Subsistence Harvests of Pacific Halibut in Alaska, 2008

by

James A. Fall

and

David Koster

January 2010

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)	
centimeter	cm
deciliter	dL
gram	g
hectare	ha
kilogram	kg
kilometer	km
liter	L
meter	m
milliliter	mL
millimeter	mm
Weights and measures (English)	ft ³ /s
cubic feet per second	
foot	ft
gallon	gal
inch	in
mile	mi
nautical mile	nmi
ounce	OZ
pound	lb
quart	qt
yard	yd
Time and temperature	
day	d
degrees Celsius	°C
degrees Fahrenheit	°F
degrees kelvin	Κ
hour	h
minute	min
second	s
Physics and chemistry	
Physics and chemistry	
all atomic symbols	
all atomic symbols alternating current	AC
all atomic symbols alternating current ampere	А
all atomic symbols alternating current ampere calorie	A cal
all atomic symbols alternating current ampere calorie direct current	A cal DC
all atomic symbols alternating current ampere calorie direct current hertz	A cal DC Hz
all atomic symbols alternating current ampere calorie direct current hertz horsepower	A cal DC Hz hp
all atomic symbols alternating current ampere calorie direct current hertz horsepower hydrogen ion activity (negative lo	A cal DC Hz hp g of) pH
all atomic symbols alternating current ampere calorie direct current hertz horsepower hydrogen ion activity (negative lo parts per million	A cal DC Hz hp g of) pH ppm
all atomic symbols alternating current ampere calorie direct current hertz horsepower hydrogen ion activity (negative lo parts per million parts per thousand	A cal DC Hz hp g of) pH ppm ppt, ‰
all atomic symbols alternating current ampere calorie direct current hertz horsepower hydrogen ion activity (negative lo parts per million parts per thousand volts	A cal DC Hz pp g of) pH ppm ppt, ‰ V
all atomic symbols alternating current ampere calorie direct current hertz horsepower hydrogen ion activity (negative lo parts per million parts per thousand	A cal DC Hz hp g of) pH ppm ppt, ‰

General	
all commonly-accepted a	
e.g., Mr., Mrs., AM, PM, et	
all commonly-accepted p	
titles; e.g., Dr., Ph.D., R.	
Alaska Administrative Code	AAC
Alaska Department of	
Fish and Game	ADF&G
at	@
compass directions:	-
east	E
north	N
south	S
west	W
copyright	C
corporate suffixes:	
Company	Co.
Corporation	Corp.
Incorporated	Inc.
Limited	Ltd.
District of Columbia	D.C.
et alii (and others)	et al.
et cetera (and so forth)	etc.
exempli gratia (for example)	e.g.
Federal Information Code	FIC
<i>id est</i> (that is)	i.e.
latitude or longitude	lat. or long.
monetary symbols (U.S.)	\$,¢
months (tables and figures):	first three
	(Jan,,Dec)
registered trademark	®
trademark	TM
United States (adjective)	U.S.
United States of America (not	· ·
	States Code
U.S. state use two-letter a	
(e.	g., AK, WA

Measures (fisheries)	
fork length	FL
mideye-to-fork	MEF
mideye-to-tail-fork	METF
standard length	SL
total length	SL TL
total lengui	IL
Mathematics, statistics	
all standard mathematical s	signs, symbols
and abbreviations	
alternate hypothesis	H _A
approximately	~
base of natural logarithm	е
catch per unit effort	CPUE
coefficient of variation	CV
common test statistics	$(F, t, \chi^2, \text{etc.})$
confidence interval	CI
correlation coefficient (mult	tiple) R
correlation coefficient (simple	ole) r
covariance	cov
degree (angular)	0
degrees of freedom	df
expected value	Е
greater than	>
greater than or equal to	2
harvest per unit effort	HPUE
less than	<
less than or equal to	<
logarithm (natural)	ln
logarithm (base 10)	log
logarithm (specify base)	\log_2 etc.
mean	\overline{x}
minute (angular)	, x
not significant	NS
null hypothesis	H ₀
percent	%
plus or minus	70 ±
population size	Ň
probability	P
- ·	-
sample size	<i>n</i>
second (angular) standard deviation	
	σ or s
standard error (of the mean)	
type I error probability	P_a
type II error probability	P_b $\sigma^2 \text{ or } s^2$
variance	σ or s^{-}

TECHNICAL PAPER NO. 348

SUBSISTENCE HARVESTS OF PACIFIC HALIBUT IN ALASKA, 2008

by

James A. Fall, Alaska Department of Fish and Game, Division of Subsistence, Anchorage

and

David Koster 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, USA

> > January 2010

Development and publication of this manuscript were partially financed by the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, under award number NA04NMF4370170.

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. This publication has undergone editorial and professional review.

James A. Fall and David Koster, Alaska Department of Fish and Game, Division of Subsistence, 333 Raspberry Road, Anchorage, Alaska, 99518, USA

This document should be cited as: Fall, J.A. and D. Koster. 2010. Subsistence harvests of Pacific halibut in Alaska, 2008. Alaska Department of Fish and Game Division of Subsistence, Technical Paper No. 348, 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, MS 2042, Arlington, VA, 22203 Office of Equal Opportunity, U.S. Department of the Interior, 1849 C Street, NW MS 5230, Washington D.C., 20240

The department's ADA Coordinator can be reached via telephone 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: ADF&G Division of Subsistence at www.subsistence.adfg.state.ak.us.

TABLE OF CONTENTS

Page

	-
LIST OF TABLES	ii
LIST OF FIGURES	iii
LIST OF APPENDICES	iv
ACKNOWLEGEMENTS	v
ABSTRACT	vi
EXECUTIVE SUMMARY	vii
CHAPTER 1: BACKGROUND AND METHODS	
Background	
Project Objectives	
Data Collection Methods	
Public Outreach	
Postal Household Survey	2
Community Visits and In-Person Surveys	
Sample Achievement	
Data Analysis	
Data Entry Analysis: Development of Harvest Estimates	
Products	
CHAPTER 2: FINDINGS	9
Subsistence Halibut Harvests In 2008	9
Estimated Number of Subsistence Halibut Fishers	
Estimated Alaska Subsistence Halibut Harvests in 2008 by SHARC Type and Regulatory Area Estimated Alaska Subsistence Halibut Harvests in 2008 by Harvest Location	
Subsistence Halibut Harvests by Place of Residence	
Subsistence Harvests by Gear Type	
Number of Hooks Fished with Setline Gear	
Sport Harvests of Halibut by SHARC Holders Estimated Average Net Weights of Subsistence- and Sport-Caught Halibut	
Rockfish Harvests	
Lingcod Harvests	
CHAPTER 3: DISCUSSION	
Comparisons With Other Harvest Estimates	
Community Case Studies	
Sitka (Regulatory Area 2C)	
Petersburg (Regulatory Area 2C)	21
Cordova (Regulatory Area 3A) Port Graham (Regulatory Area 3A)	
Kodiak City and Road System (Regulatory Area 3A)	
Sand Point (Regulatory Area 3B)	

Unalaska/Dutch Harbor (Regulatory Area 4A)	27
Toksook Bay (Regulatory Area 4E) Tununak (Regulatory Area 4E)	29
Comparisons With Nonsubsistence Harvests In 2008	
CHAPTER 4: CONCLUSIONS AND RECOMMENDATIONS	
Summary And Conclusions	
Recommendations	
REFERENCES CITED	
TABLES AND FIGURES	
APPENDIX A: LIST OF ELIGIBLE TRIBES AND RURAL COMMUNITIES (FROM FEDERAL REGISTER)	
APPENDIX B: LETTER SENT TO TRIBES ABOUT THE PROJECT	
APPENDIX C: NEWSPAPER NOTICE	112
APPENDIX D: SURVEY INSTRUMENT	114
APPENDIX E: SURVEY EXPLANATORY LETTER	118
APPENDIX F: SET OF FREQUENTLY-ASKED QUESTIONS AND RESPONSES	
APPENDIX G: APPENDIX TABLES	124
APPENDIX H: PROJECT FINDINGS SUMMARY	

LIST OF TABLES

Table	Page
1.	Population of rural communities eligible to participate in the Alaska subsistence halibut fishery, 2000
	and 2008
2.	Project chronology, 2008 project year
3.	Sample achievement, Alaska subsistence halibut survey, by eligible Alaska tribe, eligible Alaska rural
	community, and community of residence of SHARC holders, 2008
4.	Estimated Alaska subsistence harvests of halibut, sport halibut harvests by SHARC holders, and
	incidental harvests of lingcod and rockfish, by SHARC type and regulatory area of the tribe or rural
	community of registration by the SHARC holder, 2008
5.	Age of SHARC holders, by SHARC type, 2008
6.	Estimated Alaska subsistence harvests of halibut by regulatory area and subarea fished and gear type,
	and estimated sport harvests by SHARC holders, 2008
7.	Alaska subsistence halibut harvests, by geographic area fished, 2003–2008
8.	Number of hooks usually fished, setline (fixed) gear, Alaska subsistence halibut fishery, 2008
9.	Average net weight of subsistence- and sport-harvested halibut, by regulatory area fished, 2008
10.	Estimated harvests of lingcod and rockfish by SHARC holders while subsistence fishing for halibut, by
	regulatory area and geographic subarea fished, 2008
11.	Estimated harvests of halibut by gear type and participation (subsistence and sport fisheries), selected
	Alaska communities, 2003–2008
12.	Estimated harvests of halibut for home use, Sitka
13.	Number of SHARCs issued, estimated number of subsistence halibut fishers, and estimated harvests by
	SHARC category, Sitka, 2003–2008
14.	Estimated harvests of halibut for home use, Petersburg
15.	Estimated harvests of halibut for home use, Cordova
16.	Estimated harvests of halibut for home use, Port Graham

List of tables, continued

Table		Page
17.	Estimated harvests of halibut for home use, Kodiak road system.	71
18.	Halibut removals in Alaska, by regulatory area, 2008.	71
19.	Comparison of selected SHARC survey results, 2003-2007 project years	72

LIST OF FIGURES

Figure	J	Page
1.	Regulatory areas for the federal Pacific halibut subsistence fishery.	
2.	Number of surveys returned and return rates for subsistence halibut surveys, by SHARC type, 2008	75
3.	SHARC survey return rates, communities with more than 100 SHARCs issued and tribes with more	
	than 70 SHARCs issues, 2008	76
4.	Return rate by place of residence, 2008.	
5.	Number of survey responses, by response category, 2008.	
6.	Number of SHARCs issued and estimated number of subsistence halibut fishers, by SHARC type,	
	2003–2008	79
7.	Age of SHARC holders, by SHARC type, 2008.	
8.	Estimated number of Alaska subsistence halibut fishers, by regulatory area of tribe or rural community	
	2003–2008	81
9.	Estimated number of subsistence halibut fishers, by place of residence, 2003–2008, communities with	
	50 or more fishers in 2008.	82
10.	Estimated subsistence halibut harvests, pounds net weight, by regulatory area of tribe and rural	
	community, 2003–2008	83
11.	Estimated Alaska subsistence halibut harvests, pounds net weight, by SHARC type, 2003–2008	
12.	Percentage of tribal subsistence halibut harvest, by tribe, 2008.	
13.	Percentage of rural community subsistence halibut harvest, by community, 2008	86
14.	Percentage of subsistence halibut harvest, by regulatory area fished, 2008.	87
15.	Alaska subsistence halibut harvests, by geographic area, 2008	88
16.	Percentage of Alaska subsistence halibut harvest, by geographic area, 2008	89
17.	Estimated subsistence halibut harvests, pounds net weight, by regulatory area fished, 2003–2008	
18.	Change in Alaska subsistence halibut harvests from 2007 to 2008, by regulatory area fished	91
19.	Change in Alaska subsistence halibut harvests in 2008 compared to recent 5-year average (2003–	
	2007), by regulatory area fished.	92
20.	Average subsistence harvest of halibut per fisher in Alaska, pounds net weight, by regulatory area,	
	2008.	93
21.	Average subsistence harvest of halibut per fisher in Alaska, numbers of fish, by regulatory area, 2008	94
22.	Alaska subsistence halibut harvests, by place of residence, 2008.	95
23.	Percentage of subsistence halibut harvest, by gear type, by regulatory area, 2008	96
24.	Number of hooks usually fished, percentage of fishers using setline (stationary) gear, Alaska	
	subsistence halibut fishery, 2008.	
25.	Estimated incidental harvests of rockfish in the Alaska subsistence halibut fishery, numbers of fish, by	
	regulatory area fished, 2003–2008.	
26.	Percentage of incidental harvest of rockfish, by regulatory area fished, 2008.	99
27.	Estimated incidental harvest of lingcod in the Alaska subsistence halibut fishery, numbers of fish, by	
	regulatory area fished, 2003–2008.	100
28.	Percentage of incidental harvest of lingcod, by regulatory area, 2008.	101
29.	Estimated harvests of halibut for home use, Port Graham.	102
30.	Halibut removals, Alaska, 2008.	
31.	Halibut removals in Alaska, by regulatory area and removal category, 2008	104

LIST OF APPENDICES

Appendix		Page
A.	List of eligible tribes and rural communities (from Federal Register).	
В.	Letter sent to tribes about the project.	
C.	Newspaper notice.	
D.	Survey instrument.	
E.	Survey explanatory letter	
F.	Set of frequently-asked questions and responses	
G.	Appendix tables	
H.	Project findings summary	

ACKNOWLEGEMENTS

First and foremost, we thank the thousands of individuals who took the time to voluntarily respond to the mailed survey form or to be interviewed. This report would not be possible without their cooperation.

Jay Ginter of the National Marine Fisheries Service (NMFS), as the lead subsistence halibut regulatory contact, facilitated the grant that funded this project and also provided other project support. We also thank the staffs of the NMFS Restricted Access Management (RAM) program and the Information Services Division, who initially implemented and currently administer the Subsistence Halibut Registration Certificate (SHARC) program and helped provide information to the public about the research.

We gratefully acknowledge the input and support of the Alaska Native Subsistence Halibut Working Group. We also thank the many tribal governments that granted approvals for the survey projects, and the local research assistants who helped with these projects. We especially thank the Sitka Tribe of Alaska (Ms. Robi Craig) and the Hydaburg Cooperative Association (Anthony Christianson) for assisting with survey administration in their communities. Matt Kookesh of the Southeast Alaska Inter-Tribal Fish and Wildlife Commission was responsible for conducting interviews with SHARC holders in Ketchikan and Saxman. In Akutan, we thank the Akutan Traditional Council for approving the household survey, funded through a separate project, which supplemented the return of SHARC surveys through the mail. Local researchers in Akutan were Samantha Fairbanks, Jacob Stepetin, Karen Vincler, and Jennie Webster.

In addition to the co-authors of this report, other Alaska Department of Fish and Game (ADF&G) Division of Subsistence staff who assisted with research, data management, and report preparation included Chloe Dunlap, River Ramuglia, KaiLyn Davenport, Analin Lazatin, Jennifer Bond, Mike Turek, Nancy Ratner, Lisa Hutchinson-Scarbrough, Victoria Ciccone, Lisa Olson, and Garrett Zimpelman. Ana Lewis, Peggy Lewerenz, and Orin Carpenter provided project administrative support.

Heather Gilroy and Gregg Williams (staff to the International Pacific Halibut Commission) provided background information for this report. Several of the above-mentioned ADF&G staff also offered comments and suggestions on the preliminary draft.

ABSTRACT

This report describes the results of the sixth annual project to estimate the subsistence harvest of Pacific halibut Hippoglossus stenolepis in Alaska since the National Marine Fisheries Service adopted rules governing subsistence halibut fishing in 2003. Data were collected through a voluntary survey mailed to all holders of Subsistence Halibut Registration Certificates (SHARCs). The survey response rate was 63% (7,316 surveyed of 11,565 SHARC holders.). An estimated 5,303 individuals participated in the subsistence fishery for halibut in 2008, compared to 5,933 in 2007; 5,909 in 2006; 5,621 in 2005; 5,984 in 2004; and 4,942 in 2003. The estimated harvest in 2008 was 48,604 halibut, comprising 886,988 lb (net weight) (±3.0%). This compares to a harvest estimate of 53,697 halibut, comprising 1,032,293 lb (net weight) (±4.1%) in 2007; 54,089 halibut comprising 1,125,312 lb (±2.9%) in 2006; 55,875 fish comprising 1,178,222 lb (±3.0%) in 2005; 52,412 fish comprising 1,193,162 lb (±1.5%) in 2004; and 43.926 halibut comprising 1.041.330 lb (±3.9%) in 2003. Of the total subsistence halibut harvested in 2008, 74% was harvested with setline gear and 26% with hand-operated gear. As in 2003-2007, the largest portion of the Alaska subsistence halibut harvest in 2008 occurred in Regulatory Area 2C (Southeast Alaska), 52%, followed by Area 3A (Southcentral Alaska), 38%. Subsistence harvests represented about 1.3% of the total halibut removals in Alaska in 2008. The harvest estimates based on the surveys for 2003–2008 serve as a basis for understanding the overall harvest, annual variability in catch, and whether any increase in harvest may be associated with implementation of the 2003 regulations. Although the 2008 harvest estimate is lower than the 2003–2007 estimates, there are no certain trends in the fishery based on these 6 project years. The report recommends that monitoring of the subsistence harvest of halibut in Alaska be continued.

Key words: Pacific halibut, *Hippoglossus stenolepis*, subsistence harvests, Alaska, rockfish, *Sebastes*, lingcod *Ophiodon elongatus*.

EXECUTIVE SUMMARY

This report presents findings of a project designed to estimate the subsistence harvest of Pacific halibut *Hippoglossus stenolepis* in Alaska in 2008. The Alaska Department of Fish and Game (ADF&G) Division of Subsistence conducted the project under National Oceanic and Atmospheric Administration (NOAA) award number NA04NMF4370170 from the U.S. Department of Commerce, NOAA National Marine Fisheries Service (NMFS). In May 2003, NMFS published federal regulations implementing a subsistence halibut fishery in Alaska for qualified individuals who are residents of 118 rural communities or members of 123 Alaska Native tribes with traditional uses of halibut. The year 2008 was the sixth in which subsistence halibut fishing took place under these regulations. Subsistence fishers are required to obtain a Subsistence Halibut Registration Certificate (SHARC) from NMFS before fishing. During 2008, 11,565 individuals held SHARCs, compared to 15,047 at the end of 2007 (a decrease of 23%); 14,206 at the end of 2006; 14,306 by the end of 2005; 13,813 by the end of 2004; and 11,635 by the end of 2003. The number of valid SHARCs in 2008 was 16% below the previous 5-year average.

Harvest information was collected by means of a postal (mailed) survey. The one-page survey form was mailed to all SHARC holders in early 2009, with 2 follow-up mailings. Household visits supplemented the mailings in selected communities. In total, 7,316 surveys were returned, a response rate of 63%. Participation in the survey was voluntary.

According to the project findings, an estimated 5,303 individuals participated in the subsistence halibut fishery in 2008, compared to an estimated 5,933 in 2007; 5,909 in 2006; 5,621 in 2005; 5,984 in 2004; and 4,942 in 2003. The estimated harvest in 2008 was 48,604 halibut (\pm 3.6%) comprising 886,988 lb (net weight) (\pm 3.0%). ("Net weight" is 75% of "round" or live weight; the estimated harvest was 1,182,651 lb round weight.) This compares to a harvest estimate of 53,697 halibut (\pm 3.3%) comprising 1,032,293 lb (net weight) (\pm 4.1%) in 2006; 54,089 halibut (\pm 2.8%) comprising 1,125,312 lb (net weight) (\pm 2.9%) in 2006; 55,875 fish (\pm 3.0%) comprising 1,178,222 lb (net weight) (\pm 3.0%) in 2005; 52,412 fish (\pm 1.6%) comprising 1,193,162 lb (\pm 1.5%) in 2004; and 43,926 halibut comprising 1,041,330 lb (net weight) (\pm 3.9%) in 2003. As measured in pounds, the 2008 harvest was about 14% lower than the estimated harvest in 2008 harvest in 2007, and 20% lower than the previous 5-year average from 2003–2007.

Of the total subsistence halibut harvest in 2008, 658,017 lb (74%) were harvested with setline (stationary) gear (i.e., longlines, or "skates") and 228,971 lb (26%) were harvested with hand-operated gear (i.e., rod and reel or handline). This was similar to the harvest by gear type in 2007 (69% setline and 31% hand-operated gear); 2006 (70% setline and 30% hand-operated gear); 2005 (70% setline and 30% hand-operated gear), 2004 (74% setline and 26% hand-operated gear), and 2003 (72% setline and 28% hand-operated gear). Of those subsistence fishers using setline gear in 2008, the most (42%) usually fished with 30 hooks, the maximum number allowed by regulation in all areas except areas 4C, 4D, and 4E, where regulations establish no hook limit.

Subsistence fishers also harvested an estimated 14,346 rockfish *Sebastes* and 3,479 lingcod *Ophiodon elongatus* in 2008 while fishing for halibut. In 2007, subsistence halibut fishers harvested an estimated 15,266 rockfish and 3,402 lingcod. In 2006, subsistence halibut fishers harvested an estimated 16,945 rockfish and 3,486 lingcod. In 2005, subsistence halibut fishers harvested an estimated 12,395 rockfish and 2,355 lingcod. In 2004, subsistence halibut fishers harvested 19,001 rockfish and 4,407 lingcod. In 2003, subsistence halibut fishers harvest of 14,870 rockfish and 3,298 lingcod.

Based upon fishing locations, the largest portion of the Alaska subsistence halibut harvest in 2008 occurred in Regulatory Area 2C (Southeast Alaska), 52% (458,360 lb); followed by:

- Area 3A (Southcentral Alaska), 38% (337,403 lb);
- Area 3B (Alaska Peninsula), 5% (42,248 lb);

- Area 4A (Eastern Aleutian Islands), 2% (19,553 lb);
- Area 4E (East Bering Sea Coast), 2% (15,898 lb);
- Area 4C (Pribilof Islands), less than 1% (5,657 lb);
- Area 4B (Western Aleutian Islands), less than 1% (4,737 lb); and
- Area 4D (Central Bering Sea), less than 1% (3,131 lb).

In 2003–2007 as well, Area 2C and Area 3A accounted for over 85% of the subsistence halibut harvests. The proportion of the statewide subsistence halibut harvest occurring in Area 2C declined to 52% in 2008, 51% in 2007, 52% in 2006, and 51% in 2005, compared to 57% in 2004 and 60% in 2003. Correspondingly, the portion occurring in Area 3A increased to 38% in 2008, 36% in 2007, 34% in 2006, 36% in 2005, and 34% in 2004, compared to 27% in 2003.

Preliminary data from the International Pacific Halibut Commission (IPHC) combined with the findings of this project indicate that 72.215 million pounds (net weight) of halibut were removed from Alaskan waters in 2008. Of this total, the subsistence harvest accounted for 1.3%. Commercial harvests took 69.4% of the halibut, followed by bycatch in other commercial fisheries (14.2%), sport harvests (12.1%), and wastage in the commercial fishery (3.0%).

This report describes the results of the sixth annual project to estimate the subsistence halibut harvest in Alaska since NMFS adopted rules governing subsistence halibut fishing in May 2003. The harvest estimates based on the SHARC surveys for the 2003-2008 fishing seasons serve as a basis for understanding the overall harvest, annual variability in catch, and whether any increase in harvest may be associated with implementation of the new regulations. Demonstrating changes in the magnitude of the Alaska subsistence halibut harvest resulting from the new regulations using the results of the SHARC surveys for 2003–2008 is problematic, however, because of the limitations of earlier harvest estimates at the statewide level. The subsistence harvest estimates for 2003–2008 for some of the larger communities, such as Sitka, Petersburg, and Kodiak, which account for the majority of the harvest, are similar to harvest estimates based on household surveys prior to the new regulations. The higher overall harvest estimates for 2004-2006 compared to 2003 may be due to more thorough registration of subsistence fishers, hence better harvest documentation. The lower total harvest in net pounds in 2008 compared to the previous 5 years appears to be the result of fewer registered SHARC holders, fewer estimated participants in the fishery, and a decline in the average size of the harvested halibut over the 6 years of the study, from 23.7 pounds per fish in 2003 to 18.2 pounds per fish in 2008. Additional years of harvest data will be necessary to shed light on these and other factors that may shape the subsistence halibut harvest in Alaska.

The report concludes that 886,988 net pounds is a sound estimate of the Alaska subsistence halibut harvest in 2008. The estimate is based upon a scientific sampling of SHARC holders and a relatively high response rate. The total estimated harvest falls below the 1.5 million net pounds estimated for the subsistence harvest when the current regulations were developed by the North Pacific Fishery Management Council (see http://www.fakr.noaa.gov/frules/70fr16742.pdf, page 16748). Although the 2008 harvest estimate was 20% below the average for the previous 5 project years, there are no certain trends in the harvest. The report recommends that monitoring of the subsistence halibut harvest in Alaska continue so that trends in the fishery in terms of participation, location of harvests, and harvest quantities can be better understood.

CHAPTER 1: BACKGROUND AND METHODS

BACKGROUND

The primary goal of this project was to estimate the subsistence harvests of Pacific halibut *Hippoglossus stenolepis* in Alaska in 2008 through a survey mailed to registered subsistence halibut fishers; the survey was supplemented by a number of face-to-face interviews in selected communities. This was the sixth year for which this research was conducted. (See Fall et al. 2004 for the results for 2003, Fall et al. 2005 for the results for 2004, Fall et al. 2006 for the results for 2005, Fall et al. 2007 for the results for 2006, and Fall and Koster 2008 for the results for 2007.) The Division of Subsistence administered the project through a grant from NMFS (award number NA04NMF4370170).

In Alaska's coastal areas, subsistence halibut fisheries are local, noncommercial, customary and traditional food fisheries, as noted by Wolfe (2002) and described in *Environmental Assessment/Regulatory Impact Review/Initial Regulatory Flexibility Analysis for a Regulatory Amendment for Defining a Halibut Subsistence Fishery Category* (an "EA/RIR/IRFA") by the North Pacific Fishery Management Council (NPFMC), ADF&G, IPHC, and NMFS, August 11, 2000 (NMFS 2000; see also NPFMC 2003). The EA/RIR/IRFA summarizes information about the subsistence halibut fishery in Alaska. This background information is not repeated here but provided the basis for the NPFMC's recommendation for subsistence halibut fishing regulations in Alaska. Figure 1 illustrates federal halibut regulatory areas in Alaska.

In April 2003, the National Marine Fisheries Service, Alaska Region, published federal regulations implementing a subsistence halibut fishery for qualified individuals in the waters in and off Alaska (68 FR 18145, April 15, 2003) (see http://www.fakr.noaa.gov/frules/fr18145.pdf). Current regulations state that persons eligible to subsistence halibut fish include 1) residents of rural communities with customary and traditional uses of halibut (rural); and 2) members of federally-recognized Alaska Native tribes with customary and traditional uses of halibut (tribal). In total, residents of 118 rural communities¹ and members of 123 Alaska Native tribes are eligible to participate in the fishery.² (See Appendix A for a list of eligible tribes and communities as they appeared in the Federal Register in 2003.) Subsistence halibut fishers are required to obtain a Subsistence Halibut Registration Certificate (SHARC) from the Restricted Access Management Program (RAM) office of NMFS prior to fishing.³ Federal regulations (50 CFR Part 300.65(h)(4)) also authorize periodic surveys of SHARC holders in order to estimate annual subsistence halibut harvest survey will be voluntary."

Table 1 provides population estimates for the eligible rural communities for 2000 based on the federal decennial census. The total population of these communities in 2000 was 82,707, of which 38,990 were Alaska Natives. As also shown in Table 1, estimates published by the State of Alaska for 2008 report a total population of 79,887 for eligible rural communities. In addition, the nonrural communities of Juneau and Ketchikan in 2000 had Alaska Native populations of 5,084 and 2,689, respectively (U.S. Census Bureau 2001), most of whom were eligible to participate in the federal subsistence halibut fishery through their tribal membership. Also, an unknown number of eligible tribal members lived in other nonrural communities such as Anchorage and the Kenai Peninsula Borough. Updated population estimates by ethnicity are not available.

¹ In December 2004, the NPFMC adopted a recommendation to the Secretary of Commerce to add Naukati Bay to the list of 117 eligible rural communities. Regulations implementing this change went into effect in 2008, resulting in 118 rural communities eligible for a portion of 2008.

² Note that the Northern Pacific Halibut Act of 1982, under which the Alaska subsistence halibut fishery regulations are authorized, provides for fair and equitable allocations of halibut among U.S. fishers, but does not establish priorities for those allocations (see http://www.fakr.noaa.gov/frules/70fr16742.pdf, page 16747).

³ The subsistence rules were amended in 2005 by regulations published in the Federal Register at 70 FR 16742, April 1, 2005. Among other things, this amendment provides for obtaining Community Harvest Permits, Ceremonial Permits, and Educational Permits.

PROJECT OBJECTIVES

The primary goal of the project was to estimate the subsistence harvest of halibut in Alaska in the calendar year 2008. Funding for 2008 (\$100,000) was reduced by one-half compared to the first 5 years of the project. Consequently, the project plan initially focused on estimating harvests only in regulatory areas 2C and 3A, where most of the harvest occurs. However, because of lower costs of analysis and report preparation, due to the experience of conducting the survey for 5 years, and after evaluating available funds, it was decided to once again produce a statewide estimate using a mailed survey to all SHARC holders. However, outreach and supplemental interviewing in 2008 could occur only in a few communities in Area 2C. Therefore, the project objectives, listed below, were identical to the first 5 years of the project:

- 1. An estimate of the subsistence harvest of halibut in Alaska in 2008 by community, tribe, gear type, and federal regulatory area, along with an estimate of the number of individuals who subsistence fished for halibut in 2007.
- 2. An estimate of the harvest of halibut by SHARC holders while sport fishing in 2008.
- 3. An estimate of the number of lingcod *Ophiodon elongatus* and rockfish *Sebastes* taken by subsistence fishers while subsistence fishing for halibut in 2008.

