A 2002 SURVEY OF RESIDENT FRESHWATER ANGLERS IN WASHINGTON STATE And Comparisons to the 1994 and 1988 Surveys

Washington Department of Fish and Wildlife Fish Program Fish Management Division

Patricia J. Michael

November 2004

Over 1500 anglers were contacted by telephone in April 2003 and asked various questions about their angling activities and preferences during the previous license year (April 1 2002- March 31 2003). Responses to these questions are summarized in this document. When possible, the responses were also compared to those from two similar surveys that took place in 1994 and 1986.

Fifty-eight percent of the anglers surveyed had fished in eastern Washington during the last license year; 83% of these were very or somewhat satisfied with their fishing experience. An equal 58% had fished in western Washington: 72% of these anglers were very or somewhat satisfied. "For relaxation" and "To be with family and friends" were the two top reasons listed for going fishing.

Although only 15% fished on the "opening day" of lowland lake season during the last license year, the majority, 57% said we had the right amount of opening day lakes. Almost half (45%) felt that we had the right amount of juvenile only waters (waters where fishing is limited to those under 15 years of age). The majority (57%) had taken a juvenile fishing the last year, and 33% were aware of the Department's Youth Fishing Program. For quality waters (waters managed for larger trout), 43% believed we had the right amount, and, 22% had fished a quality water during the previous license year.

Sixty-one percent had fished each of the last 5 years. The most popular type of fishing was for trout in lowland lakes (33%) with warmwater fish coming in second with 21%. In the 1994 survey the percent preferring lowland lake trout was very similar (32.3%).

The number of days spent fishing for a particular species or species group was fairly constant across the 2002, 1994, and 1986 surveys. Gear preferences for several different species (bass, rainbow trout, steelhead, resident cutthroat, kokanee, and walleye) are reported and compared between the 2002 and 1994 survey. The percentage of anglers who release some legal fish of various species is also listed and compared between the 1994 and 2002 surveys. Anglers were also asked to give the minimum size fish they would keep for certain species, and the minimum size they would consider a quality fish.

Seventy eight percent of anglers got their fishing information from the regulation pamphlet, while 18% used the agency website. Sixty five percent said the regulations were clear and easy to understand. Most anglers (86%) did not belong to a fishing or hunting club. Respondents to the survey were mostly male (81%).

Table of Contents

List of Tables	
List of Figures	iii
Introduction	1
The Survey	2
Telephone and Interview Procedures	2
Content and Development of Questionnaire	3
Sample Size and Selection	3
Results Of The 2002 Survey And Comparisons To Previous Surveys	6
Fishing Activity and Angler Satisfaction	6
Attitudes Toward Fishing Regulations	
Species Preferences	
Types of Fishing Preferred –Number of Days Spent Fishing	
Gear Preferences	
Percent of Legal Fish Released, Size Preferences	
Opening Day Lakes	
Quality Waters	
Juvenile Only Waters	
Additional Information	
Summary	
Appendix 1	
Appendix 2	
Appendix 3	
Appendix 4	
••	

Table 1: License Types and Percentages Used in 2002 Survey	4
Table 2: Percent of legal fish released for various species	

Figure 1:	Binomial Confidence Intervals for various response proportions and sample sizes. Based on Zar, 1984
Figure 2.	Responses to the question: Overall, are you satisfied or dissatisfied with your fishing experiences in eastern/western Washington lakes, rivers, or streams during the past license year (April 1, 2002- March 31, 2003)? 6
Figure 3:	Responses to the question: In general, excluding salmon and sturgeon, how would you rate the present quality of lake and stream angling in Washington?
Figure 4:	Comparisons of anglers' ratings of freshwater fisheries in the three most recent surveys
Figure 5:	Responses to the question: How many years, out of the past 5 years, did you go fishing in Washington's lakes, rivers, or streams?
Figure 6:	Responses to the question: Over the past 5 years, would you say your fishing activity in Washington's lakes, rivers or streams has increased, decreased, or remained about the same?
Figure 7:	Responses to the question: What was your main reason for fishing in Washington's lakes, rivers, or streams over the past 2 years?
Figure 8:	Anglers' responses to the question: Do you agree or disagree that Washington's fishing regulations are clear and easy to understand?12
Figure 9:	Response to the question "How do you get information about fishing rules and rule changes in Washington?"
Figure 10:	Responses to the question: Did you fish forin Washington in the past license year (April 1, 2002- March 31, 2003)?
Figure 11:	Percentages of Anglers Fishing for a Given Species Over the Last Three Surveys
Figure 12:	Angler responses to the question: Which of the previously listed fish do you most prefer to fish for? (Only anglers' first choices are shown)
Figure 13:	Anglers' response to the question: Which of the following six kinds of fishing do you most prefer?
Figure 14:	Comparison of 1994 and 2002 data for anglers' preferences on types of fishing
Figure 15:	Percent of anglers participating and average number of days spent in 6 major types of freshwater fishing in 2002
Figure 16:	Percent of anglers fishing for summer and winter steelhead and days fished in different areas of the state

Figure 17:	Responses to the question: How many days did you fish for Comparison of 2002, 1994, and 1986 surveys	22
Figure 18:	Anglers' responses to the question: When you fish for do you most often fish with flies, lures, lures with bait, or bait?	23
Figure 19:	Comparison of the percentages of anglers preferring to fish with bait for selected species for the 1994 and 2002 surveys	24
Figure 20:	Comparison of the percentages of anglers preferring to fish with lures with bait for selected species for the 1994 and 2002 surveys.	25
Figure 21:	Comparison of the percentages of anglers preferring to fish with lures for selected species for the 1994 and 2002 surveys	26
Figure 22:	Comparison of the percentages of anglers preferring to fish with flies for selected species for the 1994 and 2002 surveys	27
Figure 23:	Comparison of percentage of anglers releasing some legal fish in 2002, 1994 surveys.	.29
Figure 24:	Comparison of percentage of anglers releasing all legal fish in 2002, 1994 surveys.	. 30
Figure 25:	Bass – minimum size anglers would keep, minimum size considered a quality fish.	.31
Figure 26:	Catfish - minimum size anglers would keep, minimum size considered a quality fish.	.32
Figure 27:	Crappie, perch and sunfish - minimum size anglers would keep, minimum size considered a quality fish	
Figure 28:	Rainbow trout - minimum size anglers would keep, minimum size considered a quality fish	.34
Figure 29:	Summer steelhead - minimum size anglers would keep, minimum size considered a quality fish	35
Figure 30:	Winter steelhead - minimum size anglers would keep, minimum size considered a quality fish	.36
Figure 31:	Sea-run cutthroat trout - minimum size anglers would keep, minimum size considered a quality fish	37
Figure 32:	Salmon - minimum size anglers would keep, minimum size considered a quality fish.	. 38
Figure 33:	Resident cutthroat trout - minimum size anglers would keep, minimum size considered a quality fish	39
Figure 34:	Dolly Varden/bull trout - minimum size anglers would keep, minimum size considered a quality fish	40
Figure 35:	Kokanee - minimum size anglers would keep, minimum size considered a quality fish.	.41

Figure 36:	Walleye - minimum size anglers would keep, minimum size considered a quality fish.	42
Figure 37:	Sturgeon - minimum size anglers would keep, minimum size considered a quality fish.	.43
Figure 38:	Brook, brown, and golden trout - minimum size anglers would keep, minimum size considered a quality fish	.44
Figure 39:	Comparison of anglers' responses to the question: Did you fish Opening Day? over the three surveys	45
Figure 40:	Anglers' opinions about Opening Day Lakes	46
Figure 41:	Comparison of answers to the question: Do you prefer year-round or opening day lakes?	.47
Figure 42:	Anglers' opinions of the amount of quality waters	48
Figure 43:	Comparison of 2002, 1994 and 1986 survey data for anglers' opinions on quality lakes	
Figure 44:	Anglers' opinions on the amount of "juvenile only" waters	50

The state of Washington encompasses over one million acres of fresh water including lakes, streams and reservoirs, and nearly two million acres of salt water. The inland waters of the state provide habitat to over 75 species of fish, including those classified as both game fish and food fish. Since the merger of the Washington Department of Fisheries with the Wildlife Department in 1994, food fish, game fish and shellfish in both salt and fresh water are all managed by the new combined agency, the Washington Department of Fish and Wildlife (WDFW). Because of this administrative change, this survey contains a few questions about some species – specifically salmon, crayfish, and sturgeon – that were not included in previous surveys.

To meet the changing needs and interests of the angling public, it is essential to communicate effectively with all of the many different types of anglers in Washington. This has never been an easy task. Washington's fish management agencies have used various types of media (news releases, letters, mailouts, posters, regulation pamphlets, websites, etc.) to send out information or to request opinions from anglers, but none of these provide the type of feedback that is needed to really know what a broad cross-section of anglers are thinking. Information flow between resource users and managers is usually in the form of letters, phone calls, advisory groups, and verbal testimony at public meetings. Most of the people who make the effort to communicate are prompted to do so because of an action by the agency that they disagree with. This information is important, but does not represent the opinions of the total angling public.

Fish and Wildlife agencies have traditionally used surveys or questionnaires, distributed to a random cross section of users, to provide a more complete picture of angler attitudes and opinions. Several game fish surveys were performed over the last few decades in Washington, but only two statewide angler preference surveys, covering all aspects of Washington's game fish programs, have been done. The first of these was a very comprehensive survey that covered license year 1986 (Mongillo and Hahn, 1988). In this document this survey will be referred to as the 1986 survey. Due to budget constraints, the next survey was not completed until just after license year 1994 (WDFW, 1996), and was somewhat smaller in scope. This survey is referred to as the 1994 survey. The most recent survey questions anglers about fishing during the 2002 license year, and although it is admittedly somewhat different for the reasons described above, uses the 1994 survey as a starting point, asking many of the same questions and allowing us to track the changing opinions of the angling public on a number of important issues. Comparisons are also made to the 1986 survey when possible.

Objectives of the 2002 survey: There were three main objectives for this survey: 1) to ascertain angler use and opinions about species Washington anglers fish for and the types of fishing opportunities they preferred; 2) to determine how satisfied anglers are with current freshwater fish programs and learn how anglers get information about fishing regulations; and 3) to track trends in anglers' preferences and use. This information will be used to help make management decisions regarding sportfishing rules and to inform anglers about these decisions.

A telephone survey was selected for several reasons. Of the two other recent comprehensive angler preference surveys conducted, one was a mail survey (1986) survey) and one was a telephone survey (1994 survey). The telephone survey had a high response rate. Of the anglers that were called, almost 60% were successfully contacted and interviewed (1994), compared to 45.7% useable responses from the mail survey (1988). The response rate for the 2002 survey was 54%. The 11.7% "volitional" non-response (those anglers who were contacted, but who chose not to respond) for the 1994 phone survey was much lower compared to the 60.8% recorded for the mail survey. Although this type of data was not kept for the 2002 survey, interviewers indicated that very few anglers contacted refused to be part of the survey. This reduction in non-response should have proportionally reduced bias (unsuccessful anglers being less likely to respond, for instance). A telephone survey also has an advantage in that it can be completed more guickly than a mail survey. In this case, the survey was performed from April 4 through June 3, 2003, immediately after the close of the license year (March 31), giving anglers a good chance to remember accurately the details of their fishing experiences during the past season.

Telephone and Interview Procedures

Through a competitive bid process, Responsive Management, a public opinion and attitude survey research firm specializing in natural resource and outdoor recreation issues, was chosen to perform the survey. All interviews were conducted by employees of Responsive Management with experience conducting computer-assisted telephone interviews on the subjects of fisheries, natural resources, and outdoor recreation.

Telephone interviewers who took part in the survey received specific training before the survey began on the type of survey, survey goals and objectives, handling of survey questions, interview length, termination points and qualifiers for participation, interviewer instructions within the survey instrument, reading of the survey instrument, skip patterns, and probing and clarifying techniques necessary for specific questions on the survey. Calls were randomly monitored without the interviewers' knowledge to evaluate the performance of each interviewer. WDFW staff were able to listen in on some survey calls to ensure that the survey questions were understandable and that the survey was being properly administered. Managers of the survey center and/or statisticians edited each completed survey to ensure clarity and completeness.

Interviews were conducted Monday through Friday from 9:00 a.m. to 9:00 p.m., Saturday from noon to 6:00 p.m., and Sunday from 3:00 p.m. to 7:00 p.m., local time. A five-callback design was used to maintain the representativeness of the sample, to avoid bias toward people easy to reach by telephone, and to provide an equal opportunity for all to participate. When a respondent could not be reached on the first call, subsequent calls were placed on different days of the week and at different times of the day. To ensure the statistical validity of the survey, a total of 1,541 complete interviews were obtained.

Content and Development of Questionnaire

The telephone survey questionnaire used in this survey was developed cooperatively by Responsive Management and WDFW and was designed with several goals in mind. Whenever possible, questions were the same or similar to those asked in the 1986 and 1994 surveys, to allow us to track trends in angler opinions and actions. But in order to improve the survey, poorly worded or outdated questions from previous surveys were discarded, and some new issues were added. With the merger of the Departments of Fish and Wildlife, information was needed about more species, so some additional species options were added to a few of the questions. Responsive Management conducted pre-tests of the questionnaire, and revisions were made to the questionnaire based on the pre-tests. Appendix 2 contains the final survey questionnaire.

Sample Size and Selection

Anglers in Washington over the age of 14 are required to purchase a fishing license. The license year runs from April 1 through the following March 31. License types are based on the age of the fisher and the type of fishing they intend to pursue. Age-specific licenses offered during the 2002-2003 license year included Youth (age 15), Adult (age 16 – 69) and Senior (age 70+). Only a Combination license (which allows anglers to fish in salt water, freshwater, or for shellfish and seaweed) was available for youths and seniors. Adults could purchase a Saltwater (which allows anglers to fish for any fish species in salt water), Freshwater (which allows an angler to fish for any fish species in fresh water), Shellfish/Seaweed (which allows an angler to harvest seaweed and shellfish), or Combination license, as well as a 2-day Combination license for a reduced fee. Persons with disabilities were offered a Combination license for a reduced fee. Residents and non-residents paid different fees for the various licenses.

For the purposes of this study, which is intended only to gain information about freshwater fisheries, anglers who purchased only a Shellfish/Seaweed license or only a Saltwater license were not included. Because we wanted information about Washington anglers, the database for anglers to interview was also limited to only those who purchased resident licenses. So the group of licensed anglers from which our random sample was drawn consisted of those resident adults, seniors, youths, or persons of disability who purchased a Combination license or a Freshwater license for the 2002 license year (April 1, 2002 – March 31 2003).

License sale data are kept in a computerized database, which was queried to pull the records we needed, including the name and phone numbers of licenseholders of the proper types. The number of licenses of each type provided to Responsive Management for the survey was reflective of the overall percentage for that license type in the database. Actual numbers of licenseholders in the database, in the sample forwarded to Responsive Management, and those contacted in the survey are shown in Table 1.

License Types Used in Survey	Number of 2002 Licenses Sold	% of Total for License Types Used	Sample Size sent to Phone Surveyors	Number of Completed Surveys	% of Total Surveyed for each License Type
2-Day Combination	70,794	11	825	114	7
Combination *	176,935	28	2100	454	29
Freshwater	365,026	59	4425	941	61
Youth	12,599	2	150	32	2
Total	625,354	100	7500	1541	99

Table 1: License	Types and Percentages	Used in 2002 Survey.
------------------	-----------------------	----------------------

* (includes adults, seniors, and persons with disabilities)

A survey size of 1500 anglers was chosen to give a high degree of confidence in answers whether the response was rather evenly divided or skewed toward one answer or the other (Figure 1). As shown below, a survey size of 1500 anglers gives a confidence interval of plus or minus .02, whether anglers respond to a question in a one-sided manner (.95 or .05 sample proportion – meaning anglers favored one response much more than the other) or in a more balanced manner (.50 sample proportion – meaning, for instance, half of the anglers answered yes to a question and half answered no). A total of 1541 completed surveys were obtained.

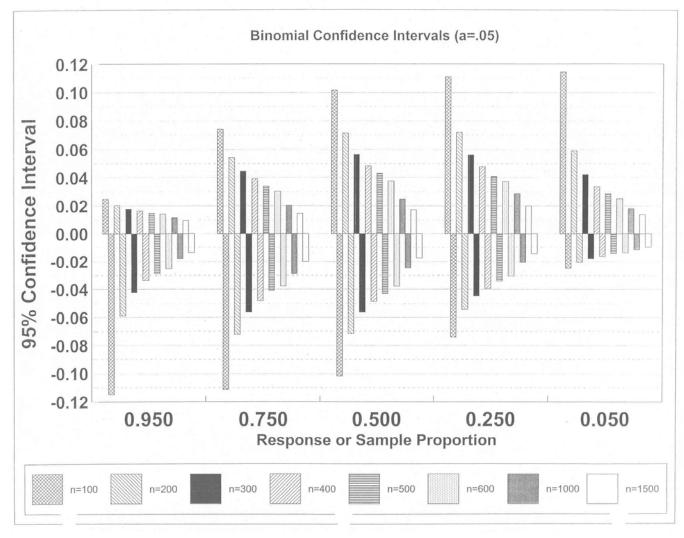


Figure 1: Binomial Confidence Intervals for various response proportions and sample sizes. Based on Zar, 1984.

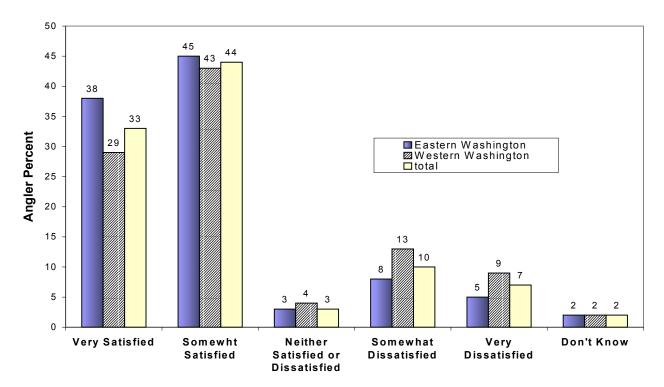
Results Of The 2002 Survey And Comparisons To Previous Surveys

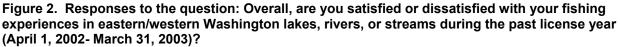
Appendix 3 contains the raw data collected from anglers' responses to the questions in the survey. The following is a summary and analysis of that information, with comparisons to the 1994 and 1986 surveys, where possible.

Fishing Activity and Angler Satisfaction

Anglers in Washington are enjoying fishing across the state. Of the anglers surveyed, 58% had fished in an eastern Washington lake, river, or steam the previous license year. An identical 58% had fished in western Washington.

Washington fishers were generally satisfied with their fishing experiences during the 2002-2003 license year (Figure 2). Of those who fished in eastern Washington, 83% were very or somewhat satisfied, while 13% were somewhat or very dissatisfied. Western Washington numbers were slightly lower, with, 72% very or somewhat satisfied, and 22% somewhat or very dissatisfied.





When asked to rate the quality of freshwater fishing in general (excluding salmon and sturgeon), 55% rated it as excellent or good. Another 30% considered it fair, and only 8% rated it as poor (Figure 3).

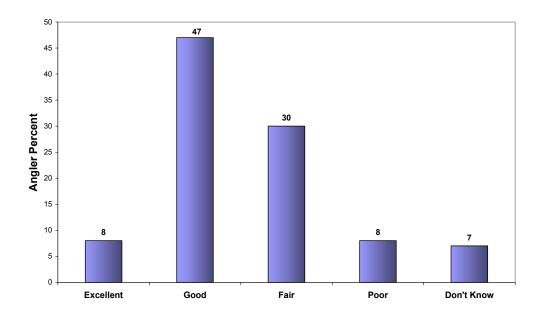


Figure 3: Responses to the question: In general, excluding salmon and sturgeon, how would you rate the present quality of lake and stream angling in Washington?

This compares favorably with data collected on this question from the last two surveys, shown in Figure 4, below. In this figure, the 2002 data was combined into two groups, fair to excellent and good to excellent, so that it could be compared to the earlier surveys. The group of anglers rating fishing as fair to excellent remains fairly constant through the three surveys. The good to excellent group, however, was quite a bit larger in the 2002 survey, indicating that the anglers rating the fishery as good rather than fair increased between the 1994 and 2002 survey years.

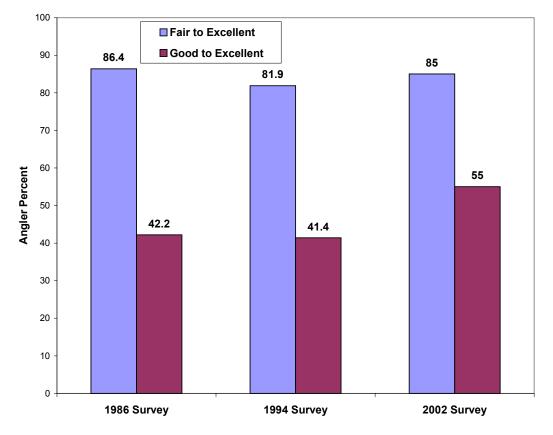


Figure 4: Comparisons of anglers' ratings of freshwater fisheries in the three most recent surveys.

Fishing is an important leisure activity in Washington, with the majority of anglers (61%) in the survey responding that they had fished in a lake, river, or stream in <u>each</u> of the last five years (Figure 5). A total of 74% of the anglers queried said that their fishing activity had either increased or stayed the same over the past 5 years. Only 23% said that their fishing activity had decreased (Figure 6).

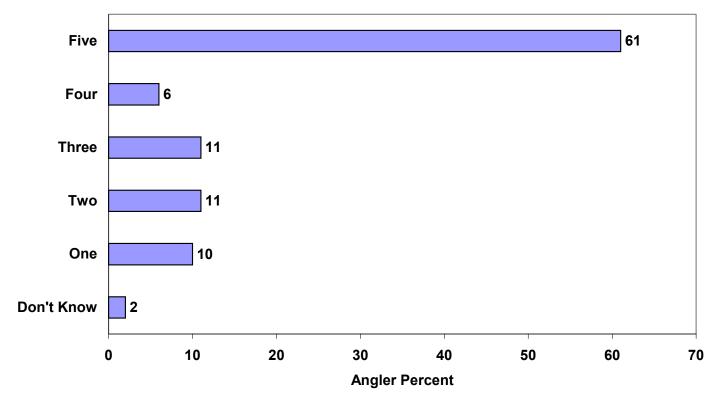


Figure 5: Responses to the question: How many years, out of the past 5 years, did you go fishing in Washington's lakes, rivers, or streams?

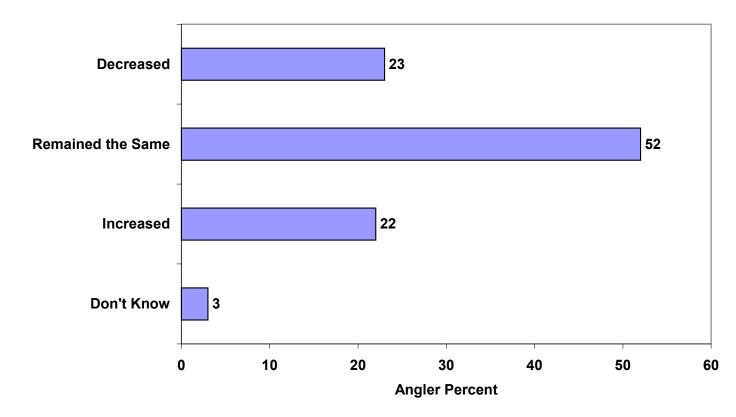


Figure 6: Responses to the question: Over the past 5 years, would you say your fishing activity in Washington's lakes, rivers or streams has increased, decreased, or remained about the same?

