

**Technical Paper No. 286**

---

# **The Validity and Reliability of Fisheries Harvest Monitoring Methods, Southeast Alaska**

by  
**Robert Walker**

March 2009

---

Alaska Department of Fish and Game

Division of Subsistence



## Symbols and Abbreviations

The following symbols and abbreviations, and others approved for the Système International d'Unités (SI), are used without definition in the reports by the Division of Subsistence. All others, including deviations from definitions listed below, are noted in the text at first mention, as well as in the titles or footnotes of tables, and in figure or figure captions.

Weights and measures (metric)		General		Measures (fisheries)	
centimeter	cm	Alaska Administrative		fork length	FL
deciliter	dL	Code	AAC	mid-eye-to-fork	MEF
gram	g	all commonly accepted		mid-eye-to-tail-fork	METF
hectare	ha	abbreviations	e.g., Mr., Mrs., AM, PM, etc.	standard length	SL
kilogram	kg			total length	TL
kilometer	km	all commonly accepted			
liter	L	professional titles	e.g., Dr., Ph.D., R.N., etc.	<b>Mathematics, statistics</b>	
meter	m			<i>all standard mathematical</i>	
milliliter	mL	at	@	<i>signs, symbols and</i>	
millimeter	mm	compass directions:		<i>abbreviations</i>	
		east	E	alternate hypothesis	H <sub>A</sub>
		north	N	base of natural logarithm	e
		south	S	catch per unit effort	CPUE
		west	W	coefficient of variation	CV
		copyright	©	common test statistics	(F, t, $\chi^2$ , etc.)
		corporate suffixes:		confidence interval	CI
		Company	Co.	correlation coefficient	
		Corporation	Corp.	(multiple)	R
		Incorporated	Inc.	correlation coefficient	
		Limited	Ltd.	(simple)	r
		District of Columbia	D.C.	covariance	cov
		et alii (and others)	et al.	degree (angular )	°
		et cetera (and so forth)	etc.	degrees of freedom	df
		exempli gratia		expected value	E
		(for example)	e.g.	greater than	>
		Federal Information		greater than or equal to	≥
		Code	FIC	harvest per unit effort	HPUE
		id est (that is)	i.e.	less than	<
		latitude or longitude	lat. or long.	less than or equal to	≤
		monetary symbols		logarithm (natural)	ln
		(U.S.)	\$, ¢	logarithm (base 10)	log
		months (tables and		logarithm (specify base)	log <sub>2</sub> , etc.
		figures): first three		minute (angular)	'
		letters	Jan.,...,Dec	not significant	NS
		registered trademark	®	null hypothesis	H <sub>0</sub>
		trademark	™	percent	%
		United States		probability	P
		(adjective)	U.S.	probability of a type I error	
		United States of		(rejection of the null	
		America (noun)	USA	hypothesis when true)	α
		U.S.C.	United States	probability of a type II error	
			Code	(acceptance of the null	
		U.S. state	use two-letter	hypothesis when false)	β
			abbreviations	second (angular)	"
			(e.g., AK, WA)	standard deviation	SD
				standard error	SE
				variance	
				population	Var
				sample	var
<b>Weights and measures (English)</b>					
cubic feet per second	ft <sup>3</sup> /s				
foot	ft				
gallon	gal				
inch	in				
mile	mi				
nautical mile	nmi				
ounce	oz				
pound	lb				
quart	qt				
yard	yd				
<b>Time and temperature</b>					
day	d				
degrees Celsius	°C				
degrees Fahrenheit	°F				
degrees kelvin	K				
hour	h				
minute	min				
second	s				
<b>Physics and chemistry</b>					
all atomic symbols					
alternating current	AC				
ampere	A				
calorie	cal				
direct current	DC				
hertz	Hz				
horsepower	hp				
hydrogen ion activity	pH				
(negative log of)					
parts per million	ppm				
parts per thousand	ppt, ‰				
volts	V				
watts	W				

***TECHNICAL PAPER NO. 286***

**THE VALIDITY AND RELIABILITY OF FISHERIES HARVEST  
MONITORING METHODS, SOUTHEAST ALASKA**

by

Robert Walker

Alaska Department of Fish and Game, Division of Subsistence, Anchorage

Alaska Department of Fish and Game  
Division of Subsistence  
333 Raspberry Road, Anchorage, Alaska, 99518-1599

March 2009

Final Report to the U.S. Fish and Wildlife Service, Office of Subsistence Management, Fisheries  
Resource Monitoring Program to fulfill obligations for Study No. 01-106 under agreements  
70181-1-J335 and ADF&G COOP-01-074

The Division of Subsistence Technical Paper Series was established in 1979 and represents the most complete collection of information about customary and traditional uses of fish and wildlife resources in Alaska. The papers cover all regions of the state. Some papers were written in response to specific fish and game management issues. Others provide detailed, basic information on the subsistence uses of particular communities which pertain to a large number of scientific and policy questions. Technical Paper Series reports are available through the Alaska State Library and on the Internet: <http://www.subsistence.adfg.state.ak.us/>

*Robert Walker (retired),  
Alaska Department of Fish and Game, Division of Subsistence,  
333 Raspberry Road, Anchorage, Alaska 99518-1599, USA*

*This document should be cited as:*

*Walker, R. 2009. The validity and reliability of fisheries harvest monitoring methods, Southeast Alaska. Alaska Department of Fish and Game, Division of Subsistence Technical Paper No. 286. Anchorage.*

The Alaska Department of Fish and Game (ADF&G) administers all programs and activities free from discrimination based on race, color, national origin, age, sex, religion, marital status, pregnancy, parenthood, or disability. The department administers all programs and activities in compliance with 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 (ADA) of 1990, the Age Discrimination Act of 1975, and Title IX of the Education Amendments of 1972.

**If you believe you have been discriminated against in any program, activity, or facility please write:**

ADF&G ADA Coordinator, P.O. Box 115526, Juneau AK 99811-5526

U.S. Fish and Wildlife Service, 4040 N. Fairfax Drive, Suite 300 Webb, Arlington VA 22203

Office of Equal Opportunity, U.S. Department of the Interior, Washington DC 20240

**The department's ADA Coordinator can be reached via phone at the following numbers:**

(VOICE) 907-465-6077, (Statewide Telecommunication Device for the Deaf) 1-800-478-3648, (Juneau TDD) 907-465-3646, or (FAX) 907-465-6078

**For information on alternative formats and questions on this publication, please contact:**

<http://www.subsistence.adfg.state.ak.us/>

# TABLE OF CONTENTS

	Page
LIST OF TABLES.....	ii
LIST OF FIGURES .....	iii
ABSTRACT .....	1
INTRODUCTION .....	1
OBJECTIVES.....	2
METHODS .....	3
Survey Instrument.....	3
Angoon, Hoonah, and Kake.....	4
Petersburg .....	4
Wrangell .....	5
Yakutat .....	6
Southeastern Alaska Subsistence/Personal Use Permits.....	6
Permanent Fund Dividend Files .....	7
Regulatory Background .....	7
Harvest Monitoring Program.....	8
Permit Conditions .....	9
Angoon .....	9
Hoonah.....	10
Kake.....	11
Wrangell .....	11
Yakutat.....	12
RESULTS.....	12
Wrangell .....	12
Petersburg .....	14
Yakutat .....	15
Angoon .....	17
Hoonah .....	18
Kake.....	19
DISCUSSION AND CONCLUSIONS .....	20
RECOMMENDATIONS.....	23
Angoon, Hoonah, and Kake.....	23
Wrangell and Petersburg .....	24
Yakutat .....	24
ACKNOWLEDGEMENTS.....	24
LITERATURE CITED.....	26
APPENDIX A. SURVEY INSTRUMENTS.....	91
A-1. Angoon Survey Instrument.....	92

A-1. Angoon Survey Instrument (continued).....	93
A-1. Angoon Survey Instrument (continued).....	94
A-1. Angoon Survey Instrument (continued).....	95
A-2. Hoonah Survey Instrument.....	96
A-2. Hoonah Survey Instrument (continued).....	97
A-2. Hoonah Survey Instrument (continued).....	98
A-2. Hoonah Survey Instrument (continued).....	99
A-3. Kake Survey Instrument.....	100
A-3. Kake Survey Instrument (continued).....	101
A-3. Kake Survey Instrument (continued).....	102
A-4. Petersburg Survey Instrument.....	103
A-4. Petersburg Survey Instrument (continued).....	104
A-5. Wrangell Survey Instrument.....	105
A-5. Wrangell Survey Instrument (continued).....	106
A-6. Yakutat Survey Instrument.....	107
A-6. Yakutat Survey Instrument (continued).....	108
APPENDIX B. MAPS.....	109
B-1. Map of the Angoon Area.....	110
B-2. Map of the Hoonah Area.....	111
B-3. Map of the Kake Area.....	112
B-4. Map of the Petersburg and Wrangell Areas.....	113
B-5. Map of the Yakutat Area.....	114

## LIST OF TABLES

Table	Page
1. U.S. Census and Alaska Department of Labor population estimates for selected Southeast Alaska communities, 1999-2002.....	27
2. Number of Alaska Permanent Fund Dividend applicants, selected Southeast Alaska mailing cities, 1999-2002 residency years.....	27
3. Matches for Alaska Permanent Fund Dividend applicants, selected Southeast Alaska mailing cities, with 2000 base, 1999-2002 residency years.....	28
4. Number of Southeastern Alaska subsistence salmon permits issued and returned by management area for selected Southeast Alaska communities, 1999-2002.....	29
5. Reported subsistence and personal use salmon harvest by location and gear, Wrangell residents, 2000.....	30
6. Estimated subsistence and personal use salmon harvest by location and gear, Wrangell residents, 2000.....	31
7. Total salmon harvest for household use by gear, Wrangell residents, 2000.....	32
8. Noncommercial salmon harvest by location and gear, Wrangell residents, 2000.....	33
9. Estimated subsistence/personal use permit and household survey salmon harvest and confidence intervals, Wrangell, 2000.....	34
10. Reported subsistence/personal use salmon permit harvest by location and gear, Petersburg residents, 2000.....	35
11. Estimated subsistence/personal use salmon permit harvest by location and gear, Petersburg residents, 2000.....	36
12. Estimated salmon harvest by gear, Petersburg, 2000.....	37
13. Estimated non-commercial salmon harvest by location and gear, Petersburg, 2000.....	38
14. Estimated subsistence/personal use permit and household survey salmon harvest and confidence intervals, Petersburg, 2000.....	39
15. Reported subsistence/personal use salmon permit harvest by location and gear, Yakutat residents, 2000.....	40
16. Estimated subsistence/personal use salmon permit harvest by location and gear, Yakutat residents, 2000.....	41

17.	Estimated salmon harvest by gear, Yakutat, 2000.....	42
18.	Estimated non-commercial salmon harvest by location and gear, Yakutat, 2000. ....	43
19.	Estimated subsistence/personal use permit and household survey salmon harvest and confidence intervals, Yakutat, 2000.....	44
20.	Matches for Alaska Permanent Fund Dividend applicants, selected Southeast Alaska mailing cities, with 2001 base, 1999-2002 residency years. ....	45
21.	Reported subsistence/personal use salmon permit harvest by location and gear, Angoon residents, 2001.....	46
22.	Estimated subsistence/personal use salmon permit harvest by location and gear, Angoon residents, 2001. (Permit Holders may fish more than one location for a resource.).....	47
23.	Estimated non-commercial salmon harvest by gear, Angoon, 2001. ....	48
24.	Estimated non-commercial salmon harvest by location and gear, Angoon, 2001. ....	49
25.	Estimated subsistence/personal use permit and household survey salmon harvest and confidence intervals, Angoon, 2001. ....	50
26.	Reported subsistence/personal use salmon permit harvest by location and gear, Hoonah residents, 2001.....	51
27.	Estimated subsistence/personal use salmon permit harvest by location and gear, Hoonah residents, 2001.....	52
28.	Estimated non-commercial salmon harvest by gear, Hoonah, 2001.....	53
29.	Estimated non-commercial salmon harvest by location and gear, Hoonah, 2001. ....	54
30.	Estimated subsistence/personal use permit and household survey salmon harvest and confidence intervals, Hoonah, 2001.....	55
31.	Reported subsistence/personal use salmon permit harvest by location and gear, Kake residents, 2001. ....	56
32.	Estimated subsistence/personal use salmon permit harvest by location and gear, Kake residents, 2001. ....	57
33.	Estimated non-commercial salmon harvest by gear, Kake, 2001.....	58
34.	Estimated non-commercial salmon harvest by location and gear, Kake, 2001. ....	59
35.	Estimated subsistence/personal use permit and household survey salmon harvest and confidence intervals, Kake, 2001.....	60

## LIST OF FIGURES

Figure	Page
1. Frequency distribution of subsistence/personal use permits and household survey Chinook salmon harvests, Yakutat, 2000. ....	61
2. Frequency distributions of subsistence/personal use permits and household survey pink salmon harvests, Yakutat, 2000. ....	62
3. Frequency distributions of subsistence/personal use permits and household survey chum salmon harvests, Yakutat, 2000. ....	63
4. Frequency distributions of subsistence/personal use permits and household survey sockeye salmon harvests, Yakutat, 2000. ....	64
5. Frequency distributions of subsistence/personal use permits and household survey coho salmon harvests, Yakutat, 2000. ....	65
6. Frequency distribution of subsistence/personal use permits and household survey Chinook salmon harvests, Angoon, 2001. ....	66
7. Frequency distribution of subsistence/personal use permits and household survey pink salmon harvests, Angoon, 2001. ....	67
8. Frequency distribution of subsistence/personal use permits and household survey chum salmon harvests, Angoon, 2001. ....	68
9. Frequency distribution of subsistence/personal use permits and household survey sockeye salmon harvests, Angoon, 2001. ....	69
10. Frequency distribution of subsistence/personal use permits and household survey coho salmon harvests, Angoon, 2001. ....	70

11.	Frequency distribution of subsistence/personal use permits and household survey Chinook salmon harvests, Hoonah, 2001. ....	71
12.	Frequency distribution of subsistence/personal use permits and household survey pink salmon harvests, Hoonah, 2001. ....	72
13.	Frequency distribution of subsistence/personal use permits and household survey chum salmon harvests, Hoonah, 2001. ....	73
14.	Frequency distribution of subsistence/personal use permits and household survey sockeye salmon harvests, Hoonah, 2001. ....	74
15.	Frequency distribution of subsistence/personal use permits and household survey coho salmon harvests, Hoonah, 2001. ....	75
16.	Frequency distributions of subsistence/personal use permits and household survey Chinook salmon harvests, Kake, 2001. ....	76
17.	Frequency distributions of subsistence/personal use permits and household survey pink salmon harvests, Kake, 2001. ....	77
18.	Frequency distributions of subsistence/personal use permits and household survey chum salmon harvests, Kake, 2001. ....	78
19.	Frequency distributions of subsistence/personal use permits and household survey sockeye salmon harvests, Kake, 2001. ....	79
20.	Frequency distributions of subsistence/personal use permits and household survey coho salmon harvests, Kake, 2001. ....	80
21.	Frequency distribution of subsistence/personal use permits and household survey Chinook salmon harvests, Wrangell, 2000. ....	81
22.	Frequency distribution of subsistence/personal use permits and household survey pink salmon harvests, Wrangell, 2000. ....	82
23.	Frequency distribution of subsistence/personal use permits and household survey chum salmon harvests, Wrangell, 2000. ....	83
24.	Frequency distribution of subsistence/personal use permits and household survey sockeye salmon harvests, Wrangell, 2000. ....	84
25.	Frequency distribution of subsistence/personal use permits and household survey coho salmon harvests, Wrangell, 2000. ....	85
26.	Frequency distribution of subsistence/personal use permits and household survey Chinook salmon Harvests, Petersburg, 2000. ....	86
27.	Frequency distribution of subsistence/personal use permits and household survey pink salmon harvests, Petersburg, 2000. ....	87
28.	Frequency distribution of subsistence/personal use permits and household survey chum salmon harvests, Petersburg, 2000. ....	88
29.	Frequency distribution of subsistence/personal use permits and household survey sockeye salmon harvests, Petersburg, 2000. ....	89
30.	Frequency distribution of subsistence/personal use permits and household survey coho salmon harvests, Petersburg, 2000. ....	90



## ABSTRACT

The primary objective of this research was to evaluate the reliability and validity of harvest monitoring methods used to estimate the salmon harvested using legal subsistence/personal use gear in Southeast Alaska. Data collected from Kake, Hoonah, Angoon, Petersburg, Wrangell, and Yakutat were addressed as part of this analysis. Methods included household surveys of the harvest of salmon using legal subsistence/personal use gear and statistically comparing the estimated harvests from surveys and permits. Research results indicated that for Wrangell and Petersburg in 2000, survey estimates for salmon did not statistically differ from expanded estimates for permits issued to community residents. For Yakutat in 2001, estimates of salmon harvests from surveys were twice the amount indicated on subsistence/personal use permits. For Angoon and Hoonah in 2001, estimated harvests from surveys were not statistically different from the expanded harvests from permit reporting. For Kake in 2001, the average chum salmon (*Oncorhynchus keta*) and sockeye salmon (*O. nerka*) harvests for identified fishing households were over 3 times the average harvests reported on subsistence/personal use permits and the estimated community harvest was at least twice as large, and statistically different from, the expanded permit harvest. In Wrangell and Petersburg, where over 90% of permits were returned, and researchers concluded that the monitoring system was adequate. The Yakutat Area subsistence salmon fishery needs further research. For Angoon and Hoonah, the practice of sharing permits needs careful examination and regulations need to be crafted to accommodate this practice. For Kake, it is recommended that regularly-scheduled household surveys of salmon harvests using subsistence/personal use gear be undertaken.

Key words: Petersburg, Wrangell, Yakutat, Angoon, Hoonah, Kake, Chinook salmon, *Oncorhynchus tshawytscha*, coho salmon, *Oncorhynchus kisutch*, sockeye salmon, *Oncorhynchus nerka*, pink salmon, *Oncorhynchus gorbuscha*, chum salmon, *Oncorhynchus keta*, personal use, subsistence, harvest monitoring.

## INTRODUCTION

This project arose out of an identified need to evaluate the reliability and validity of harvest monitoring methods in the state of Alaska, and specifically, salmon harvest monitoring methods using subsistence and personal use gear in Southeast Alaska. As part of the U.S. Fish and Wildlife Service (USFWS) Office of Subsistence Management (OSM) Project No. 00-017 “Statewide Subsistence Harvest Monitoring Strategy” (Fall and Shanks 2000), the Subsistence Fisheries Harvest Assessment Working Group (SFHAWG) was created in 2000. Composed of 3 representatives from the Alaska Department of Fish and Game (ADF&G), 3 federal agency representatives, and 5 Alaska Native representatives, SFHAWG was tasked with developing recommendations for a unified harvest assessment program for Alaskan subsistence fisheries, because collection of accurate harvest data is an essential component of any effective resources management program (Fall and Shanks 2000). This project arose as part of the recommendations of the SFHAWG technical subcommittee: to compare harvest assessments from subsistence fisheries with 138 instances of data collected from ADF&G baseline studies (ADF&G 2006; Fall and Shanks 2000:22-23). However, because many communities have multiple-year baseline surveys, e.g., Port Graham had 7 baseline surveys conducted between 1987 and 1997, the actual number of communities represented by these data is only 64. And because some fisheries do not provide the number of permits issued, there is no way to assess the number of “total permits” for these communities. Thus, comprehensive comparisons of harvest levels and the number of households engaged in subsistence fishing were unavailable. In essence, there were only 45 instances (representing 32 communities) where formal comparisons could be made between the results from the baseline surveys and the results from the fishery harvest assessment system.

In addition to unavailable data, the existing information may be biased. In particular, there are 2 major sources of bias that can occur in a permit system. The first is “sampling bias;” that is, the permits that are returned are not representative of the actual harvest behaviors of the community. The most likely sampling bias occurs when not all actively-harvesting households return their permits. Another form of bias can occur due to the kinds of households that return permits. For example, if only low-harvesting households return their permits, the permit system would underestimate the total harvest of the community. There are also a number of non-sampling errors that may occur. However, this study was limited to one form of measurement error: incorrect harvest estimates recorded on the permits. For example, if a household actually harvested 1,000 salmon, but reported only 500 on the permit, this is a measurement error.

The main intent of this project was to understand and improve the quality of subsistence/personal use harvest assessment information for salmon in Southeast Alaska. This region was chosen as a focus area because of questions about existing methodology and estimates of harvest raised by some technical experts in SFHAWG. OSM also identified, as a priority, the need for investigation into the validity of Southeast subsistence harvest monitoring. In addition, under-reporting on permits was identified as a fundamental problem during a workshop, conducted in Southeast Alaska, and attended by representatives of 6 communities (Angoon, Sitka, Kake, Juneau, Saxman, and Hoonah), the Central Council of Tlingit and Haida Indians, Sealaska Corporation, the Alaska Native Brotherhood, and the Alaska Inter-Tribal Council as part of another OSM study, No. 01-107, “Implementation of Statewide Subsistence Fisheries Harvest Assessment Strategy” (Fall 2003).

This project, originally funded by OSM in 2001, subsequently experienced staffing changes and methodological problems which required adjustment to its scope. The original scope included tasks that proved to be inapplicable or beyond the scope of work that was envisioned, and project objectives and schedules were modified, with assistance from OSM program staff, in 2004. Funding after 2003 was provided by the State of Alaska.

## **OBJECTIVES**

As modified in May 2004, the objectives for this project were categorized by communities, year of study, and whether or not community-level or household level measurements of salmon harvests with subsistence/personal use gear could be compared.

### **A. Kake, Hoonah, and Angoon:**

1. Develop community-level salmon harvest estimates from household survey data for 2001.
2. Describe and compare community-level salmon harvest estimates from harvest surveys with those from Southeastern Alaska subsistence/personal use salmon permits.
3. Describe and compare the reported household-level salmon harvests from harvest surveys with those from Southeastern Alaska subsistence/personal use salmon permits.
4. Describe and compare community composition in Kake, Hoonah, and Angoon as indicated in 1999, 2000, 2001, and 2002 Alaska Permanent Fund Dividend (PFD) residency files (see “Permanent Fund Dividend Files,” below).

### **B. Petersburg and Wrangell:**

1. Develop community-level salmon harvest estimates from household survey data for 2000.

2. Describe and compare community-level salmon harvest estimates from harvest surveys with those from Southeastern Alaska subsistence/personal use salmon permits.
3. Describe and compare community composition in Wrangell and Petersburg as indicated in 1999, 2000, 2001, and 2002 Alaska PFD residency files (see “Permanent Fund Dividend Files,” below).

C. Yakutat:

1. Develop community-level salmon harvest estimates from household survey data for 2000.
2. Describe and compare community-level salmon harvest estimates from harvest surveys with those from Southeastern Alaska subsistence/personal use salmon permits.
3. Describe and compare community composition in Yakutat as indicated in 1999, 2000, 2001, and 2002 Alaska PFD residency files (see “Permanent Fund Dividend Files,” below).

## **METHODS**

### **SURVEY INSTRUMENT**

The primary data gathering procedure was formal household interviews using standard survey instruments (Appendices A-1 to A-6). Interviews were conducted in person. In Wrangell, Petersburg, and Yakutat, the following information was collected for the calendar year 2000 for the harvest of salmon for home use:

- Whether a household harvested, attempted to harvest, used, received, or gave away each species during the study year;
- Harvest numbers for each species;
- Types of fishing gear used; and
- Locations of harvests.

Survey instruments for these 3 communities included questions concerning the harvest and use for subsistence purposes of all fish and wildlife resources, not just salmon.

In Angoon and Hoonah, the following information was collected for the 12-month study period of November 1, 2000, to October 31, 2001, and for the 2001 calendar year for Kake:

- Harvest numbers using subsistence/personal use gear, by salmon species;
- Types of fishing gear used; and
- Locations of harvests.

In Wrangell, Petersburg, and Yakutat, a random sample of households in each community was selected. Sample sizes for these communities varied. In an effort to achieve 95% confidence intervals, interviewers contacted more than the minimum numbers of households. Interviews from more than 30 households, or from 50% of the households in a stratum, were needed in order for the estimated total harvest to be calculated by expanding the reported harvest using the ratio of total households to sampled households. Conversely, if fewer than 30 or less than 50% of the households were contacted in a stratum, the reported harvest was used as the estimated total harvest of the community. This was true, with the expectation that not all contacts would result

in completed harvest surveys necessary for household-level comparisons of reported harvests from surveys and permits. In Angoon, Hoonah, and Kake, a census survey of only those households known to harvest salmon in 2001 was attempted. A more detailed description of the results of sampling follows below.

### **ANGOON, HOONAH, AND KAKE**

Census surveys of households known to harvest salmon using subsistence/personal use gear were conducted in these 3 communities. A list of Angoon, Hoonah, and Kake individuals who were issued subsistence salmon permits in 2001 was obtained from the ADF&G Division of Commercial Fisheries' database "Alexander: the integrated fisheries database for Southeast Alaska and Yakutat" (Alexander database) (ADF&G 2001). The list of Kake individuals also included individuals who were issued permits in either 1999 or 2000, with duplicates removed. The list of individuals in Hoonah also included individuals who were issued permits in 1998, 1999, or 2000, with duplicates removed. The list was reviewed by locally-hired researchers, tribal staff, and others knowledgeable about the communities, household compositions, and subsistence salmon fishers. People known to have moved away prior to the 2001 fishing season were removed from the list. Indications that a household was listed more than once, based on duplicate post office box or phone numbers and personal knowledge of household composition, enabled the duplicates to be removed.

It is a common practice for some households to obtain a permit so that another household may harvest its allowable numbers of salmon, though this is technically illegal. Therefore, households with permits but with no member actively engaged in subsistence fishing were also removed. In Hoonah, staff determined that all individuals from the Mount Bether community at Game Creek (and who were included in the Hoonah lists) who had obtained subsistence salmon permits for 2001 did not fish in 2001, so these individuals were removed from the Hoonah list. The final list of active subsistence salmon fishing households was randomly sorted.

ADF&G Fish and Wildlife Technicians, hired locally from each community, were trained to administer the survey. The intent was to survey all households on the list; however, time and funding constraints made achievement of this goal difficult. Local officials and the technicians helped identify households in which members had fished in the last season. "Fishing households" were henceforth targeted for interviews. In Angoon, 58 fishing households were identified, of which 47 were interviewed (83%). Two households declined to participate (4%), 8 households could not be contacted, and the residents of one household (2%) had moved away. In Kake, 111 fishing households were identified. Interviews were conducted with 73 of those households (66%); 9 households (11%) declined to participate; and 29 households (26%) could not be contacted. In Hoonah, 127 fishing households were identified. Interviews were conducted with 96 households (76%), one household (1%) declined to participate, and 30 households (24 %) could not be contacted.

### **PETERSBURG**

The Petersburg household harvest survey was designed as a simple random sample of households. In order to make a random selection from 125 households it was necessary to compile a list of all residential dwelling units in the community. Inquiries to the City of Petersburg directed researchers to the accounting firm managing the property assessment for the city. The firm directed researchers to the electric utility list that identified residential accounts by street location as well as by electric meter-reader route.

A spreadsheet was prepared that contained one row for each dwelling unit, and that was arranged by address and by electric utility route. Dwellings located on Kupreanof Island were included, and one row was added for every dwelling unit identified on the 1990 U.S. Census block count. A list of live-aboard boats was obtained from the city Harbormaster, and one row was added for each of these units. Dwellings were located using a map of the city, with census block boundaries added by division staff. This entire list of 1,431 dwelling units was then randomized. Attempts were made to contact 199 households in order to obtain 125 completed surveys. The survey covered household activities from January 1, 2000, through December 31, 2000, and interviews were conducted between December 2000 and February 2001.

The total number of dwellings in the community was adjusted based on the contacts attempted. The percentage of vacancies and of non-existent dwellings among the 199 contacts attempted was applied to the total number of dwelling units to arrive at a revised estimate of 1,070 households in the community. Therefore, 12% (125 of 1,070) of the estimated households were surveyed. The names on the utility list were unreliable indicators of who actually lived at the address: sometimes the owner of the property was not the resident, or the current customer was different than the one listed.

## **WRANGELL**

The Wrangell household harvest survey was designed as a simple random sample of 100 households. In order to make a random selection of 100 households it was necessary to compile a list of all residential dwelling units in the community. Inquiries with the City of Wrangell determined that the city did not have such a list. The decision was made to compile a list from the 1990 U.S. Census count of dwelling units by U.S. Census block, and to adjust those numbers according to Wrangell city planning office information, including residential construction since 1990 in Wrangell as well as in the nearby road-connected area.

The 1990 U.S. Census block maps and data were obtained from the Alaska Department of Labor's Research and Analysis Section (ADOL 2004) and the U.S. Census Bureau (USDC 2004). A spreadsheet was prepared that contained one row for each dwelling unit by U.S. Census block. Additional rows were added based on the City of Wrangell's information on new construction. Since the census block count included the harbors, live-aboard boats were not excluded. Each row represented a possible dwelling unit and was assigned a household identification number. This list of 1,169 dwelling units was then randomized. Dwellings were located using a map provided by the City of Wrangell, with census block boundaries added by division staff.

Several census blocks yielded fewer dwellings than were initially counted, while other census blocks yielded more. As extra dwellings from one census block were identified, they were recorded. The "non-existent dwellings" were recorded in the census block. The surveyors usually counted and identified every dwelling in every census block. Dwellings were identified using the street address and description of the dwelling. Whenever possible, the counting started from the northernmost corner of the block and proceeded in a clockwise direction. In most cases sketches showing the location of the dwelling units were made of the census blocks. The number of electric utility meters on obviously residential structures was considered an indication of the number of dwelling units. Information was obtained from residents and from the city in order to refine this count, especially in the case of apartment buildings, mobile homes, and trailer courts.

During the survey, in those instances when no one could be contacted, the knowledge of the local research assistant about the resident was used to determine whether the resident was absent, or whether the dwelling had been vacated. Some dwellings were identified as abandoned, or were considered unfit for habitation. In some cases, trailer spaces were found to be empty.

The total number of dwellings in the community was adjusted based on the contacts attempted. The percentage of vacancies and of non-existent dwellings among the 164 contacts attempted was applied to the total number of dwellings (1,169) to arrive at a revised estimate of the number of households in the community.

In an effort to obtain the desired number of completed surveys (100) it was necessary to contact more than the number required (164 total). As a result, surveys were obtained from 98 (13%) households of the revised estimate of 747 households in the community. As this sampling was based on dwellings, names of household residents are not available. The survey covered household activities from January 1, 2000, through December 31, 2000, and interviews were conducted between December 2000 and February 2001.

## **YAKUTAT**

The Yakutat household harvest survey was designed as a simple random sample of households. The staff of the Yakutat Tlingit Tribe (YTT) obtained a list of households and a map of the community, one that showed all structures, from the City of Yakutat. Dwelling units were identified and listed on a spreadsheet, with the name(s) of the household resident(s), if known. Live-aboard boats in the harbor were included. Blank rows were included in case surveyors discovered additional dwelling units during their survey activities. The list of 268 dwellings was then randomized. During the survey activity, 12 dwellings were determined to be vacant, 10 were identified as unfit for habitation, and 8 were determined to be nonresidents (and therefore ineligible for subsistence fisheries by regulation (5 AAC 01.010(b)) or seasonal dwellings. This yielded a revised count of 234 households in the community.

An effort was made to interview 150 randomly-selected households. Surveys were completed with 139 households (59% of the revised total number of households in the community). Names of residents were not included in the final list of households, and remain confidential with the YTT project staff. The survey covered household activities from October 1, 1999, through September 31, 2000, and interviews were conducted between January 2001 and March 2001.

## **SOUTHEASTERN ALASKA SUBSISTENCE/PERSONAL USE PERMITS**

At the time of this study, subsistence and personal use fishers were required to obtain permits from the ADF&G Division of Commercial Fisheries. Area management biologists issued permits that identified the waters open for fishing, harvestable species, daily (or annual) catch and possession limits, and other conditions, such as open or closed seasons and allowable gear. One permit condition was that permit catch calendars had to be returned, either by mail or by phone, at the end of each season. The information on the calendars was entered into the Alexander database, which also included all harvest data from the Southeastern and Yakutat area commercial fisheries. The database also included the names and addresses of all who applied for subsistence/personal use permits, as well as their catch records. Only one permit per household was allowed, and permit holders and other household members authorized to fish under the permit had to be Alaska residents. Most permits for the region specified that a permit would not be issued to anyone who failed to return a permit issued the previous year. Generally, area

management offices accepted a previous year's catch record at the time a person applied for a current year's permit, and the previous year's catch record could also be given by telephone. In order to complete the objectives of this project, the Division of Subsistence investigators acquired Southeastern subsistence/personal use permit information for 2000 and 2001.

## **PERMANENT FUND DIVIDEND FILES**

Since 1982, residents of Alaska have been able to apply for the Alaska Permanent Fund Dividend (PFD), which is a cash dividend administered by the State of Alaska Department of Revenue, and given to Alaskans who meet residency and other requirements. The applications are for individuals. Since successful application results in a monetary benefit at no cost to applicants, the applicant file is often viewed as a good indicator of who has lived in the state during a calendar year.

The Division of Subsistence acquired data files<sup>1</sup> from the Alaska Department of Revenue, Permanent Fund Division; specifically, data for applicants who were residents during any or all of 1999, 2000, 2001 and 2002. Duplication of applicants was prevented by matching names, mailing addresses, and dates of birth across years. Initially, this was done programmatically through finding exact matches among these fields across all records by "sets" of years (e.g., 1999 and 2000, 2000 and 2001, 1999 and 2001, etc.) Subsequently, records were filtered for mailing addresses within selected study communities, by sets of years, then manually scanned and names and addresses matched. This second pass accounted for variations in names or changes in addresses across years. In this way, State of Alaska residency was confirmed for permittees. A check on community residency, based on the mailing addresses of PFD applicants, was performed, and then individual applicants were assigned a unique identification number.

## **REGULATORY BACKGROUND**

The Southeastern and Yakutat fisheries management region includes all waters of Alaska between the latitude of Cape Muzon at the tip of Prince of Wales Island at Dixon Entrance to Cape Suckling on the Gulf of Alaska (5 AAC 01.650 and 5 AAC 01.700. See Appendix B). There are 7 fisheries management areas for subsistence purposes, which match the commercial salmon and shellfish management areas: the Yakutat Area, the Haines Area, the Juneau Area, the Sitka Area, the Petersburg Area, the Wrangell Area, and the Ketchikan Area. At the time of this report, subsistence and personal use fisheries in each of these areas had annual harvest assessment programs based on a permit reporting system. All but the Yakutat Area had identified specific waters where subsistence or personal use fishing is permitted, as well as daily or annual limits, seasons, and allowable gear (Brown et al. 2005:161).

Depending upon the district and section, noncommercial, nonrecreational salmon fishing in Southeast Alaska occurs under either subsistence or personal use regulations. The Alaska Joint Board of Fisheries and Game has identified 2 nonsubsistence areas in Southeast Alaska: the Ketchikan Nonsubsistence Area and the Juneau Nonsubsistence Area (5 AAC 99.015). Subsistence fisheries are not authorized in nonsubsistence areas. For areas outside nonsubsistence areas, the Alaska Board of Fisheries (Board) makes a determination on whether there has been a "customary and traditional use" of a fish stock. If the Board finds that a fishery

---

<sup>1</sup> Information on each Permanent Fund Dividend application (except applicant name) is confidential by Alaska state law (AS 43.23.017), except that the Department of Revenue may release information to state agencies.

meets the criteria established for identifying customary and traditional fisheries (5 AAC 99.010), then an amount necessary for subsistence is established, and a subsistence fishery can be opened. Since 1990, any Alaska resident (AS 16.05.940 [27]) may harvest under the terms of a subsistence permit.

Subsistence fishing is defined by statute to mean “the taking of, fishing for, or possession of fish, shellfish, or other fisheries resources by a resident domiciled in a rural area of the state for subsistence uses with gill net, seine, fish wheel, long line, or other means defined by the Board of Fisheries” (AS 16.05.940[31]). Personal use fishing is defined by statute as the taking of fish “by Alaska residents for personal use and not for sale or barter, with gill or dip net, seine, fish wheel, long line, or other means defined by the Board of Fisheries” (AS 16.05.940[24]). Personal use fisheries differ from subsistence fisheries in 3 respects: they do not meet the criteria established by the Joint Board for customary and traditional fisheries (5 AAC 99.010), or they occur within nonsubsistence areas, and there is no priority afforded to personal use fisheries.

## **HARVEST MONITORING PROGRAM**

In Southeast Alaska, subsistence fish harvest monitoring programs are challenging to conduct. Due to the small size of the salmon systems, small run sizes, and other conservation concerns, seasonal (and, in some cases, daily) harvest limits are often relatively low in Southeast Alaska subsistence salmon fisheries. Some fishers, therefore, do not seek permits. It is also not uncommon for some households to obtain a subsistence permit with the intention of having another household harvest salmon for them. The current subsistence harvest assessment program in the Southeastern and Yakutat region also fails to account for commercially-caught salmon retained for home use. Further, “rod and reel” harvests, another important source of salmon, particularly Chinook salmon (*Oncorhynchus tshawytscha*) and coho salmon (*O. kisutch*), are not documented through the current subsistence permit system because rod and reel harvests are defined by statute as “sport” caught fish. There are no directed subsistence Chinook fisheries in the Southeastern and Yakutat regions, and only one subsistence coho fishery, at Mitchell Bay near Angoon (Appendix A-1). Subsistence harvesters have often asserted, and household surveys frequently confirm, that these factors likely lead to underreporting on permits and low subsistence salmon harvest estimates (Brown et al. 2005). This problem is complicated by the fact that harvests are recorded according to commercial fishing districts and statistical areas, rather than customary and traditional fishing areas as identified by the Board of Fisheries, which results in some subsistence harvest reports falling within the jurisdiction of more than one ADF&G Division of Commercial Fisheries area management office. Unfortunately, the Alexander database does not allow the grouping of subsistence salmon fisheries by customary and traditional area.

The Division of Commercial Fisheries records the numbers of salmon reported on returned permits, but does not expand these numbers include unreturned permits when entering the data into the Alexander database. The decision by the Division of Commercial Fisheries not to expand harvest amounts to include unreturned permits stems from the uncertainty about whether those permits were fished. Since all Southeastern region subsistence fisheries permits, with the exception of the Yakutat Area, inform users of daily or annual harvest limits, returned permits that have catch data have often matched the limits. Information from other sources, notably the Division of Subsistence household harvest surveys, suggests that actual harvests typically exceed limits for some communities and locations. Data on subsistence salmon harvests from the Alexander database therefore represent a minimum harvest estimate.



Data for the calendar year 2000 were the first data from the Alexander database to be added to the Alaska Subsistence Fisheries Database, as part of the “Statewide Subsistence Fisheries Harvest Monitoring Strategy” project, funded by the U.S. Fish and Wildlife Service’s Office of Subsistence Management (Fall and Shanks 2000). In order to provide consistent results, and to treat each fishery in a systematic manner, the same data entry conventions used for subsistence harvests from other regions were applied to Southeastern region subsistence salmon permit harvest data: namely, expanding numbers to account for unreturned permits. The expansion assumes that the observed average harvest from returned permits can be applied to those permits not returned.

Some subsistence fishers expressed concern that the permit program used in Southeast Alaska, with its limitations of daily possession and/or annual limits, opening and closing dates, and, in some cases, allowable gear, does not accommodate the traditional practices followed by Southeast salmon fishers. The permit conditions generally do not recognize or accommodate local knowledge of the resource, local practices of specialization in resource harvest activities (high harvesters), and sharing among families and households. As a result, all harvests are not recorded on permits. The Division of Subsistence household harvest surveys in communities of Southeast Alaska illustrate this. The harvest surveys have documented substantially higher salmon harvest levels than those reported on the subsistence salmon permits.

Fishers respond to the regulatory system governing the Southeastern region subsistence salmon fisheries in a variety of ways. Some fishers use more than one permit per household. Occasionally, a fisher may carry permits from several households when fishing. Another practice is to report the permit limit rather than the actual amount harvested. Fishing without a permit, or at locations not listed on the permit, also occurs. If one or more of these strategies are employed, the resulting data provided to the department may be considerably different from actual harvests.

## **PERMIT CONDITIONS**

### **Angoon**

Subsistence salmon fisheries in the waters customarily used by residents of the community of Angoon were under the management responsibility of the Division of Commercial Fisheries’ area management offices in Juneau and Sitka. Customary and traditional use determinations for salmon included the waters of District 12 south of a line from Fishery Point (Appendix B-1) to South Passage Point and north of the latitude of Point Caution, and the waters of Section 13-C east of the longitude of Point Elizabeth (5 AAC 01.716 [5]). The residents of the community of Angoon are the principal subsistence fishers in this area.

The subsistence salmon permit program for the waters of District 12 provided for an open season for sockeye salmon (*O. nerka*) in Kanalku, Basket (Kook Lake outlet), and Sitkoh bays from June 1 through July 31.<sup>2</sup> The open period for subsistence coho salmon fishing in the waters of Hasselborg/Salt Lake was August 1 through October 31. Pink salmon (*O. gorbuscha*) could be harvested in all streams of the District from July 1 through September 30, and the season for chum salmon (*O. keta*) in all streams of the District was July 1 through October 31. Possession limits for sockeye in 2001 were 10 fish per individual, or 20 per household at Basket Bay; 25

---

<sup>2</sup> Sitkoh Bay-Lake Eva and Basket Bay (Kook Lake outlet) are listed on both the Juneau and Sitka Management Area permits.

fish per individual and household at Kanalku and Hasselborg River/Salt Lake; and 10 fish at Sitkoh Bay. Season limits for pink salmon were 150 fish from any stream in the District, and for chum salmon the limit was 50 fish. The coho salmon season limit at Hasselborg River/Salt Lake was 20 fish. In 2001 this was the only subsistence coho fishery in Southeast Alaska.