DATA COLLECTION METHODS

Public Outreach

In December 2008, the Division of Subsistence sent the report for project year 2007 (Fall and Koster 2008) to all eligible tribes, along with a short summary of the findings for 2007 and a letter informing them that the research would continue for the 2008 harvest year (Appendix B). In early February 2009, the division published announcements in local newspapers about the upcoming mailing of halibut survey forms to SHARC holders. Appendix C is an example of the announcement, which ran in the *Kodiak Daily Mirror*, *Bristol Bay Times* (Dillingham), *Dutch Harbor Fisherman*, *Tundra Drums* (Bethel), *Cordova Times*, *Sitka Sentinel*, *Ketchikan Daily News*, *Petersburg Pilot*, *Wrangell Sentinel*, *Chilkat Valley News* (Haines), *Juneau Empire*, and the *Capital City Weekly*. Information was also available on the NMFS web site for subsistence halibut fishing in Alaska (http://www.fakr.noaa.gov/ram/subsistence/halibut.htm).

Postal Household Survey

As noted, this was the sixth year of a harvest assessment program for the subsistence halibut fishery in Alaska. Because the subsistence halibut regulations came into effect in 2003, the first years of collecting harvest data were exploratory. Subsequent project years have built upon the lessons learned in the first years of the project and have benefited from outreach efforts to improve response rates. (See recommendations in Chapter 4.)

As recommended by Wolfe (2002), survey methodology was based upon a registration system for subsistence halibut fishers that requires fishers to obtain a SHARC before fishing under federal subsistence halibut regulations. All 11,565 individuals who held a SHARC for any portion of 2008, as of December 31, 2008, were mailed a retrospective recall survey covering a 12-month harvest period: calendar year 2008. SHARCs issued to nontribal residents of eligible rural communities are valid for 2 years and tribal SHARCs are valid for 4 years, after which they must be renewed. Because of nonrenewals, the number of valid SHARCs for 2008 was down 23% from the 15,047 that were valid for 2007.

The 2008 survey instrument was virtually identical to the form used for the 2003–2007 project years. It is based on recommendations by Wolfe (2002:Appendix A), with slight modifications such as project year and return address. (See Appendix D in this report for a copy of the 2008 survey instrument.) Wolfe

(2002:15–18) provided justification for the kinds of data to be collected, which include name and address of the fisher; halibut harvests in numbers and pounds round (whole) weight by gear type in 2008; number of hooks usually set; and harvests of lingcod and rockfish taken while subsistence fishing for halibut. In 2003, a question addressing the water body fished (primary location) while subsistence fishing was added at the recommendation of NMFS staff. This question was retained for 2004–2008. Another was added in 2004 to record the location of sport halibut fishing by SHARC holders. The survey was designed to reduce the potential double counting of halibut taken with rod and reel gear, which could be reported in both the subsistence survey and in the ADF&G Division of Sport Fish *Statewide Harvest Survey* (Wolfe 2002:19).

A short explanatory letter with instructions on the back for completing the survey was included in the mailings (Appendix E). The survey was designed so that it could be directly returned to the Division of Subsistence, postage paid.

Presently under IPHC regulations, Community Development Quota (CDQ) fishers may retain halibut under 32 inches ("shorts") while commercial CDQ fishing in areas 4D and 4E only. These regulations require the CDQ organization to report this harvest to the IPHC. To avoid double counting, subsistence fishers were instructed not to include these fish on their subsistence halibut survey.

During an October 2003 meeting of the Alaska Native Subsistence Halibut Working Group (ANSHWG), held before the mailed survey for the first project year, community representatives expressed concern that not all fishers would know which fish were to be included under the category "rockfish" for the incidental harvest question on the survey. This would have led to an overestimation of this harvest if fishers reported fish such as Pacific cod *Gadus macrocephalus* or various species of sculpins in response to this question. The instructions mailed with the survey provided guidance on this question.⁴

Table 2 provides a chronology of key activities during the project. Table 3 provides a summary of response rates by mailing, SHARC type (rural or tribal), and place of residence. The first mailing to 11,565 SHARC holders occurred on February 15, 2009.⁵ The second mailing to 6,581 SHARC holders occurred on April 15, 2009. The third mailing to 4,861 SHARC holders took place on May 27, 2009.

The Division of Subsistence created a dedicated e-mail address that recipients of the postal survey could use if they had questions about how to respond. Also, the RAM Program set up a toll-free telephone number (1-800-304-4846) to provide information about the subsistence halibut program, including the harvest assessment program. Both the e-mail address and toll-free telephone number appeared on the survey. A set of "frequently asked questions" and responses was developed by ADF&G and NMFS staff members to guide staff responses to telephone calls and e-mail inquiries about how to fill out the survey form (Appendix F).

Community Visits and In-Person Surveys

Because the response rate to the postal survey varied by community and tribe in the first 5 project years, the mailings were again supplemented in selected communities with face-to-face household surveys conducted by Division of Subsistence staff or local research assistants. The latter were hired through subcontracts with tribes or Alaska Native regional organizations. Because of the large number of eligible communities and tribes, it was not possible to conduct face-to-face surveys in most communities. Additionally, because of reductions in the budget, face-to-face surveys for 2008 harvests were limited to certain communities in Area 2C. The only exception was Akutan, where the Division of Subsistence in collaboration with the Akutan Traditional Council, conducted comprehensive subsistence harvest surveys

⁴ The principal investigators for this project are aware that more than 30 species of rockfish inhabit Alaska waters. (See Alaska Administrative Code 5 AAC 39.975 for definitions of management assemblages of rockfishes.) The goal of this project was to keep the questions about incidental harvests simple. As discussed in the recommendations section (see Chapter 4), if more precise harvest data for various rockfish are needed for particular areas, future research should be designed and funded to address these data needs.

⁵ This total excludes 16 surveys of the original mailing of 11,581 that were sent to deceased SHARC holders.

in March and April 2009. Subsistence halibut harvest data were collected as part of this survey to supplement the responses to the mailed survey.

In the 2008 project year, in-person interviews were administered in Sitka, Hydaburg, Ketchikan, and Saxman. Cooperative agreements with Sitka Tribe of Alaska and Hydaburg Cooperative Association supported interviewing in those communities. Through another cooperative agreement, the Southeast Alaska Inter-Tribal Fish and Wildlife Commission conducted outreach and interviews in Ketchikan and Saxman. In each community, the surveys were administered face-to-face or by telephone.

SAMPLE ACHIEVEMENT

Table 3 reports sample achievement by tribe, rural community, and community of residence. Overall, 7,316 surveys were returned by 11,565 SHARC holders, a response rate of 63% (Figure 2). For residents of the 118 eligible rural communities who did not register as tribal members, 5,166 of 7,249 surveys were returned (71%). As shown in Figure 3, in 2008 there were 12 communities with more than 100 nontribal SHARC holders, accounting in total for 86% of all nontribal SHARCs issued in rural communities. Return rates were 63% or more in all 12 of these communities, and were 70% or more in 10 of them.

Of the 4,316 individual tribal members who held SHARCs in 2008, 2,150 (50%) returned surveys. As shown in Figure 3, there were 16 tribes with more than 70 members who obtained SHARCs. Return rates for these 16 tribes varied widely, from 90% in Hydaburg (where the Hydaburg Cooperative Association conducted surveys to supplement the return of surveys by mail) to 28% in Sand Point (where no directed outreach occurred). In total, these 16 tribes accounted for 68% of all tribal SHARCs.

Figure 4 illustrates survey response rates by place of residence of SHARC holders for the 21 communities with 100 or more SHARC holders in 2008. These communities accounted for 83% of all SHARCs and 84% of all returned surveys.

Figure 5 shows the survey return rate by response category (see also Table 3). After the first mailing, 5,219 surveys were returned, for a response rate of 45%. Responses to the second mailing added 1,216 surveys, a total response rate of 56% up to that point. Responses to the third and final mailing added 473 surveys, for a total response to the postal survey of 6,908 surveys, 60% of the 11,565 SHARC holders. In addition, surveys administered by staff, either ADF&G personnel or representatives of tribal organizations working with ADF&G, added 408 surveys. Most of these were in Hydaburg, Ketchikan, Sitka, and Akutan. This brought the total response to 7,316 surveys, 63% of all individuals who held SHARCs in 2008.

The overall response rate for the survey for 2008 increased compared to 2007, from 58% to 63%. The return rate for 2003, the first year of the survey, was 65%; the return rate for 2004 was 62%; the return rate for 2005was 60%; and the return rate for 2006was 59%. The number of returned surveys increased over the first 3 years of the project, from 7,593 in 2003, to 8,524 in 2004, and 8,565 in 2005, reflecting the larger number of SHARC holders in 2004 and 2005 and the larger number of staff administered surveys in 2005. The total number of surveys dropped slightly in 2006, to 8,426, but increased again to 8,682 surveys in 2007, the largest annual total for the 6 years of the project. The number of surveys returned for 2008, 7,316, was the lowest of the 6 project years, reflecting the sharp drop in the number of SHARC holders in 2005, 52% in 2006, and 50% in 2007. In 2008, the response rate by mail declined during the first 5 years of the project, from 62% in 2003 to 59% in 2004, 55% in 2003, 52% in 2006, and 50% in 2007. In 2008, the response rate by mail increased to 60%, the highest since the first project year. The number of surveys returned as "undeliverable" increased from 208 in 2003 (Fall et al. 2004:45), to 617 in 2004 (Fall et al. 2005:48), 613 in 2005 (Fall et al. 2006), 1,194 in 2006 (Fall et al. 2007:7), and 1,700 in 2007; there were 817 undeliverable surveys in 2008 (Table 3). Subtracting "undeliverables" from the postal survey totals gives a response rate by mail of 64% in 2008, compared to 63% in 2003, 62% in 2004, 57% in 2005, 57% in

⁶ See Table 18 for sample sizes and fractions and selected project findings for the 6 project years.

2006, and 54% in 2007. Fewer surveys were administered in person or via telephone in 2008 (408) compared to 2007 (1,089), 2006 (1,522), or 2005 (755 surveys), but more than in 2003 (392) or 2004 (355). The lack of outreach and household surveys in communities in Area 3B and Area 4 communities in 2008 due to budget reductions accounts for reduced number of staff administered surveys compared to the previous 3 years.

DATA ANALYSIS

Data Entry

All returned surveys were reviewed for completeness prior to data entry. Responses were coded following standardized conventions used by the Division of Subsistence. Staff within the Information Management Section of the division set up database structures within Microsoft SQL Server⁷ at ADF&G in Anchorage to hold the survey data. The database structures included rules, constraints, and referential integrity to insure that data were entered completely and accurately. Data entry screens were available on a secure Internet site. Daily incremental backups of the database occurred, and transaction logs were backed up hourly. Full backups of the database occurred twice weekly. This ensured that no more than one hour of data entry would be lost in the unlikely event of a catastrophic failure.

Survey responses were manually entered twice, and survey forms were electronically scanned. All data were compared programmatically for inconsistent data entry. Double data entry ensured a more accurate transfer of information from the coded survey forms into the database, and is a standard Division of Subsistence practice. Data did not pass to the processing phase until inconsistencies between the twice-entered data set were eliminated. The scanned survey forms also facilitated efficient data correction and editing.

Information was processed and analyzed using MS SQL programming. Initial processing included the performance of standardized logic checks of the data. Logic checks are often needed in complex data sets where rules, constraints, and referential integrity do not capture all of the possible inconsistencies that may appear.

Analysis: Development of Harvest Estimates

Analysis included review of raw data frequencies, cross tabulations, table generation, and estimates of population parameters. Missing information was dealt with on a case-by-case basis. The Division of Subsistence has standard practices for dealing with missing information, such as minimal value substitution or use of an average response for similarly characterized households or communities. Typically, missing data are an uncommon, randomly occurring phenomenon in household surveys conducted by the division, as was the case in this project.

In general, estimates of harvests, levels of participation, and other findings were calculated based upon the application of weighted means (Cochran 1977). These calculations are standard methods for extrapolating sampled data. In this project, each tribe and rural community was a separate stratum for purposes of estimating total harvests. In most cases, the mean for returned SHARC surveys was applied to the total number of SHARCs issued for the tribe or community to calculate the estimated harvest. (See Appendix Table G-1 for the reported harvests for each tribe and community.) The formula for standard expansion of community harvests is

⁷ Product names are included for scientific completeness and do not constitute an endorsement.

$$H_t = \sum H_i \tag{1}$$

where
$$H_i = h_i W_i$$
 (2)

and
$$W_i = \frac{N_i}{n_i}$$
 (Harvest weight factor per strata *i*) (3)

 H_t = the total harvest (numbers of fish or pounds),

 H_i = the total harvest, numbers or pounds, for tribe or community *i*

 W_i = the weight factor for tribe or community *i*,

 h_i = the total harvest, numbers or pounds, reported in returned surveys for tribe or community,

 n_i = the number of returned surveys in each tribe or community, and

 N_i = the number of SHARCs issued for tribe or community.

There were 2 exceptions. First, 101 SHARCs were held by eligible tribal members living outside of Alaska. Of these, 69 postal surveys were returned from this group, and very few of these returned surveys indicated any subsistence fishing activity. Rather than assign the mean value for their tribe (which would likely result in an overestimate of the harvest), all nonreturned surveys for SHARC holders with out-of-state addresses were coded as "did not fish."

Second, all SHARC holders were divided into 2 categories based upon the expiration date of their SHARC. SHARCs having an expiration date falling within the project period and that were not renewed were treated as separate strata from other SHARCs for the purpose of generating harvest estimates. This was done to account for potential bias and resulting overestimation of harvest for SHARCs that fished for only part of the year. During 2008, 656 rural and 725 tribal SHARCs expired and were not renewed; of those, 141 (21%) rural SHARCs and 256 (35%) tribal SHARCs participated in the survey.

The RAM division issued 2 community harvest permits to tribes in Area 2C that were valid in 2008. Holders of these permits reported no subsistence halibut harvests to RAM.⁸ No educational or ceremonial permits were issued for 2008. If harvests under any of these permits had occurred, the totals would have been added to the estimates for the tribe of the permit holder because they are not reported by individuals in their response to the SHARC postal survey.

It should also be noted that not every individual who obtained a SHARC as a tribal member resided in the community where his or her tribe's headquarters is located. Therefore, the sum of harvest estimates for tribal SHARC holders and rural resident SHARC holders does not necessarily equal the halibut harvest for particular communities. Rather, an additional analysis was necessary to estimate harvests by community of residence that assigned tribal SHARC holders to a community based on their mailing addresses. Appendix tables G-4, G-5, and G-6 report project results by place of residence of the SHARC holders.

The standard deviation (SD) (or Variance [V], which is the SD squared) of the harvest was calculated with the raw, unexpanded data. The Standard error (SE), or SD of the mean, was also calculated for each community or tribe. This was used to calculate the relative precision of the mean, or the likelihood an unknown value falls within a certain distance from the mean. In this project, the relative precision of the mean is shown in the tables as a confidence interval (CI), expressed as a percentage. Once the standard

⁸ When this report was nearing completion, RAM received reports from a community harvest permit of harvests that occurred in November and December 2008. The reported harvests totaled 25 halibut and 375 lb (round weight; 281.25 pounds net weight) and took place in Icy Strait (Regulatory Area 2C). These harvests are not included in the findings summarized in this final report.

error was calculated, the CI was determined by multiplying the SE by a constant that reflected the level of significance desired, based on a normal distribution. The constant for 95% confidence intervals is 1.96. Though there are numerous ways to express the formula below, it contains the components of a SD, V, and SE.

Relative precision of the mean (CI%):

$$C.I.\%(\pm) = \frac{t_{\alpha/2} \times \frac{s}{\sqrt{n}} \times \sqrt{\frac{N-n}{N-1}}}{\frac{1}{x}}$$
(4)

Where
$$s = \sqrt{\sum_{i=1}^{t} \frac{\sum (x - \overline{x}_i)^2}{n_i - 1}}$$
 (Sample standard deviation) (5)

s = sample standard deviation

x = reported amount harvested by individual SHARC holders

 \overline{x} = mean harvest

n =total sample size

N =total population size

 n_i = tribal or community sample size

 N_i = tribal or community population size

 $t_{\alpha/2}$ = *Student's t* statistic for alpha level (α =.95) with n–1 degrees of freedom.

Project staff explored the possibility of nonresponse bias for returned mail out surveys and its effect on harvest estimates. However, it was determined that responses to the survey, including harvest levels and involvement in the fishery, were not significantly different between any of the response categories (responses to the first mailing, the second mailing, the third mailing, and staff administered surveys) (see Appendix Table G-2).

As noted above, survey respondents provided harvest estimates in pounds round (whole, live) weight. For ease of comparison with estimates of halibut removals in other fisheries, we have converted these estimates to pounds net (dressed, head off) weight, where 0.75×10^{-9}

Products

The public review draft of this final report was completed in November 2009 and circulated for review and comments. The draft report was also posted at the Division of Subsistence website. A presentation of the project findings and recommendations occurred at the December 2009 meetings of the ANSHWG and the NPFMC in Anchorage, Alaska. The final report was revised in consideration of comments and

⁹ The factor of 0.75 for converting halibut round weight to net weight is the standard used by the International Pacific Halibut Commission and the ADF&G Division of Sport Fish. Division of Subsistence studies, as reported in the Technical Paper series and in the Community Subsistence Information System (http://www.subsistence.adfg.state.ak.us/CSIS/, hereinafter referred to as CSIS, and formerly the Community Profile Database [Scott, C.L., B. Brown, G.B. Jennings, and C. Utermohle. *Unpublished*. Community Profile Database, 2001, for Microsoft Access 2000. Version 3.12. Alaska Department of Fish and Game Division of Subsistence, Juneau. Hereinafter referred to as CPDB.]), generally use a factor of 0.72 for converting halibut round weights to net weights, based on Crapo et al. 1993:7), who reports that on average, the weight of a dressed halibut with the head removed is 72% of the round weight, with a range of 68% to 80%. In Division of Subsistence Technical Papers, "net" weight (dressed, head off) is usually referred to as "usable weight."

suggestions received from reviewers of the public review draft. In addition to the final report, a short findings summary was prepared (Appendix H). The summary was sent to tribal government representatives and other interested individuals and groups. This report was posted on the Division of Subsistence web site and the RAM website in PDF format for downloading and printing by the public. Printed copies of this report were sent to the Alaska Resources Library and Information Services as well as the Alaska State Library.

CHAPTER 2: FINDINGS

SUBSISTENCE HALIBUT HARVESTS IN 2008

Estimated Number of Subsistence Halibut Fishers

Of the 11,565 individuals who held valid SHARCs for any portion of 2008, an estimated 5,303 (46%) participated in the subsistence halibut fishery in 2008 (Table 4, Figure 6). Of the 4,316 individuals who held SHARCs as members of an eligible tribe, an estimated 1,595 participated in the fishery (37%). Of the 7,249 individuals who held SHARCs as residents of qualifying rural communities, an estimated 3,708 (51%) participated in the subsistence fishery for halibut in 2008. In 2007, 5,933 of 15,047 SHARC holders fished in the subsistence halibut fishery (39%), including 2,222 of 7,446 tribal SHARC holders (33%) and 3,710 of 7,601 rural SHARC holders (51%). In 2006, 5,909 of 14,206 SHARC holders fished in the subsistence (42%), including 2,329 of 7,123 tribal SHARC holders (33%) and 3,580 of 7,083 rural SHARC holders (51%). In 2005, 5,621 of 14,306 SHARC holders fished in the fishery (39%) including 2,035 of 6,437 tribal SHARC holders (32%) and 3,349 of 7,869 nontribal rural SHARC holders (43%). In 2004, 5,984 of 13,813 SHARC holders participated in the fishery (43%), including 2,157 of 6,533 tribal SHARC holders (33%) and 3,827 of 7,280 nontribal rural SHARC holders (53%). In 2003, 4,924 of 11,635 SHARC holders participated in the subsistence fishery (42%), including 1,836 of 5,578 tribal SHARC holders (33%) and 3,106 of 6,057 nontribal rural SHARC holders (51%) (Figure 6).

In 2003–2007, differences in the demography of tribal SHARC holders and rural SHARC holders probably accounted for some of the differences in the rate of participation in the subsistence halibut fishery between these 2 groups. As a proportion of total SHARC holders, about twice as many tribal SHARC holders were under 20 years of age compared to rural SHARC holders. This may reflect a policy on the part of some eligible tribes to register all or most tribal members, including younger people who were less likely to participate in the subsistence fishery than adults. Despite the substantial drop in the number of tribal SHARC holders in 2008, differences in the age structure of this group compared to rural SHARC holders remained. For example, in 2007, 13% of tribal SHARC holders were younger than 20 years of age, compared to 6% of rural SHARC holders (Table 5, Figure 7). This difference persisted despite the decline of tribal SHARC holders in Toksook Bay from 534 in 2007 (35% of whom were less than 20 years old) to just 34 in 2008 (18% under age 20).

As illustrated in Figure 8 (see also Table 4), the largest number of Alaska subsistence halibut fishers in 2008 were from tribes and rural communities in Regulatory Area 2C (Southeast Alaska), 3,057 (58%). There were 1,712 subsistence halibut fishers (32%) from tribes and communities in Regulatory Area 3A (Southcentral Alaska); 253 (5%) from Regulatory Area 3B (Alaska Peninsula) tribes and communities; and 143 (5%) from Area 4E (East Bering Sea Coast) tribes and communities. Additionally, there were 138 (3%) halibut fishers who were members of tribes and residents of communities in the four other regulatory areas. As also shown in Figure 8, the distribution of subsistence fishers by regulatory area in 2008 was similar to that of 2003–2007, except there was a sharp decrease in the number of halibut fishers in Area 4E, from 376 in 2007 to 143 in 2008. Compared to 2007, the estimated number of halibut fishers from tribes and rural communities in all the other regulatory areas also dropped, most notably in Area 2C (from 3,294 fishers to 3,057, a drop of 7%) and Area 3A (from 1,818 fishers to 1,712 fishers, a drop of 6%).

Alaska Native tribes with the most subsistence halibut fishers in 2008 included the Central Council of Tlingit and Haida Indians (187 subsistence halibut fishers), the Ketchikan Indian Corporation (127), the Qagan Tayagungin Tribe of Sand Point Village (113), the Sitka Tribe of Alaska (108), the Shoonaq' Tribe of Kodiak (89), the Hydaburg Cooperative Association (56), the Hoonah Indian Association (51), the Metlakatla Indian Community (46), and Angoon Community Association (45). Of the SHARC holders who registered as residents of eligible rural communities, the most subsistence fishers lived in Kodiak

(876), followed by Sitka (722), Petersburg (361), Cordova (236), Haines (233), Wrangell (210), and Craig (173). Appendix Table G-3 provides details for each tribe and community regarding participation in the subsistence fishery and subsistence halibut harvests in 2008.

As noted above, not every tribal SHARC holder lives in his or her tribe's headquarters community. After assigning tribal members to a community based on their place of residence, an estimate of participation in the subsistence halibut fishery in 2008 by community can be obtained. Appendix Table G-4 provides project findings based on place of residence. Communities with 100 or more resident SHARC holders who participated in the subsistence halibut fishery in 2008 were Kodiak (963), Sitka (845), Petersburg (393), Wrangell (259), Cordova (254), Haines (250), Craig (247), Ketchikan (179), Sand Point (130), Hoonah (108), and Seldovia (101). Of the 11 Alaska communities with 100 or more subsistence halibut fishers in 2007, most had about the same or slightly fewer fishers than in 2007. Participation by Kodiak residents increased each of the first 4 years of the fishery, dropped slightly in 2007, and increased again in 2008. The estimated number of subsistence halibut fishers in Sitka declined by 8%, in Cordova by 10%, and in Ketchikan by 11% (Figure 9). (See Chapter 3 for further discussion of Kodiak, Petersburg, and Cordova as case project communities.) Three non-Alaska resident tribal SHARC holders subsistence fished for halibut in Alaska in 2008, compared to zero in 2007, 7 in 2006, zero in 2005, 24 in 2004, and 5 in 2003.

Estimated Alaska Subsistence Halibut Harvests in 2008 by SHARC Type and Regulatory Area

Table 4 reports estimated Alaska subsistence halibut harvests for 2008 by SHARC type, regulatory area, and gear type. The total estimated subsistence halibut harvest in Alaska in 2008 was 48,604 fish (\pm 4%) for 886,988 lb (net weight) (\pm 3%).¹⁰ As estimated in pounds net weight, 52% of the subsistence halibut harvest (463,764 lb [\pm 4%]) was taken by fishers registered with tribes or rural communities in Regulatory Area 2C (Figure 10). (Note that because some SHARC holders may fish in a regulatory area different from the location of their tribal headquarters or rural community of registration, the area totals in Table 4 do not precisely represent harvest locations. See the section on harvests by location, below.) Fishers from Area 3A tribes and rural communities harvested 334,956 lb (\pm 5%) (35% of the state total). Harvests totaled 43,239 lb (\pm 17%) (5%) for communities and tribes of Regulatory Area 3B. For tribal and rural SHARC holders in Area 4A, the estimated harvest was 18,960 lb (\pm 30%) (2%). For Regulatory Area 4E,¹¹ the estimated harvest for tribal and rural SHARC holders was 15,036 lb (\pm 36%) (2%). Tribes and communities in the remaining 3 regulatory areas (4B, 4C, and 4D) harvested 11,033 lb (about 1%).

The estimated subsistence harvest of 886,988 pounds of halibut in 2008 represents a decrease of 14% compared to the estimated harvest of 1,032,293 lb in 2007 (Figure 11). Harvests by tribal SHARC holders decreased by 27%, from 441,506 lb in 2007 to 322,980 lb in 2008. Tribal SHARC holders harvested 36% of the Alaska subsistence halibut harvest in 2008, compared to 43% in 2007. Subsistence halibut harvests by nontribal, rural resident SHARC holders decreased by 5%, from 590,787 lb in 2007 to 564,007 lb in 2007. This group accounted for 64% of the statewide subsistence halibut harvests in 2008, compared to 57% in 2007.

Members of 69 Alaska tribes harvested subsistence halibut in 2008. In one other, SHARC holders fished but had no harvest. In 25 others, tribal members obtained SHARCs, but no one fished. No one in the remaining 28 eligible tribes held a valid SHARC in 2008. All but 3 of these tribes were in Regulatory

¹⁰ This approximates 1,182,651 pounds round (live or whole) weight. See footnote 9 in Chapter 1 for an explanation of the factor used to convert round weight to net weight.

¹¹ Community Development Quota (CDQ) organizations operating exclusively in areas 4D and 4E may retain sublegal halibut (less than 32 inches) from their commercial catches for home use. In 2008, a total of 21,666 pounds net weight of halibut was retained by 3 organizations: Coastal Villages Regional Fund (12,926 pounds), Bristol Bay Economic Development Corporation (1,816 pounds), and Norton Sound Economic Development Corporation (6,924 pounds) (Williams 2009). The IPHC includes these fish within the "personal use" removal category, a category that also includes subsistence harvests (Gilroy 2005:64). See also the section in Chapter 3, "Comparisons with Nonsubsistence Harvests."

Area 4E (East Bering Sea Coast). As shown in Figure 12, members of the 8 tribes with harvests of 10,000 lb or more accounted for 51% of the total subsistence halibut harvest by tribal SHARC holders in 2007. These 8 tribes accounted for 48% of the tribal SHARCs (2,079 of 4,316). Members of the other 61 tribes with harvests accounted for about 52% of the total harvest by tribal members.

Residents of 62 eligible rural communities harvested subsistence halibut in 2008.¹² In 3 others, SHARC holders fished unsuccessfully. In 17 others, individuals obtained SHARCs but no one fished. No one in the remaining 36 eligible rural communities held a valid SHARC as a nontribal member in 2008. Most of these communities (30) were in Regulatory Area 4E (East Bering Sea Coast).¹³ As shown in Figure 13, twelve rural communities with harvests of over 10,000 lb accounted for 84% of the subsistence halibut harvest by the holders of rural (nontribal) SHARCs in 2008. Residents of the other 50 communities with harvests accounted for 16% of the total harvest by rural SHARC holders.

As also shown in Figure 13, rural SHARC holders from 2 communities accounted for 44% the total harvest by this group in 2008: Kodiak (29%) and Sitka (16%). Adding Petersburg, the next highest rural community harvest at 7%, the top 3 rural communities accounted for over one-half (52%) of the rural community (nontribal) subsistence halibut harvest in Alaska in 2008.

Estimated Alaska Subsistence Halibut Harvests in 2008 by Harvest Location

Survey respondents were asked to report the "water body, bay, or sound [that they] usually fished" for subsistence halibut in 2008. Multiple responses were permitted. In Table 6, estimated subsistence halibut harvests are reported for the 8 Alaska halibut regulatory areas and 21 subdivisions within these areas. It should be noted that regulatory area totals in Table 6 differ slightly from those reported in Table 4 because not all SHARC holders fished within the regulatory area in which their tribal headquarters or residence is located.