Anglers were also asked to relate their main reason for fishing in Washington's lakes, rivers, or streams over the past two years, and were given the following choices:

- To be close to nature;
- For the sport;
- For the fun of catching fish;
- To be with family and friends;
- For relaxation,
- To catch large fish;
- None of the above; and
- Don't know.

The two most popular answers to this question, accounting for nearly half (47%) of the responses, were "For relaxation" and "To be with family and friends". Two other popular answers were "For the sport" with 18% and "For the fun of catching fish" with 16% (Figure 7). To catch fresh fish for food" only received a 9% response.

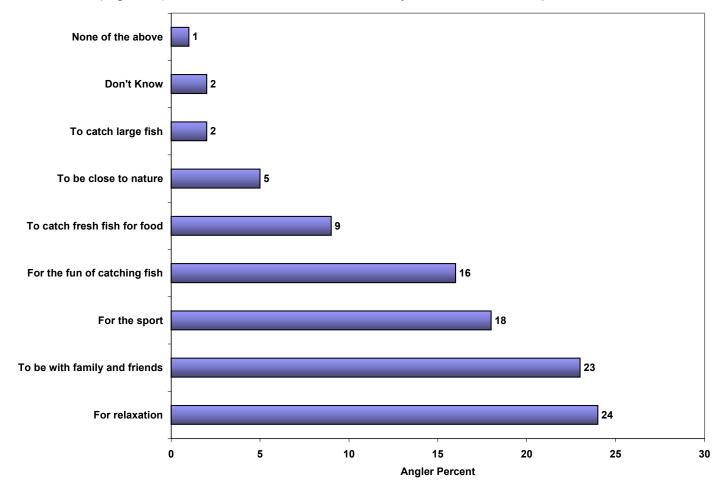


Figure 7: Responses to the question: What was your main reason for fishing in Washington's lakes, rivers, or streams over the past 2 years?

Attitudes Toward Fishing Regulations

Anglers were asked whether they agreed or disagreed that Washington's fishing regulations are clear and easy to understand (Figure 8). Somewhat surprisingly, 65% agreed that the regulations were clear and easy to understand (31% strongly, 34% somewhat). Only 29% disagreed (13% somewhat, 16% strongly), while 3% neither agreed nor disagreed, and another 3% had no opinion.

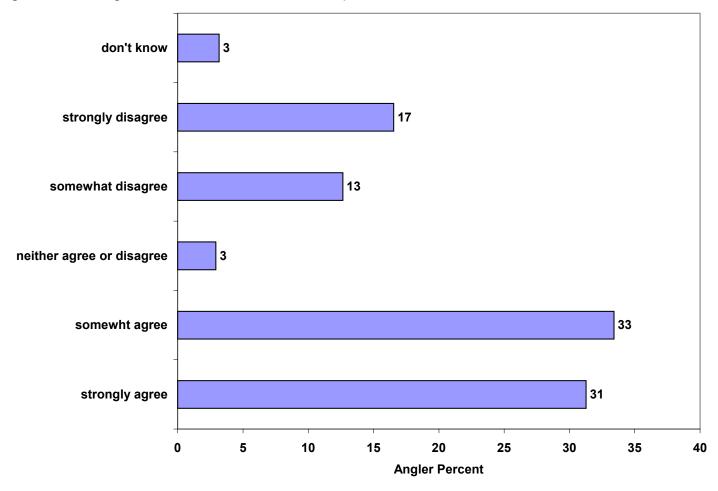


Figure 8: Anglers' responses to the question: Do you agree or disagree that Washington's fishing regulations are clear and easy to understand?

When asked how they got information about fishing rules and rule changes, 78% responded the regulations handbook/pamphlet, 18% used the intranet/website, and 12% asked a friend or relative, while 6% used the newspaper, and only 1% said they used the hotline (Figure 9). Because of the increasing number of emergency changes to the rules, anglers should be encouraged to check the website or hotline before they going fishing or shellfishing.

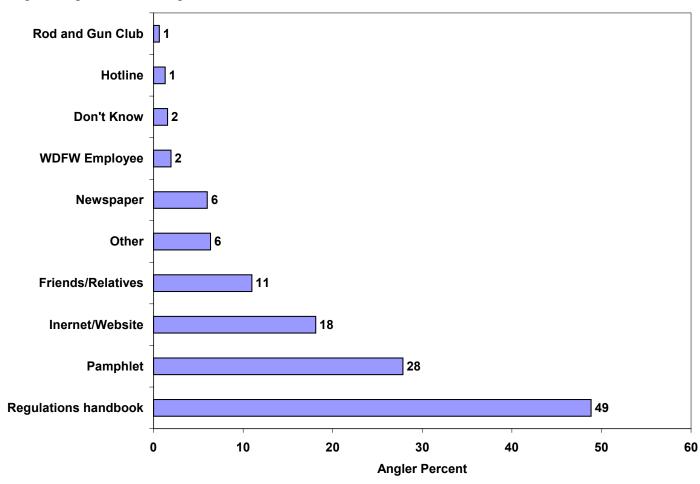


Figure 9: Response to the question "How do you get information about fishing rules and rule changes in Washington?"

Species Preferences

Figure 10 presents data on the freshwater fish species anglers preferred to fish for during the 2002 license year (multiple responses were allowed). Rainbow trout were the most popular, with 79% of anglers fishing for rainbows at least once. Salmon was the next most fished-for species at 42%, followed by the combination of brook, brown and golden trout, then any kind of bass, and kokanee. Crappie, perch, and sunfish (grouped together), resident trout, winter steelhead and summer steelhead came in at 26%, 25% 24% and 23%, respectively. Sea-run cutthroat trout and walleye followed at 18% and 17%. Eleven percent of those surveyed had fished for sturgeon, 10% for catfish, and 9% for Dolly Varden/bull trout. Four percent or less had fished for carp, crayfish, tiger muskie, or burbot.

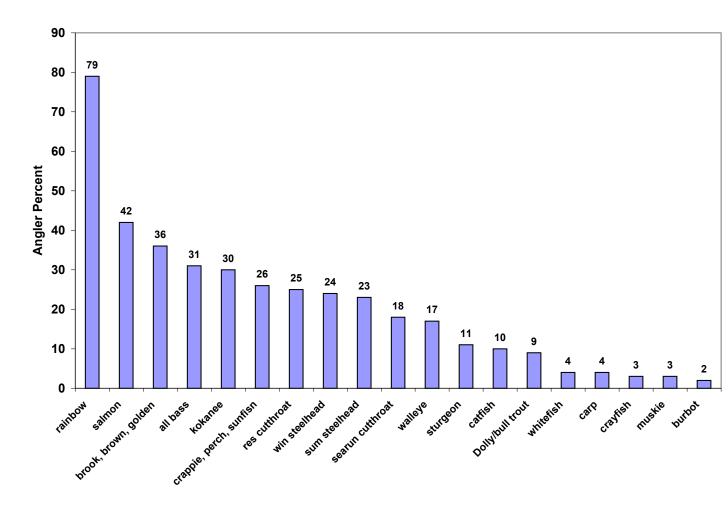


Figure 10: Responses to the question: Did you fish forin Washington in the past license year (April 1, 2002- March 31, 2003)?

This question was also asked in the 1994 and 1986 surveys. Figure 11 presents a comparison of the responses received. Although some of the results are not directly comparable because of different species or species groups, rainbow trout remained the most popular fish in all three surveys. Bass were popular in all three surveys, although in the 1986 survey there were categories for both smallmouth and largemouth bass instead of the general bass category used in the last 2 surveys. (Because multiple responses were allowed, it is not possible to simply add the two bass categories together for comparison to the later surveys). Brook, brown, and golden trout were combined in the 2002 survey and remained a strong favorite at 36%, although this appears to be down from the 1994 survey where the species appeared singly and both brook and brown trout received over 40%. Crappie, perch, and sunfish were also combined for the 2002 survey, and the numbers appear to be down from the previous two surveys where the species were listed individually.

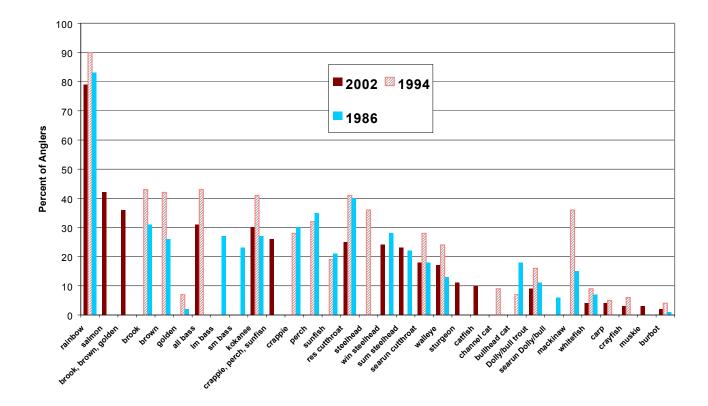


Figure 11: Percentages of Anglers Fishing for a Given Species Over the Last Three Surveys.

Anglers were then asked for the types of fish they most preferred to fish for. Anglers were asked for a first, second, and third choice. Figure 12 shows the percentage of anglers listing a particular species as their first choice. Rainbow trout were first on the list in the 2002 survey, with about 33% of those surveyed listing them as their top choice. Salmon came in second, with 13.6% listing it as the number one choice. Bass ranked 3rd with 10.4%. Summer and winter steelhead were number 4 and 5 with 6% and 5.7% respectively. The combined category of brook, brown and golden trout came next with 5.2%, followed by walleye at 4.2% and kokanee at 3.8%. Crappie/perch/sunfish and sturgeon rounded out the top 10 at 3% and 2.5%. Percentages of anglers choosing these and other species as their 2nd and 3rd choices are listed in Appendix 3.

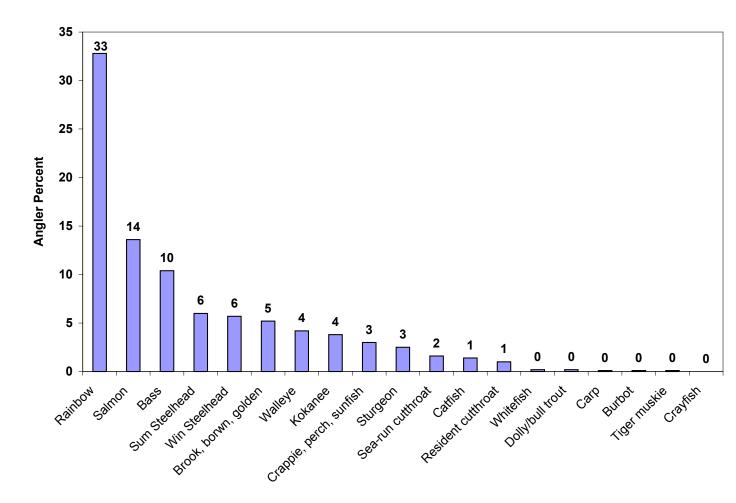


Figure 12: Angler responses to the question: Which of the previously listed fish do you most prefer to fish for? (Only anglers' first choices are shown).

Although similar questions were asked in both the 1994 and 1986 surveys, some species or species groups were different, and the data were handled differently. The 1986 survey only reports data for anglers' 1st, 2nd, and 3rd choices added together and weighted equally. In 1994, the authors felt that it was incorrect to weight all three

choices equally, so, while all the data for all three choices was listed in the Appendix, only the top ten 1st choices were displayed in the text.

The top ten 1st choices in the 1994 survey were rainbow trout (42.6%), bass (15.7%) steelhead (12.8%), kokanee (5.6%), walleye (5.3%), mackinaw (3.2%), resident cutthroat (3%), sea-run cutthroat (2.1%), brook trout (2%) and brown trout (2%). Allowing for differences in species groupings and the addition of new species, there are some similarities between this and the 2002 data. Using the data for anglers' first choices, rainbow trout were the top fish for both surveys. Bass ranked next (removing salmon because they weren't part of the 1994 survey). Summer and winter steelhead added together give a percentage similar to the steelhead percent given in the 1996 survey, and brook, brown and golden trout added together would also give a similar percentage to the previous survey.

Using the combined data $(1^{st}, 2^{nd} \text{ and } 3^{rd} \text{ choices grouped together and weighted equally})$, the top 10 species from the 1986 survey were rainbow trout (23%), winter steelhead (10%), resident cutthroat (8.2%), summer steelhead (7.8%), large mouth bass (6.4%), brook trout (6.3%), kokanee (6.1%), crappie (4.2%), resident cutthroat (4.1%), and perch with 4.0%.

Types of Fishing Preferred –Number of Days Spent Fishing

In another question, anglers were asked to chose which kind of fishing they most preferred, based on the six major types of freshwater fishing available for game fish: trout in lowland lakes; bass, panfish, walleye, catfish, or perch in lakes or rivers (referred to as warmwater in the figure below); steelhead; trout in streams or beaver ponds (other than sea-run cutthroat or steelhead); trout in alpine lakes; or sea-run cutthroat. Trout in lowland lakes was the most popular type of fishing, followed by bass and panfish, then steelhead, trout in streams, trout in alpine lakes, and sea-run cutthroat. (Figure 13).

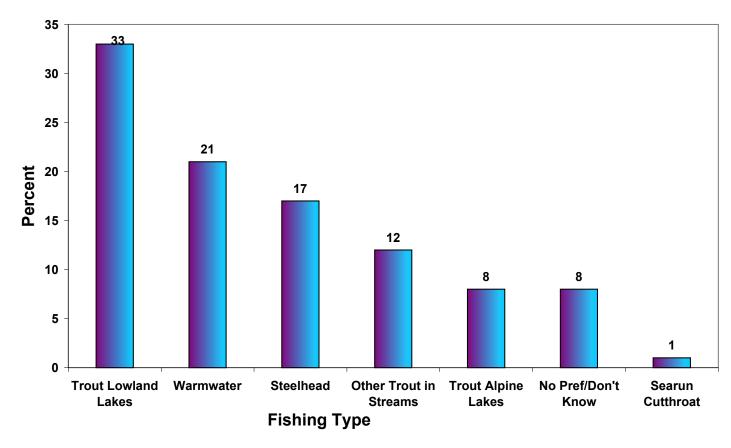


Figure 13: Anglers' response to the question: Which of the following six kinds of fishing do you most prefer?

This question was also asked in the 1994 survey. However, anglers were not given steelhead or sea-run cutthroat as a choice in the 1994 survey. As you can see in Figure 14, the percent preferring lowland lake trout fishing was very similar in both surveys. However, the percentage of anglers preferring bass and warmwater fish, trout in high lakes and trout in streams all decreased between the 1994 and 2002 surveys. It is possible that this is because of the additional choices offered in the 2002 survey.

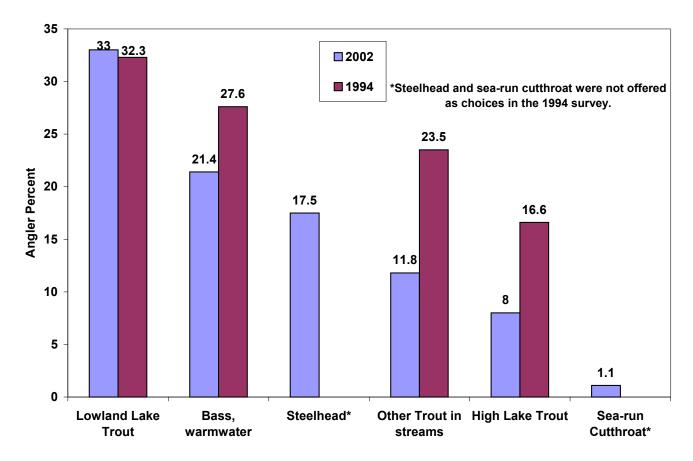


Figure 14: Comparison of 1994 and 2002 data for anglers' preferences on types of fishing.

Anglers were also asked how many days they spent in the same six types of fishing. Figure 15 details the percent of anglers who participated in each type of fishery and the average number of days they spent on each type during the 2002 license year.

Trout in lowland lakes was again the most popular fishery. About 71% of the anglers surveyed had fished for trout in a lowland lake during the 2002-03 license year, and they spent an average of 13.4 days in this type of fishing. Fishing for bass and warmwater fish was the second most popular type, with 44% of the anglers fishing, each spending about 17.7 days. Fishing for trout in streams was another popular choice; 34% of those surveyed had participated, spending on average of 11.6 days in the past license year. About 28% had fished for steelhead, each spending about 18.3 days, while 23% fished for trout in high lakes, spending on the average 8.4 days. Nearly 20% fished for sea-run cutthroat for about 10.4 days each.

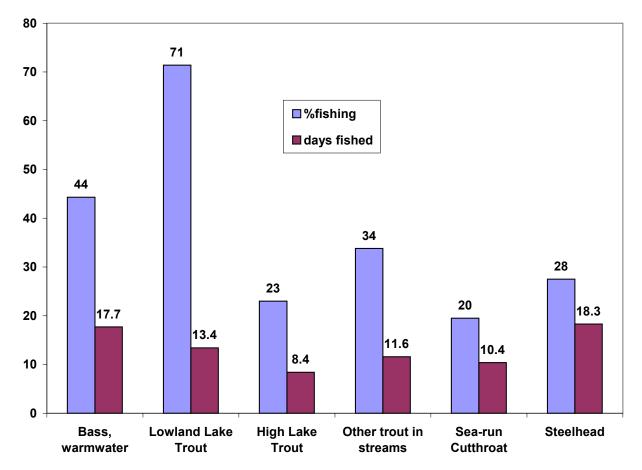


Figure 15: Percent of anglers participating and average number of days spent in 6 major types of freshwater fishing in 2002.

Anglers who had fished for steelhead during the last license year were asked further questions. They were asked for a separate report of the number of days and the areas where they fished for winter- or summer-run fish. Results are shown in Figure 16. The percentages of anglers fishing for winter fish are similar to those fishing for summer steelhead. Although the numbers overall are similar, winter steelheaders appear to spend a few more days fishing each year, except in the Columbia and Snake River tributaries.

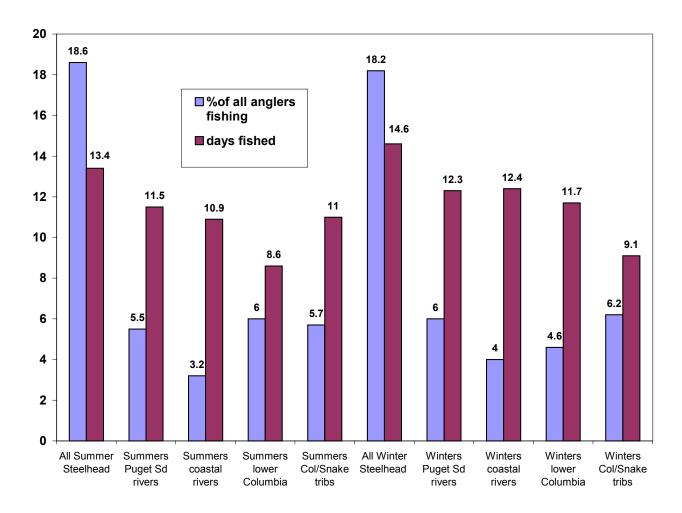


Figure 16: Percent of anglers fishing for summer and winter steelhead and days fished in different areas of the state.

The original question concerning days fished in the six different types of fishing was also asked in the angler surveys conducted in 1994 and 1986. Figure 17 shows a comparison of the data from the three surveys. Steelhead was not one of the choices given in the 1994 survey, but the number of days fished by steelhead anglers appears to have risen slightly, from an average of about 16 in 1986 to over 18 days/year in the 2002 survey. Days fished for sea-run cutthroat took a jump from 7 to 10 days between the 1986 and 1994 surveys, then remained at about 10 days per year in 2002. Fishing for stream trout (other than steelhead or sea-run cutthroat) has shown a slight rise, from about 9 days in 1986, to about 10 in 1994, to about 11.6 days/year in the 2002 survey. Fishing for trout in high lakes showed a similar rising trend with about 6 days in 1986, 7.7 in 1994, and 8.4 days/year in 2002. Fishing for trout in lowland lakes has remained at 12-14 days/year, with 1994 being the highest. Fishing for warmwater fish took a jump between the first two surveys, from about 14 days/year to about 18.5. Interest in this type of fishing has remained strong, with the 2002 data showing about 17.7 days/year.

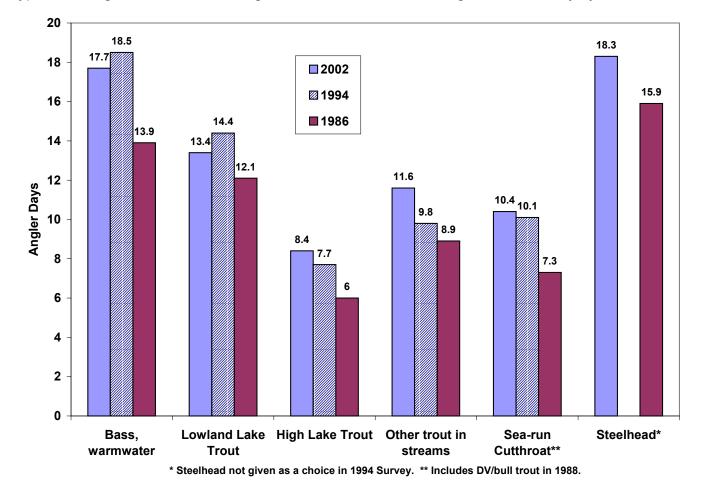


Figure 17: Responses to the question: How many days did you fish for... Comparison of 2002, 1994, and 1986 surveys.

Gear Preferences

Anglers were asked about the type of gear they preferred to use when fishing for their three most preferred fish species. They were given the choice of flies, lures, bait, or lures with bait. Results from the 2002 survey are shown below (Figure 18) for species that received over 50 responses. Bait was the overwhelming choice for sturgeon and catfish. Over 50% of the crappie fishers preferred bait. It was also a strong choice for all the trout categories except sea-run cutthroat, where flies were the most popular choice. The majority of bass fishers preferred lures, and walleye fishers preferred lures with bait, followed by lures alone and then bait alone.

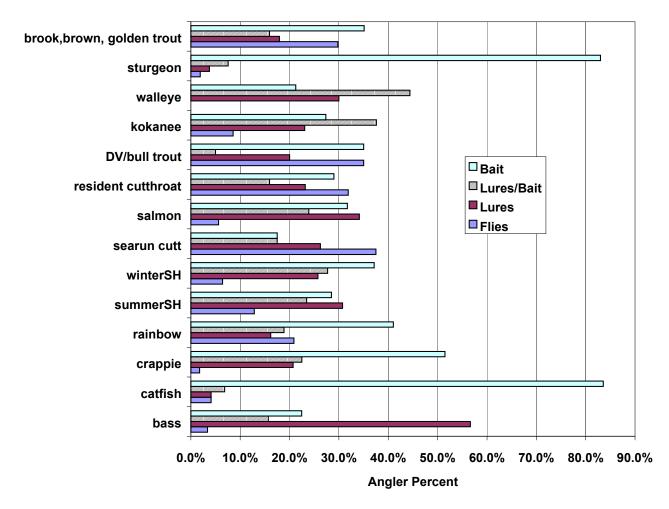


Figure 18: Anglers' responses to the question: When you fish for... do you most often fish with flies, lures, lures with bait, or bait?