Sport-caught (e.g., caught by rod and reel gear) and subsistence-caught salmon could not be possessed on the same day, and salmon taken under the subsistence/personal use regulations could not subsequently be used as bait for commercial fishing purposes. Subsistence gear allowed in the Angoon area included gaffs, spears, beach seines, and dip nets. Only drift gillnets could be used to take sockeye salmon and nets could not exceed 50 fathoms in length; set gillnets were not allowed. Only beach seines and gaffs could be used to take coho salmon in Salt Lake. Snagging or fishing with a rod and reel was prohibited. Other standard permit conditions included removal of dorsal fins; prohibition of fishing within 300 feet of a dam, fish ladder, weir, culvert or other artificial obstruction; and completion of the catch calendar for each day fished, specifying location, species, and gear.

## **Hoonah**

Subsistence salmon fisheries in the waters customarily used by the community of Hoonah were under the management responsibility of the Division of Commercial Fisheries' area management offices in Juneau and Sitka. Customary and traditional use determinations for salmon included the waters of District 12 in Basket Bay (Appendix B-2) inside a line from 57°30.83' N. lat., 134°53.20' W. long., to 57°39.28' N. lat., 134°53.88' W. long.; the waters of District 13 along the western shore of Yakobi Island east of a line from Cape Spencer Light to Surge Bay Light; and the waters of sections 14-B and 14-C, (5 AAC 01.716[4]). The residents of the Village of Hoonah are the principal subsistence fishers in this area.

The 2001 subsistence salmon permit program for the Hoonah area waters provided for an open season for sockeye salmon in Surge Bay and Hoktaheen Cove from June 1 through July 20, and at Neva Creek and all other subsistence sockeye fisheries in the area from June 1 through July 31. Individual and household possession limits for sockeye salmon from Surge Bay and Hoktaheen Cove were 20 fish; for Neva Creek the limit was just 10 fish annually per individual or household. The season for pink salmon was July 1 through September 30, and the possession limit for pink salmon from all streams within the Hoonah-Angoon Subsistence Area was 150 per individual and per household. The subsistence season for chum salmon was July 1 through October 31, and the possession limit was 50 fish per individual and per household. There was an opening for subsistence coho salmon at the Hasselborg River/Salt Lake at the head of Mitchell Bay near Angoon, but no streams within the waters traditionally associated with the Hoonah Tlingit were open to subsistence coho fishing in 2001.

Sport-caught and subsistence-caught salmon could not be possessed on the same day, and salmon taken under the subsistence/personal use regulations could not subsequently be used as bait for commercial fishing purposes. Subsistence gear allowed in the Hoonah area included gaffs, spears, beach seines, and dip nets. Only drift gillnets could be used to take sockeye salmon and the net could not exceed 50 fathoms in length; set gillnets were not allowed. Only beach seines and gaffs could be used to take coho salmon in Salt Lake. Snagging or fishing with a rod and reel was prohibited. Other standard permit conditions included removal of dorsal fins; prohibition of fishing within 300 feet of a dam, fish ladder, weir, culvert or other artificial obstruction; and completion of the catch calendar for each day fished, specifying location, species, and gear.

## **Kake**

Subsistence salmon fisheries in the waters customarily used by the community of Kake were under the management responsibility of the Division of Commercial Fisheries' area management offices in Petersburg and Wrangell. Customary and traditional use determinations for salmon included the waters of sections 9-A and 9-B north of the latitude of Swain Point (Appendix B-3); the waters of District 10 west of a line from Pinta Point to False Point Pybus; and the waters of District 5 north of a line from Point Barrie to Boulder Point (5 AAC 01.716 [10]).

The residents of Kake are the principal subsistence users of the salmon stocks in Gut Bay and Falls Lake Creek, on the southwest coast of Baranof Island, as well as in Saginaw/Salt Lake, Pillar Bay/Kutlaku Creek and Tebenkof Bay/Alecks Creek on Kuiu Island. Kake residents shared the use of the southern coastal waters of Admiralty Island with the people of Angoon and Petersburg. In the recent years prior to this report, principal subsistence salmon fishing by Kake residents occurred in Gut Bay and Falls Creek on Baranof Island, and at Kutlaku Creek in Pillar Bay.

The 2001 subsistence salmon permit program for District 9 of the Kake area waters provided for an open season for sockeye salmon in Tebenkof Bay/Alecks Creek and Pillar Bay/Kutlaku Creek from June 1 through July 31. In Falls Creek and Gut Bay the season ran from June 1 through July 20. The open season for pink salmon in all streams in the Kake subsistence area ran from July 15 through August 31. The 2001 season for fall chum in Port Camden was August 15 through September 30, and for Security Bay, from September 1 through October 31. Allowable subsistence gear included gaffs, spears, beach seines and dip nets. Possession limits for sockeye from Alecks Creek and Pillar Bay were 15 per person and 25 per household. The limit for fish from Gut Bay and Falls Creek was 10 per person and per household.

## **Wrangell**

Subsistence salmon fisheries in the waters customarily used by the community of Wrangell were under the management responsibility of the Division of Commercial Fisheries area management offices in Petersburg and Wrangell. In 1989, when the Alaska Board of Fisheries adopted positive findings for customary and traditional use of salmon in some waters of Southeast Alaska, it did not act on proposals to make a similar finding for the waters principally used by the people of Petersburg and Wrangell. These waters and streams included Crystal Creek (Appendix B-4) in the Wrangell Narrows; Salmon Bay, Red Bay Lake, and the northwest coast of Prince of Wales Island along the shores of Sumner and Clarence Strait in District 6; Thoms Creek, the Harding River, and Mill Creek in District 7; and the Stikine River in District 8. In 2001 salmon fishing for home use in these waters occurred under sport and personal use regulations.

The residents of Petersburg and Wrangell are the principal communities dependent on the salmon stocks of Salmon Bay on Prince of Wales Island, and Crystal Creek, Thoms Creek, Earl West Cove, Mill Creek and the Stikine River. Rod and reel was the preferred method used by Petersburg and Wrangell fishers to harvest salmon for home use.

The subsistence/personal use salmon permit program for the Petersburg/Wrangell Management Area provided for sockeye salmon subsistence fisheries at Shipley Bay, Salmon and Red bays, and Falls Lake. In 2001, the season was open from June 1 through July 31. Season limits for sockeye were 15 per person and 25 per household in possession from Shipley Bay with no

annual limit, and 10 in possession and no annual limit from Salmon Bay and Red Bay. The open season for the personal use sockeye salmon fisheries at Thoms Place and Mill Creek was June 1 through July 31, with a daily possession limit of 10 per person/per household. The season at Hatchery Creek season ran from June 1 through June 30, with a daily limit of 5 sockeye per person and 5 per household, and an annual limit of 20. There was a daily limit of 50 pink salmon per person and 100 per household from all streams in the Kake and Point Baker/Port Protection areas, and no annual limit for pink salmon. The open season for pink salmon in Cat Creek, the Chuck River, Olive Cove and Kuday Bay was July 15 through August 31, with a possession limit of 50 and no annual limit. The open season for chum salmon on the Harding River was July 1 through August 15.

## **Yakutat**

The Yakutat Management Area stretches from Cape Fairweather to Cape Suckling (Appendix B-5). Customary and traditional use determinations for salmon have been made for the fresh waters upstream from their terminuses from the Doame River in the south to the Tsiu River; the waters of Yakutat Bay and Russell Fjord; and waters of Icy Bay (5 AAC 01.666 [3]). The Yakutat Area was unique in the Southeastern region in that subsistence salmon fishing locations were not restricted to specific streams, nor were there daily or annual limits on the number of fish harvested. Fishing usually occurred where sockeye salmon runs were most productive.

Subsistence salmon permits for the Yakutat Management Area limited subsistence fishing in the hours before, during and after commercial salmon fishing openings. The 2001 permit specified that subsistence salmon could not be taken from 48 hours before a commercial opening until 48 hours after the closure of an open commercial salmon net fishing season. There were exceptions to this closure when the commercial salmon net fishery exceeded 2 days. In such cases, the subsistence fishing period was “from 6:00 a.m. to 6:00 p.m. Saturday in those locations, except in the Tsiu River where the subsistence fishing period shall be from 6:00 a.m. to 6:00 p.m. Sunday.” This effectively limited the period when subsistence fishing could take place to 2 or 3 days per week during the commercial salmon fishing season. At the Situk River, subsistence fishers were required to attend their net at all times when being used to take salmon.

Other standard permit conditions included removal of dorsal fins; prohibition of fishing within 300 feet of a dam, fish ladder, weir, culvert or other artificial obstruction; and completion of the catch calendar for each day fished, specifying location, species, and gear. Sport-caught and subsistence-caught salmon could not be possessed on the same day. Since the state did not recognize “rod and reel” as subsistence gear at the time of this report, any salmon or steelhead taken with rod and reel could not be possessed simultaneously with fish taken in nets. The permit did not specify allowable subsistence gear, but set gillnets were preferred. Permits could be used for any location in the district.

## **RESULTS**

### **WRANGELL**

U.S. Census Bureau (USDC 2004) and Alaska Department of Labor (ADOL 2004) estimates for Wrangell indicate that the population size decreased between 1999 and 2002 (Table 1). In 1999, the population was estimated at 2,549, but by 2002 the estimate had declined to 2,144. In 2000, the U.S. Census Bureau counted the population of Wrangell to be 2,308.

The number of Alaska Permanent Fund applications that had a Wrangell mailing address also declined between 1999 and 2002 (Table 2). In 1999, 2,431 applications that had a Wrangell mailing address were submitted, but that number had declined to 2,172 in 2002. The number of year 2000 applications (the study year for Wrangell) submitted with a Wrangell mailing address slightly exceeded the U.S. Census estimated population. However, permanent fund applicants only testify to Alaska residency, and not residency in a particular community.

Eighty-eight percent of the Alaska Permanent Fund applicants with a Wrangell mailing address testifying to year 2000 Alaska residency also submitted applications with a Wrangell mailing address testifying to 1999 Alaska residency (Table 3). Similarly, 86% of the applicants identifying 2000 residency also submitted 2001 PFD applications.

In 2000, 130 Southeastern Alaska subsistence/personal use salmon permits were issued to individuals with a Wrangell mailing address (Table 4). This number of permits was the highest issued for the period 1999 to 2002, and the number of permits issued has ranged from 111 to 130. The majority (99%) of 2000 Southeastern subsistence/personal use salmon permits for Wrangell residents were issued for the Petersburg/Wrangell Management Area. Using Division of Subsistence estimates of the number of households in Wrangell in 2000, about 17% of these households obtained subsistence/personal use permits. Between 1999 and 2002, the rate of subsistence/personal use reporting (permittees returning harvest reports) for Wrangell residents has ranged from 84% to 96%. In 2000, 92% of the permittees returned harvest reports via mail or phone.

These harvest reports from Wrangell residents identified that nearly 1,000 sockeye salmon were harvested in 2000, with minor amounts of Chinook (44 fish), chum (34), pink (26) and coho (9) salmon also being taken (Table 5). Sockeye were harvested primarily with gill nets (94% of the total sockeye salmon harvest), and most were harvested at Thoms Creek (41% of the total sockeye salmon harvest) (Appendix Table B-4), Mill Creek (24%), and Salmon Bay Creek (22%).

Given the high rate of reporting for Wrangell residents (92%) in 2000, it was to be expected that the estimated or expanded harvest (Table 6) was only slightly higher than the reported harvest. The estimated harvest for sockeye salmon was 1,076, while the estimated harvests for Chinook, chum, pink and coho salmon were 46, 35, 28, and 9 fish, respectively.

The estimated harvests of salmon for Wrangell in 2000 from the random sample of households are presented in Table 7. An estimated 1,418 sockeye salmon were harvested by subsistence/personal use methods, and an additional 168 sockeye salmon were taken by rod and reel. A total of 160 Chinook salmon were harvested by gillnet, and 23 chum salmon were harvested by gillnet or dip net. An additional 1,807 Chinook salmon were taken by rod and reel. Although no coho salmon were harvested by subsistence/personal use methods, an estimated 678 coho salmon were harvested by rod and reel. A significant portion of the overall salmon harvest came from removals from the commercial harvest. An estimated 1,075 coho salmon, 587 sockeye salmon, 457 Chinook salmon, 381 pink salmon, and 229 chum salmon were removed from the commercial catch for home use.

The Wrangell survey collected location of harvest by non-commercial methods only for sockeye and coho salmon. The results are presented in Table 8. Eighty percent of the estimated sockeye harvest by subsistence/personal use methods occurred in Thoms Creek (Appendix A-1).

A comparison of the frequency distributions of reported subsistence/personal use harvests to harvests reported from household survey salmon by Wrangell residents in 2000 is provided in Figures 1 through 5. In both instances, the majority of households did not report harvesting any Chinook, chum, coho or pink salmon. However, while only 40% of the households reported no harvest of sockeye salmon on their subsistence/personal use salmon permits, over 90% of the households surveyed at random reported no harvest of sockeye salmon using subsistence/personal use methods. This could be expected from a random sample of Wrangell households, as was done during the survey. However, only surveyed households reported harvesting more than 50 sockeye salmon.

Table 9 provides the approximate 95% confidence intervals for estimated salmon harvests from subsistence/personal use permits and household surveys. The confidence intervals for Chinook salmon, chum salmon and sockeye salmon overlap, suggesting that the estimated totals for these resources were not statistically different. No coho or pink salmon harvests were reported during household interviews, but the estimated harvest of these 2 species recorded on subsistence/personal use permits was low and infrequent.

## **PETERSBURG**

U.S. Census Bureau (USDC 2004) and Alaska Department of Labor (ADOL 2004) populations estimates for Petersburg indicate that the population size generally decreased for the period 1999 through 2002 (Table 1). In 1999, the population was estimated at 3,415, but by 2002 the estimate had declined to 3,146. In 2000, the U.S. Census Bureau estimated the population of Petersburg to be 3,224.

The number of Alaska Permanent Fund applications submitted with a Petersburg mailing address for 1999 residency was 3,351, and the numbers of Permanent Fund applications submitted for 2000 (3,325), 2001 (3,322) and 2002 (3,235) were similar (Table 2). The number of 2000 applications (the study year for Petersburg) submitted with a Petersburg mailing address was slightly higher than the U.S. Census Bureau's population estimate of 3,224.

Ninety percent of the Alaska Permanent Fund applicants with a Petersburg mailing address testifying to year 2000 Alaska residency also submitted applications with a Petersburg mailing address testifying to 1999 Alaska residency (Table 3). Similarly, 88% of the applicants identifying 2000 residency also submitted 2001 PFD applications. These rates are similar to other Southeast communities for 1999 through 2002.

In 2000, 96 Southeastern Alaska subsistence/personal use salmon permits were issued to individuals with a Petersburg mailing address (Table 4). This was the lowest number of permits for the period 1999 through 2002, and the number of permits issued has ranged from 96 to 135. The majority (99%) of 2000 Southeastern subsistence/personal use salmon permits for Petersburg residents were issued for the Petersburg/Wrangell Management Area. Using the Division of Subsistence estimates for the number of households in Petersburg in 2000, about 9% of these households obtained subsistence/personal use permits. Between 1999 and 2002 the rate of subsistence/personal use permit return for Petersburg residents has ranged from 96% to 99%. In 2000, 98% of the Petersburg permittees returned harvest reports via mail or phone.

The harvest reports by Petersburg residents identified that 462 sockeye salmon were harvested in 2000, along with 141 coho salmon, 74 chum salmon and 20 pink salmon (Table 10.). Gill nets were used to harvest all of the coho, chum, and pink salmon, as well as the majority of sockeye

salmon (89%). Three-quarters of the sockeye salmon were harvested at Salmon Bay Creek (Appendix B-4), while virtually all (99%) of the coho salmon were harvested at Crystal Creek. Given the high rate of reporting for Petersburg residents (98%) in 2000, it was to be expected that the estimated of expanded harvest (Table 11) was only slightly higher than the reported harvest. The estimated harvest for sockeye salmon was 468, while the estimated harvests for coho, chum, and pink salmon were 143, 75, and 20 fish, respectively.

The estimated harvests of salmon for Petersburg in 2000 from the random sample of households are presented in (Table 12). An estimated 377 sockeye salmon were harvested by subsistence/personal use methods. Rod and reel harvest is a significant component of the community's salmon harvest: 7,062 Chinook salmon, 4,631, coho salmon, 2,842 sockeye salmon, 548 chum salmon, and 377 pink salmon were estimated to have been taken by rod and reel. In addition, an estimated 4,451 pink salmon, 1,994 Chinook salmon, 1,327 coho salmon, 1,019 chum salmon and 565 sockeye salmon were removed from commercial harvests for home use.

The Petersburg survey collected location of harvest only by non-commercial methods for sockeye and coho salmon. The results are presented in Table 13. Of the total estimated sockeye harvest by subsistence/personal use methods, 99% occurred in Salmon Bay Creek.

A comparison of the frequency distributions of reported subsistence/personal use harvests with harvests from household surveys of Petersburg residents for 2000 is provided by Figures 6 through 10. In both instances, the majority of households did not report Chinook, chum, coho or pink salmon harvests. Just over 50% of the households that received subsistence/personal use salmon permits reported no harvest of sockeye, but over 95% of the households surveyed reported no sockeye salmon harvest using subsistence/personal use methods. This could be expected from a random sample of Petersburg households, as was done during the survey.

Table 14 provides the approximate 95% confidence intervals for estimated salmon harvests from subsistence/personal use permits and household surveys. The confidence intervals for sockeye salmon overlap, suggesting that the estimated totals are not statistically different. No Chinook, chum, coho or pink salmon harvests were recorded in household interviews. Over 10% of the households reported the harvest of coho salmon on their on subsistence/personal use permits, and nearly 10% of the households reported harvesting chum or pink salmon. However, this amounts to approximately 10 households. As only 12% of the estimated 1,070 households in Petersburg were included in the survey sample, it is understandable why none of these households were included in the random sampling of all households.

## **YAKUTAT**

U.S. Census Bureau (USDC 2004) and Alaska Department of Labor (ADOL 2004) estimates for Yakutat indicate that the population size generally decreased from 1999 to 2002 (Table 1). In 1999, the population was estimated at 729; 680 in 2000; and only 669 by 2002.

The number of Alaska Permanent Fund applications submitted that had a Yakutat mailing address for 2000 residency (694) was the highest for the period 1999 through 2002 (Table 2). The number of applications for 1999 residency was 662; there were 677 applications for 2001 residency, and 637 applications for 2002 residency. The number of year 2000 applications (the

study year for Yakutat) submitted with a Yakutat mailing address was slightly higher than the U.S. Census population count (680).

Of the Alaska Permanent Fund applicants with a Yakutat mailing address testifying to year 2000 Alaska residency, 83% also submitted applications with a Yakutat mailing address testifying to 1999 Alaska residency (Table 3). Similarly, 81% of the applicants identifying 2000 residency also submitted 2001 PFD applications. These rates were the lowest for the selected Southeast communities for 1999 through 2002.

In 2000, 115 Southeastern Alaska subsistence/personal use salmon permits were issued to individuals who had a Yakutat mailing address (Table 4). Between 1999 and 2002, the number of permits issued ranged from 103 to 117. The majority (95%) of 2000 Southeastern subsistence/personal use salmon permits for Yakutat residents were issued for the Yakutat Management Area. Using the Division of Subsistence estimates of the number of households living in Yakutat in 2000, about 50% of the households obtained subsistence/personal use permits. Between 1999 and 2002, the rate of subsistence/personal use permit return for Yakutat residents ranged from 86% to 97%. In 2000, 95% of the Yakutat permittees returned harvest reports via mail or phone.

Harvest reports for Yakutat residents identified that 3,288 sockeye salmon were harvested in 2000, along with 1,036 coho salmon, 606 Chinook salmon, 149 pink salmon and 27 chum salmon (Table 15). Gillnets were used to harvest all of the coho, chum, and Chinook salmon, as well as the majority of the reported harvest of pink (99%) and sockeye (98%) salmon. Ninety-nine percent of the pink salmon, 91% of the Chinook, 88% of the sockeye salmon, and 83% of the coho were reported harvested in the Situk River (Appendix B-5). Given the high rate of permit returns from Yakutat residents (95%) in 2000, it was not unexpected that the estimate of expanded harvest (Table 16) was only slightly higher than the reported harvest. The estimated harvest included 3,464 sockeye, 1,089 coho salmon, 638 Chinook salmon, 157 pink salmon and 27 chum salmon.

The estimated harvests of salmon for Yakutat in 2000 from the random sample of households are presented in Table 17. An estimated 6,268 sockeye salmon, 3,778 coho salmon, 1,650 Chinook salmon, 742 pink salmon, and 101 chum salmon were harvested by subsistence/personal use methods. An additional 901 coho, 397 sockeye, 249 Chinook, 17 pink and 10 chum salmon were estimated to have been harvested by rod and reel. In addition, an estimated 774 coho salmon, 714 sockeye salmon, 462 Chinook salmon, 5 chum salmon and 3 pink salmon were removed from commercial harvests for home use.

Harvests in the Situk River (Appendix A-2) accounted for 86% of the pink, 83% of the coho, 83% of the sockeye, 51% of the Chinook and 25% of the chum salmon harvested by subsistence/personal use methods (Table 18). Thirty-four percent of the estimated total Chinook subsistence/personal use harvest occurred in Yakutat Bay.

A comparison of the frequency distributions of reported subsistence/personal use and household survey salmon harvests for Yakutat residents for 2000 is provided by Figures 11 through 15. In both instances, the majority of households did not report chum, coho, or pink salmon harvests. While over 50% of the surveyed households reported Chinook or sockeye salmon harvests, between 25% and 30% of the returned subsistence/personal use salmon permits reported no harvest. This was not unexpected given a random sample of all Yakutat households. However,



for households reporting any harvests, the percentage of households harvesting salmon at the various levels of harvest appear similar.

Table 19 provides the approximate 95% confidence intervals for estimated salmon harvests from subsistence/personal use permits and household surveys. The confidence intervals for the estimated harvests do not overlap, and the estimated harvests from household surveys are always larger.

## **ANGOON**

U.S. Census Bureau (USDC 2004) and Alaska Department of Labor (ADOL 2004) estimates for Angoon indicate that the population declined slightly from 1999 through 2002 (Table 1). In 1999, the population was estimated at 576, but declined in subsequent years (572 in 2000, 560 in 2001 and 542 in 2002). The number of Alaska Permanent Fund applications submitted with an Angoon mailing address fluctuated during this period (Table 2). For 1999 residency, 554 applications were submitted; the number of applications increased to 581 for 2000 residency; declined to 568 for 2001 residency; and further declined to 477 for 2002 residency. The number of year 2001 applications (the study year for Angoon) submitted with an Angoon mailing address was slightly higher than the Alaska Department of Labor population estimate (560).

Of the Alaska Permanent Fund applicants with an Angoon mailing address testifying to year 2001 (the study year for Angoon) Alaska residency, 89% also submitted applications identifying 2000 Alaska residency (Table 20). However, only 70% of the Angoon PFD applicants identifying 2001 residency also submitted 2002 PFD applications.

In 2001, 117 Southeastern Alaska subsistence/personal use salmon permits were issued to individuals who had an Angoon mailing address (Table 4). Between 1999 and 2002, the number of permits issued ranged from 91 to 117, with the high in 2001. All of the 2001 Southeastern subsistence/personal use salmon permits for Angoon residents were issued for the Juneau Management Area. The number of permits issued in 2001 to Angoon residents (117) was double the number of active fishing households (57) identified by the Division of Subsistence. Between 1999 and 2002, the rate of return of subsistence/personal use permits from Angoon permittees ranged from 50% to 75%, with the lowest rate of return occurring in 2001.

The harvest reports for Angoon residents identified that 1,222 sockeye salmon were harvested in 2001, along with 208 coho salmon, 33 chum salmon, 63 pink salmon and one Chinook salmon (Table 21). Beach seines were used to harvest all of the pink salmon, as well as the majority of coho (70% of the total coho harvest), and sockeye (64%) salmon. Harvests in Kanalku Bay accounted for 54% of the pink salmon reported harvests, 78% of the sockeye salmon, 58% of the chum salmon, and 46% of the coho salmon harvested in 2001. An additional 33% of the coho harvests occurred in the Hasselborg River.

As only about one-half of the subsistence/personal use salmon permits issued for Angoon in 2001 were returned, the estimates of expanded harvest (Table 22) would be significantly higher than the reported harvest. The estimated harvest included 2,217 sockeye, 409 coho salmon, 63 chum salmon, 124 pink salmon, and one Chinook salmon.

The estimated harvests of salmon for Angoon in 2001 from the survey of identified fishing households are presented in Table 23. An estimated 1,933 sockeye salmon, 309 coho salmon, and 36 pink salmon were harvested by subsistence/personal use methods. An additional 130 coho

and 6 Chinook salmon were estimated to have been harvested by rod and reel. The survey did not collect information on salmon removed from the commercial catch for home use.

Harvests in Kanalku Bay (Appendix B-1) accounted for all of the pink salmon and 88% of the sockeye salmon harvested by subsistence/personal use methods (Table 24). Over 92% of the coho salmon harvests by subsistence/personal use methods occurred in Mitchell Bay.

A comparison of the frequency distributions of reported subsistence/personal use and household survey salmon harvests for Angoon residents for 2001 is provided in Figures 16 through 20. In both instances the majority of households did not report Chinook, chum, coho or pink salmon harvests. About 40% of the households recorded no sockeye salmon harvests on their subsistence/personal use salmon permits, but less than 25% of the identified fishing households surveyed reported no sockeye salmon harvest using subsistence/personal use methods.

Table 25 provides the approximate 95% confidence intervals for estimated salmon harvests from subsistence/personal use permits and household surveys. The confidence intervals for sockeye, coho and pink salmon overlap, suggesting that the estimated totals were not statistically different. No Chinook or chum salmon were recorded in household interviews.

## **HOONAH**

U.S. Census Bureau (USDC 2004) and Alaska Department of Labor (ADOL 2004) estimates for Hoonah indicate that the population size was stable from 1999 to 2002 (Table 1). In 1999, the population was estimated at 877; 860 in 2000; 873 in 2001; and 868 in 2002.

The number of Alaska Permanent Fund applications with a Hoonah mailing address was significantly higher than the population estimates during 1999 to 2002 (Table 2). There were 1,020 applications submitted for 1999 residency; 1,035 for 2000 residency; and 1,042 for 2001 residency (the study year for Hoonah). However, for 2002 residency, the number of applications submitted (896) declined significantly from that submitted for previous years' residency. The number of 2001 applications that had a Hoonah mailing address was 19% higher than the Alaska Department of Labor population estimate. Of the Alaska Permanent Fund applications that had a Hoonah mailing address testifying to year 2001 Alaska residency, 88% were also submitted testifying to 2000 Alaska residency (Table 20). However, only 69% of the applicants identifying 2001 residency also submitted 2002 PFD applications. These rates were lower than rates for the selected Southeast communities from 1999 to 2002.

In 2001, 151 Southeastern Alaska subsistence/personal use salmon permits were issued to individuals who had a Hoonah mailing address (Table 4). Between 1999 and 2002, the number of permits issued ranged from 169 to 118. The majority (99%) of 2001 Southeastern subsistence/personal use salmon permits for Hoonah residents were issued for the Juneau Management Area. The number of permits issued in 2001 to Hoonah residents (151) was larger than the number of active fishing households (127) identified by the Division of Subsistence. Between 1999 and 2002, the rate of subsistence/personal use permit return for Hoonah permittees ranged from 50% to 68%. In 2001, the rate of permit return was 66%.

The harvest reports for Hoonah residents identified that 792 sockeye salmon were harvested in 2001, along with 98 coho salmon, 746 chum salmon, and 46 pink salmon (Table 26). The majority (59%) of sockeye salmon was harvested with gillnets, while the majority of coho (80%), chum (82%) and pink salmon (54%) were taken with "other/unknown methods." The majority (80%) of chum salmon was taken in the Excursion River (Appendix B-2), and the

majority of sockeye salmon was taken in Hoktaheen Cove. Harvests for the other species were spread across several sites, with the majority of harvest not occurring in a single site.

As only about two-thirds of the subsistence/personal use salmon permits issued for Hoonah in 2001 had harvest reports, the estimate of expanded harvest (Table 27) was significantly higher than the reported harvest. The estimated harvest included 1,193 sockeye salmon, 1,128 chum salmon, 147 coho salmon, and 68 pink salmon.

The estimated harvests of salmon in 2001 for Hoonah from the fishing households identified through surveys are presented in Table 28. An estimated 2,316 sockeye salmon, 1,978 chum salmon, and 124 pink salmon were harvested by subsistence/personal use methods. An additional 1,024 coho salmon and 87 Chinook salmon were estimated to have been harvested by rod and reel. The survey did not collect information on salmon removed from the commercial catch for home use. Of the total estimated sockeye harvest by subsistence/personal use methods, 78% occurred in Hoktaheen Cove (Table 29). Chum harvests by subsistence/personal use methods were split between Excursion Inlet (50%) and Sophia Area (47%).

A comparison of the frequency distributions of reported subsistence/personal use and household survey salmon harvests for Hoonah residents for 2001 is shown in Figures 21 through 25. In both instances, the majority of households did not report any salmon harvests. A higher proportion of households reporting from permits harvested sockeye, but nearly 5% of the surveyed households identified that they harvested more than 100 sockeye salmon. Overall, the average sockeye harvest for surveyed households was over twice that reported by households with subsistence/personal use permits.

Table 30 provides the approximate 95% confidence intervals for estimated salmon harvests from subsistence/personal use permits and household surveys. The confidence intervals for sockeye, chum and pink salmon overlap, suggesting that the estimated totals were not statistically different. No Chinook salmon were reported harvested on permits or during interviews. No coho salmon were recorded in household interviews.

## **KAKE**

U.S. Census Bureau (USDC 2004) and Alaska Department of Labor (ADOL 2004) estimates for Kake indicate that, for the period 1999 to 2002, the size was highest in 1999 (745 persons); decreased to 710 in 2000; and remained stable in 2001 (697 persons) and 2002 (700 persons) (Table 1). The number of Alaska Permanent Fund applications submitted that had a Kake mailing address continually declined during the same period (Table 2). There were 763 applications submitted for 1999 residency; 732 for 2000 residency; 716 for 2001 residency (the study year for Kake); and 676 for 2002 residency.

Ninety-two percent of the Alaska Permanent Fund applicants who had a Kake mailing address and who testified to year 2001 Alaska residency also submitted applications with a Kake mailing address testifying to 2000 Alaska residency (Table 20). Eighty-one percent of applicants identifying 2001 residency also submitted 2002 PFD applications. These rates were the highest for the selected Southeast communities for 1999 to 2002.

In 2001, 191 Southeastern Alaska subsistence/personal use salmon permits were issued to individuals who had a Kake mailing address (Table 4). Between 1999 and 2002, the number of permits issued ranged from 156 to 214. The majority (98%) of 2001 Southeastern subsistence/personal use salmon permits for Kake residents were issued for the

Petersburg/Wrangell Management Area. The number of permits issued in 2001 to Kake residents (191) was almost twice the number of active fishing households (111) identified by the Division of Subsistence. Between 1999 and 2002, the rate of subsistence/personal use permit return for Kake permittees ranged from 89% to 98%, and in 2001 the rate of permit return was 96%.

The harvest reports for Kake residents identified that 2,036 sockeye salmon were harvested in 2001, along with 84 chum salmon, 72 pink salmon, 20 coho salmon, and 8 Chinook salmon (Table 31). The majority (53%) of sockeye salmon were harvested with gillnets, and the remainder (47%) taken with beach seine. The majority (61%) of sockeye salmon were taken at Falls Creek/Baranof Island (Appendix B-3).

Given the high rate of reporting for Kake residents (96%), it was not unexpected that the estimate of expanded harvest (Table 32) was only slightly higher than the reported harvest. The estimated harvest for sockeye salmon was 2,120, while the estimated harvests for chum, pink, coho and Chinook salmon were 86, 74, 20, and 8 fish, respectively.

The estimated harvests of salmon in 2001 for Kake from the fishing households identified during the survey are presented in Table 33. An estimated 4,224 sockeye salmon, 357 chum salmon, 75 pink salmon, and 9 Chinook salmon were harvested by subsistence/personal use methods. An additional 398 coho salmon, 141 Chinook, 43 pink salmon, 23 sockeye salmon, and 9 chum salmon were estimated to have been harvested by rod and reel. The survey did not collect information on salmon removed from the commercial catch for home use. Two-thirds of the estimated sockeye harvest by subsistence/personal use methods occurred in Falls Creek (Table 34).

Figures 26 to 30 provide a comparison of the frequency distributions of reported subsistence/personal use and household survey salmon harvests for Kake residents for 2001. In both instances, 90% or more did not report any Chinook, chum, coho or pink salmon harvests. The number of households reporting no harvest of sockeye salmon on permits was higher than the number in the survey; surveyed households reported harvesting sockeye salmon at higher rates than households reporting from permits. Overall, the average sockeye harvest for surveyed households was over 3 times that for households reporting on subsistence/personal use permits.

Table 35 provides the approximate 95% confidence intervals for estimated salmon harvests from subsistence/personal use permits and household surveys. The confidence intervals for sockeye and chum salmon do not overlap, suggesting that the estimated totals were statistically different. No Chinook or coho salmon were recorded in household interviews.

## **DISCUSSION AND CONCLUSIONS**

In reviewing the comparisons of information derived from different methods of obtaining subsistence salmon harvest information in Southeast Alaska, several significant findings emerged.

The residency records from Permanent Fund applications provided useful in comparing human population status and trends for 1999 to 2000 between communities and within communities. From 1999 to 2002, population estimates for each of the study communities indicated a decline. The rate of decline was highest in Wrangell (16%), but population declines were also significant in Yakutat (8%), Petersburg (8%), and Kake (6%). Furthermore, population turnover was evident from examination of Permanent Fund Dividend records. Between 12 and 31% of applicants in

the study year for communities of interest did not apply the following year. Changes in population may be related to overall economic conditions in Southeast Alaska, particularly the decline of the timber and commercial fishing industries.

The Permanent Fund application records also provided an indirect measure of community size through a comparison of the number of subsistence permits issued. The numbers of subsistence/personal use salmon permits issued to residents of these same communities did not match the PFD data. Instead, it appears that other factors affected the number of permits issued. Between 1999 and 2002, the largest declines in the number of permits issued were observed in Kake (27% reduction), Angoon (17%) and Hoonah (17%). In contrast, the number of permits issued to Yakutat residents stayed the same, and increased for Petersburg residents by 6%. The number of permits issued to Wrangell residents decreased by 6%.

The salmon harvest data from household surveys, when compared with permit-derived data, showed distinct local patterns in correspondence or variability. Households were randomly surveyed in Wrangell, Petersburg and Yakutat in 2001. In Wrangell and Petersburg, the survey estimates of salmon harvested with subsistence/personal use gear did not statistically differ from expanded estimates for permits issued to residents of these communities. Because over 90% of Wrangell and Petersburg residents who had permits turned in harvest reports, the reported permit harvests do not differ greatly from the expanded estimates for these communities. It is reasonable to conclude that reported harvest information from the Alexander database (ADF&G 2001) can continue to be used as a reliable source of information to monitor harvests by Wrangell and Petersburg residents in Southeastern Alaska subsistence/personal use fisheries.

This study provided insights into distinctive community salmon harvest patterns. Previous Division of Subsistence household survey data indicated that Wrangell and Petersburg residents relied on rod and reel and removal from commercial catches for a significant portion of their salmon (ADF&G 2006). The 2000 harvest survey data indicate that Wrangell residents continue to rely on both removal from commercial catches and the use of rod and reel for a significant portion of their salmon for home use. Chinook salmon were harvested primarily with rod and reel. Fully 75% (1,807) of the total 2,664 salmon estimated harvested by rod and reel gear were caught in this manner (Table 7). A significant number of coho salmon were also reported taken with rod and reel: 678 (39%) of the total 1,753 coho estimated harvested by gear (Table 7). Coho comprised the greatest number of salmon retained from commercial catches: 1,075 (61%) of the total 1,753 coho estimated harvested by gear (Table 7).

Of the 6,990 salmon estimated harvested by Wrangell residents, non-commercial personal use/subsistence net fisheries were used to take 1,601 (23 %) of salmon harvested for home use (Table 7). Non-commercial personal use/subsistence net fisheries were used to catch mostly sockeye salmon, 1,418 (65%) of the total 2,172 sockeye estimated harvested by gear (Table 7).

The 2000 harvest survey data indicate that Petersburg residents continue to rely on salmon removed from commercial catches and caught with rod and reel for the majority of their salmon for home use. Chinook salmon were harvested primarily with rod and reel: 7,062 (78%) of the total 9,056 estimated harvested by gear (Table 12). Coho salmon were harvested primarily with rod and reel: 4,631 (78%) of the total 5,958 coho estimated harvested by gear (Table 12). The majority of sockeye salmon were also taken with rod and reel: 2,842 (75%) of the total 3,784 sockeye estimated harvested by gear (Table 12). Chinook comprised the greatest number of

salmon retained from commercial catches: 1,994 (22%) of the total 9,056 estimated harvested by gear (Table 12).

A comparison between salmon harvest data collected from subsistence permits and data from household surveys clearly shows that reliability of the harvest information must be analyzed and determined for each community individually. Of the 25,192 salmon estimated harvested by Petersburg residents, non-commercial personal use/subsistence net fisheries were used to take 377 (2%) of salmon harvested for home use (Table 12). Non-commercial personal use/subsistence net fisheries were used to catch 377 sockeye salmon (10 %) of the total 3,784 sockeye estimated harvested by gear (Table 12). Wrangell and Petersburg's high rate of returned permit harvest reports, discussed above, combined with residents' relatively low reliance on personal use/subsistence net fisheries does not warrant changes in the permit reporting system for these areas at this time.

Previous Division of Subsistence household survey data indicated that Yakutat residents relied on salmon removed from commercial catches for a significant portion of the salmon brought into their homes (ADF&G 2006). The 2000 survey indicated that this reliance on commercial fisheries has declined. The survey estimates indicate that a small number of salmon, 1,959 (12%) of the total 16,081 salmon harvested for home use, were removed from commercial harvests (Table 17). Rod and reel harvests were also low: only 1,574 (10%) of the total 16,081 salmon harvested for home use (Table 17). Non-commercial, subsistence net fisheries were the primary source of salmon for home use: 12,498 salmon (78%) of the total 16,081 salmon taken for home use came from subsistence harvests (Table 17).

The household survey of Yakutat households suggested that salmon harvests as reported on Southeastern subsistence/personal use permits may inadequately measure these harvests. Frequency of harvests for randomly-surveyed households appeared similar to households obtaining a subsistence/personal use permit. When expanded to a community estimate, estimates of salmon harvests from surveys were twice the amount indicated on subsistence/personal use permits in 2001, and were statistically different. It should be noted that about 50% of the estimated number of households in Yakutat obtained subsistence/personal use permits (in contrast to the 17% of the estimated households in Wrangell who obtained permits, and 9% of the estimated households in Petersburg), and that over 90% of the households with permits returned harvest reports. The survey instrument used in Yakutat clearly distinguished between removal from the commercial catch for home use and harvests through use of subsistence/personal use gear, and is not a ready explanation for this discrepancy. However, as noted previously, the Yakutat Area is unique in the Southeastern Region in that subsistence salmon fishing locations are not restricted to specific streams, nor is there a daily or annual limit on the number of fish harvested. It may be that participants in the subsistence/personal use fishery do not obtain needed permits since stringent oversight is not dedicated to this fishery. Further research is needed to clarify the reasons for these discrepancies.

In contrast to the random selection approach, households identified as fishing in the previous season were sampled in Angoon, Hoonah and Kake in 2002. For households in Angoon and Hoonah, the estimated harvests from surveys were not statistically different from the expanded harvests from permit reporting. However, reported harvest information from the Alexander database is used to manage subsistence/personal use fisheries in Southeast Alaska, but only 50% of the permits issued to Angoon residents had harvest reports returned during the study year, and only two-thirds of the permits issued to Hoonah residents had harvest reports returned.

Therefore, use of permit harvest information for Angoon and Hoonah would be a significant understatement of the harvest that actually occurred in 2001. This did not appear to be the case for Kake, where there was a relatively high number of permits issued, and where most were returned with harvest information. However, what was reported on the returned permits was considerably lower than harvest reported using the household survey method.

In Angoon, Hoonah, and Kake, a number of households harvested salmon for more households than their own. These high-harvesting households shared their harvests with several other households in the community. Some sharing is based on the traditional practice of sharing among clan and family members, while some is less structured. In an attempt to conduct these traditional fisheries under existing state regulations, households that had permits but that were unable to use them, gave their permits to another harvester. Thus, some permits are returned with the number of fish the household received from the high harvester, or, more frequently, with simply the permitted limit of fish. The practice of sharing permits, although not in accordance with state law, occurred most frequently in Angoon, Hoonah, and Kake. Although the expanded permit data estimates may be comparable to the number of fish actually harvested in Angoon and Hoonah, the data available from the state permit system does not reflect the actual harvest practices in these communities.

The average chum and sockeye harvests for Kake fishing households identified by the Division of Subsistence were over 3 times the average harvests reported on subsistence/personal use permits, and the estimated community harvest was at least twice as large and statistically different from the expanded permit harvest. Although over 25% fewer permits were issued in 2001 to Kake residents compared to 1999, the number of permits issued in 2001 to Kake residents (191) was almost twice the number of active fishing households (111) as determined by the Division of Subsistence. The rate of reporting for those households obtaining permits was high: 96% in 2001. A higher proportion of households reporting from permits did not harvest any sockeye, and surveyed households reported harvesting sockeye salmon at higher rates than households reporting from permits. Therefore, reported and expanded permit harvest information for Kake appeared to be a significant understatement of the salmon harvests that occurred in 2001.

## **RECOMMENDATIONS**

The findings in this study should allow fisheries managers to have more confidence in the reliability of the permit data for some communities. For other areas in which the permit data are underreporting the harvest, managers can now use those data with a more accurate understanding of the associated limitations. Managers and researchers also can develop further insights and cooperative project proposals to further assess the causes for and ways to decrease the underreporting of harvests where that is a substantial pattern. The study results indicate a variety of recommendations to improve the reliability of salmon harvest reporting. Some of these recommendations are specific to particular communities or groups of communities.