Subsistence halibut harvests in Regulatory Area 2C (Southeast Alaska) accounted for 52% of the Alaska subsistence halibut harvest in 2008 (458,360 lb [net weight]) (Figure 14; Table 6). Also, 3 of the 4 geographic subareas with the largest subsistence halibut harvests in 2008 were in Area 2C: southern Southeast Alaska (254,510 lb [net weight]; 29% of the state total); the Sitka Local Area Management Plan (LAMP) area (104,973 lb; 12%), and northern Southeast Alaska other than the Sitka LAMP area (98,877 lb; 11%), as shown in Figure 15 and Figure 16.¹⁴ Regulatory Area 3A (Southcentral Alaska) ranked second, with 38% of the state's total subsistence halibut harvest (337,403 lb [net weight]). Waters not within the Kodiak Island road system area ("Kodiak Island – Other") ranked third among subareas, with a subsistence halibut harvest of 100,540 lb (11% of the state total), followed by waters bordering the Kodiak Island road system (including Chiniak Bay), which ranked fifth (96,872 lb; 11%). Harvests within Cook Inlet waters of Area 3A accounted for 9% of the state total (76,795 lb), those within Prince William Sound added 47,112 lb (5% of the statewide total), and the Yakutat Area added 16,084 lb (2%). Among regulatory areas, Area 3B (Alaska Peninsula, including the Chignik Area) ranked third with 5% of the Alaska total (42,248 lb). Area 3A (eastern Aleutian Islands) ranked fourth with 19,553 lb (2%), and Area 4E (Bering Sea Coast) ranked fifth with 15,898 lb (2%). Most of the harvest in Area 4E came from the Yukon-Kuskokwim Delta area, with much smaller amounts from Bristol Bay and Norton Sound. In descending order, subsistence halibut harvests in the other regulatory areas in 2008 were as follows: Area 4C (Pribilof Islands), 5,657 lb (<1%); Area 4B (western Aleutian Islands), 4,737 lb (<1%); and Area 4D (St. Lawrence Island), 3,131 lb (<1%).

¹² In this tally, Chiniak, listed separately in tables in this report, is counted as part of Kodiak, as it is for eligibility.

¹³ Note that residents of these communities may have obtained SHARCs as tribal members.

¹⁴ For this project, "northern Southeast Alaska" includes those waters of Regulatory Area 2C north of Frederick Sound, including waters surrounding Baranof Island and excluding the Sitka LAMP area. For a description of the Sitka LAMP area, see FR 68 18156, April 15, 2003, § 300.65(d)(1). The remaining waters of Area 2C are referred to as "southern Southeast Alaska" in this report.

Figure 17 reports estimated harvests in pounds net weight by location fished at the regulatory area level in 2003–2008. Table 7 compares estimated subsistence halibut harvests by regulatory area and geographic area in 2008 with those estimated for 2003–2007 and for the 5-year average from 2003–2007. As noted previously, for the state overall, the estimated harvest in pounds decreased by about 14% in 2008 from 2007 (Figure 18). The estimated harvest in 2008 was 20% lower than average for the first 5 years of the subsistence halibut harvest monitoring program (2003–2007) (Figure 19).

Estimated subsistence halibut harvests decreased in 6 of the 8 regulatory areas in 2008 compared to 2007 (Figure 17; Figure 18; Table 7). The largest proportional decrease was in Area 4E (East Bering Sea Coast), where the estimated harvest of 15,898 lb was a 70% decrease from the 52,135 lb estimated for 2007 (Figure 17; Figure 18; Table 7). The 2008 harvest was 69% lower than the 5 year average from 2003–2007 (Figure 19). Lower harvest estimates for this area might in part be attributable to the substantial drop in valid SHARCs held by tribal members and rural community residents of Area 4E, from 1,191 in 2007 to 421 in 2008. Also, unlike previous years, no outreach, face-to-face interviewing, or telephone calls took place in Area 4E communities, resulting in lower response rates in several communities compared to previous years. For example, response rates dropped in Toksook Bay from 41% (218 of 533 SHARCs) to 32% (11 of 34 SHARCs) and in Tununak from 64% (44 of 69 SHARCs) to 10% (7 of 68 SHARCs).

The second largest proportional decrease was in Area 4C (Pribilof Islands), where estimated harvests decreased 62%, from 15,077 lb in 2007 to 5,657 lb in 2008. The estimated harvest in 2008 was 56% below the recent 5-year average and was the lowest estimate for the 6 years of the project (Figure 19). As noted in reports for previous project years (Fall et al. 2005:15; Fall and Koster 2008:15), a high response rate to the survey, based upon follow-up household surveys and inseason data collection by the Central Bering Sea Fishermen's Association, likely produced very reliable harvest estimates for St. Paul, the largest community in Area 4C, after the first project year of 2003. However, due to funding reductions, this work did not take place for 2008. The number of valid SHARCs held by St. Paul residents dropped from 246 in 2007 to 42 in 2008, and the response rate to the survey declined from 83% in 2007 to 45% in 2008. However, the estimated number of subsistence halibut fishers in the community remained about the same: 14 in 2007 and 15 in 2008.

As in the first 5 years of the project, Area 2C (Southeast Alaska) accounted for the most subsistence halibut harvests in 2008 (458,360 lb; 52% of the state total), but this harvest represents a decrease of 13% compared to 2007 (Table 7; Figure 17; Figure 18) and 24% compared to the 5-year average from 2003–2007 (Figure 19). The percentage of the total statewide subsistence halibut harvest that took place in Area 2C in 2007 was 52%, similar to 5007, (51%), 2006 (52%) and 2005 (51%), but a decline compared to 57% in 2004 and 60% in 2003. Harvests decreased in all 3 subareas within Area 2C in 2008 compared to 2007, with an 10% decrease in the southern Southeast Alaska subarea, a 21% decrease in the Sitka LAMP area, and a 10% decrease in northern Southeast Alaska subarea (excluding the Sitka LAMP). Harvests were also down in all 3 subareas compared to recent 5 year averages: 19% in southern Southeast Alaska, 29% in the Sitka LAMP, and 28% in the remainder of northern Southeast Alaska. The reasons for these changes in Area 2C are likely complex and beyond the scope of this report.¹⁵

There was a decrease of 12% in Area 3B (Alaska Peninsula) harvests from 2007 (47,748 lb) to 2008 (42,248 lb) (Figure 17; Figure 18; Table 7). In Area 3B, the 2008 estimated harvest was slightly higher than the previous 5-year average (4%), and notably above the estimates for 2004 (33,519 lb) and 2003 (27,477 lb) (Table 7; Figure 17; Figure 19). Improved participation in the SHARC program in 2006, 2007, and 2008 likely accounts for some of the increase in the estimated harvests in Area 3B in those years, compared to 2003 and 2004, the first 2 years of the harvest monitoring program (see discussion of Sand Point in Chapter 3).

¹⁵ Further discussion of differences between harvest estimates for 2003–2008 appears in Chapter 3 and Chapter 4.

Estimated harvests in Area 3A (Southcentral Alaska) dropped by 9% (from 372,289 lb in 2007 to 337,403 lb in 2008), for the third straight year. The estimated subsistence halibut harvest in Area 3A in 2008 was 10% lower than the previous 5-year average (Figure 19). In contrast to the last 3 years, in terms of total pounds, the largest increase in estimated harvests over the first 3 years of the project took place in Area 3A, where the 2005 harvest of 429,275 lb was 6% higher than the estimate for 2004 (403,610 lb) and 50% higher than the estimate for 2003 (285,500 lb) (Table 7). Area 3A accounted for 38% of the statewide subsistence halibut harvest in 2008, 36% in 2007, 34% in 2006, 36% in 2005, and 34% in 2004, compared to 27% in 2003 (Table 7). In Area 3A in 2008 compared to 2007, subsistence halibut harvests increased in the portion of Kodiak Island off the road system (5%) and the Cook Inlet area by 2%. Decreases in harvests occurred in the Kodiak Island road system (down 26%), Prince William Sound (down 10%), and the Yakutat area (down 8%) (Table 7).

A small decrease (2%) in estimated harvests occurred in Area 4D (Central Bering Sea), from 3,204 lb in 2007 to 3,131 lb in 2008. However, the 2008 estimate was 52% lower than the previous 5-year average for Area 4D (Figure 17; Figure 18; Figure 19; Table 7).

Estimated subsistence harvests of halibut increased by 31% in Area 4A (Eastern Aleutians) from 14,946 lb in 2007 to 19,553 lb in 2008. However, the 2008 estimate was 23% lower than the previous 5-year average (Figure 19). As noted in Fall and Koster (2008:14), the 2007 estimate for Area 4A was notably lower than estimates for the other project years. A substantial drop in the harvest estimates for Akutan (3,603 lb in 2007 [Fall and Koster 2008:Appendix Table G-5] compared to 12,412 in 2006 [Fall et al. 2007:138], for example) accounted for most of this change. Sample achievement in Akutan was low in 2003–2006, and estimates for this small community are likely influenced by survey participation by just a few key fishers. As in 2007, face-to-face interviewing took place in Akutan in 2008, when a response rate of 100% was achieved (17 of 17 SHARCs) and the harvest was 6,029 lb (Appendix Table G-4).

In Area 4B (Western Aleutians) there was a large increase (137%) in the estimated subsistence harvest of halibut in 2008 (4,737 lb) compared to 2007 (1,997 lb) (Table 7; Figure 17; Figure 18). The 2008 estimate was 147% higher than the previous 5-year-average (Table 19). This increase is likely due to the larger reported average size of halibut harvested in this area in 2008 (30.5 lb [net weight] per fish; see Table 9, below) compared to earlier years (19.5 lb [net weight] per fish in 2007 [Fall and Koster 2008:71]).

Figure 20 illustrates the average subsistence halibut harvest in pounds net weight for those SHARC holders who subsistence fished in 2008. Figure 21 illustrates the average harvest per fisher in numbers of halibut. For the state overall, the average subsistence halibut fisher harvested 167 lb (net weight) or about 9.2 halibut in 2008. Average harvests per fisher at the regulatory area level ranged from 105 lb (net weight) in Area 4E to 313 pounds per fisher in Area 4D. In 2003, subsistence fishers on average harvested 8.9 halibut (211 lb) (Fall et al. 2004:12–13): in 2004 the average harvests were 8.8 halibut and 199 lb (Fall et al. 2005:15); in 2005, the average harvests were 9.9 halibut and 210 lb (Fall et al. 2006: 17); in 2006, average harvests were 9.2 halibut and 190 lb (Fall et al. 2007:18); and in 2007, the averages were 9.1 halibut and 174 net pounds harvested per fisher (Fall and Koster 2008:16).

Subsistence Halibut Harvests by Place of Residence

As shown in Figure 22, there were 25 Alaska communities whose residents had combined estimated subsistence halibut harvests of approximately 7,500 lb or more (net weight, over 10,000 lb round weight) in 2008. In this figure, community totals include harvests of all SHARC holders living in the community, regardless of type of SHARC (tribal or rural) or tribal affiliation.¹⁶ Residents of these communities accounted for 85% of the total Alaska subsistence halibut harvest in 2008. Residents of Kodiak (Kodiak includes the city of Kodiak and other portions of the Kodiak Island Borough connected to it by roads) ranked first with 20% of the total Alaska harvest, and Sitka ranked second with about 12%. With 12,623

¹⁶ Note that nonrural places, such as Anchorage, Juneau, Ketchikan, and Valdez, appear in Figure 22 and in Appendix Tables A-4, A-5, and A-6, because members of eligible Alaska Native tribes may participate in the fishery regardless of where they live.

and 8,615 residents, respectively, these 2 communities included about 27% of the population of rural communities eligible to participate in the subsistence fishery. There were 97 other Alaska communities with at least one resident who participated in the subsistence halibut fishery in 2008. The total harvest for these other communities represented about 15% of the state total.

For 2008, 110 SHARC holders provided out-of-state addresses from 81 communities in 24 states, provinces, and territories.¹⁷ Seattle was the non-Alaska community with the most SHARC holders, with 6. Three non-Alaska-resident SHARC holders subsistence fished for halibut in 2008, with a harvest of 13 fish and 237 lb (0.03% of the state total) (see Appendix Table G-4). In 2007, no non-Alaska resident SHARC holders participated in the Alaska subsistence halibut fishery. In 2006, seven non-Alaska resident SHARC holders subsistence fished for halibut, reporting a harvest of 72 fish and 2,346 lb (net weight) (0.2% of the state total). No non-Alaska resident SHARC holders subsistence fished for halibut, reporting a harvest of 72 fish and 2,346 lb (net weight) (0.2% of the state total). No non-Alaska resident SHARC holders subsistence fished for halibut in 2005. In 2004, 24 non-Alaska residents reported subsistence fishing for halibut in Alaska, with an estimated total harvest of 169 fish and 4,845 lb (net weight) (about 0.4% of state total). In 2003, five non-Alaska residents participated in the Alaska subsistence halibut fishery, harvesting 5 fish.

Subsistence Harvests by Gear Type

Table 6 and Figure 23 report the estimated subsistence harvests of halibut in Alaska in 2008 by gear type and regulatory area fished. In total, 658,017 lb (74%) of halibut (net weight) were harvested using setline (stationary) gear (i.e., longlines, or "skates", often set with a power winch attached to a vessel) and 228,971 lb (26%) were harvested using hand-operated gear (i.e., handlines or lines attached to a rod or pole). There were notable differences between regulatory areas (Table 6, Figure 23). Harvests using setline gear predominated in Area 4D (Central Bering Sea) (92% of the area's total subsistence harvest), 2C (Southeast Alaska) (81%), Area 3A (Southcentral Alaska) (71%), and Area 4C (Pribilof Islands) (65% setline gear, 35% hand operated gear). In contrast, hand-operated gear accounted for most of the subsistence halibut harvests in Area 4E (East Bering Sea Coast) (65%). Harvests were about equally divided across the 2 gear types in Area 3B (Alaska Peninsula) (56% setline gear and 44% hand operated gear), Area 4A (Eastern Aleutian Islands) (48% setline gear, 52% hand operated gear), and Area 4B (western Aleutian Islands) (49% setline gear, 51% hand operated gear). In 2007, 69% of the total Alaska subsistence halibut harvest was taken with setline gear and 31% with hand-operated gear (Fall and Koster 2008:16-17). In 2006, 70% of the total Alaska subsistence halibut harvest was taken with setline gear and 30% with hand-operated gear (Fall et al. 2007:18–19). In 2005 also, 70% of the total Alaska subsistence harvest was taken with setline gear and 30% with hand-operated gear (Fall et al. 2006: 18). In 2004, 74% of the Alaska subsistence halibut harvest was taken with setline gear and 26% with hand-operated gear (Fall et al. 2005:16). In 2003, 72% was taken with setline gear and 28% with hand-operated gear (Fall et al. 2004:13).

Number of Hooks Fished with Setline Gear

Respondents who fished with setline (stationary) gear (longline or skate) were asked to report how many hooks they "usually set." The findings by regulatory area are reported in Table 8. For the fishery overall, most setline fishers (42%) used 30 hooks, the maximum number allowed by regulation in areas 2C, 3A, 3B, 4A, and 4B (there is no hook limit in areas 4C, 4D, and 4E) (Figure 24). The next most-frequently reported number was 20 hooks, usually used by 19% of the fishers who used setline gear. Fifteen hooks (10%) ranked third, followed by 25 hooks (8%) and 10 hooks (6%). This pattern is similar to that recorded for 2007, when 41% of setline fishers used 30 or more hooks and 19% used 20 hooks (Fall and Koster 2008:17); 2006, when 38% of setline fishers used 30 or more hooks and 20% used 20 hooks (Fall et al. 2007:19); 2004, when 44% of setline fishers used 30 hooks and 19% used 20 hooks (Fall et al.

¹⁷ Note that members of eligible tribes may obtain SHARCs regardless of their place of residence.

2005:16), and 2003, when 43% of setline fishers used 30 hooks and 20% used 20 hooks (Fall et al. 2004:13).

Thirty was the most frequently used number of hooks with setline gear in 7 of the 8 regulatory areas (Table 8): 2C (Southeast Alaska), 40%; 3A (Southcentral Alaska), 43%; 3B (Alaska Peninsula), 56%; 4A (Eastern Aleutian Islands), 50%; Area 4C (Pribilof Islands), 73%; Area 4D (Central Bering Sea), 67%; and 4E (East Bering Sea Coast), 41%. In Area 4B (Western Aleutians), 33% of fishers who used setline gear used one hook, 33% used 20 hooks, and 33% used 25 hooks.

Sport Harvests of Halibut by SHARC Holders

Survey respondents were asked to report the number of halibut and pounds of halibut they harvested "while sport fishing during 2008." They were instructed not to include fish they considered sport-caught as part of their subsistence halibut harvest. The goal of this question was to avoid double counting harvested halibut in this survey and in the statewide survey of sport fishers administered by the Division of Sport Fish. Answering this question required respondents to classify their hand-operated gear (i.e., hook and line and rod and reel) harvests as either subsistence or sport; these gear types are legal gear for both sport fishing and subsistence fishing. Fish reported in the survey as "sport harvests" are not included in the estimated subsistence harvests discussed above. If SHARC holders also received the sport fish survey for 2008, they would be expected to report only their sport-caught halibut and not include any halibut they reported as subsistence harvests, even if taken with rod and reel or handheld line with two or fewer hooks. Note that the project findings do not represent the total recreational halibut harvest by residents of eligible communities and tribes in 2008, because individuals from these tribes and communities who did not obtain SHARCs could have sport fished.

As shown in Table 4 and Table 6, the estimated total sport halibut harvest by holders of SHARCs in 2008 was 11,427 fish and 197,760 lb (net weight). By area fished, most of the sport halibut harvest by SHARC holders occurred in Area 3A (Southcentral Alaska) (100,572 lb; 51%) and Area 2C (Southeast Alaska) (87,052 lb; 44%) (Table 6). In total, an estimated 2,609 SHARC holders (23%) reported that they sport fished for halibut in 2008. A large proportion of these fishers fished in either Area 2C (1,457; 56%) or Area 3A (1,074; 41%) (Table 6). (See Appendix Table G-7 for estimated sport halibut harvests by tribe and nontribal rural community SHARC holders.)¹⁸

Estimated Average Net Weights of Subsistence- and Sport-Caught Halibut

Table 9 reports the average net weight of subsistence- and sport-caught halibut by SHARC holders in 2008, based upon estimates provided by survey respondents. For the state, the estimated average net weight of subsistence-caught halibut was 18.2 lb and the average net weight of sport-harvested halibut by SHARC holders was 17.3 lb. For the halibut reported as harvested in the SHARC program by SHARC holders in 2008, the average net weight per harvested halibut was 18.1 lb. Between regulatory areas, there was a range of average weights per halibut. The halibut harvested by the communities of Area 4D (St. Lawrence Island), averaged 48.2 lb (net weight) per fish, more than double the statewide average. Halibut harvested in the subsistence fishery in Area 4B were also larger than the state average, at 30.5 pounds per fish. In contrast, in Area 4E, halibut harvested in the subsistence fishery averaged 6.0 lb (net weight), about one-third of the statewide average. The average weight of halibut declined steadily over the 6 years

¹⁸ The ADF&G postal survey did not investigate the criteria by which survey respondents classified their rod and reel (hook and line attached to a rod or pole) halibut harvests as subsistence or sport. However, a supplemental mailing to 1,098 SHARC holders from Kodiak and Sitka who fished for halibut in 2004 asked respondents to provide reasons for classifying their halibut harvests as sport or subsistence. For a discussion of the findings, see Fall et al. 2006;19–20, 123–138. In short, the primary factor (for 69% of respondents) was the gear used to harvest the fish: respondents viewed rod and reel as "sport gear" and setline gear as "subsistence gear." Another factor, reported by 12%, concerned the composition of the fishing group. If the SHARC holders had fished with relatives or friends who did not possess a SHARC, they classified their fishing as recreational. Harvest amounts were also a consideration: harvest of one or two halibut with a rod and reel were considered "sport" by some respondents, but if they harvested more than 2 fish with rod and reel in one day, they classified the harvest as subsistence. Finally, about 19% of the respondents gave reasons related to the uses of the fish or other cultural and lifestyle explanations.

of this project. In 2007, the estimated average weight of halibut harvested in the subsistence fishery was 19.2 lb, the average halibut harvested by SHARC holders while sport fishing weighed 17.9 lb, and the average of all halibut harvested noncommercially was 19.0 lb (Fall et al. 2007; Fall and Koster 2008:18). In 2006, the estimated average weight of halibut harvested in the subsistence fishery was 20.8 lb, the average halibut harvested by SHARC holders while sport fishing weighed 19.9 lb, and the average of all halibut harvested noncommercially was 20.7 lb (Fall et al. 2007:20). In 2005, the estimated average weight of halibut harvested in the subsistence fishery was 21.1 lb, the average halibut taken by SHARC holders while sport fishing weighed 20.8 lb, and the average of all halibut harvested noncommercially was 21.0 lb (Fall et al. 2006:20). In 2004, the statewide average for subsistence-harvested halibut was estimated at 22.8 lb, the average sport-harvested halibut by SHARC holders was 20.0 lb, and the average for all halibut harvested noncommercially was 22.2 lb (Fall et al. 2005:17). In 2003, the statewide average for subsistence-harvested halibut was 23.7 lb, the average sport-harvested halibut by SHARC holders was 22.8 lb, and the average for all halibut harvested noncommercially was 23.7 lb, the average sport-harvested halibut by SHARC holders was 23.8 lb, and the average for all halibut harvested noncommercially was 23.7 lb, the average sport-harvested halibut by SHARC holders was 23.8 lb, and the average for all halibut harvested noncommercially was 23.7 lb, the average sport-harvested halibut by SHARC holders was 23.8 lb, and the average for all halibut harvested noncommercially was 23.7 lb, the average sport-harvested halibut by SHARC holders was 23.8 lb, and the average for all halibut harvested noncommercially was 23.5 lb (Fall et al. 2004:14).

ROCKFISH HARVESTS

Survey respondents were asked to estimate the number of rockfish they harvested while subsistence fishing for halibut in 2008. Harvest data at the species level were not collected as part of this survey.

Note that these survey results do not represent an estimate for the total subsistence rockfish harvest by SHARC holders in 2008 because they might have harvested rockfish while fishing for species other than halibut, and other fishers in the communities who did not obtain SHARCs might have harvested rockfish. The Division of Subsistence Community Subsistence Information System (CSIS)¹⁹ includes estimates of rockfish harvests for communities in which comprehensive household surveys have been administered.

It should also be noted that the label "bycatch" for these harvests is misleading.²⁰ Rockfish are used for subsistence purposes in rural communities throughout their range in Alaska (CSIS). It is highly likely that most rockfish harvested incidentally in the subsistence halibut fishery are utilized as a subsistence food. It is highly unlikely that many incidentally caught rockfish are discarded in this subsistence fishery.

As shown in Table 10, the statewide estimated rockfish incidental harvest in the subsistence halibut fishery in 2008 was 14,346 fish by 1,404 fishers (12% of all SHARC holders, and 27% of all SHARC holders who subsistence fished for halibut in 2008). This is an average of about 2.7 rockfish per fisher for all subsistence halibut fishers in the SHARC program, and about 10.2 rockfish per fisher for those who had a rockfish harvest. Most of the subsistence halibut fishers who caught rockfish fished in Area 2C (Southeast Alaska) (1,045 fishers; 74%) and Area 3A (317 fishers; 23%). In Area 2C, about 34% of subsistence halibut fishers incidentally harvested rockfish, as did 18% in Area 3A (Southcentral Alaska). (See Appendix Table G-7 for estimated rockfish harvests by tribe and by nontribal rural community SHARC holders.)

As illustrated in Figure 25 and Figure 26, most of the incidental rockfish harvest in 2008 was harvested in Area 2C: 9,982 rockfish, 70% of the statewide total. Area 3A accounted for the second highest total: 3,523 rockfish, 25% of the total. Harvests were very small by SHARC holders fishing in other regulatory areas; their combined harvest of 841 rockfish was about 6% of the statewide total. Compared to 2007, when 15,266 rockfish were harvested, the incidental rockfish harvest in the subsistence halibut fishery in 2008 was down by 6%. The 2008 estimated rockfish harvest was lower than the estimate for 2004 (19,001)

¹⁹ http://www.subsistence.adfg.state.ak.us/CSIS. Hereinafter cited as CSIS; see footnote 9.

²⁰ The Magnuson-Stevens Fishery Conservation and Management Act (Section 3) defines "bycatch" as "fish harvested in a fishery, but which are not sold or kept for personal use, and includes economic discards and regulatory discards. Such term does not include fish released alive under a recreational catch and release fishery management program." Federal regulations (50 CFR 679.2) define "bycatch" or "bycatch species" as fish caught and released while targeting another species or caught and released while targeting the same species; under 50 CFR 600.10 "discard" means to release or return fish to the sea, whether or not such fish are brought fully on board a fishing vessel. In all cases, "bycatch" means to discard fish and excludes retaining fish for use. The federal definition of "incidental catch" or "incidental species" is "fish caught and retained while targeting on some other species, but does not include discard of fish that were returned to the sea" (50 CFR 679.2).

rockfish), 2006 (16,945), and 2003, (14,870 rockfish), but higher than 2005, when the incidental rockfish harvest was 12,395.

Table 10 also reports location of harvests within geographic subareas. Most of the harvest occurred in southern Southeast Alaska (4,532 fish), the Sitka LAMP area (4,010 rockfish), northern Southeast Alaska (1,440 rockfish), other Kodiak Island locations (1,181 rockfish), Cook Inlet (860 rockfish), Prince William Sound (739 rockfish), and the Kodiak Island road system (662 rockfish). Incidental rockfish harvests totaled 381 fish in the Lower Alaska Peninsula subarea, 152 in the Yukon Delta subareas, 127 in the Chignik area, and 125 in the eastern Aleutians subarea.

LINGCOD HARVESTS

Survey respondents were asked to estimate the number of lingcod they harvested while subsistence fishing for halibut in 2008. Note that these survey results do not provide an estimate of the total subsistence lingcod harvest by SHARC holders in 2008 because they might have harvested lingcod while fishing for species other than halibut. Also, other fishers in the communities who did not hold SHARCs might have fished for or harvested lingcod, so that these incidental harvests represent only a portion of the total 2007 subsistence harvest. The Division of Subsistence Community Subsistence Information System (CSIS) includes estimates of lingcod harvests for communities in which comprehensive household surveys have been administered.

It should also be noted that the label "bycatch" for these harvests might be misleading.²¹ Lingcod are used for subsistence purposes throughout their range (CSIS). It is highly likely that most lingcod harvested incidentally in the subsistence halibut fishery are utilized as a subsistence food. It is very unlikely that many lingcod caught in this subsistence fishery are discarded.

The statewide estimated incidental lingcod harvest in the subsistence halibut fishery in 2008 was 3,479 fish by 854 fishers (Table 10). This is an average of about 0.7 lingcod per fisher for all subsistence halibut fishers who participated in the SHARC program, and 4.1 lingcod per fisher for those who had a lingcod harvest. Of SHARC holders who subsistence fished for halibut in 2008, 16% harvested at least one lingcod while halibut fishing. Most of the subsistence halibut fishers who harvested lingcod fished in Area 2C (Southeast Alaska) (629; 74%) and Area 3A (Southcentral Alaska) (209; 24%). (See Appendix Table G-7 for estimated lingcod harvests by tribe and by nontribal rural community SHARC holders.)

As illustrated in Figure 27 and Figure 28, most of the incidental lingcod were harvested in Area 2C: 2,466 lingcod, 71%. Area 3A fishing locations accounted for the second highest total: 763 lingcod, 22%. In 2003–2007, an estimated 3,298, 4,407, 2,355, 3,486, and 3,402 lingcod, respectively, were harvested in the subsistence halibut fishery. The 2008 estimated harvest represents an increase of 2% in the incidental lingcod harvest compared to 2007, and an increase of 3% over the previous 5-year average (2003–2007).

Table 10 also reports the location of incidental lingcod harvests by geographic subarea. Most of this harvest occurred in Area 2C (Southeast Alaska): the Sitka LAMP area (1,353 lingcod), southern Southeast Alaska (842 lingcod), and northern Southeast Alaska waters outside the Sitka LAMP (271 lingcod). Incidental lingcod harvests totaled 187 lingcod in Cook Inlet, 187 in the Kodiak Island road system area, and 162 in the Yakutat area. Harvests totaled fewer than 150 lingcod in each of the other geographic subareas.

²¹ See footnote 20 for definitions of "bycatch" and "incidental catch".

CHAPTER 3: DISCUSSION

COMPARISONS WITH OTHER HARVEST ESTIMATES

As discussed in the first report for the SHARC survey project (Fall et al. 2004:19–22), comparing the statewide subsistence halibut harvest estimates generated by the SHARC survey with subsistence halibut harvest estimates from projects conducted in previous years continues to be difficult. The primary reason, as noted in Chapter 1, is that the regulations that allow subsistence halibut fishing in Alaska waters using traditional gear, such as longlines with more than 2 hooks, and that removed the restrictive daily harvest limit of 2 fish, have been in place for only 6 years, since May 2003.