The next four figures (Figures 19-22) compare the 2002 survey data on gear use to data collected in the 1994 survey, with each graph presenting the data for a different gear choice. The six species that were directly comparable between the two surveys were bass, rainbow trout, steelhead, resident cutthroat trout, kokanee, and walleye.

The percentage of anglers preferring to use bait for both kokanee and rainbow trout dropped between the 1994 and 2002 surveys, and went up for resident cutthroat and steelhead, but for other species, there was not much change. The percentage of anglers preferring lures with bait rose between the 1994 and 2002 surveys for every species but walleye, where it dropped slightly. The percent of anglers preferring to fish with lures alone dropped from 41% to 28% for steelhead, but dropped only slightly for bass, rainbow, and resident cutthroat, while rising slightly for kokanee and walleye. The amount of anglers preferring to use flies to fish for resident cutthroat dropped from 45% to 32% between the two surveys. For rainbow trout, the percentage rose from about 8% to almost 21%. For other species there was not much change in the percentages of anglers using bait.

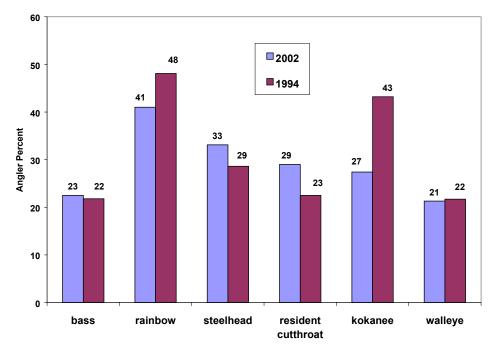


Figure 19: Comparison of the percentages of anglers preferring to fish with bait for selected species for the 1994 and 2002 surveys.

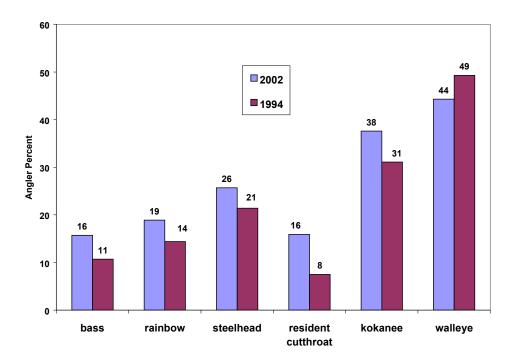


Figure 20: Comparison of the percentages of anglers preferring to fish with lures with bait for selected species for the 1994 and 2002 surveys.

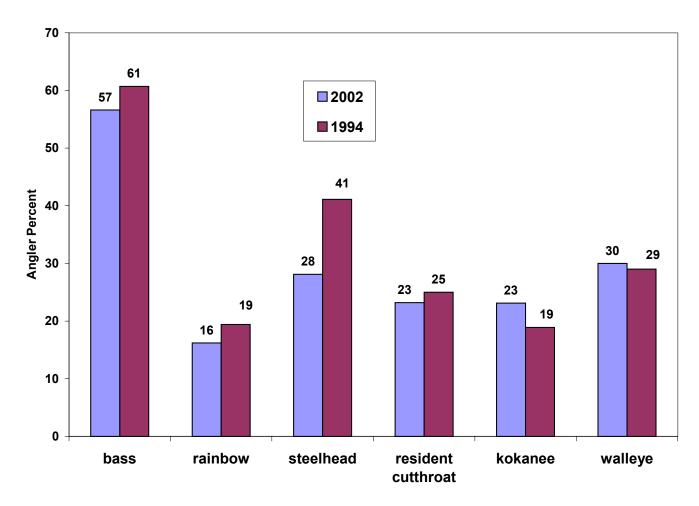


Figure 21: Comparison of the percentages of anglers preferring to fish with lures for selected species for the 1994 and 2002 surveys.

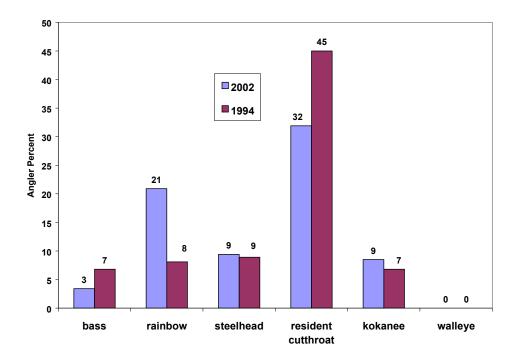


Figure 22: Comparison of the percentages of anglers preferring to fish with flies for selected species for the 1994 and 2002 surveys.

Percent of Legal Fish Released, Size Preferences

Anglers were also asked about the percentages of legal fish they released, based on their first three preferences from the questions discussed earlier. Table 2 shows their responses.

				% OF	LEGAL	FISH R	RELEAS	SED				
SPECIES	0(None)	1-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-99	100(all)
Bass	22.9%	4.9%	1.0%	2.0%	1.3%	11.8%	1.6%	1.6%	3.6%	4.6%	2.6%	42.1%
Catfish	41.9%	7.5%	3.0%	7.5%	0.0%	10.5%	1.5%	1.5%	3.0%	1.5%	1.3%	20.9%
Crappie/Perch/Sunfish	50.4%	5.2%	0.6%	4.5%	0.6%	13.6%	0.6%	0.0%	5.2%	3.2%	0.6%	15.5%
Burbot/Freshwater Ling	25.0%	0.0%	0.0%	0.0%	0.0%	25.0%	0.0%	0.0%	25.0%	0.0%	0.0%	25.0%
Rainbow Trout	27.2%	7.7%	2.1%	3.7%	2.1%	14.4%	1.7%	1.3%	4.5%	5.8%	3.9%	25.5%
Summer Steelhead	34.8%	4.8%	4.2%	3.0%	3.6%	15.0%	0.6%	0.6%	5.4%	2.4%	5.9%	19.8%
Winter Steelhead	37.7%	3.8%	3.8%	2.7%	3.8%	18.8%	1.1%	1.6%	5.9%	4.3%	2.1%	14.5%
Crayfish	25.0%	50.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	25.0%	0.0%	0.0%	0.0%
Searun Cutthroat Trout	21.8%	5.1%	2.6%	2.6%	2.6%	6.4%	0.0%	2.6%	7.7%	5.1%	5.0%	38.5%
Salmon	51.5%	5.3%	2.1%	3.7%	1.6%	14.1%	0.8%	0.8%	3.7%	3.7%	1.8%	10.9%
Tiger Muskie	12.5%	0.0%	0.0%	0.0%	12.5%	0.0%	0.0%	0.0%	0.0%	0.0%	37.5%	37.5%
Resident Cutthroat	23.5%	7.3%	7.3%	0.0%	0.0%	10.3%	1.5%	1.5%	5.9%	4.4%	1.8%	36.7%
Bull/Dolly Varden Trout	22.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.5%	11.0%	6.6%	54.9%
Kokanee/"Silvers"	45.9%	9.2%	2.8%	3.7%	0.9%	15.6%	0.9%	0.9%	4.6%	3.7%	0.8%	11.0%
Walleye	42.2%	1.3%	1.9%	2.6%	1.9%	14.9%	0.0%	1.9%	7.1%	3.2%	7.2%	15.6%
Whitefish	60.0%	0.0%	0.0%	0.0%	0.0%	10.0%	0.0%	10.0%	0.0%	0.0%	10.0%	10.0%
Carp	16.7%	16.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	33.3%	33.3%
Sturgeon	55.0%	4.9%	2.0%	2.0%	2.0%	3.9%	1.0%	1.0%	2.9%	3.9%	0.9%	20.6%
Brook, Brown, Golden Trout	24.4%	3.5%	3.1%	3.1%	1.7%	14.8%	1.3%	0.0%	4.8%	2.6%	6.2%	34.5%
Don't know	98.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.6%	0.7%

Table 2: Percent of legal fish released for various species.

Several species or species groups had a large percentage of anglers who released all the legal fish they caught. These include bass (42.1%); sea-run cutthroat trout (38.5%); tiger muskie (37.5%); resident cutthroat trout (36.7%); Dolly Varden/bull trout (54.9%); carp (33.3%); and brook, brown, and golden trout combined (34.5%). Species with large percentages of anglers who did not release any legal fish included catfish (41.9%); summer steelhead (34.8%); winter steelhead (37.7%); kokanee (45.9%); walleye (42.2%); whitefish (60%); and sturgeon (55%). Note: some species (catfish, crappie/perch/sunfish, burbot, whitefish, and carp) have no minimum size, so any fish an angler catches is legal. Anglers probably choose to release some of these species just because they were too small to keep.

Figure 23 shows a comparison of the 2002 and 1994 data for anglers releasing some legal fish. In general, the numbers appear similar. The number releasing some legal rainbow trout has risen somewhat, while the number releasing some steelhead, bass, and kokanee dropped slightly. Note: since the 1994 survey did not distinguish between summer and winter steelhead, the 2002 data for the two categories was combined and averaged for this comparison. The biggest change was for walleye, where in 2002, almost 58% said they released some legal fish, while in the 1994 survey the percentage was only 48.5. Release numbers for resident cutthroat were virtually unchanged between the two surveys.

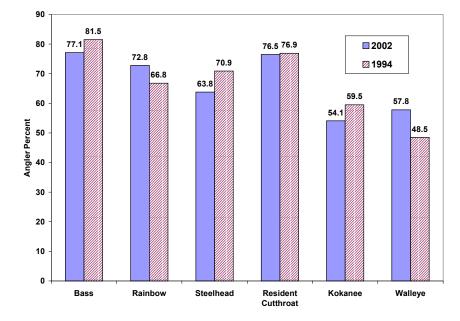
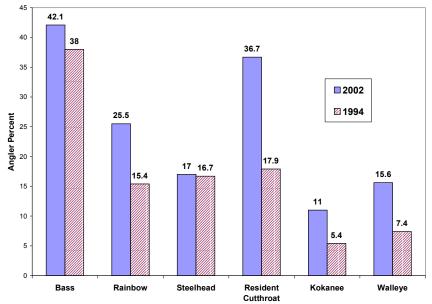


Figure 23: Comparison of percentage of anglers releasing some legal fish in 2002, 1994 surveys.

Looking at a comparison of anglers who would release all legal fish, there were a few differences between the two surveys (Figure 24). In general more anglers released all the fish they caught in the 2002 survey than they did in the 1994 survey. In 2002, 25% of the anglers surveyed said they released all of the legal rainbow they caught. In the 1994 survey the number was only 15%. For resident cutthroat, the increase was even more dramatic, from just under 18% in 1994 to almost 37% in 2002. Both kokanee and walleye anglers released all fish about twice as often in 2002 as they did in 1994. There was a slight increase in the number of bass anglers who released all their fish, but the number for steelhead remained almost exactly the same. Note: since the 1994 survey did not distinguish between summer and winter steelhead, the 2002 data for the two categories was combined and averaged for this comparison.





We also asked anglers what would be the minimum size of fish they would keep for each of their first three preferences, and what size they would consider a quality fish for each species or species group. To produce the graphs used to illustrate the answers to this question, size preferences for a particular species were combined and weighted equally whether they were an angler' 1st, 2nd or 3rd preference.

For bass, most (69%) would keep a 12" fish. About 81% would keep a 14" bass, and over 90% would keep a 16" fish. However, a 12" bass was only considered a quality fish by a slight majority (52%). About 67% considered a 14" bass a quality fish, compared to 87% for a 16" fish and 94% for an 18" bass. (Figure 25)

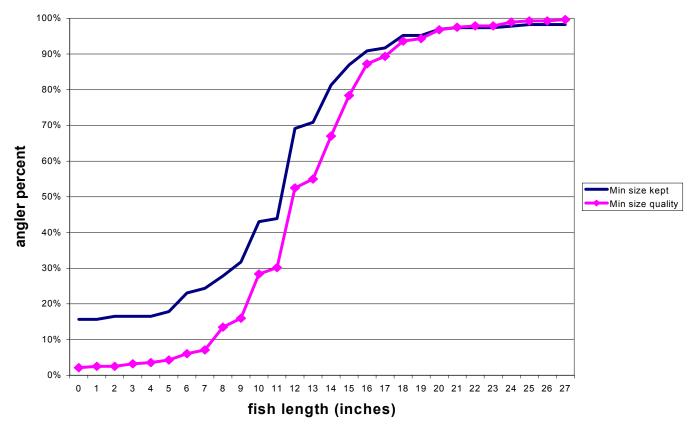


Figure 25: Bass – minimum size anglers would keep, minimum size considered a quality fish.

For catfish, (Figure 26) the majority of anglers (56%) would keep a 10" fish, 75% would keep a 12" catfish, and about 82% would keep a catfish 16" long. Even though most would keep it, only 18% consider a 10" catfish a quality fish. At 12" the number is only 29%, with 47% considering a 14" catfish a quality fish. At 16", 64% would consider it a quality fish, at 18", 75%, and at 20" over 90% would consider it a quality catfish.

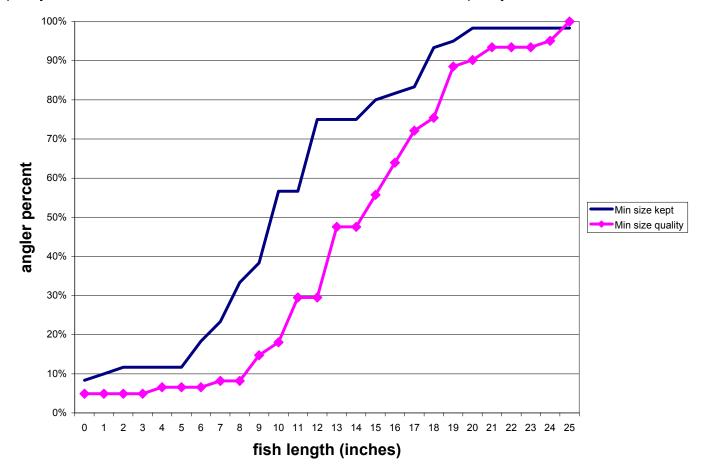


Figure 26: Catfish - minimum size anglers would keep, minimum size considered a quality fish.

The majority (67%) of crappie/perch/sunfish fishers interviewed would keep an 8" fish (Figure 27). Almost 90% would keep a 10" fish, and nearly 98% would keep a 12" fish. However, the majority of anglers (55%) would not consider a fish of these species to be a quality fish until it was at least 10" in length. At 12" 79% would consider it a quality fish, as would 96% at 14".

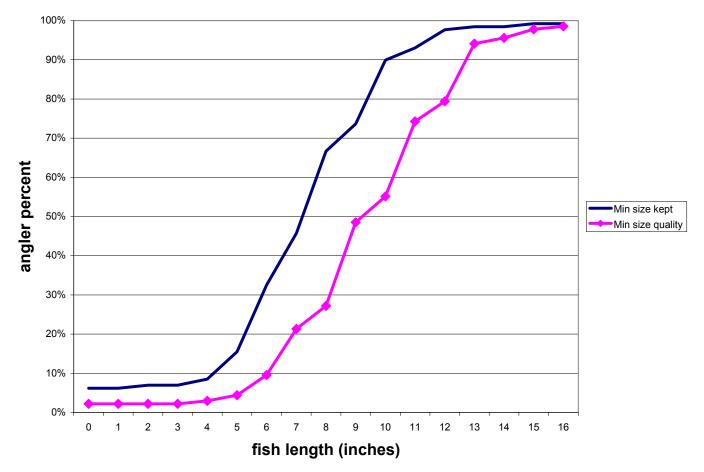


Figure 27: Crappie, perch and sunfish - minimum size anglers would keep, minimum size considered a quality fish.

Most anglers (52%) felt that rainbow trout should be at least 10" long before they were kept (Figure 28). Seventy six percent would keep a 12" rainbow, and over 86% would keep a 14" fish. A 16" rainbow would be kept by 93% of the anglers surveyed. Although a lot of anglers would keep small rainbow, only 16% considered a 10" fish a quality fish. Thirty two percent thought a 12" rainbow was a quality fish, as did 62% of anglers for a 14" rainbow. Almost 80% of anglers thought of an 18" rainbow as a quality fish, and at 20" the quality rating was up to 95%.

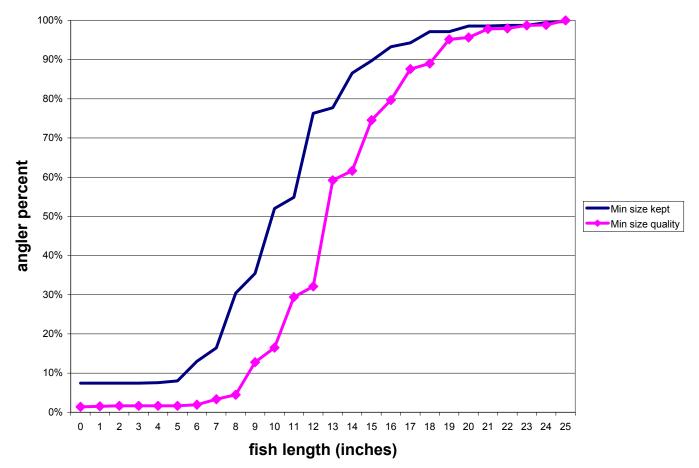


Figure 28: Rainbow trout - minimum size anglers would keep, minimum size considered a quality fish.

For steelhead, the majority (53%) of those fishing for summer-run fish would keep a 22" fish (Figure 29). Only about 47% of those fishing for winter-run steelhead said they would keep a 22" fish (Figure 30). A 24" fish appealed to over 70% of anglers for both summer- and winter-run steelhead, while a 26" fish (summer- or winter-run) would be kept by over 80%, and a 28" fish of either type would be kept by over 89% of steelhead anglers. The majority of fishers did not consider a steelhead a quality fish until it was at least 25" long (56% for summer steelhead and 50% for winter steelhead). At 30", 80% considered a summer-run fish to be a quality steelhead, while slightly fewer (76%) considered a 30" winter steelhead a quality fish. At 32", 92% considered both summer and winter steelhead to be a quality fish.

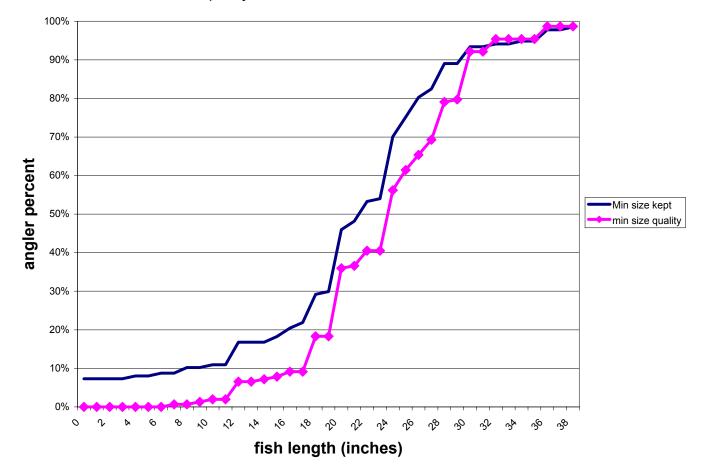


Figure 29: Summer steelhead - minimum size anglers would keep, minimum size considered a quality fish.

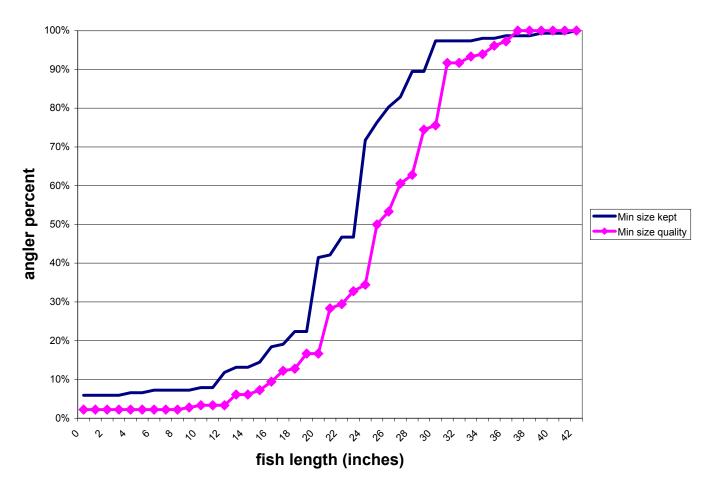


Figure 30: Winter steelhead - minimum size anglers would keep, minimum size considered a quality fish.

Most anglers (54%) thought a sea-run cutthroat should be at least 12" before keeping it (Figure 31). A 14" fish would be kept by 68%, a 16" fish by 79%, and an 18" fish by 89% of the anglers surveyed. However, to be a quality fish, most anglers felt a sea-run cutthroat should be at least 15" long (54%). An 18" fish was termed a quality fish by 76%, and a 19-20" fish by 93%.

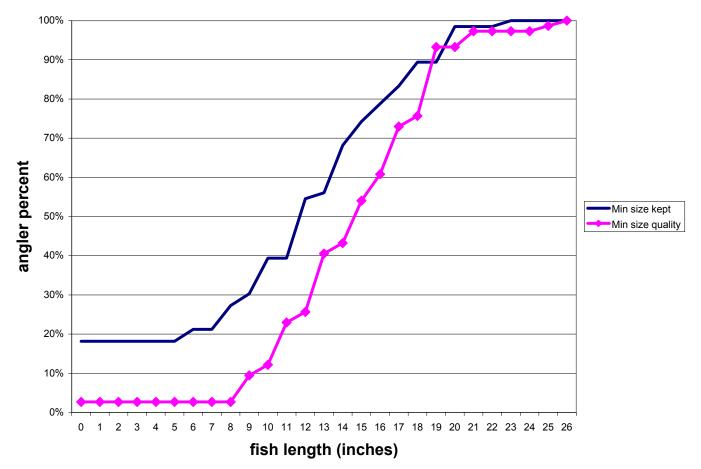


Figure 31: Sea-run cutthroat trout - minimum size anglers would keep, minimum size considered a quality fish.

Although we did not specify a particular species of salmon, most anglers, (57%) would keep a salmon 22 inches or longer (Figure 32). Seventy six percent would keep a 24" salmon, and 85% would keep a 26" fish. A majority (57%) considered a 25" salmon to be a quality fish. By 30" the quality rating was up to 72%, and by 35", 92% of anglers considered a salmon to be a quality fish.

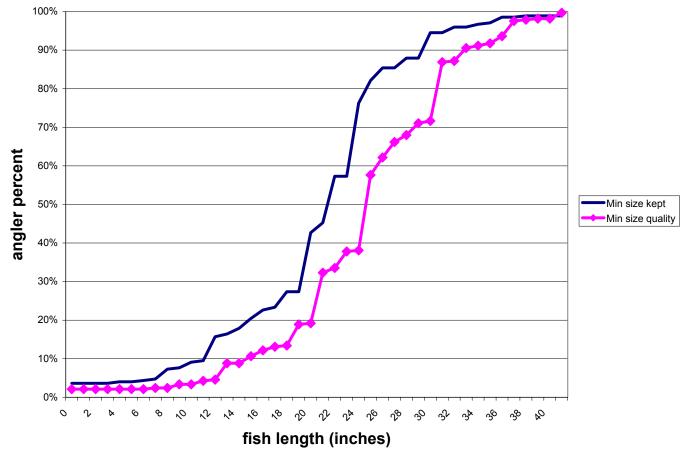


Figure 32: Salmon - minimum size anglers would keep, minimum size considered a quality fish.