### **ANGOON, HOONAH, AND KAKE**

Data available from the state permit system do not reflect actual harvest practices in Angoon and Hoonah. Furthermore, the permit harvest data for Kake significantly underestimate the subsistence salmon harvest. It is recommended that for Angoon and Hoonah, the practice of sharing permits be carefully examined in order to craft regulations that will accommodate this

customary and traditional practice. It is further recommended that for Kake, a more regular schedule of household subsistence salmon harvest surveys be undertaken to monitor household harvests, which appear underestimated on returned permits.

## **WRANGELL AND PETERSBURG**

A majority of Wrangell and Petersburg residents with subsistence/personal use permits return harvest reports (over 90%; see “Discussion,” above), and the reported harvests do not appreciably differ from the Division of Subsistence expanded estimates. Therefore, we recommend that reported harvest information from the Alexander database continue to be used for monitoring harvests of subsistence/personal use fisheries in Wrangell and Petersburg. Furthermore, residents of Wrangell and Petersburg primarily rely on salmon removed from commercial catches for subsistence. No changes in the permit system are recommended; however, this situation may change over time.

## **YAKUTAT**

Reliance on salmon removed from commercial catches has declined in Yakutat according to the 2000 survey (see “Discussion,” above). Non-commercial subsistence net fisheries provided 78% of the total number of salmon taken for home use (Table 17). The household harvest survey indicated that salmon harvests may be inaccurately measured by returned subsistence/personal use permit data. The community estimate based on expanded data from the household surveys was twice the amount that the subsistence/personal use permit data indicated. Because subsistence salmon fishing locations are not restricted to specific streams in the Yakutat Area, and stringent oversight is not dedicated to this fishery, not all subsistence/personal use fishers may obtain permits for this fishery. It is therefore strongly recommended that further research be undertaken addressing the Yakutat Area subsistence salmon fishery.

## **ACKNOWLEDGEMENTS**

For their cooperation and patience, the author would like to thank the scores of Wrangell, Petersburg, Yakutat, Angoon, Hoonah and Kake residents who agreed to respond to the survey. The U.S. Fish and Wildlife Service, Office of Subsistence Management, provided \$116,446 in funding support for this project, which included a Kuskokwim element, through the Fisheries Resource Monitoring Program, under agreement numbers 70181-1-J335 and ADF&G COOP-01-074.

Several present and former Division of Subsistence staff oversaw survey procedures, supervised local hires, and conducted surveys. Mike Turek helped support all Southeast staff field researchers. Amy Paige, Subsistence Resource Specialist II; Brian Davis, Subsistence Resource Specialist II; and Matthew Kookesh, Subsistence Resource Specialist I were involved with the project in Wrangell, Petersburg and Yakutat. Laura Wade, Fish and Wildlife Technician II conducted surveys in Wrangell. Shere Griffis, Fish and Wildlife Technician II, conducted surveys in Petersburg. Matthew Kookesh was lead division staff person in Angoon, Kake, and Hoonah. Nathan Soboleff, Subsistence Resource Specialist I, assisted with the survey in Kake. Burt Jackson, Fish and Wildlife Technician II, conducted surveys in Kake. Harlena Warford, Fish and Wildlife Technician II, conducted surveys in Hoonah; and Harriet Silva, Fish and Wildlife Technician II, conducted surveys in Angoon. Mathew Brock, Subsistence Resource Specialist I, constructed the maps in Appendix A.



This project would not have been possible without the support and cooperation of the municipal and tribal staffs of the communities involved. John Feller, serving as the president of the Wrangell Cooperative Association at the time of the Wrangell survey, supported the project and assisted division staff. Both the City of Petersburg and the Petersburg Indian Association supported the survey and assisted division staff. The Yakutat survey was a cooperative project between the Division of Subsistence and the Yakutat Tlingit Tribe. Bert Adams, Sr., supervised tribal staff, as well as Judy Ramos, Subsistence Harvest Coordinator, and Dora Jackson, Subsistence Harvest Interviewer. Frank Wright, Jr., President, Hoonah Indian Association, and David Belton, Natural and Cultural Resource Specialist, worked closely with division staff in Hoonah. Marlene Zuboff, Executive Director of the Angoon Community Association, worked closely with division staff in Angoon. In Kake, Dawn Jackson, Executive Assistant of the Organized Village of Kake, and Mike Jackson worked closely with division staff.

Several former members of the Information Management group of the Division of Subsistence have been involved in the design of this project and processing of survey data, including Charles Utermohle as an original principal investigator, Gretchen Jennings, Kurt Kamletz, and Ron Paciorek. Jessie Mallery did much of the data entry for this project.

## LITERATURE CITED

- ADF&G (Alaska Department of Fish and Game) 2006. Community Subsistence Information System. Alaska Department of Fish and Game, Division of Subsistence, Juneau. <http://www.subsistence.adfg.state.ak.us/CSIS/>, accessed in 2006.
- ADF&G (Alaska Department of Fish and Game). 2001. Alexander: the integrated fisheries database for Southeast Alaska and Yakutat. Alaska Department of Fish and Game, Division of Commercial Fisheries, Juneau.
- ADOL (Alaska Department of Labor and Workforce Development). 2004. Population of places by borough and census area, 2000-2003. Alaska Department of Labor and Workforce Development, Juneau. <http://www.labor.state.ak.us/research/pop/estimates/>, accessed in 2004.
- Brown, C., D. Caylor, J. Dizard, J.A. Fall, S. Georgette, T. Krauthoefer, and M. Turek. 2005. Alaska subsistence fisheries 2003 annual report. Alaska Department of Fish and Game, Division of Subsistence Technical Paper 316, Juneau.
- Fall, J.A. 2003. Implementation of statewide subsistence fisheries harvest assessment strategy. USFWS Office of Subsistence Management, Fisheries Resource Monitoring Program, Final Report No. FIS01-107. Anchorage.
- Fall, J.A. and R. Shanks. 2003. Subsistence fisheries harvest monitoring strategy. USFWS Office of Subsistence Management, Fisheries Resource Monitoring Program, Final Report No. FIS01-017. Alaska Department of Fish and Game, Division of Subsistence, Anchorage.
- U.S. Bureau of the Census. 2004. <http://censtats.census.gov/cgi-bin/pct/pctProfile.pl>, accessed in 2004.

**Table 1.**—U.S. Census and Alaska Department of Labor population estimates for selected Southeast Alaska communities, 1999-2002.

Community	1999 DOL	2000 Census	2001 DOL	2002 DOL
Angoon	576	572	560	542
Hoonah	877	860	873	868
Kake	745	710	697	700
Petersburg	3,415	3,224	3,234	3,146
Wrangell	2,549	2,308	2,226	2,144
Yakutat	729	680	649	669
<b>Total</b>	<b>8,891</b>	<b>8,354</b>	<b>8,239</b>	<b>8,069</b>

Sources: ADOL 2004; U.S. Bureau of the Census 2004.

**Table 2.**—Number of Alaska Permanent Fund Dividend applicants, selected Southeast Alaska mailing cities, 1999-2002 residency years.

Mailing City	1999	2000	2001	2002
Angoon	554	581	568	477
Hoonah	1,020	1,035	1,042	896
Kake	763	732	716	676
Petersburg	3,351	3,325	3,322	3,235
Wrangell	2,431	2,417	2,364	2,172
Yakutat	662	694	677	637
<b>Total</b>	<b>8,781</b>	<b>8,784</b>	<b>8,689</b>	<b>8,093</b>

Note: Multiple applications may have been submitted under the same name and address.

**Table 3.**—Matches for Alaska Permanent Fund Dividend applicants, selected Southeast Alaska mailing cities, with 2000 base, 1999-2002 residency years.

Mailing City	1999		2000		2001		2002	
	No. Matched 2000 Applicants	% Matched 2000 Applicants	No. Applicants	% Matched 2000 Applicants	No. Matched 2000 Applicants	% Matched 2000 Applicants	No. Matched 2000 Applicants	% Matched 2000 Applicants
Angoon	508	87.4%	581	100.0%	481	82.8%	379	65.2%
Hoonah	895	86.5%	1,035	100.0%	903	87.2%	672	64.9%
Kake	654	89.3%	732	100.0%	647	88.4%	558	76.2%
Petersburg	2,992	90.0%	3,325	100.0%	2,915	87.7%	2,336	70.3%
Wrangell	2,139	88.5%	2,417	100.0%	2,086	86.3%	1,624	67.2%
Yakutat	576	83.0%	694	100.0%	561	80.8%	471	67.9%

Note: Multiple applications may have been submitted under same name and address.

**Table 4.**—Number of Southeastern Alaska subsistence salmon permits issued and returned by management area for selected Southeast Alaska communities, 1999-2002.

Community	Area	1999		2000		2001		2002	
		Issued	Returned	Issued	Returned	Issued	Returned	Issued	Returned
Angoon	Haines Management Area	0	0	1	1	0	0	0	0
	Juneau Management Area	109	81	114	71	117	59	91	58
	Ketchikan Management Area	1	1	0	0	0	0	0	0
	Southeastern / Yakutat Region	110	82	115	72	117	59	91	58
Hoonah	Haines Management Area	0	0	0	0	0	0	1	0
	Juneau Management Area	166	113	117	74	150	99	139	70
	Ketchikan Management Area	1	1	0	0	0	0	0	0
	Sitka Management Area	2	0	1	1	1	1	1	1
	Southeastern / Yakutat Region	169	114	118	75	151	100	141	71
Kake	Juneau Management Area	2	0	0	0	0	0	0	0
	Petersburg/Wrangell Management Area	208	187	177	173	188	180	153	137
	Sitka Management Area	4	4	3	3	3	3	3	3
	Southeastern / Yakutat Region	214	191	180	176	191	183	156	140
Petersburg	Haines Management Area	0	0	0	0	0	0	1	1
	Juneau Management Area	0	0	1	1	4	4	1	1
	Ketchikan Management Area	1	1	0	0	0	0	0	0
	Petersburg/Wrangell Management Area	108	105	95	93	131	130	112	108
	Sitka Management Area	0	0	0	0	0	0	1	1
	Southeastern / Yakutat Region	109	106	96	94	135	134	115	111
Wrangell	Juneau Management Area	0	0	1	1	1	0	0	0
	Ketchikan Management Area	1	0	0	0	0	0	0	0
	Petersburg/Wrangell Management Area	117	99	129	119	109	106	110	96
	Sitka Management Area	0	0	0	0	1	1	1	0
	Southeastern / Yakutat Region	118	99	130	120	111	107	111	96
Yakutat	Juneau Management Area	1	1	0	0	0	0	0	0
	Sitka Management Area	0	0	1	1	0	0	0	0
	Yakutat Management Area	102	99	114	108	117	100	103	97
	Southeastern / Yakutat Region	103	100	115	109	117	100	103	97

Source: ADF&G Division of Commercial Fisheries Subsistence Salmon Permits, 1999-2002.

**Table 5.—Reported subsistence and personal use salmon harvest by location and gear, Wrangell residents, 2000.**

Location		Gill Net			Dip Net			Purse Seine			Beach Seine			Gaff			Other/Unknown Methods			All Methods		
		Rep. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Rep. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Rep. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Rep. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Rep. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Rep. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Rep. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location
Coho Salmon	All Locations	8	88.9%	88.9%	1	11.1%	11.1%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	9	100.0%	100.0%
	Crystal Creek	8	88.9%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	8	88.9%	100.0%
	Mill Ck	0	0.0%	0.0%	1	11.1%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	1	11.1%	100.0%
Chum Salmon	All Locations	22	64.7%	64.7%	12	35.3%	35.3%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	34	100.0%	100.0%
	Mill Ck	18	52.9%	81.8%	4	11.8%	18.2%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	22	64.7%	100.0%
	Snake Ck Olive Cove	0	0.0%	0.0%	6	17.6%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	6	17.6%	100.0%
	Thoms Creek	4	11.8%	66.7%	2	5.9%	33.3%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	6	17.6%	100.0%
Chinook Salmon	All Locations	41	93.2%	93.2%	3	6.8%	6.8%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	44	100.0%	100.0%
	Earl West Creek	37	84.1%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	37	84.1%	100.0%
	Mill Ck	4	9.1%	57.1%	3	6.8%	42.9%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	7	15.9%	100.0%
Pink Salmon	All Locations	1	3.8%	3.8%	25	96.2%	96.2%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	26	100.0%	100.0%
	Snake Ck Olive Cove	0	0.0%	0.0%	25	96.2%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	25	96.2%	100.0%
	Thoms Creek	1	3.8%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	1	3.8%	100.0%
Sockeye Salmon	All Locations	935	93.8%	93.8%	52	5.2%	5.2%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	10	1.0%	1.0%	997	100.0%	100.0%
	Alecks Creek	50	5.0%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	50	5.0%	100.0%
	Earl West Creek	3	0.3%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	3	0.3%	100.0%
	Mill Ck	244	24.5%	92.4%	20	2.0%	7.6%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	264	26.5%	100.0%
	Salmon Bay Creek	218	21.9%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	218	21.9%	100.0%
	Snake Ck Olive Cove	0	0.0%	0.0%	2	0.2%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	2	0.2%	100.0%
	Taku River	10	1.0%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	10	1.0%	100.0%
	Thoms Creek	410	41.1%	91.1%	30	3.0%	6.7%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	10	1.0%	2.2%	450	45.1%	100.0%

Sources: ADF&G Division of Commercial Fisheries, Subsistence Salmon Permits, 2000.

\* Permit Holders may fish more than one location for a resource

**Table 6.**—Estimated subsistence and personal use salmon harvest by location and gear, Wrangell residents, 2000.

		Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location
Location																						
Coho Salmon	All Locations	8	88.9%	88.9%	1	11.1%	11.1%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	9	100.0%	100.0%
	Crystal Creek	8	88.9%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	8	88.9%	100.0%
	Mill Ck	0	0.0%	0.0%	1	11.1%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	1	11.1%	100.0%
Chum Salmon	All Locations	23	65.7%	65.7%	12	34.3%	34.3%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	35	100.0%	100.0%
	Mill Ck	19	54.3%	82.6%	4	11.4%	17.4%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	23	65.7%	100.0%
	Snake Ck Olive Cove	0	0.0%	0.0%	6	17.1%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	6	17.1%	100.0%
	Thorns Creek	4	11.4%	66.7%	2	5.7%	33.3%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	6	17.1%	100.0%
Chinook Salmon	All Locations	43	93.5%	93.5%	3	6.5%	6.5%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	46	100.0%	100.0%
	Earl West Creek	39	84.8%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	39	84.8%	100.0%
	Mill Ck	4	8.7%	57.1%	3	6.5%	42.9%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	7	15.2%	100.0%
Pink Salmon	All Locations	1	3.6%	3.6%	27	96.4%	96.4%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	28	100.0%	100.0%
	Snake Ck Olive Cove	0	0.0%	0.0%	27	96.4%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	27	96.4%	100.0%
	Thorns Creek	1	3.6%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	1	3.6%	100.0%
Sockeye Salmon	All Locations	1,011	94.0%	94.0%	55	5.1%	5.1%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	10	0.9%	0.9%	1,076	100.0%	100.0%
	Alecks Creek	54	5.0%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	54	5.0%	100.0%
	Earl West Creek	3	0.3%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	3	0.3%	100.0%
	Mill Ck	264	24.5%	92.6%	21	2.0%	7.4%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	285	26.5%	100.0%
	Salmon Bay Creek	236	21.9%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	236	21.9%	100.0%
	Snake Ck Olive Cove	0	0.0%	0.0%	2	0.2%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	2	0.2%	100.0%
	Taku River	10	0.9%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	10	0.9%	100.0%
	Thorns Creek	444	41.3%	91.4%	32	3.0%	6.6%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	10	0.9%	2.1%	486	45.2%	100.0%

SOURCE: Alaska Department of Fish and Game, Division of Commercial Fisheries, Subsistence Salmon Permits, 2000

\* Permit Holders may fish more than one location for a resource

Expanded for non-response.

**Table 7.**—Total salmon harvest for household use by gear, Wrangell residents, 2000.

Species	Harvest Unit	Removed from Commercial Catch		Gill Net		Beach Seine		Dip Net		Purse Seine		Other Methods		Subsistence/Personal Use Methods		Rod and Reel		Any Method	
		Total	HH Mean	Total	HH Mean	Total	HH Mean	Total	HH Mean	Total	HH Mean	Total	HH Mean	Total	HH Mean	Total	HH Mean	Total	HH Mean
Salmon	ea.	2,729	3.7	808	1.1	0	0.0	23	0.0	0	0.0	770	1.0	1,601	2.1	2,660	3.6	6,990	9.4
	lbs.	16,150	21.6	4,806	6.4	0	0.0	121	0.2	0	0.0	3,435	4.6	8,363	11.2	25,510	34.1	50,022	67.0
Chum Salmon	ea.	229	0.3	15	0.0	0	0.0	8	0.0	0	0.0	0	0.0	23	0.0	0	0.0	252	0.3
	lbs.	1,587	2.1	106	0.1	0	0.0	53	0.1	0	0.0	0	0.0	159	0.2	0	0.0	1,746	2.3
Coho Salmon	ea.	1,075	1.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	678	0.9	1,753	2.3
	lbs.	5,631	7.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	3,554	4.8	9,185	12.3
Chinook Salmon	ea.	457	0.6	160	0.2	0	0.0	0	0.0	0	0.0	0	0.0	160	0.2	1,807	2.4	2,424	3.2
	lbs.	5,364	7.2	1,877	2.5	0	0.0	0	0.0	0	0.0	0	0.0	1,877	2.5	21,188	28.4	28,430	38.1
Pink Salmon	ea.	381	0.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	8	0.0	389	0.5
	lbs.	949	1.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	19	0.0	968	1.3
Sockeye Salmon	ea.	587	0.8	633	0.8	0	0.0	15	0.0	0	0.0	770	1.0	1,418	1.9	168	0.2	2,172	2.9
	lbs.	2,619	3.5	2,823	3.8	0	0.0	68	0.1	0	0.0	3,435	4.6	6,326	8.5	748	1.0	9,694	13.0
Unknown Salmon	ea.	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	lbs.	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0

Source: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 2001



**Table 8.**—Noncommercial salmon harvest by location and gear, Wrangell residents, 2000.

		Gill Net			Dip Net			Other			Unknown			All Subsistence/Personal Use Methods			Rod and Reel			All Methods		
Resource	Location	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location
Coho Salmon	All locations	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	678	100.0%	100.0%	678	100.0%	100.0%
	Unknown	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	678	100.0%	100.0%	678	100.0%	100.0%
Sockeye Salmon	All locations	633	39.9%	39.9%	15	1.0%	1.0%	770	48.6%	48.6%	0	0.0%	0.0%	1,418	89.4%	89.4%	168	10.6%	10.6%	1,585	100.0%	100.0%
	Mill Creek	76	4.8%	83.3%	15	1.0%	16.7%	0	0.0%	0.0%	0	0.0%	0.0%	91	5.8%	100.0%	0	0.0%	0.0%	91	5.8%	100.0%
	Salmon Bay Creek	76	4.8%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	76	4.8%	100.0%	0	0.0%	0.0%	76	4.8%	100.0%
	Thoms Creek	457	28.8%	40.0%	0	0.0%	0.0%	686	43.3%	60.0%	0	0.0%	0.0%	1,143	72.1%	100.0%	0	0.0%	0.0%	1,143	72.1%	100.0%
	Unknown	23	1.4%	8.3%	0	0.0%	0.0%	84	5.3%	30.6%	0	0.0%	0.0%	107	6.7%	38.9%	168	10.6%	61.1%	274	17.3%	100.0%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Survey, 2001

\* Households may fish more than one location for a resource

**Table 9.**—Estimated subsistence/personal use permit and household survey salmon harvest and confidence intervals, Wrangell, 2000.

Subsistence/Personal Use Salmon Permits		Household Surveys	
Permits	Issued 130	Households	Defined 747
	Reports Returned 120		Interviewed 98
Chinook Salmon	Average 0.4	Chinook Salmon	Average 0.2
	Standard Error 0.15		Standard Error 0.20
	Estimated Total 48		Estimated Total 160
	95% Confidence Interval (High) 59 (Low) 37		95% Confidence Interval (High) 439 (Low) -119
Chum Salmon	Average 0.3	Chum Salmon	Average 0.0
	Standard Error 0.10		Standard Error 0.02
	Estimated Total 40		Estimated Total 23
	95% Confidence Interval (High) 47 (Low) 34		95% Confidence Interval (High) 54 (Low) -8
Coho Salmon	Average 0.1	Coho Salmon	Average 0.0
	Standard Error 0.05		Standard Error 0.00
	Estimated Total 10		Estimated Total 0
	95% Confidence Interval (High) 14 (Low) 7		95% Confidence Interval (High) 0 (Low) 0
Pink Salmon	Average 0.2	Pink Salmon	Average 0.0
	Standard Error 0.21		Standard Error 0.00
	Estimated Total 29		Estimated Total 0
	95% Confidence Interval (High) 43 (Low) 14		95% Confidence Interval (High) 0 (Low) 0
Sockeye Salmon	Average 8.4	Sockeye Salmon	Average 1.9
	Standard Error 0.91		Standard Error 1.11
	Estimated Total 1,087		Estimated Total 1,418
	95% Confidence Interval (High) 1,151 (Low) 1,022		95% Confidence Interval (High) 2,932 (Low) -96

**Table 10.**—Reported subsistence/personal use salmon permit harvest by location and gear, Petersburg residents, 2000.

Location	Gill Net			Dip Net			Purse Seine			Beach Seine			Gaff			Other/Unknown Methods			All Methods		
	Rep. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Rep. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Rep. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Rep. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Rep. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Rep. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Rep. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location
Coho Salmon	141	100.0%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	141	100.0%	100.0%
All Locations	139	98.6%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	139	98.6%	100.0%
Crystal Creek	2	1.4%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	2	1.4%	100.0%
Salmon Bay Creek																					
Chum Salmon	74	100.0%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	74	100.0%	100.0%
All Locations	3	4.1%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	3	4.1%	100.0%
Crystal Creek	18	24.3%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	18	24.3%	100.0%
Falls Ck Baranof Is	3	4.1%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	3	4.1%	100.0%
Salmon Bay Creek	50	67.6%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	50	67.6%	100.0%
Salt Chuck-Security																					
Pink Salmon	20	100.0%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	20	100.0%	100.0%
All Locations	1	5.0%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	1	5.0%	100.0%
Crystal Creek	8	40.0%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	8	40.0%	100.0%
Falls Ck Baranof Is	8	40.0%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	8	40.0%	100.0%
Salmon Bay Creek	3	15.0%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	3	15.0%	100.0%
Taku River																					
Sockeye Salmon	412	89.2%	89.2%	10	2.2%	2.2%	0	0.0%	0.0%	30	6.5%	6.5%	0	0.0%	0.0%	10	2.2%	2.2%	462	100.0%	100.0%
All Locations	19	4.1%	48.7%	0	0.0%	0.0%	0	0.0%	0.0%	20	4.3%	51.3%	0	0.0%	0.0%	0	0.0%	0.0%	39	8.4%	100.0%
Falls Ck Baranof Is	30	6.5%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	30	6.5%	100.0%
Gut Bay Head	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	10	2.2%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	10	2.2%	100.0%
Kutiaku Creek	25	5.4%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	25	5.4%	100.0%
Red Lake Creek	328	71.0%	94.3%	10	2.2%	2.9%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	10	2.2%	2.9%	348	75.3%	100.0%
Salmon Bay Creek	10	2.2%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	10	2.2%	100.0%
Taku River																					

SOURCE: Alaska Department of Fish and Game, Division of Commercial Fisheries, Subsistence Salmon Permits, 2000

Note: permit holders may fish more than one location for a resource.

**Table 11.**—Estimated subsistence/personal use salmon permit harvest by location and gear, Petersburg residents, 2000.

Location	Gill Net			Dip Net			Purse Seine			Beach Seine			Gaff			Other/Unknown Methods			All Methods		
	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location
Coho Salmon																					
All Locations	143	100.0%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	143	100.0%	100.0%
Crystal Creek	141	98.6%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	141	98.6%	100.0%
Salmon Bay Creek	2	1.4%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	2	1.4%	100.0%
Chum Salmon																					
All Locations	75	100.0%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	75	100.0%	100.0%
Crystal Creek	3	4.0%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	3	4.0%	100.0%
Falls Ck Baranof Is	18	24.0%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	18	24.0%	100.0%
Salmon Bay Creek	3	4.0%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	3	4.0%	100.0%
Salt Chuck-Security	51	68.0%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	51	68.0%	100.0%
Pink Salmon																					
All Locations	20	100.0%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	20	100.0%	100.0%
Crystal Creek	1	5.0%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	1	5.0%	100.0%
Falls Ck Baranof Is	8	40.0%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	8	40.0%	100.0%
Salmon Bay Creek	8	40.0%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	8	40.0%	100.0%
Taku River	3	15.0%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	3	15.0%	100.0%
Sockeye Salmon																					
All Locations	418	89.3%	89.3%	10	2.1%	2.1%	0	0.0%	0.0%	30	6.4%	6.4%	0	0.0%	0.0%	10	2.1%	2.1%	468	100.0%	100.0%
Falls Ck Baranof Is	19	4.1%	48.7%	0	0.0%	0.0%	0	0.0%	0.0%	20	4.3%	51.3%	0	0.0%	0.0%	0	0.0%	0.0%	39	8.3%	100.0%
Gut Bay Head	30	6.4%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	30	6.4%	100.0%
Kutlaku Creek	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	10	2.1%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	10	2.1%	100.0%
Red Lake Creek	25	5.3%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	25	5.3%	100.0%
Salmon Bay Creek	334	71.4%	94.4%	10	2.1%	2.8%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	10	2.1%	2.8%	354	75.6%	100.0%
Taku River	10	2.1%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	10	2.1%	100.0%

SOURCE: Alaska Department of Fish and Game, Division of Commercial Fisheries, Subsistence Salmon Permits, 2000

\* Permit Holders may fish more than one location for a resource

**Table 12.**—Estimated salmon harvest by gear, Petersburg, 2000.

Species	Harvest Unit	Removed from Commercial Catch		Gill Net		Beach Seine		Dip Net		Purse Seine		Other Methods		Subsistence/Personal Use Methods		Rod and Reel		Any Method	
		Total	HH Mean	Total	HH Mean	Total	HH Mean	Total	HH Mean	Total	HH Mean	Total	HH Mean	Total	HH Mean	Total	HH Mean	Total	HH Mean
Salmon	ea.	9,356	8.7	377	0.4	0	0.0	0	0.0	0	0.0	0	0.0	377	0.4	15,459	14.4	25,192	23.5
	lbs.	51,016	47.7	1,681	1.6	0	0.0	0	0.0	0	0.0	0	0.0	1,681	1.6	124,513	116.4	177,210	165.6
Chum Salmon	ea.	1,019	1.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	548	0.5	1,566	1.5
	lbs.	7,071	6.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	3,803	3.6	10,873	10.2
Coho Salmon	ea.	1,327	1.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	4,631	4.3	5,958	5.6
	lbs.	6,951	6.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	24,263	22.7	31,214	29.2
Chinook Salmon	ea.	1,994	1.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	7,062	6.6	9,056	8.5
	lbs.	23,393	21.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	82,829	77.4	106,222	99.3
Pink Salmon	ea.	4,451	4.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	377	0.4	4,828	4.5
	lbs.	11,080	10.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	938	0.9	12,018	11.2
Sockeye Salmon	ea.	565	0.5	377	0.4	0	0.0	0	0.0	0	0.0	0	0.0	377	0.4	2,842	2.7	3,784	3.5
	lbs.	2,521	2.4	1,681	1.6	0	0.0	0	0.0	0	0.0	0	0.0	1,681	1.6	12,681	11.9	16,883	15.8
Unknown Salmon	ea.	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	lbs.	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0

Source: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 2001

**Table 13.**—Estimated non-commercial salmon harvest by location and gear, Petersburg, 2000.

		Gill Net			Dip Net			Other			Unknown			All Subsistence/Personal Use Methods			Rod and Reel			All Methods		
Resource	Location	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location
Coho Salmon	All locations	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	4,631	100.0%	100.0%	4,631	100.0%	100.0%
	Blind Slough	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	2,799	60.4%	100.0%	2,799	60.4%	100.0%
	Castle River	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	9	0.2%	100.0%	9	0.2%	100.0%
	Duncan Canal	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	17	0.4%	100.0%	17	0.4%	100.0%
	Kah Sheets Creek	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	26	0.6%	100.0%	26	0.6%	100.0%
	Marsh S Anuk River	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	856	18.5%	100.0%	856	18.5%	100.0%
	Mitchell Slough	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	68	1.5%	100.0%	68	1.5%	100.0%
	Ohmer Creek	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	128	2.8%	100.0%	128	2.8%	100.0%
	Petersburg Creek	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	146	3.1%	100.0%	146	3.1%	100.0%
	Red Lake Creek	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	171	3.7%	100.0%	171	3.7%	100.0%
	Salmon Bay Creek	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	51	1.1%	100.0%	51	1.1%	100.0%
	Wrangell Narrows	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	26	0.6%	100.0%	26	0.6%	100.0%
	Unknown	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	334	7.2%	100.0%	334	7.2%	100.0%
Sockeye Salmon	All locations	377	11.7%	11.7%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	377	11.7%	11.7%	2,842	88.3%	88.3%	3,219	100.0%	100.0%
	Chatham St Coronation Is	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	342	10.6%	100.0%	342	10.6%	100.0%
	District 12	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	17	0.5%	100.0%	17	0.5%	100.0%
	Kah Sheets Creek	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	171	5.3%	100.0%	171	5.3%	100.0%
	Petersburg Creek	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	2,268	70.5%	100.0%	2,268	70.5%	100.0%
	Salmon Bay Creek	368	11.4%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	368	11.4%	100.0%	0	0.0%	0.0%	368	11.4%	100.0%
	Unknown	9	0.3%	16.7%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	9	0.3%	16.7%	43	1.3%	83.3%	51	1.6%	100.0%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Survey, 2001  
Note: households may fish more than one location for a resource.

**Table 14.**—Estimated subsistence/personal use permit and household survey salmon harvest and confidence intervals, Petersburg, 2000.

	Subsistence/Personal Use Salmon Permits			Household Surveys	
Permits	Issued	96	Households	Defined	1,070
	Reports Returned	94		Interviewed	125
Chinook Salmon	Average	0.0	Chinook Salmon	Average	0.0
	Standard Error	0.00		Standard Error	0.00
	Estimated Total	0		Estimated Total	0
	95% Confidence Interval (High)	0		95% Confidence Interval (High)	0
	(Low)	0		(Low)	0
Chum Salmon	Average	0.8	Chum Salmon	Average	0.0
	Standard Error	0.61		Standard Error	0.00
	Estimated Total	76		Estimated Total	0
	95% Confidence Interval (High)	92		95% Confidence Interval (High)	0
	(Low)	59		(Low)	0
Coho Salmon	Average	1.5	Coho Salmon	Average	0.0
	Standard Error	0.51		Standard Error	0.00
	Estimated Total	144		Estimated Total	0
	95% Confidence Interval (High)	158		95% Confidence Interval (High)	0
	(Low)	130		(Low)	0
Pink Salmon	Average	0.2	Pink Salmon	Average	0.0
	Standard Error	0.11		Standard Error	0.00
	Estimated Total	20		Estimated Total	0
	95% Confidence Interval (High)	23		95% Confidence Interval (High)	0
	(Low)	17		(Low)	0
Sockeye Salmon	Average	4.9	Sockeye Salmon	Average	0.4
	Standard Error	0.67		Standard Error	0.21
	Estimated Total	471		Estimated Total	377
	95% Confidence Interval (High)	489		95% Confidence Interval (High)	782
	(Low)	453		(Low)	-28

**Table 15.**—Reported subsistence/personal use salmon permit harvest by location and gear, Yakutat residents, 2000.

		Gill Net			Dip Net			Purse Seine			Beach Seine			Gaff			Other/Unknown Methods			All Methods		
		Rep. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Rep. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Rep. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Rep. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Rep. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Rep. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Rep. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location
Coho Salmon	All Locations	1,036	100.0%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	1,036	100.0%	100.0%
	Ahrnklin River	20	1.9%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	20	1.9%	100.0%
	Alsek River	17	1.6%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	17	1.6%	100.0%
	Ankau Creek	15	1.4%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	15	1.4%	100.0%
	Situk River	856	82.6%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	856	82.6%	100.0%
	Tawah Creek	88	8.5%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	88	8.5%	100.0%
	Tsiu River	25	2.4%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	25	2.4%	100.0%
	Yahitse River	15	1.4%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	15	1.4%	100.0%
Chum Salmon	All Locations	27	100.0%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	27	100.0%	100.0%
	East Alsek River	15	55.6%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	15	55.6%	100.0%
	Situk River	12	44.4%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	12	44.4%	100.0%
Chinook Salmon	All Locations	606	100.0%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	606	100.0%	100.0%
	Ahrnklin River	2	0.3%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	2	0.3%	100.0%
	Akw e River	12	2.0%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	12	2.0%	100.0%
	Alsek River	36	5.9%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	36	5.9%	100.0%
	Ankau Creek	7	1.2%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	7	1.2%	100.0%
	Situk River	549	90.6%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	549	90.6%	100.0%
Pink Salmon	All Locations	148	99.3%	99.3%	1	0.7%	0.7%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	149	100.0%	100.0%
	Necker Bay Lake	0	0.0%	0.0%	1	0.7%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	1	0.7%	100.0%
	Situk River	148	99.3%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	148	99.3%	100.0%
Sockeye Salmon	All Locations	3,230	98.2%	98.2%	58	1.8%	1.8%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	3,288	100.0%	100.0%
	Ahrnklin River	8	0.2%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	8	0.2%	100.0%
	Akw e River	108	3.3%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	108	3.3%	100.0%
	Alsek River	61	1.9%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	61	1.9%	100.0%
	Ankau Creek	65	2.0%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	65	2.0%	100.0%
	Dangerous River	67	2.0%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	67	2.0%	100.0%
	East Alsek River	42	1.3%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	42	1.3%	100.0%
	Necker Bay Lake	0	0.0%	0.0%	58	1.8%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	58	1.8%	100.0%
	Situk River	2,879	87.6%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	2,879	87.6%	100.0%

SOURCE: Alaska Department of Fish and Game, Division of Commercial Fisheries, Subsistence Salmon Permits, 2000

\* Permit Holders may fish more than one location for a resource



**Table 16.**—Estimated subsistence/personal use salmon permit harvest by location and gear, Yakutat residents, 2000.

		Gill Net			Dip Net			Purse Seine			Beach Seine			Gaff			Other/Unknown Methods			All Methods		
		Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location
Coho Salmon	All Locations	1,089	100.0%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	1,089	100.0%	100.0%
	Ahrnklin River	21	1.9%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	21	1.9%	100.0%
	Alsek River	17	1.6%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	17	1.6%	100.0%
	Ankau Creek	15	1.4%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	15	1.4%	100.0%
	Stuk River	903	82.9%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	903	82.9%	100.0%
	Taw ah Creek	92	8.4%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	92	8.4%	100.0%
	Tsiu River	26	2.4%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	26	2.4%	100.0%
	Yahse River	15	1.4%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	15	1.4%	100.0%
Chum Salmon	All Locations	27	100.0%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	27	100.0%	100.0%
	East Alsek River	15	55.6%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	15	55.6%	100.0%
	Stuk River	12	44.4%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	12	44.4%	100.0%
Chinook Salmon	All Locations	638	100.0%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	638	100.0%	100.0%
	Ahrnklin River	2	0.3%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	2	0.3%	100.0%
	Akw e River	12	1.9%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	12	1.9%	100.0%
	Alsek River	38	6.0%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	38	6.0%	100.0%
	Ankau Creek	7	1.1%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	7	1.1%	100.0%
	Stuk River	579	90.8%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	579	90.8%	100.0%
Pink Salmon	All Locations	156	99.4%	99.4%	1	0.6%	0.6%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	157	100.0%	100.0%
	Necker Bay Lake	0	0.0%	0.0%	1	0.6%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	1	0.6%	100.0%
	Stuk River	156	99.4%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	156	99.4%	100.0%
Sockeye Salmon	All Locations	3,406	98.3%	98.3%	58	1.7%	1.7%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	3,464	100.0%	100.0%
	Ahrnklin River	8	0.2%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	8	0.2%	100.0%
	Akw e River	114	3.3%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	114	3.3%	100.0%
	Alsek River	64	1.8%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	64	1.8%	100.0%
	Ankau Creek	68	2.0%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	68	2.0%	100.0%
	Dangerous River	70	2.0%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	70	2.0%	100.0%
	East Alsek River	44	1.3%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	44	1.3%	100.0%
	Necker Bay Lake	0	0.0%	0.0%	58	1.7%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	58	1.7%	100.0%
	Stuk River	3,038	87.7%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	3,038	87.7%	100.0%

SOURCE: Alaska Department of Fish and Game, Division of Commercial Fisheries, Subsistence Salmon Permits, 2000

\* Permit Holders may fish more than one location for a resource

**Table 17.**—Estimated salmon harvest by gear, Yakutat, 2000.

Harvest Units		Removed from Commercial Catch		Set Net		Longline		Other		Subsistence Personal Use Methods		Rod and Reel		Any Method	
		Total	HH Mean	Total	HH Mean	Total	HH Mean	Total	HH Mean	Total	HH Mean	Total	HH Mean	Total	HH Mean
Salmon	ea.	1,959	8.4	12,498	53.4	17	0.1	34	0.1	12,548	53.6	1,574	6.7	16,081	68.7
	lbs.	12,760	54.5	69,617	297.5	197	0.8	165	0.7	69,979	299.1	9,590	41.0	92,329	394.6
Chum Salmon	ea.	5	0.0	101	0.4	0	0.0	0	0.0	101	0.4	10	0.0	116	0.5
	lbs.	35	0.2	701	3.0	0	0.0	0	0.0	701	3.0	70	0.3	806	3.5
Coho Salmon	ea.	774	3.3	3,771	16.1	0	0.0	17	0.1	3,788	16.2	901	3.9	5,463	23.4
	lbs.	4,112	17.6	20,024	85.6	0	0.0	89	0.4	20,113	86.0	4,782	20.4	29,008	124.0
Chinook Salmon	ea.	462	2.0	1,633	7.0	17	0.1	0	0.0	1,650	7.1	249	1.1	2,361	10.1
	lbs.	5,420	23.2	19,153	81.9	197	0.8	0	0.0	19,350	82.7	2,922	12.5	27,692	118.3
Pink Salmon	ea.	3	0.0	742	3.2	0	0.0	0	0.0	742	3.2	17	0.1	763	3.3
	lbs.	8	0.0	1,848	7.9	0	0.0	0	0.0	1,848	7.9	42	0.2	1,898	8.1
Sockeye Salmon	ea.	714	3.1	6,251	26.7	0	0.0	17	0.1	6,268	26.8	397	1.7	7,379	31.5
	lbs.	3,185	13.6	27,892	119.2	0	0.0	75	0.3	27,967	119.5	1,773	7.6	32,925	140.7
Unknown Salmon	ea.	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	lbs.	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Survey, 2001.