Although the ADF&G Division of Subsistence has conducted systematic household surveys in many rural Alaska communities that have traditional uses of halibut, these studies pertain to different harvest years. In addition, there are many communities, especially in western Alaska, where such surveys have not been conducted. Also, these Division of Subsistence studies have attempted to estimate the total halibut harvest for home use by including harvests conducted under sport fishing rules and harvests removed from commercial fisheries for home use. Typically, these studies have also collected harvests by gear type, such as rod and reel or "other gear." When using these data sets, therefore, it is not possible to separate the "sport" harvest from the "subsistence" harvest for past harvest years, especially in larger rural communities with a diverse population where at least a segment of the population perceives some of their halibut fishing effort as recreational (see, for example, the discussions about Sitka and Kodiak, below).

Furthermore, the statewide subsistence halibut harvest estimates from the SHARC postal survey include only those subsistence harvests by individuals who obtained SHARCs. The estimates do not include total noncommercial harvests, such as those accomplished under sport fishing regulations or halibut removed by commercial fishers for use by their households or for noncommercial sharing. Thus they can be only partial estimates of the total harvest of halibut for home use by rural Alaska residents and can not be directly compared to estimates from previous Division of Subsistence studies.

The report for the first year of this project included a detailed discussion of previous efforts to develop an estimate of subsistence halibut harvests at the regional and statewide levels. The report suggested that the 2003 SHARC survey estimates were not markedly different from estimates based on Division of Subsistence household survey data as reported in the Community Subsistence Information System (CSIS). We will not repeat that full discussion here.²² However the report also concluded that because of the limitations associated with the previous subsistence harvest estimates at the statewide level, until a time series is developed based upon the SHARC survey results, discussion of harvest trends in the subsistence halibut fishery will remain speculative. A discussion comparing the project findings for 2008 with those for 2003–2007 appears in Chapter 4.

COMMUNITY CASE STUDIES

Despite the limitations discussed above, it is possible to compare some communities' previous noncommercial halibut harvest estimates with estimates generated from the SHARC survey, keeping in mind the different sampling methods, uncertainty in the separation of subsistence and recreational

²² For example for 2000, the IPHC estimated 439,000 pounds net weight for Alaska "personal use" (noncommercial, non-recreational) harvests (*in* Wolfe 2001). The IPHC estimate is based upon a methodology described by Trumble n.d.. The IPHC method assumed that 50% of Alaska Native rod and reel halibut harvests, as reported in ADF&G household surveys, are "sport" and 50% "personal use," and that 75% of the non-Native rod and reel harvests are "sport" and 25% "personal use" (Trumble n.d.:62). No justification for these assumptions is provided, and changing these sport-to-personal-use ratios can result in a very different estimate for the "personal use" halibut harvest. In a report to the Alaska Board of Fisheries in May 2001, using the same data source as the IPHC, Wolfe (2001) estimated that the subsistence halibut harvest in Alaska "probably ranges between 400,000 and 1,000,000 pounds (round weight) annually," based on harvest data in the CSIS/CPDB. This is an estimated harvest of 300,000 to 750,000 pounds net weight. See Fall et al. 2004:19–21 for discussion of Wolfe's methods. In the original analysis for the subsistence halibut program, the NPFMC estimated the Alaska subsistence halibut harvest at 1.5 million pounds net weight (68 FR 18145, April 15, 2003, EA/RIR [NPFMC 2003]).

harvests, and the relative newness of the regulatory changes enacted in 2003. Prior Division of Subsistence research has suggested that such communities, presented here as case studies, can also be seen as representative of other communities of similar size and geographic location. In the following evaluation, emphasis is placed on larger communities, since, as discussed in Chapter 2, a small number of large communities has accounted for most of the statewide subsistence halibut harvest, according to the SHARC surveys. A comparison of the harvest estimates for these communities helps to determine the reliability of the statewide estimate generated by the SHARC survey, as well as survey performance. Because, as noted in Chapter 1, not all tribal SHARC holders live in the community where their tribal headquarters is located, the following comparisons are based upon place of residence of the SHARC holder, in order to be consistent with earlier division studies. Table 11 reports selected project findings for 2003–2008 in the case study communities discussed below. Appendix tables G-4, G-5, and G-6 report project results for 2008 for all communities, based upon residence of SHARC holders.

Sitka (Regulatory Area 2C)

Sitka had a population of 8,835 people in 2000, 2,178 of whom were Alaska Native (U.S. Census Bureau 2001). In 2008, the estimated population of Sitka was 8,615 (Table 1; ADOL 2008). Sitka was the second largest rural community eligible to participate in the SHARC halibut fishery in 2008, and had the second highest number of SHARCs issued, at 1,662 (Table 11) (about 14% of the Alaska total). Of these, 1,388 were issued to nontribal residents of Sitka, and 274 to tribal members; the latter total was down from 470 in 2007 (Fall and Koster 2008:22). Members of the Sitka Tribe of Alaska (STA) held 273 SHARCs in 2008, compared to 485 in 2007. It is important to remember that some STA members live in communities other than Sitka and that members of other Alaska tribes live in Sitka. Because of the relatively large number of SHARC holders who live there, developing a reliable subsistence halibut harvest estimate for Sitka is essential for the success of this subsistence harvest assessment program. Sitka residents' response rates to the survey have also been significant during the 6 years of the project: 75% in 2003, 72% in 2004, 68% in 2005, 69% in 2006, 68% in 2007, and 71% in 2008.

The Division of Subsistence has generated 2 estimates of noncommercial halibut harvests in Sitka for years prior to the 2003 authorization of subsistence halibut fishing (Table 12). One is for the 1987 study year, in which the estimated total noncommercial halibut harvest was 193,335 lb (net weight) (\pm 22%), or 180,982 lb if fish removed from commercial harvests are deleted. This noncommercial total includes only harvests reported by surveyed persons as taken with rod and reel; data on harvests using "other methods" such as longlines, which were not allowed at that time in the subsistence fishery, were not collected. An estimated 1,252 Sitka households had at least one member who fished noncommercially for halibut in 1987. For 1996, the total estimated noncommercial harvest was 165,772 lb (net weight) (\pm 28%), and 149,244 lb with commercial removals deleted. In 1996, an estimated 943 Sitka households had at least one member who fished noncommercially for halibut.

For 2008, the estimated subsistence harvest of halibut, by both tribal SHARC holders who live in Sitka (most, but not all, of whom are members of the STA) and by other residents of Sitka (1,662 SHARC holders), was 109,581 lb (net weight) (5,513 fish). This was the second highest of any community (behind Kodiak), and accounted for 12% of the statewide total subsistence halibut harvest. Of Sitka's total subsistence halibut harvest, 96,314 lb (88%) was taken with setline gear, and 13,266 lb (12%) was taken with hand-operated gear. Adding sport harvests by Sitka SHARC holders (13,055 lb) produces a noncommercial estimate of 122,636 lb (net weight). Of all SHARC holders from Sitka, 845 reported that they subsistence fished for halibut in 2008. Of these, 784 reported that they used setline gear and 232 used hand-operated gear. Also, 307 SHARC holders from Sitka reported that they sport fished for halibut in 2008. Thus the total number of SHARC holders living in Sitka who reported that they fished for halibut in either the subsistence or recreational fishery in 2008 was 932 (Table 11).

Estimated subsistence and sport halibut harvests by Sitka SHARC holders in 2008 were notably lower than similar estimates for 2003–2007 (Table 11). A total of 1,639 Sitka residents had SHARCs in 2003;

1,871 in 2004; 1,974 in 2005; 1,895 in 2006; and 1,954 in 2007; compared to 1,662 in 2008. Subsistence harvests by all Sitka SHARC holders were 174,880 lb (net weight) in 2003 compared to 166,474 lb in 2004, 146,319 lb in 2005, 163,372 lb in 2006, 142,049 lb in 2007, and 109,581 lb in 2008; the 2008 estimate was 23% lower than the estimate for 2007. A change also occurred in the number of halibut harvested: 6,621 in 2003, 6,583 in 2004, 6,062 in 2005, 6,691 in 2006, 6,304 in 2007, and 5,513 in 2008. Adding sport harvests of halibut by SHARC holders to subsistence harvest totals results in noncommercial harvest estimates for Sitka that are similar among the first 4 years of the project: 207,288 lb for 2003, 192,303 lb in 2004, 202,232 lb for 2005, and 186,404 lb in 2006. According to the SHARC survey, more Sitka residents participated in the subsistence halibut fishery in 2008 (845) compared to 2003 (821 SHARC holders) or 2005 (814 SHARC holders), but less than in 2004 (904 SHARC holders), 2006 (915), or 2007 (921). Of those SHARC holders who participated in either the subsistence or sport fisheries for halibut in 2008, there were only 932, compared to 956 in 2003, 1,026 in 2004, 987 in 2005, 1,036 in 2006, and 1,010 in 2007.²³

In summary, this comparison suggests that the 2003–2008 subsistence halibut harvest estimates for Sitka, based on the SHARC survey, appear reasonable. The estimates for 2003–2007 were generally the same as those generated from previous face-to-face household surveys conducted in 1987 and 1996.

The SHARC survey data for 2008 suggest a decline in halibut harvests in Sitka compared to previous project years. A decline in the number of SHARCs held by tribal members in Sitka may account, at least in part, for lower 2008 estimated harvests, although average harvests by nontribal SHARC holders in Sitka were also lower in 2008 compared to 2003–2007 (Table 13). For example, nontribal SHARC holders from Sitka who fished for halibut in 2008 had an average harvest of 122 pounds per fisher, the lowest of the 6 project years and 26% below the previous 5-year average of 166 pounds per fisher. Tribal SHARC holders from Sitka who fished in 2008 also had lower harvests: only 176 pounds per fisher, which is 31% below the previous 5 year average of 254 lb. These findings suggest that the low 2008 harvest estimate was not simply a result of inadequate sampling or less participation in the SHARC program, but that subsistence harvests in Sitka appear to have declined from 2003 through 2008 and that the causes of this decline will require further investigation.

Petersburg (Regulatory Area 2C)

In 2000, Petersburg had a population of 3,224, including 388 Alaska Natives (U.S. Census Bureau 2001). In 2007, the estimated population had dropped to 3,009 (Table 1; ADOL 2008). Prior to the 2003 authorization of federal subsistence halibut fishing, the Division of Subsistence generated 2 estimates of noncommercial halibut harvests by Petersburg residents, based on household surveys in 1987 and 2000 (Table 14). In the 1987 project, a random sample of 49 of the 1,123 households in Petersburg was interviewed (4%), which generated a subsistence harvest estimate of 119,176 lb of halibut (net weight) (\pm 51%); of this, 11,728 lb were estimated to have been removed from commercial harvests, resulting in a total noncommercial harvest estimate of 107,448 lb. As with Sitka, the 1987 project in Petersburg collected noncommercial harvest data only for halibut taken with rod and reel. Of the 1,123 households in Petersburg, 54% were estimated to have at least one member who fished for halibut noncommercially in 1987, which was an estimated 604 halibut fishers (CPDB). In 2000, Petersburg residents were estimated to have been removed from a subsistence harvest of 49,023 lb, all of which was taken with rod and reel. In 2000, it was estimated that 468 Petersburg households had at least one member who fished for halibut for home use.

²³ Following a recommendation from the first project year (Fall et al. 2004:31), data from the ADF&G Division of Sport Fish *Statewide Harvest Survey* (SWHS) about sport halibut harvests by Sitka residents were analyzed for additional background on halibut fishing in the community and discussed in the report for the 2004 project year (Fall et al. 2005:23-24). An updated analysis has not been prepared for this report.

For 2008, the estimated subsistence harvest of halibut by Petersburg residents with SHARCs (985 SHARC holders) was 46,600 lb (net weight) (Table 11). In 2007, 1,123 SHARC holders in Petersburg harvested 47,517 lb of halibut in the subsistence fishery; in 2006, 1,082 SHARC holders harvested 53,682 lb; in 2005, 1,197 SHARC holders harvested 61,372 lb; in 2004, 1,187 SHARC holders harvested 71,784 lb; and in 2003, 1,047 SHARC holders harvested 55,718 lb. Of the total 2008 subsistence halibut harvest, 31,077 lb (67%) was harvested with setline gear and 15,523 lb (33%) was harvested with hand-operated gear. In 2007, 67% of the subsistence halibut harvest by Petersburg residents was taken with setline gear, and 33% with hand-operated gear; 66% with setline gear and 34% with hand-operated gear in 2006; 72% with setline gear and 28% with hand-operated gear in 2005; and about 75% taken with setline gear and 25% with hand-operated gear in both 2003 and 2004.

In 2008, Petersburg SHARC holders also harvested 17,506 lb of halibut they classified as sport harvested. This gives a total noncommercial halibut harvest estimate for Petersburg SHARC holders of 64,106 lb in 2008. In 2007, the sport harvest contributed 15,177 lb to the total noncommercial halibut harvest of 62,694 lb; 17,351 lb in 2006, for a total noncommercial halibut harvest estimate of 71,033 lb; 23,289 lb in 2005 for a total noncommercial harvest estimate of 84,661 lb; 26,408 lb in 2004 for a total noncommercial harvest estimate of 98,192 lb; and 19,611 lb in 2003 for a total noncommercial halibut harvest estimate of 75,329 lb (Table 11).

In 2008, an estimated 393 Petersburg SHARC holders harvested halibut in the subsistence fishery (285 with setline gear and 207 with hand-operated gear). This compares to 386 fishers in 2007 (274 setline and 191 hand-operated gear); 416 fishers in 2006 (300 setline and 222 hand-operated gear); 436 fishers in 2005 (338 setline gear and 175 used hand-operated gear); 482 fishers in 2004 (322 setline gear and 206 hand-operated gear); and 415 subsistence halibut fishers in 2003 (330 setline gear and 138 hand-operated gear). In 2007, an estimated 264 Petersburg SHARC holders sport fished for halibut, as did 246 in 2006, 312 in 2005, 351 in 2004, and 268 in 2003. An estimated total of 516 Petersburg SHARC holders either subsistence or sport fished for halibut in 2007 and 529 in 2006, 569 in 2005, 617 in 2004, and 523 in 2003 (Table 11).

Because some Petersburg residents without SHARC cards likely sport fished for and harvested halibut, the 2003–2008 estimates of noncommercial halibut harvests by Petersburg residents generated by the SHARC survey appear consistent with the 1987 estimate based on household interviews, although the SHARC estimate is slightly higher than the in-person estimate for 2000, the year that state regulations restricted subsistence fishing to handlines or rods and reels with no more than 2 hooks. In that year, no Petersburg households reported taking halibut for home use with any gear other than rod and reel. In contrast, an estimated 330 used setline gear in 2003, based on the SHARC survey, and 322 in 2004, 338 in 2005, 300 in 2006, 274 in 2007, and 285 in 2008 (Table 11, Table 13).

Cordova (Regulatory Area 3A)

In 2000, Cordova had a population of 2,454 people, including 368 Alaska Natives (U.S. Census Bureau 2001). Cordova's estimated population in 2008 was 2,161 (Table 1; ADOL 2008). Before 2003, there were 6 Division of Subsistence household surveys that estimated noncommercial halibut harvests (Table 15). After subtracting fish removed from commercial harvests for home use, estimated noncommercial halibut harvests by Cordova residents ranged from 25,609 lb (net weight) (\pm 33%) in 1991 to 120,221 lb (\pm 62%) in 1988, with an average over the 6 project years of 57,285 lb. The estimated number of Cordova households with at least one member fishing noncommercially for halibut ranged from 228 in 1985 to 401 in 1992, with a mean of 325 households (CSIS).

SHARC survey subsistence halibut harvest estimates and participation estimates for Cordova residents for 2003 were lower than might be expected from previous research (Fall et al. 2004:24–25). In 2003, 358 residents of Cordova obtained SHARCs (Table 11). Of these, an estimated 102 subsistence-fished (68 with setline gear, 40 with hand-operated gear), 144 reported that they sport fished for halibut, and 194 fished for halibut either under the new federal subsistence halibut provisions or in the sport fishery. The

estimated subsistence harvest from the SHARC survey was 15,498 lb (net weight) (7,613 lb [49%] with setline gear, 7,885 lb [51%] with hand-operated gear), and there were additional 11,534 lb estimated taken by SHARC holders while sport fishing. The total of 27,032 lb was about 47% of the average for previous project years.

Based on these comparisons, the final report for 2003 suggested that the SHARC survey had underestimated the amount of halibut harvested by Cordova residents for home use, perhaps because not all subsistence fishers in Cordova obtained SHARCs in 2003. The results of the survey for 2004 also supported this conclusion (Fall et al. 2005:25–26). A total of 526 Cordova residents had obtained SHARCs by the end of 2004 (an increase of 47%) (Table 11). An estimated 262 Cordova SHARC holders subsistence fished for halibut in 2004, up 157% from 2003. Of these, 174 fished with setline gear (up 156%) and 97 used hand-operated gear. The estimated subsistence halibut harvest by Cordova residents in 2004 was 40,640 lb (net weight), an increase of 163% over 2003. Sport harvests by Cordova SHARC holders (an estimated 174 of whom sport fished for halibut in 2004) added 12,149 lb to the community harvest for 2004, for a total estimate of 52,789 lb of halibut harvested noncommercially by 325 fishers. This total was an increase of 95% over 2003, and was about 92% of the average for the 6 survey years prior to 2003 (and exceeded the total for 3 of those 6 years). Given that some Cordova residents likely obtained halibut for home use exclusively in the sport fishery and without obtaining SHARCs, the SHARC survey estimate for 2004 appeared consistent with earlier estimates of subsistence halibut harvests in Cordova.

Findings for Cordova for 2005 were much like those for 2004 and supported the conclusions of the 2004 final report. As shown in Table 11, 602 Cordova residents held SHARCs in 2005, continuing the growth that had occurred in 2004, but at a slower pace. Subsistence halibut harvests totaled 47,141 lb, up about 16% from 40,640 lb in 2004. In 2004, 73% of the total was harvested with setline gear, as was 74% in 2005. In 2005, 281 Cordova residents obtained SHARC cards and went subsistence fishing, compared to 262 in 2004. Cordova SHARC holders harvested 10,519 lb of halibut while sport fishing in 2005, for a total noncommercial harvest estimate of 57,660 lb. This total was similar to the estimate for 2004 (a combined total of 52,789 lb in the subsistence and sport fishery) and approximated the mean harvest of 57,285 lb estimated in the 6 harvest survey project years.

The estimated subsistence halibut harvest for Cordova in 2006 was 29,027 lb, a decline from 2004 (40,640 lb) and 2005 (47,141 lb) but still about double the 2003 estimated harvest (15,498 lb) (Table 11). The reasons for this decline remain uncertain. The estimated sport halibut harvest by Cordova SHARC holders in 2006 was 7,020 lb, lower than estimates in the first 3 years of the SHARC program. In total, Cordova SHARC holders harvested an estimated 36,047 lb of noncommercial halibut in 2006. This total was substantially lower than the noncommercial estimates for 2004 (52,789 lb) and 2005 (57,660) lb, but was higher than that for 2003 (27,032 lb) (Table 11). The 2006 estimate was higher than estimates generated during previous in-person survey efforts in 1985 and 1991, but lower than the average for the 6 years for which SHARC data are available (Table 14).

Estimated subsistence halibut harvests by Cordova SHARC holders declined slightly in 2007 from 2006 levels, to 28,716 lb, with most of this (21,683 lb; 76%) taken with setline gear. Sport harvests of halibut by Cordova SHARC holders declined to 4,203 lb in 2007, the lowest of the 5 previous project years. The total noncommercial harvest estimate for 2007 by Cordova SHARC holders was 32,919 lb of halibut, lower than any project year except 2003 and also lower than the average for the previous 6 in-person surveys (Table 11, Table 14).

For 2008, the estimated subsistence harvest of halibut in Cordova was 27,547 lb, lower than any SHARC project year since 2003 but similar to estimates for 2006 and 2007 (Table 11). Of the 2008 subsistence harvest, 81% (22,301 lb) was harvested with setline gear. Sport harvests of halibut by Cordova SHARC holders totaled 5,562 in 2008, lower than during any SHARC project year except 2007. The 2008 total noncommercial harvest of halibut by Cordova SHARC holders was 33,109 lb of halibut, which was the

second lowest (after 2007) since 2003. The 2008 estimated harvest was only 58% of the annual average for pre-2003 project years, although it is higher than either 1985 or 1991 (Table 14).

Fewer Cordova residents held SHARCs in 2008 (587) as did in 2007 9615), 2006 (607), and 2005 (602). Fewer Cordova residents reported that they participated in the subsistence halibut fishery in 2008 (254) than in any of the previous 4 years. The estimated number of Cordova SHARC holders who sport fished for halibut (126) was about the same as 2007 (123) but lower than any year from 2003–2006. In 2008, 292 Cordova SHARC holders fished noncommercially for halibut in 2008, down from 315 in 2007. In 2008, fewer Cordova SHARC holders participated in any noncommercial halibut fishing than in any year since the new regulations came into effect except 2003 (Table 11).

Port Graham (Regulatory Area 3A)

Port Graham, which is located in Lower Cook Inlet, had a population of 171 in 2000, including 151 Alaska Natives (U.S. Census Bureau 2001). Port Graham's population in 2008 was estimated at 136 (Table 1; ADOL 2008). It is presented as a case example of the smaller predominantly Alaska Native communities in regulatory areas 3A and 3B that depend heavily on subsistence harvests of fish and wildlife resources. The division has produced estimates of subsistence halibut harvests by Port Graham residents based on household surveys for 7 project years (Table 16). Excluding 1989, the year of the *Exxon Valdez* oil spill, Port Graham's noncommercial halibut harvests ranged from 4,451 lb (net weight) (\pm 14%) in 1993 to 11,232 lb (\pm 14%) in 1992, with a 6-year average of 7,591 lb (net weight) (Figure 29). Again excluding 1989, an estimated average of 38 Port Graham households had at least one member who subsistence fished for halibut in the project years in the late 1980s and 1990s.

During 2008, a total of 48 Port Graham residents held SHARCs (excluding Port Graham tribal members who do not live in Port Graham.) In 2008, an estimated 30 Port Graham residents subsistence fished for halibut, with 13 using setline gear and 23 using hand operated gear. Also, 2 said they had sport fished for halibut in 2008. In 2007, of 59 SHARC holders in Port Graham, an estimated 36 subsistence fished for halibut, with 22 using setline gear and 28 using hand operated gear. Also, 4 said they sport fished for halibut in 2007. In 2006, 30 Port Graham SHARC holders subsistence fished for halibut, with 9 using setline gear and 24 using hand operated gear. In 2005, 18 Port Graham SHARC holders subsistence fished for halibut, with 8 using setline gear and 18 using hand operated gear. Nine Port Graham SHARC holders sport fished for halibut, with 15 using setline gear and 31 using hand operated gear; 11 said they sport fished for halibut, with 15 using setline gear and 31 using hand operated gear; 10 used setline gear, 28 used hand operated gear), and 3 said they sport fished for halibut (Table 11). The findings for the 2003–2008 SHARC surveys were thus consistent with levels of participation found in the noncommercial halibut fisheries during previous studies in Port Graham, although estimated participation was lower in 2005, according to the SHARC survey.

The subsistence halibut harvest estimate for Port Graham in 2008 was 9,097 lb (Table 11). Of this, 6,896 lb (76%) were harvested with setline gear and 2,200 lb (24%) with hand-operated gear. Adding 51 lb that Port Graham SHARC holders harvested in the sport halibut fishery results in a total community noncommercial harvest estimate of 9,148 lb in 2008. Harvests in 2008 were up slightly from 2007, when Port Graham SHARC holders harvested an estimated 8,493 lb of halibut in the subsistence fishery, with 5,347 lb taken with setline gear and 3,146 lb with hand-operated gear. Harvests in 2008 were up more markedly from 2006, when Port Graham SHARC holders harvested an estimated 6,194 lb of halibut, with 2,397 lb taken with setline gear and 3,797 lb with hand-operated gear. In the first 3 years of the SHARC program (2003–2005), estimated subsistence halibut harvests were higher in Port Graham than in 2006, 2007, or 2008. In 2005, Port Graham SHARC holders harvested an estimated 11,127 lb of halibut, with 7,938 lb taken with setline gear and 3,190 lb with hand operated gear. In 2004, Port Graham's estimated subsistence halibut harvest was 9,181 lb (net weight) with 4,425 lb (48%) harvested with setline gear and 4,755 lb (52%) with hand-operated gear. In 2003, the estimated halibut harvest was 11,454 lb (net

weight), with 4,398 lb (38%) harvested with setline gear and 7,056 lb (62%) with hand operated gear. Only 2 Port Graham SHARC holders reported sport fishing effort for halibut in 2007, with no harvest. (Table 11).

Total noncommercial halibut harvest estimates for Port Graham (subsistence plus sport harvests reported by SHARC holders) for 2003–2005 were similar to the highest estimate generated prior to the SHARC survey (11,232 lb in 1992) (Table 11), and they also exceeded the average of previous project years of 7,591 lb. This finding was not unexpected: Port Graham has traditionally used setlines with multiple hooks to harvest halibut as well as hand-operated gear (Stanek 1985:67–69,151). With May 2003 regulations finally consistent with traditional harvest methods, residents of Port Graham and other communities with similar traditions could fish with setline gear and hand-operated gear, and thus their reported subsistence halibut harvests are probably similar to historical levels.²⁴ However, the 2006 estimate of 6,194 lb was lower than those for the previous 3 years, and lower than the average of the prior in-person survey estimates for 1987–1997. The 2007 and 2008 estimates were also lower than 2003–2005, but above the average of the earlier survey years (Table 15). The reasons for the lower harvests in 2006, 2007, and 2008 are uncertain, but a decline in the community's population may be part of the explanation.

Kodiak City and Road System (Regulatory Area 3A)

"Kodiak" in this report includes the city of Kodiak (population 6,334 in 2000, including 829 Alaska Natives) and those portions of the Kodiak Island Borough connected to the city of Kodiak by road. This area had a population of 12,973 people in 2000, including 1,697 Alaska Natives (U.S. Census Bureau 2001). The estimated population in 2008 was 12,623 (Table 1; ADOL 2008). This is the largest rural community eligible to participate in the Alaska subsistence halibut fishery.

Based on Division of Subsistence household surveys, estimates of halibut harvests for home use are available for the entire Kodiak road system population for 1982 and 1991 (CSIS). Estimates for Kodiak city residents alone are available for 1992 and 1993, and these can be expanded to produce a total for the entire road system population (Table 17). Excluding fish removed from commercial catches for home use, noncommercial halibut harvests by Kodiak road system residents ranged from 247,283 lb (usable weight) (\pm 30%) in 1991 to 511,254 lb (\pm 33%) in 1993. The average for the 4 available project years was 366,682 lb; of this, 338,476 lb (92%) was taken with rod and reel, most likely consistent with sport fishing regulations. On average for the 4 project years, 1,306 Kodiak road system households had at least one member who fished for halibut for home use.

Kodiak residents held 1,725 SHARCs during 2008, down slightly from 1,880 in 2007 (Table 11). In 2008, an estimated 963 Kodiak SHARC holders subsistence fished for halibut; most (763; 79%) used setline gear. This compares to an estimated 945 subsistence fishers in Kodiak in 2007, of whom 707 (75%) used setline gear; 961 in 2006, of whom 684 (71%) used setline gear; 871 in 2005, 650 of whom (75%) used setline gear; 802 in 2004, 554 (69%) of whom used setline gear; and 646 in 2003, 438 of whom (68%) used setline gear. In 2008, an estimated 693 Kodiak SHARC holders sport fished for halibut, and 1,213 fished for halibut and 1,157 were involved in noncommercial halibut fishing; 2006, when 562 sport fished for halibut and 1,092 were involved in noncommercial halibut fishing; 2005 when 669 sport fished for halibut, and 971 fished for halibut under either subsistence or sport regulations; and 2003, when 498 sport fished for halibut, and 858 either subsistence or sport fished for halibut (Table 11). Given the likelihood that many Kodiak residents continued to fish for halibut under sport fishing regulations in

²⁴ A cautionary note for Port Graham for 2005 concerns response rate. Only 16 of 52 SHARC holders responded to the 2005 survey (31%) (Fall et al. 2006:52). Further outreach in this community was necessary to improve the response rate and build confidence in the harvest estimates. As noted in Chapter 1, this outreach occurred in 2007 for the 2006 project year, and a response rate of 66% was achieved.

2003–2008 without obtaining SHARCs, the estimated level of participation in the subsistence fishery based on the SHARC survey appears reasonable when compared to the earlier household survey results.

The estimated subsistence harvest of halibut in 2008 for Kodiak road system area residents was 177,334 lb (net weight), lower than the 193,633 lb estimated for 2007, 205,822 lb estimated for 2006, 210,828 lb estimated for 2005, and 187,214 lb for 2004, but higher than the 153,254 lb estimated for 2003 (Table 11). In 2008, Kodiak subsistence fishers harvested an estimated 128,226 lb of halibut with setline gear (72%) and 49,108 lb (28%) with hand-operated gear. This compares to 135,351 lb (70%) harvested with setline gear and 58,282 lb (30%) with hand-operated gear in 2007; 142,326 lb (69%) harvested with setline gear and 63,496 lb (31%) with hand-operated gear in 2006; 146,781 lb (70%) harvested with setline gear and 64,047 lb (30%) with hand-operated gear in 2005; 131,719 lb (70%) harvested with setline gear and 55,605 lb (30%) with hand-operated gear in 2004; and 101,575 lb taken in 2003 with setline gear (66%) and 51,678 lb (34%) with hand-operated gear. In addition, Kodiak road system SHARC holders harvested an estimated 72,915 lb (net weight) of halibut in 2008 they classified as sportcaught, which was within the range of harvests in other years: 68,556 lb in 2007, 64,320 lb in 2006, 82,455 lb in 2005, 73,181 lb in 2004, and 68,170 lb in 2003. In total, Kodiak SHARC holders harvested 250,249 lb of halibut in 2008, compared to 262,189 lb in 2007, 270,142 lb in 2006, 293,283 lb in 2005, 260,395 lb in 2004, and 221,424 lb (net weight) in 2003 (Table 11). Not surprisingly, the totals for all 6 years of the SHARC survey are lower than those based on household surveys for previous years (except that the 2004, 2005, 2006, 2007, and 2008 SHARC survey estimates are higher than the household survey estimate for 1991) because, as just noted, many Kodiak road system residents who fish for halibut likely do not obtained SHARCs and continue to harvest halibut under sport fishing rules. Overall, the 2003-2008 subsistence harvest estimates for Kodiak appear reasonable, but they should be further evaluated using ADF&G Division of Sport Fish Statewide Harvest Survey data and with additional years of subsistence harvest survey data.

