9	9	9	D	UNION	27			
111001	7	22	`*		2	٥	34	•	用自 业上行 型 系	e e	267		
	:		71	ā	•	ġ	0	4	MANCO	124	603		
4500		1136	323	164		217	42	41	WASHINGT	P £ 7	5847		
ECHINGE		7,70	7/7		i		C	Ð	HPLELER	2	22		
HEELER			161	25	ā	76	5.7		V AMH ILL	279	1443		
PHILL	•	1410	187	47				-					

		8	OAT STOPP	L D	SCAFTING SAFETY OR EQUICATIONAL MATERIAL HANDE					
COUNTY	*(5	MO	SHE 4 IFF	STATE	COAST Guard	CIMER	C0430	COUNTY	163	NÓ.
							19	11468	192	461
14469	0	744	1.0	10	19	20	20	AENTON	688	1476
SENTON	J	1401	+0	∠ •	40		516	CLACKANA	2363	7971
LACKAMA	0	5040	113	3 %	240	137	36	CLATION	167	1439
L4150P		1344	3.6	14	119	14	21	CCLUMPIA	524	1,152
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003	31	3880	9 2	\$ 1	214	61	61 12	Cacak	119	427
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URRE		915	10	15	217	15	45	DESCHUTE	615	2612
ESCHUTE		3451	\$ 5	2.2	45	22	2.2	SCUGLAS	1292	3161
006645	3.1	3966	33	33	298	13	11	G TLL TAM	72	***
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ARMET		185	•	19		9	ą.		111	244
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I E F E B SQ	ā	349	11	0		2.2	0	JEFFERSO	106	1354
ICSE##14	i	1096	27	27	94	27	54	TOSELHEM	1830	2197
CLAHATH		2792	72	24	72	41	72	EFFELLA		158
JKE	i	221	11	11	11	•	•	FTHE	!!	4297
LANE	i i	16226	73	35	5 6 5	9	10	Fiat	3957	
LINCOLM		1678	9.4	2.2	254	8	6.6	L INGOL#	114	1495
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MHIGH		232	ě	7	**	•	•	MALLOWA	45	215
MALLONA	:	141	i i	1	14		11	W1520	195	215
MASCO		5299	205	47		41	ii	MASHINGT	4519	5004
MUSHINGT	*!	"#	```	• 1	156	":	7	une fich	7	16
HMEELER		1441	93			•	25	YIPHILL	415	1170
T ANNILL		F441	7.0		111	4	67			

APPENDIX I
BOATING COURSES TAKEN BY SPONSOR
AND COUNTY OF REGISTRATION

COUNTY NOME CONTING SAFETY OTHER CONTO COUNTY ACUT SOUTH SAFETY OTHER CCHSU		POMEP 5	GUAGGON BOAT	ING COURSES				COAST GUAP	D AUXILIARY	BOATING CCU	RSES						
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