**Table 18.**—Estimated non-commercial salmon harvest by location and gear, Yakutat, 2000.

Resource	Location	Gill Net			Set Net			Longline			Spear			All Subsistence/Personal Use Methods			Rod and Reel			All Methods		
		Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location
Chum Salmon	All locations	0	0.0%	0.0%	101	90.9%	90.9%	0	0.0%	0.0%	0	0.0%	0.0%	101	90.9%	90.9%	10	9.1%	9.1%	111	100.0%	100.0%
	Akwé River	0	0.0%	0.0%	3	3.0%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	3	3.0%	100.0%	0	0.0%	0.0%	3	3.0%	100.0%
	Alsek River	0	0.0%	0.0%	3	3.0%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	3	3.0%	100.0%	0	0.0%	0.0%	3	3.0%	100.0%
	Dangerous River	0	0.0%	0.0%	2	1.5%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	2	1.5%	100.0%	0	0.0%	0.0%	2	1.5%	100.0%
	East Alsek River	0	0.0%	0.0%	3	3.0%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	3	3.0%	100.0%	0	0.0%	0.0%	3	3.0%	100.0%
	Itallo River	0	0.0%	0.0%	2	1.5%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	2	1.5%	100.0%	0	0.0%	0.0%	2	1.5%	100.0%
	Stuk River	0	0.0%	0.0%	25	22.7%	83.3%	0	0.0%	0.0%	0	0.0%	0.0%	25	22.7%	83.3%	5	4.5%	16.7%	30	27.3%	100.0%
	Yakutat Bay	0	0.0%	0.0%	34	30.3%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	34	30.3%	100.0%	0	0.0%	0.0%	34	30.3%	100.0%
	Unknown	0	0.0%	0.0%	29	25.8%	85.0%	0	0.0%	0.0%	0	0.0%	0.0%	29	25.8%	85.0%	5	4.5%	15.0%	34	30.3%	100.0%
Coho Salmon	All locations	0	0.0%	0.0%	3,771	80.4%	80.4%	0	0.0%	0.0%	17	0.4%	0.4%	3,788	80.8%	80.8%	901	19.2%	19.2%	4,688	100.0%	100.0%
	Ahmiklin River	0	0.0%	0.0%	42	0.9%	48.1%	0	0.0%	0.0%	0	0.0%	0.0%	42	0.9%	48.1%	45	1.0%	51.9%	88	1.9%	100.0%
	Akwé River	0	0.0%	0.0%	82	1.8%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	82	1.8%	100.0%	0	0.0%	0.0%	82	1.8%	100.0%
	Alsek River	0	0.0%	0.0%	12	0.3%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	12	0.3%	100.0%	0	0.0%	0.0%	12	0.3%	100.0%
	Ankau Creek	0	0.0%	0.0%	17	0.4%	20.8%	0	0.0%	0.0%	0	0.0%	0.0%	17	0.4%	20.8%	64	1.4%	79.2%	81	1.7%	100.0%
	Dangerous River	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	8	0.2%	100.0%	8	0.2%	100.0%
	Eske Stream	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	10	0.2%	100.0%	10	0.2%	100.0%
	Itallo Lake	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	8	0.2%	100.0%	8	0.2%	100.0%
	Itallo River	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	42	0.9%	100.0%	42	0.9%	100.0%
	Lost River	0	0.0%	0.0%	7	0.1%	7.7%	0	0.0%	0.0%	0	0.0%	0.0%	7	0.1%	7.7%	81	1.7%	92.3%	88	1.9%	100.0%
	Manby Stream	0	0.0%	0.0%	84	1.8%	96.2%	0	0.0%	0.0%	0	0.0%	0.0%	84	1.8%	96.2%	3	0.1%	3.8%	88	1.9%	100.0%
	Ophir Creek	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	17	0.4%	100.0%	17	0.4%	100.0%	0	0.0%	0.0%	17	0.4%	100.0%
	Stuk River	0	0.0%	0.0%	3,145	67.1%	93.6%	0	0.0%	0.0%	0	0.0%	0.0%	3,145	67.1%	93.6%	214	4.6%	6.4%	3,358	71.6%	100.0%
	Tawah Creek	0	0.0%	0.0%	118	2.5%	43.8%	0	0.0%	0.0%	0	0.0%	0.0%	118	2.5%	43.8%	152	3.2%	56.3%	269	5.7%	100.0%
	Tsu River	0	0.0%	0.0%	42	0.9%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	42	0.9%	100.0%	0	0.0%	0.0%	42	0.9%	100.0%
	Yakutat River	0	0.0%	0.0%	8	0.2%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	8	0.2%	100.0%	0	0.0%	0.0%	8	0.2%	100.0%
	Yakutat Bay	0	0.0%	0.0%	205	4.4%	49.6%	0	0.0%	0.0%	0	0.0%	0.0%	205	4.4%	49.6%	209	4.5%	50.4%	414	8.8%	100.0%
	Yana River	0	0.0%	0.0%	8	0.2%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	8	0.2%	100.0%	0	0.0%	0.0%	8	0.2%	100.0%
	Unknown	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	64	1.4%	100.0%	64	1.4%	100.0%
Chinook Salmon	All locations	0	0.0%	0.0%	1,633	86.0%	86.0%	17	0.9%	0.9%	0	0.0%	0.0%	1,650	86.9%	86.9%	249	13.1%	13.1%	1,899	100.0%	100.0%
	Ahmiklin River	0	0.0%	0.0%	15	0.8%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	15	0.8%	100.0%	0	0.0%	0.0%	15	0.8%	100.0%
	Akwé River	0	0.0%	0.0%	29	1.5%	53.1%	0	0.0%	0.0%	0	0.0%	0.0%	29	1.5%	53.1%	25	1.3%	46.9%	54	2.8%	100.0%
	Alsek River	0	0.0%	0.0%	5	0.3%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	5	0.3%	100.0%	0	0.0%	0.0%	5	0.3%	100.0%
	Ankau Creek	0	0.0%	0.0%	103	5.4%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	103	5.4%	100.0%	0	0.0%	0.0%	103	5.4%	100.0%
	Dangerous River	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	3	0.2%	100.0%	3	0.2%	100.0%
	East Alsek River	0	0.0%	0.0%	5	0.3%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	5	0.3%	100.0%	0	0.0%	0.0%	5	0.3%	100.0%
	Itallo River	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	12	0.6%	100.0%	12	0.6%	100.0%
	Manby Stream	0	0.0%	0.0%	2	0.1%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	2	0.1%	100.0%	0	0.0%	0.0%	2	0.1%	100.0%
	Stuk River	0	0.0%	0.0%	840	44.2%	94.3%	0	0.0%	0.0%	0	0.0%	0.0%	840	44.2%	94.3%	51	2.7%	5.7%	891	46.9%	100.0%
	Yakutat Bay	0	0.0%	0.0%	628	33.1%	78.4%	17	0.9%	2.1%	0	0.0%	0.0%	645	34.0%	80.5%	157	8.2%	19.5%	801	42.2%	100.0%
	Unknown	0	0.0%	0.0%	7	0.4%	80.0%	0	0.0%	0.0%	0	0.0%	0.0%	7	0.4%	80.0%	2	0.1%	20.0%	8	0.4%	100.0%
Pink Salmon	All locations	0	0.0%	0.0%	742	97.8%	97.8%	0	0.0%	0.0%	0	0.0%	0.0%	742	97.8%	97.8%	17	2.2%	2.2%	759	100.0%	100.0%
	Akwé River	0	0.0%	0.0%	12	1.6%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	12	1.6%	100.0%	0	0.0%	0.0%	12	1.6%	100.0%
	Alsek River	0	0.0%	0.0%	2	0.2%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	2	0.2%	100.0%	0	0.0%	0.0%	2	0.2%	100.0%
	Dangerous River	0	0.0%	0.0%	2	0.2%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	2	0.2%	100.0%	0	0.0%	0.0%	2	0.2%	100.0%
	East Alsek River	0	0.0%	0.0%	2	0.2%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	2	0.2%	100.0%	0	0.0%	0.0%	2	0.2%	100.0%
	Itallo River	0	0.0%	0.0%	2	0.2%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	2	0.2%	100.0%	0	0.0%	0.0%	2	0.2%	100.0%
	Stuk River	0	0.0%	0.0%	638	84.0%	99.5%	0	0.0%	0.0%	0	0.0%	0.0%	638	84.0%	99.5%	3	0.4%	0.5%	641	84.5%	100.0%
	Yakutat Bay	0	0.0%	0.0%	62	8.2%	82.2%	0	0.0%	0.0%	0	0.0%	0.0%	62	8.2%	82.2%	13	1.8%	17.8%	76	10.0%	100.0%
	Unknown	0	0.0%	0.0%	24	3.1%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	24	3.1%	100.0%	0	0.0%	0.0%	24	3.1%	100.0%
Sockeye Salmon	All locations	0	0.0%	0.0%	6,251	93.8%	93.8%	0	0.0%	0.0%	17	0.3%	0.3%	6,267	94.0%	94.0%	397	6.0%	6.0%	6,665	100.0%	100.0%
	Ahmiklin River	0	0.0%	0.0%	42	0.6%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	42	0.6%	100.0%	0	0.0%	0.0%	42	0.6%	100.0%
	Akwé River	0	0.0%	0.0%	217	3.3%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	217	3.3%	100.0%	0	0.0%	0.0%	217	3.3%	100.0%
	Alsek River	0	0.0%	0.0%	42	0.6%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	42	0.6%	100.0%	0	0.0%	0.0%	42	0.6%	100.0%
	Dangerous River	0	0.0%	0.0%	126	1.9%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	126	1.9%	100.0%	0	0.0%	0.0%	126	1.9%	100.0%
	East Alsek River	0	0.0%	0.0%	25	0.4%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	25	0.4%	100.0%	0	0.0%	0.0%	25	0.4%	100.0%
	Itallo River	0	0.0%	0.0%	25	0.4%	42.9%	0	0.0%	0.0%	0	0.0%	0.0%	25	0.4%	42.9%	34	0.5%	57.1%	59	0.9%	100.0%
	Lost River	0	0.0%	0.0%	202	3.0%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	202	3.0%	100.0%	0	0.0%	0.0%	202	3.0%	100.0%
	Manby Stream	0	0.0%	0.0%	84	1.3%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	84	1.3%	100.0%	0	0.0%	0.0%	84	1.3%	100.0%
	Ophir Creek	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	17	0.3%	100.0%	17	0.3%	100.0%	0	0.0%	0.0%	17	0.3%	100.0%
	Stuk River	0	0.0%	0.0%	5,180	77.7%	94.1%	0	0.0%	0.0%	0	0.0%	0.0%	5,180	77.7%	94.1%	327	4.9%	5.9%	5,507	82.6%	100.0%
	Tawah Creek	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	7	0.1%	100.0%	7	0.1%	100.0%
	Yakutat Bay	0	0.0%	0.0%	222	3.3%	91.7%	0	0.0%	0.0%	0	0.0%	0.0%	222	3.3%	91.7%	20	0.3%	8.3%	242	3.6%	100.0%
	Unknown	0	0.0%	0.0%	84	1.3%	89.3%	0	0.0%	0.0%	0	0.0%	0.0%	84	1.3%	89.3%	10	0.2%	10.7%	94	1.4%	100.0%

SOURCE: Alaska Department of Fish and Game, Division of

**Table 19.**—Estimated subsistence/personal use permit and household survey salmon harvest and confidence intervals, Yakutat, 2000.

	Subsistence/Personal Use Salmon Permits			Household Surveys	
Permits	Issued	115	Households	Defined	234
	Reports				
	Returned	109		Interviewed	139
Chinook Salmon	Average	8.2	Chinook Salmon	Average	7.1
	Standard Error	1.24		Standard Error	1.08
	Estimated Total	938		Estimated Total	1,650
	95% Confidence Interval (High)	1,002		95% Confidence Interval (High)	1,964
	(Low)	875		(Low)	1,336
Chum Salmon	Average	0.3	Chum Salmon	Average	0.4
	Standard Error	0.18		Standard Error	0.20
	Estimated Total	29		Estimated Total	101
	95% Confidence Interval (High)	38		95% Confidence Interval (High)	160
	(Low)	20		(Low)	42
Coho Salmon	Average	10.4	Coho Salmon	Average	16.2
	Standard Error	6.65		Standard Error	2.98
	Estimated Total	1,197		Estimated Total	3,788
	95% Confidence Interval (High)	1,540		95% Confidence Interval (High)	4,657
	(Low)	855		(Low)	2,918
Pink Salmon	Average	1.4	Pink Salmon	Average	3.2
	Standard Error	0.83		Standard Error	1.16
	Estimated Total	161		Estimated Total	742
	95% Confidence Interval (High)	204		95% Confidence Interval (High)	1,080
	(Low)	118		(Low)	404
Sockeye Salmon	Average	33.8	Sockeye Salmon	Average	26.8
	Standard Error	3.51		Standard Error	3.64
	Estimated Total	3,884		Estimated Total	6,267
	95% Confidence Interval (High)	4,064		95% Confidence Interval (High)	7,331
	(Low)	3,703		(Low)	5,202

**Table 20.**—Matches for Alaska Permanent Fund Dividend applicants, selected Southeast Alaska mailing cities, with 2001 base, 1999-2002 residency years.

Mailing City	1999		2000		2001		2002	
	No. Matched 2001 Applicants	% Matched 2001 Applicants	No. Matched 2001 Applicants	% Matched 2001 Applicants	No. Matched 2001 Applicants	% Matched 2001 Applicants	No. Matched 2001 Applicants	% Matched 2001 Applicants
Angoon	474	83.5%	506	89.1%	568	100.0%	398	70.1%
Hoonah	826	79.3%	921	88.4%	1,042	100.0%	722	69.3%
Kake	607	84.8%	659	92.0%	716	100.0%	580	81.0%
Petersburg	2,762	83.1%	2,971	89.4%	3,322	100.0%	2,500	75.3%
Wrangell	1,961	83.0%	2,139	90.5%	2,364	100.0%	1,742	73.7%
Yakutat	504	74.4%	574	84.8%	677	100.0%	493	72.8%

Note: multiple applications may have been submitted under the same name and address.

**Table 21.**—Reported subsistence/personal use salmon permit harvest by location and gear, Angoon residents, 2001.

		Gill Net			Dip Net			Purse Seine			Beach Seine			Gaff			Other/Unknown Methods			All Methods		
		Rep. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Rep. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Rep. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Rep. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Rep. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Rep. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Rep. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location
Coho Salmon	All locations	15	7.2%	7.2%	0	0.0%	0.0%	47	22.6%	22.6%	146	70.2%	70.2%	0	0.0%	0.0%	0	0.0%	0.0%	208	100.0%	100.0%
	Hasselborg River	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	68	32.7%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	68	32.7%	100.0%
	Kanalku Bay	15	7.2%	15.8%	0	0.0%	0.0%	47	22.6%	49.5%	33	15.9%	34.7%	0	0.0%	0.0%	0	0.0%	0.0%	95	45.7%	100.0%
	Kook Lake Outlet	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	30	14.4%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	30	14.4%	100.0%
	Salt Chuck-Security	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	15	7.2%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	15	7.2%	100.0%
Chum Salmon	All Locations	0	0.0%	0.0%	1	3.0%	3.0%	0	0.0%	0.0%	14	42.4%	42.4%	0	0.0%	0.0%	18	54.5%	54.5%	33	100.0%	100.0%
	Kanalku Bay	0	0.0%	0.0%	1	3.0%	5.3%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	18	54.5%	94.7%	19	57.6%	100.0%
	Sitkoh Lake Creek	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	14	42.4%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	14	42.4%	100.0%
Chinook	All Locations	1	100.0%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	1	100.0%	100.0%
	Taku River	1	100.0%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	1	100.0%	100.0%
Pink Salmon	All Locations	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	63	100.0%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	63	100.0%	100.0%
	Kanalku Bay	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	34	54.0%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	34	54.0%	100.0%
	Sitkoh Lake Creek	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	29	46.0%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	29	46.0%	100.0%
Sockeye Salmon	All Locations	95	8.5%	8.5%	80	7.1%	7.1%	160	14.3%	14.3%	712	63.5%	63.5%	0	0.0%	0.0%	75	6.7%	6.7%	1,122	100.0%	100.0%
	Chaik Bay Creek	50	4.5%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	50	4.5%	100.0%
	Hasselborg River	0	0.0%	0.0%	0	0.0%	0.0%	20	1.8%	50.0%	20	1.8%	50.0%	0	0.0%	0.0%	0	0.0%	0.0%	40	3.6%	100.0%
	Kanalku Bay	25	2.2%	2.9%	80	7.1%	9.2%	140	12.5%	16.1%	550	49.0%	63.2%	0	0.0%	0.0%	75	6.7%	8.6%	870	77.5%	100.0%
	Kanalku Lake Creek	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	25	2.2%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	25	2.2%	100.0%
	Kook Lake Outlet	10	0.9%	22.2%	0	0.0%	0.0%	0	0.0%	0.0%	35	3.1%	77.8%	0	0.0%	0.0%	0	0.0%	0.0%	45	4.0%	100.0%
	Sitkoh Lake Creek	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	82	7.3%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	82	7.3%	100.0%
	Taku River	10	0.9%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	10	0.9%	100.0%

SOURCE: Alaska Department of Fish and Game, Division of Commercial Fisheries, Subsistence Salmon Permits, 2001.

Note: permit holders may fish more than one location for a resource.

**Table 22.**—Estimated subsistence/personal use salmon permit harvest by location and gear, Angoon residents, 2001. (Permit Holders may fish more than one location for a resource.)

		Gill Net			Dip Net			Purse Seine			Beach Seine			Gaff			Other/Unknown Methods			All Methods		
		Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location
Coho Salmon	All locations	29	7.1%	7.1%	0	0.0%	0.0%	93	22.7%	22.7%	287	70.2%	70.2%	0	0.0%	0.0%	0	0.0%	0.0%	409	100.0%	100.0%
	Hasselborg River	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	134	32.8%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	134	32.8%	100.0%
	Kanaiaku Bay	29	7.1%	15.5%	0	0.0%	0.0%	93	22.7%	49.7%	65	15.9%	34.8%	0	0.0%	0.0%	0	0.0%	0.0%	187	45.7%	100.0%
	Kook Lake Outlet	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	59	14.4%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	59	14.4%	100.0%
	Salt Chuck-Security	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	29	7.1%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	29	7.1%	100.0%
Chum Salmon	All Locations	0	0.0%	0.0%	1	1.6%	1.6%	0	0.0%	0.0%	27	42.9%	42.9%	0	0.0%	0.0%	35	55.6%	55.6%	63	100.0%	100.0%
	Kanaiaku Bay	0	0.0%	0.0%	1	1.6%	2.8%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	35	55.6%	97.2%	36	57.1%	100.0%
	Sitkoh Lake Creek	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	27	42.9%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	27	42.9%	100.0%
Chinook Salmon	All Locations	1	100.0%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	1	100.0%	100.0%
	Taku River	1	100.0%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	1	100.0%	100.0%
Pink Salmon	All Locations	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	124	100.0%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	124	100.0%	100.0%
	Kanaiaku Bay	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	67	54.0%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	67	54.0%	100.0%
	Sitkoh Lake Creek	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	57	46.0%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	57	46.0%	100.0%
Sockeye Salmon	All Locations	186	8.4%	8.4%	158	7.1%	7.1%	316	14.3%	14.3%	1,409	63.6%	63.6%	0	0.0%	0.0%	148	6.7%	6.7%	2,217	100.0%	100.0%
	Chaik Bay Creek	99	4.5%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	99	4.5%	100.0%
	Hasselborg River	0	0.0%	0.0%	0	0.0%	0.0%	39	1.8%	50.0%	39	1.8%	50.0%	0	0.0%	0.0%	0	0.0%	0.0%	78	3.5%	100.0%
	Kanaiaku Bay	49	2.2%	2.8%	158	7.1%	9.2%	277	12.5%	16.1%	1,090	49.2%	63.3%	0	0.0%	0.0%	148	6.7%	8.6%	1,722	77.7%	100.0%
	Kanaiaku Lake Creek	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	49	2.2%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	49	2.2%	100.0%
	Kook Lake Outlet	19	0.9%	21.6%	0	0.0%	0.0%	0	0.0%	0.0%	69	3.1%	78.4%	0	0.0%	0.0%	0	0.0%	0.0%	88	4.0%	100.0%
	Sitkoh Lake Creek	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	162	7.3%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	162	7.3%	100.0%
	Taku River	19	0.9%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	19	0.9%	100.0%

SOURCE: Alaska Department of Fish and Game, Division of Commercial Fisheries, Subsistence Salmon Permits, 2001.

**Table 23.**—Estimated non-commercial salmon harvest by gear, Angoon, 2001.

Species	Harvest Unit	Gill Net		Beach Seine		Dip Net		Gaff		Purse Seine		Subsistence/Personal Use Methods		Rod and Reel		Any Method	
		Total	HH Mean	Total	HH Mean	Total	HH Mean	Total	HH Mean	Total	HH Mean	Total	HH Mean	Total	HH Mean	Total	HH Mean
Salmon	ea.	0	0.0	2,178	38.2	101	1.8	0	0.0	0	0.0	2,279	40.0	136	2.4	2,415	42.4
	lbs.	0	0.0	10,020	175.8	460	8.1	0	0.0	0	0.0	10,480	183.9	728	12.8	11,209	196.6
Chum Salmon	ea.	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	lbs.	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Coho Salmon	ea.	0	0.0	309	5.4	0	0.0	0	0.0	0	0.0	309	5.4	130	2.3	439	7.7
	lbs.	0	0.0	1,559	27.3	0	0.0	0	0.0	0	0.0	1,559	27.3	654	11.5	2,213	38.8
Chinook Salmon	ea.	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	6	0.1	6	0.1
	lbs.	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	74	1.3	74	1.3
Pink Salmon	ea.	0	0.0	36	0.6	0	0.0	0	0.0	0	0.0	36	0.6	0	0.0	36	0.6
	lbs.	0	0.0	87	1.5	0	0.0	0	0.0	0	0.0	87	1.5	0	0.0	87	1.5
Sockeye Salmon	ea.	0	0.0	1,832	32.1	101	1.8	0	0.0	0	0.0	1,933	33.9	0	0.0	1,933	33.9
	lbs.	0	0.0	8,374	146.9	460	8.1	0	0.0	0	0.0	8,834	155.0	0	0.0	8,834	155.0
Unknown Salmon	ea.	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	lbs.	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0

Source: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 2002



**Table 24.**—Estimated non-commercial salmon harvest by location and gear, Angoon, 2001.

Resource	Location	Gill Net			Dip Net			Purse Seine			Beach Seine			Gaff			All Subsistence/Personal Use Methods			Rod and Reel			All Methods		
		Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location
Coho Salmon	All locations	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	309	70.4%	70.4%	0	0.0%	0.0%	309	70.4%	70.4%	130	29.6%	29.6%	439	100.0%	100.0%
	Kanalku Bay	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	24	5.5%	100.0%	0	0.0%	0.0%	24	5.5%	100.0%	0	0.0%	0.0%	24	5.5%	100.0%
	Mitchell Bay	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	285	64.9%	100.0%	0	0.0%	0.0%	285	64.9%	100.0%	0	0.0%	0.0%	285	64.9%	100.0%
	Morse Reef	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	61	13.8%	100.0%	61	13.8%	100.0%
	Other	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	53	12.2%	100.0%	53	12.2%	100.0%
	Sitkoh Bay	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	16	3.6%	100.0%	16	3.6%	100.0%
Chinook Salmon	All locations	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	6	100.0%	100.0%	6	100.0%	100.0%
	Hood Bay	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	6	100.0%	100.0%	6	100.0%	100.0%
Pink Salmon	All locations	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	36	100.0%	100.0%	0	0.0%	0.0%	36	100.0%	100.0%	0	0.0%	0.0%	36	100.0%	100.0%
	Kanalku Bay	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	36	100.0%	100.0%	0	0.0%	0.0%	36	100.0%	100.0%	0	0.0%	0.0%	36	100.0%	100.0%
Sockeye Salmon	All locations	0	0.0%	0.0%	101	5.2%	5.2%	0	0.0%	0.0%	1,832	94.8%	94.8%	0	0.0%	0.0%	1,933	100.0%	100.0%	0	0.0%	0.0%	1,933	100.0%	100.0%
	Basket Bay	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	15	0.8%	100.0%	0	0.0%	0.0%	15	0.8%	100.0%	0	0.0%	0.0%	15	0.8%	100.0%
	Kanalku Bay	0	0.0%	0.0%	101	5.2%	5.9%	0	0.0%	0.0%	1,606	83.1%	94.1%	0	0.0%	0.0%	1,706	88.3%	100.0%	0	0.0%	0.0%	1,706	88.3%	100.0%
	Mitchell Bay	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	85	4.4%	100.0%	0	0.0%	0.0%	85	4.4%	100.0%	0	0.0%	0.0%	85	4.4%	100.0%
	Sitkoh Bay	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	79	4.1%	100.0%	0	0.0%	0.0%	79	4.1%	100.0%	0	0.0%	0.0%	79	4.1%	100.0%
	Sitkoh Lake Creek	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	49	2.5%	100.0%	0	0.0%	0.0%	49	2.5%	100.0%	0	0.0%	0.0%	49	2.5%	100.0%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Survey, 2002

\* Households may fish more than one location for a resource

**Table 25.**—Estimated subsistence/personal use permit and household survey salmon harvest and confidence intervals, Angoon, 2001.

	Subsistence/Personal Use Salmon Permits			Household Surveys	
Permits	Issued	117	Household s	Defined	57
	Reports Returned	59		Interviewed	47
Chinook Salmon	Average	0.0	Chinook Salmon	Average	0.0
	Standard Error	0.02		Standard Error	0.00
	Estimated Total	1		Estimated Total	0
	95% Confidence Interval (High)	4		95% Confidence Interval (High)	0
	(Low)	-2		(Low)	0
Chum Salmon	Average	0.6	Chum Salmon	Average	0.0
	Standard Error	0.39		Standard Error	0.00
	Estimated Total	63		Estimated Total	0
	95% Confidence Interval (High)	126		95% Confidence Interval (High)	0
	(Low)	0		(Low)	0
Coho Salmon	Average	3.6	Coho Salmon	Average	5.4
	Standard Error	1.09		Standard Error	2.30
	Estimated Total	409		Estimated Total	309
	95% Confidence Interval (High)	585		95% Confidence Interval (High)	417
	(Low)	233		(Low)	202
Pink Salmon	Average	1.1	Pink Salmon	Average	0.6
	Standard Error	0.56		Standard Error	0.47
	Estimated Total	124		Estimated Total	36
	95% Confidence Interval (High)	214		95% Confidence Interval (High)	58
	(Low)	34		(Low)	14
Sockeye Salmon	Average	19.3	Sockeye Salmon	Average	33.9
	Standard Error	2.70		Standard Error	4.29
	Estimated Total	2,217		Estimated Total	1,933
	95% Confidence Interval (High)	2,653		95% Confidence Interval (High)	2,134
	(Low)	1,781		(Low)	1,733

**Table 26.**—Reported subsistence/personal use salmon permit harvest by location and gear, Hoonah residents, 2001.

Location	Gill Net			Dip Net			Purse Seine			Beach Seine			Gaff			Other/Unknown Methods			All Methods		
	Rep. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Rep. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Rep. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Rep. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Rep. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Rep. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Rep. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location
Coho Salmon																					
All locations	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	20	20.4%	20.4%	0	0.0%	0.0%	78	79.6%	79.6%	98	100.0%	100.0%
Cartina Creek	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	24	24.5%	100.0%	24	24.5%	100.0%
Kook Lake Outlet	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	20	20.4%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	20	20.4%	100.0%
Neva Creek	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	30	30.6%	100.0%	30	30.6%	100.0%
Spasski Creek	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	24	24.5%	100.0%	24	24.5%	100.0%
Chum Salmon																					
All Locations	0	0.0%	0.0%	0	0.0%	0.0%	100	13.4%	13.4%	32	4.3%	4.3%	0	0.0%	0.0%	614	82.3%	82.3%	746	100.0%	100.0%
Bear Ok Stephens Pas	0	0.0%	0.0%	0	0.0%	0.0%	100	13.4%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	100	13.4%	100.0%
Excursion River	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	600	80.4%	100.0%	600	80.4%	100.0%
Game Creek	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	2	0.3%	100.0%	2	0.3%	100.0%
Kanalku Bay	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	17	2.3%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	17	2.3%	100.0%
Pavlof River	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	15	2.0%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	15	2.0%	100.0%
Spasski Creek	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	2	0.3%	100.0%	2	0.3%	100.0%
Whitestone East Side	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	10	1.3%	100.0%	10	1.3%	100.0%
Pink Salmon																					
All Locations	11	23.9%	23.9%	0	0.0%	0.0%	0	0.0%	0.0%	10	21.7%	21.7%	0	0.0%	0.0%	25	54.3%	54.3%	46	100.0%	100.0%
Game Creek	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	2	4.3%	100.0%	2	4.3%	100.0%
Hoktaheen Cove	11	23.9%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	11	23.9%	100.0%
Humpback Creek	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	20	43.5%	100.0%	20	43.5%	100.0%
Pavlof River	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	10	21.7%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	10	21.7%	100.0%
Spasski Creek	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	3	6.5%	100.0%	3	6.5%	100.0%
Sockeye Salmon																					
All Locations	468	59.1%	59.1%	31	3.9%	3.9%	0	0.0%	0.0%	203	25.6%	25.6%	0	0.0%	0.0%	90	11.4%	11.4%	792	100.0%	100.0%
Admiralty Creek	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	20	2.5%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	20	2.5%	100.0%
Dundas River	40	5.1%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	40	5.1%	100.0%
Hoktaheen Cove	300	37.9%	58.5%	0	0.0%	0.0%	0	0.0%	0.0%	173	21.8%	33.7%	0	0.0%	0.0%	40	5.1%	7.8%	513	64.8%	100.0%
Kook Lake Outlet	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	10	1.3%	66.7%	0	0.0%	0.0%	5	0.6%	33.3%	15	1.9%	100.0%
Neva Creek	128	16.2%	86.5%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	20	2.5%	13.5%	148	18.7%	100.0%
Spasski Creek	0	0.0%	0.0%	6	0.8%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	6	0.8%	100.0%
Surge Bay	0	0.0%	0.0%	25	3.2%	50.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	25	3.2%	50.0%	50	6.3%	100.0%

SOURCE: Alaska Department of Fish and Game, Division of Commercial Fisheries, Subsistence Salmon Permits, 2001.

Note: permit holders may fish more than one location for a resource.

**Table 27.**—Estimated subsistence/personal use salmon permit harvest by location and gear, Hoonah residents, 2001.

Location	Gill Net			Dip Net			Purse Seine			Beach Seine			Gaff			Other/Unknown Methods			All Methods		
	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location
Coho Salmon																					
All locations	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	30	20.4%	20.4%	0	0.0%	0.0%	117	79.6%	79.6%	147	100.0%	100.0%
Gartina Creek	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	36	24.5%	100.0%	36	24.5%	100.0%
Kook Lake Outlet	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	30	20.4%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	30	20.4%	100.0%
Neva Creek	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	45	30.6%	100.0%	45	30.6%	100.0%
Spasski Creek	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	36	24.5%	100.0%	36	24.5%	100.0%
Chum Salmon																					
All Locations	0	0.0%	0.0%	0	0.0%	0.0%	151	13.4%	13.4%	47	4.2%	4.2%	0	0.0%	0.0%	930	82.4%	82.4%	1,128	100.0%	100.0%
Bear Ck Stephens Pas	0	0.0%	0.0%	0	0.0%	0.0%	151	13.4%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	151	13.4%	100.0%
Excursion River	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	909	80.6%	100.0%	909	80.6%	100.0%
Game Creek	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	3	0.3%	100.0%	3	0.3%	100.0%
Kanalku Bay	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	25	2.2%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	25	2.2%	100.0%
Pavlof River	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	22	2.0%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	22	2.0%	100.0%
Spasski Creek	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	3	0.3%	100.0%	3	0.3%	100.0%
Whitestone East Side	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	15	1.3%	100.0%	15	1.3%	100.0%
Pink Salmon																					
All locations	16	23.5%	23.5%	0	0.0%	0.0%	0	0.0%	0.0%	15	22.1%	22.1%	0	0.0%	0.0%	37	54.4%	54.4%	68	100.0%	100.0%
Game Creek	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	3	4.4%	100.0%	3	4.4%	100.0%
Hoktaheen Cove	16	23.5%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	16	23.5%	100.0%
Humpback Creek	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	30	44.1%	100.0%	30	44.1%	100.0%
Pavlof River	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	15	22.1%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	15	22.1%	100.0%
Spasski Creek	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	4	5.9%	100.0%	4	5.9%	100.0%
Sockeye Salmon																					
All locations	706	59.2%	59.2%	46	3.9%	3.9%	0	0.0%	0.0%	307	25.7%	25.7%	0	0.0%	0.0%	134	11.2%	11.2%	1,193	100.0%	100.0%
Admiralty Creek	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	30	2.5%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	30	2.5%	100.0%
Dundas River	60	5.0%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	60	5.0%	100.0%
Hoktaheen Cove	453	38.0%	58.5%	0	0.0%	0.0%	0	0.0%	0.0%	262	22.0%	33.8%	0	0.0%	0.0%	60	5.0%	7.7%	775	65.0%	100.0%
Kook Lake Outlet	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	15	1.3%	68.2%	0	0.0%	0.0%	7	0.6%	31.8%	22	1.8%	100.0%
Neva Creek	193	16.2%	86.5%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	30	2.5%	13.5%	223	18.7%	100.0%
Spasski Creek	0	0.0%	0.0%	9	0.8%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	9	0.8%	100.0%
Surge Bay	0	0.0%	0.0%	37	3.1%	50.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	37	3.1%	50.0%	74	6.2%	100.0%

SOURCE: Alaska Department of Fish and Game, Division of Commercial Fisheries, Subsistence Salmon Permits, 2001.

Note: permit holders may fish more than one location for a resource.

**Table 28.**—Estimated non-commercial salmon harvest by gear, Hoonah, 2001.

Species	Harvest Unit	Gill Net		Beach Seine		Dip Net		Gaff		Purse Seine		Subsistence/Personal Use Methods		Rod and Reel		Any Method	
		HH		HH		HH		HH		HH		HH		HH		HH	
		Total	Mean	Total	Mean	Total	Mean	Total	Mean	Total	Mean	Total	Mean	Total	Mean	Total	Mean
Salmon	ea.	2,475	19.5	853	6.7	0	0.0	95	0.8	992	7.8	4,416	34.8	1,278	10.1	5,694	44.8
	lbs.	12,942	101.9	3,978	31.3	0	0.0	417	3.3	6,509	51.3	23,847	187.8	6,973	54.9	30,819	242.7
Chum Salmon	ea.	926	7.3	40	0.3	0	0.0	20	0.2	992	7.8	1,978	15.6	81	0.6	2,058	16.2
	lbs.	6,075	47.8	260	2.1	0	0.0	130	1.0	6,509	51.3	12,974	102.2	529	4.2	13,503	106.3
Coho Salmon	ea.	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1,024	8.1	1,024	8.1
	lbs.	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	5,161	40.6	5,161	40.6
Chinook Salmon	ea.	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	87	0.7	87	0.7
	lbs.	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1,070	8.4	1,070	8.4
Pink Salmon	ea.	98	0.8	0	0.0	0	0.0	26	0.2	0	0.0	124	1.0	83	0.7	208	1.6
	lbs.	235	1.9	0	0.0	0	0.0	64	0.5	0	0.0	298	2.4	200	1.6	498	3.9
Sockeye Salmon	ea.	1,451	11.4	814	6.4	0	0.0	49	0.4	0	0.0	2,314	18.2	3	0.0	2,316	18.2
	lbs.	6,632	52.2	3,718	29.3	0	0.0	224	1.8	0	0.0	10,574	83.3	12	0.1	10,586	83.4
Unknown Salmon	ea.	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0.0	0.0	0	0.0	0	0.0
	lbs.	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0.0	0.0	0	0.0	0	0.0

**Table 29.**—Estimated non-commercial salmon harvest by location and gear, Hoonah, 2001.

		Gill Net			Dip Net			Purse Seine			Beach Seine			Gaff			All Subsistence/Personal Use Methods			Rod and Reel			All Methods		
			% of Resource Total Harvest for	% of Resource Total Harvest for		% of Resource Total Harvest for	% of Resource Total Harvest for		% of Resource Total Harvest for	% of Resource Total Harvest for		% of Resource Total Harvest for	% of Resource Total Harvest for		% of Resource Total Harvest for	% of Resource Total Harvest for		% of Resource Total Harvest for	% of Resource Total Harvest for		% of Resource Total Harvest for	% of Resource Total Harvest for		% of Resource Total Harvest for	% of Resource Total Harvest for
Resource	Location	Est. Harvest	% of Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Resource	% of Resource Total Harvest for Location
Chum Salmon	All locations	926	45.0%	45.0%	0	0.0%	0.0%	992	48.2%	48.2%	40	1.9%	1.9%	20	1.0%	1.0%	1,978	96.1%	96.1%	81	3.9%	3.9%	2,058	100.0%	100.0%
	Freshwater Bay	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	40	1.9%	61.2%	0	0.0%	0.0%	40	1.9%	61.2%	25	1.2%	38.8%	65	3.1%	100.0%
	Icy Straight/Point																								
	Sophia Area	926	45.0%	97.6%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	926	45.0%	97.6%	22	1.1%	2.4%	949	46.1%	100.0%
	Spasskii Creek	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	20	1.0%	75.0%	20	1.0%	75.0%	7	0.3%	25.0%	26	1.3%	100.0%
	Game Creek	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	26	1.3%	100.0%	26	1.3%	100.0%
	Excursion Inlet	0	0.0%	0.0%	0	0.0%	0.0%	992	48.2%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	992	48.2%	100.0%	0	0.0%	0.0%	992	48.2%	100.0%
Coho Salmon	All locations	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	1,024	100.0%	100.0%	1,024	100.0%	100.0%
	Bear Creek	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	32	3.1%	100.0%	32	3.1%	100.0%
	Freshwater Bay	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	40	3.9%	100.0%	40	3.9%	100.0%
	Game Creek	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	66	6.5%	100.0%	66	6.5%	100.0%
	Icy Straight/Point																								
	Sophia Area	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	278	27.1%	100.0%	278	27.1%	100.0%
	Neka River	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	529	51.7%	100.0%	529	51.7%	100.0%
	Spasskii Creek	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	79	7.8%	100.0%	79	7.8%	100.0%
Chinook Salmon	All locations	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	87	100.0%	100.0%	87	100.0%	100.0%
	Other	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	8	9.1%	100.0%	8	9.1%	100.0%
	Icy Straight/Point																								
	Sophia Area	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	79	90.9%	100.0%	79	90.9%	100.0%
Pink Salmon	All locations	98	47.1%	47.1%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	26	12.7%	12.7%	124	59.9%	59.9%	83	40.1%	40.1%	208	100.0%	100.0%
	Bear Creek	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	26	12.7%	100.0%	26	12.7%	100.0%	0	0.0%	0.0%	26	12.7%	100.0%
	Freshwater Bay	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	13	6.4%	100.0%	13	6.4%	100.0%
	Game Creek	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	13	6.4%	100.0%	13	6.4%	100.0%
	Hoktaheen Cove	32	15.3%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	32	15.3%	100.0%	0	0.0%	0.0%	32	15.3%	100.0%
	Icy Straight/Point																								
	Sophia Area	66	31.8%	56.8%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	66	31.8%	56.8%	50	24.2%	43.2%	116	56.1%	100.0%
	Spasskii Creek	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	7	3.2%	100.0%	7	3.2%	100.0%
Sockeye Salmon	All locations	1,451	62.6%	62.6%	0	0.0%	0.0%	0	0.0%	0.0%	814	35.1%	35.1%	49	2.1%	2.1%	2,314	99.9%	99.9%	3	0.1%	0.1%	2,316	100.0%	100.0%
	Hoktaheen Cove	1,310	56.5%	73.0%	0	0.0%	0.0%	0	0.0%	0.0%	470	20.3%	26.2%	16	0.7%	0.9%	1,795	77.5%	100.0%	0	0.0%	0.0%	1,795	77.5%	100.0%
	Icy Straight/Point																								
	Sophia Area	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	3	0.1%	100.0%	3	0.1%	100.0%
	Neka River	89	3.8%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	89	3.8%	100.0%	0	0.0%	0.0%	89	3.8%	100.0%
	Neva Creek	13	0.6%	5.1%	0	0.0%	0.0%	0	0.0%	0.0%	212	9.1%	82.1%	33	1.4%	12.8%	258	11.1%	100.0%	0	0.0%	0.0%	258	11.1%	100.0%
	Other	13	0.6%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	13	0.6%	100.0%	0	0.0%	0.0%	13	0.6%	100.0%
	Surge Bay	26	1.1%	16.7%	0	0.0%	0.0%	0	0.0%	0.0%	132	5.7%	83.3%	0	0.0%	0.0%	159	6.9%	100.0%	0	0.0%	0.0%	159	6.9%	100.0%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Survey, 2002

\* Households may fish more than one location for a resource

**Table 30.**—Estimated subsistence/personal use permit and household survey salmon harvest and confidence intervals, Hoonah, 2001.