Sand Point (Regulatory Area 3B)

In 2000, the population of Sand Point was 952, with an Alaska Native population of 421 (U.S. Census Bureau 2001). The population estimate for 2008 was 958 (Table 1; ADOL 2008). There is one estimate of 1992 halibut harvests for home use by Sand Point residents based on Division of Subsistence household surveys prior to 2003 (Fall et al. 1993), at 13,981 lb (net weight). Of this, 6,240 lb were removed from commercial harvests, 6,934 lb were taken with subsistence methods (setline or jigging with a hand-held line) and 807 lb were harvested with rod and reel. The total harvest with noncommercial methods was 7,741 lb. Of the 204 permanent households in the community, 122 harvested halibut for home use; 65 used "subsistence methods," 16 fished with rod and reel, and the rest obtained halibut for home use from their commercial harvests.

At the end of 2003, 73 residents of Sand Point had obtained SHARCs. The estimated subsistence halibut harvest for 2003 was 4,819 lb (net weight), based on the SHARC survey. Of this, 3,409 lb were harvested with setline gear and 1,410 lb with hand-operated gear. Twenty-one Sand Point residents reported that they subsistence fished for halibut in 2003. In addition, 11 Sand Point SHARC holders reported that they harvested an estimated 410 lb of halibut while sport fishing, for a total estimated noncommercial harvest of 5,229 lb of halibut (Table 11). These are lower harvests and levels of participation than might be expected, considering the 1992 survey findings.

By December 31, 2004, 351 Sand Point residents had obtained SHARCs, a very substantial increase over 2003, when 73 obtained SHARCs. The estimated total subsistence halibut harvest was 11,355 lb (net weight). Of this total, 4,360 lb were harvested with setline gear (38%) and 6,996 lb (61%) with hand-operated gear. In total, an estimated 109 Sand Point SHARC holders subsistence fished for halibut in 2004, about 5 times the estimate for 2003. Also, an estimated 50 Sand Point SHARC holders sport fished for halibut, with an estimated total harvest of 1,384 lb. In total, 121 Sand Point SHARC holders fished for halibut noncommercially in 2004 and had a total estimated harvest of 12,739 lb (net weight) (Table 11).

This is more than double the 2003 estimate, and similar to the total community estimate for 1992 (which included halibut removed from commercial harvests). It is likely that the higher estimate for 2004 does not indicate an increased harvest by Sand Point residents over 2003, but rather a more complete estimate due to much larger number of participants in the SHARC program.

A total of 321 Sand Point residents held SHARCs in 2005. The estimated subsistence harvest of halibut increased to 21,901 lb, with 12,201 lb (56%) taken with setline gear and 9,700 lb (44%) caught with hand-operated gear. One hundred Sand Point residents subsistence fished for halibut in 2005. In addition, 23 sport fished for halibut, adding 1,281 lb for a total noncommercial halibut harvest estimate of 23,182 lb (Table 11). The increase in the total halibut harvest, especially the increase in setline harvests, suggests that Sand Point residents were increasingly participating in the opportunities provided by the federal subsistence halibut fishery.

In 2006, the number of Sand Point residents with SHARCs increased to 365. The estimated number of SHARC holders who subsistence fished for halibut also increased, to 133 from 100 in 2005 and 109 in 2004. The estimated number of Sand Point SHARC holders subsistence fishing with setlines also increased notably to 59 in 2006, compared to 35 in 2005 and 25 in 2004. The number fishing with hand-operated gear rose slightly to 87 in 2006, from 77 in 2005 and 74 in 2004. The estimated subsistence halibut harvest by Sand Point residents in 2006 was 20,214, similar to the estimate for 2005 of 21,901. In 2006, 37% (7,406 lb) of the subsistence halibut were harvested with setline gear and 63% (12,809 lb) with hand-operated gear. In addition, an estimated 29 Sand Point SHARC holders sport fished for halibut in 2006, with an estimated harvest of 6,300 lb, up substantially from 1,281 lb of sport-harvested halibut in 2005 and 1,384 lb in 2004. As a result of the higher estimated sport harvests of halibut by Sand Point SHARC holders in 2006, the total estimated noncommercial harvest of halibut increased to 26,514 lb from 23,182 lb in 2005 and 12,739 lb in 2004 (Table 11).

Subsistence halibut fishing patterns in Sand Point in 2007 were generally similar to those of 2006. During any part of 2007, 364 Sand Point residents held SHARCs, and 138 used them to subsistence fish for halibut. Of these, 49 used setline gear and 113 used hand-operated gear. The total estimated subsistence halibut harvest in 2007 was 24,615 lb, up slightly from 2006 and the highest estimate for the 5 years of the project. The subsistence harvest was about evenly split between setline gear (13,278 lb; 54%) and hand-operated gear (11,337 lb; 46%). An estimated 16 Sand Point SHARC holders also went sport fishing for halibut and they harvested an estimated 3,034 lb. In total, the noncommercial halibut harvest at Sand Point in 2007 was 27,649 lb, with 138 people involved in this harvest (Table 11).

The results of the SHARC survey for Sand Point for 2008 found subsistence halibut fishing patterns similar to those of 2006 and 2007. During 2008, 342 Sand Point residents held SHARCs, and 130 subsistence fished for halibut. Of these, 71 used setline gear and 88 used hand-operated gear. The total estimated subsistence halibut harvest in 2008 was 25,013 lb, up slightly from 2007 and the highest estimate for the 6 years of the project. Setline gear accounted for 15,766 lb (63%) and hand-operated gear added 9,247 lb (37%). An estimated 19 Sand Point SHARC holders also went sport fishing for halibut and they harvested an estimated 2,195 lb. In total, the noncommercial halibut harvest estimate at Sand Point in 2008 was 27,208 lb, with 132 people involved in this harvest (Table 11).

Unalaska/Dutch Harbor (Regulatory Area 4A)

The city of Unalaska (which includes Dutch Harbor) had a population of 4,283 in 2000, including 397 Alaska Natives (U.S. Census Bureau 2001). The estimated population in 2008 was 3,551 (Table 1; ADOL 2008). The Division of Subsistence conducted a household harvest survey in Unalaska/Dutch Harbor for the 1994 data year and found that the estimated total halibut harvest was 97,601 lb (net weight) (3,049 fish) (\pm 34%), excluding 10,606 lb (331 fish) removed from commercial catches for home use. Of the 700 households in the community, an estimated 391 (56%) had at least one member who fished for halibut in 1994. Most of the noncommercial harvest, 88,142 lb (90%), was taken with rod and reel (CSIS).

By the close of 2003, only 92 residents of Unalaska and Dutch Harbor had obtained SHARCs (Table 11). Notably, only 14 members of the Qawalangin Tribe of Unalaska obtained SHARCs in 2003. For the community overall as well as for the tribe, this was far fewer registrants than might have been predicted from the 1994 survey results. By the end of 2004, 131 Unalaska/Dutch Harbor residents had obtained SHARCs, as had 25 Qawalangin Tribe members. In 2005, 150 community members held SHARCs, as did 31 Qawalangin Tribe members. While a notable increase over 2003, this total continued to be lower than expected. The total increased to 171 SHARC holders in 2006, including 43 Qawalangin Tribe members. During 2007, 176 Unalaska/Dutch Harbor residents held SHARCs, as did 43 Qawalangin Tribe members. In 2008, 173 Unalaska/Dutch Harbor residents held SHARCs, as did 43 Qawalangin Tribe members.

In 2008, an estimated 87 Unalaska/Dutch Harbor SHARC holders participated in the subsistence halibut fishery, an estimated 43 sport fished, and an estimated 101 participated in either fishery. In comparison, in 2007, 83 Unalaska/Dutch Harbor SHARC holders participated in the subsistence halibut fishery, 33 sport fished, and 92 participated in either fishery. In 2006, 81 Unalaska/Dutch Harbor SHARC holders participated in the subsistence halibut fishery, 50 sport fished, and 101 participated in either fishery. In 2005, 88 SHARC holders participated in the subsistence halibut fishery. In 2005, 88 SHARC holders participated in the subsistence fished; 97 participated in either fishery. In 2004, 81 SHARC holders subsistence fished for halibut and 34 sport fished; 93 participated in either fishery. In 2003, 50 Unalaska/Dutch Harbor SHARC holders subsistence fished for halibut, 33 sport fished, and 70 fished in either fishery (Table 11).

In 2008, SHARC holders in Unalaska/Dutch Harbor harvested an estimated 13,710 lb of halibut in the subsistence fishery. Of this, 7,293 lb was harvested with setlines (53%) and 6,417 lb with hand-operated gear (47%). Additionally, they harvested 2,962 lb of halibut in the sport fishery, for a total noncommercial harvest of 16,672 lb (Table 11). In 2007, the estimated subsistence halibut harvest was 13,250 lb, 9,012 lb (68%) with setline gear and 4,238 lb (32%) with hand-operated gear. The estimated sport harvest was 2,287 lb, for a total noncommercial harvest of 15,537 lb. In 2006, the estimated subsistence halibut harvest was 16,331 lb, 7,526 lb (46%) with setline gear and 8,805 lb (54%) with handoperated gear. The estimated sport harvest was 3,768 lb for a total noncommercial harvest of 20,100 lb. In 2005, the estimated subsistence harvest was 18,108 lb (net weight), with most (9,573 lb; 53%) taken with setline gear and the balance with hand-operated gear. In addition, in 2005 Unalaska/Dutch Harbor SHARC holders harvested 2,439 lb of halibut while sport fishing, for a total noncommercial halibut harvest of 20,547 lb. In 2004, the estimated subsistence harvest was 15,530 lb (net weight), with most (9,557 lb; 62%) taken with setline gear and the balance with hand operated gear. In addition, Unalaska/Dutch Harbor SHARC holders harvested 2,165 lb of halibut while sport fishing in 2004, for a total noncommercial halibut harvest of 17,695 lb. The estimated subsistence harvest for 2003 was 10,860 lb (net weight), and there was an additional 5,519 lb of halibut harvested while sport fishing, for a total noncommercial harvest of 16,379 lb.

The 2008 total halibut harvest by Unalaska/Dutch Harbor SHARC holders represents just 17% of the harvest estimate for 1994. Similarly, the 2007 total halibut harvest was 16%, the 2006 total halibut harvest was 21%, the 2005 total halibut harvest was 21%, the 2004 total halibut harvest was 18% of, and the 2003 estimate was 17% of the 1994 estimate. There are at least 5 explanations for these differences. First, actual noncommercial halibut harvests in Unalaska may have declined since 1994, although a decline of this magnitude is probably unlikely. Second, if many fishers did not obtain a SHARC, the SHARC survey may have underestimated the subsistence halibut harvest. A third explanation is that the 1994 survey may have overestimated the halibut harvest. A fourth explanation is that many halibut fishers in Unalaska may prefer to harvest halibut under sport fishing regulations and therefore do not obtain SHARCs. A fifth possibility that may account for a decline in subsistence halibut harvests is a decline in stock abundance. The IPHC has noted a decline in abundance in Area 4A since 1994 (Gregg Williams, IPHC, personal communication, 2005). A combination of all 5 factors could be responsible for the unexpectedly low subsistence halibut harvest estimated for Unalaska from the SHARC surveys in all 6

study years. Further outreach in Unalaska is clearly appropriate, as well as additional research to better understand patterns of halibut fishing in the community.

Toksook Bay (Regulatory Area 4E)

Toksook Bay had a population of 532 in 2000 and 605 in 2008 (Table 1; U.S. Census Bureau 2001; ADOL 2008). As discussed in Chapter 1, the number of valid SHARCs held by Toksook Bay residents dropped from 534 (approximating the community's total population) to 34 in 2008. Very few that had been obtained in 2003 and that expired at the close of 2007 were renewed. The Division of Subsistence has not conducted a household harvest survey in this community. Wolfe (2002) estimated a subsistence halibut harvest of 12,600 lb (net weight, 16,800 lb round weight) for this community for 2000, based upon a 1986 per capita estimate for the neighboring community of Tununak. During SHARC project years from 2003-2007, Division of Subsistence staff, with the assistance of the Toksook Bay tribal government, evaluated the list of SHARC holders in the community, estimated the total number of subsistence halibut fishers, and conducted interviews with likely fishers. Based on the results of this collaboration with the tribal government, it is highly likely that most community residents who subsistence fished for halibut in 2003–2007 provided harvest data through the SHARC survey. Therefore, harvest estimates for Toksook Bay for 2003-2007 represent the harvests reported by respondents to the survey, and are not expanded to the total number of SHARC holders in the community. In 2008, however, no outreach or interviewing could occur in Toksook Bay. Of 34 SHARC holders, 11 (32%) responded to the mailed survey. Unlike previous years, returned survey data were expanded to estimate 2008 halibut harvests in Toksook Bay.

The estimated harvest for Toksook Bay for 2003 was 24,500 lb (net weight) by 54 fishers (Table 11). Project staff consider this a reliable subsistence harvest estimate for the community. It should be noted that Toksook Bay is a member of the Coastal Villages Regional Fund (CVRF) CDQ organization²⁵. The majority of the 5,034 lb of sublegal halibut retained for home use by members of this CDQ organization in 2003 was landed at Toksook Bay and Mekoryuk (Williams 2004:59–60).

For 2004, 56 Toksook Bay SHARC holders reported a harvest of 6,596 lb of halibut, with most of this (5,737 lb) harvested with hand-operated gear (Table 11). This suggests a substantial decline in subsistence halibut harvests compared to 2003. As in 2003, a majority (69% of 7,120 lb [net weight]) of the sublegal halibut retained for home use by the CVRF was landed at Toksook Bay and Mekoryuk (Williams 2005), but this cannot account for the decline in subsistence harvests.

In 2005, subsistence harvests by Toksook Bay SHARC holders rebounded to 14,870 lb; adding the 98 lb of SHARC holder's sport-caught halibut produces a community total of 14,968 lb (Table 11). Almost all (14,269 lb; 96%) of the subsistence harvest was taken with hand-operated gear. Sixty-one Toksook Bay residents participated in the SHARC subsistence halibut fishery in 2005.

The estimated subsistence halibut harvest by Toksook Bay SHARC holders increased substantially in 2006, to 36,481 lb, all harvested with subsistence gear and most (34,149 lb; 94%) caught with handoperated gear (Table 11). In 2006, the estimated number of participants in the SHARC subsistence fishery also increased, to 113 SHARC holders; the previous highest estimate was 61 subsistence halibut fishers in 2005. During interviews in the community in April 2007, SHARC fishers in Toksook Bay reported that subsistence fishing had been very productive in 2006; halibut were abundant and there was a corresponding increase in subsistence fishing effort. This may account for the large increase in the estimated harvest in 2006. Also, in 2006, over 67% of the 19,710 lb of sublegal halibut retained for home use in the CVRF CDQ fishery were landed at Toksook Bay and Mekoryuk (Williams 2007). Division staff conducting interviews with SHARC holders in Toksook Bay reminded respondents to exclude CDQ sublegal halibut in their subsistence estimates for the SHARC survey.

²⁵ See footnote 11 for more information about the CDQ program.

In 2007, the estimated subsistence harvest in Toksook Bay dropped to 7,921 lb (from 36,481 lb in 2006), with most of this harvest (6,469 lb; 82%) taken with hand-operated gear. The estimated number of participants in the subsistence fishery was 112, with most of these (100; 89%) using hand-operated gear. Also in 2007, 59% of the 11,398 lb of sublegal halibut retained from home use during the Coastal Villages Regional Fund CDQ fishery were landed at Toksook Bay and Mekoryuk (Williams 2008). When conducting interviews in Toksook Bay in early 2008 about 2007 subsistence halibut harvests, Division of Subsistence staff encountered several subsistence fishers who did not hold SHARCs. Therefore, the 2007 estimate based on the SHARC list likely underestimates the community's total by an unknown amount.

As noted above, the number of valid SHARCs for Toksook Bay dropped to 34 in 2008. Based on the SHARC survey returns (11 of 34; 32%), it is likely that many active halibut fishers in the community did not renew their SHARCs and therefore were not part of the SHARC survey, resulting in underestimates of participation in the fishery and in estimated harvests. For example, based on the survey results, 9 Toksook Bay residents participated in the subsistence halibut fishery in 2008, compared to an average of 73 for the previous 5 years (range 44 to 112; Table 11). The estimated harvest was 2,143 lb in 2008, while the previous 5-year average was 18,074 lb (range 6,596 to 36,481 lb). Without renewed registrations in the SHARC program and outreach in the community, it is unlikely that the mail survey alone will provide reliable harvest estimates for the subsistence halibut fishery in Toksook Bay.

Tununak (Regulatory Area 4E)

Tununak had a population of 325 in 2000, 315 of whom were Alaska Native (U.S. Census Bureau 2001). The population for 2008 was 341 (Table 1; ADOL 2008). The Division of Subsistence conducted a comprehensive household harvest survey in Tununak in 1986, which provides the only estimate of subsistence halibut harvests for the community prior to the adoption of the 2003 subsistence regulations. The harvest estimate for 1986 was 1,532 fish and 30,643 lb (net [dressed] weight), with a 95% confidence limit of $\pm 26\%$. The harvest per capita was 93 lb (net weight) (CSIS).

No residents of Tununak obtained SHARCs in 2003²⁶, and the Traditional Elders' Council in Tununak did not approve Division of Subsistence plans to conduct interviews with potential subsistence halibut fishers for 2003. Therefore, there is no subsistence halibut harvest estimate for this community for 2003. By the close of 2004, however, 70 residents of Tununak had obtained SHARCs (Table 11). Because only 9 SHARC holders responded to the postal survey (13%), harvest estimates for Tununak for 2004 are based on a very low sample achievement. The estimated total subsistence halibut harvest was 1,954 lb (net weight) by 31 fishers, 878 lb harvested with setline gear and 1,076 lb with hand-operated gear. No Tununak SHARC holders reported sport fishing activity.

The tribal government supported Division of Subsistence interviewing of subsistence halibut fishers in Tununak for the 2005 project year (Fall et al. 2006:5). Thirty-three of 70 SHARC holders were interviewed (47%). As in Toksook Bay, reported harvests were not expanded for Tununak for the 2005 project year because most known halibut fishers were interviewed. The total subsistence harvest of halibut was 2,661 lb by 20 fishers. Most of the harvest (88%) was taken with hand-operated gear. There were no sport harvests of halibut reported in Tununak in 2005.

In 2006, 70 Tununak residents held SHARCs. No interviewing took place in the community, but division staff did attempt to contact SHARC holders by telephone. Sample achievement was low (10 of 70 SHARC holders; 14%). Based on this limited sample, the estimated subsistence halibut harvest at Tununak in 2006 was 4,032 lb by 33 subsistence fishers. Almost all of this harvest (3,808 lb; 94%) was with hand-operated gear.

In 2007, 69 Tununak residents held SHARCs for a part of the year. With the support of a short-term contract with the division, staff of the Tununak IRA council conducted interviews in their community in

²⁶ One tribal member obtained a SHARC, but this person was not a resident of Tununak.

order to supplement SHARC survey data. The estimated subsistence harvest in Tununak in 2007 was 7,015 lb by 38 fishers. Most of this harvest (5,479 lb; 78%) was taken with hand-operated gear.

In 2008, 68 Tununak residents held SHARCs. No outreach or supplemental interviewing took place in the community in 2008. The response rate to the mailed survey was 10% (7 of 68 SHARC holders). Estimated harvested based on this sample were by far the lowest of any project year for which data area available: 2,143 lb, all with hand-operated gear by an estimated 8 fishers. This is almost certainly a large underestimation of the subsistence harvest of halibut in Tununak in 2008.

Compared to the results of the 1986 survey, the harvest estimates for Tununak for 2004 through 2007 appear low. The reasons for this difference are uncertain. As just noted, the low response to the mailed SHARC survey plus a lack of outreach or follow-up interviews likely resulted in a large underestimation of the 2008 harvest. Several additional years of harvest data collection plus renewed outreach and community support will be necessary to adequately document subsistence halibut harvest trends in this community.

COMPARISONS WITH NONSUBSISTENCE HARVESTS IN 2008

As reported in Table 18, the preliminary estimated total halibut removal in Alaskan waters in 2008 was 72,214,654 lb (net weight) based on data compiled by the IPHC (Williams 2009) and this project. In this total, the removal of 21,666 lb of sublegal halibut for personal use by CDQ organizations in Areas 4D and 4E has been added to the subsistence harvest category. Commercial harvests accounted for 69.4% of halibut removals in Alaska in 2008 (Figure 30). Bycatch of halibut in various other commercial fisheries ranked second, with 14.2% of the statewide removals. Sport harvests ranked third, with 12.1%. Wastage in commercial fisheries added 3.0% to the total halibut removals. Finally, the subsistence fishery accounted for 1.3% of the total removals of halibut in Alaska waters in 2008.

Halibut harvests by fishery in 2008 at the regulatory area level did not differ substantially from the statewide pattern (Table 18, Figure 31). In all regulatory areas, commercial harvests accounted for 59% or more of the total pounds net weight of halibut removals. In Area 2C (Southeast Alaska) and Area 3A (Southcentral Alaska), sport fisheries took 29.9% and 16.3%, respectively, of the halibut harvest in 2008; however, sport fisheries were smaller than the subsistence harvests in Area 3B and Area 4. Commercial bycatch accounted for 38.2% of halibut removals in Area 4. As a percentage of the total removal, subsistence halibut harvests were largest in Area 2C at 4.4% of the total (although they were less than 15% of the sport harvest and about 7% of the commercial harvest) and in Area 3A at 1.0%.

CHAPTER 4: CONCLUSIONS AND RECOMMENDATIONS

SUMMARY AND CONCLUSIONS

New federal regulations governing subsistence halibut fishing in Alaska went into effect in May 2003. The 2008 calendar year was the sixth for which a program was implemented to estimate the subsistence harvest of halibut under these regulations. By several measures, the program is a success. Of 11,565 SHARC holders, 7,316 (63%) voluntarily provided information about their subsistence halibut fishing activities in 2008 by responding to the survey. This compares to a response rate of 58% (8,682 respondents of 15,047 SHARC holders) for the 2007 project year; 59% (8,426 respondents of 14,206 SHARC holders) for the 2006 project year; 60% for the 2005 project year (8,565 respondents of 14,306 SHARC holders); 62% for the 2004 project year (8,524 respondents of 13,813 SHARC holders); and 65% for the 2003 project year (7,593 respondents of 11,625 SHARC holders). In 2008, the number of valid SHARCs dropped to 11.565, 23% lower than 2007 and 16% lower than the 5-year average from 2003-2007 (Table 19). Nonrenewed SHARCs probably account for most of this decline. The largest portion of this decline in the number of SHARC holders was in the tribal segment: 4,316 SHARCs in 2008 compared to 7,446 in 2007, a decline of 42%. Tribal SHARCs are valid for 4 years, so those issued in 2003, the first year of the new fishery, expired in 2007. In comparison, the number of nontribal SHARC holders dropped just 5% from 2007 (7,601 SHARCs) to 2008 (7,249 SHARCs). Nontribal SHARCs are valid for 2 years, so there have been several rounds of expirations and renewals since 2003, in contrast to the tribal SHARC group.

Based on the survey returns, an estimated 5,303 individuals participated in the Alaska subsistence halibut fishery in 2008. This is a decrease of 11% from the estimated 5,933 SHARC holders who subsistence fished for halibut in Alaska in 2007 and is 7% lower than the 5-year average from 2003–2007. The estimated subsistence harvest of halibut in Alaska in 2008 is 5,303 fish and 886,988 lb (net weight) (±3.0%). In comparison, the 2007 estimated subsistence halibut harvest was 53,697 fish and 1,032,293 lb $(\pm 4.1\%)$; the 2006 estimated subsistence halibut harvest was 54,089 fish and 1,125,312 lb $(\pm 2.9\%)$; the 2005 estimated subsistence halibut harvest was 55,875 fish and 1,178,222 lb (net weight) (±3.0%); the 2004 estimated subsistence harvest was 52,412 halibut and 1,193,162 net pounds ($\pm 1.5\%$), and 43,926 halibut for 1.041,330 lb (\pm 4%) were harvested in the subsistence fishery in 2003. As measured in pounds, the 2008 subsistence halibut harvest was about 14% lower than the harvest in 2007 and 20% lower than the 5-year average from 2003–2007 (Table 18). The total estimated harvests for 2003–2008 are below the 1.5 million net pounds estimated for the Alaska subsistence halibut harvest when the current regulations were developed bv the North Pacific Fishery Management Council http://www.fakr.noaa.gov/frules/70fr16742.pdf, page 16748; NPFMC 2003). The larger estimated harvest in 2004 compared to 2003 most likely corresponded to the greater number of individuals who held SHARCs through December 2004 and a proportional increase in the number of individuals who subsistence fished for halibut. The leveling off and slight decline in the harvests in 2006 and 2005, compared to 2004, are consistent with the leveling-off of the number of individuals who held SHARCs for at least a portion of these years. However, harvests as estimated in pounds dropped in 2007 despite an increase in individuals who held a SHARC for at least part of the year. In 2008, estimated harvests dropped by 14% and the number of SHARC holders dropped by 23%. Average harvests per fisher were about the same in 2008 (9.2 halibut per fisher for 167 lb) compared to 2007 (9.1 halibut per fisher for 174 lb) and 2006 (9.2 halibut per fisher for 190 lb). Of the 5 previous project years, average harvests were highest in 2005 (9.9 halibut per fisher for 210 lb). In the first 2 years of the project, averages were 8.8 halibut per fisher for 199 lb in 2004 and 8.9 halibut per fisher for 211 lb in 2003. Of the 6 project years, the average weight of subsistence halibut declined from 23.7 lb in 2003 to 18.2 lb in 2008 (a decline of 23%) (Table 19).

After 6 years of the harvest assessment program, it appears likely that the overall larger statewide harvest estimates in 2004, 2005, and 2006 compared to 2003 were, at least in part, a consequence of increased

participation of subsistence fishers in the SHARC program after 2003 and, perhaps, an increase in trust on the part of subsistence fishers in the survey. The lower harvest estimate for 2008 may in part be a consequence of reduced participation in the SHARC program, especially among eligible tribal members. As the community case studies demonstrate, however, a number of factors appear to have caused the differences in harvest estimates over the 6 project years, and these differ by community. Some were methodological (St. Paul, for example), while other factors were probably linked to more thorough and accurate documentation of harvests (Cordova and Sand Point) rather than a true increase.

In 2008, most subsistence halibut were harvested with setline (stationary) gear (74%) and the rest with hand-operated gear (26%). Similarly, in 2007, 69% of the subsistence halibut were taken with setline gear; in 2006, 70% of the subsistence halibut were taken with setline gear; in 2005, 70% of the subsistence halibut were harvested with setline gear; in 2004, 74% of the subsistence halibut were harvested with setline gear; and in 2003, setlines accounted for 72% of the harvest.

The largest portion of the Alaska subsistence halibut harvest in 2008 occurred in Regulatory Area 2C (Southeast Alaska), at 52% (458,360 lb), followed by Area 3A (Southcentral Alaska) at 38% (337,403 lb), Area 3B (Alaska Peninsula) at 5% (42,248 lb), Area 4A (Eastern Aleutian Islands) at 2% (19,553 lb), Area 4E (East Bering Sea Coast) at 2% (15,898 lb), Area 4C (Pribilof Islands) at less than 1% (5,657 lb), Area 4B (Western Aleutian Islands) at less than 1% (4,737 lb), and Area 4D (Central Bering Sea) at less than 1% (3,131 lb). In 2003–2007, Area 2C (Southeast Alaska) and Area 3A (Southcentral Alaska) also accounted for most of the subsistence harvests. The proportion of the statewide subsistence halibut harvest occurring in Area 2C (Southeast Alaska) has declined from 60% in 2003 and 57% in 2004 to 51% in 2005, 52% in 2006, 51% in 2007, and 52% in 2008. Correspondingly, the portion occurring in Area 3A (Southcentral Alaska) increased from 27% in 2003 to 34% in 2004, 36% in 2005, 34% in 2006, 36% in 2007, and 38% in 2008. Subsistence harvests accounted for 1.3% of the total halibut removals in Alaska waters in 2008, compared to 1.4% in 2007, 1.5% in 2006, 1.5% in 2005, 1.5% in 2004, and 1.3% in 2003.