Resident cutthroat trout would be kept by a majority of anglers (67%) if they were 12" or longer (Figure 33). A 14" fish would be kept by 81%, and a 16" fish by about 90%. At 13", 60% of anglers surveyed considered a resident cutthroat to be a quality fish. At 16", the percentage rose to 88%, and at 19" or larger, 100% of those surveyed would consider a resident cutthroat trout to be a quality fish.

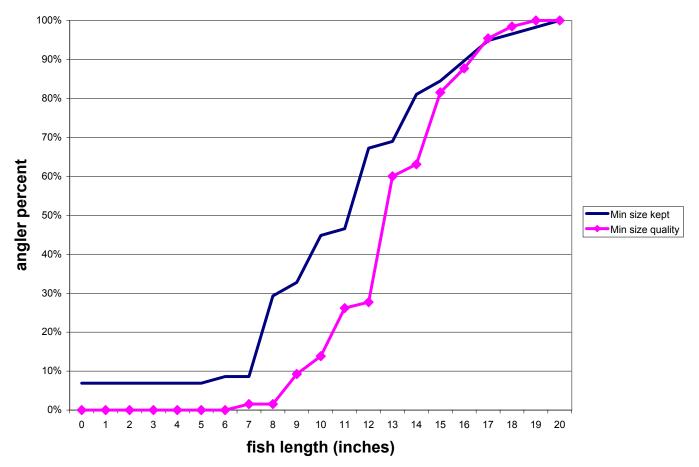


Figure 33: Resident cutthroat trout - minimum size anglers would keep, minimum size considered a quality fish.

Interestingly, of the 15 anglers who listed Dolly Varden/bull trout as one of their top three choices, 60% said they would keep a 9" fish (minimum size when open is 20" - Figure 34). Eighty percent would keep a fish from 14" - 19" in length and 93% would keep a 20" fish. The majority of anglers considered a 13" fish to be a quality fish (53%), while 90% considered a 17"-20" fish as a quality fish, and 100% of those surveyed would call a 22" Dolly Varden/bull trout a quality fish.

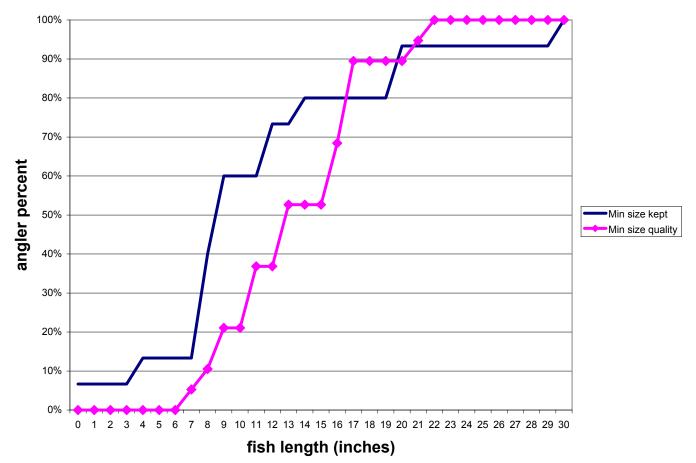


Figure 34: Dolly Varden/bull trout - minimum size anglers would keep, minimum size considered a quality fish.

Kokanee anglers wanted their fish to be at least 12" in length before the majority (65%) would keep them (Figure 35). Seventy five percent would keep a 14" kokanee, and about 80% would keep a 16" fish. Kokanee were not considered quality fish by the majority of anglers (56%) until they were 15" long. By 20", about 80% of those surveyed considered them to be quality fish, and by 25", over 95% agreed.

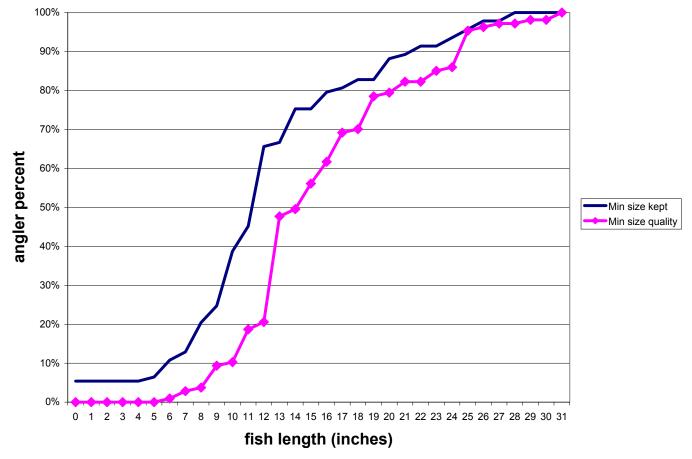


Figure 35: Kokanee - minimum size anglers would keep, minimum size considered a quality fish.

Exactly 50% of the walleye fishers surveyed would keep a 16" fish (Figure 36). The percentage jumps to 81% for an 18" walleye, and 94% for a 20" fish. Walleye were not considered to be a quality fish by the majority (62%) until they were 19' in length. By 24", 83% agreed, and at 28", over 97% felt that walleye were quality fish.

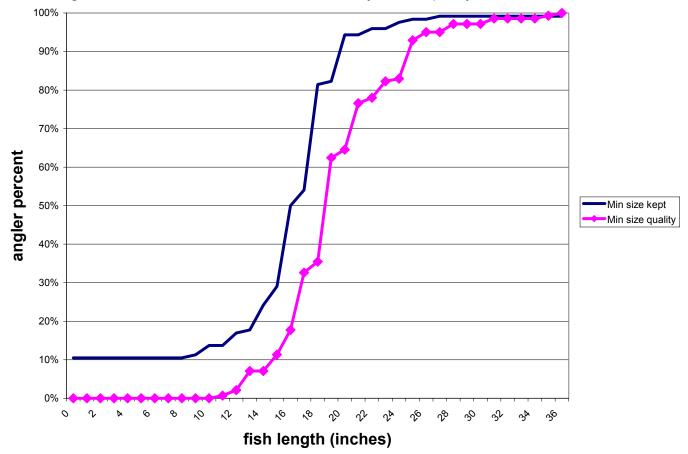


Figure 36: Walleye - minimum size anglers would keep, minimum size considered a quality fish.

Only seven anglers chose whitefish as one of their top three choices – the majority (71%) would keep a fish 15" or longer, but whitefish were not considered to be quality fish by the majority (56%) until they were at least 21" long.

For sturgeon, 46% would keep a 42" fish (minimum legal size during survey period - see Figure 37). Seventy five percent would keep a 45" fish, and over 90% would keep a 48" sturgeon. A small majority of anglers (52%) thought of sturgeon 45" or longer as quality fish. Over 77% felt that a sturgeon 50" in length or longer was a quality fish.

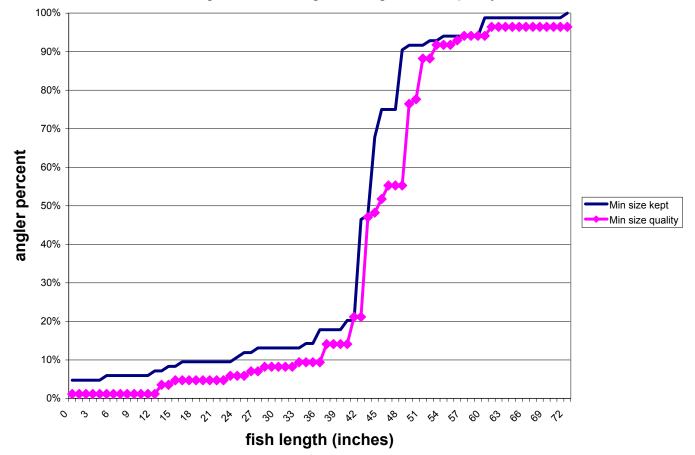


Figure 37: Sturgeon - minimum size anglers would keep, minimum size considered a quality fish.

Most anglers preferring brook, brown, and golden trout thought a 10" fish was worth keeping (51%), and 74% would keep a 12" fish, while over 90% would keep a trout 16" or longer (Figure 38). The majority of these anglers (54%) thought a 13" brook, brown, or golden trout was a quality fish, while almost 80% felt that a 16" trout of this type was a quality fish. By 20" the quality rating had jumped to 95% of the anglers surveyed.

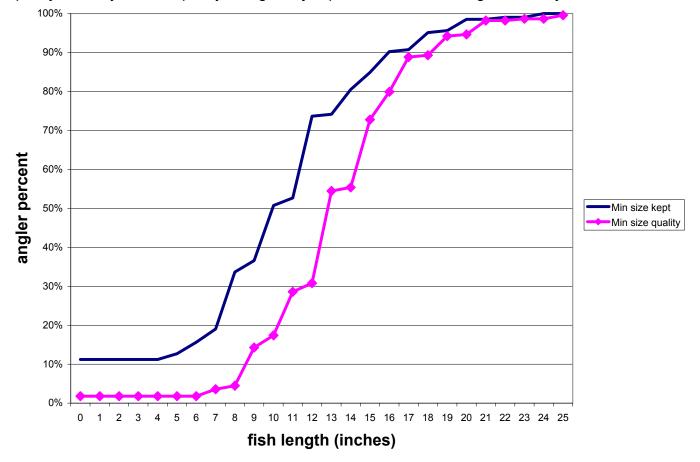


Figure 38: Brook, brown, and golden trout - minimum size anglers would keep, minimum size considered a quality fish.

Opening Day Lakes

Anglers were asked whether or not they had fished in a lake on opening day of lowland lake trout season (set each year as the last Saturday in April) in 2002. Of the 1541 anglers queried, only 240 (15.57%) said yes. In the 1986 survey, 29.3% of anglers surveyed had fished the previous opening day (Figure 39). 1994 was a banner year with 36.3% fishing on opening day.

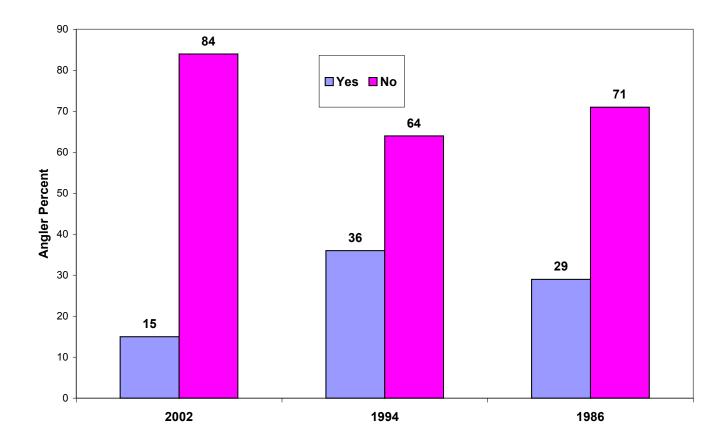


Figure 39 Comparison of anglers' responses to the question: Did you fish Opening Day? over the three surveys.

Looking for a way to explain this difference, we thought of the change in license types available, so analyzed the 2002 data by license type. Of the 1541 anglers interviewed, 114 had a 2-day license, 454 had a combination license, 941 had a freshwater license, and 32 had youth licenses. Since 2-day licenses are not valid on opening day of lowland lake fishing, the data was reanalyzed with those licenseholders excluded (8 of the 114 anglers with 2-day licenses, or 7% said that they fished on opening day). The exclusion of these licenses raised the percentage of those fishing on opening day only slightly (16.25% vs. 15.57%). Looked at separately, 19% of the combination license holders, 15% of the freshwater license holders, and 16% of the youth licenseholders said they fished opening day.

Anglers were also asked whether they thought that we had about the right number of opening day lakes, or whether we need more or less opening day lakes. The majority (56%) thought we had about the right number (Figure 40).

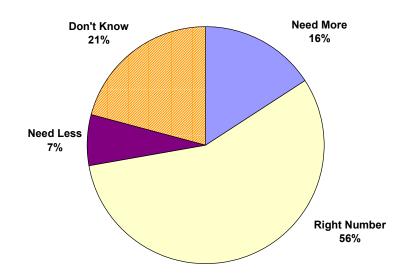
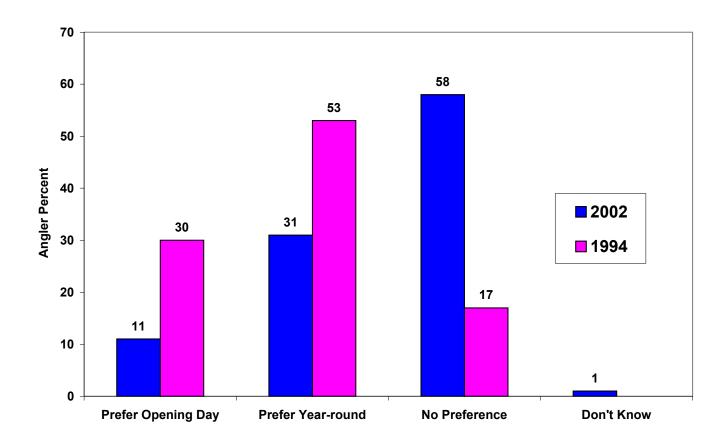
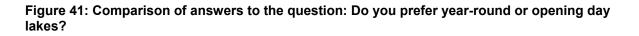


Figure 40: Anglers' opinions about Opening Day Lakes.

Even though the percent of anglers fishing on opening day was not as large in 2002, only 7% thought we needed fewer opening day lakes, while 16% thought we could use more. A fairly large group (21%) didn't know.

When asked whether they preferred to fish in a lake with an opening day and a closed season during the winter or in lakes open to fishing all year, 58% of anglers had no preference. Only 11% said they preferred opening day lakes, while 31% preferred lakes open all year. This was considerably different from the 1996 survey, where 53% preferred a year-round season, 30% preferred opening day lakes, and 17% had no opinion (Figure 41).





Quality Waters

Before questioning anglers about their opinions on quality waters, interviewers read the following paragraph:

"The Department manages approximately 30 waters for larger trout. Regulations for such waters allow only 1 or 2 fish to be kept each day, and sometimes there is a 12" or higher minimum length requirement for fish that are kept. In addition, you may not fish with bait. Anglers usually catch more fish than under standard regulations, but most fish have to be released because they are less than the minimum length."

They were then asked: "Did you fish in this type of trout water during the past license year?" About 22% of the respondents had fished in a quality trout water during the past year. This compares to about 38% of the anglers contacted in the 1994 survey who said they had fished in a quality lake and the 15% from the 1986 survey who responded positively.

The question was then asked: "Regarding the 30 lakes that the Department manages for larger trout, do you think that we need more of these types of waters, there are about the right number of these types of waters, or we need less of these types of waters?" Only 7% thought we needed less quality waters, while 29% thought we should have more. The largest group (44%) thought we had the right amount, while 20% didn't know (Figure 42).

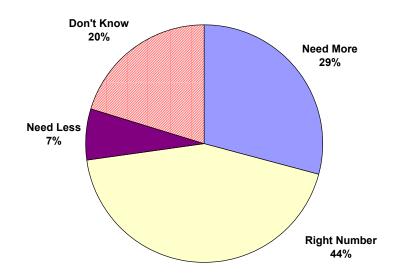


Figure 42: Anglers' opinions of the amount of quality waters.

Figure 43 shows a comparison of the 2002, 1994, and 1986 survey data for this question. In 1986 the choice was worded slightly differently – for quality lakes, anglers were asked to choose between whether there were 1)Far less than they would like 2) Somewhat less than they would like, 3) About the right number, 4) Somewhat more than they would like, 5) Far more than they would like, or 6) had no opinion on the number of quality lakes. For purposes of this comparison, categories 1 and 2 (Far less and Somewhat less) were combined and compared against the "Need More" category in previous surveys, and categories 4 and 5 (Somewhat more and Far more) were combined to compare against the "Need Less" category from the first two surveys. In the 2002 survey, a slightly larger percentage of anglers thought we had the right amount of quality waters (43% vs. 38%). This percentage was much higher than the 17% reported in the 1986 survey. Fewer anglers thought we needed more quality waters in 2002 than did in 1994 or 1988 (29% in 2002 vs. about 41% in 1994 and 35% in 1988). So it appears that we may be approaching the point where we have the right amount of these waters to satisfy the majority of our angling public.

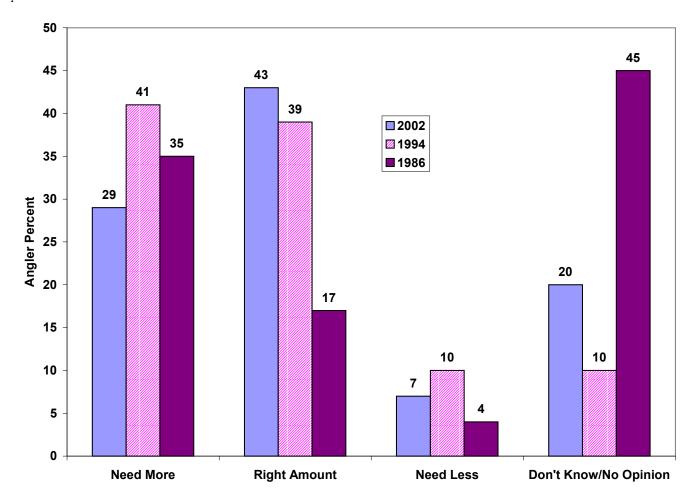


Figure 43: Comparison of 2002, 1994 and 1986 survey data for anglers' opinions on quality lakes.

Juvenile Only Waters

Juvenile only waters are waters where only anglers under the age of 15 may fish. When asked in the 2002 survey, the largest group (44%) said they thought we had about the right amount of these waters. A sizeable number (31%) thought we needed more juvenile only waters, and 7% thought we needed less, with an additional 18% who didn't know whether we needed more of these waters or not (Figure 44).

Most of the anglers surveyed (57%) had taken a juvenile fishing during the last year – the mean number they took fishing was 2.7 kids. Thirty-three percent of the anglers surveyed were aware that WDFW has a Youth Fishing Program.

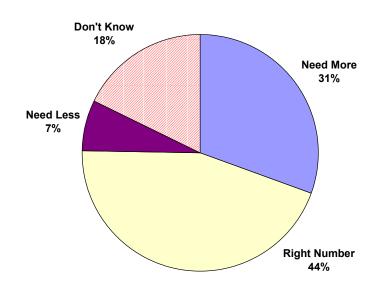


Figure 44: Anglers' opinions on the amount of "juvenile only" waters.

Membership in a Fishing or Hunting Club

Anglers were asked about their membership in a fishing or hunting club or organization. About 14% of the anglers questioned did belong to some type of club. This is very close to the 13.7 % who answered yes to this question in the 1994 survey. In the 1986 survey, only 7.9% of anglers questioned belonged to a hunting or fishing club. Members of a fishing or hunting club were about as likely as other anglers to fish on opening day (16.5% fished opening day in 2002, while the percentage of anglers as a whole was 15.6), but were slightly more likely than average to fish in a quality water (27.6% said they had fished in a quality water in the last year, vs. 22% of anglers as a whole).

Additional Information

Although it was not a question on the survey, interviewers noted that the respondents were overwhelmingly male (81%).

At the end of the survey, anglers were given the opportunity to make additional comments. These were recorded by the interviewers and are presented in Appendix 1.

In April 2003,1541 anglers were contacted by telephone and asked various questions about their angling activities and preferences during the previous license year (April 1 2002- March 31 2003). Their responses are summarized in this report. Appendix 1 contains additional comments anglers made on a variety of subjects after they had answered the survey questions. Appendix 2 is the actual survey instrument used. Appendix 3 is a detailed list of the raw data gathered during the survey, and Appendix 4 is References Cited. Comparisons are also made between this and two similar surveys conducted in 1994 and 1986. It is hoped that these data will help managers make decisions on the types and amounts of different fisheries to provide for the fishing public.

Fifty eight percent of the anglers contacted had fished in eastern Washington during the last license year. Of those, 83% were very or somewhat satisfied with their fishing experience. An equal 58% had fished in western Washington, with 72% of these anglers very or somewhat satisfied. "For relaxation" and To be with family and friends" were the two top reasons anglers gave when asked about their main reason for fishing, followed closely by ""For the sport" and "For the fun of catching fish."

Only 15% fished on the "opening day" of lowland lake trout season during the last license year. The majority, 56% said we had the right amount of opening day lakes, while 7% said we needed less and 16% said we needed more. Comparing opening day lakes to lakes open year-round, 11% preferred to fish opening day lakes, 31% preferred year-round lakes, and the majority, 58%, had no preference. This differed from the results reported in the 1994 survey, where 30% preferred opening day lakes, 53% preferred year-round lakes, and 17% had no preference.

A little less than half (44%) felt that we had the right amount of juvenile only waters (waters where fishing is limited to those under 15 years of age), while 31% said we could use more and 7% said we needed fewer. The majority (57%) had taken a juvenile fishing the last year, and 33% were aware of the Department's Youth Fishing Program.

When asked for their opinions about quality waters (waters managed for larger trout), 43% believed we had the right amount, while 29% said we needed more, and 7% wanted less. Over the last license year, 22% had fished in a quality water. The number of anglers who felt we had enough quality lakes has climbed risen with each successive survey, from 17% in 1988 to 19% in 1994, to 43% in the 2002 survey.

When asked about fishing during the last five years, well over half (61%) had fished each of these years. The most popular type of fishing was for trout in lowland lakes (33%) with bass, panfish, walleye, catfish and perch (warmwater species) coming in second with 21%. In the 1994 survey, anglers were not given steelhead or sea-run cutthroat as a choice, but the percent preferring to fish for lowland lake trout was very similar (32.3%). A few more anglers preferred bass and warmwater fishing in the previous survey (27.6%) and fishing for trout in both streams and high lakes received a

higher percentage in 1994 (23.5% and 16.6%, respectively). However, this could be skewed by the fact that anglers in 1994 were given fewer choices.

The number of days spent fishing for various species or species groups was fairly consistent between the 2002, 1994, and 1986 surveys. Anglers spent between 12 and 14 days fishing for lowland lake trout, and between 6 and 8 days fishing high lakes. Days spent fishing for trout in streams ranged from about 9 to 11. Bass and warmwater fish ranged from 14 to 18 days, with 1994 being the high year. Steelhead fishers were only surveyed in 1986 and 2002; the number of days fished rose from about 16 in 1986 to a little over 18 days/year in 2002.

Gear preferences for several different species (bass, rainbow trout, steelhead, resident cutthroat, kokanee, and walleye) were compared between the 2002 and 1994 survey. The percent of anglers who preferred to fish for rainbows with bait declined in 2002, as did the percent fishing for kokanee with bait. But more anglers fished for steelhead and resident cutthroat with bait in 2002. The percentage of anglers preferring to use lures with bait rose slightly in 2002 in all categories except walleye, where it declined slightly. Those preferring to fish with only lures for steelhead declined in 2002, while remaining fairly constant for other species. The percent of anglers fishing for resident cutthroat with flies declined sharply in 2002, and went up for rainbow trout, while percentages for other species in this category showed little change.