	Subsistence/Personal Use Salmon Permits			Household Surveys	
Permits	Issued	151	Households	Defined	127
	Reports Returned	100		Interviewed	96
Chinook Salmon	Average	0.0	Chinook Salmon	Average	0.0
	Standard Error	0.00		Standard Error	0.00
	Estimated Total	0		Estimated Total	0
	95% Confidence Interval (High)	0		95% Confidence Interval (High)	0
	(Low)	0		(Low)	0
Chum Salmon	Average	7.5	Chum Salmon	Average	15.6
	Standard Error	6.07		Standard Error	10.63
	Estimated Total	1,128		Estimated Total	1,978
	95% Confidence Interval (High)	2,172		95% Confidence Interval (High)	3,285
	(Low)	84		(Low)	671
Coho Salmon	Average	1.0	Coho Salmon	Average	0.0
	Standard Error	0.44		Standard Error	0.00
	Estimated Total	147		Estimated Total	0
	95% Confidence Interval (High)	223		95% Confidence Interval (High)	0
	(Low)	71		(Low)	0
Pink Salmon	Average	0.5	Pink Salmon	Average	1.0
	Standard Error	0.24		Standard Error	0.61
	Estimated Total	68		Estimated Total	124
	95% Confidence Interval (High)	109		95% Confidence Interval (High)	199
	(Low)	27		(Low)	49
Sockeye Salmon	Average	7.9	Sockeye Salmon	Average	18.2
	Standard Error	1.72		Standard Error	8.00
	Estimated Total	1,193		Estimated Total	2,314
	95% Confidence Interval (High)	1,488		95% Confidence Interval (High)	3,297
	(Low)	898		(Low)	1,330

**Table 31.**—Reported subsistence/personal use salmon permit harvest by location and gear, Kake residents, 2001.

Location		Gill Net			Dip Net			Purse Seine			Beach Seine			Gaff			Other/Unknown Methods			All Methods		
		Rep. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Rep. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Rep. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Rep. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Rep. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Rep. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Rep. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location
Coho Salmon	All Locations	17	85.0%	85.0%	0	0.0%	0.0%	0	0.0%	0.0%	2	10.0%	10.0%	0	0.0%	0.0%	1	5.0%	5.0%	20	100.0%	100.0%
	Crystal Creek	12	60.0%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	12	60.0%	100.0%
	Falls Ck Baranof Is	5	25.0%	71.4%	0	0.0%	0.0%	0	0.0%	0.0%	2	10.0%	28.6%	0	0.0%	0.0%	0	0.0%	0.0%	7	35.0%	100.0%
	Point White Creek	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	1	5.0%	100.0%	1	5.0%	100.0%
Chum Salmon	All Locations	61	72.6%	72.6%	0	0.0%	0.0%	0	0.0%	0.0%	23	27.4%	27.4%	0	0.0%	0.0%	0	0.0%	0.0%	84	100.0%	100.0%
	Alecks Creek	4	4.8%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	4	4.8%	100.0%
	Falls Ck Baranof Is	52	61.9%	94.5%	0	0.0%	0.0%	0	0.0%	0.0%	3	3.6%	5.5%	0	0.0%	0.0%	0	0.0%	0.0%	55	65.5%	100.0%
	Gut Bay Head	5	6.0%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	5	6.0%	100.0%
	Salt Chuck-Security	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	20	23.8%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	20	23.8%	100.0%
Chinook Salmon	All Locations	6	30.0%	75.0%	0	0.0%	0.0%	0	0.0%	0.0%	2	10.0%	25.0%	0	0.0%	0.0%	0	0.0%	0.0%	8	40.0%	100.0%
	Falls Ck Baranof Is	6	30.0%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	6	30.0%	100.0%
	Gut Bay Head	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	2	10.0%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	2	10.0%	100.0%
Pink Salmon	All Locations	12	16.7%	16.7%	0	0.0%	0.0%	0	0.0%	0.0%	25	34.7%	34.7%	0	0.0%	0.0%	35	48.6%	48.6%	72	100.0%	100.0%
	Falls Ck Baranof Is	12	16.7%	32.4%	0	0.0%	0.0%	0	0.0%	0.0%	25	34.7%	67.6%	0	0.0%	0.0%	0	0.0%	0.0%	37	51.4%	100.0%
	Point White Creek	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	35	48.6%	100.0%	35	48.6%	100.0%
Sockeye Salmon	All Locations	1,078	52.9%	52.9%	0	0.0%	0.0%	0	0.0%	0.0%	958	47.1%	47.1%	0	0.0%	0.0%	0	0.0%	0.0%	2,036	100.0%	100.0%
	Alecks Creek	120	5.9%	82.8%	0	0.0%	0.0%	0	0.0%	0.0%	25	1.2%	17.2%	0	0.0%	0.0%	0	0.0%	0.0%	145	7.1%	100.0%
	Falls Ck Baranof Is	506	24.9%	40.8%	0	0.0%	0.0%	0	0.0%	0.0%	734	36.1%	59.2%	0	0.0%	0.0%	0	0.0%	0.0%	1,240	60.9%	100.0%
	Gut Bay Head	398	19.5%	71.5%	0	0.0%	0.0%	0	0.0%	0.0%	159	7.8%	28.5%	0	0.0%	0.0%	0	0.0%	0.0%	557	27.4%	100.0%
	Kutlaku Creek	54	2.7%	57.4%	0	0.0%	0.0%	0	0.0%	0.0%	40	2.0%	42.6%	0	0.0%	0.0%	0	0.0%	0.0%	94	4.6%	100.0%

SOURCE: Alaska Department of Fish and Game, Division of Commercial Fisheries, Subsistence Salmon Permits, 2001

\* Permit Holders may fish more than one location for a resource



**Table 32.**—Estimated subsistence/personal use salmon permit harvest by location and gear, Kake residents, 2001.

		Gill Net			Dip Net			Purse Seine			Beach Seine			Gaff			Other/Unknown Methods			All Methods		
		Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location
Coho Salmon	All locations	17	85.0%	85.0%	0	0.0%	0.0%	0	0.0%	0.0%	2	10.0%	10.0%	0	0.0%	0.0%	1	5.0%	5.0%	20	100.0%	100.0%
	Crystal Creek	12	60.0%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	12	60.0%	100.0%
	Falls Ck Baranof Is	5	25.0%	71.4%	0	0.0%	0.0%	0	0.0%	0.0%	2	10.0%	28.6%	0	0.0%	0.0%	0	0.0%	0.0%	7	35.0%	100.0%
	Point White Creek	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	1	5.0%	100.0%	1	5.0%	100.0%
Chum Salmon	All Locations	63	73.3%	73.3%	0	0.0%	0.0%	0	0.0%	0.0%	23	26.7%	26.7%	0	0.0%	0.0%	0	0.0%	0.0%	86	100.0%	100.0%
	Alecks Creek	4	4.7%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	4	4.7%	100.0%
	Falls Ck Baranof Is	54	62.8%	94.7%	0	0.0%	0.0%	0	0.0%	0.0%	3	3.5%	5.3%	0	0.0%	0.0%	0	0.0%	0.0%	57	66.3%	100.0%
	Gut Bay Head	5	5.8%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	5	5.8%	100.0%
	Salt Chuck-Security	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	20	23.3%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	20	23.3%	100.0%
Chinook Salmon	All Locations	6	30.0%	75.0%	0	0.0%	0.0%	0	0.0%	0.0%	2	10.0%	25.0%	0	0.0%	0.0%	0	0.0%	0.0%	8	40.0%	100.0%
	Falls Ck Baranof Is	6	30.0%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	6	30.0%	100.0%
	Gut Bay Head	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	2	10.0%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	2	10.0%	100.0%
Pink Salmon	All Locations	12	16.2%	16.2%	0	0.0%	0.0%	0	0.0%	0.0%	26	35.1%	35.1%	0	0.0%	0.0%	36	48.6%	48.6%	74	100.0%	100.0%
	Falls Ck Baranof Is	12	16.2%	31.6%	0	0.0%	0.0%	0	0.0%	0.0%	26	35.1%	68.4%	0	0.0%	0.0%	0	0.0%	0.0%	38	51.4%	100.0%
	Point White Creek	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	36	48.6%	100.0%	36	48.6%	100.0%
Sockeye Salmon	All Locations	1,121	52.9%	52.9%	0	0.0%	0.0%	0	0.0%	0.0%	999	47.1%	47.1%	0	0.0%	0.0%	0	0.0%	0.0%	2,120	100.0%	100.0%
	Alecks Creek	124	5.8%	82.7%	0	0.0%	0.0%	0	0.0%	0.0%	26	1.2%	17.3%	0	0.0%	0.0%	0	0.0%	0.0%	150	7.1%	100.0%
	Falls Ck Baranof Is	527	24.9%	40.8%	0	0.0%	0.0%	0	0.0%	0.0%	766	36.1%	59.2%	0	0.0%	0.0%	0	0.0%	0.0%	1,293	61.0%	100.0%
	Gut Bay Head	414	19.5%	71.4%	0	0.0%	0.0%	0	0.0%	0.0%	166	7.8%	28.6%	0	0.0%	0.0%	0	0.0%	0.0%	580	27.4%	100.0%
	Kutiaku Creek	56	2.6%	57.7%	0	0.0%	0.0%	0	0.0%	0.0%	41	1.9%	42.3%	0	0.0%	0.0%	0	0.0%	0.0%	97	4.6%	100.0%

SOURCE: Alaska Department of Fish and Game, Division of Commercial Fisheries, Subsistence Salmon Permits, 2001

\* Permit Holders may fish more than one location for a resource

**Table 33.**—Estimated non-commercial salmon harvest by gear, Kake, 2001.

Species	Harvest Unit	Gill Net		Beach Seine		Dip Net		Gaff		Purse Seine		Subsistence/Personal Use Methods		Rod and Reel		Any Method	
		Total	HH Mean	Total	HH Mean	Total	HH Mean	Total	HH Mean	Total	HH Mean	Total	HH Mean	Total	HH Mean	Total	HH Mean
Salmon	ea.	2,895	26.1	1,732	15.6	0	0.0	38	0.3	0	0.0	4,665	42.0	637	5.7	5,302	47.8
	lbs.	13,499	121.6	8,348	75.2	0	0.0	91	0.8	0	0.0	21,939	197.6	4,063	36.6	26,001	234.2
Chum Salmon	ea.	106	1.0	251	2.3	0	0.0	0	0.0	0	0.0	357	3.2	9	0.1	366	3.3
	lbs.	698	6.3	1,646	14.8	0	0.0	0	0.0	0	0.0	2,344	21.1	60	0.5	2,404	21.7
Coho Salmon	ea.	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	398	3.6	398	3.6
	lbs.	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2,008	18.1	2,008	18.1
Chinook Salmon	ea.	9	0.1	0	0.0	0	0.0	0	0.0	0	0.0	9	0.1	141	1.3	151	1.4
	lbs.	112	1.0	0	0.0	0	0.0	0	0.0	0	0.0	112	1.0	1,734	15.6	1,846	16.6
Pink Salmon	ea.	6	0.1	30	0.3	0	0.0	38	0.3	0	0.0	75	0.7	43	0.4	117	1.1
	lbs.	15	0.1	73	0.7	0	0.0	91	0.8	0	0.0	179	1.6	102	0.9	281	2.5
Sockeye Salmon	ea.	2,773	25.0	1,451	13.1	0	0.0	0	0.0	0	0.0	4,224	38.1	23	0.2	4,247	38.3
	lbs.	12,675	114.2	6,629	59.7	0	0.0	0	0.0	0	0.0	19,304	173.9	104	0.9	19,408	174.8
Unknown Salmon	ea.	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	23	0.2	23	0.2
	lbs.	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	55	0.5	55	0.5

Source: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 2002

**Table 34.**—Estimated non-commercial salmon harvest by location and gear, Kake, 2001.

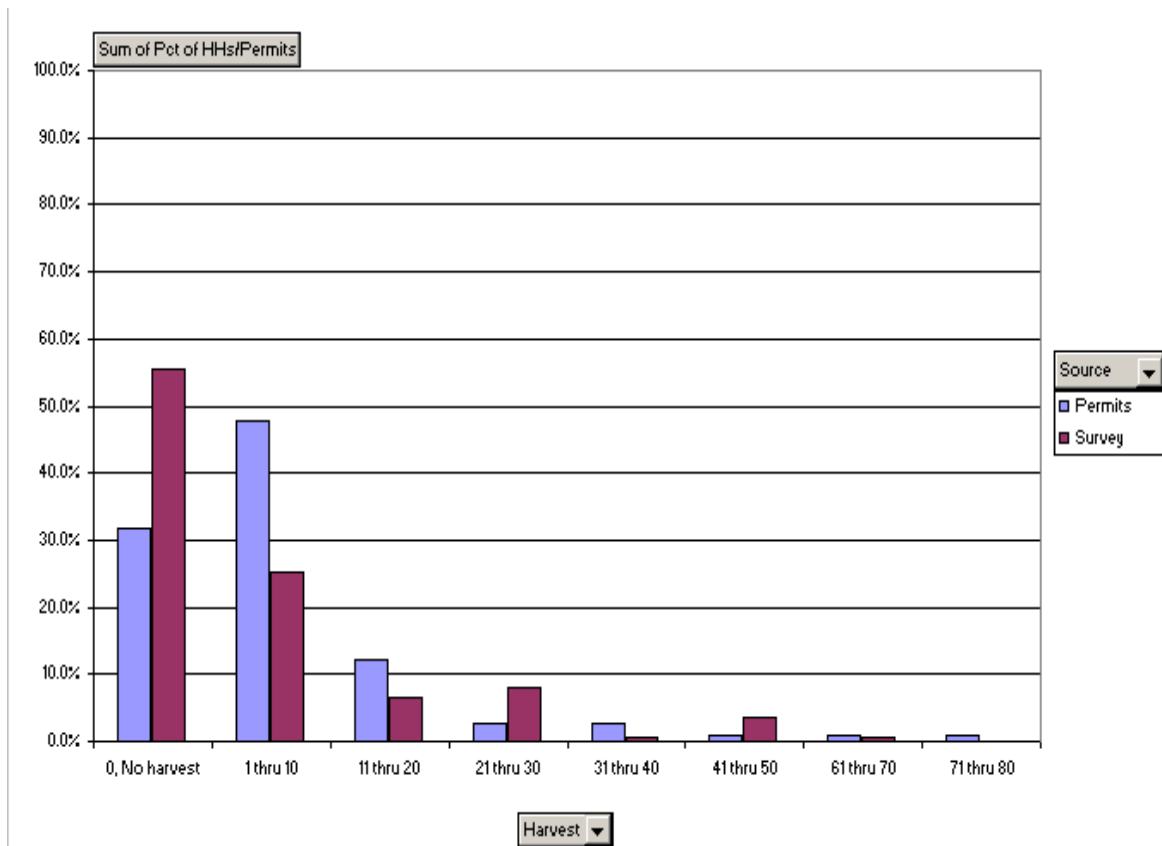
		Gill Net			Dip Net			Purse Seine			Beach Seine			Gaff			All Subsistence/Personal Use Methods			Rod and Reel			All Methods		
Resource	Location	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location	Est. Harvest	% of Total Harvest for Resource	% of Resource Total Harvest for Location
Chum Salmon	All locations	106	29.0%	29.0%	0	0.0%	0.0%	0	0.0%	0.0%	251	68.5%	68.5%	0	0.0%	0.0%	357	97.5%	97.5%	9	2.5%	2.5%	366	100.0%	100.0%
	Falls Creek	23	6.2%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	23	6.2%	100.0%	0	0.0%	0.0%	23	6.2%	100.0%
	Gunnock Creek	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	46	12.4%	100.0%	0	0.0%	0.0%	46	12.4%	100.0%	0	0.0%	0.0%	46	12.4%	100.0%
	Other	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	8	2.1%	100.0%	8	2.1%	100.0%
	Point White Creek	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	15	4.1%	90.9%	0	0.0%	0.0%	15	4.1%	90.9%	2	0.4%	9.1%	17	4.6%	100.0%
	Port Camden	38	10.4%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	38	10.4%	100.0%	0	0.0%	0.0%	38	10.4%	100.0%
	Saginaw Bay	46	12.4%	37.5%	0	0.0%	0.0%	0	0.0%	0.0%	76	20.7%	62.5%	0	0.0%	0.0%	122	33.2%	100.0%	0	0.0%	0.0%	122	33.2%	100.0%
	Salt Chuck-Security Bay	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	114	31.1%	100.0%	0	0.0%	0.0%	114	31.1%	100.0%	0	0.0%	0.0%	114	31.1%	100.0%
Coho Salmon	All locations	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	398	100.0%	100.0%	398	100.0%	100.0%
	Hamilton Bay	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	234	58.8%	100.0%	234	58.8%	100.0%
	Irish Creek	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	29	7.3%	100.0%	29	7.3%	100.0%
	Other	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	71	17.9%	100.0%	71	17.9%	100.0%
	Point White Creek	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	41	10.3%	100.0%	41	10.3%	100.0%
	Saginaw Bay	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	23	5.7%	100.0%	23	5.7%	100.0%
Chinook Salmon	All locations	9	6.1%	6.1%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	9	6.1%	6.1%	141	93.9%	93.9%	151	100.0%	100.0%
	Falls Creek	6	4.0%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	6	4.0%	100.0%	0	0.0%	0.0%	6	4.0%	100.0%
	Gut Bay	3	2.0%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	3	2.0%	100.0%	0	0.0%	0.0%	3	2.0%	100.0%
	Kingsmill/Washington Bay	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	15	10.1%	100.0%	15	10.1%	100.0%
	Other	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	111	73.7%	100.0%	111	73.7%	100.0%
	Point White Creek	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	8	5.1%	100.0%	8	5.1%	100.0%
	Port Camden	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	8	5.1%	100.0%	8	5.1%	100.0%
Pink Salmon	All locations	6	5.2%	5.2%	0	0.0%	0.0%	0	0.0%	0.0%	30	26.0%	26.0%	38	32.5%	32.5%	75	63.6%	63.6%	43	36.4%	36.4%	117	100.0%	100.0%
	Falls Creek	6	5.2%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	6	5.2%	100.0%	0	0.0%	0.0%	6	5.2%	100.0%
	Gunnock Creek	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	38	32.5%	100.0%	38	32.5%	100.0%	0	0.0%	0.0%	38	32.5%	100.0%
	Hamilton Bay	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	30	26.0%	100.0%	30	26.0%	100.0%
	Point White Creek	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	30	26.0%	71.4%	0	0.0%	0.0%	30	26.0%	71.4%	12	10.4%	28.6%	43	36.4%	100.0%
Sockeye Salmon	All locations	2,773	65.3%	65.3%	0	0.0%	0.0%	0	0.0%	0.0%	1,451	34.2%	34.2%	0	0.0%	0.0%	4,224	99.5%	99.5%	23	0.5%	0.5%	4,247	100.0%	100.0%
	Alecks Creek	271	6.4%	100.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	271	6.4%	100.0%	0	0.0%	0.0%	271	6.4%	100.0%
	Falls Creek	1,879	44.3%	65.2%	0	0.0%	0.0%	0	0.0%	0.0%	979	23.1%	34.0%	0	0.0%	0.0%	2,859	67.3%	99.2%	23	0.5%	0.8%	2,881	67.8%	100.0%
	Gut Bay	569	13.4%	61.9%	0	0.0%	0.0%	0	0.0%	0.0%	350	8.2%	38.1%	0	0.0%	0.0%	918	21.6%	100.0%	0	0.0%	0.0%	918	21.6%	100.0%
	Pillar Bay/Kutlaku	55	1.3%	31.0%	0	0.0%	0.0%	0	0.0%	0.0%	122	2.9%	69.0%	0	0.0%	0.0%	176	4.2%	100.0%	0	0.0%	0.0%	176	4.2%	100.0%
Unknown Salmon	All locations	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	23	100.0%	100.0%	23	100.0%	100.0%
	Saginaw Bay	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	0	0.0%	0.0%	23	100.0%	100.0%	23	100.0%	100.0%

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Survey, 2002

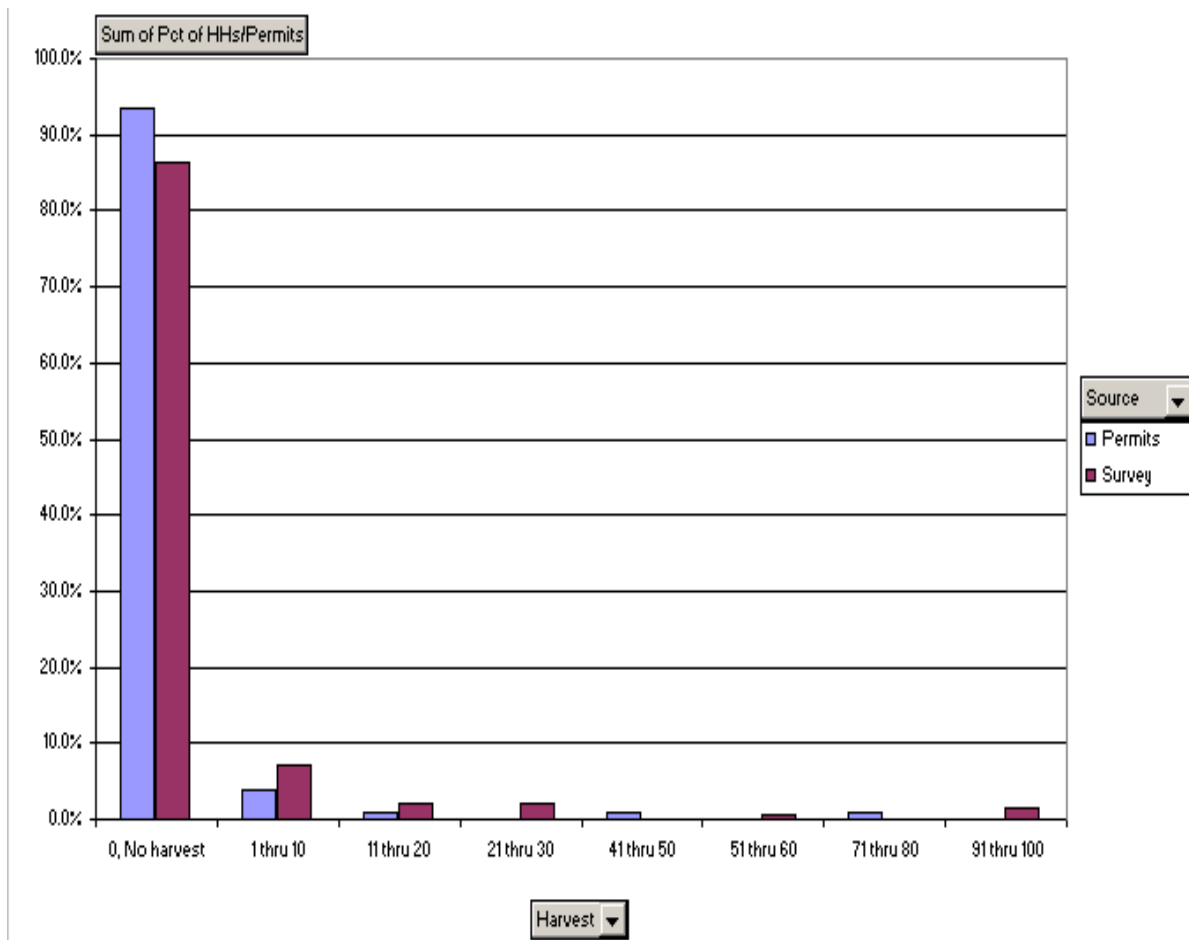
\* Households may fish more than one location for a resource

**Table 35.**—Estimated subsistence/personal use permit and household survey salmon harvest and confidence intervals, Kake, 2001.

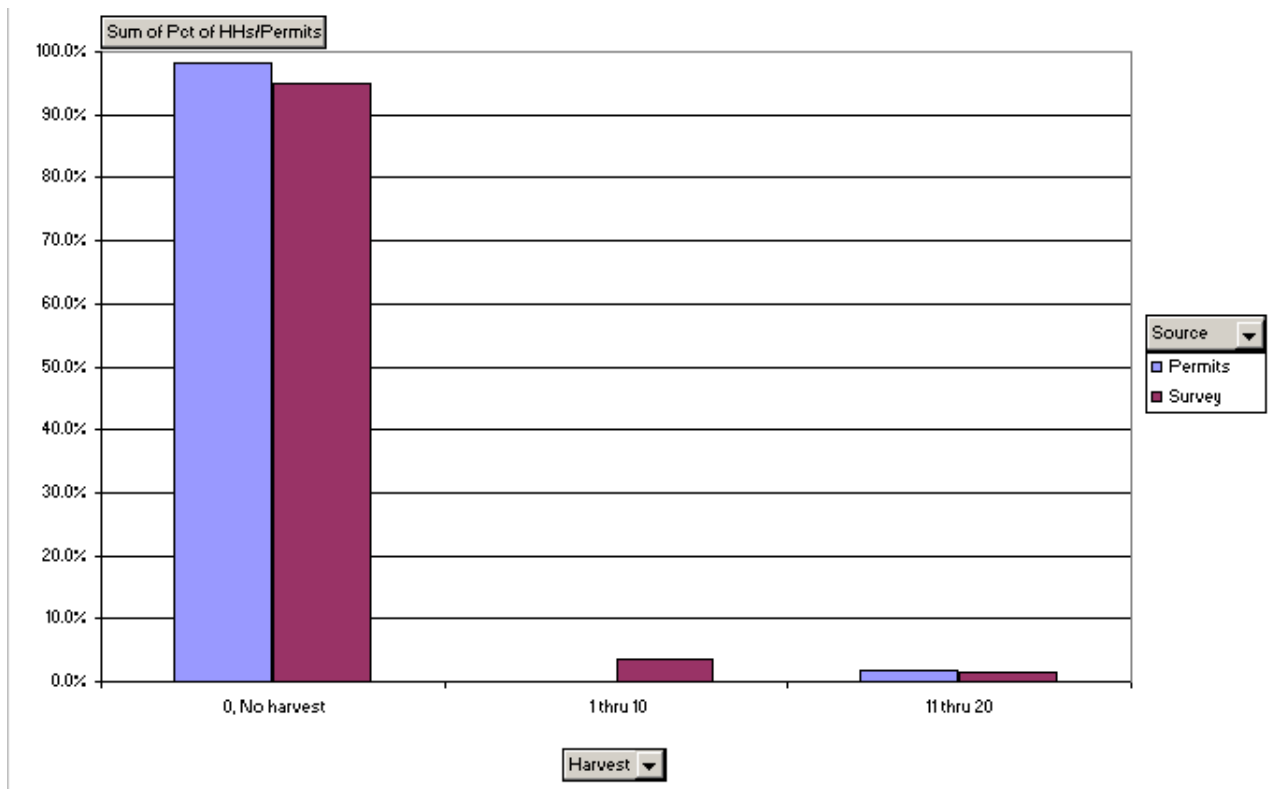
Subsistence/Personal Use Salmon Permits		Household Surveys	
Permits	Issued 191	Households	Defined 111
	Reports Returned 183		Interviewed 73
Chinook Salmon	Average 0.0	Chinook Salmon	Average 0.1
	Standard Error 0.04		Standard Error 0.06
	Estimated Total 8		Estimated Total 9
	95% Confidence Interval (High) 11		95% Confidence Interval (High) 17
	(Low) 6		(Low) 1
Chum Salmon	Average 0.5	Chum Salmon	Average 3.2
	Standard Error 0.18		Standard Error 1.42
	Estimated Total 86		Estimated Total 357
	95% Confidence Interval (High) 100		95% Confidence Interval (High) 538
	(Low) 72		(Low) 176
Coho Salmon	Average 0.1	Coho Salmon	Average 0.0
	Standard Error 0.07		Standard Error 0.00
	Estimated Total 20		Estimated Total 0
	95% Confidence Interval (High) 25		95% Confidence Interval (High) 0
	(Low) 15		(Low) 0
Pink Salmon	Average 0.4	Pink Salmon	Average 0.7
	Standard Error 0.19		Standard Error 0.44
	Estimated Total 74		Estimated Total 75
	95% Confidence Interval (High) 88		95% Confidence Interval (High) 130
	(Low) 60		(Low) 19
Sockeye Salmon	Average 11.1	Sockeye Salmon	Average 38.1
	Standard Error 0.94		Standard Error 6.97
	Estimated Total 2,120		Estimated Total 4,224
	95% Confidence Interval (High) 2,192		95% Confidence Interval (High) 5,111
	(Low) 2,048		(Low) 3,337



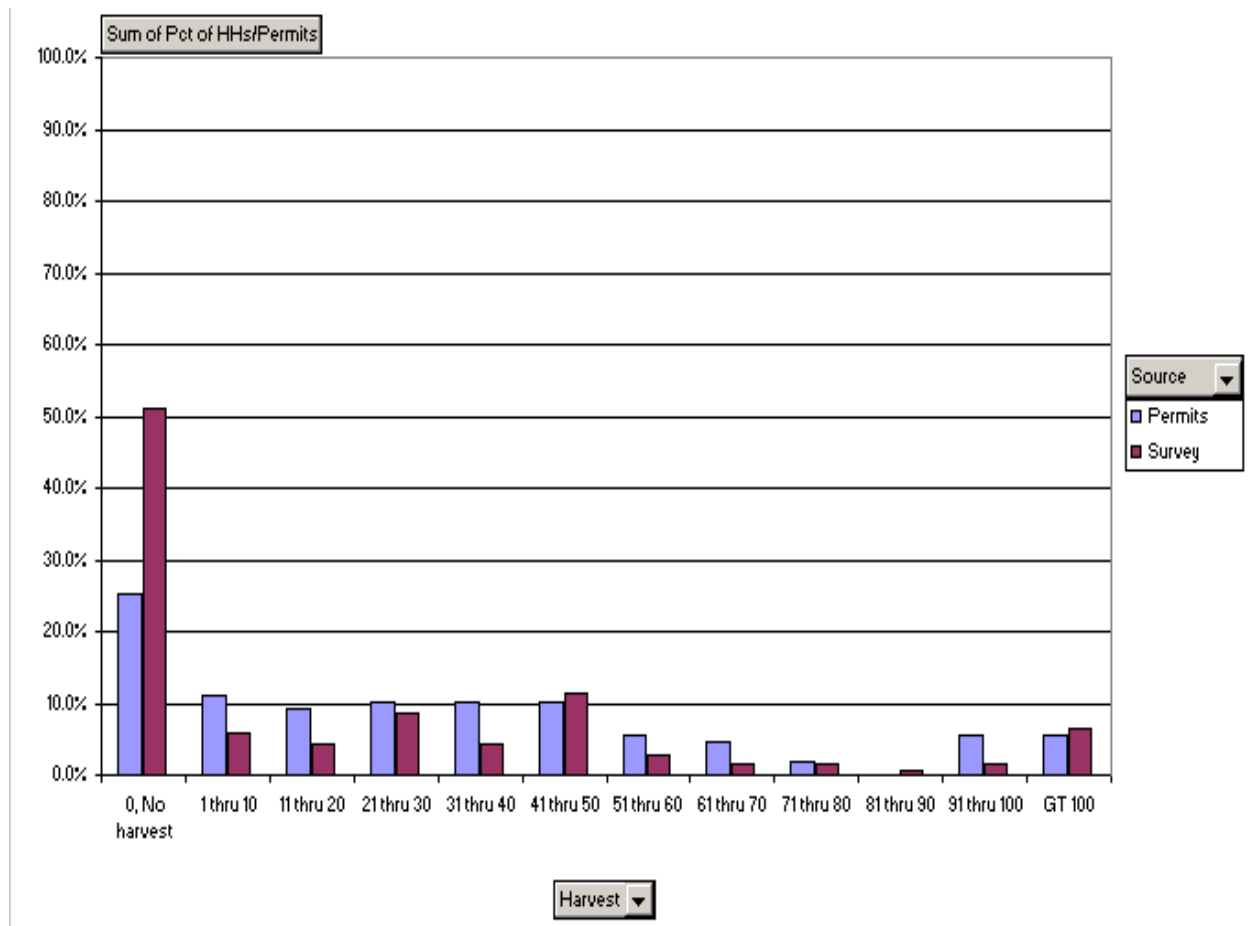
**Figure 1.**—Frequency distribution of subsistence/personal use permits and household survey Chinook salmon harvests, Yakutat, 2000.



**Figure 2.**—Frequency distributions of subsistence/personal use permits and household survey pink salmon harvests, Yakutat, 2000.

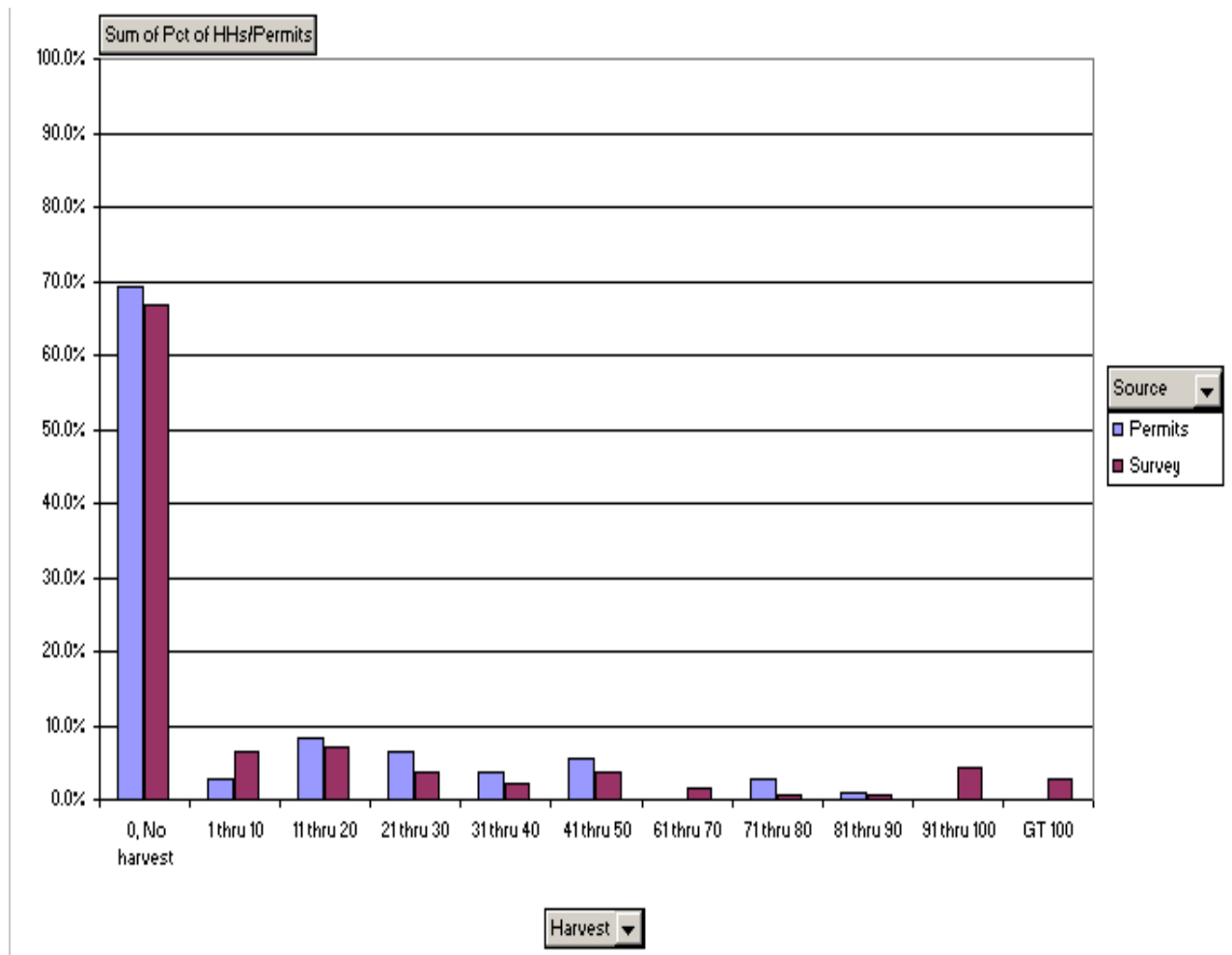


**Figure 3.**—Frequency distributions of subsistence/personal use permits and household survey chum salmon harvests, Yakutat, 2000.

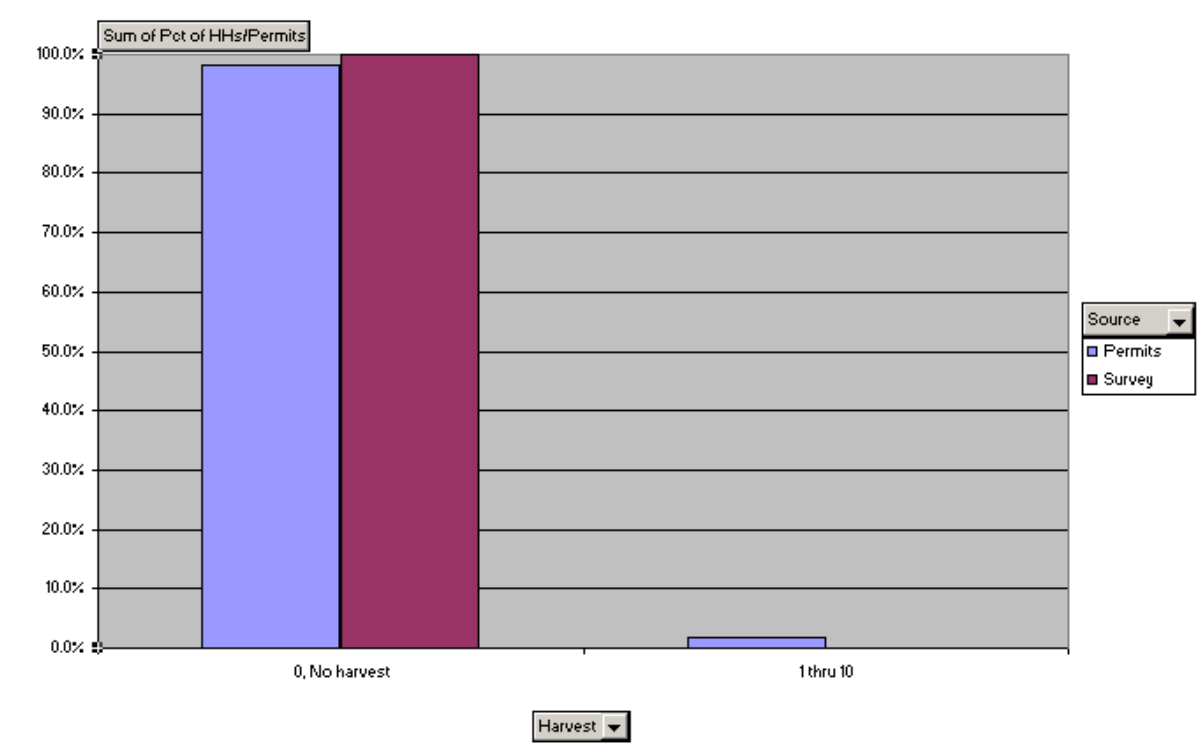


**Figure 4.**—Frequency distributions of subsistence/personal use permits and household survey sockeye salmon harvests, Yakutat, 2000.

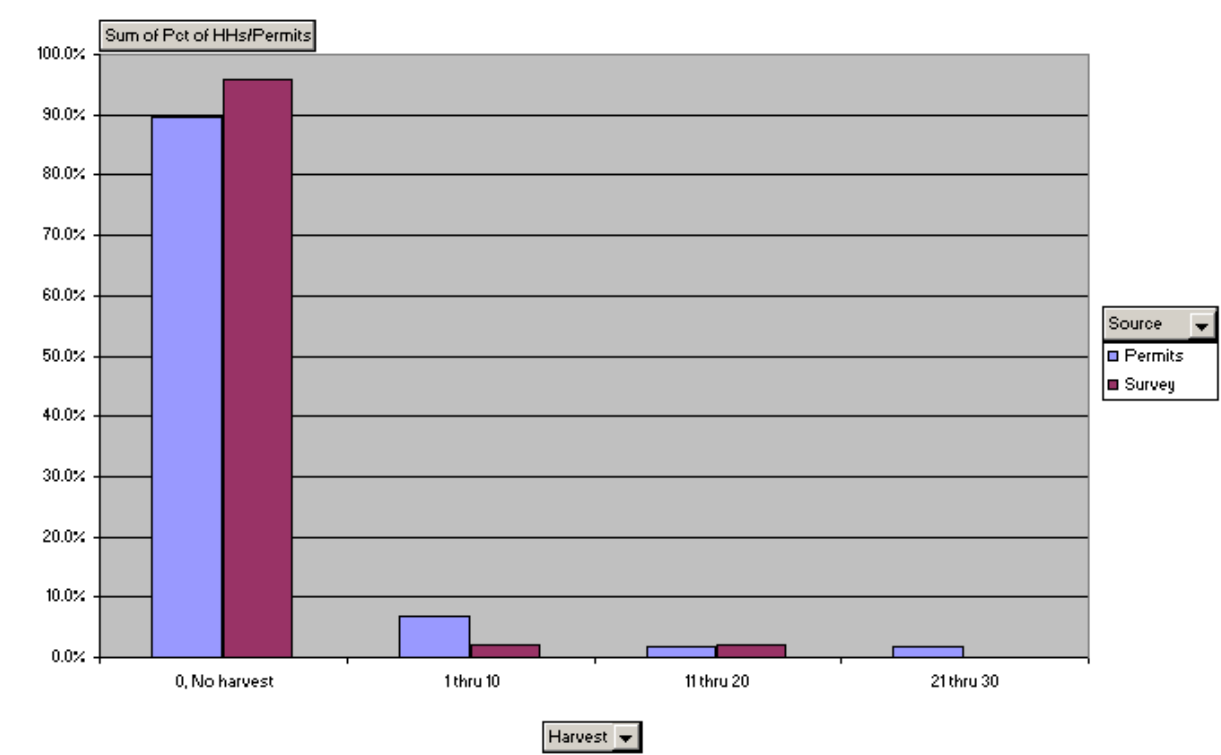




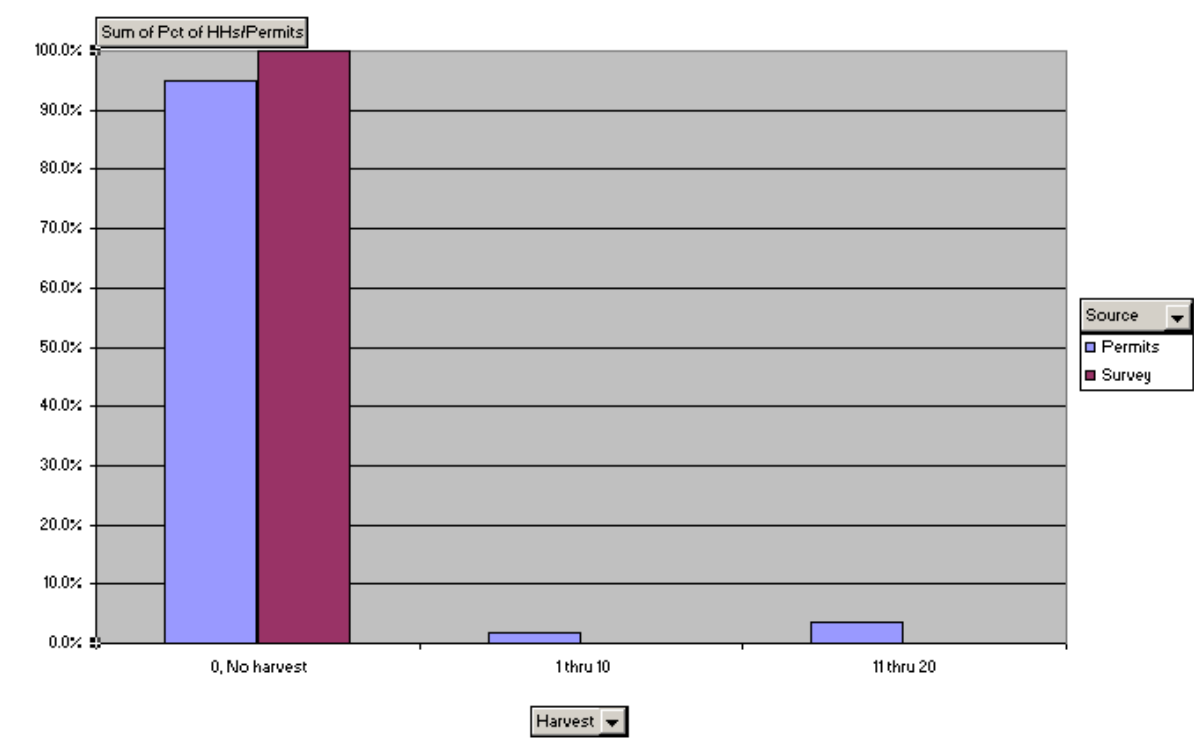
**Figure 5.**—Frequency distributions of subsistence/personal use permits and household survey coho salmon harvests, Yakutat, 2000.