Subsistence halibut fishers had an estimated incidental harvest of 14,346 rockfish in 2008. This a decrease of 6% from the estimate of 15,266 rockfish for 2007 and a decrease of 9% from the 5-year average from 2003–2007 (Table 19). There were 1,404 SHARC holders who harvested rockfish while subsistence halibut fishing in 2008, compared to 1,568 in 2007, 1,529 in 2006, 1,544 in 2005, 1,616 in 2004, and 1,239 in 2003. Most of the incidental rockfish harvests in 2008 occurred in Area 2C (70%), as they had in 2007 (68%), 2006 (68%), 2005 (63%), 2004 (68%), and 2003 (67%).

In 2008, subsistence halibut fishers harvested an estimated 3,479 lingcod in the subsistence halibut fishery. This is a increase of 2% from the estimate of 3,402 lingcod harvested in the subsistence halibut fishery in 2007, and an increase of 3% from the 5-year average from 2003–2007. In total, 854 SHARC holders harvested lingcod while subsistence halibut fishing in 2008. This is 11% lower than the 959 SHARC holders who had an incidental harvest of lingcod in 2007, and 3% lower than the 5-year average from 2003–2007 (Table 19). As with rockfish, most of the incidental lingcod harvest took place in Area 2C in 2008 (71%), 2007 (66%), 2006 (59%), 2005 (56%), 2004 (56%) and 2003 (51%).

As discussed above, although comparisons of the 2003–2008 harvest estimates with those from previous research by the Division of Subsistence are complicated by different research methods, such comparisons may still be instructive. Subsistence harvest estimates for most of the larger communities (combining tribal and rural SHARC holders) such as Sitka, Petersburg, and Kodiak for 2003–2008 are similar to earlier estimates based on household surveys. This is significant in that these communities account for a very large percentage of the total harvest. We conclude that the 6 years of the survey of SHARC holders produced sound estimates of subsistence harvests of halibut in Alaska based on a scientific sample and a relatively high response rate. The estimates can be further evaluated as additional years of harvest data are collected. Continued documentation of the subsistence harvests is also necessary for any meaningful discussion of long-term trends in the fishery.

RECOMMENDATIONS

We conclude this report with the following recommendations based on experiences during the 6 years of this project. These suggestions are similar to those that were offered at the conclusion of the earlier years' reports (Fall et al. 2004:30–31; Fall et al. 2005:34–36; Fall et al. 2006:37–38; Fall et al. 2007:39–40; Fall and Koster 2008:39–40).

- The harvest assessment program for the Alaska subsistence halibut fishery should continue.²⁷ The 6year effort just completed developed a time series for assessment of harvest trends in the future. As discussed above, the methods used for 2003-2008 (a short postal survey with 3 mailings, supplemented by community outreach, interviewing in selected communities, and partnerships with tribal governments), were successful and should be retained to facilitate comparisons across project years. A recommendation in the final report for the third year of the program was that "implementation of a program to collect harvest data in-season in selected communities should be considered on a trial basis to help supplement and evaluate the data collected through the postal survey" (Fall et al. 2006:37). The Division of Subsistence conducted an inseason harvest monitoring project for the subsistence halibut fishery in Sitka and Kodiak in 2006 with funding provided by NMFS. Findings were presented in Fall et al. (2009). Consideration should be given in the future to inseason monitoring programs in other communities as a method to compare harvest estimates with those from the mailed surveys. Also, as noted in Chapter 1, most likely due to expirations and nonrenewals, total valid SHARCs declined from 15,047 in 2007 to 11,565 in 2008, with most of this decline occurring in the tribal segment of SHARC holders (7,446 in 2007, 4,316 in 2008). Such changes in the registration of potential subsistence halibut fishers has implications for future harvest estimates and are another reason why monitoring of the harvests should continue.
- 2. Additional or renewed outreach is needed in several communities outside of Area 2C, including Unalaska/Dutch Harbor, Tununak, Toksook Bay, St. Paul, and Sand Point, based on relatively low response rates or unexpectedly low numbers of SHARCs issued, especially if more reliable harvest estimates are desired in areas 3B and 4 and given reduced funds to conduct the project. Contracts with tribal governments or local hiring in communities of Area 2C, such as Sitka, Angoon, Hydaburg, Saxman, and Ketchikan, should be continued in future harvest monitoring efforts in those communities.
- 3. Given the drop in SHARC registrations, community outreach is necessary in Area 4E (East Bering Sea Coast) if reliable harvest estimates are to be produced. There are many communities in this very large geographic area but, compared to areas 2C and 3A, relatively few SHARCs have been issued and a smaller percentage of the statewide subsistence halibut harvest occurs in Area 4E. Through the 2007 project year, the focus of outreach in Area 4E was on those communities that are known to have relatively large traditional harvests of halibut. Harvests in many other communities in this area are likely to be small. However, due to funding cuts, no outreach or supplemental surveys took place in any Area 4E community. Although a major outreach effort that would include most of communities of 4E would be expensive and unnecessary, communications with tribal governments could result in more enrollments in the SHARC program and more confidence in the survey results.
- 4. Regulations were adopted by NMFS in late 2004 creating a community harvester program for subsistence halibut fishing. It is essential to continue to integrate this program into the SHARC harvest assessment program. This may entail further cooperative work with tribal governments.
- 5. If rockfish or lingcod incidental harvests in the halibut subsistence fishery continue to be of interest to managers in some areas, more specific data collection tools need to be developed to collect rockfish harvest data at the species level in particular communities. This should be done only in selected areas

²⁷ Through an amendment to award number NA07NMF4370170, the Division of Subsistence received funding in 2009 from NOAA to conduct a seventh year of surveys to document subsistence harvests that occurred in 2009.

of concern given the additional costs to data collection and analysis that this will entail (see Wolfe 2002 for more discussion of collection of rockfish harvest data through the SHARC survey). Such research should occur only through partnerships with local communities and tribes, and should include a combination of participant observation, key respondent interviewing, and survey methods.

- 6. Further evaluation of several years of sport fishing harvest data achieved through the postal *Statewide Harvest Survey* administered by the Division of Sport Fish should take place for the larger rural communities participating in the subsistence halibut fishery. (Analysis of these data for Sitka was conducted as a pilot effort for 2004. See Fall et al. 2005:22–24.) As discussed in Chapter 2 and Chapter 3, many SHARC holders also reported that they sport fished for halibut in 2003–2007. It will be important to try to determine if a shift in harvest from the "sport" category to the "subsistence" category is occurring, in order to evaluate trends in the subsistence fishery and the effect of the new subsistence halibut regulations on fishing patterns. Also, as also noted in Chapter 3, comparisons of community harvest estimates from previous research require consideration of sport harvests as well as harvests under the new subsistence regulations. Such comparisons are also important for evaluating the subsistence harvest assessment program and the performance of the new subsistence regulations.
- 7. Consideration should be given to funding and implementing ethnographic investigations in key halibut fishing communities to evaluate the effects of the new subsistence fishing regulations on fishing patterns. These studies would entail more detailed interviewing of fishers regarding changes in gear choice, fishing effort, harvest amounts, incidental harvests of rockfish or lingcod, or other fishing activities that have resulted from the regulatory changes. These interviews could also investigate traditional knowledge about local halibut stocks (as well as local stocks of rockfish and lingcod) that might prove useful to management agencies, communities, and tribes for future management of the subsistence, sport, and commercial halibut fisheries in Alaska.
- 8. Results of the 6 years of survey data and the inseason project should be evaluated to design a sustainable harvest monitoring program for the Alaska subsistence halibut fishery. Such a program could be based on a postal survey linked with other data gathering methods in selected communities or regulatory areas, such as face-to-face interviews, calendars, or limited inseason monitoring.

REFERENCES CITED

ADOL (Alaska Department of Labor). 2008. Workforce info: population estimates, Juneau. http://laborstats.alaska.gov/?PAGEID=67&SUBID=171

Cochran, W.G. 1977. Sampling techniques. 3rd edition. John Wiley & Sons: New York.

- Crapo, C., B.C. Paust, and J.K. Babbitt. 1993. Recoveries & yields from Pacific fish and shellfish. University of Alaska Fairbanks Alaska Sea Grant College Program, Marine Advisory Bulletin #37, Fairbanks.
- Fall, J.A., D.B. Andersen, L. Brown, M. Coffing, G. Jennings, C. Mishler, A. Paige, C.J. Utermohle, and V. Vanek 1993. Noncommercial harvests and uses of wild resources in Sand Point, Alaska, 1992. Alaska Department of Fish and Game Division of Subsistence, Technical Paper No. 226, Juneau. http://www.subsistence.adfg.state.ak.us/techpap/tp226.pdf
- Fall, J.A., M. George, and B. Easley. 2005. Subsistence harvests of Pacific halibut in Alaska, 2004. Alaska Department of Fish and Game Division of Subsistence, Technical Paper No. 304, Juneau. http://www.subsistence.adfg.state.ak.us/techpap/tp304.pdf
- Fall, J.A., M. Kerlin, B. Easley, and R.J. Walker. 2004. Subsistence harvests of Pacific halibut in Alaska, 2003. Alaska Department of Fish and Game Division of Subsistence, Technical Paper No. 288, Anchorage and Juneau. http://www.subsistence.adfg.state.ak.us/techpap/tp288.pdf
- Fall, J.A., and D. Koster. 2008. Subsistence harvests of Pacific halibut in Alaska, 2007. Alaska Department of Fish and Game Division of Subsistence, Technical Paper No. 342, Anchorage. http://www.subsistence.adfg.state.ak.us/TechPap/TP342.pdf
- Fall, J.A., D. Koster, and B. Davis. 2006. Subsistence harvests of Pacific halibut in Alaska, 2005 Alaska Department of Fish and Game Division of Subsistence, Technical Paper No. 320, Juneau. http://www.subsistence.adfg.state.ak.us/techpap/tp320.pdf
- Fall, J.A., D. Koster, and M. Turek. 2007. Subsistence harvests of Pacific halibut in Alaska, 2006. Alaska Department of Fish and Game Division of Subsistence, Technical Paper No. 333, Juneau. http://www.subsistence.adfg.state.ak.us/techpap/TP333.pdf
- Fall, J.A., D. Koster, and M. Turek. 2009. Estimates of subsistence harvests of Pacific halibut in Kodiak and Sitka, Alaska, 2006. Alaska Department of Fish and Game Division of Subsistence, Special Publication No. 2009-06, Anchorage.
- Gilroy, H.L. 2005. The Pacific halibut fishery, 2004. Pages 5–18 [*in*] The proceedings of the International Pacific Halibut Commission Eighty-First Annual Meeting, January 17-21, 2005. International Pacific Halibut Commission, Victoria, British Columbia. http://www.iphc.washington.edu/halcom/pubs/annmeet/2005/bluebook/Bluebook2005.pdf
- NMFS (National Marine Fisheries Service). 2000. Environmental assessment/regulatory impact review/initial regulatory flexibility analysis for a regulatory amendment for defining a halibut subsistence fishery category (EA/RIR/RFA). North Pacific Fishery Management Council, Alaska Department of Fish and Game, International Pacific Halibut Commission, and National Marine Fisheries Service. Anchorage, August 11, 2000.
- NPFMC (North Pacific Fishery Management Council). 2003. Environmental assessment and regulatory impact review for a regulatory amendment to define a halibut subsistence fishery category in convention waters. National Marine Fisheries Service, Juneau and the North Pacific Fishery Management Council, Anchorage. http://www.fakr.noaa.gov/analyses/subsistence/halibut0403.pdf
- Stanek, R.T. 1985. Patterns of wild resource use in English Bay and Port Graham, Alaska. Alaska Department of Fish and Game Division of Subsistence, Technical Paper No. 104, Anchorage. http://www.subsistence.adfg.state.ak.us/techpap/tp104.pdf
- Trumble, R.J. *n.d.* 1998 estimates of personal use halibut. Pages 61–64 [*in*] Report of assessment and research activities 1998. International Pacific Halibut Commission, Seattle.
- U.S. Census Bureau. 2001. Profiles of general demographic characteristics, Alaska: 2000. U.S. Department of Commerce Washington, D.C.

- Williams, G.H. 2004. Retention of sublegal halibut in the areas 4D/4E CDQ fishery: 2003 harvests. Pages 59–60 [*in*] IPHC staff, editors. International Pacific Halibut Commission report of assessment and research activities 2003, Seattle.
- Williams, G.H. 2005. Retention of sublegal halibut in the areas 4D/4E CDQ fishery: 2004 harvests. Pages 59–60 [*in*] IPHC staff, editors. International Pacific Halibut Commission report of assessment and research activities 2004, Seattle.
- Williams, G.H. 2007. Retention of sublegal halibut in the area 4D/4E CDQ fishery: 2006 harvests. Pages 63–65 [*in*] IPHC staff, editors. International Pacific Halibut Commission report of assessment and research activities 2006, Seattle.
- Williams, G.H. 2008. Retention of sublegal halibut in the area 4D/4E CDQ fishery: 2007 harvests. Pages 79–81 [*in*] IPHC staff, editors. International Pacific Halibut Commission report of assessment and research activities 2007, Seattle.
- Williams, G.H. 2009. Retention of sublegal-sized halibut in the Area 4D/4E CDQ fishery: 1998-2008 harvests. Pages 67–70 [*in*] IPHC report of assessment and research activities 2008. International Pacific Halibut Commission, Seattle.
- Wolfe, R.J. 2002. Subsistence halibut harvest assessment methodologies. Report prepared for the National Marine Fisheries Service, Sustainable Fisheries Division. Robert J. Wolfe and Associates: San Marcos, CA.

TABLES AND FIGURES

-		Popula	tion: 2000			
	Regulatory		Alaska			
Community ^a	area	Total	Native ^b	Population: 2008		
Angoon	2C	572	419	430		
Coffman Cove	2C	199	12	141		
Craig	2C	1,397	432	1,414		
Edna Bay	2C	49	2	40		
Elfin Cove	2C	32	0	22		
Gustavus	2C	429	32	448		
Haines	2C	1,811	332	1,475		
Hollis	2C	139	13	172		
Hoonah	2C	860	597	823		
Hydaburg	2C	382	342	341		
Hyder	2C	97	4	94		
Kake	2C	710	530	519		
Kasaan	2C	39	19	54		
Klawock	2C	854	496	785		
Klukwan	2C	139	123	102		
Metlakatla	2C	1,375	1,125	1,372		
Meyers Chuck	2C	21	2	17		
Naukati Bay	2C	135	13	124		
Pelican	2C	163	42	113		
Petersburg	2C	3,224	388	3,009		
Point Baker	2C	35	3	15		
Port Alexander	2C	81	11	51		
Port Protection	2C	63	7	66		
Saxman	2C	431	302	420		
Sitka	2C	8,835	2,178	8,615		
Skagway	2C	862	44	846		
Tenakee Springs	2C	104	5	99		
Thorne Bay	2C	552	27	440		
Whale Pass	2C	58	2	48		
Wrangell	2C	2,308	550	1,943		
C	Subtotal, Regulatory Area 2C ^c	25,956	8,052	24,038		
Akhiok	3A	80	75	48		
Chenega Bay	3A	86	67	76		
Cordova	3A	2,454	368	2,161		
Karluk	3A	27	26	38		
Kodiak ^d	3A	12,973	1,697	12,623		
Larsen Bay	3A	115	91	67		
Nanwalek	3A	177	165	229		
Old Harbor	3A	237	203	184		
Ouzinkie	3A	225	197	167		

Table 1.–Population of rural communities eligible to participate in the Alaska subsistence halibut fishery, 2000 and 2008.

Table 1. Page 2 of		Popula	tion: 2000	
	Regulatory		Alaska	
Community ^a	area	Total	Native ^b	Population: 2008
Port Graham	3A	171	151	136
Port Lions	3A	253	163	190
Seldovia	3A	286	66	423
Fatitlek	3A	107	91	102
Yakutat	3A	680	375	592
	Subtotal, Regulatory Area 3A	17,871	3,735	17,036
Chignik	3B	79	48	59
Chignik Lagoon	3B	103	85	71
Chignik Lake	3B	145	127	105
Cold Bay	3B	88	15	90
False Pass	3B	64	42	39
vanof Bay	3B	22	21	0
King Cove	3B	792	379	750
Nelson Lagoon	3B	83	68	65
Perryville	3B	107	105	133
Sand Point	3B	952	421	958
	Subtotal, Regulatory Area 3B	2,435	1,311	2,270
Akutan	4A	713	117	796
Vikolski	4A	39	27	27
Jnalaska	4A	4,283	397	3,551
nunusitu	Subtotal, Regulatory Area 4A	5,035	541	4,374
Adak	4B	316	118	178
Atka	48	92	84	73
lilu	Subtotal, Regulatory Area 4B	408	202	251
St. George Island	4C	152	140	112
St. Paul Island	4C	532	460	450
	Subtotal, Regulatory Area 4C	684	600	562
Gambell	4D	649	622	673
Savoonga	4D	643	614	722
Diomede	4D	146	137	128
	Subtotal, Regulatory Area 4D	1,438	1,373	1,523
Alakanuk	4E	652	638	670
Aleknagik	4E 4E	221	187	242
Brevig Mission	4E 4E	276	254	350
Bethel	4E 4E	5,471	3,719	5,665
Chefornak	4E 4E	394	386	470
Cherofinak		ontinued-	300	470

Table 1. Page 2 of 4.

Table 1. Page 3 of 4.

Table 1. 1 age 5 01 4.		Populat		
~	Regulatory		Alaska	
Community ^a	area	Total	Native ^b	Population: 2008
Chevak	4E	765	734	922
Clark's Point	4E	75	69	54
Council ANVSA ^e	4E	0	0	6
Dillingham	4E	2,466	1,503	2,347
Eek	4E	280	271	272
Egegik	4E	116	89	62
Elim	4E	313	297	280
Emmonak	4E	767	720	794
Golovin	4E	144	133	160
Goodnews Bay	4E	230	216	225
Hooper Bay	4E	1,014	971	1,160
King Salmon	4E	442	133	409
Kipnuk	4E	644	631	696
Kongiganak	4E	359	349	445
Kotlik	4E	591	568	610
Koyuk	4E	297	280	333
Kwigillingok	4E	338	331	352
Levelock	4E	122	116	70
Manokotak	4E	399	378	430
Mekoryuk	4E	210	203	195
Naknek	$4\mathrm{E}$	678	319	552
Napakiak	$4\mathrm{E}$	353	341	348
Napaskiak	4E	390	383	435
Newtok	4E	321	311	357
Nightmute	4E	208	197	249
Nome	4E	3,505	2,057	3,570
Oscarville	4E	61	61	95
Pilot Point	4E	100	86	72
Platinum	4E	41	38	47
Port Heiden	4E	119	93	90
Quinhagak	4E	555	540	661
Scammon Bay	4E	465	453	533
Saint Michael	4E	368	343	434
Shaktoolik	4E	230	218	223
Sheldon Point	4E	164	154	156
Shishmaref	4E	562	531	587
Solomon ANVSA	4E	4	3	2
South Naknek	4E	137	115	68
Stebbins	4E	547	518	577
Teller	4E	268	248	260
Togiak	4E	809	750	802
Toksook Bay	4E	532	519	605

Table 1. Page 4 of 4.

		Popula	tion: 2000	
	Regulatory		Alaska	
Community ^a	area	Total	Native ^b	Population: 2008
Tuntutuliak	4E	370	366	417
Tununak	4E	325	315	332
Twin Hills	4E	69	65	75
Ugashik	4E	11	9	15
Unalakleet	4E	747	655	723
Wales	4E	152	137	138
White Mountain	4E	203	175	191
	Subtotal, Regulatory Area 4E	28,880	23,176	29,833
Total		82,707	38,990	79,887

a. Alaska Native Village Statistical Area (ANVSA) populations were used whenever no city or census designated place (CDP) populations were present in the census.

b. No Alaska Native population data are available for 2008.

c. Nontribal residents of Naukati Bay were not eligible for SHARCs until 2008. This community was not included in population estimates for previous project years.

d. Total population for the Kodiak Island road system area includes Kodiak City, Kodiak Station, Chiniak, and other areas on the road system.

e. There is no census table for a Council CDP or municipality in 2000. The Council ANVSA table indicated that all 40 housing units were vacant in 2000.

Sources U.S. Census Bureau 2001; ADOL 2008.

Table 2Project chronology, 2008 project year
--

Date	Event/Action
October 1, 2008	Award No. NA04NMF4370170 between NMFS and ADF&G amended to support the research for project year 2008.
December 31, 2008	Distribution of final report and 4 page summary for project year 2007.
Early February 2009	Running of newspaper ads.
February 15, 2009	First mailing of survey forms.
April 15, 2009	Second mailing of survey forms.
April through June 2009	Administration of surveys in Sitka, Hydaburg, and Ketchikan.
April 17, 2009	Submission of semi-annual report on project progress to NMFS.
March and April 2009	Interviewing in Akutan.
May 15, 2009	Third mailing of survey forms.
October 28, 2009	Submission of semi-annual report on project progress to NMFS.
November 20, 2009	Release of public review draft of final report.
December 9, 2009	Presentation of project findings, NPFMC, Anchorage.
December 11, 2009	Presentation of project findings, ANSHWG, Anchorage.
December 31, 2009	Completion of revised final report.

			First mai	ling		Second m	ailing		Third mailing			Totals				
Eligible Alaska tribe	Regulatory area			Surveys returned undeliverable		Surveys returned	Surveys returned undeliverable		Surveys returned	Surveys returned undeliverable	SHARCs issued	Returned by mail	Returned through staff	Response	Response rate	Undeliverable
Angoon Community Association	2C	113	22	2	92	18	0	75	11	0	113	51	2	53	46.9%	2
Central Council Tlingit And Haida Indian Tribes	2C	507	161	38	335	60	6	268	11	7	507	232	5	237	46.7%	47
Chilkat Indian Village	2C	18	11	1	8	3	0	4	1	0	18	15	0	15	83.3%	1
Chilkoot Indian Association		45	19	2	26	3	1	21	2	0	45	24	0	24	53.3%	3
Craig Community Association	2C	46	20	0	27	6	1	21	2	1	46	28	1	29	63.0%	1
Douglas Indian Association	2C	16	3	0	13	0	0	13	1	0	16	4	0	4	25.0%	0
Hoonah Indian Association	2C	135	48	8	86	21	0	64	6	1	135	75	2	77	57.0%	9
Hydaburg Cooperative Association	2C	116	21	7	89	7	1	81	1	0	116	29	75	104	89.7%	8
Ketchikan Indian Corporation	2C	585	143	64	413	42	13	353	26	15	585	211	70	281	48.0%	87
Klawock Cooperative Association	2C	73	20	5	52	11	0	40	8	0	73	39	0	39	53.4%	5
Metlakatla Indian Community, Annette Island Reserve	2C	205	42	9	157	30	2	130	4	1	205	76	1	77	37.6%	11
Organized Village of Kake	2C	83	33	3	48	11	0	37	5	0	83	49	0	49	59.0%	3

Table 3.–Sample Achievement, Alaska subsistence halibut survey for 2008 by eligible tribe, eligible Alaska rural community, and place of residence of SHARC holders.^a

Table 3, section 1: eligible Alaska tribe, page 2 of 15.

			First mai	ling		Second m	ailing		Third ma	ailing				Totals		
Eligible Alaska tribe	Regulatory area	Surveys mailed ^b		Surveys returned undeliverable		Surveys returned	Surveys returned undeliverable		Surveys returned	Surveys returned undeliverable		Returned by mail	Returned through staff	Response	Response rate	Undeliverable
Organized Village of Kasaan	2C	15	7	2	8	4	0	3	0	0	15	11	0	11	73.3%	2
Organized Village of Saxman	2C	38	5	5	28	3	0	25	0	2	38	8	4	12	31.6%	7
Petersburg Indian Association	2C	72	28	2	49	5	1	35	11	0	72	44	3	47	65.3%	3
Sitka Tribe of Alaska	2C	273	94	19	177	24	5	140	8	4	273	126	56	182	66.7%	25
Skagway Village	2C	4														
Wrangell Cooperative Association	2C	89	58	7	37	5	1	23	3	0	89	66	0	66	74.2%	8
Subtota	al, Area 2C	2,433	736	174	1,648	255	32	1,335	100	32	2,433	1,091	219	1,310	53.8%	223
Kenaitze Indian Tribe	3A	87	34	3	53	7	0	46	6	0	87	47	1	48	55.2%	3
Lesnoi Village (Woody Island)	3A	69	36	2	34	5	1	27	2	1	69	43	0	43	62.3%	3
Native Village of Afognak	3A	23	11	2	12	2	0	8	1	1	23	14	0	14	60.9%	3
Native Village of Akhiok	3A	15	3	3	9	3	0	7	0	1	15	6	0	6	40.0%	4
Native Village of Chenega	3A	20	9	0	11	2	0	10	1	0	20	12	0	12	60.0%	0
Native Village of Eyak	3A	75	40	6	35	2	2	28	4	1	75	46	0	46	61.3%	7
Native Village of Karluk	3A	1														
Native Village of Larsen Bay	3A	36	6	14	16	1	0	15	2	0	36	9	0	9	25.0%	14
Native Village of Nanwalek	3A	42	8	0	36	6	0	33	5	0	42	19	0	19	45.2%	0

			First mai	ling		Second m	ailing		Third ma	uiling				Totals		
Eligible Alaska tribe	Regulatory area	Surveys mailed ^b				Surveys returned	Surveys returned undeliverable		Surveys returned	Surveys returned undeliverable		Returned by mail	0	Response	Response rate	Undeliverable
Native Village of Ouzinkie	3A	33	11	1	22	5	0	18	3	0	33	19	0	19	57.6%	1
Native Village of Port Graham	3A	40	20	1	24	4	0	18	0	0	40	24	0	24	60.0%	1
Native Village of Port Lions	3A	32	19	1	18	2	0	11	0	0	32	21	0	21	65.6%	1
Native Village of Tatitlek	3A	33	8	2	24	4	1	23	4	0	33	16	0	16	48.5%	3
Ninilchik Village	3A	72	27	3	48	2	0	41	1	0	72	30	0	30	41.7%	3
Seldovia Village Tribe	3A	49	22	1	29	6	0	21	2	0	49	30	0	30	61.2%	1
Shoonaq' Tribe of Kodiak	3A	137	51	17	75	7	3	65	4	1	137	62	1	63	46.0%	17
Village of Kanatak	3A	5														
Village of Old Harbor	3A	63	23	2	41	4	4	38	3	0	63	30	0	30	47.6%	6
Village of Salamatof	3A	21	9	1	11	5	1	6	0	0	21	14	0	14	66.7%	2
Yakutat Tlingit Tribe	3A	37	13	0	26	3	0	22	2	0	37	18	0	18	48.6%	0
Subtot	al, Area 3A	890	350	60	529	70	14	442	40	6	890	460	2	462	51.9%	72
Agdaadux Tribe of King Cove	3B	68	33	0	36	10	0	28	2	0	68	45	0	45	66.2%	0
Chignik Lake Village	3B	10	5	1	4	0	0	4	0	0	10	5	0	5	50.0%	1
Ivanoff Bay Village	3B	14	3	5	6	1	0	5	0	0	14	4	0	4	28.6%	5
Native Village of Belkofski	3B	3														
Native Village of Chignik	3B	7	6	0	1	1	0	0	0	0	7	7	0	7	100.0%	0
Native Village of Chignik Lagoon	3B	24	14	0	18	4	0	8	1	0	24	19	0	19	79.2%	0

Table 3, section 1: eligible Alaska tribe, page 3 of 15.

46

			First mai	ling		Second m	ailing		Third ma	uiling				Totals		
Eligible Alaska tribe	Regulatory area			Surveys returned undeliverable		Surveys returned	Surveys returned undeliverable		Surveys returned	Surveys returned undeliverable	SHARCs issued	Returned by mail	Returned through staff	Response	Response rate	e U
Native Village of False Pass	3B	1														
Native Village of Nelson Lagoon	3B	3														
Native Village of Perryville	3B	36	16	2	18	2	0	17	2	0	36	20	0	20	55.6%	
Native Village of Unga	3B	11	1	0	10	1	0	9	0	0	11	2	0	2	18.2%	
Pauloff Harbor Village	3B	46	10	2	36	7	0	30	0	2	46	17	0	17	37.0%	
Qagan Tayagungin Tribe of Sand Point Village	3B	306	60	59	197	18	1	176	7	0	306	85	0	85	27.8%	
Subtota	al, Area 3B	529	151	69	330	45	1	280	12	2	529	208	0	208	39.3%	
Native Village of Akutan	4A	18	7	0	11	1	0	1	0	0	18	8	9	17	94.4%	
Qawalangin Tribe of Unalaska	4A	43	14	0	33	2	0	28	0	0	43	16	1	17	39.5%	
Subtota	al, Area 4A	61	21	0	44	3	0	29	0	0	61	24	10	34	55.7%	
Native Village of Atka	4B	5														
Subtota	al, Area 4B	5														
Pribilof Islands Aleut Community of St. George	4C	6	2	0	4	1	0	3	0	0	6	3	0	3	50.0%	
Pribilof Islands Aleut Community of St. Paul	4C	46	9	5	33	4	0	30	5	0	46	18	0	18	39.1%	
Subtota	al, Area 4C	52	11	5	37	5	0	33	5	0	52	21	0	21	40.4%	

Undeliverable

Table 3, section 1: eligible Alaska tribe, page 4 of 15.

Table 3, section 1: eligible Alaska tribe page 5 of 15.