The percentage of anglers who release fish that are legal to keep was reported for the anglers' first three choices of species. Species where anglers commonly (35-42% of the time) released all of their catch in 2002 included bass, sea-run cutthroat, tiger muskie, resident cutthroat, Dolly Varden/bull trout, carp, and brook, brown, and golden trout combined. Between the 1994 and 2002 surveys the number of anglers releasing all legal rainbow rose dramatically, and the percent releasing all legal resident cutthroat doubled. In fact, more anglers released fish in every category in 2002 than in 1994, with the possible exception of steelhead, which remained virtually constant.

Anglers were also asked to give the minimum size fish they would keep for certain species, and the minimum size they would consider a quality fish. For bass, most (69%) would keep a 12" fish, but only just over half would consider this a quality fish. A slight majority (56%) would keep a 10" catfish, but most (64%) did not consider a catfish to be a quality fish until it was 16" long. The majority (67%) of crappie/perch/sunfish fishers would keep an 8" fish, but only 55% considered a 10" fish to be a quality fish. Most anglers (52%) said they would keep a 10" rainbow trout, but most did not consider it a quality fish until it was at least 14" long. Summer steelheaders were likely to keep a 22" fish, while winter steelheaders preferred a slightly larger fish. The majority did not consider a steelhead a quality fish until it was at least 25" long. Most sea-run cutthroat anglers (54%0 would keep a 12" fish, but wanted a 15" fish for a quality experience. Most salmon anglers would keep a 22" salmon, and considered a 25" fish a quality salmon. Resident cutthroat at 12" would be kept by 67% of anglers, and would be considered a quality fish until they were 15" in length. For brook, brown, and

golden trout, the majority (51%) would keep a 10" fish, and 54% thought of a 13" fish as a quality fish. Half (50%) of the walleye anglers surveyed would keep a 16" fish and a 19" walleye was considered a quality fish by 62%.

Seventy eight percent of anglers got their fishing information from the regulation handbook/pamphlet, while 18% used the agency website, and 12% asked a friend or relative. Surprisingly, 65% said the fishing regulations were clear and easy to understand. Only 14% of anglers belonged to a fishing or hunting club; this was very similar to the 1994 survey results. Although it was not a question asked in the survey, interviewers reported that anglers responding to the survey were predominately male (81%).

Appendix 1 ADDITIONAL COMMENTS MADE BY SURVEY RESPONDENTS

At the end of the survey, surveyors also recorded any additional comments made by anglers. These comments are listed below.

- I think they should regulate boats with large motors in smaller lakes. Perhaps big boats should be for
- large lakes.
- Need to enhance the spring salmon runs and open the Yakima River. Stop tournament fishing!
- I would like to see more of Lower Columbia waters opened up.
- The fishing laws are good, but more areas need to be open.
- I think lakes should not be designated for a certain season. Ice anglers pollute the area they fish (cans,etc.).
- They need to do better monitoring of native Americans; they are killing baby fish and leaving trash.
- All of the boat launches along the Columbia River have no bathrooms for women, poor boat launches and access, and no toilet paper.
- I should get any informational material when I get my license at no more cost. Trout season should be longer. Zones are too confusing.
- Keep up the good work! I appreciate it and have been fishing in Washington since 1962.
- There are many eastside lakes that should be managed for warm water fisheries instead of trout.
- Why isn't there any focus on the Narrows Bridge and the effect on cod?
- 1. I do not want more juvenile fishing waters. 2. I have a hard time finding rules about specific waters; the book is too complicated.
- The 18-inch rule on the walleye should be brought back.
- A lot of the lakes we go to-the water skiers on the lakes are rude and don't leave when they're supposed to.
- Add more fish to lakes and rivers; put more fish in there.
- Any research or special investigations by WDFW need to be more available to the public.
- Are you supposed to stop fishing when you reach your catch limit, or do you just have to catch and release? It's not clear.
- Be more congenial to the people paying for this and take their input. The regulations are impossible to understand.
- We need better launching facilities.
- Call me more often for surveys.
- Catfishing requires fishing at night, and there is no parking at night, which is problematic.
- Clean up the lakes—some are really polluted; stock the lakes with fish.
- The Columbia Basin used to have natural species of bass, crappie, etc.; now there's only trout, and they need to be replenished.
- The state could do a better job of stocking fish.
- I am concerned about Indians wasting salmon in the Skagit River.
- I am disappointed because they cut off the Kokanee runs on my lake. I live on Lake Pleasant in Beaver, WA.
- I am disappointed with salmon/sturgeon management. There is too much commercial fishing, especially sturgeon management.
- Do away with bait fishing on rivers and lakes.
- Do they have any spear fishing like they do in Hawaii in Washington State?
- I do not fish much! I just started fishing last year and really do not know much nor care much about the rules and regulations.
- I do not like the new regulations on bass. I fish more in Idaho. The state should provide more docks.
- I don't like to have to stick the fish stickers on my car.
- I don't agree with cutback on days for salmon/sturgeon; too much commercial angling.
- Each year they say they're going to drop the cost of the license, but then it goes up; I'm 77 and can't afford it much longer.
- Easier access to information on tides, etc., is needed.
- Elderly and handicapped—need improvement for access to fishing.
- I am extremely disappointed with the level of closure on the Tucannon River; rules are very unclear as to what areas are open/closed.
- Fish and Game Wardens need to come around more often and check; too many people are fishing illegally.
- Fish stocking needs to be managed better. Weekends are overcrowded; need more regulations.
- Fishing is getting better for salmon; the steelhead fishing is getting poorer.
- Fishing regulations need to be reduced and simplified. The rules are deceptive; they make it tough for people.
- Fishing rules are too complicated.
- For juveniles, I would like to see more quality fishing.
- For large trout waters, stock fish when they're bigger.
- For rainbow trout—the smaller the fish, the better the taste. I keep the smaller rainbow trout.

- Game and Fish does a wonderful job, even though they get flack from everyone. The Website is a little difficult to navigate.
- Get off our backs when we are out there fishing. Why are they closing the parks for families?
- Get rid of salmon derbies; put more trout in these lakes—not the 2-inchers.
- I am happy in general with fishing opportunities in WA. More northern pike would be great.
- I have not fished much; only went fishing 1 day during the past license year.
- I have to pay to get my boat in the water, and I don't like it.
- I killed more fish than I kept this year, because I feel as though anglers should be able to catch a quota.
- My husband got fined for a regulation that is not in the handbook but was added afterwards. The Dept. needs to inform us better.
- I'd like to see a little more access to alpine lakes, I think that the kids fishing is really important.
- I'd like to see Washington not go the way of Oregon as far as catch and release goes.
- I'm a Cub Scout leader, and the gentleman from the WDFW did a real great job sending me information and materials for my scouts.
- I'm also a commercial fisherman; sport fishers need to be more informed and not blame us for overcatches.
- I'm going to get a fishing license.
- I'm real happy with the fishing here.
- I'm worried about the salmon and steelhead around here. We need to address the gill nets on the Columbia, not the dams.
- I believe in catch and release due to the poor habitat for the resident trout.
- I believe we should not have changed Lone Lake's fishing regulations—we can only troll at that lake.
- I couldn't get my parking permit renewed on the computer, the Website wouldn't work; I had to send in a check.
- I disapprove of the contests. Fishing is much better in Idaho at Yellowstone. I go there in the summer.
- I don't think lakes in western WA are being maintained for those who want adequate fishing. Goldfish are a big problem.
- I don't like when gill netters come in because they rape the rivers, and I have no luck.
- I enjoy fishing but wish we had more fish, but we have to do the best we can with what we have.
- I fished in Port Angeles, Elwah River.
- I have a problem with Lake Concully not allowing water in; they're diverting it for Indian purposes.
- I have property at Lake Sinclair, and I like the way they're stocking it.
- I hope they have a pink salmon season.
- I hope this information really helps.
- I just like to fish!
- I just wish that the white folks will live better with the Indian folks to make Seattle more like a mini-Alaska.
- I like fishing.
- I like the fly release in the eastern lakes in the early season.
- I like the triploids and wish you'd stock more.
- I love fishing in Washington.
- I think it's great what the state does for the juvenile fishing.
- I think the survey is great idea-make more specific questions regarding rivers.
- I think that all salmon fishing should be cut off for 5 years; I can't go out without being skunked.
- I think that opening day should be a couple weeks later because there will be more fish.
- I think the Dept. is doing a good job. There are still places to fish, but preserving areas as well is good for the future.
- I think the guide comes out way too late in the season. I missed all the Memorial Day sales because of late release.
- I think the regulations they have put on north-central WA rivers are too complicated.
- I think there should be a program to clean up the lakes of pollution.
- I think there should be a wiser use of money—no special citizens i.e. Indians.
- I think there should be less emphasis on large fish and more on matching the equipment used to the different kinds of fish.
- I think they should have a program for parking that requires only one tag that allows you to access multiple sites.
- I think they should put all the salmon rules together as opposed to general rules in one section and area rules in another.
- I think we have a good F and W Dept., especially for war veterans.
- I think we need more lakes to catch crappie, perch, and bluegill.
- I think we should eliminate the regulations and/or make them easier to understand—less fees as well.
 - I think you are a bunch of crooks! We were fishing, and the game wardens contradicted the regulations book.
- I used to fish in I-82 ponds 1 and 2 (for perch), but since they put walleye in, there's no perch; nobody fishes there anymore.
- I want all commercial netting to end in the Columbia River.

- I wish regulations would come out before the season starts!
- I wish they'd change regulations for sport anglers as opposed to commercial, so commercial doesn't reap all benefits from king salmon.
- I wish they'd give fishing in Washington State 2 years off and let the fisheries build up.
- I would like to see a salmon season opened in the Snake River; I buy a license in Idaho just for that.
- I would like the regulations to come out before one purchases his/her license.
- I would like to see an additional stocking period so that 75% would be before opening day and 25% 45 days into the season.
- I would like to see more management on the water, more game wardens on the water; lots of people take illegal walleye.
- I would like to see more trophy lakes for all game fish.
- I would like to see the opening in the lakes to be put back to the last weekend in April. Need to fix access to Pampa Pond!
- I would like very much to get rid of the freshwater nets.
- If they are going to be clipping hatchery salmon, they need to clip them all.
- If you can do anything about simplifying that horrible regulations book, it would be a big help.
- Improve saltwater management, improve lakes in western Washington. I hate public lakes that go private. Protect the wild.
- In eastern Washington, there needs to be more parking available near the boating docks. It's a headache.
- Indian population is abusing fishing—netting, gutting, and leaving fish behind; same rules should apply to all and be enforced.
- Indians need to get valid plan with the state government.
- It's hard to get the regulation book on time! Have to use last year's.
- It would be nice to make fishing more affordable again.
- Keep bass out of waters, clean waters, restrict bait, and don't change the dates.
- Keep pollution down.
- Keep the quality and size of fish up, and more people will fish. Congratulations for doing survey and asking for my input.
- Lake Tye yet to recognized by Dept. and being stocked, regulate.
- Lakes seem to be stocked for opening day; after that, there's nothing to fish for. Need to keep them stocked.
- Leave us alone.
- Less opening day lakes, kills supply in short amount of time. Work on enforcing rules and regulations for salmon, create catch and release.
- Let nature take its course, and stop controlling the salmon.
- Licenses are more expensive, less fish.
- Limit bass to 3 per day; no slot limit; regulations out on time; Family Fishing Pond in Kenilworth, enforce rules!; boat licenses too expensive.
- Longer fishing seasons!!! More time.
- Make less regulations but simpler and concise. Should have regulations books out by April 1st for new fishing year.
- Make license cheaper.
- Make your pamphlets readable for a normal person.
- More enforcement and game officers. I notice a lot of violations.
- More handicapped-access for people who are not completely wheelchair bound...I can't stay out longer than 30 minutes.
- More quality waters with one or no fish limits.
- More restrictive regulations, but not take the brood stock out of the pond either.
- My friends and I think they are doing a great job stocking the lowland lakes.
- Need a 1-800 number to call for information. The rules and regulations need to be more clear.
- Need more lakes stocked with panfish.
- Need more officials to do their job and check for unauthorized people fishing.
- Need more publicity on the juvenile-only waters.
- Need more signs in the water that distinguish fishing from non-fishing waters.
- Need to improve the salmon and steelhead on the Cowlitz River.
- I'm glad the state is doing a survey about fishing..
- No salmon and steelhead netting on the Columbia River. Need to sell punch cards Jan-Dec. Adipose fins not cut right.
- Not enough regulations for people fishing with bait. More boat regulations because they bring in strange algae; pollution.
- Now do I get a new reel?

- Once the salmon population is stabilized, open the season more.
- One pole rule in Puget Sound conflicts with two pole rule in Seattle.
- I only fished for salmon last year, and it was my first time fishing.
- Opening days put too much pressure on the lakes, and those are the days when fair-weather fishermen come out.
- Outlaw any retention of wild steelhead anywhere.
- Over-pricing of the fish permit.
- Pamphlet is unclear about landmarks-bridges listed under local names, which are not listed or posted- confusing!
- Please clarify the rules and regulations.
- Poaching is the biggest problem; more officers. Quality waters should be catch and release. WA should have more flyfishing waters.
- Post public access with clear and definitive instructions. The general public doesn't read the newspaper or visit the web-site.
- I prefer lakes with a higher limit, less year round lakes.
- Put more fish in the lakes!
- Put some more fish in lakes.
- Raise more fish; need more species, including perch. Lower fee for residents.
- Rattlesnake Lake should stay open longer. I would like more selective fishing rules. Keep big fishers out of Yakima River.
- Regulate the Indian fishing heavier; they are killing off all the fish.
- Regulation handbooks are not readily available; hard to get one.
- Regulations and rules are not posted in a timely fashion; many of us aren't aware of changes.
- Regulations are confusing. I disapprove of night fishing because of poaching problems.
- Regulations are extremely difficult to understand. There is a lot of pollution in many lakes and rivers.
- Rules don't come out until too late; people don't know what's happening.
- Salmon fisheries being shut down throughout the state is a problem. The pamphlet is a little unclear.
- I sent in my son's fishing records from last year, and they never received it, but I already sent it in.
- I don't really fish, but I take my two children fishing all the time.
- I only went one day and caught one fish. I do not like to fish.
- Should highlight changes in pamphlet. I want to know what the Dept. is doing with Dusty Lake—I haven't caught any lately.
- Some lakes north are being abused, too much fishing and people keeping the small fish.
- Some lakes not listed in pamphlet as well as some creeks; I'm afraid to go fishing in them for fear of being fined.
- Some people need to be checked—we don't have enough enforcement officers in the field; need 4x the current number of officers.
- Son or nephew translated and spoke on behalf of Chau Le Minh. He attended all fishing trips with the elder.
- They need more fish, and there are too many people fishing on opening day. Raise fish legal limit.
- I go fishing all the time with my husband and kids. I want more kids fishing streams.
- I think they need to revise the pamphlet and make it easier to understand ...
- I wish there were more bass in the waters.
- Start stocking some rivers again to give kids a chance.
- Steelhead fishing has gotten better in the past 2-3 years.
- Stocking program would be wonderful on the west, as it is on the east side; makes a definite positive difference.
- Stop playing politics and start playing conservation; call me any time.
- Stop poisoning the panfish, stickle backs (i.e., sunfish, perch, and spiny rays).
- Stop raising license rates and shortening season times. Regulations are confusing. Open saltwater more for salmon fishing.
- Southwest WA is good. John Weinheimer and Bob Lucas are doing great!
- We need to stock fish in the creeks. The restrictions (esp., Dolly Varden) are a pain.
- Thanks for the Website information for the Kid's Fishing Program!
- The 30 lakes for larger trout—there are always people fishing with bait and keeping the fish! Wardens need to check!
- The Commissioner should be a fisherman and listen to the people. Get nets out of the Columbia River!
- The Department is not user-friendly and needs to move back to downtown where it's convenient for the average sportsman.
- The Fish and Wildlife Department should just keep up the good work!
- The fishing here is great, but public access needs some work. It's difficult to get to some spots without a boat.
- The handbook, revised, should be available at the beginning of the fishing season; it is always last year's.
- The pamphlets on information are difficult to understand (it takes a lawyer to decipher).
- The pamphlets are too small. The tag is too small.

- The planting of fish could be improved in western Washington.
- The regulations book is ridiculous; too many guidelines to remember.
- The regulation handbook is way too complicated for the average angler to understand, so please make it less complicated.
- The regulations are too complicated. You need to be a lawyer to figure them out.
- The regulations are way too complex; they could be simplified. Either make them easier or easier to read (less legal).
- The regulations need to be simplified.
- The rule book is not exactly clear about carrying a picture I.D. with you; fines are too large; fish are too small.
- The rules and regulations should be available at the beginning of the season!
- The state needs to do a better job of sending out the regulations before opening day.
- The state needs to make the regulations more simple to understand, so you don't have to be a Philadelphia lawyer to fish.
- The state shouldn't make money off of minors. The state needs to quit micro-managing the lakes and streams. I
 hate the rules!
- The Yakima fly-fisherman's club shouldn't be allowed to allocate river as just for their fishing. Little kids can't fly fish.
- There are starting to be too many people in the northwest now.
- There are too many regulations for all of the fishing locations. It should be more simple.
- There are too many rules; do away with different seasons for different zones. Research Montana's regulations, they are a good model.
- There needs to be more game fish in the lakes.
- There needs to be more steelheads in the rivers and streams.
- There should be a different license option, similar to an active duty program. There should be increased funding mechanisms other than the price of licenses for WA Dept. of Fish and Game.
- They ask for more IDs than needed when you get your license.
- They need to crack down on leaving litter; waters are not broad enough, too crowded.
- They need to do something about the restrictions on licenses, it's too complicated.
- They need to lighten regulations on sturgeon fishing.
- They need to simplify the fishing handbook. It takes too much time to read, and I never know if I'm legal.
- They need to stock the lakes better.
- They should create more kids programs so they have something to do.
- They should do a survey like this for hunting regulations.
- I think the Fish and Game should open up North Richmond area for more fishing. I rarely get enough fish!
- I think the release of wild fish in saltwater kills more fish. Keep them and count them as a legal fish.
- Too many evolving situations with the fishing; it changes too often; too confusing to keep up with. Too many people.
- Too many rule changes in the last minute; not good for those fishing for food. Make rules consistent.
- Too much pressure on summer steelhead fishing; need more fly fishing waters for steelhead.
- I took kids fishing once last year as part of a church function.
- Trophy lakes in Snohomish County; catch and release; fly fishing.
- It is very difficult to find a quiet, accessible spot to go fishing.
- I'm very disappointed with the quality of fish being put into the waters and in the behavior of steelhead fishers.
- It is very easy to get confused. Do they stock cutthroat? Where can you fish for Dolly Varden? I want to know.
- WA let quality down due to money problems.
- Fishing for panfish and walleye have decreased a lot in Sprague Lake. Hatcheries need management.
- Walleye sizes are confusing; needs to be more uniform.
- I want to raise daily catch limit up to at least 8, if not 12.
- I want to know if WA allows multiple rods fishing at one time.
- Wash. needs to pattern after Alaska. Lakes aren't being stocked. Do away with vehicle use permits.
- Fees in Alaska are lower.
- Washington has about the best-managed program in the states.
- Washington is doing pretty well and has pretty clean water. Need more clubs to help, like B.A.S.S.
- We're fairly new here and don't know the area well.
- We're losing lots of public access to shorelines; not enough accessible spots.
- We have a great state for fishing.
- We have more people, less fish and designated areas; need more enforcement and disability access.
- We have too much commercial fishing; need more access and an increase of quality fish.
- We need enforcement so people pick up their trash, e.g., Rotary Lake.
- We need less fishing rights for native Americans.
- We need more game wardens during fishing season.

- We need more game wardens to keep people in line with proper regulations.
- We need more handicapped (esp. wheelchair) accessible fishing.
- We need more local programs for kids in Snohomish County/Everett.
- We should give our kids more fishing time.
- Website needs to be updated more often..
- Western Washington is hurting for good fly fishing water.
- When is crabbing going to be opened in Washington?
- Where I buy my license (Save-More in Wenatchee), there is never a pamphlet available.
- Where is this 50/50 rule anyway? They put it in place in 1978, and the Indians are wiping out all the crabs before I get there.
- Why can't I use 2 poles at once? Regarding sturgeon, wait 1 day for a bite, can't fish for anything else at the same time?
- Why did they close the Cedar River to all kinds of fishing, and why can't they re-open it?
- Why spend money printing regulations handbooks, then make all changes on the Internet? If you don't have a computer, then what?
- With the license issuance, it would be nice to know more about the life cycles of the fish to increase respect for them.
- I would like to be able to catch more than two fish per trip.
- I would like to get information over the Internet since the rules change so often.
- You should be able to fish with bow and also with nets wherever you want.