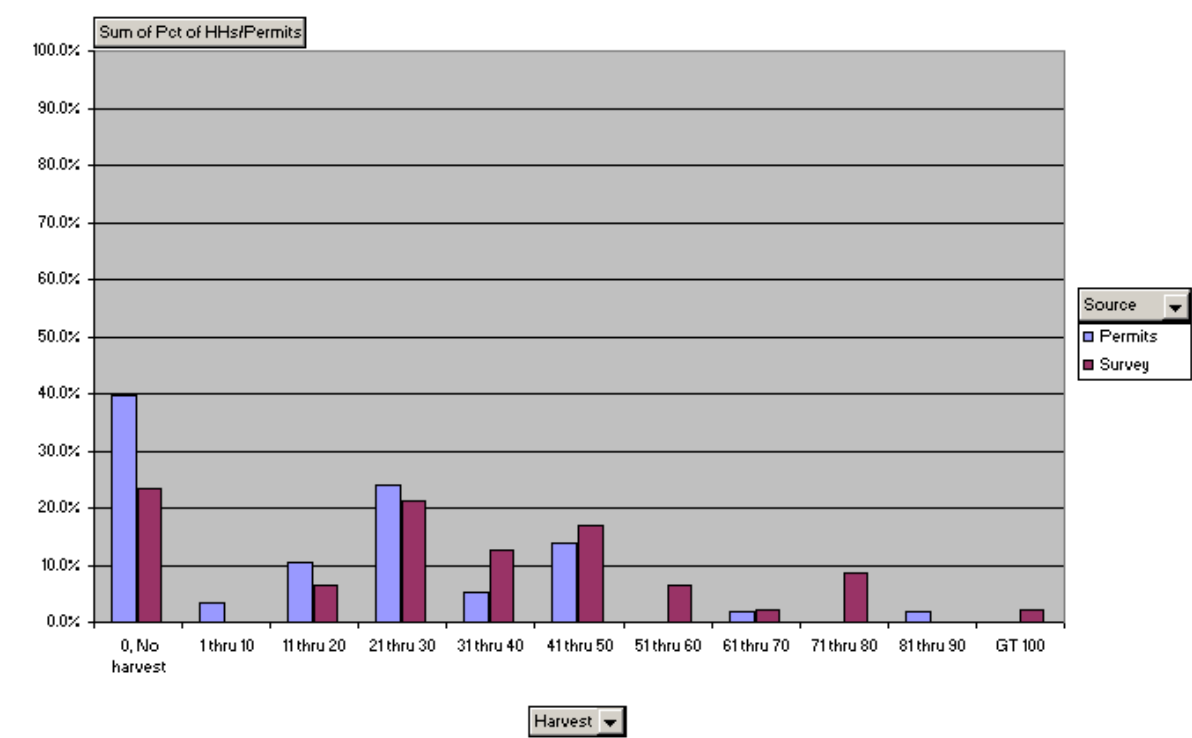
**Figure 6.**—Frequency distribution of subsistence/personal use permits and household survey Chinook salmon harvests, Angoon, 2001.



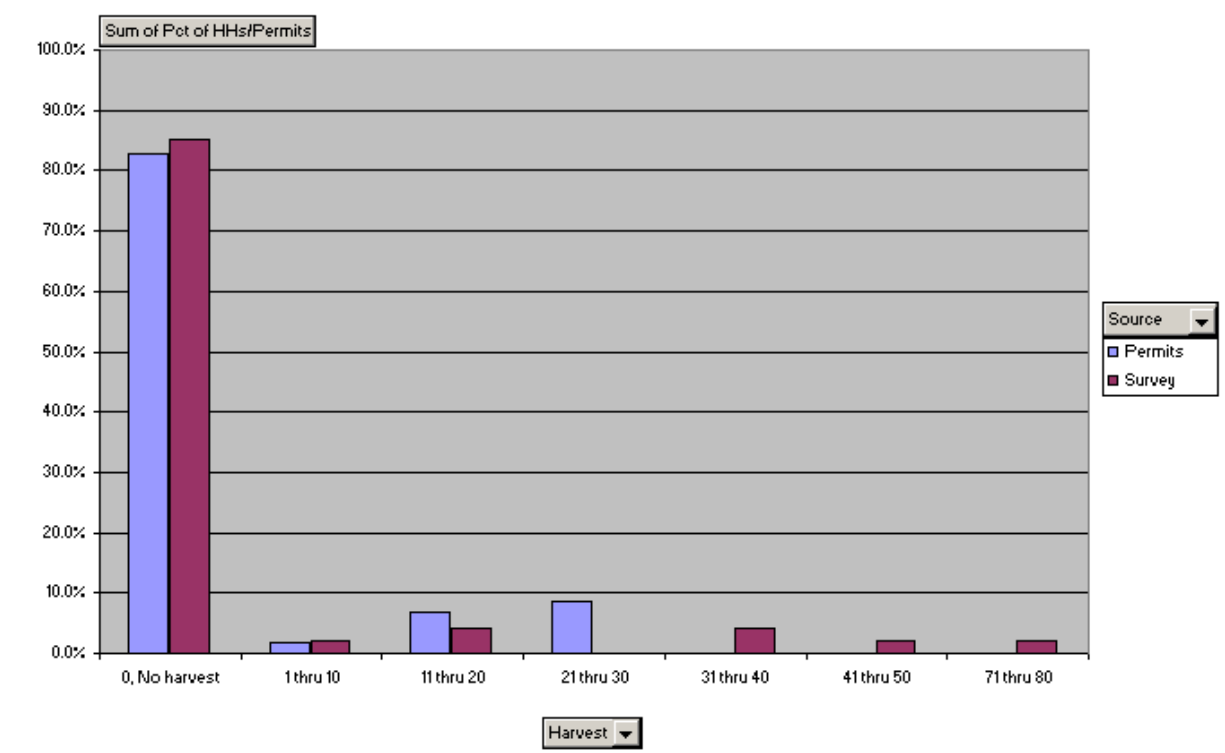
**Figure 7.**—Frequency distribution of subsistence/personal use permits and household survey pink salmon harvests, Angoon, 2001.



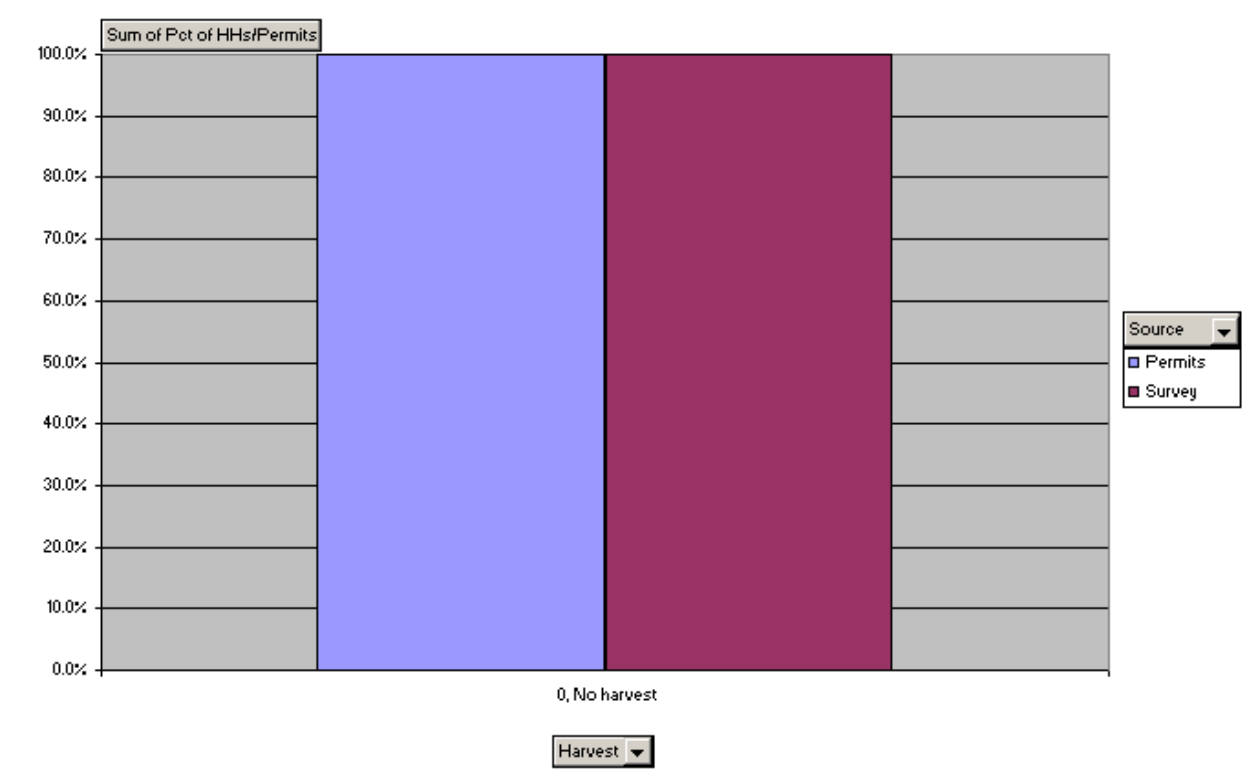
**Figure 8.**—Frequency distribution of subsistence/personal use permits and household survey chum salmon harvests, Angoon, 2001.



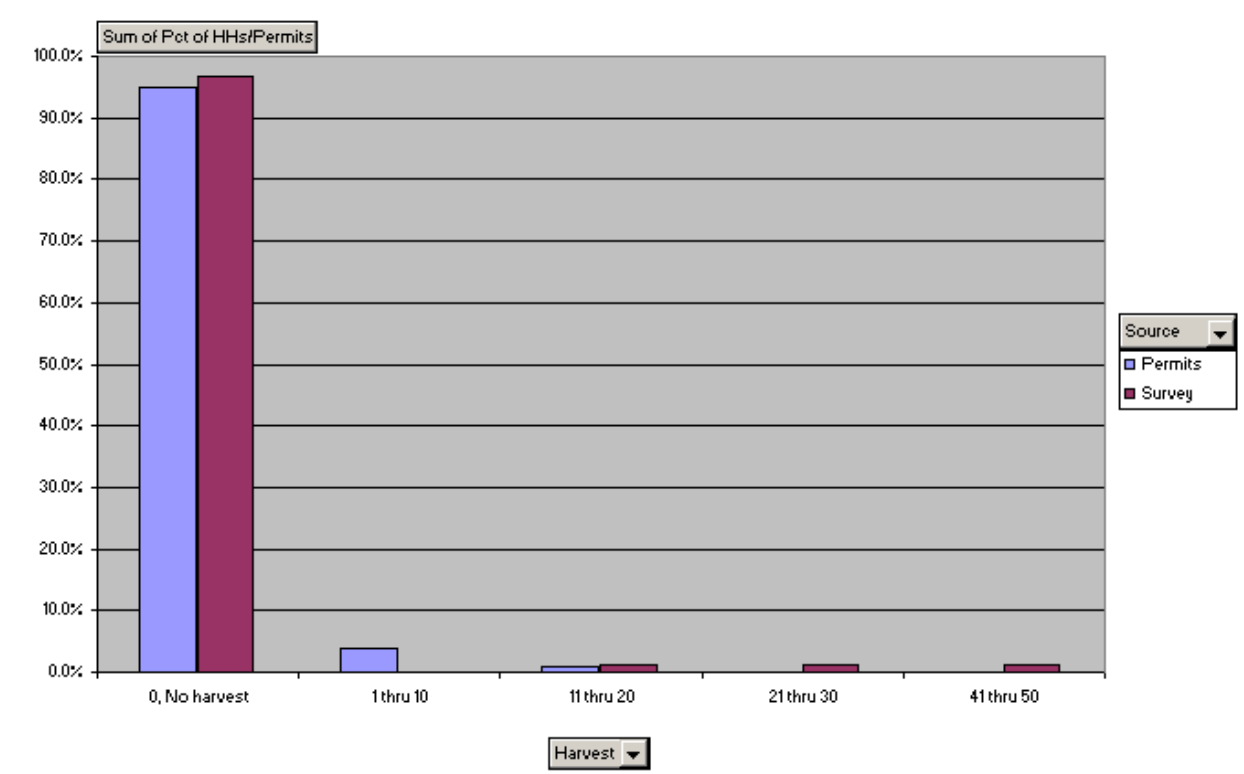
**Figure 9.**—Frequency distribution of subsistence/personal use permits and household survey sockeye salmon harvests, Angoon, 2001.



**Figure 10.**—Frequency distribution of subsistence/personal use permits and household survey coho salmon harvests, Angoon, 2001.

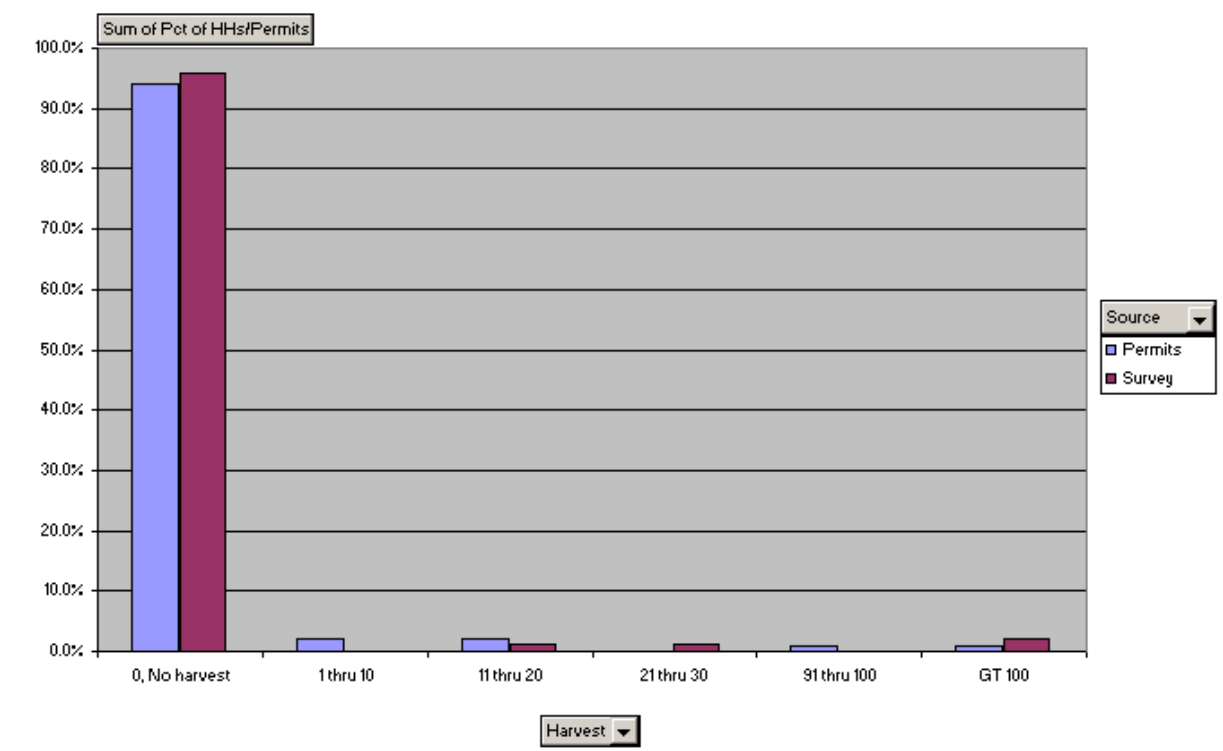


**Figure 11.**—Frequency distribution of subsistence/personal use permits and household survey Chinook salmon harvests, Hoonah, 2001.

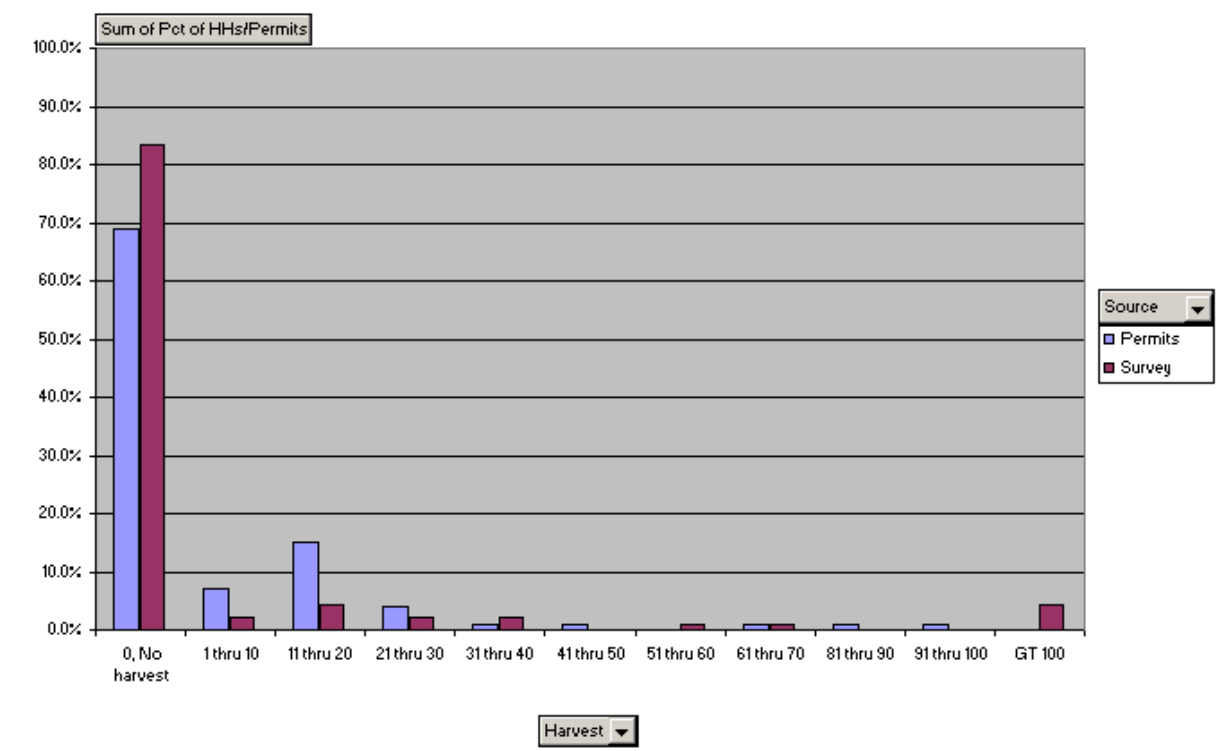


**Figure 12.**—Frequency distribution of subsistence/personal use permits and household survey pink salmon harvests, Hoonah, 2001.

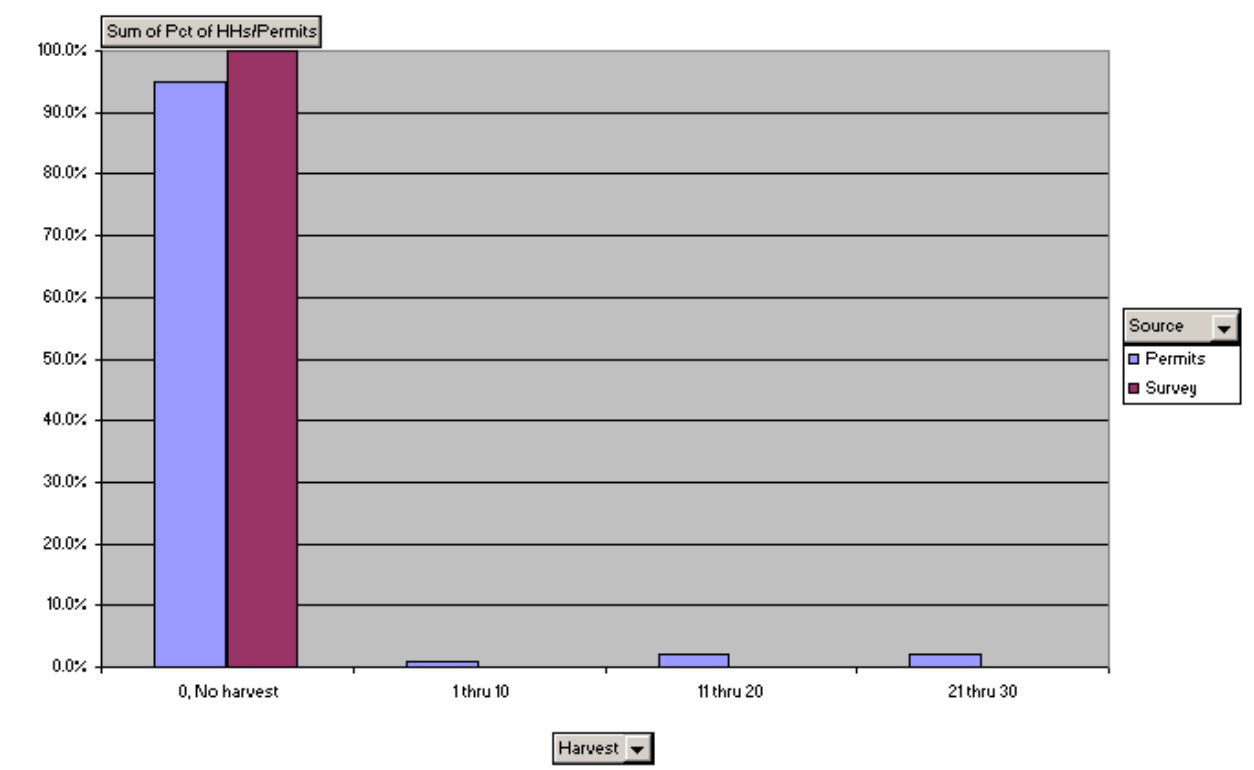




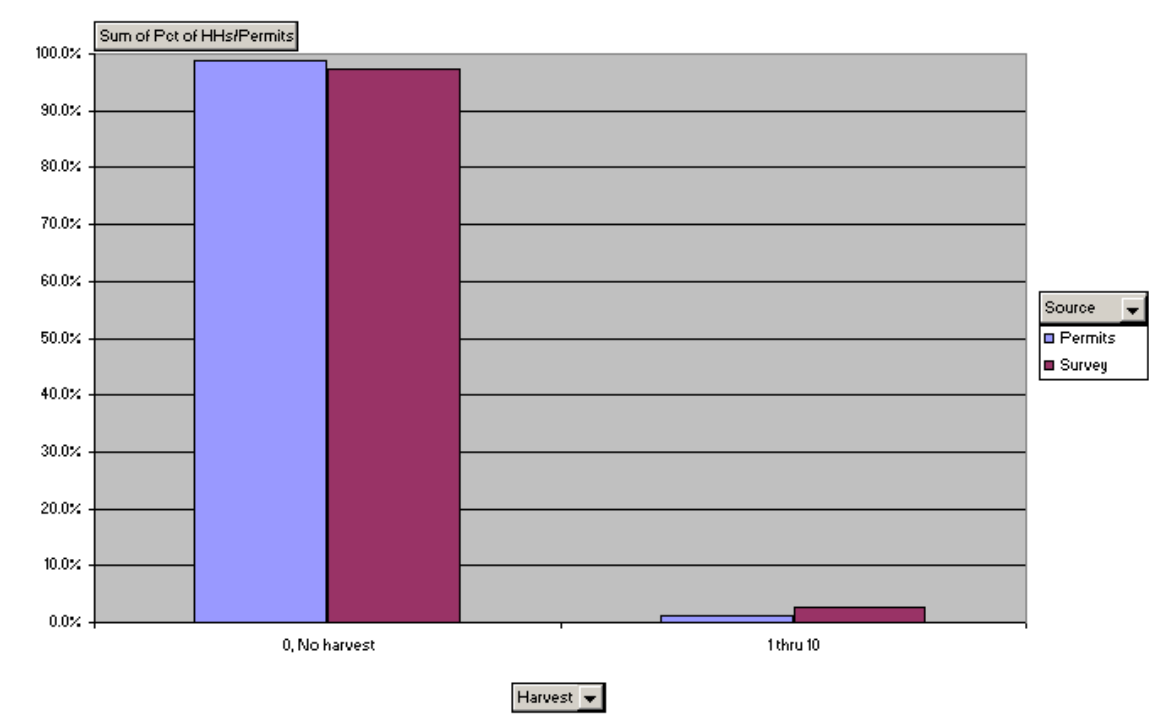
**Figure 13.**—Frequency distribution of subsistence/personal use permits and household survey chum salmon harvests, Hoonah, 2001.



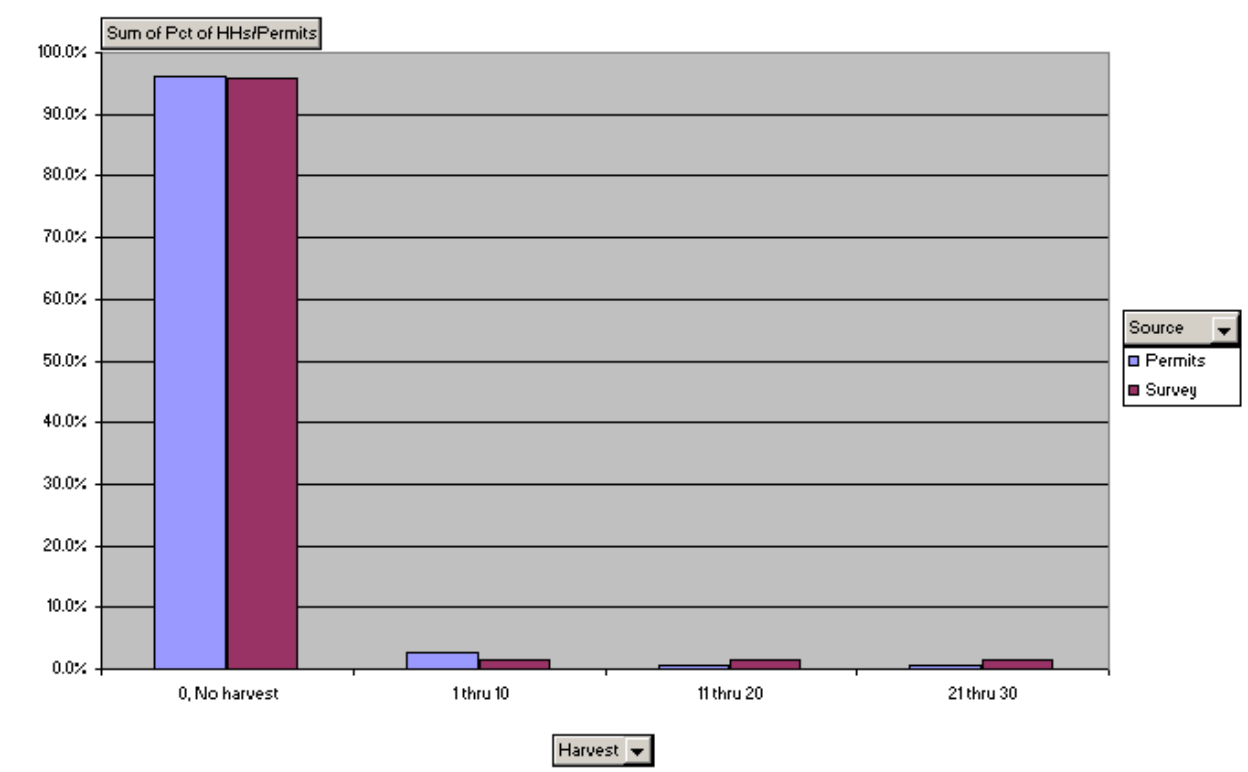
**Figure 14.**—Frequency distribution of subsistence/personal use permits and household survey sockeye salmon harvests, Hoonah, 2001.



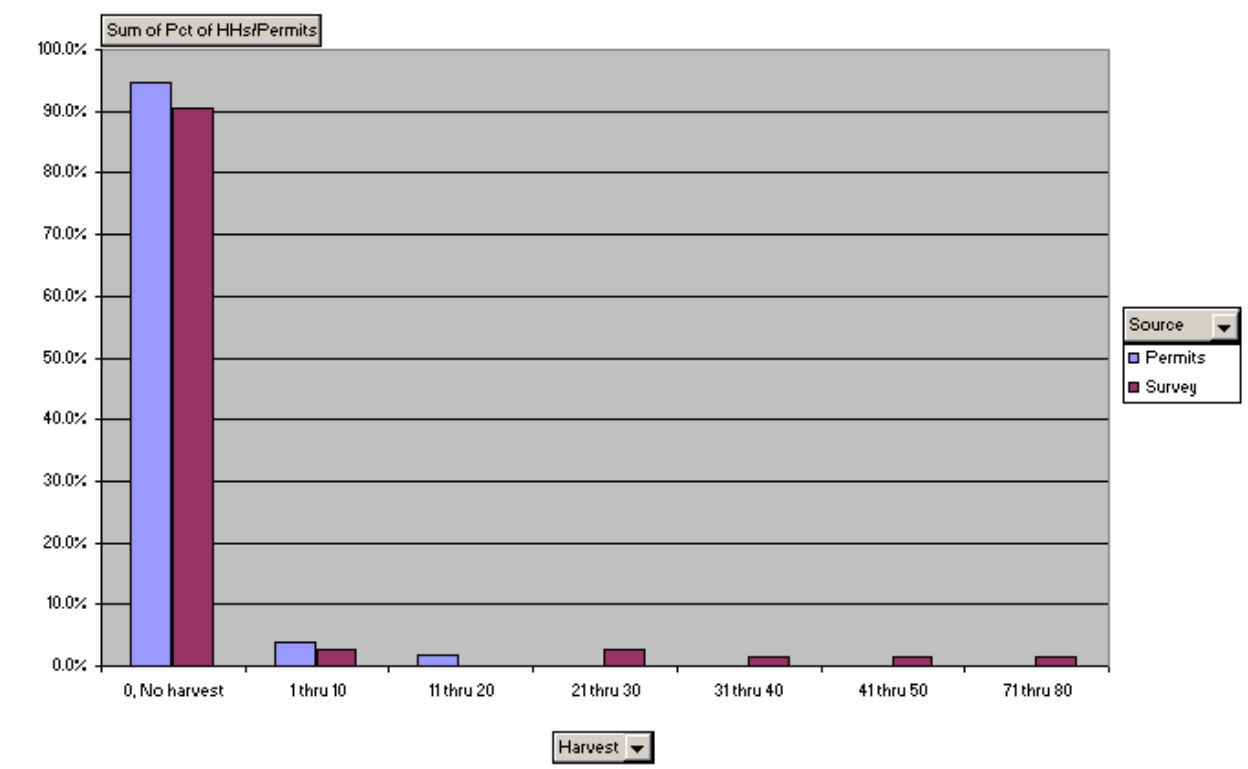
**Figure 15.**—Frequency distribution of subsistence/personal use permits and household survey coho salmon harvests, Hoonah, 2001.



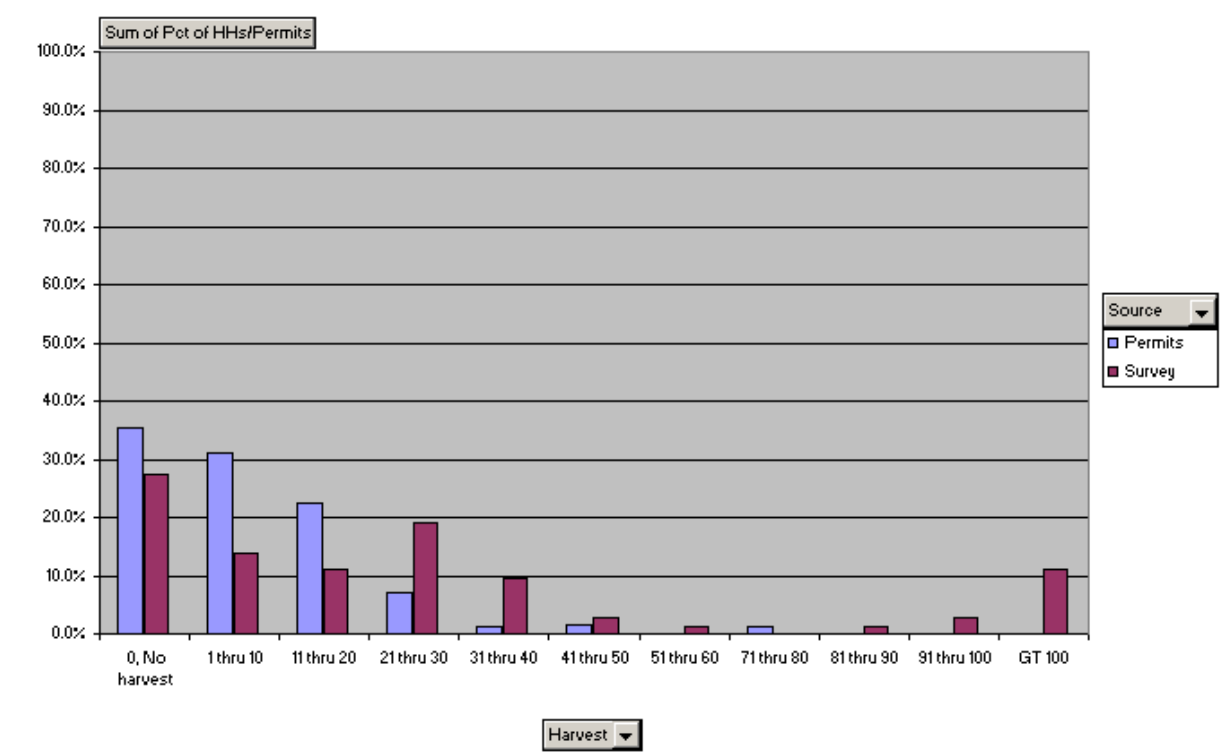
**Figure 16.**—Frequency distributions of subsistence/personal use permits and household survey Chinook salmon harvests, Kake, 2001.



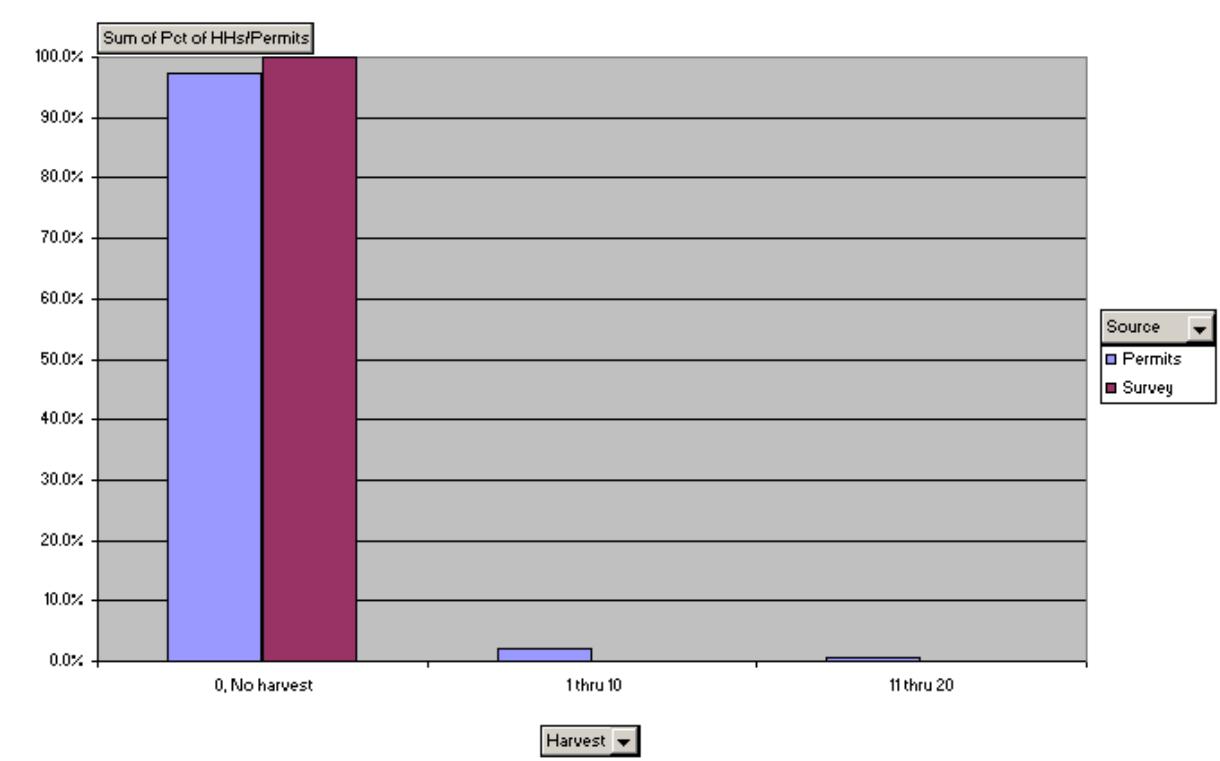
**Figure 17.**—Frequency distributions of subsistence/personal use permits and household survey pink salmon harvests, Kake, 2001.



**Figure 18.**—Frequency distributions of subsistence/personal use permits and household survey chum salmon harvests, Kake, 2001.

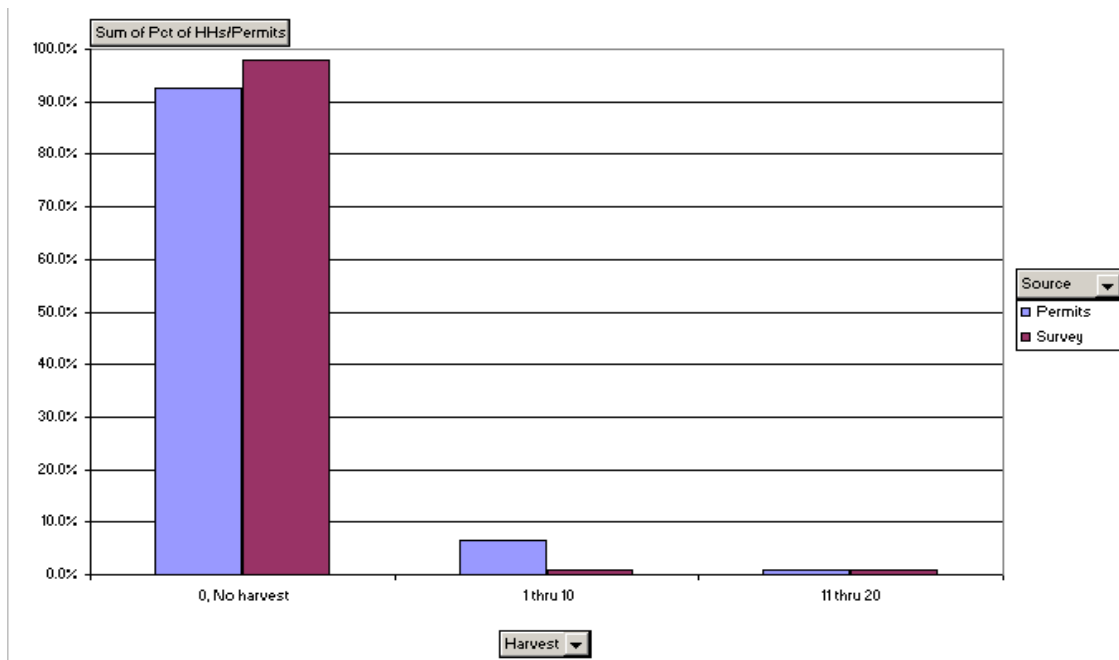


**Figure 19.** – Frequency distributions of subsistence/personal use permits and household survey sockeye salmon harvests, Kake, 2001.

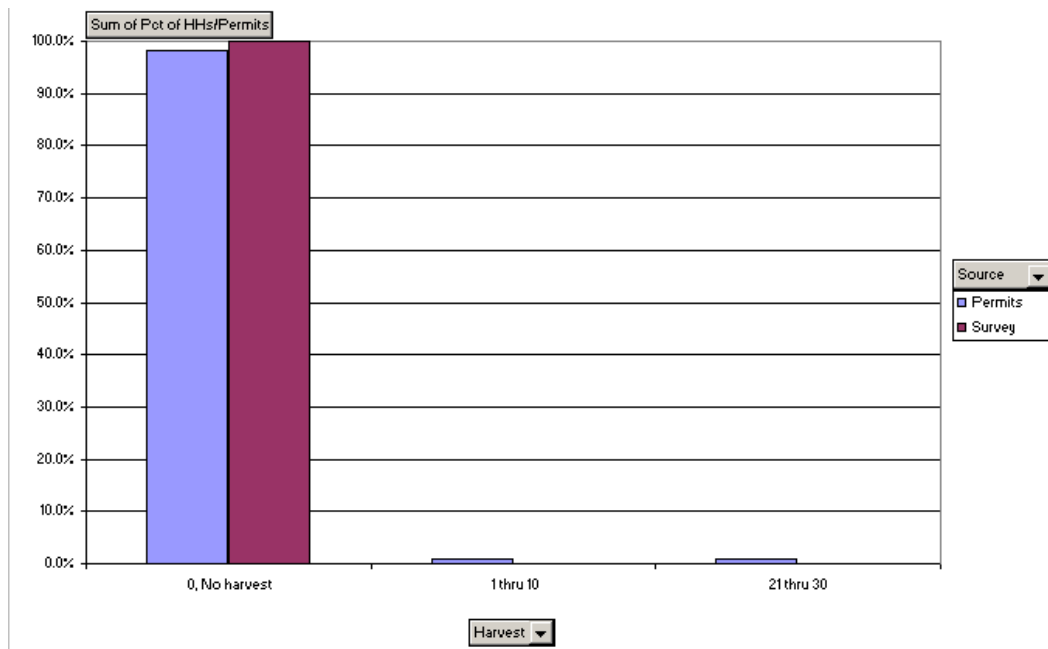


**Figure 20.**—Frequency distributions of subsistence/personal use permits and household survey coho salmon harvests, Kake, 2001.