			First mai	ling		Second m	ailing		Third ma	iling				Totals		
Eligible Alaska tribe	Regulatory area	Surveys mailed ^b	Surveys returned	Surveys returned undeliverable		Surveys returned	Surveys returned undeliverable		Surveys returned	Surveys returned undeliverable	SHARCs issued	Returned by mail	Returned through staff	Response	Response rate	Undeliverable
Native Village of Gambell	4D	1														
Native Village of Savoonga	4D	20	7	0	13	3	0	10	0	0	20	10	0	10	50.0%	0
Subtota	al, Area 4D	21	8	0	14	3	0	10	0	0	21	11	0	11	52.4%	0
Chevak Native Village (Kashunamiut)	4E	6	3	1	2	0	0	2	1	0	6	4	0	4	66.7%	1
Chinik Eskimo Community	4E	1														
Egegik Village	4E	1														
King Island Native Community	4E	1														
Levelock Village	4E	1														
Naknek Native Village	4E	9	3	0	7	0	1	7	1	0	9	4	0	4	44.4%	1
Native Village of Aleknagik	4E	6	2	0	4	2	0	2	0	1	6	4	0	4	66.7%	1
Native Village of Brevig Mission	4E	1														
Native Village of Council	4E	2														
Native Village of Dillingham (Curyung)	4E	21	5	1	15	2	0	14	0	0	21	7	0	7	33.3%	1
Native Village of Eek	4E	7	1	0	6	2	0	5	1	0	7	4	0	4	57.1%	0
Native Village of Goodnews Bay (Mumtraq)	4E	4														
Native Village of Hooper Bay	4E	17	4	0	15	3	0	11	1	0	17	8	0	8	47.1%	0

Table 3, section 1: eligible Alaska tribe page 6 of 15.

			First mai	ling		Second m	ailing		Third ma	iling	Totals					
Eligible Alaska tribe	Regulatory area			Surveys returned undeliverable		Surveys returned	Surveys returned undeliverable		Surveys returned	Surveys returned undeliverable	SHARCs issued	Returned by mail	Returned through staff		Response rate	Undeliverable
Native Village of Kanakanak	4E	1														
Native Village of Kipnuk	4E	12	1	0	11	0	0	11	0	0	12	1	0	1	8.3%	0
Native Village of Kongiganak	4E	6	2	1	3	0	0	3	0	0	6	2	0	2	33.3%	1
Native Village of Koyuk	4E	1														
Native Village of Kwigillingok	4E	46	1	1	45	1	0	43	0	0	46	2	0	2	4.3%	1
Native Village of Kwinhagak	4E	4														
Native Village of Mekoryuk	4E	6	3	0	3	1	0	2	0	0	6	4	0	4	66.7%	0
Native Village of Nightmute	4E	5														
Native Village of Port Heiden	4E	1														
Native Village of Scammon Bay	4E	5														
Native Village of Toksook Bay (Nunakauyak)	4E	34	7	2	27	2	0	24	1	0	34	10	0	10	29.4%	2
Native Village of Tununak	4E	71	3	0	68	1	0	67	3	0	71	7	0	7	9.9%	0
Native Village of Unalakleet	4E	3														
Native Village of White Mountain	4E	1														
Newtok Village	4E	1														
Nome Eskimo Community	4E	12	5	0	8	1	0	6	1	0	12	7	0	7	58.3%	0

Table 3, section 1: eligible Alaska tribe, page 7 of 15.

			First mai	ling		Second m	ailing		Third ma	uiling				Totals		
Eligible Alaska tribe				Surveys returned undeliverable		Surveys returned	Surveys returned undeliverable		Surveys returned	Surveys returned undeliverable	SHARCs issued	Returned by mail	Returned through staff	Response	Response rate	Undeliverable
Orutsararmuit Native Village	4E	7	5	0	2	0	0	2	0	0	7	5	0	5	71.4%	0
South Naknek Village	4E	2														
Stebbins Community Association	4E	4														
Traditional Village of Togiak	4E	6	1	0	5	3	0	2	0	0	6	4	0	4	66.7%	0
Twin Hills Village	4E	1														
Ugashik Village	4E	1														
Village of Chefornak	4E	15	6	0	11	0	0	9	0	0	15	6	0	6	40.0%	0
Village of Clark's Point	4E	2														
Village of Kotlik	4E	1														
Subtot	al, Area 4E	325	65	8	261	24	2	234	12	1	325	101	1	102	31.4%	11
Subtotal, elig	ible Alaska tribe	4,316	1,344	316	2,867	405	49	2,366	169	41	4,316	1,918	232	2,150	49.8%	382

			First mai	ling		Second m	ailing		Third ma	iling				Totals		
Eligible Alaska rural community	Regulatory area	Surveys mailed ^b	2	Surveys returned undeliverable		Surveys returned	Surveys returned undeliverable	2	Surveys returned	Surveys returned undeliverable	SHARCs issued	Returned by mail	Returned through staff	Response	Response rate	Undeliverable
Angoon	2C	16	7	0	10	1	1	8	2	0	16	10	0	10	62.5%	1
Coffman Cove	2C	47	26	1	23	4	0	18	7	0	47	37	0	37	78.7%	1
Craig	2C	380	204	15	196	51	6	123	9	2	380	264	2	266	70.0%	20
Edna Bay	2C	45	29	0	26	4	0	14	3	0	45	36	0	36	80.0%	0
Elfin Cove	2C	18	8	0	13	1	0	9	1	0	18	10	0	10	55.6%	0
Gustavus	2C	74	49	4	30	6	0	16	2	0	74	57	0	57	77.0%	4
Haines	2C	427	273	21	168	55	3	87	19	0	427	347	0	347	81.3%	24
Hollis	2C	36	15	7	16	10	0	8	0	0	36	25	0	25	69.4%	7
Hoonah	2C	121	74	5	59	12	2	34	1	1	121	87	0	87	71.9%	8
Hydaburg	2C	13	6	0	7	0	1	7	0	1	13	6	6	12	92.3%	1
Hyder	2C	36	23	0	18	2	0	12	4	0	36	29	0	29	80.6%	0
Kake	2C	42	23	5	19	4	1	10	0	0	42	27	0	27	64.3%	5
Kasaan	2C	10	10	0	4	0	0	0	0	0	10	10	0	10	100.0%	0
Klawock	2C	125	73	8	56	8	0	45	6	0	125	87	1	88	70.4%	8
Metlakatla	2C	40	9	2	30	7	1	24	2	1	40	18	0	18	45.0%	3
Meyers Chuck	2C	8	8	0	4	0	0	0	0	0	8	8	0	8	100.0%	0
Naukati Bay	2C	6	1	0	5	2	0	2	0	0	6	3	1	4	66.7%	0
Pelican	2C	44	24	3	22	7	0	13	2	0	44	33	0	33	75.0%	3
Petersburg	2C	904	510	20	451	121	9	293	43	6	904	674	2	676	74.8%	32
Port Alexander	2C	34	16	2	19	3	0	15	2	0	34	21	0	21	61.8%	2
Port Protection	2C	20	13	0	9	1	0	6	2	0	20	16	0	16	80.0%	0
Point Baker	2C	17	11	0	8	3	0	4	1	0	17	15	0	15	88.2%	0
Saxman	2C	16	11	2	4	1	0	2	0	0	16	12	1	13	81.3%	2
Sitka	2C	1,388	650	76	745	137	27	554	45	20	1,388	832	158	990	71.3%	109
Skagway	2C	51	35	1	22	4	0	12	2	0	51	41	0	41	80.4%	1
Tenakee Springs	2C	44	38	0	16	2	0	9	1	0	44	41	0	41	93.2%	0
Thorne Bay	2C	122	69	14	50	12	3	32	9	1	122	90	0	90	73.8%	16
Whale Pass	2C	22	14	0	10	5	0	4	1	0	22	20	0	20	90.9%	0
Wrangell	2C	373	240	9	172	48	2	93	16	1	373	304	2	306	82.0%	11
Subtota	l, Area 2C	4,479	2,469	195	2,212	511	56	1,454	180	33	4,479	3,160	173	3,333	74.4%	258
Akhiok	3A	1														
Chenega Bay	3A	10	6	2	2	1	0	2	0	0	10	7	0	7	70.0%	2

Table 3, section 2: eligible Alaska rural community, page 8 of 15.

			First mai	ling		Second m	ailing		Third ma	ailing				Totals		
Eligible Alaska rural community	Regulatory area			Surveys returned undeliverable		Surveys returned	Surveys returned undeliverable		Surveys returned	Surveys returned undeliverable		Returned by mail	Returned through staff		Response rate	Undeliverable
Cordova	3A	522	274	18	282	74	1	180	34	1	522	382	0	382	73.2%	20
Kodiak	3A	1,584	787	101	850	150	15	605	63	12	1,584	1,000	1	1,001	63.2%	120
Larsen Bay	3A	13	6	3	4	2	1	2	0	1	13	8	0	8	61.5%	4
Nanwalek	3A	11	2	1	10	0	0	9	1	0	11	3	0	3	27.3%	1
Old Harbor	3A	18	13	0	5	2	0	3	0	0	18	15	0	15	83.3%	0
Ouzinkie	3A	25	14	0	12	2	0	10	1	0	25	17	0	17	68.0%	0
Port Graham	3A	14	6	0	8	1	0	7	0	0	14	7	0	7	50.0%	0
Port Lions	3A	16	9	0	8	2	0	5	0	0	16	11	0	11	68.8%	0
Seldovia	3A	147	85	7	73	20	0	44	4	0	147	109	1	110	74.8%	7
Tatitlek	3A	11	6	1	7	1	0	4	1	0	11	8	0	8	72.7%	1
Yakutat	3A	64	32	0	37	7	0	28	2	0	64	41	0	41	64.1%	0
Subtota	l, Area 3A	2,436	1,241	133	1,298	262	17	899	106	14	2,436	1,609	2	1,611	66.1%	155
Chignik	3B	5														
Chignik Lagoon	3B	2														
Chignik Lake	3B	3														
Cold Bay	3B	24	16	3	6	3	0	2	0	0	24	19	0	19	79.2%	3
False Pass	3B	2														
King Cove	3B	23	14	1	9	4	0	4	0	0	23	18	0	18	78.3%	1
Nelson Lagoon	3B	1														
Perryville	3B	1														
Sand Point	3B	16	10	0	9	1	1	6	1	0	16	12	0	12	75.0%	1
Subtota	ıl, Area 3B	77	48	4	33	8	2	18	1	0	77	57	0	57	74.0%	6
Akutan	4A	1														
Nikolski	4A	2														
Unalaska	4A	127	69	3	72	17	3	47	2	2	127	88	0	88	69.3%	6
Subtota	l, Area 4A	130	71	3	73	17	3	47	2	2	130	90	1	91	70.0%	6
Adak	4B	26	3	0	24	3	0	22	7	0	26	13	0	13	50.0%	0
Atka	4B	2														
Subtota	ıl, Area 4B	28	4	0	25	3	0	23	7	0	28	14	0	14	50.0%	0
St. George Island	4C	1														
St. Paul Island	4C	2														
Subtota	l, Area 4C	3														

Table 3, section 2: eligible Alaska rural community, page 9 of 15.

52

			First mai	ling		Second m	ailing		Third ma	uling				Totals		
Eligible Alaska rural community	Regulatory area	Surveys mailed ^b				Surveys returned	Surveys returned undeliverable		Surveys returned	Surveys returned undeliverable		Returned by mail	Returned through staff	Response	Response rate	Undeliverable
Alakanuk	4E	1														
Aleknagik	4E	2														
Bethel	4E	3														
Chefornak	4E	1														
Clark's Point	4E	1														
Dillingham	4E	43	23	3	21	6	3	12	1	2	43	30	0	30	69.8%	6
Hooper Bay	4E	1														
King Salmon	4E	2														
Kongiganak	4E	1														
Kwigillingok	4E	1														
Manokotak	4E	2														
Mekoryuk	4E	1														
Naknek	4E	5														
Nightmute	4E	3														
Nome	4E	13	4	0	10	2	1	7	3	0	13	9	0	9	69.2%	1
Platinum	4E	1														
Port Heiden	4E	3														
Quinhagak	4E	2														
Sheldon Point	4E	1														
South Naknek	4E	1														
Teller	4E	2														
Togiak	4E	3														
Toksook Bay	4E	1														
White Mountain	4E	2														
Subtota	ıl, Area 4E	96	40	6	57	10	4	41	8	2	96	58	0	58	60.4%	10
Subtotal, eligi rural co	ble Alaska mmunities	7,249	3,875	341	3,699	811	82	2,483	304	51	7,249	4,990	176	5,166	71.3%	435
Subtotal, eligi tribes and eligi rural co		11,565	5,219	657	6,566	1,216	131	4,849	473	92	11,565	6,908	408	7,316	63.3%	817

			First mai	ling		Second m	ailing		Third ma	uiling				Totals		
				Surveys			Surveys			Surveys			Returned			
Eligible Alaska				returned		Surveys	returned		Surveys	returned	SHARCs		through		Response	
rural community	area	mailed b	returned	undeliverable	mailed	returned	undeliverable	mailed	returned	undeliverable	issued	by mail	staff	Response	rate	Undeliverable
Adak	AK	29	5	0	25	3	0	23	7	0	29	15	0	15	51.7%	0
Akhiok	AK	14	3	3	8	3	0	6	0	1	14	6	0	6	42.9%	4
Akutan	AK	17	6	0	11	1	0	0	0	0	17	7	10	17	100.0%	0
Alakanuk	AK	1														
Aleknagik	AK	3														
Anchor Point	AK	8	3	0	5	0	0	5	0	0	8	3	0	3	37.5%	0
Anchorage	AK	208	77	20	124	21	6	100	0	0	208	98	0	98	47.1%	24
Angoon	AK	130	29	1	104	19	1	85	15	0	130	63	2	65	50.0%	2
Atka	AK	3														
Auke Bay	AK	4														
Barrow	AK	1														
Bethel	AK	11	6	0	6	1	0	5	0	0	11	7	0	7	63.6%	0
Chefornak	AK	15	6	0	11	0	0	9	0	0	15	6	0	6	40.0%	0
Chenega Bay	AK	11	7	2	2	1	0	1	0	0	11	8	0	8	72.7%	2
Chevak	AK	6	3	0	3	0	0	3	1	0	6	4	0	4	66.7%	0
Chignik	AK	16	11	1	5	1	0	3	0	0	16	12	0	12	75.0%	1
Chignik	AK	18	10	0	15	3	0	5	1	0	18	14	0	14	77.8%	0
Lagoon																
Chignik Lake	AK	8	7	0	2	0	0	1	0	0	8	7	0	7	87.5%	0
Chiniak	AK	20	10	1	11	2	0	7	0	0	20	12	0	12	60.0%	1
Chugiak	AK	3														
Clark's Point	AK	3														
Coffman Cove	AK	44	25	0	22	3	0	18	7	0	44	35	0	35	79.5%	0
Cold Bay	AK	26	18	3	6	4	0	2	0	0	26	22	0	22	84.6%	3
Cordova	AK	587	307	21	314	76	2	208	37	2	587	420	0	420	71.6%	24
Craig	AK	487	251	15	265	72	5	174	14	2	487	337	2	339	69.6%	19
Dillingham	AK	56	24	4	32	10	3	20	1	3	56	35	0	35	62.5%	8
Douglas	AK	16	3	4	10	1	1	8	0	1	16	4	0	4	25.0%	5
Dutch Harbor	AK	82	38	3	48	8	0	37	2	1	82	48	0	48	58.5%	4
Eagle River	AK	4														
Edna Bay	AK	23	16	0	13	2	0	6	2	0	23	20	0	20	87.0%	0
Eek	AK	6	0	0	6	2	0	5	1	0	6	3	0	3	50.0%	0
Elfin Cove	AK	17	7	0	13	1	0	9	1	0	17	9	0	9	52.9%	0

Table 3, section 3: eligible Alaska rural community, page 11 of 15.

			First ma	iling		Second m	ailing		Third ma	iling				Totals		
Community of residence of SHARC holders	Regulatory area	⁷ Surveys mailed ^b				Surveys returned	Surveys returned undeliverable		Surveys returned	Surveys returned undeliverable		Returned by mail	Returned through staff	Response	Response rate	Undeliverable
Fairbanks	AK	5														
False Pass	AK	3														
Fritz Creek	AK	1														
Gakona	AK	1														
Gambell	AK	1														
Golovin	AK	2														
Goodnews Bay	AK	4														
Gustavus	AK	74	48	3	32	6	0	18	3	0	74	57	0	57	77.0%	3
Haines	AK	482	294	23	203	65	4	111	22	0	482	381	0	381	79.0%	27
Hollis	AK	4														
Homer	AK	25	14	0	14	2	0	11	0	0	25	16	0	16	64.0%	0
Hoonah	AK	251	120	12	142	31	2	97	6	2	251	157	2	159	63.3%	16
Hooper Bay	AK	17	3	0	15	3	0	11	1	0	17	7	0	7	41.2%	0
Hydaburg	AK	117	23	3	92	7	1	84	1	1	117	31	81	112	95.7%	4
Hyder	AK	35	22	0	18	2	0	12	4	0	35	28	0	28	80.0%	0
Juneau	AK	343	94	39	226	29	6	190	4	6	343	127	0	127	37.0%	47
Kake	AK	126	56	8	68	17	1	46	6	0	126	79	0	79	62.7%	8
Kasaan	AK	18	13	0	11	3	0	2	0	0	18	16	0	16	88.9%	0
Kasilof	AK	12	4	2	7	2	0	4	0	0	12	6	0	6	50.0%	2
Kenai	AK	76	35	8	39	7	0	27	3	0	76	45	0	45	59.2%	8
Ketchikan	AK	669	175	74	455	54	13	380	28	17	669	257	80	337	50.4%	99
King Cove	AK	82	41	2	42	13	1	28	2	0	82	56	0	56	68.3%	2
King Salmon	AK	2														
Kipnuk	AK	11	1	0	10	0	0	10	0	0	11	1	0	1	9.1%	0
Klawock	AK	203	91	18	107	21	0	85	12	0	203	124	1	125	61.6%	18
Kodiak	AK	1,725	830	116	937	160	16	684	70	13	1,725	1,060	1	1,061	61.5%	135
Kongiganak	AK	6	3	0	3	0	0	3	0	0	6	3	0	3	50.0%	0
Kotzebue	AK	2														
Kwigillingok	AK	46	1	2	44	1	0	42	0	0	46	2	0	2	4.3%	2
Larsen Bay	AK	39	12	15	12	3	1	9	1	1	39	16	0	16	41.0%	16
Manokotak	AK	2														
McGrath	AK	1														
Mekoryuk	AK	5														

Table 3, section 3: Community of residence of SHARC holders, page 12 of 15.

			First mai	ling		Second m	ailing		Third ma	iling				Totals		
Community of residence of SHARC holders	Regulatory area	Surveys mailed ^b		Surveys returned undeliverable		Surveys returned	Surveys returned undeliverable		Surveys returned	Surveys returned undeliverable	SHARCs issued		Returned through staff	Response	Response rate	Undeliverable
Metlakatla	AK	232	51	4	181	34	3	151	5	2	232	90	0	90	38.8%	7
Meyers Chuck	AK	8	8	0	4	0	0	0	0	0	8	8	0	8	100.0%	0
Naknek	AK	9	5	0	4	0	0	4	0	0	9	5	0	5	55.6%	0
Nanwalek	AK	51	10	1	44	4	0	40	6	0	51	20	0	20	39.2%	1
Naukati	AK	17	10	1	6	0	0	5	0	0	17	10	1	11	64.7%	1
Nelson Lagoon	AK	1														
Newtok	AK	1														
Nightmute	AK	8	0	0	8	0	0	8	2	0	8	2	0	2	25.0%	0
Nikiski	AK	12	5	0	9	1	0	6	0	0	12	6	0	6	50.0%	0
Nikolski	AK	2														
Ninilchik	AK	44	15	1	29	1	0	27	1	0	44	17	0	17	38.6%	1
Nome	AK	17	6	0	13	2	1	9	3	0	17	11	0	11	64.7%	1
North Pole	AK	4														
Old Harbor	AK	71	36	1	37	3	4	32	3	0	71	42	0	42	59.2%	5
Ouzinkie	AK	53	23	0	31	6	0	27	4	0	53	33	0	33	62.3%	0
Palmer	AK	5														
Pelican	AK	51	29	2	27	9	0	15	2	0	51	40	0	40	78.4%	2
Perryville	AK	39	13	8	18	1	0	18	2	0	39	16	0	16	41.0%	8
Petersburg	AK	985	547	22	498	126	10	332	55	6	985	728	2	730	74.1%	35
Point Baker	AK	22	15	0	9	3	0	5	2	0	22	20	0	20	90.9%	0
Port Alexander	AK	31	14	2	17	3	0	14	2	0	31	19	0	19	61.3%	2
Port Graham	AK	48	23	1	29	6	0	22	0	0	48	29	0	29	60.4%	1
Port Heiden	AK	2														
Port Lions	AK	45	23	1	28	4	0	18	0	0	45	27	0	27	60.0%	1
Port Protection	AK	1														
Port William	AK	2														
Quinhagak	AK	7	2	0	5	0	0	5	2	0	7	4	0	4	57.1%	0
Sand Point	AK	342	67	55	233	25	1	205	8	0	342	100	0	100	29.2%	56
Savoonga	AK	19	7	0	12	3	0	9	0	0	19	10	0	10	52.6%	0
Saxman	AK	13	1	1	12	1	0	10	0	1	13	2	0	2	15.4%	2
Scammon Bay	AK	1														
Seldovia	AK	150	83	8	74	21	0	47	6	0	150	110	1	111	74.0%	8

Table 3, section 3: Community of residence of SHARC holders, page 13 of 15.

			First mai	ling		Second m	ailing		Third ma	ailing				Totals		
Community of residence of SHARC holders	Regulatory area	Surveys mailed ^b		Surveys returned undeliverable		Surveys returned	Surveys returned undeliverable	2	Surveys returned	Surveys returned undeliverable		Returned by mail	Returned through staff		Response rate	Undeliverable
Seward	AK	17	10	2	5	1	0	4	1	0	17	12	0	12	70.6%	2
Sitka	AK	1,662	749	91	925	160	31	690	54	23	1,662	963	220	1,183	71.2%	129
Skagway	AK	56	37	1	25	6	1	14	2	1	56	45	0	45	80.4%	2
Soldotna	AK	24	5	0	20	3	0	18	3	1	24	11	0	11	45.8%	1
South Naknek	AK	2														
St. George Island	AK	4														
St. Paul Island	AK	42	11	0	31	3	0	29	5	0	42	19	0	19	45.2%	0
Sterling	AK	5														
Tatitlek	AK	24	8	1	19	5	0	15	5	0	24	18	0	18	75.0%	1
Teller	AK	2														
Tenakee Springs	AK	45	38	0	17	2	0	10	2	0	45	42	0	42	93.3%	0
Thorne Bay	AK	112	67	10	45	11	2	29	9	1	112	87	0	87	77.7%	12
Togiak	AK	9	1	0	8	3	0	5	1	0	9	5	0	5	55.6%	0
Toksook Bay	AK	34	8	1	27	2	0	24	1	0	34	11	0	11	32.4%	1
Trapper Creek	AK	1														
Tununak	AK	68	3	0	65	1	0	64	3	0	68	7	0	7	10.3%	0
Twin Hills	AK	2														
Unalakleet	AK	1														
Unalaska	AK	91	44	5	58	11	3	38	0	1	91	55	1	56	61.5%	7
Valdez	AK	35	21	0	15	1	0	15	1	0	35	23	0	23	65.7%	0
Ward Cove	AK	32	11	2	21	2	1	17	1	0	32	14	0	14	43.8%	3
Wasilla	AK	37	11	3	23	4	3	19	2	1	37	17	0	17	45.9%	6
Waterfall	AK	1														
Whale Pass	AK	4														
Whittier	AK	3														
Willow	AK	1														
Wrangell	AK	481	303	21	223	58	4	122	19	1	481	380	2	382	79.4%	24
Yakutat	AK	100	45	0	62	10	0	49	4	0	100	59	0	59	59.0%	0
Subto	tal, Alaska	11,455	5,161	651	6,513	1,207	129	4,806	472	89	11,455	6,840	407	7,247	63.3%	808

Table 3, section 3: Community of residence of SHARC holders, page 14 of 15.

Table 3, section 3: Community of residence of SHARC holders, page 15 of 15.

		First ma	iling		Second m	ailing		Third ma	iling				Totals		
Community of			Surveys			Surveys			Surveys			Returned	l		
	y Surveys	Surveys	returned	Surveys	Surveys	returned	Surveys	Surveys	returned	SHARCs	Returned	through		Response	
SHARC holders area	mailed ^b	returned	undeliverable	mailed	returned	undeliverable	mailed	returned	undeliverable	issued	by mail	staff	Response	rate	Undeliverable
Subtotal, Non-Alaska	° 110	58	6	53	9	2	43	1	3	110	68	1	69	62.7%	9
Subtotal, community o residence of SHAR(holder	C Í	5,219	657	6,566	1,216	131	4,849	473	92	11,565	6,908	408	7,316	63.3%	817

a. SHARC = Subsistence halibut registration certificate.

b. To protect confidentiality, data for tribes and communities with 5 or fewer SHARC holders are not reported in this table; cells remain blank. Tribal and community subtotals include all tribes and communities.

c. Note that members of eligible Alaska tribes may obtain SHARCs regardless of place of residence. All non-Alaska resident SHARC holders were members of eligible tribes.

				0	0.1.1.1	C 1 1 C	0.1.1.4	1 11 /					T 1 1	11 (1	D 101	1 . 1
		Ţ	Return rate			e fished for ibut	Subsisten	ce halibut	Sport fishe	d for halibut	Sport halil	ut harvest	Lingcod i harv		ROCKTISH	incidental
		1	ceturn rate			Percentage		Estimated	Sport fishe		Estimated			Estimated	Estimated	Estimated
SHARC	Regulatory	SHARCs	Surveys			of SHARCs			Estimated	of		number of	number of		number of	number of
type	area	issued	returned	Percent	fishers	issued	fish	pounds ^a	number	SHARCs	fish	pounds ^a	fishers	fish	fishers	fish
Tribal ^b	2C	2,433	1,310	53.8%	804	33.0%	7,488	164,104	339	13.9%	1,193	20,254	151	781	244	2,980
Tribal	3A	890	462	51.9%	398	44.7%	5,085	92,328	147	16.5%	798	11,567	55	283	93	1,602
Tribal	3B	529	208	39.3%	208	39.2%	2,104	35,758	39	7.4%	159	3,216	18	135	40	415
Tribal	4A	61	34	55.7%	33	53.7%	241	8,527	7	10.8%	9	1,866	7	77	7	38
Tribal	4B	5	2	40.0%	0	0.0%	0	0	3	50.0%	3	70	0	0	0	0
Tribal	4C	52	21	40.4%	18	35.3%	327	5,398	0	0.0%	0	0	0	0	0	0
Tribal	4D	21	11	52.4%	11	51.4%	59	3,276	0	0.0%	0	0	0	0	2	32
Tribal	4E	325	102	31.4%	124	38.0%	2,531	13,591	19	5.7%	266	1,302	7	26	8	142
Subto	tal, tribal	4,316	2,150	49.8%	1,595	36.9%	17,835	322,980	553	12.8%	2,428	38,274	237	1,301	394	5,210
Rural ^b	2C	4,479	3,333	74.4%	2,254	50.3%	16,076	299,660	1,114	24.9%	3,918	66,928	485	1,757	787	7,062
Rural	3A	2,436	1,611	66.1%	1,314	54.0%	13,380	242,628	876	36.0%	4,796	87,551	126	400	206	1,891
Rural	3B	77	57	74.0%	45	58.6%	347	7,481	17	21.7%	93	1,576	3	12	7	97
Rural	4A	130	91	70.0%	64	49.0%	702	10,433	39	35.4%	173	2,695	3	7	9	82
Rural	4B	28	14	50.0%	10	35.7%	74	2,100	4	14.3%	12	616	0	0	0	0
Rural	4C	3	2	66.7%	2	66.7%	18	260	0	0.0%	0	0	0	0	0	0
Rural	4D	0	0	0.0%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0
Rural	4E	96	58	60.4%	19	20.1%	172	1,445	6	6.7%	8	120	1	2	1	4
Subto	otal, rural	7,249	5,166	71.3%	3,708	51.2%	30,769	564,007	2,056	28.4%	8,999	159,485	617	2,178	1,010	9,136
All ^b	2C	6,912	4,643	67.2%	3,057	44.2%	23,564	463,764	1,453	21.0%	5,111	87,181	636	2,538	1,031	10,042
All	3A	3,326	2,073	62.3%	1,712	51.5%	18,466	334,956	1,023	30.8%	5,594	99,118	181	683	300	3,493
All	3B	606	265	43.7%	253	41.7%	2,451	43,239	56	9.2%	252	4,792	20	146	48	512
All	4A	191	125	65.4%	96	50.5%	942	18,960	45	23.8%	182	4,561	9	84	16	121
All	4B	33	16	48.5%	10	30.3%	74	2,100	7	19.7%	15	686	0	0	0	0
All	4C	55	23	41.8%	20	37.0%	345	5,657	0	0.0%	0	0	0	0	0	0
All	4D	21	11	52.4%	11	51.4%	59	3,276	0	0.0%	0	0	0	0	2	32
All	4E	421	160	38.0%	143	33.9%	2,702	15,036	25	6.0%	273	1,422	8	28	9	146
									-							

Table 4.–Estimated Alaska subsistence harvests of halibut, sport halibut harvests by SHARC holders, and incidental harvests of lingcod and rockfish, by SHARC type and regulatory area of the tribe or rural community of registration by the SHARC holder, 2008.

Table 4. Page 2 of 2.