Appendix 2 SURVEY INSTRUMENT

2003 WDFW Angler Preference Survey U.S. General Accounting Office 1. PRESS RETURN WHEN INTERVIEW BEGINS START TIMER STARTS AFTER THIS SCREEN 2. Time when interview began TIME1 1:1-5 _____ 3. DOS SURVEY NAME SNAME 1:6 (CHECK ONLY ONE ANSWER) ___ 1. WAAPS 4. ENTER LICENSE TYPE FROM CALLSHEET LICTYPE 1:7 (CHECK ONLY ONE ANSWER) 1. Invalid answer. Select another. (GO TO QUESTION 4) 2. MISSING: See Manager (GO TO QUESTION 95) 3. 2-Day Combination Temporary 4. Combination 5. Freshwater Fishing 6. Youth Combination 5. Hello, my name is _ , and I'm calling on behalf of the Washington State Department of Fish and Wildlife to ask you some questions about your fishing in Washington. This statewide survey is being conducted to find out how people feel about a number of important issues related to freshwater fishing in Washington. Your confidential answer will be used to help managers make informed decisions and improve service to you. We are not selling anything and the survey will just take a few minutes. Will you help us out by answering some questions? CONPER 1:8-9 (CHECK ONLY ONE ANSWER) 1. Correct person, good time to do survey (GO TO QUESTION 7) 2. Bad time/schedule recall (CB - do not save) (GO TO QUESTION 6) 3. AM, NA, BZ (do not save) 4. TM 5. RF 6. NE 7. DS 8. BG 9. DL 10. Bad Number (missing digit, begins with zero, etc.) SKIP TO OUESTION 95 _____ 6. When would be a more convenient time to call you back? Thank you for your time. WHENCALL ENTER DAY AND TIME ON CALLSHEET (CB) SKIP TO QUESTION 95 _____ 7. Our records indicate that you purchased a #4 license for the past license year. Is this correct? (April 1, 2002 - March 31, 2003) VERIFY 1:10 (CHECK ONLY ONE ANSWER) 1. Invalid answer. Select another. (GO TO QUESTION 7) 2. Yes (GO TO QUESTION 8) 3. No 4. Don't know SKIP TO OUESTION 12 _____

```
8. The questions in this survey pertain only to fishing in lakes,
rivers and streams in Washington State. Furthermore, these
questions only pertain to game fish, that is, bass, catfish
(including bullhead), burbot (freshwater ling), crappie,
perch, sunfish, trout (including steelhead), walleye, and
whitefish, but NOT salmon or sturgeon. This survey also
does not pertain to fishing in marine areas.
FRSHFISH
PRESS ENTER TO CONTINUE
9. Did you fish for game fish in EASTERN Washington lakes, rivers
or streams during the past license year (April 1, 2002 - March 31,
2003)? By eastern Washington we mean east of the Cascade
Mountains. (Game fish include: bass, catfish (including bullhead),
burbot (freshwater ling), crappie, perch, sunfish, trout
(including steelhead), walleye, and whitefish but NOT salmon
or sturgeon)
EASTFISH 1:11
(CHECK ONLY ONE ANSWER)
    1. Invalid answer. Select another. (GO TO QUESTION 9)
    2. Yes (GO TO QUESTION 10)
    3. No
    4. Don't know
SKIP TO OUESTION 11
_____
10. Overall, are you satisfied or dissatisfied with your fishing
experiences in EASTERN Washington lakes, rivers or streams
during the past license year (April 1, 2002 - March 31, 2003)?
(READ SCALE AS NECESSARY; PROMPT FOR DEGREE)
EASTSAT 1:12
(CHECK ONLY ONE ANSWER)
    1. Invalid answer. Select another. (GO TO QUESTION 10)
    2. Very satisfied
    3. Somewhat satisfied
    4. Neither satisfied nor dissatisfied
    5. Somewhat dissatisfied
    6. Very dissatisfied
    7. Don't know
11. Did you fish for game fish in WESTERN Washington lakes, rivers
or streams during the past license year (April 1, 2002 - March 31,
2003? By western Washington we mean west of the Cascade Mountains.
(Game fish include: bass, catfish (including bullhead),
burbot (freshwater ling), crappie, perch, sunfish, trout
(including steelhead), walleye, and whitefish but NOT salmon
or sturgeon)
WESTFISH 1:13
(CHECK ONLY ONE ANSWER)
    1. Invalid answer. Select another. (GO TO QUESTION 11)
    2. Yes (GO TO QUESTION 13)
    3. No
    4. Don't know
IF (#9 > 2 AND #11 > 2) GO TO #12
SKIP TO OUESTION 14
_____
12. I'm sorry, but right now we are only interviewing those
anglers that have fished for game fish in Washington during
the past license year. Thank you for your time and cooperation.
SORRY
PRESS ENTER TO CONTINUE; RECORD AS NE
SKIP TO OUESTION 95
_____
```

13. Overall, are you satisfied or dissatisfied with your fishing experiences in WESTERN Washington lakes, rivers or streams during the past license year (April 1, 2002 - March 31, 2003)? (READ SCALE AS NECESSARY; PROMPT FOR DEGREE) WESTSAT 1:14 (CHECK ONLY ONE ANSWER) 1. Invalid answer. Select another. (GO TO QUESTION 13) 2. Very satisfied 3. Somewhat satisfied 4. Neither satisfied nor dissatisfied 5. Somewhat dissatisfied 6. Very dissatisfied 7. Don't know 14. Do you agree or disagree that Washington's fishing regulations are clear and easy to understand? (READ SCALE AS NECESSARY; PROMPT FOR DEGREE) FCLEAR 1:15 (CHECK ONLY ONE ANSWER) 1. Invalid answer. Select another. (GO TO QUESTION 14) Strongly agree
 Somewhat agree 4. Neither agree nor disagree 5. Somewhat disagree 6. Strongly disagree 7. Don't know 15. How many years, out of the past five years, did you go fishing in Washington's lakes, rivers or streams? (READ SCALE AS NECESSARY) FRESHNUM 1:16 (CHECK ONLY ONE ANSWER) 1. Invalid answer. Select another. (GO TO QUESTION 15) 2. ONE 3. TWO 4. THREE 5. FOUR 6. FIVE 7. DON'T KNOW 16. And over the past five years, would you say your fishing activity in Washington's lakes, rivers or streams has increased, decreased, or remained about the same? (READ SCALE AS NECESSARY) FISHLEV 1:17 (CHECK ONLY ONE ANSWER) 1. Invalid answer. Select another. (GO TO QUESTION 16) 2. Increased 3. Remained about the same 4. Decreased 5. Don't know

<pre>17. What was your MAIN reason for fishing in Washington's lakes, rivers or streams over the past two years? Would you say you fished primarily to catch fresh fish for food, to be with family and friends, for the sport, for the fun of catching fish, to catch large fish, to be close to nature, or for relaxation? (READ SCALE AS NECESSARY) FWHYFISH 1:18-19 (CHECK ONLY ONE ANSWER) </pre>
<pre> 10. DNR: None of the above 18. Now I'm going to read a list of different kinds of fish. For each kind, please tell me if you fished for it in Washington in the past license year (April 1, 2002 - March 31, 2003). After I'm done, I will ask you which three kinds you most prefer to fish for.</pre>
First, did you fish for any kind of bass in Washington in the past license year (April 1, 2003 - March 31, 2003)? FISHBASS 1:20 (CHECK ONLY ONE ANSWER) 1. Invalid answer. Select another. (GO TO QUESTION 18) 2. Yes 3. No 4. Don't know
<pre>19. Did you fish for catfish in Washington in the past license year (April 1, 2003 - March 31, 2003)? FISHCAT 1:21 (CHECK ONLY ONE ANSWER) 1. Invalid answer. Select another. (GO TO QUESTION 19) 2. Yes 3. No 4. Don't know</pre>
<pre>20. Did you fish for crappie, perch, or sunfish, such as bluegill in the past license year (April 1, 2003 - March 31, 2003)? FISHSUN 1:22 (CHECK ONLY ONE ANSWER) 1. Invalid answer. Select another. (GO TO QUESTION 20) 2. Yes 3. No 4. Don't know</pre>
21. Did you fish for burbot or freshwater ling in the past license year (April 1, 2003 - March 31, 2003)? FISHBURB 1:23 (CHECK ONLY ONE ANSWER)

```
22. Did you fish for rainbow trout, not steelhead, in the
past license year (April 1, 2003 - March 31, 2003)?
FISHRTRT 1:24
(CHECK ONLY ONE ANSWER)
    1. Invalid answer. Select another. (GO TO QUESTION 22)
    2. Yes
    3. No
    4. Don't know
23. Did you fish for summer steelhead, from May through October,
in the past license year (April 1, 2003 - March 31, 2003)?
FISHSSTL 1:25
(CHECK ONLY ONE ANSWER)
    1. Invalid answer. Select another. (GO TO QUESTION 23)
2. Yes
    3. No
    4. Don't know
24. Did you fish for winter steelhead, from November through April,
in the past license year (April 1, 2003 - March 31, 2003)?
FISHWSTL 1:26
(CHECK ONLY ONE ANSWER)
    1. Invalid answer. Select another. (GO TO QUESTION 24)
    2. Yes
    3. No
    4. Don't know
25. Did you fish for crayfish in the past license
year (April 1, 2003 - March 31, 2003)?
FISHCRAY 1:27
(CHECK ONLY ONE ANSWER)
    1. Invalid answer. Select another. (GO TO QUESTION 25)
    2. Yes
    3. No
    4. Don't know
26. Did you fish for sea-run cutthroat trout in the
past license year (April 1, 2003 - March 31, 2003)?
FISHSTRT 1:28
(CHECK ONLY ONE ANSWER)
    1. Invalid answer. Select another. (GO TO QUESTION 26)
    2. Yes
    3. No
   4. Don't know
27. Did you fish for salmon in the past license
year (April 1, 2003 - March 31, 2003)?
FISHSLMN 1:29
(CHECK ONLY ONE ANSWER)
    1. Invalid answer. Select another. (GO TO QUESTION 27)
    2. Yes
    3. No
    4. Don't know
28. Did you fish for tiger muskie in the past
license year (April 1, 2003 - March 31, 2003)?
FISHTIGR 1:30
(CHECK ONLY ONE ANSWER)
    1. Invalid answer. Select another. (GO TO QUESTION 28)
    2. Yes
    3. No
    4. Don't know
```

```
29. Did you fish for resident cutthroat trout in Washington in
the past license year (April 1, 2003 - March 31, 2003)? FISHCTRT 1:31
(CHECK ONLY ONE ANSWER)
     1. Invalid answer. Select another. (GO TO QUESTION 29)
     2. Yes
     3. No
    4. Don't know
30. Did you fish for bull or Dolly Varden trout in Washington in the past license year (April 1, 2003 - March 31, 2003)?
FISHBTRT 1:32
     1. Invalid answer. Select another. (GO TO QUESTION 30)
2. Yes
(CHECK ONLY ONE ANSWER)
     3. No
    4. Don't know
31. Did you fish for Kokanee or "silvers" in Washington in the past license year (April 1, 2003 - March 31, 2003)?
FISHKOKA 1:33
(CHECK ONLY ONE ANSWER)
     1. Invalid answer. Select another. (GO TO QUESTION 31)
     2. Yes
     3. No
    4. Don't know
32. Did you fish for walleye in Washington in the past
license year (April 1, 2003 - March 31, 2003)?
FISHWALL 1:34
(CHECK ONLY ONE ANSWER)
     1. Invalid answer. Select another. (GO TO QUESTION 32)
     2. Yes
     3. No
    4. Don't know
33. Did you fish for whitefish in Washington in the past
license year (April 1, 2003 - March 31, 2003)?
FISHWHIT 1:35
(CHECK ONLY ONE ANSWER)
    1. Invalid answer. Select another. (GO TO QUESTION 33)
     2. Yes
     3. No
    4. Don't know
34. Did you fish for carp in Washington in the past
license year (April 1, 2003 - March 31, 2003)?
FISHCARP 1:36
     1. Invalid answer. Select another. (GO TO QUESTION 34)
2. Yes
(CHECK ONLY ONE ANSWER)
     3. No
    4. Don't know
35. Did you fish for sturgeon in Washington in the
past license year (April 1, 2003 - March 31, 2003)?
FISHSTRG 1:37
(CHECK ONLY ONE ANSWER)
     1. Invalid answer. Select another. (GO TO QUESTION 35)
     2. Yes
     3. No
    4. Don't know
```

```
36. Did you fish for brook trout, brown trout, golden trout
in Washington in the past license year (April 1, 2003 -
March 31, 2003)?
FISHGTRT 1:38
(CHECK ONLY ONE ANSWER)

    Invalid answer. Select another. (GO TO QUESTION 36)
    Yes

     3. No
    4. Don't know
37. Now, which of those fish do you most prefer to fish for? (ENTER FIRST FISH FROM LIST; ? FOR DON'T KNOW; 88 FOR NO
PREFERENCE)
PREFER1 1:39-40
İF (#37 = 88) GO TO #52
38. Do you have a second preference?
(ENTER FIRST FISH FROM LIST; ? FOR DON'T KNOW;
88 FOR NO PREFERENCE)
PREFER2 1:41-42
İF (#38 = 88) GO TO #40
39. Do you have a third preference?
(ENTER FIRST FISH FROM LIST; ? FOR DON'T KNOW;
88 FOR NO PREFERENCE)
PREFER3 1:43-44
 ___
40. When you fish for \#37, do you MOST OFTEN fish with..?
(READ LIST)
FSHPRF1 1:45
(CHECK ONLY ONE ANSWER)
     1. Flies
     2. Lures only (such as spinners, spoons, flatfish, etc.)
     3. Lures with bait
     4. Bait (worms/eggs/maggots & artificial bait e.g. power bait)
     5. DNR: Other
    6. DNR: Don't know
IF (#38 = 88) GO TO #43
41. When you fish for #38, do you MOST OFTEN fish with..?
(READ LIST)
FSHPRF2 1:46
(CHECK ONLY ONE ANSWER)
     1. Flies
     2. Lures only (such as spinners, spoons, flatfish, etc.)
     3. Lures with bait
     4. Bait (worms/eggs/maggots & artificial bait e.g. power bait)
     5. DNR: Other
     6. DNR: Don't know
IF (#39 = 88) GO TO #43
42. When you fish for #39, do you MOST OFTEN fish with ..?
(READ LIST)
FSHPRF3 1:47
(CHECK ONLY ONE ANSWER)
     1. Flies
     2. Lures only (such as spinners, spoons, flatfish, etc.)
     3. Lures with bait
     4. Bait (worms/eggs/maggots & artificial bait e.g. power bait)
     5. DNR: Other
     6. DNR: Don't know
```

43. What percent of #37, that you catch and are legal to keep, do you voluntarily release? (ENTER ? FOR DON'T KNOW) PCTPRF1 1:48-50 _|__|% İF (#38 = 88) GO TO #46 44. What percent of #38, that you catch and are legal to keep, do you voluntarily release? (ENTER ? FOR DON'T KNOW) PCTPRF2 1:51-53 |__|_|% IF (#39 = 88) GO TO #46 45. What percent of #39, that you catch and are legal to keep, do you voluntarily release? (ENTER ? FOR DON'T KNOW) PCTPRF3 1:54-56 |__|_|% 46. For #37, what is the minimum size fish you would keep? (ENTER ? FOR DON'T KNOW) PREFSIZ1 1:57-58 |__| inches İF (#38 = 88) GO TO #49 47. For #38, what is the minimum size fish you would keep? (ENTER ? FOR DON'T KNOW) PREFSIZ2 1:59-60 |__| inches IF (#39 = 88) GO TO #49 48. For #39, what is the minimum size fish you would keep? (ENTER ? FOR DON'T KNOW) PREFSIZ3 1:61-62 _|__| inches 49. For #37 What is the minimum size you would consider a quality fish? (ENTER ? FOR DON'T KNOW) PRFQUAL1 1:63-64 ___ inches IF (#38 = 88) GO TO #52 50. For #38 What is the minimum size you would consider a quality fish? (ENTER ? FOR DON'T KNOW) PRFQUAL2 1:65-66 _ inches İF (#39 = 88) GO TO #52 51. For #39 What is the minimum size you would consider a quality fish? (ENTER ? FOR DON'T KNOW) PRFQUAL3 1:67-68 |__| inches 52. Now I'm going to ask you about fishing for each of the following kinds of fish in certain types of waters during the past license year (April 1, 2002- March 31, 2003). "Fishing for" means fishing specifically for the type of fish in each of the following categories. First, how many days did you fish for bass, panfish, walleye, catfish, perch or other such fish in lakes or rivers? (ENTER ? FOR DON'T KNOW) DAYSBASS 1:69-71 _ days _ | _ _ | _ 53. How many days did you fish for trout in lowland lakes? A lowland lake you can drive to, usually at low elevation. "Trout" includes kokanee or silvers. (ENTER ? FOR DON'T KNOW) DAYSLTRT 1:72-74 __|__| days 54. How many days did you fish for trout in alpine or high lakes? An alpine or high lake above 2500 feet elevation that you can only hike to. (ENTER ? FOR DON'T KNOW) DAYSHTRT 1:75-77 |__|_ days 55. How many days did you fish sea-run cutthroat in rivers and streams or in the ocean? (ENTER ? FOR DON'T KNOW)

DAYSSRUN 1:78-80 _|__| days 56. How many days did you fish for trout in streams or in beaver ponds, other than sea-run cutthroat or steelhead? (ENTER ? FOR DON'T KNOW) DAYSPTRT 1:81-83 _|__| days IF (#23 > 2 AND #24 > 2) GO TO #68 57. How many days did you fish for steelhead past license year? (ENTER ? FOR DON'T KNOW) DAYSSTHD 1:84-86 ____|___| days IF (#23 = 2) GO TO #58 IF (#24 = 2) GO TO #63 SKIP TO QUESTION 68 _____ 58. The summer steelhead season is from May through October. During the summer of 2002, how many days did you fish for summer steelhead in Washington? (ENTER ? FOR DON'T KNOW) DAYSSSTL 1:87-89 |__|_ days 59. You said you fished #58 days for steelhead last summer. Last summer, how many days did you fish for steelhead in Area 1: Puget Sound Rivers? (ENTER ? FOR DON'T KNOW) DAYSPSR 1:90-92 __|__| days 60. Last summer, how many days did you fish for steelhead in Area 2: Coastal Rivers? (ENTER ? FOR DON'T KNOW) DAYSCR 1:93-95 __|__| days 61. Last summer, how many days did you fish for steelhead in Area 3: Lower Columbia? (ENTER ? FOR DON'T KNOW) DAYSLC 1:96-98 __|_| days 62. Last summer, how many days did you fish for steelhead in Area 4: Columbia/Snake tributaries? (ENTER ? FOR DON'T KNOW) DAYSCST 1:99-101 |___|__| days IF (#24 = 2) GO TO #63 SKIP TO QUESTION 68 63. The winter steelhead season is from November through April. During the winter of 2002-03, how many days did you fish for summer steelhead in Washington? (ENTER ? FOR DON'T KNOW) DAYSWSTL 1:102-104 |__|_ days 64. You said you fished #63 days for steelhead last winter. Last winter, how many days did you fish for steelhead in Area 1: Puget Sound Rivers? (ENTER ? FOR DON'T KNOW) DAYSWPSR 1:105-107 _ days 65. Last winter, how many days did you fish for steelhead in Area 2: Coastal Rivers? (ENTER ? FOR DON'T KNOW) DAYSWCR 1:108-110 __|__| days 66. Last winter, how many days did you fish for steelhead in Area 3: Lower Columbia? (ENTER ? FOR DON'T KNOW) DAYSWLC 1:111-113 _|__| days 67. Last winter, how many days did you fish for steelhead in Area 4: Columbia/Snake tributaries? (ENTER ? FOR DON'T KNOW) DAYSWCST 1:114-116 ___ days 68. Which of the following six kinds of fishing do you most prefer? (READ LIST)

<pre>PREFFISH 1:117-118 (CHECK ONLY ONE ANSWER) </pre>
69. Did you fish for trout in lakes on the last opening day (April 27, 2002)? OPENDAY 1:119 (CHECK ONLY ONE ANSWER) 1. Invalid answer. Select another. (GO TO QUESTION 69) 2. Yes 3. No 4. Don't know
<pre>70. Do you prefer to fish? (READ LIST) PREFDAY 1:120 (CHECK ONLY ONE ANSWER)1 I. Invalid answer. Select another. (GO TO QUESTION 70)2 In lakes with an Opening Day and a season, or3. In lakes open to fishing all year, or4. Do you have no preference5. DNR: Don't know</pre>
<pre>71. Do you think that? (READ LIST) OPENPREF 1:121 (CHECK ONLY ONE ANSWER) 1. Invalid answer. Select another. (GO TO QUESTION 71) 2. We need more opening day lakes 3. We need less opening day lakes 4. There are about the right number of opening day lakes 5. DNR: Don't know</pre>

72. The Department manages approximately 30 waters for larger trout. Regulations for such waters allow only 1 or 2 fish to be kept each day, and sometimes there is a 12-inch or higher minimum length requirement for fish that are kept. In addition, you may not fish with bait. Anglers usually catch more fish than under standard regulations but most fish have to be released because they are less than the minimum length. Did you fish in this type of trout water during the past license year (April 1, 2002 - March 31, 2003)? FISHBG30 1:122 (CHECK ONLY ONE ANSWER)
73. Regarding the 30 lakes that the Department manages for larger trout, do you think that? (READ LIST) NUMBG30 1:123 (CHECK ONLY ONE ANSWER) 1 Invalid answer. Select another. (GO TO QUESTION 73) 2. We need more of these types of waters 3. There are about the right number of these types of waters 4. We need less of these types of waters 5. DNR: Don't know
<pre>74. In general, excluding salmon and sturgeon, how would you rate the present quality of lake and stream angling in Washington? Would you say it is excellent, good, fair, or poor? FRSHQUAL 1:124 (CHECK ONLY ONE ANSWER) 1. Invalid answer. Select another. (GO TO QUESTION 74) 2. Excellent 3. Good 4. Fair 5. Poor 6. Don't know</pre>
75. Are you presently a member of a fishing or hunting club or organization? MEMBER 1:125 (CHECK ONLY ONE ANSWER) 1. Invalid answer. Select another. (GO TO QUESTION 75) 2. Yes 3. No 4. Don't know
76. Some fishing organizations conduct 1-, 2-, or 3-day fishing contests, which are scheduled in advance on a single lake or reservoir, and require participants to get a permit from the state. During the past license year (April 1, 2002 - March 31, 2003), did you participate in such a fishing contest? This does not include informal contests with friends or club members, nor with contests that cover an entire season. FSHCNTST 1:126 (CHECK ONLY ONE ANSWER) 1. Invalid answer. Select another. (GO TO QUESTION 76) 2. Yes 3. NO 4. Don't know

77. During the past license year, (April 1, 2002 - March 31, 2003), have you fished or tried to fish on a lake or reservoir when there was a fishing contest in progress and you were not a participant? TRYFISH 1:127 (CHECK ONLY ONE ANSWER) 1. Invalid answer. Select another. (GO TO QUESTION 77) 2. Yes 3. No 4. Don't know 78. Were you inconvenienced by a fishing contest in the past license year? INCNVNCD 1:128 (CHECK ONLY ONE ANSWER) 1. Invalid answer. Select another. (GO TO QUESTION 78) 2. Yes (GO TO QUESTION 80) 3. No 4. Don't know SKIP TO OUESTION 82 79. YOU DID NOT USE YOUR SPACE BAR NOSPAC1 PRESS ENTER TO TRY AGAIN 80. In what way were you inconvenienced? (DNR LIST; CHECK ALL THAT APPLY) HOWINC 1:129-135 (CHECK ALL THAT APPLY) 1. Unable to fish/area was closed to non-participants 2. Normal fishing spot was taken 3. Too many people 4. Too much noise 5. Trash/litter was left in area 6. Don't know 7. Other İF (#80 = 0) GO TO #79 IF (#80 @ 7) GO TO #81 SKIP TO QUESTION 82 _____ 81. ENTER OTHER WAY THEY WERE INCONVENIENCED. HOWINCST 2:1-240

83. Did you take a juvenile (under 15 years of age) fishing with you during the last license year (April 1, 2002-March 31, 2003)? TAKEKIDS 2:242 (CHECK ONLY ONE ANSWER) 1. Invalid answer. Select another. (GO TO QUESTION 83) 2. Yes (GO TO QUESTION 85) 3. No 4. Don't know SKIP TO QUESTION 86 _____ 84. How many days did you take juveniles (under 15 years of age) fishing with you during the last license year (April 1, 2002-March 31, 2003)? (ENTER ? FOR DON'T KNOW) DAYSKIDS 2:243-245 |__|_| days 85. How many juveniles (under 15 years of age) did you take fishing with you during the last license year (April 1, 2002- March 31, 2003)? (ENTER ? FOR DON'T KNOW) NUMKIDS 2:246-247 86. Are you aware of the Department's Kids Fishing program? (Website is: http://www.wa.gov/wdfw/fish/youth/index.htm) AWAREKFP 2:248 (CHECK ONLY ONE ANSWER) __ 1. Invalid answer. Select another. (GO TO QUESTION 86) 2. Yes 3. No 4. Don't know SKIP TO QUESTION 88 _____ 87. YOU DID NOT USE YOUR SPACE BAR NOSPAC2 PRESS ENTER TO TRY AGAIN 88. How do you get information about fishing rules and rule changes in Washington? (DNR LIST; CHECK ALL THAT APPLY) GETINF 3:1-10 (CHECK ALL THAT APPLY) 1. Regulations handbook 2. WDFW employee 3. Pamphlet 4. Hotline 5. Newspaper 6. Internet/website 7. Friends/Relatives 8. Rod and gun club 9. Don't know 10. Other IF (#88 = 0) GO TO #87 IF (#88 @ 10) GO TO #89 SKIP TO QUESTION 90 _____ 89. ENTER OTHER WAY OF RECEIVING INFORMATION. GETINFST 3:11-250

90. That's the end of the questionnaire, thank you very much for your time and cooperation! (ENTER ANY ADDITIONAL COMMENTS; IN FIRST PERSON; 120 CHARACTERS) END 4:1-120

```
91. OBSERVE AND RECORD RESPONDENT'S GENDER
GENDER 4:121
(CHECK ONLY ONE ANSWER)
    1. Invalid answer. Select another. (GO TO QUESTION 91)
    2. Don't know
    3. Male
    4. Female
92. TIME INTERVIEW WAS COMPLETED
ENDTIME 4:122-126
|___|__|__|
93. Please enter your initials in LOWERCASE ONLY!
INTVRINT 4:127-129
|___|__
         94. Enter the area code and telephone number of number dialed.
TELEPHON 4:130-139
|___|__|-_|-_|___|-
                   __|-|__|__|__|
LOWEST VALUE = 1
95. SAVE OR ERASE INTERVIEW.
DO NOT ERASE A COMPLETED INTERVIEW!
FINISH 4:140
(CHECK ONLY ONE ANSWER)
 ___ 1. Save answers (GO TO QUESTION 97)
    2. Erase answers
 ___ 3. Review answers (GO TO QUESTION 5)
96. ARE YOU SURE YOU WANT TO ERASE THIS INTERVIEW?
ONLY ERASE IF: CB, AM, NA, BZ
MAKESURE 4:141
(CHECK ONLY ONE ANSWER)
 ____ 1. No, do not erase the answers (GO TO QUESTION 95)
____ 2. Yes, erase this interview
97. Date call was made
INTVDAT 4:142-149
|___|__|__|-|__|-|___|-|___|
Year Month Day
SAVE IF (#95 = 1)
```

Appendix 3 SURVEY DATA – License type: 2-Day Combination Temporary, Combination, Freshwater, Youth Combination.