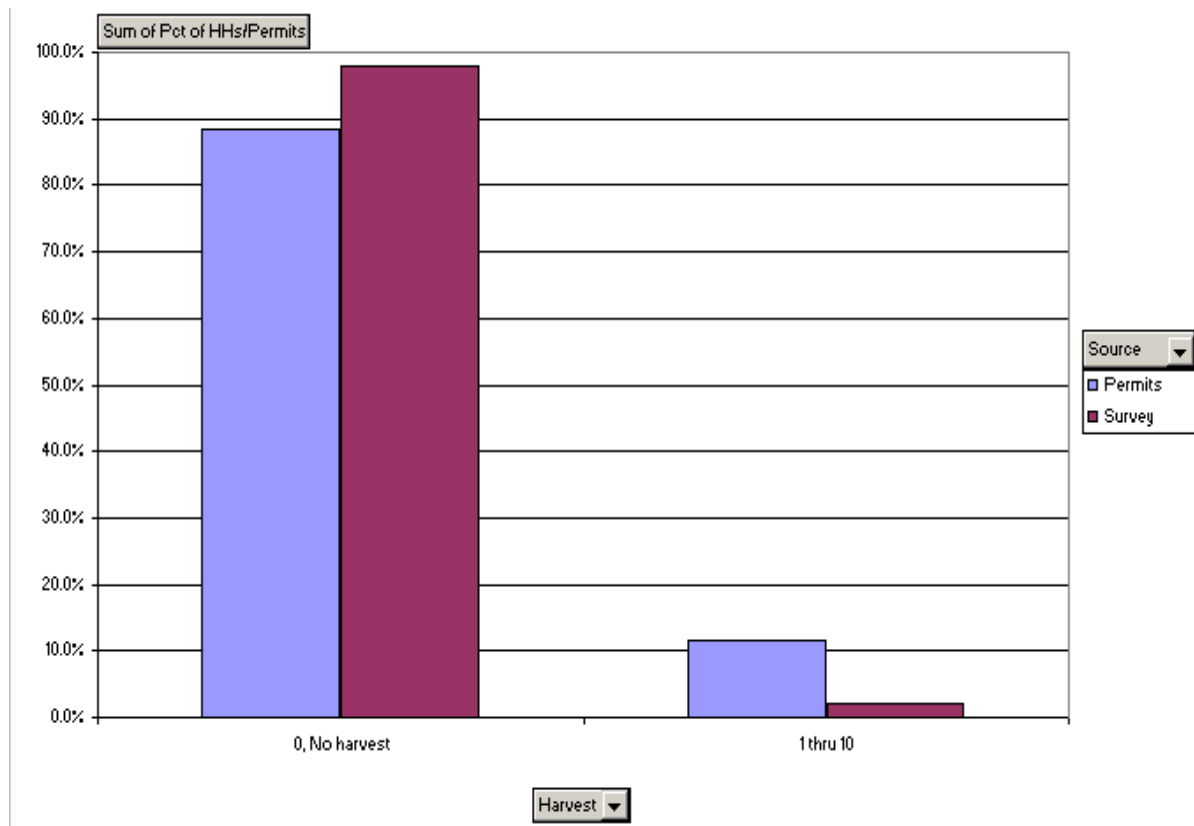




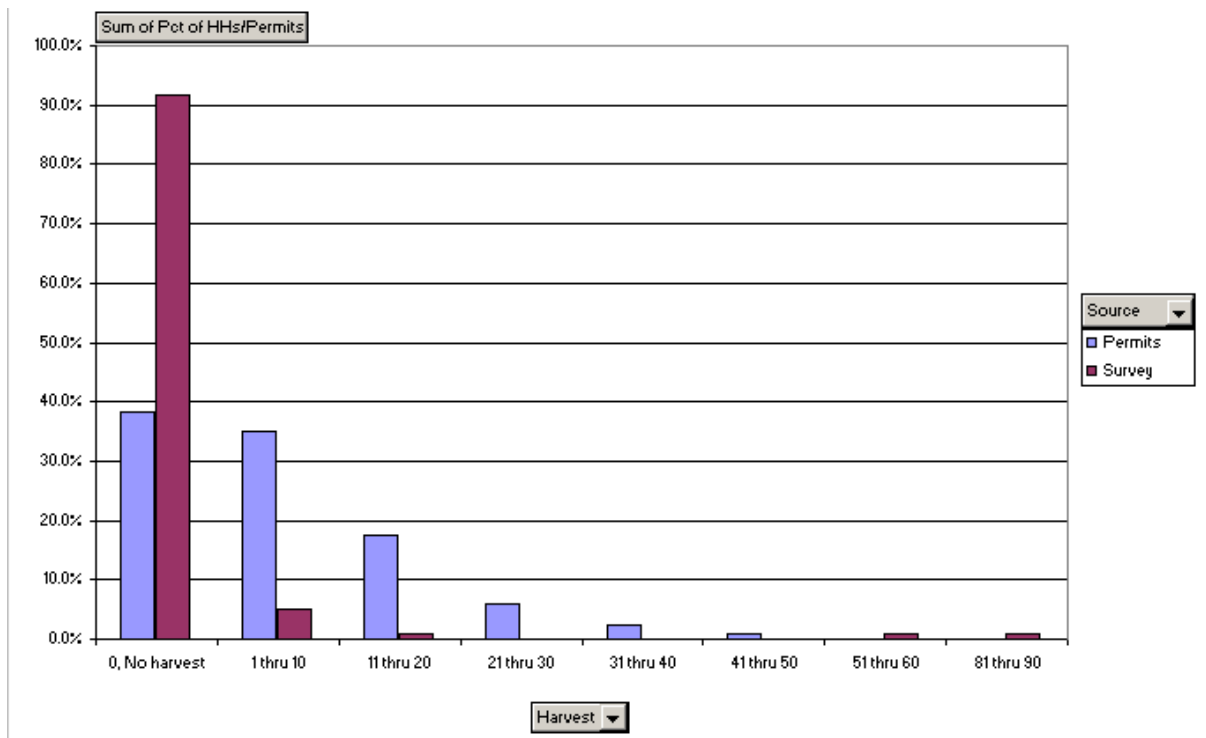
**Figure 21.**—Frequency distribution of subsistence/personal use permits and household survey Chinook salmon harvests, Wrangell, 2000.



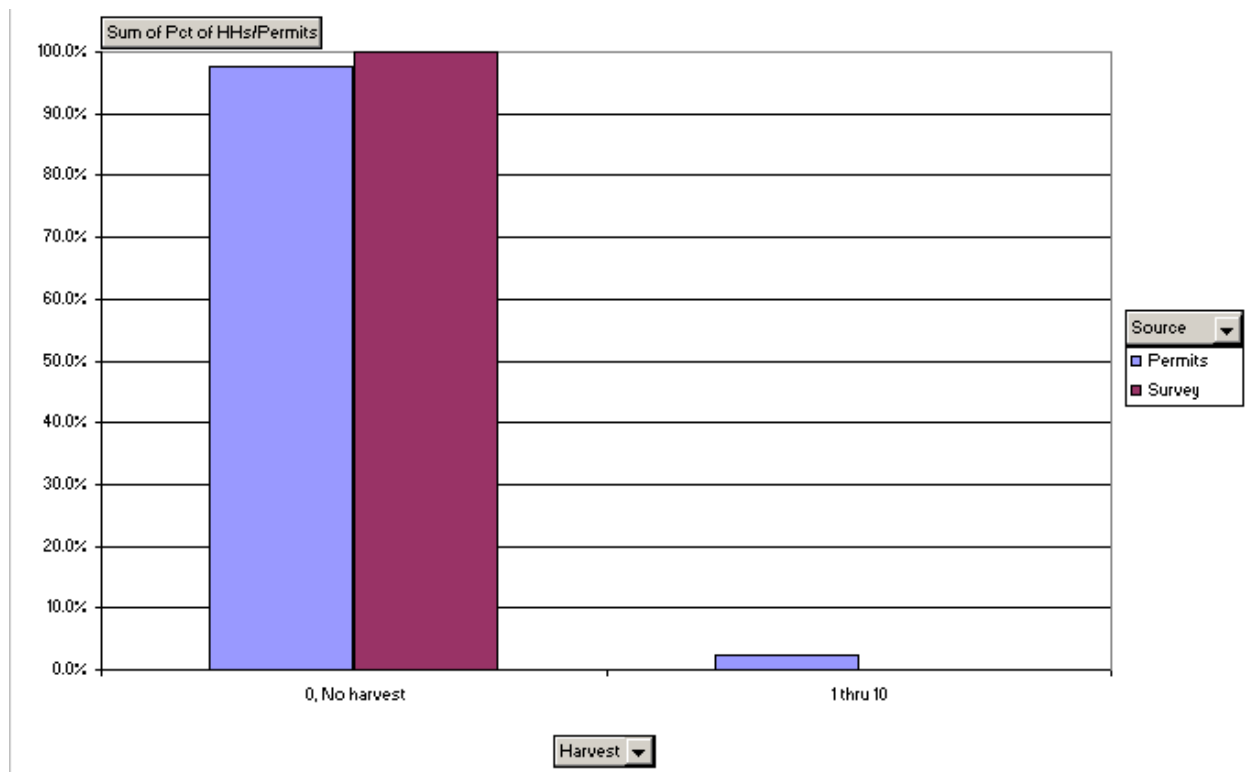
**Figure 22.**—Frequency distribution of subsistence/personal use permits and household survey pink salmon harvests, Wrangell, 2000.



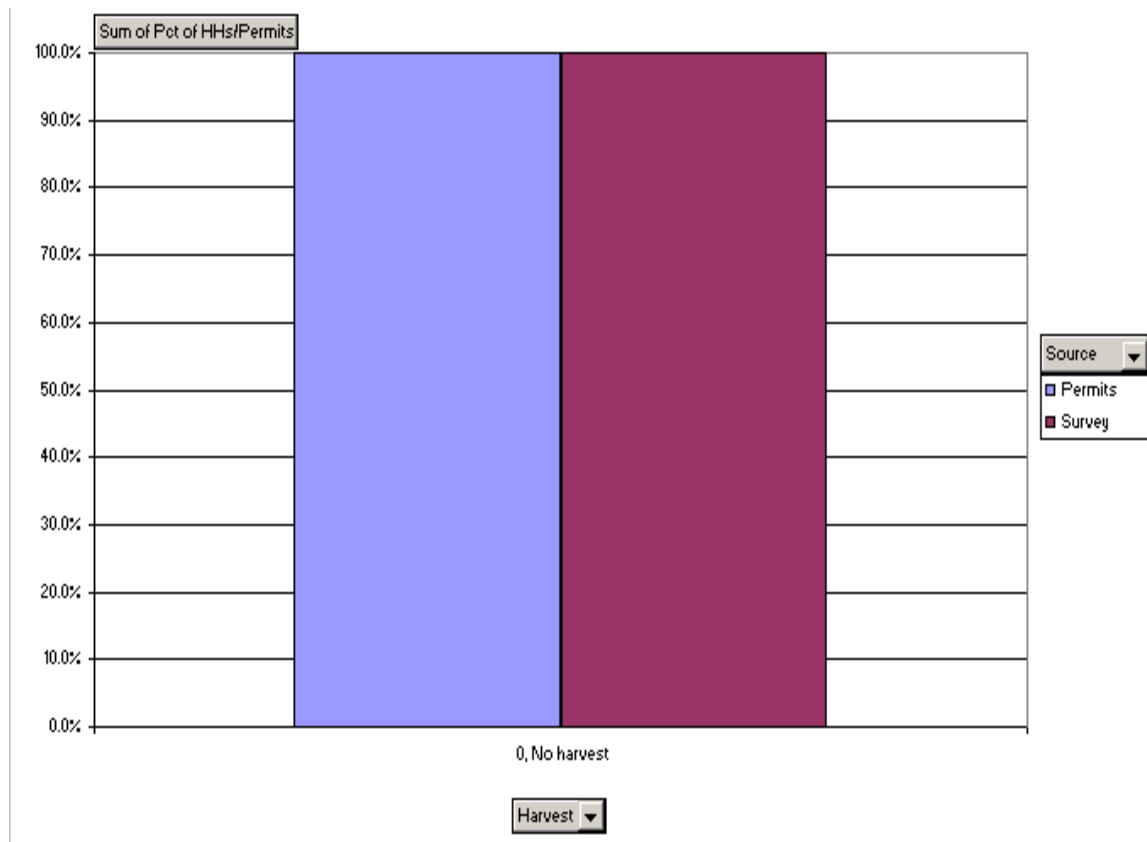
**Figure 23.**—Frequency distribution of subsistence/personal use permits and household survey chum salmon harvests, Wrangell, 2000.



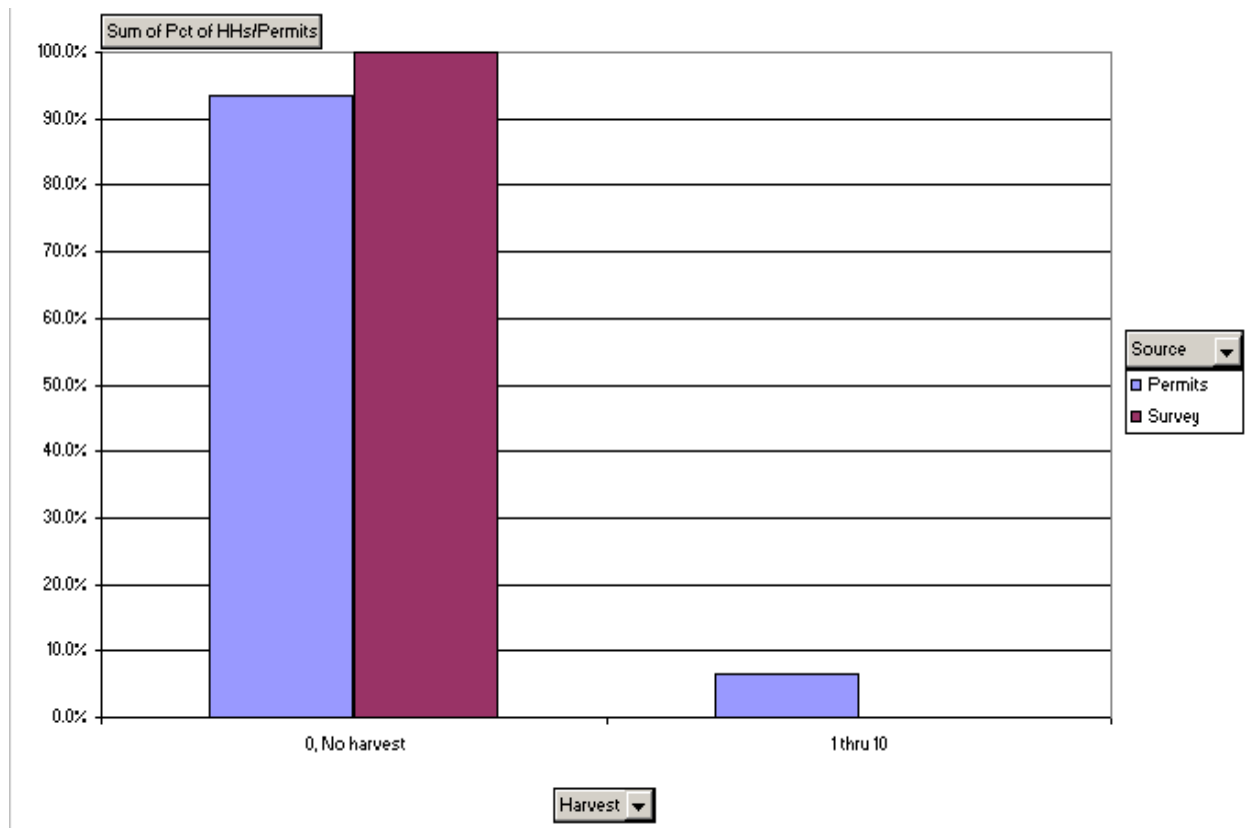
**Figure 24.**—Frequency distribution of subsistence/personal use permits and household survey sockeye salmon harvests, Wrangell, 2000.



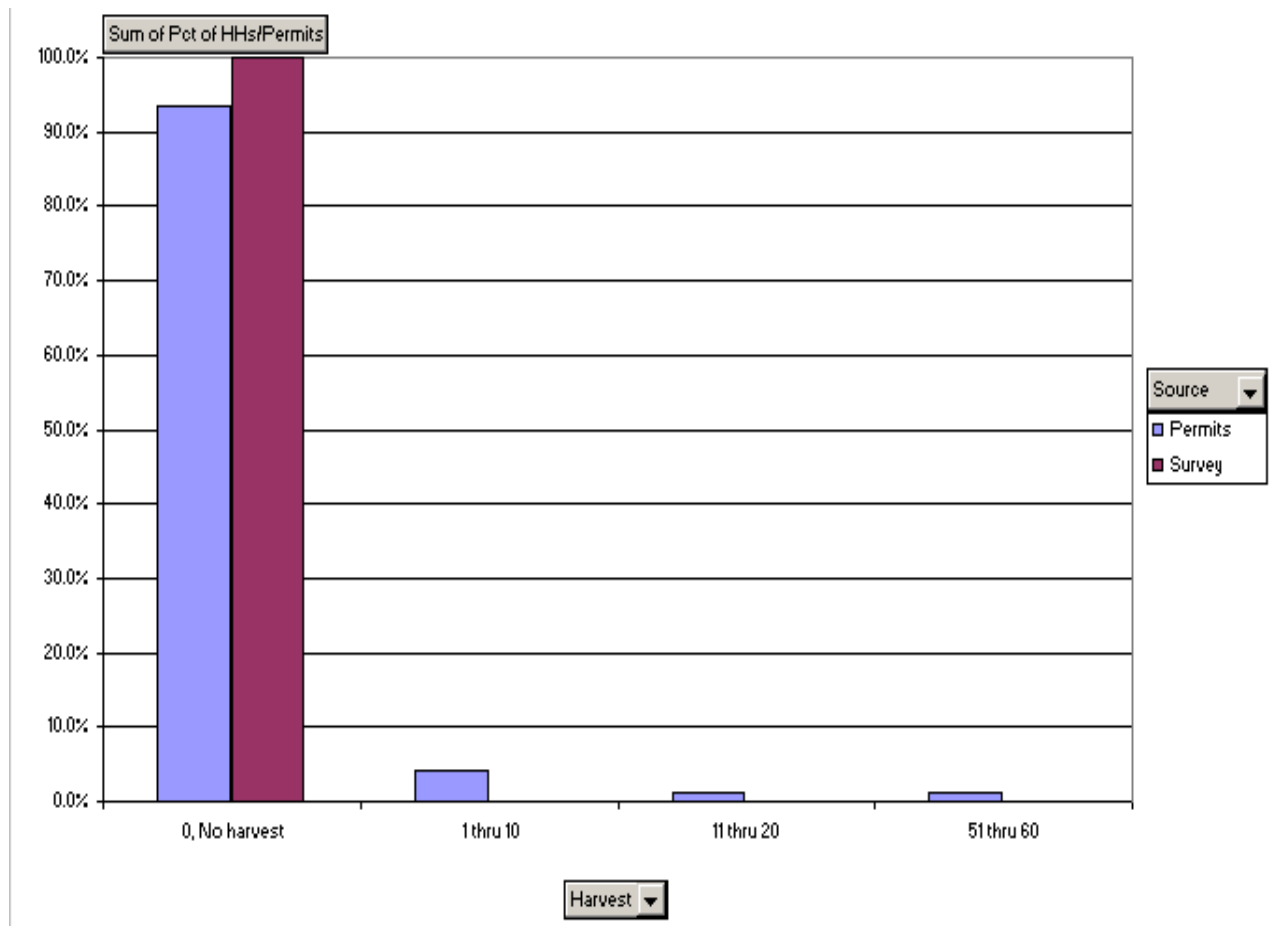
**Figure 25.**—Frequency distribution of subsistence/personal use permits and household survey coho salmon harvests, Wrangell, 2000.



**Figure 26.**—Frequency distribution of subsistence/personal use permits and household survey Chinook salmon Harvests, Petersburg, 2000.

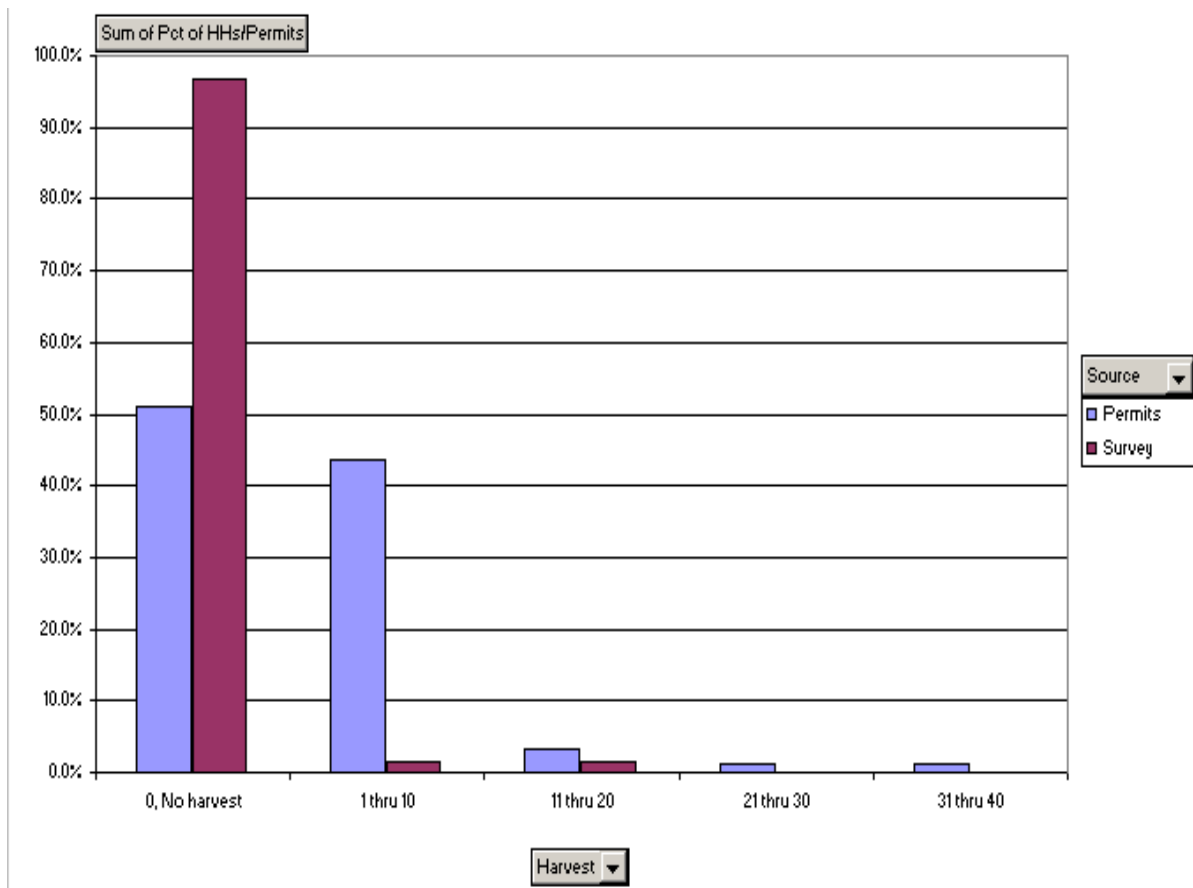


**Figure 27.**—Frequency distribution of subsistence/personal use permits and household survey pink salmon harvests, Petersburg, 2000.

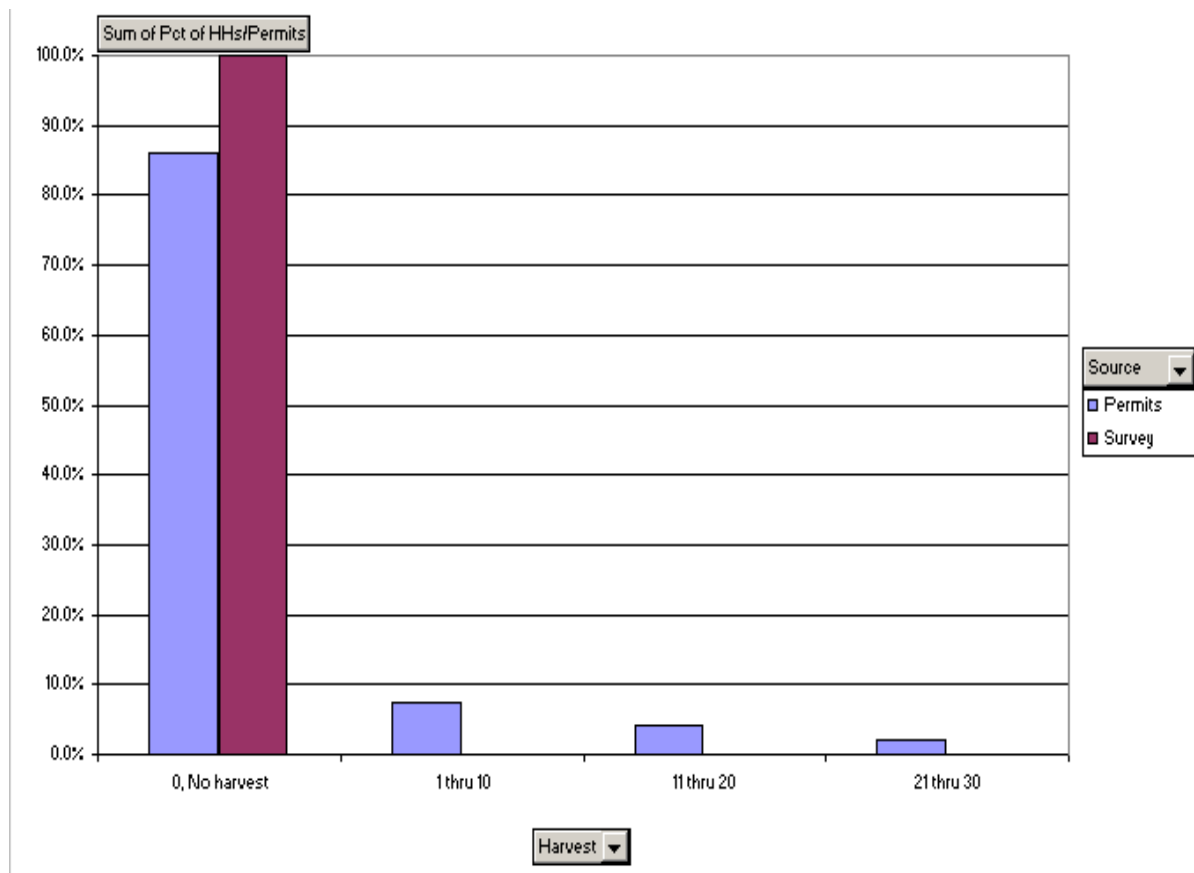


**Figure 28.**—Frequency distribution of subsistence/personal use permits and household survey chum salmon harvests, Petersburg, 2000.





**Figure 29.**—Frequency distribution of subsistence/personal use permits and household survey sockeye salmon harvests, Petersburg, 2000.



**Figure 30.**—Frequency distribution of subsistence/personal use permits and household survey coho salmon harvests, Petersburg, 2000.

## **APPENDIX A. SURVEY INSTRUMENTS**

## A-1. ANGOON SURVEY INSTRUMENT.

---

COMMUNITY _____	<input type="text"/>	INTERVIEWER: _____	<input type="text"/>
		DATE: _____	<input type="text"/>
HHID _____	<input type="text"/>	CODER: _____	<input type="text"/>
		REVIEWER: _____	<input type="text"/>

---

1. HOW MANY PEOPLE **LIVED** IN YOUR HOUSEHOLD THIS YEAR? \_\_\_\_\_
2. DID YOUR HOUSEHOLD FISH FOR SALMON FOR SUBSISTENCE USE THIS YEAR? (Nov 1, 2000 to Oct 31, 2001) YES\_ NO\_
3. HOW MANY PEOPLE **FISHED** IN YOUR HOUSEHOLD THIS YEAR? \_\_\_\_\_
4. HOW MANY **HOUSEHOLDS** DID YOUR HOUSEHOLD **FISH FOR** THIS YEAR? (Nov 1, 2000 to Oct 31, 2001)  
OWN HOUSEHOLD \_\_\_\_\_ OTHER HOUSEHOLDS \_\_\_\_\_  
Y/N (Number)
5. HOW MANY **SUBSISTENCE PERMITS** DID YOUR HOUSEHOLD FISH THIS YEAR?  
\_\_\_\_\_ OWN HOUSEHOLD OTHER HOUSEHOLDS \_\_\_\_\_ DID NOT GET ONE \_\_\_\_\_  
(Number) (Number) (Check if Applies)
6. DID OTHER HOUSEHOLDS **FISH WITH** YOUR HOUSEHOLD THIS YEAR? \_\_\_\_\_ YES \_\_\_\_\_ NO
7. HOW MANY **DAYS** DID YOUR HOUSEHOLD GO SUBSISTENCE SOCKEYE FISHING THIS YEAR? \_\_\_\_\_

## A-1. ANGOON SURVEY INSTRUMENT (CONTINUED).

8. RECORD BELOW THE HARVEST LOCATION(S), GEAR USED, AND NUMBERS OF THE SEVERAL SPECIES OF ALL SALMON **YOUR** HOUSEHOLD CAUGHT BETWEEN NOVEMBER 1, 2000 AND OCTOBER 31, 2001. IF YOU FISHED WITH ANY OTHER HOUSEHOLD(S), REPORT ONLY YOUR HOUSEHOLD'S SHARE AND THE SHARE GOING TO ANY HOUSEHOLD(S) YOU FISHED FOR. (If your partner(s) fished for own and other households, he/she will report those fish).

SPECIES	LOCATION	GEAR	NUMBER

**SUBSISTENCE GEAR:** BEACH SEINE, GILL NET, DIP NET, ROD AND REEL, OTHER (SPECIFY)

- |                                       |                                       |                                       |                                  |
|---------------------------------------|---------------------------------------|---------------------------------------|----------------------------------|
| A. Basket Bay (112-12-16)             | H. Mitchell Bay (112-67)              | O. Hood Bay, North Arm (112-72)       | V. Sitkoh Bay (113-59)           |
| B. Kook Lake Outlet (112-12-25)       | I. Favorite Bay (112-67)              | P. Hood Bay, South Arm (112-73)       | W. Hokatheen Cove (113-94-02)    |
| C. Morse Reef (112-17)                | J. Favorite Creek (112-67-80)         | Q. Weir Ck S Arm Hood Bay (112-73-24) | X. Parker Point                  |
| D. Danger Point (112-17)              | K. Hasselborg R., Salt Lk (112-67-35) | R. Chaik Bay (112-80)                 | Y. Lake Eva (Hanus Bay) (113-52) |
| E. Thayer Creek (112-17-50)           | L. Kanalku Bay (112-67-58)            | S. Chaik Bay Creek (112-80-28)        | Z. Other                         |
| F. Hawk Inlet (112-65)                | M. Kanalku Lake Cr (112-67-60)        | T. Whitewater Bay (112-90)            |                                  |
| G. Freshwater Lake Outlet (112-65-25) | N. Hood Bay (112-71)                  | U. Sitkoh Lake Creek (113-59-04)      |                                  |

## A-1. ANGOON SURVEY INSTRUMENT (CONTINUED).

9. HOW DO YOU ASSESS THE ABUNDANCE OF THE KANALKU LAKE SOCKEYE RUN?

Increasing ☐ Declining ☐ No Change ☐ No Opinion ☐

10. IF CHANGES IN REGULATIONS ARE NEEDED TO ENSURE THE HEALTH OF THE KANALKU SOCKEYE STOCKS, WHAT DO YOU BELIEVE SHOULD BE CHANGED?

Should fishing season be shortened? ..... Yes ☐ No ☐ Don't know ☐

Should openings be staggered? ..... Yes ☐ No ☐ Don't know ☐

Should the upstream area be closed ..... Yes ☐ No ☐ Don't know ☐

No Change Needed ..... Yes ☐ No ☐ Don't know ☐

Other Changes (Specify): \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

11. IF BAG/POSSESSION LIMITS WERE INCREASED FOR SITKOH BAY (currently 15) AND BASKET BAY (currently 10) SOCKEYE, HOW WOULD YOUR HOUSEHOLD'S FISHING PATTERNS BE AFFECTED?

Increase Fishing Effort There ☐

Reduce Fishing Effort at Other Locations ☐

Reduce Fishing Effort at Kanalku ☐

No Change ☐

Other Changes (Specify): \_\_\_\_\_

\_\_\_\_\_

12. \_\_\_\_\_ HOW MANY SOCKEYES DOES YOUR OWN HOUSEHOLD NEED IN A TYPICAL YEAR? ☐

\_\_\_\_\_

13. \_\_\_\_\_ HOW MANY SOCKEYES DOES YOUR HOUSEHOLD NEED FOR SOCIAL OBLIGATIONS? ☐

\_\_\_\_\_ (i.e. Payoff parties, community gatherings, barter, trade, share)

**For Gear Owners:**

14. HOW MANY SOCKEYE DID YOUR BEACH SEINE CATCH THIS YEAR? ☐

DO YOU HAVE ANY COMMENTS OR CONCERNS ABOUT SALMON FISHING YOU WISH TO SHARE?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**THANK YOU FOR YOUR TIME AND FOR HELPING WITH THIS PROJECT - GUNALCHEESH**

A summary of this subsistence fishing survey will be sent to the community next spring.

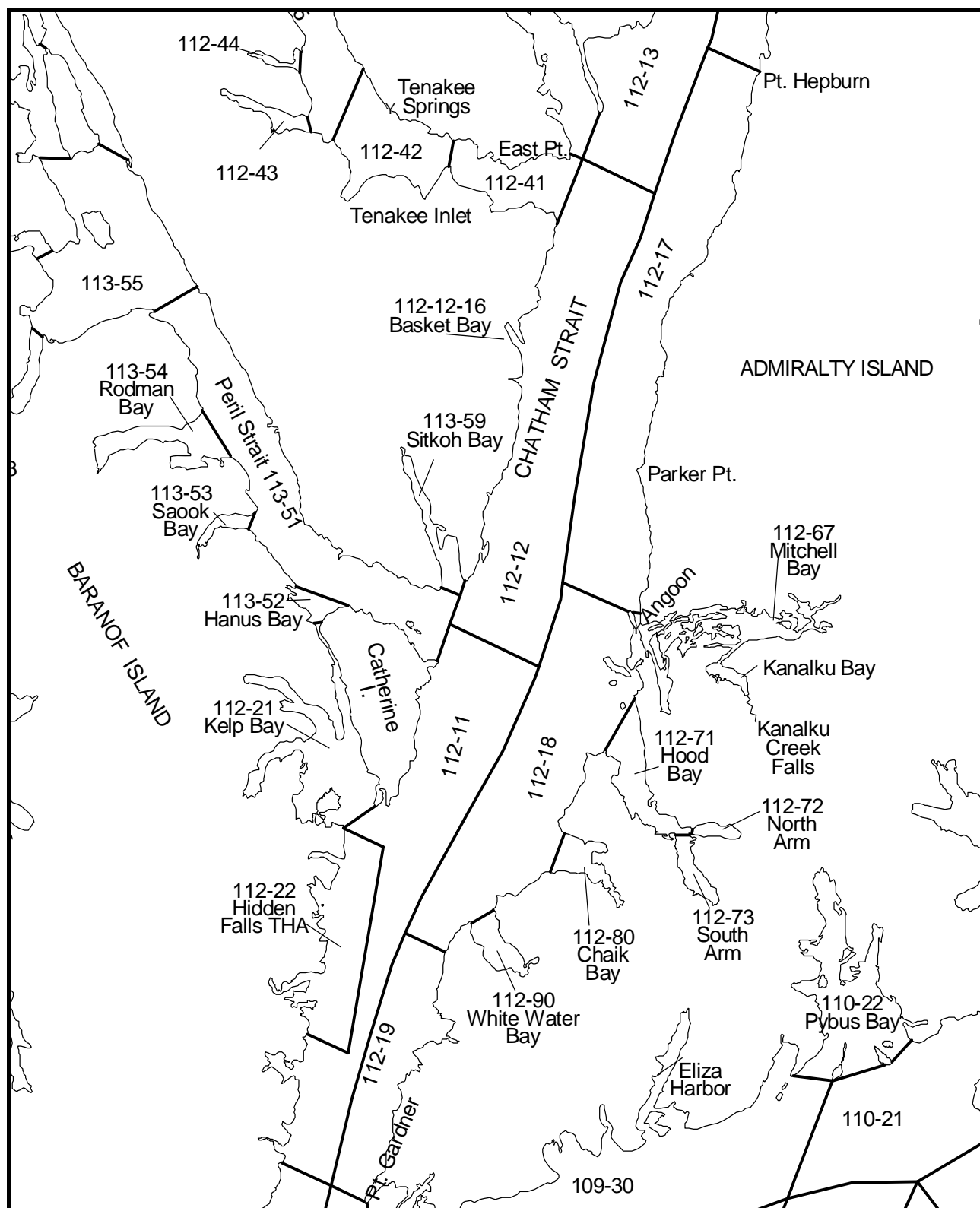
## A-1. ANGOON SURVEY INSTRUMENT (CONTINUED).

COMMUNITY \_\_\_\_\_

INTERVIEWER: \_\_\_\_\_

HHID \_\_\_\_\_

DATE: \_\_\_\_\_



## A-2. HOONAH SURVEY INSTRUMENT.

COMMUNITY \_\_\_\_\_  START TIME \_\_\_\_\_  INTERVIEWER: \_\_\_\_\_   
STOP TIME \_\_\_\_\_  DATE: \_\_\_\_\_   
HHID \_\_\_\_\_  CODER: \_\_\_\_\_   
REVIEWER: \_\_\_\_\_

---

1. HOW MANY PEOPLE **LIVED** IN YOUR HOUSEHOLD THIS YEAR? \_\_\_\_
2. DID YOUR HOUSEHOLD FISH FOR SALMON FOR SUBSISTENCE USE THIS YEAR? (Nov 1, 2000 to Oct 31, 2001) YES \_\_\_\_ NO \_\_\_\_
3. DID ANYBODY IN ANOTHER HOUSEHOLD FISH FOR YOUR HOUSEHOLD THIS YEAR? (Nov 1, 2000 to Oct 31, 2001)  
[HHID \_\_\_\_\_] NO \_\_\_\_\_ YES \_\_\_\_\_ IF YES, WOULD YOU BE WILLING TO SHARE THE NAME OF THE HOUSEHOLD?
4. DID YOU RECEIVE SALMON FROM THAT HOUSEHOLD OR ANOTHER HOUSEHOLD THIS YEAR? NO \_\_\_\_ YES \_\_\_\_  
IF YES, HOW MANY?  
KINGS \_\_\_\_\_ COHOS \_\_\_\_\_ PINKS \_\_\_\_\_  
SOCKEYES \_\_\_\_\_ CHUMS \_\_\_\_\_ STEELHEAD \_\_\_\_\_

NON FISHING HOUSEHOLDS GO TO QUESTION # 11;

FISHING HOUSEHOLDS GO TO QUESTION #5

---

5. HOW MANY PEOPLE IN YOUR HOUSEHOLD **FISHED** THIS YEAR? \_\_\_\_\_
6. HOW MANY **HOUSEHOLDS** DID YOUR HOUSEHOLD **FISH FOR** THIS YEAR? (Nov 1, 2000 to Oct 31, 2001)  
OWN HOUSEHOLD \_\_\_\_\_ OTHER HOUSEHOLDS \_\_\_\_\_  
Y/N (Number)
7. HOW MANY **SUBSISTENCE PERMITS** DID YOUR HOUSEHOLD FISH THIS YEAR?  
\_\_\_\_\_ OWN HOUSEHOLD OTHER HOUSEHOLDS \_\_\_\_\_ DID NOT GET ONE \_\_\_\_\_  
(Number) (Number) (Check if Applies)
8. DID OTHER HOUSEHOLDS **FISH WITH** YOUR HOUSEHOLD THIS YEAR? \_\_\_\_\_ YES \_\_\_\_\_ NO  
(Number)
9. \_\_\_\_\_ HOW MANY **DAYS** DID YOUR HOUSEHOLD GO SUBSISTENCE SOCKEYE FISHING THIS YEAR?



## A-2. HOONAH SURVEY INSTRUMENT (CONTINUED).

10. RECORD BELOW THE HARVEST LOCATION(S), GEAR USED, AND NUMBERS OF THE SEVERAL SPECIES OF ALL SALMON **YOUR** HOUSEHOLD CAUGHT BETWEEN NOVEMBER 1, 2000 AND OCTOBER 31, 2001. IF YOU FISHED WITH ANY OTHER HOUSEHOLD(S), REPORT **ONLY YOUR** HOUSEHOLD'S SHARE AND THE SHARE GOING TO ANY HOUSEHOLD(S) **YOU** FISHED FOR. (If your partner(s) fished for own and other households, he/she will report those fish).

SPECIES	LOCATION	GEAR	NUMBER

**SUBSISTENCE GEAR:** BEACH SEINE, GILL NET, DIP NET, ROD AND REEL, OTHER (SPECIFY)

- |                                       |  |                                |                                |
|---------------------------------------|--|--------------------------------|--------------------------------|
| A. Pavlof River (112-50-10)           | G. Surge Bay (113-93-01))                  | L. Gartina Creek (114-31-09)   | R. Dundas Bay (114-60)         |
| B. Freshwater Bay (112-50)            | H. Hoktahee Cove (113-94-02)               | M. Game Creek (114-31-13)      | S. Excursion Inlet (114-80)    |
| C. Freshwater Lake Outlet (112-65-25) | I. Lemesurier Is. to Cape Spencer (114-21) | N. Sea Gull Creek (114-32-04)  | T. Excursion River (114-80-20) |
| D. Kanulku Bay (112-67-58)            | J. Icy Strait (114-23)                     | O. Bear Creek (114-32-06)      | U. Neva Creek (114-80-45)      |
| E. Kanalku Lake Cr (112-67-60)        | J. Point Sophia Area (114-27)              | P. Neka River (114-33-32)      | V. Other                       |
| F. Takanis Bay (113-92-02)            | K. Spasskii Creek (114-27-30))             | Q. Humpback Creek (114-34-10)) |                                |

## A-2. HOONAH SURVEY INSTRUMENT (CONTINUED).

11. HOW DO YOU ASSESS THE ABUNDANCE OF THE HOKTAHEEN SOCKEYE RUN?

Increasing ☐ Declining ☐ No Change ☐ No Opinion ☐

12. HOW DO YOU ASSESS THE ABUNDANCE OF NEVA CREEK SOCKEYE RUN?

Increasing ☐ Declining ☐ No Change ☐ No Opinion ☐

13. IF CHANGES IN REGULATIONS ARE NEEDED TO ENSURE THE HEALTH OF THE HOKTAHEEN AND OR NEVA CREEK SOCKEYE STOCKS, WHAT DO YOU BELIEVE SHOULD BE CHANGED?

---

---

---

---

14. ☐ HOW MANY SOCKEYES DOES YOUR OWN HOUSEHOLD NEED IN A TYPICAL YEAR? ☐

---

15. ☐ HOW MANY SOCKEYES DOES YOUR HOUSEHOLD NEED FOR SOCIAL OBLIGATIONS? ☐

(i.e. Payoff parties, community gatherings, barter, trade, share)

DO YOU HAVE ANY COMMENTS OR CONCERNS ABOUT SUBSISTENCE SALMON FISHING YOU WISH TO SHARE?