License Types Used in Survey	Number of 2002 Licenses Sold	% of Total for License Types Used	Sample Size sent to Phone Surveyors	Number of Completed Surveys	Sampling Error
2-Day Combination	70,794	11	825	114	9.17
Combination *	176,935	28	2100	454	4.59
Freshwater	365,026	59	4425	941	3.19
Youth	12,599	2	150	32	17.30
Total	625,354	100	7500	1541	2.49

*(Includes adults, seniors, and persons with disabilities)

7. Our records indicate that you purchased alicense for the past license year, Is this correct? If not, terminate survey.

8. Survey description.

9. Did you fish for game fish in EASTERN Washington lakes, rivers or streams during the past license year (April 1, 2002 - March 31, 2003)? By eastern Washington we mean east of the Cascade Mountains. (Game fish include: bass, catfish (including bullhead), burbot (freshwater ling), crappie, perch, sunfish, trout (including steelhead), walleye, and whitefish but NOT salmon or sturgeon).

	#	%
Yes	900	58.4
No	639	41.5
Don't know	2	0.1
total	1541	100.0

10. Overall, are you satisfied or dissatisfied with your fishing experiences in EASTERN Washington lakes, rivers or streams during the past license year (April 1, 2002 - March 31, 2003)?

Satisfaction Rating	#	%
Very Satisfied	338	37.6
Somewhat Satisfied	410	45.6
Neither Satisfied or Dissatisfied	24	2.7
Somewhat Dissatisfied	67	7.4
Very Dissatisfied	44	4.9
Don't Know	17	1.9
total	900	100.1

11. Did you fish for game fish in WESTERN Washington lakes, rivers or streams during the past license year (April 1, 2002 - March 31, 2003? By western Washington we mean west of the Cascade Mountains. (Game fish include: bass, catfish (including bullhead), burbot (freshwater ling), crappie, perch, sunfish, trout (including steelhead), walleye, and whitefish but NOT salmon or sturgeon)

	#	%
Yes	895	58.1
No	639	41.5
Don't know	7	0.5
total	1541	100.1

13. Overall, are you satisfied or dissatisfied with your fishing experiences in WESTERN Washington lakes, rivers or streams during the past license year (April 1, 2002 - March 31, 2003)?

Satisfaction Rating	#	%
Very Satisfied	256	28.6
Somewhat Satisfied	384	42.9
Neither Satisfied or Dissatisfied	36	4.0
Somewhat Dissatisfied	118	13.2
Very Dissatisfied	80	8.9
Don't Know	21	2.3
total	895	99.9

14. Do you agree or disagree that Washington's fishing regulations are clear and easy to understand?

Are Regs		
Clear?	#	%
Strongly agree	482	31.3
Somewhat agree	515	33.4
Neither agree or disagree	45	2.9
Somewhat disagree	195	12.7
Strongly disagree	255	16.6
Don't know	49	3.2
total	1541	100.1

15. How many years, out of the past five years, did you go fishing in Washington's lakes, rivers or streams?

Years	#	%
One	135	8.8
Two	168	10.9
Three	162	10.5
Four	87	5.6
Five	963	62.5
Don't Know	26	1.7
total	1541	100.0

16. And over the past five years, would you say your fishing activity in Washington's lakes, rivers or streams has increased, decreased, or remained about the same?

Activity		
Level	#	%
Increased	338	21.9
Remained the Same	797	51.7
Decreased	361	23.4
Don't Know	45	2.9
total	1541	99.9

17. What was your MAIN reason for fishing in Washington's lakes, rivers or streams over the past two years? Would you say you fished primarily to catch fresh fish for food, to be with family and friends, for the sport, for the fun of catching fish, to catch large fish, to be close to nature, or for relaxation?

Reason For Fishing	#	%
For food	145	9.4
To be with family & friends	341	22.1
For the sport	280	18.1
For the fun of catching fish	251	16.3
To catch a large fish	34	2.2
To be close to nature	77	5.0
For the relaxation	363	23.6
Don't know	38	2.5
None of above	12	0.8
	1541	100.0

18. Now I'm going to read a list of different kinds of fish. For each kind, please tell me if you fished for it in Washington in the past license year (April 1, 2002 - March 31, 2003). After I'm done, I will ask you which three kinds you most prefer to fish for. First, did you fish for any kind of bass in Washington in the past license year (April 1, 2003 - March 31, 2003)?

Bass	#	%
yes	483	31.3
no	1043	67.7
don't know	15	1.0
total	1541	100.0

19. Did you fish for catfish in Washington in the past license year (April 1, 2003 - March 31, 2003)?

Catfish	#	%
yes	161	10.4
no	1363	88.4
don't know	17	1.0

total 1541 99.9

20. Did you fish for crappie, perch, or sunfish, such as bluegill, in the past license year (April 1, 2003 - March 31, 2003)?

,	,	,
Crappie	#	%
yes	414	26.9
no	1113	72.2
don't know	14	0.9
total	1541	100.0

21. Did you fish for burbot or freshwater ling in the past license year (April 1, 2003 - March 31, 2003)?

Burbot	#	%
yes	38	2.5
no	1483	96.2
don't know	20	1.3
total	1541	100.0

22. Did you fish for rainbow trout, not steelhead, in the past license year (April 1, 2003 - March 31, 2003)?

Rainbow		
Trout	#	%
yes	1223	79.4
no	305	19.8
don't know	13	0.8
total	1541	100.0

23. Did you fish for summer steelhead, from May through October, in the past license year (April 1, 2003 - March 31, 2003)?

Summer Steelhead	#	%
yes	355	23.0
no	1164	75.5
don't know	22	1.4
total	1541	99.9

24. Did you fish for winter steelhead, from November through April, in the past license year (April 1, 2003 - March 31, 2003)?

Winter Steelhead	#	%
yes	375	24.3
no	1149	74.6
don't know	17	1.1

total 1541 100.0

25. Did you fish for crayfish in the past license year (April 1, 2003 - March 31, 2003)?

Crayfish	#	%
yes	44	2.9
no	1483	96.2
don't know	14	0.9
total	1541	100.0

26. Did you fish for sea-run cutthroat trout in the past license year (April 1, 2003 - March 31, 2003)?

Sea-run Cutthroat	#	%
yes	281	18.2
no	1226	79.6
don't know	34	2.2
total	1541	100.0

27. Did you fish for salmon in the past license year (April 1, 2003 - March 31, 2003)?

Salmon	#	%
yes	642	41.7
no	886	57.5
don't know	13	0.8
total	1541	100.0

28. Did you fish for tiger muskie in the past license year (April 1, 2003 - March 31, 2003)?

Muskie	#	%
yes	38	2.5
no	1490	96.7
don't know	13	0.8
total	1541	100.0

29. Did you fish for resident cutthroat trout in Washington in the past license year (April 1, 2003 - March 31, 2003)?

Resident cutthroat	#	%
yes	386	25.0
no	1106	71.8
don't know	49	3.2
total	1541	100.0

30. Did you fish for bull or Dolly Varden trout in Washington in the past license year (April 1, 2003 - March 31, 2003)?

DV/bulltrout	#	%
yes	130	8.4
no	1382	89.7
don't know	29	1.9
total	1541	100.0

31. Did you fish for Kokanee or "silvers" in Washington in the past license year (April 1, 2003 - March 31, 2003)?

Kokanee	#	%
yes	470	30.5
no	1051	68.2
don't know	20	1.3
total	1541	100.0

32. Did you fish for walleye in Washington in the past license year (April 1, 2003 - March 31, 2003)?

Walleye	#	%
yes	217	17.6
no	1254	81.4
don't know	16	1.0
total	1541	100.0

33. Did you fish for whitefish in Washington in the past license year (April 1, 2003 - March 31, 2003)?

Whitefish	#	%
yes	59	3.8
no	1464	95.0
don't know	18	1.2
total	1541	100.0

34. Did you fish for carp in Washington in the past license year (April 1, 2003 - March 31, 2003)?

Carp	#	%
yes	56	3.6
no	1470	95.4
don't know	15	1.0
total	1541	100.0

35. Did you fish for sturgeon in Washington in the past license year (April 1, 2003 - March 31, 2003)?

Sturgeon	#	%
yes	174	11.3
no	1353	87.8
don't know	14	0.9
total	1541	100.0

36. Did you fish for brook trout, brown trout, golden trout in Washington in the past license year (April 1, 2003 – March 31, 2003)?

Brook, Brown, Golden Trout	#	%
yes	565	36.7
no	947	61.4
don't know	29	1.9
total	1541	100.0

37. Now, which of those fish do you most prefer to fish for?

Species	#	%
Bass	161	10.4
Catfish	21	1.4
Crappie etc	47	3.0
Burbot	1	0.1
Rainbow	506	32.8
S Steelhead	93	6.0
W Steelhead	88	5.7
Crayfish	0	0
Sea-run cutthroat	25	1.6
Salmon	210	13.6
Tiger muskie	1	0.1
Resident cutthroat	15	1.0
DV/bull trout	3	0.2
Kokanee	58	3.8
Walleye	65	4.2
Whitefish	9	0.2
Carp	2	0.1
Sturgeon	39	2.5
B,b,g trout	80	5.2
No preference	111	7.2
Don't know	10	0.6
No answer	2	0.1
Total	1541	99.8

38. Do you have a second preference?

Species	#	%
Bass	104	6.7
Catfish	36	2.3
Crappie etc	69	4.5
Burbot	2	0.1
Rainbow	241	15.6
S Steelhead	59	3.8
W Steelhead	84	5.4
Crayfish	2	0.1
Sea-run cutthroat	33	2.1
Salmon	136	8.8
Tiger muskie	2	0.2
Resident cutthroat	31	2.0
DV/bull trout	9	0.6
Kokanee	37	2.4
Walleye	52	3.4
Whitefish	1	0.1
Carp	1	0.1
Sturgeon	42	2.7
B,b,g trout	105	6.8
No preference	275	17.8
Don't know	220	14.2
Total	1541	99.1

39. Do you have a third preference?

Species	#	%
Bass	60	3.9
Catfish	16	1.0
Crappie etc	53	3.4
Burbot	1	0.1
Rainbow	106	6.9
S Steelhead	27	1.8
W Steelhead	30	1.9
Crayfish	2	0.1
Sea-run cutthroat	22	1.4
Salmon	64	4.2
Tiger muskie	3	0.2
Resident cutthroat	23	1.5
DV/bull trout	8	0.5
Kokanee	22	1.4
Walleye	43	2.8
Whitefish	5	0.3
Carp	1	0.1
Sturgeon	25	1.6
B,b,g trout	60	3.9
No preference	363	23.4
Don't know	607	39.4
Total	1541	99.8

40. When you fish for #37, do you MOST OFTEN fish with ..?

Orașia			Lures Lures with Bait Bait					04		Tatal			
Species	Fli		Lur		-				Oth	ier %	kno	w %	Total
_	#	%	#	%	#	%	#	%	#		#		#
Bass	7	4.3		55.9		14.3		24.2	1	0.1	1	0.1	161
Catfish	2	9.5	0	0	2	9.5		80.9	0	0	0	0	21
Crappie etc	1	2.1	2		13	27.7	29	61.7	0	0	2	4.2	47
Burbot	1	100	0	0	0	0	0	0	0	0	0	0	1
Rainbow	99	19.6	81	16.0	95	18.8	211	41.7	13	2.6	7	1.4	506
S Steelhead	17	18.2	27	29.0	20	21.5	24	25.8	3	3.22	2	2.2	93
W Steelhead	3	3.4	21	23.9	33	37.5	27	30.7	1	1.1	3	3.4	88
Crayfish	0	0	0	0	0	0	0	0	0	0	0	0	0
Sea-run cutthroat	10	40.0	8	30.0	4	16.0	3	12.0	0	0	0	0	25
Salmon	13	6.2	65	31.0	58	27.6	63	30.0	5	2.4	6	2.9	210
Tiger muskie	0	0	0	0	0	0	1	100	0	0	0	0	1
Resident cutthroat	6	40.0	3	20.0	2	13.3	4	26.7	0	0	0	0	15
DV/bull trout	1	33.3	1	33.3	0	0	1	33.3	0	0	0	0	3
Kokanee	6	10.3	12	20.7	17	29.3	22	37.9	1	1.7	0	0	58
Walleye	0	0	16	24.6	40	61.5	7	10.8	0	0	2	3.1	65
Whitefish	1	33.3	0	0	1	33.3	1	33.3	0	0	0	0	3
Carp	0	0	0	0	2	100	0	0	0	0	0	0	2
Sturgeon	0	0	1	2.5	3	7.7	34	87.2	0	0	1	2.6	39
B,b,g trout	27	33.8	10	12.5	15	18.8	27	33.8	0	0	1	1.3	80
No preference													111
Don't know	2	20.0	2	20.0	1	10.0	3	30.0	0	0	2	20.0	10
No answer													2

41. When you fish for #38, do you MOST OFTEN fish with ..?

A			Lures						•		_ / .		
Species	Fli		Lu		with		Ba		Oth		kno		Total
	#	%	#	%	#	%	#	%	#	%	#	%	#
Bass	4	3.8	58	55.8	15	14.4	24	23.1	1	1.0	2	2.0	104
Catfish	1	2.8	3	8.3	2	5.6	30	83.3	0	0	0	0	36
Crappie etc	1	1.4	20	29.0	18	26.1	27	39.1	2	2.9	1	1.4	69
Burbot	0	0	1	50.0	1	50.0	0	0	0	0	0	0	2
Rainbow	56	23.3	35	14.5	53	22.0	94	39.0	2	0.8	1	0.4	241
S Steelhead	1	1.7	23	39.0	15	25.4	18	30.5	1	1.7	1	1.7	59
W Steelhead	8	9.5	19	22.6	19	22.6	37	44.0	1	1.2	0	0	84
Crayfish	0	0	0	0	0	0	2	100	0	0	0	0	2
Sea-run cutthroat	12	26.3	8	24.2	7	21.2	5	15.1	1	3.0	0	0	33
Salmon	6	4.4	45	33.1	32	23.5	49	36.0	2	1.5	2	1.5	136
Tiger muskie	0	0	1	50.0	0	0	0	0	0	0	1	50.0	2
Resident cutthroat	8	25.8	9	29.0	7	22.6	7	22.6	0	0	0	0	31
DV/bull trout	2	22.2	2	22.2	1	11.1	4	44.4	0	0	0	0	9
Kokanee	2	5.4	8	21.6	17	45.9	8	21.6	1	2.7	1	2.7	37
Walleye	0	0	16	30.8	17	32.7	15	28.8	1	1.9	3	5.8	52
Whitefish	0	0	0	0	0	0	1	100	0	0	0	0	1
Carp	0	0	0	0	0	0	1	100	0	0	0	0	1
Sturgeon	1	2.4	2	4.8	4	9.5	35	83.3	0	0	0	0	42
B,b,g trout	30	28.6	17	16.2	16	15.2	40	38.1	1	1.0	1	1.0	105
No preference													275
Don't know	23	21.1	2	1.8	1	0.9	3	2.8	3	2.8	77	70.6	109
No answer													

42. When you fish for #39, do you MOST OFTEN fish with ..?

Species	Fli	es	Lur	es	Lui with		Ba	ait	Oth	er	Do kno		Total
•	#	%	#	%	#	%	#	%	#	%	#	%	#
Bass	0	0	36	60.0	13	21.7	10	16.7	1	1.7	0	0	60
Catfish	0	0	0	0	1	6.25	14	87.5	0	0	1	6.25	16
Crappie etc	1	1.9	13	24.5	7	13.2	31	64.2	0	0	1	1.9	53
Burbot	0	0	0	0	1	100	0	0	0	0	0	0	1
Rainbow	23	21.7	22	20.8	13	12.3	45	42.5	1	0.9	2	1.9	106
S Steelhead	5	18.5	5	18.5	7	25.9	9	33.3	0	0	1	3.7	27
W Steelhead	2	6.7	12	40.0	4	13.3	11	36.7	1	3.3	0	0	30
Crayfish	0	0	1	50.0	0	0	1	50.0	0	0	0	0	2
Sea-run cutthroat	8	36.4		22.7	3	13.6	6	27.3	0	0	0	0	22
Salmon	4	6.3		46.9	8	12.5	18	28.1	2	3.1	2	3.1	64
Tiger muskie	0	0	2	66.7	0	0	1		0	0	0	0	3
Resident cutthroat	8	34.8		17.4	2	8.7	9	39.1	0	0	0	0	23
DV/bull trout	4	50.0		12.5	0	0	2	25.0	0	0	1	12.5	8
Kokanee	2	9.1	7	31.8	10	45.4	2	9.1	0	0	1	4.5	22
Walleye	0	0	16	37.2	14	32.55	12	27.9	0	0	1	2.3	43
Whitefish	1	20.0	0	0	0	0	4	80.0	0	0	0	0	5
Carp	0	0	1	100	0	0	0	0	0	0	0	0	1
Sturgeon	1	4.0	1	4.0	1	4.0	19	76.0	0	0	3	12.0	25
B,b,g trout	16	26.7	17	28.3	8	13.3	19	31.7	0	0	0	0	60
No preference													363
Don't know	68	30.8	5	2.3	4	1.8	2	0.9	4	1.8	38	62.4	221
No answer													386

43. What percent of #37, that you catch and are legal to keep, do you voluntarily release? (See species codes below for the next few questions)

Species Codes

- 1=Bass 2=Catfish 3=Crappie, perch, sunfish 4=Burbot 5=Rainbow 6=Summer Steelhead 7=Winter Steelhead 8=Crayfish 9=Sea-run cutthroat 10=Salmon 11=Tiger muskie
- 12=Resident cutthroat 13=DollyVarden/bull trout 14=Kokanee 15=Walleye 16=Whitefish 17=Carp 18=Sturgeon 19=Brook, brown or golden trout 88=No preference 99=Don't know NA=null or no answer

%	Spe	cies c	ode																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	88	99	NA
0	19	8	16		128	23	31		4	91		4	2	25	23	2		18	24		2	
1	1				1	1				3								1				
3					1																	
4					1	1																
5	4	1			12		1			2					1			1				
7					1																	
10	3	1	1		26	2	2		1	7				2			1	1			1	
13	-				1																	
15					4																	
18					1																	
19	1														1							
20	1			`	4	4	1			6		1		3				1	2			1
25	1		2		10	2	2			5				1					2			
30	3		1		6					1				2	1			1				
32	-				-													-				
33	1				4	2	4			1					2			1				
34							1															
35					1																	
40	1				7	2				3	1							1	1			
45							2															
50	21		76	1	65	17	12			27				9	13			2	13			
55					2																	
60	3				6	1	1							1					2			
65	1				1				1	1						1	1	1				
70					4	1	2		1	2		1		1	2							
75	2	1	1		13	1	3		1	3					4				1			
80	2		2		14	5	2		1	4				2	2				2			
85					4				1	2						1	1	1				
90	6		3		20	2	4		2	6		1			2	1	1	1	2		1	
98						2	1			1									1			
99	2		1			63	2			3				1					2			
100	75	5	6		121	19	15		14	23		8	1	6	7	1	1	9	19		1	
NA	10	4	7		27	4	2			17	1			5	5			1	7	111	4	1

%	Spe	cies d	code																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	88	99	NA
0	32	14	36	1	67	23	29	1	8	77		7	1	16	25		1	24	21		89	
1		1			1							1										
2									1													
3	1				1																	
5	1	1			5		1			2				1				1	2			
10	4		5		8	1	1		1	3		2		4				1				
15					2		2											1				
20		1			3	1	3		1			2			1				1			
25	1	1	3		5	1	1		2	4					2			1	2			
30		3			2	1	2			1				1	2							
33	1																		1			
34									1													
40	1		1		2	2	1		1	1					1				1			
45	1																					
50	8	7	8		35	7	15		4	15		2		5	6	1		1	11			
57										1												
60					4					1		1						1	1			
65									1													
66	1																					
70	1				6													1				
75					1	2	3		1			1		2	1			1	4			
80	5	1	2		9		1	1		4		2	1	1	3				2			
85					1					1				1								
90	5	1			16	2	4		1	4		2		1	1			2	2			
95	1				3	2	2		2	1		1	1					1	3		1	
98					1														1			
99					2	1	2												2			
100	37	4	8	1	60	9	7		8	10	1	9	6	3	10			7	40		1	
NA	4	2	6		6	6	10		1	11	1	1		2	1			1	7	275	129	

44. What percent of #38, that you catch and are legal to keep, do you voluntarily release?

45. What percent of #39, that you catch and are legal to keep, do you voluntarily release?

%	Spe	cies	code																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	88	99	NA
0	19	6	26		27	12	10		5	26	1	5	1	9	17	4		14	11		188	
1									1													
2																			2			
4																			1			
5		1					1	1	1			2							1			
10	1		2		5	2	1	1		1		2		2	1			1				
15					1														1			
20	1	1	1		1	2	1		1	2					1				2			
25	1	1			4	1				3									2			
30			1		3														1			
33										1				1								
40					3		1												1			
45					1					1												
50	6		6		16	1	6		1	10		5		3	4			1	10			
60	1	1	1		1		1			1												
62																1						
70	2	1					1								1							
75	2		1		4		2		1	2								1	1			
80			2	1	5	1			2	1		1			1			1	1			
85					1																	
90	3		2		5				1	1			2	2	2				2			
95	1				2		1		1										2		1	
99	1				3	1				1									1			
100	17	5	10		18	5	5		8	8	2	8	3	3	9		1	5	20		1	
NA	5		1		5	2			1	5			2	1	7			2	2	363	417	

size	Spe	cies	code																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	88	99	NA
0	20	2	2		30	4	4	-	4	4		1	-	3	1	1	1		6		2	1
2	1													-					-			
4							1															
5	1		3		2													1	1			
6	6	2	9		22		1			1		1		2					2		1	
7	2	3	2		17									2					1			
8	1	3	7		66	1			2	3		3		5					10			1
9	6		4		20				1					2								
10	15		4		71	1	1			1		1		8	2				11		2	
11	2		1		13					1				1					1			
12	31	3	2	1	88	4	2		3	9		2	2	10	3				16			
13					6		2			1					1				1			
14	8				28				3	4		2	1	1	3				9			
15	7	2	1		15	2				5		1			5	2	1		3			
16	4				13	2	3		2	4				2	13				2			
17	2				3	2			3	2		1		1	3				1			
18	3	2			10	3	2		2	8		1		1	13				2			
19		11																				
20	2				5	12	12		1	23	1	1		2	7				2			
21	1					2	1			6				1								
22					1	5	2			25				1	1							
24					2	13	20			20				2	2							
25	1				2	3	4			9				1								
26						5	1			7												
27						1	1								1							
28						7	3			2				1								
30						5	3			9												
32										3												
34						1				2												
36						3												2				
38						1																
39							1															
42							1															
44																		14				
45																		3				
48										11								3				
60																		2				
88		1																				
99	1																					
NA	47	2	12		92	16	23		4	61		1		12	9			12	12	111	5	

46. For #37, what is the minimum size fish you would keep?

size	Spe	cies	code																			
-	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	88	99	NA
0	10	1	3		17	2	4		4	2		22	1	1	8			3	11		90	
2		2																				
4					1	1							1									
5	2		4											1					2			
6	3	2	5		11									2					3			
7	1		9		6														3			
8	3	3	15		27	1			2	4		5	2						11			
9	2	1	2		12				1			2	2	2	1				2			
10	4	8	10	1	27				6	3		3			1				13			
11			2		5									5					1			
12	20	6	2	1	38	3	2		3	7		7		6	1			1	18			
13	3		1		2					1				1								
14	12				25				2	2		2		4	2			1	2			
15	5	1			5	L .	2		4	2		1		L	1			L .	1			\vdash
16	2	1			8	1	2			2		2		1	8			1	7			L
17	-	_			4		1								2				_			
18	2	3			6	5	2		1	1					7				7			<u> </u>
19		_				_			_										1			<u> </u>
20	1	2			4	6	11		3	11			1	3	4				1			
21						1	-			1	1											
22						2	5			3				1	1							
23 24					0	1	0	4	1	20								4				
24 25	-				2	8	9	1		20				4				1				
25 26	-					3	2			4				1								
26						2	4			1				2				1				
27						2	6			2				1				1				
30						2	7			3 6				1								
32						1	1			0												
34							1											1				
35							1			1								1				
36						1	1			1								1				
38						-	-			1								1				
40						1																
42					1	1												17				
43																		2				
44						<u> </u>									<u> </u>	<u> </u>	<u> </u>	3				
48					1						1							4				<u> </u>
54																		1				
60										1								2				<u> </u>
63	1						<u> </u>			-					<u> </u>	<u> </u>	<u> </u>	-				<u> </u>
88	1					<u> </u>				1					<u> </u>	<u> </u>	<u> </u>	<u> </u>				
99						<u> </u>				-					1	<u> </u>	<u> </u>	<u> </u>				
NA	32	7	16		39	16	23	1	6	58		7	2	6	15	1	1	2	21	275	130	<u> </u>

47. For #38, what is the minimum size fish you would keep?

size	Spe	cies	code)																		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	88	99	NA
0	6	2	3		5	4	1		4	4	1	1		1	4	1		1	6		186	
1		1																				
2	1		1																			
3								1														
4			2																			
5			2		1																	
6	3		8		2	1			2													
7			6		1					1									3			
8	4		5		5							4	3	3					9			
9	1	2	3		3					1		-	1	-					4			
10	7	3	7		18							3		5					5		2	1
11		Ť	1		2							1		Ť					2		-	
12	7	2	2		24	1	2		4	1		3		3		1			9		1	
13	1	1	-		2		-		1			1				-			۲, T		·	+
14	4				9				3			3		3	3				2			-
15	1				2				Ŭ			Ŭ		, v	- Č				5			
16	3				4		1		1			1		1	5				2			
17	Ŭ	1			-							2							-			1
18	3	1			4	2	1		1	2		-		1	14	1						1
19	5				-	1	-			~		1			14							
20	1			1	1	4	6		2	8			1		4				3			1
22				1	1	-	0		2	5			1		-				1			
24	1				1	1	9			12									2			
25					1	1	1			3					1			1	2			
26							1			1					1			1				
20						1	1			1												
28							1			2												
30						1	2			3			1									
30										3												
33										1						1						
36		<u> </u>								3	1											
40		<u> </u>		<u> </u>						3	1						<u> </u>	1				
40																		1				
																		5				
43																		1				
44		<u> </u>			<u> </u>								<u> </u>		<u> </u>		<u> </u>	1	<u> </u>			──
48																		6				
72									ļ									1				<u> </u>
88			3		L		ļ						L		L		L		L			L
99	1							L .				_					L	_				
NA	16	4	12		22	10	4	1	4	17	1	3	3	6	12	1	1	8	7	363	418	

48. For #39, what is the minimum size fish you would keep?

size	Spe	cies	cod	е																		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	88	99	NA
0	3	1			8		3		1	4								1			21	
1	1																					
3	1																					
5	1		2																			
6	2		5		7					1		1		4					1			
7	3		4		7														1			
8	8	2	9		41				3	1		2		2					11		1	
9	3		4		22	1								1					2			
10	19	1	7	1	62	1			2	3		2		4					7		1	1
11	2		2		14				1	1				1					2			
12	36	4	2		113	4	2		7	9		3	1	14	2		1	1	17			
13	3		1		17				1			2		1								
14	17	1	1		57				2	2		1		4	4				19			
15	16	2	1		23		2		1	2		1	1	2	5	1	1		9		1	
16	11	1			37	1	4	1	1	2			1	2	9				6		l	
17	2				7		1					1			1							
18	6	3			30	5	4		3	11		1		5	14				3			
19	1				3					1					2							
20	1				8	12	8		1	20	1			3	7				2			
21						1	1			2					2							
22	1				4	5	1			10				2	4				1			
23		1			1		3			1					1							
24	2				4	12	9			37				6	5	1						
25	1					4	3			8				1								
26						2	8			9												
27	1					5	1			2					3							
28						7	9			7												
29						1				1												
30						10	15			20				1								
31										1												
32						3	1			6								1				
33							1			2												
34							1			1												
35										3												
36						3	2			5								1				
40						1												4				
42	Ι	ſ												Ι	Ι			5			[Γ
44																		3				
45																		1				
48																		7				
50																		2				
52																		2				
56																						1
60																1		2				
72						1												1				
NA	18	5	9		40	14	9		2	38		1		7	6			8	5	111	5	2

49. For #37 What is the minimum size you would consider a quality fish?

size	Spe	cies	code																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	88	99	NA
0	1	2	1		2	-			1	1									4		88	
3	1	1																				
4	1	-	1																			
5	1		2		1									1								
6		1	3		4								1						1			
7		•	4		2	1							1	1								
8	7	1	11		21	•	1		2	2		3	1	3			1		5			
9	2	•	3		5		1		-			2		Ŭ					3		1	
10	9	5	10		29			6			5	1	4	1					12		1	
11	2	0	4		5			Ŭ	1		0		-	1	1				2			
12	20	4	10	2	66	1	3		2	3		7	2	7	3			1	25			
13	1	-	1	~	1		5		1	5		'	~	'	5				20			
14	13	4	1		32	1			2	4		6		1				1	19			<u> </u>
14	15	4	-		10	1			2	2		3	1	4	3	<u> </u>		-	5		1	<u> </u>
16	8	3			17	1	1	-	4	2		2	1	3	9				9		1	<u> </u>
17	3	1			3	1	1	1	2	1		2	1	5	3				9			<u> </u>
18	2	4			13	6	2		2 5	6				2	11				9 6			├
19	1	4			13	0	2		5	0				1	1				3			<u> </u>
20	3	2			5	0	12		1	14				1	6	1			3			<u> </u>
20	3	2				8			1				1		0	1			3			<u> </u>
21					1	4	1			1 2			1	4	0							
22					1	1	5			2				1	2							<u> </u>
23 24	4	0			-	40	40			40				1	4							<u> </u>
	1	2			5	10	13		4	18				3	4							<u> </u>
25						2	2		1	5				4								
26						2	3			2				1								
27						1	2			3								1				<u> </u>
28						7	9			2				1								
29						_	2			1												
30						7	9	1		21				1	1							
31										-									1			
32							2			2	1											
34							4	L								L						──
35							1			1					1	L						┣──
36						1	3	ļ		5								2				┝──
37								L		1						L						──
38										1												<u> </u>
40										3								1				<u> </u>
42								ļ										13				<u> </u>
44																						\vdash
45																		2				\vdash
48					1						1							5				
49																		1				
50																		5				
52																		1				
55																		1				
67			1																			[
72																		2				[
NA	15	3	17		16	9	10	1	2	34		3		1	6			6	9	275	129	

50. For #38 What is the minimum size you would consider a quality fish?

size	Spe	cies	cod	e																		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	88	99	NA
0	2		2		1		1			2						1					188	
2					1																	
3			1																			
4			1					1													1	
5			3		1																	
6	3		8																2			
7																			1			
8	3	1	9		3								1	1					6			
9	2	2	2		2				2			1							2			
10	7	1	9		9							1	2	1					6		1	
11	1		1		2							1			1				1			
12	7	3	8		33	2			2	2		11		8	2	1			11			
13	3				1									1					2			
14	4		1		12		2		4			5		2	2				7			
15	3				7		2		1	1			1		1	1			2		1	
16	6	1			8				4			3	2	3	3		1		5			
17	1	1			1							1		1					1			
18	4	1	1		5	3	1		5	1				2	13				2			
19		1																				
20	3				4	7	1		1	9			1		4				3			
21										1												
22					1					2								1				
24		1				2	6		1	9				1	5	1			2			
25						2	1			2	1				5			1				
26				1		2	2			2												
27							1			1												
28						1	3			1												
30						2	5			9					1							
32						2				3												
34							1			1					1							
35							1			2												
36						1				3								1				
40										2	1							1				
43	l			l		l				1		l		l	l		l	1	l			
48																		6				
50				1		1												2				1
56	l			l		l						l		l	l		l	1	l			
60	1			l		l						l		l	l		l	l	l			
NA	10	4	7		15	3	3		2	10	1		1	2	7			7	7	363	416	

51. For #39 What is the minimum size you would consider a quality fish?

52. Now I'm going to ask you about fishing for each of the following kinds of fish in certain types of waters during the past license year (April 1, 2002- March 31, 2003). "Fishing for" means fishing specifically for the type of fish in each of the following categories. first, how many days did you fish for bass, panfish, walleye, catfish, perch or other such fish in lakes or rivers?

53. How many days did you fish for trout in lowland lakes? A lowland lake you can drive to, usually at low elevation. "Trout" includes kokanee or silvers

54. How many days did you fish for trout in alpine or high lakes? An alpine or high lake above 2500 feet elevation that you can only hike to.

55. How many days did you fish sea-run cutthroat in rivers and streams or in the ocean?

56. How many days did you fish for trout in streams or in beaver ponds, other than sea-run cutthroat or steelhead?

57. How many days did you fish for steelhead past license year?

58. The summer steelhead season is from May through October. During the summer of 2002, how many days did you fish for summer steelhead in Washington?

59. You said you fished #58 days for steelhead last summer. Last summer, how many days did you fish for steelhead in Area 1: Puget Sound Rivers

60. Last summer, how many days did you fish for steelhead in Area 2: Coastal Rivers?

61. Last summer, how many days did you fish for steelhead in Area 3: Lower Columbia?

62. Last summer, how many days did you fish for steelhead in Area 4: Columbia/Snake tributaries

63. The winter steelhead season is from November through April. During the winter of 2002-03, how many days did you fish for summer steelhead in Washington

64. You said you fished #63 days for steelhead last winter. Last winter, how many days did you fish for steelhead in Area 1: Puget Sound Rivers

65. Last winter, how many days did you fish for steelhead in Area 2: Coastal Rivers

66. Last winter, how many days did you fish for steelhead in Area 3: Lower Columbia?

67. Last winter, how many days did you fish for steelhead in Area 4: Columbia/Snake tributaries?

#52-67 Data	Days Fi	she	d																																				
	0 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19 20	21	22	23	24	25	26	27	28	29	30 3	31 3	32 🗧	33	34	35	36	37	38	39	40
Bass	820 59	79	44	33	72	21	21	9		70	1	13	1	21	31	1	1	7	47	4			1	14		2			44					4	3				10
Lowland lake trout	404 80	121	96	57	125	49	52	23	31	801	6	29	3	31	70	2	3	3	64	4			4	20			4		57					6					15
High lake trout	1166 32	85	36	27	40	11	19	6	2	30		6		7	9				19	1		1		6					7										3
Sea-run cutthroat	1222 36	61	35	14	33	10	11	6		28	1	5		7	10				11	2			1	3					12										3
Trout in streams	997 53	95	50	36	60	24	20	5		45	2	7	4	12	22			1	22	2		1		4		1			25			1							5
Steelhead (All)	45 38	40	27	28	35	24	10	9	2	34	2	8	1	8	22	2		1	2 27	3	1		3	6					28					8		1			11
All Summer steelhead	55 29	33	20	25	23	16	11	8	1	33		4		5	14				21	2	1			3					20					3					2
Summer SH PS Rivers	237 12	15	5	4	7	4	4			8		2		3	4				7	1									4		1								
Summer SH Coastal Riv	274 9	10	4	1	3		2	6		3									5										3					1			1]	1
Summer SH Lower Col	229 11	17	8	10	12	3	3	4		8				2	4				4										3					1					1
Summer SH Col/Snake	235 8	11	9	9	9	5	2	2	1	12					2				6	1	1			2					2					1					1
All Winter steelhead	71 18	31	22	22	18	15	12	9	1	35	3	3	2	7	9	2			21	2			2	6					15					3	1	1	1	1	3
Winter SH PS Rivers	249 3	15	9	7	7	3	6	3	1	10		2	1	2	5				5	1			2					1	4					2					1
Winter SH Coastal Riv	282 7	6	4	6	2	5	3	1	1	5	2	3			2	1			6										4										1
Winter SH Lower Col	273 4	11	8	4	9	3	2	2		10	1			1	1				5	1				1					3								1	I	1
Winter SH Col/Snake	248 12	18	9	8	6	7		2	1	7				3	7	1	1		4	1				1					3					1		1			

#52-67 Data (cont.)	Days	s Fi	she	d																													
	41	42	43	44	45	46	47	48	49	50	52	53	55	60	65	70	73	75	80	85	90	95	100	120	130	135	143	150	200	250	365 r	null	total
Bass					3		1	1		8	3		1	14	2	1		4	1		11	1	11					4	3			39	1433
Lowland lake trout					9					11			1	14	2			1	3		7	′ 1	12	1			1		1	1		37	1439
High lake trout					1					1				2						1	1		2									20	1513
Sea-run cutthroat										3				2				1	1				2						2			19	1511
Trout in streams					1					5				3	1		1	1			5		5					1			1	23	1494
Steelhead (All)					3					7		1		10		1		1	1		9	1	6	1	1	1					1	1072	426
All Summer steelhead					4									4		1					3		1									1199	329
Summer SH PS Rivers			1							1		1																1				1219	318
Summer SH Coastal Riv																					1											1217	323
Summer SH Lower Col														1							1											1219	320
Summer SH Col/Snake					1									1		1					1											1218	319
All Winter SH					1					2				7	1						3		1	1						1		1189	335
Winter SH PS Rivers										1				2									1									1198	339
Winter SH Coastal Riv														2							1											1197	341
Winter SH Lower Col														1	1						1											1197	341
Winter SH Col/Snake														2																		1198	341

68. Which of the following six kinds of fishing do you most prefer?

- Bass, panfish, walleve, catfish, perch or other such fish in lakes or rivers?
- Trout in "lowland lakes?" (A lake you can drive to, usually at low elevation; "Trout" includes kokanee or silvers)
- Trout in "alpine or high lakes?" (A lake above 2500 feet elevation that you can only hike to)
- Trout in streams or in beaver ponds, other than sea-run cutthroat or steelhead?
- Sea-run cutthroat
- Steelhead
- No preference/none of the above
- Don't know

species	#	%
bass, etc	329	21.4
lowland lake trout	508	33.0
alpine lake trout	124	8.0
trout in streams	182	11.8
sea-run cutthroat	17	1.1
steelhead	269	17.5
no preference	81	5.3
don't know	31	2.0
total	1541	100.1

69. Did you fish for trout in lakes on the last opening day (April 27, 2002)?

	#	%
yes	240	15.6
no	1282	83.2
don't know	19	1.2
	1541	100.0

70. Do you prefer to fish ..?

Preference	#	%
opening day lakes	165	10.7
year-round lakes	476	30.9
no preference	879	57.0
don't know	21	1.4
total	1541	100.0

71. Do you think that we need more opening day lakes, we need less opening day lakes, or there are about the fight number of opening day lakes?

OD Lakes	#	%
Need More	241	15.6
Right Number	115	7.5
Need Less	869	56.4
Don't Know	316	20.5

1541 100.0

72. The Department manages approximately 30 waters for larger trout. Regulations for such waters allow only 1 or 2 fish to be kept each day, and sometimes there is a 12-inch or higher minimum length requirement for fish that are kept. In addition, you may not fish with bait. Anglers usually catch more fish than under standard regulations but most fish have to be released because they are less than the minimum length. Did you fish in this type of trout water during the past license year (April 1, 2002 –March 31, 2003)?

	#	%
yes	354	23.0
no	1081	70.1
don't know	106	6.9
	1541	100.0

73. Regarding the 30 lakes that the Department manages for larger trout, do you think that we need more of these lakes, we need less of these lakes, or there are about the right number of these lakes?

#	%
451	29.3
667	43.3
110	7.1
313	20.3
1541	100.0
	451 667 110 313

74. In general, excluding salmon and sturgeon, how would you rate the present quality of lake and stream angling in Washington?

Rating	#	%
excellent	123	8.0
good	723	46.9
fair	466	30.2
poor	120	7.8
don't know	109	7.0
Total	1541	99.9

75. Are you presently a member of a fishing or hunting club or organization?

	#	%
yes	217	14.1
no	1316	85.4
don't know	8	0.5
total	1541	100.0

76. Some fishing organizations conduct 1-, 2-, or 3-day fishing contests, which are scheduled in advance on a single lake or reservoir, and require participants to get a permit from the state. During the past license year (April 1, 2002 – March 31, 2003), did you participate in such a fishing contest? This does not include informal contests with friends or club members, nor with contests that cover an entire season.

	#	%
yes	41	2.7
no	1484	96.3
don't know	16	1.0
total	1541	100.0

77. During the past license year (April 1, 2002 – March 31, 2003), have you fished or tried to fish on a lake or reservoir when there was a fishing contest in progress and you were not a participant?

	#	%
Yes	136	8.8
No	1384	89.8
don't know	21	1.4
Total	1541	100.0

78. Were you inconvenienced by a fishing contest in the past license year?

	#	%
Yes	58	3.8
No	1466	95.1
don't know	17	1.1
Total	1541	100.0

80. In what way were you inconvenienced? (Check all that apply)

Inconvenienced by	#
unable to fish/area closed	12
normal spot taken	14
too many people	32
too much noise	10
trash	4
don't know	2
other	19
Total	93

82. For regulation purposes, juveniles are anglers under 15 years of age. Juvenile Only waters are special waters throughout the state where only juveniles may fish. Do you think that...?

Juvenile waters	#	%
We need more	476	30.9
We have the right amount	691	44.8
We need less	102	6.6
don't know	272	17.7
total	1541	100.0

83. Did you take a juvenile (under 15 years of age) fishing with you during the last license year (April 1, 2002-March 31, 2003)?

	#	%
yes	889	57.7
no	640	41.5
don't know	12	0.8
	1541	100.0

84. How many days did you take juveniles (under 15 years of age) fishing with you during the last license year (April 1, 2002-March 31, 2003)?

Note: Question was not asked due to an error in the path of the survey directions.

85. How many juveniles (under 15 years of age) did you take fishing with you during the last license year (April 1, 2002- March 31, 2003)?

π Kius taken π responses responsektius	# kids	taken#	responses	responsexkids
--	--------	--------	-----------	---------------

# KIOS taken #	responses resp	oonsexkias
0	1	0
1	293	293
2	305	610
3	118	354
4	63	252
5	38	190
6	24	144
7	8	56
8	7	56
9	3	27
10	10	100
11		0
12	3	36
13	2	26
14		0
15	2	30
16		0
17		0
18	1	18
19		0
20	2	40
21		0
22		0
23	1	23
24		0
25	1	25
30	3	90
35	1	35
null	655	
total w/o null	886	2405
Avg. per trip	2.7	

86. Are you aware of the Department's Kids Fishing program? (Website is: http://www.wa.gov/wdfw/fish/youth/index.htm)

	#	%
yes	525	34.1
no	991	64.3
don't know	25	1.6
	1541	100.0

88. How do you get information about fishing rules and rule changes in Washington? (CHECK ALL THAT APPLY)

- 1. Regulations handbook
- 2. WDFW employee
- 3. Pamphlet
- 4. Hotline
- 5. Newspaper
- Internet/website
- Friends/Relatives

Rod and gun club

Info Source	#	%
reg book	768	48.8
WDFW employee	30	2.0
pamphlet	429	27.8
hotline	20	1.3
newspaper	92	6.0
internet	279	18.1
friends	169	11.0
club	10	0.7
don't know	24	1.6
other	98	6.4

Respondent's gender observed by

questioner

	#	%
don't know	4	0.3
male	1247	80.9
female	290	18.8
	1541	100.0

Appendix 4 REFERENCES CITED

- Mongillo, P.E. and P.K.J/ Hahn 1988. A Survey of Resident Game Fish Anglers in Washington. Washington Department of Wildlife Report 88-9. Olympia WA.
- Washington Department of Fish and Wildlife Fish Management Program, Inland Fish Division. A 1995 Survey of Resident Game Fish Anglers In Washington State. Technical Report IF96-04. Washington Department of Fish and Wildlife. July 1996.
- Zar, J. H. 1894. Biostatistical Analysis. Second Edition. Prentice Hall, Englewood Cliffs, N.J. 07632. 718 p.

This program receives Federal financial assistance from the U.S. Fish and Wildlife Service Title VI of the Civil Rights Act of 1964, Section 504 of the Rehabilitation Act of 1973, Title II of the Americans with Disabilities Act of 1990, the Age Discrimination Act of 1975, and Title IX of the Education Amendments of 1972. The U.S. Department of the Interior and its bureaus prohibit discrimination on the bases of race, color, national origin, age, disability and sex (in educational programs). If you believe that you have been discriminated against in any program, activity or facility, please write to:

U.S. Fish and Wildlife Service Office of External Programs 4040 N. Fairfax Drive, Suite 130 Arlington, VA 22203