---

---

---

---

---

---

---

---

---

---

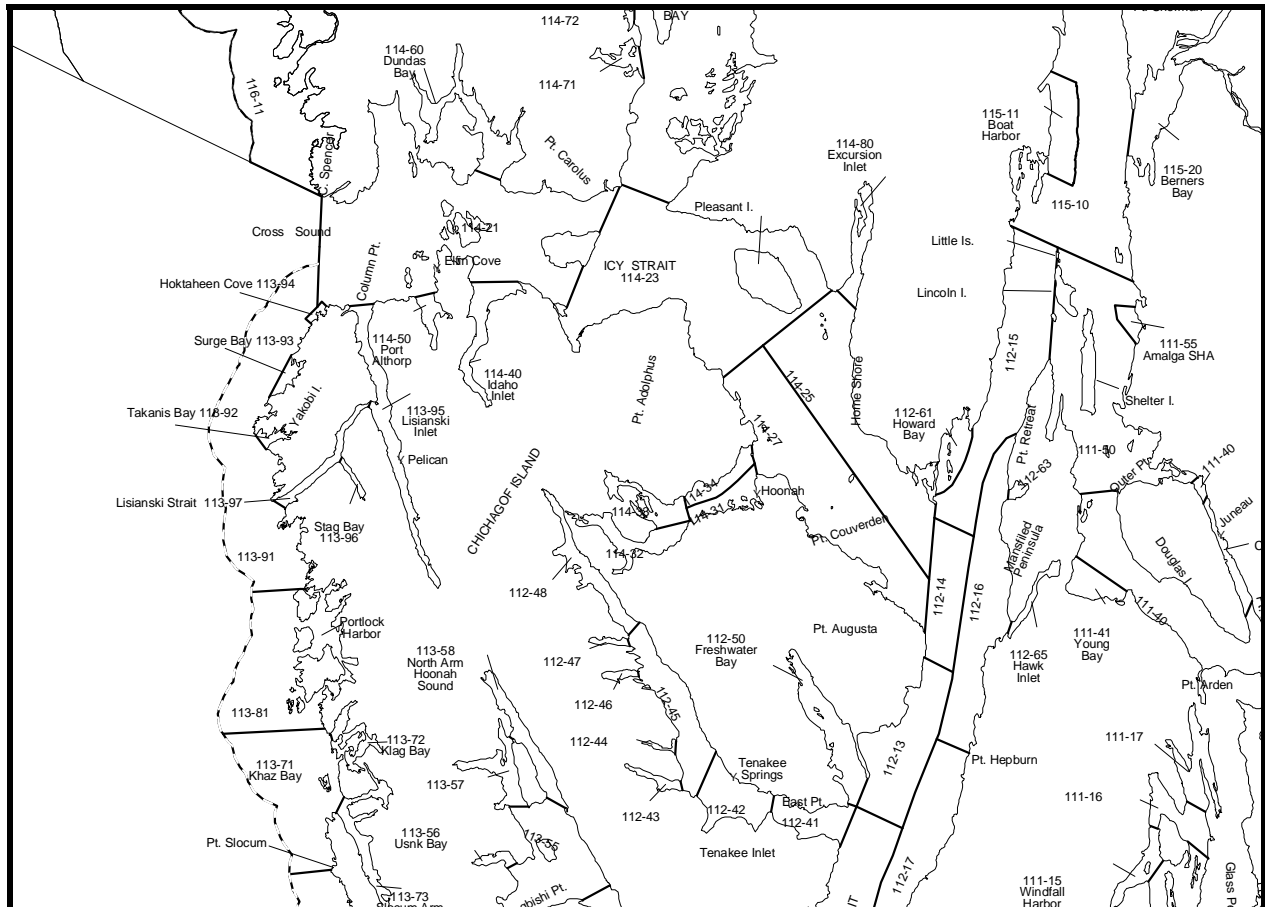
---

**THANK YOU FOR YOUR TIME AND FOR HELPING WITH THIS PROJECT -  
GUNALCHEESH**

A summary of this subsistence fishing survey will be sent to the community next spring.

## A-2. HOONAH SURVEY INSTRUMENT (CONTINUED).

COMMUNITY \_\_\_\_\_

HHID            

### A-3. KAKE SURVEY INSTRUMENT.

COMMUNITY \_\_\_\_\_  START TIME \_\_\_\_\_  INTERVIEWER: \_\_\_\_\_   
STOP TIME \_\_\_\_\_  DATE: \_\_\_\_\_   
HHID \_\_\_\_\_  CODER: \_\_\_\_\_   
REVIEWER: \_\_\_\_\_

---

1. HOW MANY PEOPLE **LIVED** IN YOUR HOUSEHOLD LAST YEAR? \_\_\_\_\_

2. DID YOUR HOUSEHOLD FISH FOR SALMON FOR SUBSISTENCE USE LAST YEAR? (Jan1, to Dec 31, 2001) YES \_\_\_\_\_ NO \_\_\_\_\_

3. DID ANYBODY IN ANOTHER HOUSEHOLD FISH FOR YOUR HOUSEHOLD LAST YEAR? (Jan1, to Dec 31, 2001)

NO \_\_\_\_\_ YES \_\_\_\_\_ IF YES, WOULD YOU BE WILLING TO SHARE THE NAME OF THE HOUSEHOLD?  
[HHID \_\_\_\_\_]

4. DID YOU RECEIVE SALMON FROM THAT HOUSEHOLD OR ANOTHER HOUSEHOLD LAST YEAR? NO \_\_\_\_\_ YES \_\_\_\_\_

IF YES, HOW MANY?

KINGS \_\_\_\_\_

COHOS \_\_\_\_\_

PINKS \_\_\_\_\_

SOCKEYES \_\_\_\_\_

CHUMS \_\_\_\_\_

STEELHEAD \_\_\_\_\_

NON FISHING HOUSEHOLDS GO TO QUESTION # 11

FISHING HOUSEHOLDS GO TO QUESTION #5

---

5. HOW MANY PEOPLE IN YOUR HOUSEHOLD **FISHED** LAST YEAR? \_\_\_\_\_

6. HOW MANY **HOUSEHOLDS** DID YOUR HOUSEHOLD **FISH FOR** LAST YEAR? (Jan1, to Dec 31, 2001)

OWN HOUSEHOLD \_\_\_\_\_ OTHER HOUSEHOLDS \_\_\_\_\_

Y/N

(Number)

7. HOW MANY **SUBSISTENCE PERMITS DID** YOUR HOUSEHOLD **FISH** LAST YEAR?

\_\_\_\_\_ OWN HOUSEHOLD OTHER HOUSEHOLDS \_\_\_\_\_ DID NOT GET ONE \_\_\_\_\_

(Number)

(Number) (Check if Applies)

8. DID OTHER HOUSEHOLDS **FISH WITH** YOUR HOUSEHOLD LAST YEAR? \_\_\_\_\_ YES \_\_\_\_\_ NO

9. HOW MANY **DAYS** DID YOUR HOUSEHOLD GO SUBSISTENCE SOCKEYE FISHING LAST YEAR? \_\_\_\_\_

### A-3. KAKE SURVEY INSTRUMENT (CONTINUED).

10. RECORD BELOW THE HARVEST LOCATION(S), GEAR USED, AND NUMBERS OF THE SEVERAL SPECIES OF ALL SALMON **YOUR** HOUSEHOLD CAUGHT BETWEEN JANUARY 1, AND DECEMBER 31, 2001. IF YOU FISHED WITH ANY OTHER HOUSEHOLD(S), REPORT ONLY YOUR HOUSEHOLD'S SHARE AND THE SHARE GOING TO ANY HOUSEHOLD(S) YOU FISHED FOR. (If your partner(s) fished for own and other households, he/she will report those fish).

SPECIES	LOCATION	GEAR	NUMBER
<div></div>	<div></div>	<div></div>	<div></div>
<div></div>	<div></div>	<div></div>	<div></div>
<div></div>	<div></div>	<div></div>	<div></div>
<div></div>	<div></div>	<div></div>	<div></div>
<div></div>	<div></div>	<div></div>	<div></div>
<div></div>	<div></div>	<div></div>	<div></div>
<div></div>	<div></div>	<div></div>	<div></div>

**SUBSISTENCE GEAR:** BEACH SEINE, GILL NET, DIP NET, ROD AND REEL, OTHER (SPECIFY)

A. Gut Bay (109-20-06)	H. Port Camden (109-43-06)	O. Kutlaku (109-52-35)	V. Rocky Pass (105-32)
B. Falls Creek (109-20-13)	I. Saginaw Bay (109-44-39)	P. Kwatahein Cr. (109-52-055)	W. Irish Creek (105-32-012)
C. Tyee Head East (109-30-016)	J. Salt Chuck-Security Bay (109-45-13)	Q. Chatham St/Coronation to Pt Ellis (109-61)	X. Red Lake Creek (106-41-030)
D. Point White Creek (109-42-001)	K. Dean's Creek (109-50-007)	R. Alecks Creek (109-62-13)	Y. Salmon Bay Creek (106-41-010)
E. Gunnock Creek (109-42-004)	L. Kingsmill /Washington Bay (109-51)	S. False Pybus Bay Creek (110-21)	Z.
F. Jenny Creek (109-42-005)	M. Rowan Bay (109-52)	T. Pybus Bay (110-22)	Other
G. Hamilton Bay (109-42-010)	N. Pillar Bay (109-52)	U. Kushneahin Creek (105-31-002)	

### A-3. KAKE SURVEY INSTRUMENT (CONTINUED).

#### 11. HOW DO YOU ASSESS THE ABUNDANCE OF THE SOCKEYE RUN AT

FALLS CREEK? Increasing \_\_\_\_ ☐ Declining \_\_\_\_ ☐ No Change \_\_\_\_ ☐ No Opinion \_\_\_\_ ☐

GUT BAY? Increasing \_\_\_\_ ☐ Declining \_\_\_\_ ☐ No Change \_\_\_\_ ☐ No Opinion \_\_\_\_ ☐

KUTLAKU CREEK? Increasing \_\_\_\_ ☐ Declining \_\_\_\_ ☐ No Change \_\_\_\_ ☐ No Opinion \_\_\_\_ ☐

12. IF CHANGES IN REGULATIONS ARE NEEDED TO ENSURE THE HEALTH OF THE FALLS CREEK SOCKEYE STOCKS, WHAT DO YOU BELIEVE SHOULD BE CHANGED?

---

---

13. IF CHANGES IN REGULATIONS ARE NEEDED TO ENSURE THE HEALTH OF THE GUT BAY SOCKEYE STOCKS, WHAT DO YOU BELIEVE SHOULD BE CHANGED?

---

---

14. IF CHANGES IN REGULATIONS ARE NEEDED TO ENSURE THE HEALTH OF THE KUTLAKU SOCKEYE STOCKS, WHAT DO YOU BELIEVE SHOULD BE CHANGED?

---

---

15. \_\_\_\_\_ HOW MANY SOCKEYES DOES YOUR OWN HOUSEHOLD NEED IN A TYPICAL YEAR? ☐

16. \_\_\_\_\_ HOW MANY SOCKEYES DOES YOUR HOUSEHOLD NEED FOR SOCIAL OBLIGATIONS? ☐

\_\_\_\_\_ (i.e. Payoff parties, community gatherings, barter, trade, share)

#### 17. HOW DO YOU ASSESS THE ABUNDANCE OF THE STEELHEAD RUN AT

HAMILTON BAY? Increasing \_\_\_\_ ☐ Declining \_\_\_\_ ☐ No Change \_\_\_\_ ☐ No Opinion \_\_\_\_ ☐

KADAKE BAY? Increasing \_\_\_\_ ☐ Declining \_\_\_\_ ☐ No Change \_\_\_\_ ☐ No Opinion \_\_\_\_ ☐

#### 18. HOW DO YOU ASSESS THE ABUNDANCE OF THE COHO RUN AT:

HAMILTON BAY? Increasing \_\_\_\_ ☐ Declining \_\_\_\_ ☐ No Change \_\_\_\_ ☐ No Opinion \_\_\_\_ ☐

KADAKE BAY? Increasing \_\_\_\_ ☐ Declining \_\_\_\_ ☐ No Change \_\_\_\_ ☐ No Opinion \_\_\_\_ ☐

KUSHNEAHIN CK? Increasing \_\_\_\_ ☐ Declining \_\_\_\_ ☐ No Change \_\_\_\_ ☐ No Opinion \_\_\_\_ ☐

IRISH CREEK? Increasing \_\_\_\_ ☐ Declining \_\_\_\_ ☐ No Change \_\_\_\_ ☐ No Opinion \_\_\_\_ ☐

DEAN'S CREEK? Increasing \_\_\_\_ ☐ Declining \_\_\_\_ ☐ No Change \_\_\_\_ ☐ No Opinion \_\_\_\_ ☐

DO YOU HAVE ANY COMMENTS OR CONCERNS ABOUT SUBSISTENCE SALMON FISHING YOU WISH TO SHARE?

---

---

---

**THANK YOU FOR YOUR TIME AND FOR HELPING WITH THIS PROJECT - GUNALCHEESH**

A summary of this subsistence fishing survey will be sent to the community next spring

## A-4. PETERSBURG SURVEY INSTRUMENT.

### NON-COMMERCIAL FISHING: SALMON.

DID MEMBERS OF YOUR HOUSEHOLD TRY TO HARVEST OR USE SALMON BETWEEN JAN 1, 2000 AND DEC 31, 2000?

YES: \_\_\_\_\_ NO: \_\_\_\_\_

IF YES, PLEASE COMPLETE THE FOLLOWING TABLE (POUNDS SHOULD INDICATE EDIBLE WEIGHT):

SPECIES	USED? Y/N	TRIED TO HARVEST Y/N	NUMBER HARVESTED BY:									UNITS	RECEIVED Y/N	GAVE AWAY Y/N
			GILLNET #	SEINE #	DIP NET #	ROD & REEL #	LOGLINE* #	SET NET #	GAFF #	OTHER METHOD TYPE   #				
CHUM SALMON 111000002												IND 1		
COHO SALMON 112000002												IND 1		
CHINOOK SALMON 113000002												IND 1		
PINK SALMON 114000002												IND 1		
SOCKEYE SALMON 115000002												IND 1		
UNKNOWN SALMON 119000002												IND 1		

\* LOGLINE INCLUDES TROLLING IN OPEN WATER

### MAPPING USE AREAS

Where have you or any member of your household harvested salmon for your own use in the last five years, 1996-2000?

DRAW THIS AREA ON THE ATTACHED MAP IN GREEN.

## A-4. PETERSBURG SURVEY INSTRUMENT (CONTINUED).

### SALMON FISHING LOCATIONS

BETWEEN JAN 1, 2000 AND DEC 31, 2000, WHERE DID YOUR HOUSEHOLD FISH FOR SALMON?

	Salmon Bay Creek [106-41-10]	Red Lake Creek [106-41-30]	Blind Slough [106-44-29]	Thoms Creek [107-30-30]	Mill Creek [107-45-7]	Alecks Creek [109-62-13]	Pillar Bay SW Side [109-52-50]	Shiple Bay Lake Creek [105-43-2]	Falls Creek- Baranof Is [109-20-13]	Gut Bay Head [109-20-7]	Kutlaku Creek [109-52-35]				
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
FISHED FOR SALMON: Y/N															
110000002															
NUMBER SCKEYE HARVEST D															
115000002															
NUMBER COHO HARVEST D															
112020002															



## A-5. WRANGELL SURVEY INSTRUMENT.

### NON-COMMERCIAL FISHING: SALMON.

DID MEMBERS OF YOUR HOUSEHOLD TRY TO HARVEST OR USE SALMON BETWEEN JAN 1, 2000 AND DEC 31, 2000?

YES: \_\_\_\_\_ NO: \_\_\_\_\_

IF YES, PLEASE COMPLETE THE FOLLOWING TABLE (POUNDS SHOULD INDICATE EDIBLE WEIGHT):

SPECIES	USED? Y/N	TRIED TO HARVEST Y/N	NUMBER HARVESTED BY:									UNITS	RECEIVED Y/N	GAVE AWAY Y/N
			GILLNET #	SEINE #	DIP NET #	ROD & REEL #	LOGLINE* #	SET NET #	GAFF #	OTHER METHOD TYPE      #				
CHUM SALMON												IND		
111000002												1		
COHO SALMON												IND		
112000002												1		
CHINOOK SALMON												IND		
113000002												1		
PINK SALMON												IND		
114000002												1		
SOCKEYE SALMON												IND		
115000002												1		
UNKNOWN SALMON												IND		
119000002												1		

\* 'LOGLINE' INCLUDES TROLLING IN OPEN WATER

### MAPPING USE AREAS

Where have you or any member of your household harvested salmon for your own use in the last five years, 1996-2000?

DRAW THIS AREA ON THE ATTACHED MAP IN GREEN.

## A-5. WRANGELL SURVEY INSTRUMENT (CONTINUED).

### SALMON FISHING LOCATIONS

BETWEEN JAN 1, 2000 AND DEC 31, 2000, WHERE DID YOUR HOUSEHOLD FISH FOR SALMON?

	Salmon Bay Creek [106-41-10]	Red Lake Creek [106-41-30]	Blind Slough [106-44-29]	Thoms Creek [107-30-30]	Mill Creek [107-45-7]	Alecks Creek [109-62-13]	Pillar Bay SW Side [109-52-50]	Shipley Bay Lake Creek [105-43-2]	Falls Creek- Baranof Is [109-20-13]	Gut Bay Head [109-20-7]	Kutlaku Creek [109-52-35]				
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
FISHED FOR SALMON: Y/N															
11000002															
NUMBER SOCKEYE HARVESTED															
11500002															
NUMBER COHO HARVESTED															
11200002															

## A-6. YAKUTAT SURVEY INSTRUMENT.

### NON-COMMERCIAL FISHING: SALMON.

DID MEMBERS OF YOUR HOUSEHOLD TRY TO HARVEST OR USE SALMON BETWEEN JAN 1, 2000 AND DEC 31, 2000?

YES: \_\_\_\_\_ NO: \_\_\_\_\_

IF YES, PLEASE COMPLETE THE FOLLOWING TABLE (POUNDS SHOULD INDICATE EDIBLE WEIGHT):

SPECIES	USED? Y/N	TRIED TO HARVEST Y/N	NUMBER HARVESTED BY:									UNITS	RECEIVED Y/N	GAVE AWAY Y/N
			GILLNET #	SEINE #	DIP NET #	ROD & REEL #	LONGLINE* #	SET NET #	GAFF #	OTHER METHOD TYPE      #				
CHUM SALMON (Dog)												IND		
111000002												1		
COHO SALMON (Silver)												IND		
112000002												1		
CHINOOK SALMON (King)												IND		
113000002												1		
PINK SALMON (Humpies)												IND		
114000002												1		
SOCKEYE SALMON (Red)												IND		
115000002												1		
UNKNOWN SALMON												IND		
119000002												1		

\* 'LONGLINE' INCLUDES TROLLING IN OPEN WATER

### NOTES

### MAPPING USE AREAS

Where have you or any member of your household harvested salmon for your own use in the last five years, 1996-2000?

DRAW THIS AREA ON THE ATTACHED MAP IN GREEN.

## A-6. YAKUTAT SURVEY INSTRUMENT (CONTINUED).

### SALMON FISHING LOCATIONS

BETWEEN JAN 1, 2000 AND DEC 31, 2000, WHERE DID YOUR HOUSEHOLD FISH FOR SALMON?

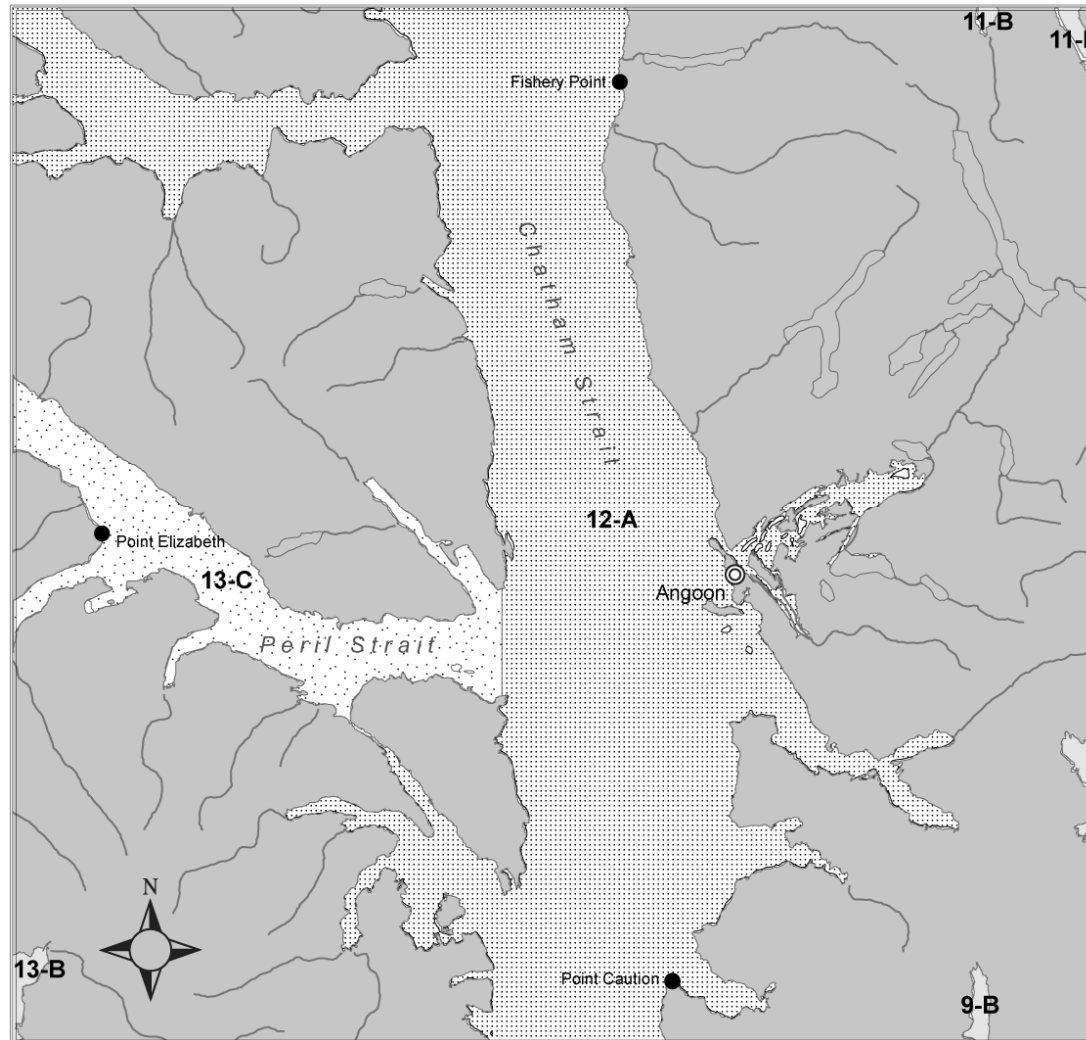
USE MAP TO IDENTIFY SUBSISTENCE FISHING PERMIT AREAS USED													NAMES OF OTHER AREAS USED IN 2000		
	East Alsek River [182-20-010]	Alsek River [182-30-010]	Akwe River [182-40-010]	Ahrnklin River [182-70-200]	Situk River [182-70-010]	Lost River [182-80-010]	Tawah Creek [182-80-030]	Yakutat Bay [183-10-000]	Ankau Creek [183-50-010]	Esker Stream [183-90-220]	Sudden Stream [183-20-170]	Icy Bay [181-40-000]			
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
FISHED FOR SALMON: Y/N															
110000002															
NUMBER SOCKEYE (Reds) HARVESTED															
115000002															
NUMBER COHO (Silver) HARVESTED															
112020002															
NUMBER CHINOOK (Kings) HARVESTED															
113020002															
NUMBER PINK (Humpies) HARVESTED															
114020002															
NUMBER CHUM (Dogs) HARVESTED															
111020002															

## **APPENDIX B. MAPS**

## B-1. MAP OF THE ANGOON AREA

### Angoon Area

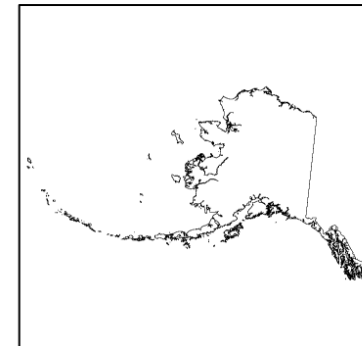
Alaska Dept. of Fish and Game  
Division of Subsistence



Subsistence salmon fisheries in the waters customarily used by the community of Angoon are under the management responsibility of the Division of Commercial Fisheries Juneau and Sitka area offices.

"Customary and Traditional Use" determinations for salmon include the waters of District 12 south of a line from Fishery Point to South Passage Point and north of the latitude of Point Caution, and in waters of Section 13-C east of the longitude of Point Elizabeth (5 AAC 01.716 (5)).

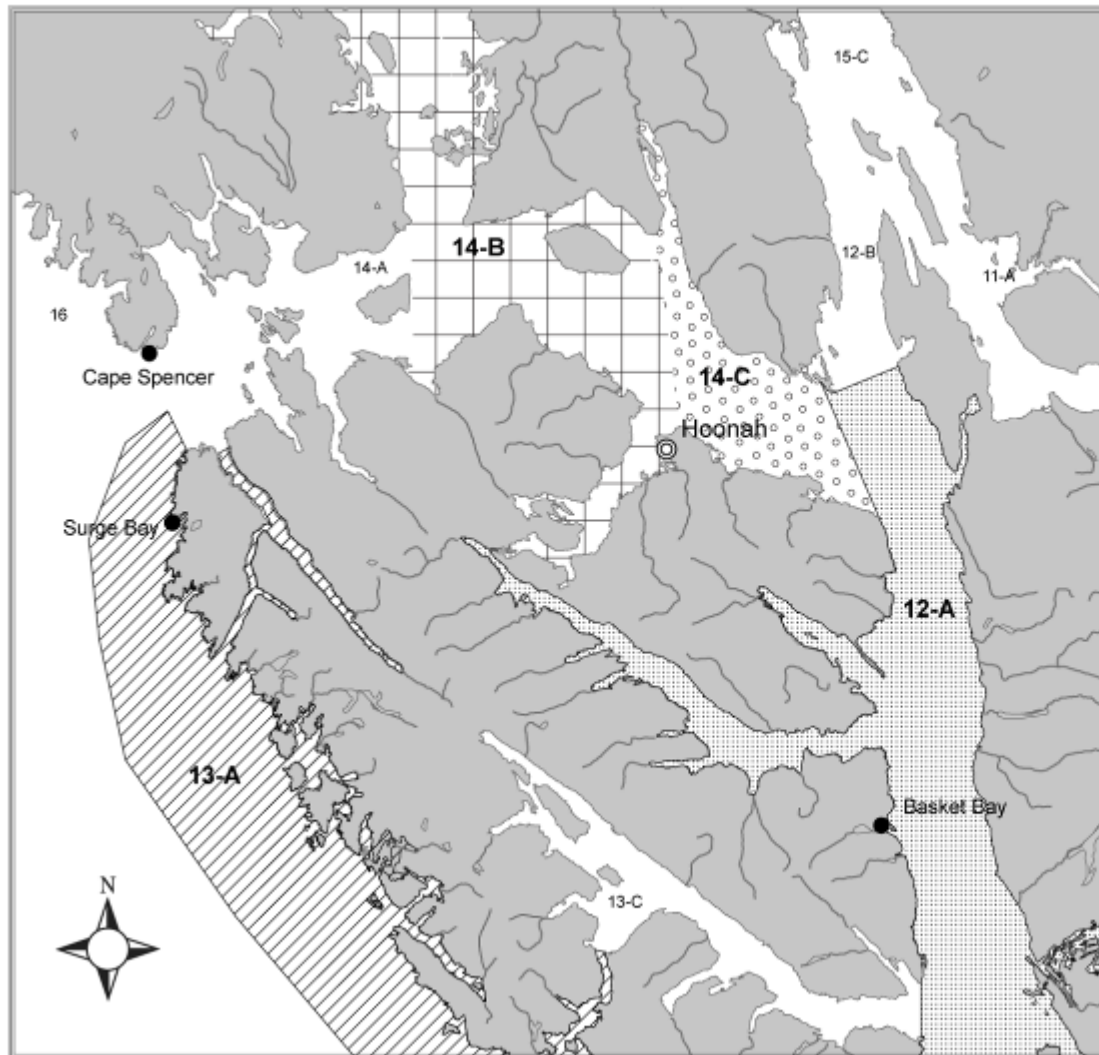
0 3 6 12 Miles



## B-2. MAP OF THE HOONAH AREA

### Hoonah Area

Alaska Dept. of Fish and Game  
Division of Subsistence



Subsistence salmon fisheries in the waters customarily used by the community of Hoonah are under the management responsibility of the Division of Commercial Fisheries Juneau and Sitka area offices. "Customary and Traditional Use" determinations for salmon include the waters of District 12 in Basket Bay inside a line from 57° 30.83' N. lat., 134° 53.20' W. long., to 57° 39.28' N. lat., 134° 53.88' W. long., in District 13 in waters along the western shore of Yakobi Island east of a line from Cape Spencer Light to Surge Bay Light, and in waters of Section 14B and 14-C, (5 AAC 01.716(4)).

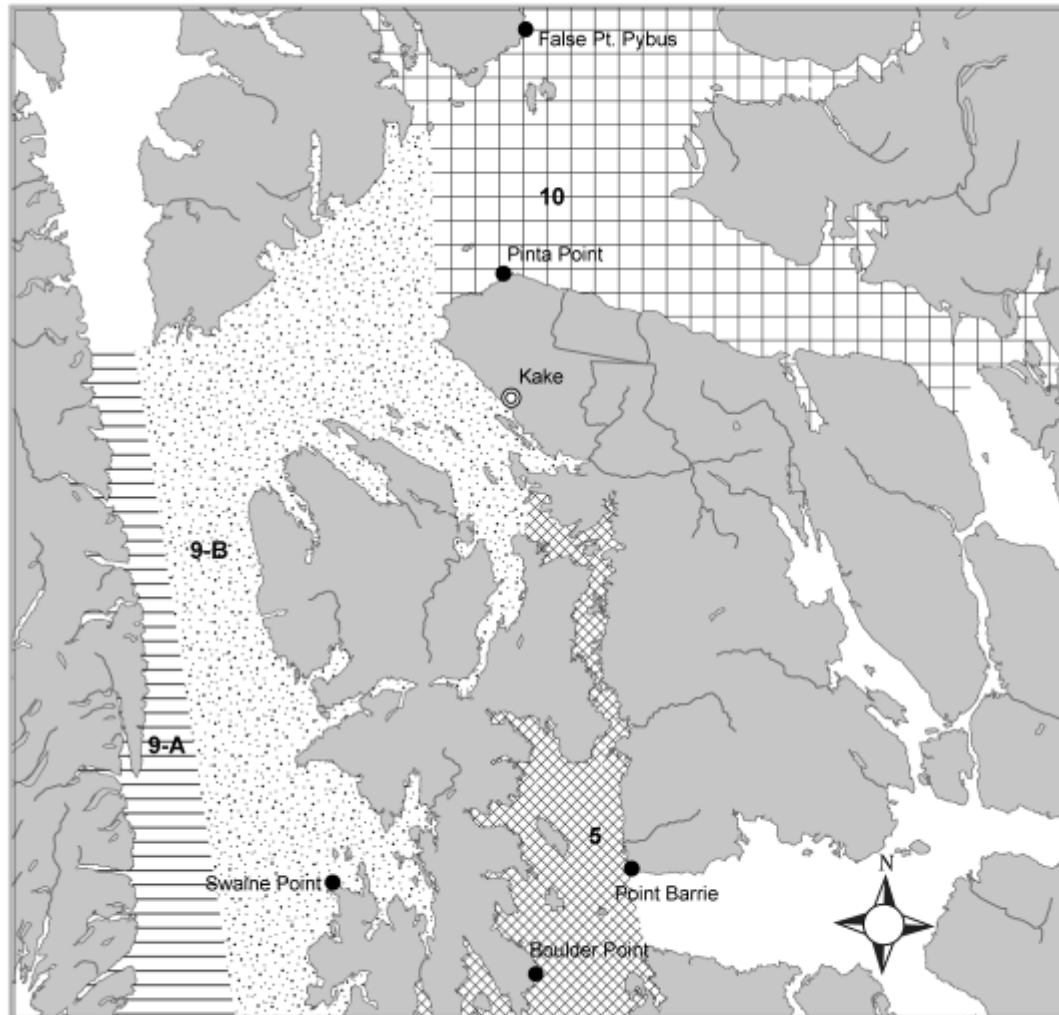
0 5 10 20 Miles



## B-3. MAP OF THE KAKE AREA

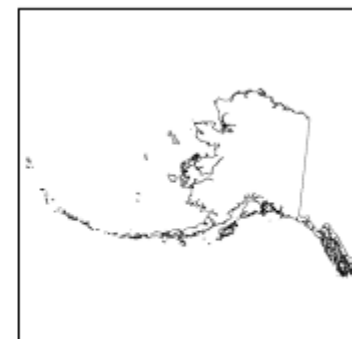
### Kake Area

Alaska Dept. of Fish and Game  
Division of Subsistence



Subsistence salmon fisheries in the waters customarily used by the community of Kake are under the management responsibility of the Petersburg and Wrangell offices of the Division of Commercial Fisheries. "Customary and Traditional Use" determinations from salmon include the waters of Section 9-A and 9-B in waters north of the latitude of Swaine Point, in waters of District 10 west of a line from Pinta Point to False Point Pybus, and in waters of District 5 north of a line from Point Barrie to Boulder Point (5 AAC 01.716 (10)).

0 5 10 20 Miles

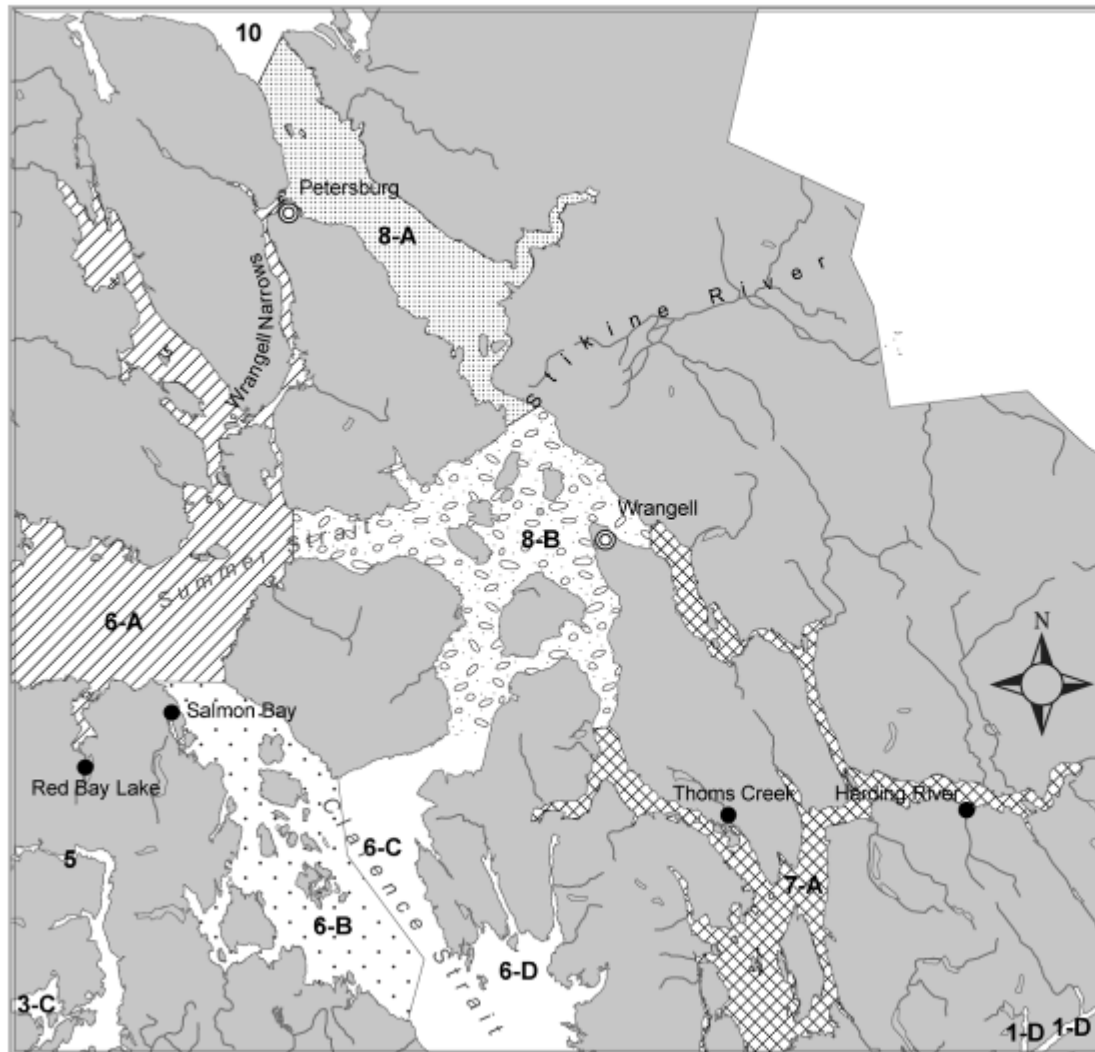




## B-4. MAP OF THE PETERSBURG AND WRANGELL AREAS

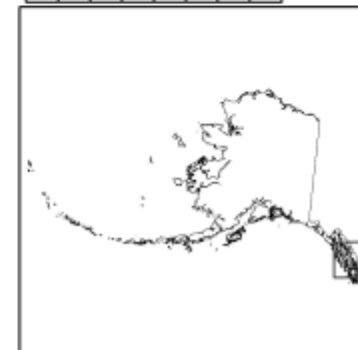
### Wrangell & Petersburg Area Maps

Alaska Dept. of Fish and Game  
Division of Subsistence



Subsistence salmon fisheries in the waters customarily used by the community of Wrangell are under the management responsibility of the Division of Commercial Fisheries Petersburg and Wrangell offices. "Customary and Traditional Use" determinations for salmon include the waters of Section 6-A west of a line from Macnamara Point to Mitchell Point, and in the waters of Section 6-B west of the longitude Macnamara Point; in the waters of Section 7 and 8 (5 AAC 01.716 (20) and (22)).

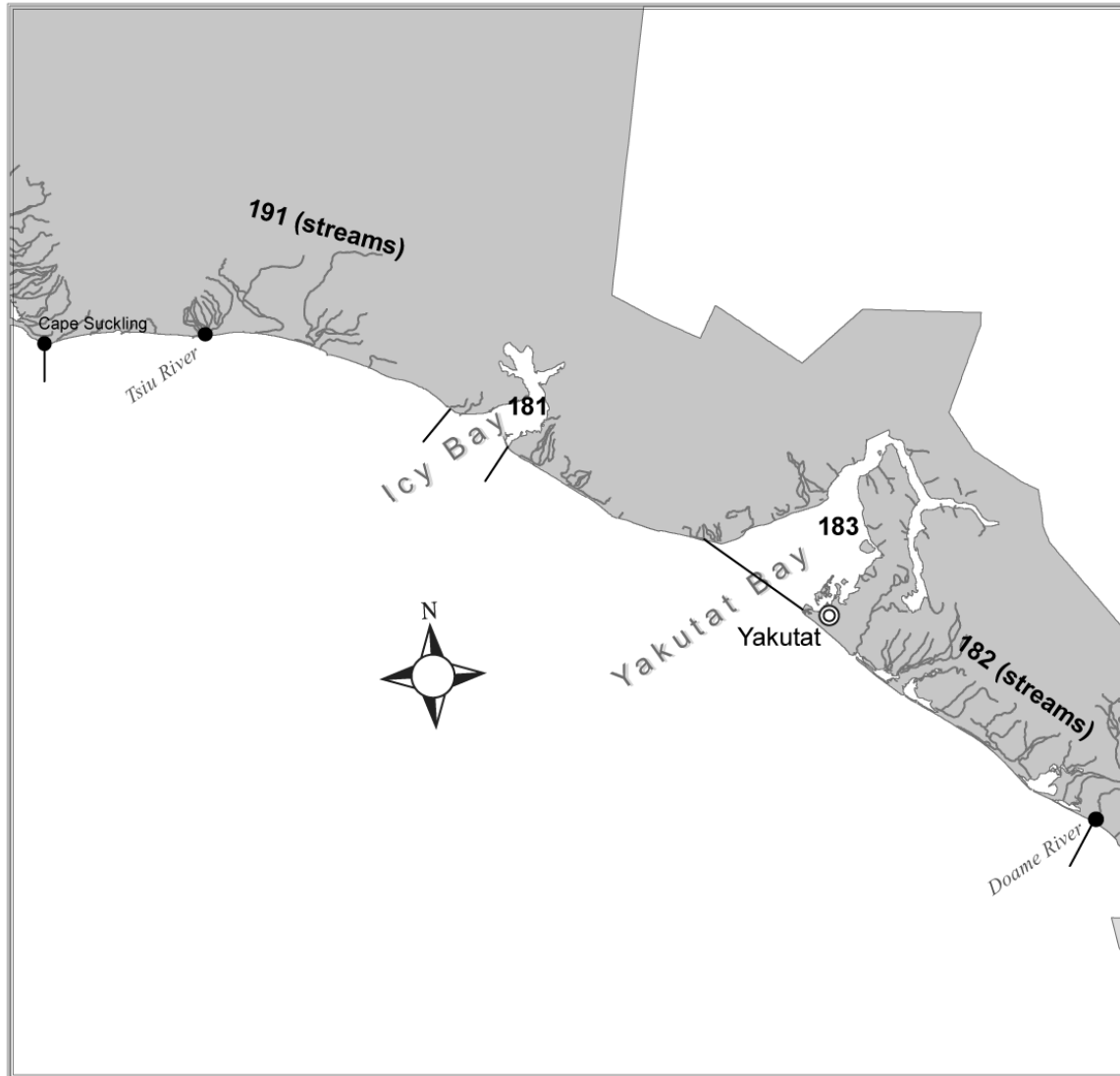
0 4.5 9 18 Miles



## B-5. MAP OF THE YAKUTAT AREA

### Yakutat Management Area

Alaska Dept. of Fish and Game  
Division of Subsistence



The Yakutat Management Area stretches from Cape Fairweather to Cape Suckling. "Customary and Traditional Use" determinations for salmon identify the freshwaters upstream the terminus of streams and rivers from the Doame River in District 182 in the south to the Tsiu River in District 191, and the waters of Yakutat Bay and Russell Fjord in District 183, and Icy Bay in District 181 (5 AAC 01.666(3)).

0 12.5 25 50 Miles