					Subsistenc	e fished for	Subsisten	ce halibut					Lingcod i	ncidental	Rockfish	incidental
		F	Return rate		hal	libut	har	vest	Sport fished	d for halibut	Sport halib	out harvest	harv	vest	harv	vest
					Estimated	Percentage	Estimated	Estimated		Percentage	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated
SHARC	Regulatory	SHARCs	Surveys		number of	of SHARCs	number of	number of	Estimated	of	number of	number of	number of	number of	number of	number of
type	Area	issued	returned	Percent	fishers	issued	fish	pounds ^a	number	SHARCs	fish	pounds ^a	fishers	fish	fishers	fish
Total		11,565	7,316	63.3%	5,303	45.9%	48,604	886,988	2,609	22.6%	11,427	197,760	854	3,479	1,404	14,346

a. Pounds are net (dressed) weight. Net weight is 75% of round (whole) weight.

b. "Tribal" = individuals who obtained SHARCs as member of an eligible tribe, sorted by location of tribal headquarters. "Rural" = individuals who obtained SHARCs as residents of an eligible rural community. "All" = sum of tribal and rural SHARC holders for a regulatory area based on location of tribal headquarters or rural community. Because some SHARC holders may fish in regulatory areas other than the location of the area of their tribal headquarters or rural residence, area totals in this table differ slightly from those in Table 6, Table 7, and Table 9.

Source ADF&G Division of Subsistence SHARC survey, 2009.

Table 5.–Age of SHARC holders, by SHARC type, 2008.

	Age in years (number of SHARC holders, percentage of population)																				
SHARC			10–	15–		25-	30-	35–					60–		70–	75–	80-	85–	90-		
type	0–4	5–9	14	19	20-24	29	34	39	40–44	45–49	50-54	55–59	64	65–69	74	79	84	89	94	95+	Total
Tribal	23	112	147	252	292	299	278	317	421	496	474	438	289	222	140	68	28	13	5	2	4,316
	0.5%	2.6%	3.4%	5.8%	6.8%	6.9%	6.4%	7.3%	9.8%	11.5%	11.0%	10.1%	6.7%	5.1%	3.2%	1.6%	0.6%	0.3%	0.1%	0.0%	
Rural	18	64	155	199	247	435	548	570	677	929	1036	875	654	431	242	104	49	14	1	1	7,249
	0.2%	0.9%	2.1%	2.7%	3.4%	6.0%	7.6%	7.9%	9.3%	12.8%	14.3%	12.1%	9.0%	5.9%	3.3%	1.4%	0.7%	0.2%	0.0%	0.0%	
Total	41	176	302	451	539	734	826	887	1,098	1,425	1,510	1,313	943	653	382	172	77	27	6	3	11,565
	0.4%	1.5%	2.6%	3.9%	4.7%	6.3%	7.1%	7.7%	9.5%	12.3%	13.1%	11.4%	8.2%	5.6%	3.3%	1.5%	0.7%	0.2%	0.1%	0.0%	
Toksook Bay	0	1	2	3	4	0	2	2	5	0	2	6	2	4	1	0	0	0	0	0	34
	0.0%	2.9%	5.9%	8.8%	11.8%	0.0%	5.9%	5.9%	14.7%	0.0%	5.9%	17.6%	5.9%	11.8%	2.9%	0.0%	0.0%	0.0%	0.0%	0.0%	
Subtotal,																					
tribal	23	111	145	249	288	299	276	315	416	496	472	432	287	218	139	68	28	13	5	2	4.282
without	0.5%	2.6%			6.7%		- · ·	7.4%	9.7%		11.0%	10.1%		-	3.2%	1.6%		0.3%	0.1%	0.0%	.,_0_
Toksook Bay																					

Source NMFS Restricted Access Management Program SHARC database, as of 12/31/2008.

		Number						est by gear ty						
		of SHARCs fished	Set	line (fixed) g	gear	Hai	nd-operated	gear	All	subsistence	gear	Estin	nated sport h	arvest
Regulatory subarea	Regulatory area	(any halibut fishing) ^a	Estimated number fished	Estimated number harvested	Estimated pounds harvested ^c									
Southern Southeast Alaska	2C	1,614	1,294	9,619	197,035	742	3,768	57,476	1,614	13,387	254,510	875	3,216	54,828
Sitka LAMP area	2C	841	781	4,406	92,374	234	817	12,599	841	5,223	104,973	316	709	12,558
Northern Southeast Alaska	2C	743	669	3,806	81,166	271	1,053	17,711	743	4,859	98,877	350	1,204	19,665
Subtota	l, Area 2C	3,060	2,619	17,832	370,575	1,182	5,638	87,785	3,060	23,470	458,360	1,457	5,129	87,052
Yakutat Area	3A	77	69	853	14,417	19	115	1,667	77	968	16,084	15	31	474
Prince William Sound	3A	342	311	2,051	38,995	134	423	8,117	342	2,473	47,112	177	447	9,375
Cook Inlet	3A	273	148	2,766	48,628	199	2,000	28,167	273	4,766	76,795	120	656	8,132
Kodiak Island road system	3A	688	551	3,535	68,573	351	1,799	28,299	688	5,334	96,872	584	2,648	49,958
Kodiak Island–Other	3A	658	499	3,405	69,471	352	1,638	31,069	658	5,043	100,540	404	1,852	32,632
Subtota	l, Area 3A	1,789	1,362	12,611	240,084	914	5,974	97,320	1,789	18,584	337,403	1,074	5,633	100,572
Chignik Area	3B	53	24	506	8,417	45	183	3,425	53	688	11,842	6	14	335
Lower Alaska Peninsula	3B	198	90	838	15,197	149	810	15,209	198	1,648	30,406	53	227	3,965
Subtota	l, Area 3B	250	115	1,344	23,614	194	993	18,634	250	2,336	42,248	58	242	4,300
Eastern Aleutians– East	4A	103	66	503	9,324	53	460	9,720	103	964	19,043	47	170	4,289
Eastern Aleutians– West	4A	4	3	3	63	4	44	446	4	47	509	3	11	314
Subtota	l, Area 4A	106	68	506	9,387	56	504	10,166	106	1,010	19,553	48	181	4,603
Western Aleutians– East	4B	16	10	81	2,306	10	74	2,431	16	155	4,737	6	21	723
Western Aleutians– Other	4B	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 6.–Estimated Alaska subsistence harvests of halibut by regulatory area and subarea fished and gear type, and estimated sport harvests by SHARC holders, 2008.

Table 6. Page 2 of 2.

		Number			Est	imated subs	istence harve	est by gear ty	/pe ^b					
		of	Set	line (fixed) g	gear	Haı	nd-operated	gear	All	subsistence	gear	Estin	nated sport h	arvest
		SHARCs fished												
		(any	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated
California	Regulatory	halibut	number	number	pounds	number	number	pounds	number	number	pounds	number	number	pounds
Subarea	area	fishing) ^a	fished	harvested	harvested ^c	fished	harvested	harvested ^c	fished	harvested	harvested	fished	harvested	harvested
Subtota	al, Area 4B	16	10	81	2,306	10	74	2,431	16	155	4,737	6	21	723
St. George Island	4C	8	2	0	0	8	56	1,150	8	56	1,150	0	0	0
St. Paul Island	4C	15	12	262	3,661	9	27	846	15	289	4,507	0	0	0
Subtota	al, Area 4C	20	12	262	3,661	14	83	1,996	20	345	5,657	0	0	0
St. Lawrence Island	4D	10	9	53	2,879	3	12	252	10	65	3,131	0	0	0
Area 4D–Other	4D	0	0	0	0	0	0	0	0	0	0	0	0	0
Subtota	al, Area 4D	10	9	53	2,879	3	12	252	10	65	3,131	0	0	0
Bristol Bay	4E	11	11	16	84	7	0	0	11	16	84	2	0	0
Yukon–Kuskokwim Delta	4E	134	38	1,040	4,283	115	1,510	10,386	134	2,550	14,669	13	222	510
Norton Sound	4E	7	7	72	1,145	1	0	0	7	72	1,145	1	0	0
Subtota	al, Area 4E	152	56	1,128	5,511	123	1,510	10,386	152	2,638	15,898	16	222	510
Total, Alaska ^a		5,303	4,182	33,816	658,017	2,423	14,788	228,971	5,303	48,604	886,988	2,609	11,427	197,760

a. Because fishers might fish in more than one area, subtotals for regulatory areas and the state total may exceed the sum of the subarea values. Includes subsistence and sport fishing.

b. Setline = longline or skate. Hand-operated gear = rod and reel or handline.

c. Pounds are net (dressed) weight. Net weight is 75% of round (whole) weight.

Source ADF&G Division of Subsistence SHARC survey, 2009.

		a 1 • .	1 111 / 1				-	hange between		P		6		
-		Subsistenc	e halibut ha	arvests, net	pounds		y	Eive veer		Pei	centage of	of state to	tal	
Geographic area	2003	2004	2005	2006	2007	2008	2007– 2008	Five year average to 2008	2003	2004	2005	2006	2007	2008
Southern Southeast Alaska	290,443	369,319	328,658	307,921	283,422	254,510	-10.2%	-19.4%	27.9%	31.0%	27.9%	27.4%	27.5%	28.7%
Sitka LAMP Area	173,323	147,312	133,545	147,526	132,190	104,973	-20.6%	-28.5%	16.6%	12.3%	11.3%	13.1%	12.8%	11.8%
Northern Southeast Alaska	159,772	160,453	135,869	124,670	109,286	98,877	-9.5%	-28.4%	15.3%	13.4%	11.5%	11.1%	10.6%	11.1%
Subtotal, Area 2C	623,538	677,084	598,072	580,117	524,897	458,360	-12.7%	-23.7%	59.9%	56.7%	50.8%	51.6%	50.8%	51.7%
Yakutat Area	11,198	20,153	36,515	19,187	17,516	16,084	-8.2%	-23.1%	1.1%	1.7%	3.1%	1.7%	1.7%	1.8%
Prince William Sound	28,409	58,429	68,063	47,965	52,407	47,112	-10.1%	-7.7%	2.7%	4.9%	5.8%	4.3%	5.1%	5.3%
Cook Inlet	52,609	83,939	79,024	59,965	75,623	76,795	1.6%	9.3%	5.1%	7.0%	6.7%	5.3%	7.3%	8.7%
Kodiak Island road system	114,028	129,145	134,849	140,388	130,538	96,872	-25.8%	-25.4%	11.0%	10.8%	11.4%	12.5%	12.6%	10.9%
Kodiak Island–Other	79,256	111,944	110,824	111,752	96,206	100,540	4.5%	-1.4%	7.6%	9.4%	9.4%	9.9%	9.3%	11.3%
Subtotal, Area 3A	285,500	403,610	429,275	379,258	372,289	337,403	-9.4%	-9.8%	27.4%	33.8%	36.4%	33.7%	36.1%	38.0%
Chignik Area	10,500	12,053	14,783	17,780	15,397	11,842	-23.1%	-16.0%	1.0%	1.0%	1.3%	1.6%	1.5%	1.3%
Lower Alaska Peninsula	16,977	21,467	31,442	30,767	32,351	30,406	-6.0%	14.3%	1.6%	1.8%	2.7%	2.7%	3.1%	3.4%
Subtotal, Area 3B	27,477	33,519	46,225	48,547	47,748	42,248	-11.5%	3.8%	2.6%	2.8%	3.9%	4.3%	4.6%	4.8%
Eastern Aleutians-East	19,345	26,715	33,882	25,993	12,753	19,043	49.3%	-19.8%	1.9%	2.2%	2.9%	2.3%	1.2%	2.1%
Eastern Aleutians– West	1,852	2,162	1,734	1,069	2,193	509	-76.8%	-71.7%	0.2%	0.2%	0.1%	0.1%	0.2%	0.1%
Subtotal, Area 4A	21,197	28,877	35,615	27,062	14,946	19,553	30.8%	-23.4%	2.0%	2.4%	3.0%	2.4%	1.4%	2.2%
Western Aleutians– East	2,582	916	1,351	2,761	1,997	4,737	137.2%	146.5%	0.2%	0.1%	0.1%	0.2%	0.2%	0.5%
Western Aleutians– Other	0	0	0	0	0	0			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Subtotal, Area 4B	2,582	916	1,351	2,761	1,997	4,737	137.2%	146.5%	0.2%	0.1%	0.1%	0.2%	0.2%	0.5%
St. George Island	2,042	1,823	2,145	3,443	3,736	1,150	-69.2%	-56.4%	0.2%	0.2%	0.2%	0.3%	0.4%	0.1%
St. Paul Island	20,839	7,911	5,571	5,085	11,342	4,507	-60.3%	-55.6%	2.0%	0.7%	0.5%	0.5%	1.1%	0.5%
Subtotal, Area 4C	22,881	9,734	7,716	8,527	15,077	5,657	-62.5%	-55.8%	2.2%	0.8%	0.7%	0.8%	1.5%	0.6%

Table 7.–Alaska subsistence halibut harvests, by geographic area fished, 2003–2008.

-continued-

63

Table 7. Page 2 of 2.

							Percentage	change between						
		Subsisten	ce halibut h	arvests, ne	t pounds		-	years		Pe	rcentage	of state to	otal	
								Five year						
							2007-	average						
Geographic area	2003	2004	2005	2006	2007	2008	2008	to 2008	2003	2004	2005	2006	2007	2008
St. Lawrence Island	4,380	10,923	5,848	8,297	3,204	3,131	-2.3%	-52.1%	0.4%	0.9%	0.5%	0.7%	0.3%	0.4%
Area 4D-Other	0	0	0	0	0	0			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Subtotal, Area 4D	4,380	10,923	5,848	8,297	3,204	3,131	-2.3%	-52.1%	0.4%	0.9%	0.5%	0.7%	0.3%	0.4%
Bristol Bay	435	203	2,169	1,336	2,116	84	-96.0%	-93.3%	0.0%	0.0%	0.2%	0.1%	0.2%	0.0%
Yukon–Kuskokwim Delta	53,284	28,298	51,950	69,407	50,019	14,669	-70.7%	-71.0%	5.1%	2.4%	4.4%	6.2%	4.8%	1.7%
Norton Sound	56	0	0	0	0	1,145		10,118.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Subtotal, Area 4E	53,775	28,501	54,119	70,743	52,135	15,898	-69.5%	-69.3%	5.2%	2.4%	4.6%	6.3%	5.1%	1.8%
Total, Alaska ^a	1,041,330	1,193,162	1,178,222	1,125,312	1,032,293	886,988	-14.1%	-20.4%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

a. The sum of the harvests by geographic areas for 2003 reported here differs slightly from that reported in Table 8 in Fall et al (2004:50) due to rounding.

																Nu	mbe	r of i	hook	s ^a													_
Regulatory area (Numbe of SHARC holders)	er	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Missing	• Tot
2C (6,912)	No.	10						5													526		8								1,053	98	2,62
	Pct.	0.4	0.6	0.2	0.2	0.7	0.7	0.2	0.4	0.2	5.5	0.0	1.8	0.0	0.3	11.8	0.2	0.0	0.3	0.0	20.0	0.1	0.3	0.1	0.6	7.4	0.5	0.4	2.4	0.9	40.1	3.7	
A (3,326)	No.	8	7	3	3	10	5	0	2	3	82	0	23	0	0	79	2	0	18	2	257	1	1	2	8	115	8	4	32	4	555	56	1,29
	Pct.	0.6	0.6	0.2	0.2	0.8	0.4	0.0	0.1	0.2	6.4	0.0	1.8	0.0	0.0	6.1	0.2	0.0	1.4	0.2	19.9	0.1	0.1	0.1	0.6	8.9	0.6	0.3	2.5	0.3	43.0	7.5	
B (606)	No.	13	1	0	0	0	0	0	1	0	6	0	0	0	0	7	0	0	1	0	6	0	0	0	0	8	0	0	3	0	68	7	122
	Pct.	10.6	1.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	5.0	0.0	0.0	0.0	0.0	5.9	0.0	0.0	0.9	0.0	5.1	0.0	0.0	0.0	0.0	6.7	0.0	0.0	2.5	0.0	55.7	10.8	
A (191)	No.	1	0	0	0	0	0	0	0	0	4	0	0	0	0	7	0	0	0	0	8	0	0	0	2	2	0	0	0	3	32	6	64
	Pct.	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	0.0	0.0	0.0	0.0	10.4	0.0	0.0	0.0	0.0	12.6	0.0	0.0	0.0	2.3	3.5	0.0	0.0	0.0	4.6	50.4	13.2	
B (33)	No.	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	0	0	6
	Pct.	33.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.3	0.0	0.0	0.0	0.0	33.3	0.0	0.0	0.0	0.0	0.0	0.0	
C (55)	No.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	1	0	0	0	0	9	2	12
	Pct.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.3	0.0	0.0	0.0	0.0	73.4	4.9	
D (21)	No.	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	7	0	11
	Pct.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	66.7	0.0	
E (421)	No.	4	1	0	0	0	0	0	0	0	7		0	0	0	2		1	0	0	3	0	0	0	0	5	0	0	0	0	19	4	47
	Pct.	8.6	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.0	0.0	0.0	0.0	0.0	4.7	0.0	2.1	0.0	0.0	6.1	0.0	0.0	0.0	0.0	11.2	0.0	0.0	0.0	0.0	40.8	5.4	
Fotal, Alaska (11,565)																																173	4,18
	Pct.	0.9	0.6	0.2	0.2	0.7	0.5	0.1	0.3	0.2	5.9	0.0	1.7	0.0	0.2	9.7	0.2	0.0	0.6	0.1	19.2	0.1	0.3	0.1	0.6	7.8	0.5	0.4	2.4	0.7	41.7	4.1	

Table 8.–Number of hooks usually fished, setline (fixed) gear, Alaska subsistence halibut fishery, 2008.

a. The column for 30 hooks includes those fishers who reported using more than 30. There is no 30-hook limit in areas 4C, 4D, or 4E.

b. Number of fishers using setline (fixed) gear. Based on location of tribe or rural community of SHARC holder.

Source ADF&G Division of Subsistence SHARC survey, 2009.

	Subs	sistence met	hods	S	port harves	t ^b	r	Fotal halibu	t
		Pounds,	Average		Pounds,	Average		Pounds,	Average
Regulatory area ^a	Number	net weight	per fish	Number	net weight	per fish	Number	net weight	per fish
2C	23,470	458,360	19.5	5,129	87,052	17.0	28,599	545,412	19.1
3A	18,584	337,403	18.2	5,633	100,572	17.9	24,217	437,975	18.1
3B	2,336	42,248	18.1	242	4,300	17.8	2,578	46,548	18.1
4A	1,010	19,553	19.4	181	4,603	25.5	1,191	24,155	20.3
4B	155	4,737	30.5	21	723	34.2	176	5,460	30.9
4C	345	5,657	16.4	0	0		345	5,657	16.4
4D	65	3,131	48.2	0	0		65	3,131	48.2
4E	2,638	15,898	6.0	222	510	2.3	2,860	16,408	5.7
Total, Alaska	48,604	886,988	18.2	11,427	197,760	17.3	60,031	1,084,747	18.1

Table 9.-Average net weight of subsistence- and sport-harvested halibut, by regulatory area fished, 2008.

a. Area totals are based on the location of the harvest (see also Table 6 and Table 7).

b. Sport harvest of halibut by SHARC holders.

Source ADF&G Division of Subsistence SHARC survey, 2009.

Table 10.–Estimated harvests of lingcod and rockfish by SHARC holders while subsistence fishing for halibut, by regulatory area and geographic subarea fished, 2008.

				Estimate	d harvest	
		Number	Ling	gcod	Roc	kfish
Geographic subarea	Regulatory area	of SHARCs fished	Estimated number fished	Estimated number harvested	Estimated number fished	Estimated number harvested
Southern Southeast Alask	a 2C	1,614	234	842	546	4,532
Sitka LAMP Area	2C	841	363	1,353	398	4,010
Northern Southeast Alask	a 2C	743	77	271	172	1,440
	Subtotal, Area 2C	3,060	629	2,466	1,045	9,982
Yakutat Area	3A	77	35	162	10	81
Prince William Sound	3A	342	42	111	67	739
Cook Inlet	3A	273	29	187	50	860
Kodiak Island road system	n 3A	688	77	171	120	662
Kodiak Island–Other	3A	658	66	132	138	1,181
	Subtotal, Area 3A	1,789	209	763	317	3,523
Chignik Area	3B	53	8	39	11	127
Lower Alaska Peninsula	3B	198	16	103	41	381
	Subtotal, Area 3B	250	24	143	52	508
Eastern Aleutians-East	4A	103	11	44	18	125
Eastern Aleutians-West	4A	4	0	0	2	6
	Subtotal, Area 4A	106	11	44	18	132
Western Aleutians-East	4B	16	2	29	6	16
	Subtotal, Area 4B	16	2	29	6	16

Table 10. Page 2 of 2.

				Estimate	d harvest	
		Number	Ling	gcod	Roc	kfish
		of	Estimated	Estimated	Estimated	Estimated
	Regulatory	SHARCs	number	number	number	number
Geographic subarea	area	fished	fished	harvested	fished	harvested
St. George Island	4C	8	0	0	0	0
St. Paul Island	4C	15	0	0	0	0
	Subtotal, Area 4C	20	0	0	0	0
St. Lawrence Island	4D	10	0	0	3	34
	Subtotal, Area 4D	10	0	0	3	34
Bristol Bay	4E	11	0	0	0	0
Yukon-Kuskokwim Delta	a 4E	134	9	35	10	152
Norton Sound	4E	7	0	0	0	0
	Subtotal, Area 4E	152	9	35	10	152
Total, Alaska ^a		5,303	854	3,479	1,404	14,346

a. Because fishers may fish in more than one area, subtotals for regulatory areas and the state total may exceed the sum of the subarea values.

Source ADF&G Division of Subsistence SHARC survey, 2009.

Table 11.–Estimated harvests of halibut by gear type and participation (subsistence and sport fisheries), selected Alaska communities, 2003–2008.

					Subsisten	ce harvests						
								bsistence		,		
		Number	Setline (f	, 0		rated gear		vest	1	narvest ^b		arvests
		of SHARC		Estimated			Estimated number					
Community	Year		number fished	pounds harvested	number fished	pounds harvested	fished	pounds harvested	number fished	pounds harvested	number fished	pounds harvested
Cordova	2003		68	7,613	40	7,885	102	15,498	144		194	27,032
	2004		174	29,693	97	10,946	262	40,640	174	12,149	325	52,789
	2005	602	238	34,907	104	12,234	281	47,141	179	10,519	358	57,660
	2006	607	202	21,059	125	7,968	248	29,027	152	7,020	301	36,047
	2007	615	233	21,683	128	7,033	282	28,716	123	4,203	315	32,919
	2008	587	231	22,301	95	5,246	254	27,547	126	5,562	292	33,109
Kodiak	2003	1,320	438	101,575	278	51,678	646	153,254	498	68,170	858	221,424
	2004	1,561	554	131,719	335	55,605	802	187,214	581	73,181	971	260,395
	2005	1,741	650	146,781	398	64,047	871	210,828	669	82,455	1,116	293,283
	2006	1,716	684	142,326	497	63,496	961	205,822	562	64,320	1,092	270,142
	2007	1,880	707	135,351	486	58,282	945	193,633	648	68,556	1,157	262,189
	2008	1,725	763	128,226	479	49,108	963	177,334	693	72,915	1,213	250,249
Petersburg	2003	1,047	330	41,704	138	14,013	415	55,718	268	19,611	523	75,329
	2004	1,187	322	53,885	206	17,900	482	71,784	351	26,408	617	98,192
	2005	1,197	338	44,050	175	17,321	436	61,372	312	23,289	569	84,661
	2006	1,082	300	35,608	222	18,075	426	53,682	246	17,351	529	71,033
	2007	1,123	274	32,026	191	15,491	386	47,517	264	15,177	516	62,694
	2008	985	285	31,077	207	15,523	393	46,600	279	17,506	515	64,106

Table 11. Page 2 of 2.

		01 2.			Subsistend	ce harvests						
			0.41	1)				bsistence			A 11 1	
		Number of	· · · · · · · · · · · · · · · · · · ·	ixed) gear Estimated		rated gear Estimated		vest Estimated	-	arvest ^b Estimated	All ha	ervests Estimated
		SHARC	number	pounds	number	pounds	number	pounds	number	pounds	number	pounds
Community	Year	holders ^a	fished	harvested	fished	harvested	fished	harvested	fished	harvested	fished	harvested
Port Graham		52	10	4,398	28	7,056	35	11,454	3	156	36	11,610
	2004	57	15	4,425	31	4,755	42	9,181	11	850		10,031
	2005	52	8	7,938	18	3,190	18	11,127	9	488	18	11,615
	2006	50		2,397	24	3,797	30	6,194	2	0	30	6,194
	2007	59	22	5,347	28	3,146	36	8,493	4	233	36	8,726
	2008	48	13	6,896	23	2,200	30	9,097	2	51	30	9,148
Sand Point		73	15	3,409	11	1,410	21	4,819	11	410		5,229
	2004	351	25	4,360	74	6,996	109	11,355	50	1,384	121	12,739
	2005	321	35	12,201	77	9,700	100	21,901	23	1,281	105	23,182
	2006	365	59	7,406	87	12,809	133	20,214	29	6,300	140	26,514
	2007	364	49	13,278	113	11,337	138	24,615	16	3,034	138	27,649
	2008	342	71	15,766	88	9,247	130	25,013	19	2,195	132	27,208
Sitka	2003	1,639	760	155,276	160	19,604	821	174,880	401	32,408	956	207,288
	2004	1,871	714	151,660	147	14,739	904	166,474	412	25,829	1,026	192,303
	2005	1,974	738	126,426	172	19,893	814	146,319	417	55,913	987	202,232
	2006	1,895	809	145,542	297	17,830	915	163,372	395	23,032	1,036	186,404
	2007	1,954	839	115,162	270	26,886	921	142,049	315	16,200	1,010	158,249
	2008	1,662	784	96,314	232	13,266	845	109,581	307	13,055	932	122,636
Toksook Bay	2003	532	8	3,790	47	20,709	54	24,500	0	0	54	24,500
	2004	529	7	859	44	5,737	56	6,596	0	0	56	6,596
	2005	522	5	602	60	14,269	61	14,870	2	98	62	14,968
	2006	533	6	2,333	112	34,149	113	36,481	0	0	113	36,481
	2007	533	17	1,451	100	6,469	112	7,921	0	0	112	7,921
	2008	34	6	707	8	1,436	9	2,143	0	0	9	2,143
Tununak	2003	0										
	2004	70	16	878	23	1,076	31	1,954	0	0	31	1,954
	2005	70	3	332	18	2,329	20	2,661	0	0	20	2,661
	2006	70	7	224	33	3,808	33	4,032	0	0	33	4,032
	2007	69	14	1,536	38	5,479	38	7,015	0	0	38	7,015
	2008	68	0	0	8	1,296	8	1,296	0	0	8	1,296
Unalaska ^c	2003	92	39	6,713	31	4,146	50	10,860	33	5,519	70	16,379
	2004	131	43	9,557	39	5,973	81	15,530	34	2,165	93	17,695
	2005	150		9,573	57	8,535	88	18,108	28	2,439	97	20,547
	2006	171	53	7,526	47	8,805	81	16,331	50	3,768		20,100
	2007	176		9,012	38	4,238	83	13,250	33	2,287	92	15,537
	2008	173		7,293	42	6,417	87	13,710		2,962		16,672

Note For data on all communities for 2008, see appendix tables G-4, G-5, and G-6.

a. Includes all SHARC holders living in the community.

b. Sport harvests by SHARC holders only.

c. Includes Dutch Harbor.

Sources ADF&G Division of Subsistence SHARC surveys, 2004–2009.

			Pounds	usable (ne	et) weight	t	
	Number	Removed					95%
	of	from	Rod			Total without	confidence
	fishing	commercial	and	Other		commercial	range
Year	households	harvests	reel	methods ^a	Total	removal	$(\pm)^{b}$
1987	1,252	12,353	180,982		193,335	180,982	22%
1996	943	16,528	135,048	14,196	165,772	149,244	28%
Annual average	1,098	14,441	158,015	14,196	179,554	165,113	

Table 12.-Estimated harvests of halibut for home use, Sitka.

a. Harvest data not collected for "other methods" in 1987.

b. Pertains to estimate of total harvests.

Source ADF&G Division of Subsistence CPDB.

Table 13.–Number of SHARCs issued, estimated number of subsistence halibut fishers, and estimated harvests by SHARC category, Sitka, 2003–2008.

	_	Rural SH	ARCs		Tribal SHARCs				All SHARC holders residing in Sitka			
				Harvest				Harvest				Harvest
				per				per				per
				fisher,				fisher,				fisher,
		Subsistence		average		Subsistence		average		Subsistence		average
Harvest year	SHARCs	fished	Harvest	pounds	SHARCs	fished	Harvest	pounds	SHARCs	fished	Harvest	pounds
2003	1,224	679	128,489	189	415	142	46,391	327	1,639	821	174,880	213
2004	1,464	785	135,532	173	407	119	30,942	260	1,871	904	166,474	184
2005	1,578	654	114,632	175	396	160	31,687	198	1,974	814	146,319	180
2006	1,429	759	120,735	159	466	156	42,637	274	1,895	915	163,372	179
2007	1,484	754	104,530	139	470	167	37,519	225	1,954	921	142,049	154
2008	1,388	722	87,945	122	274	123	21,636	176	1,662	845	109,581	130
5-year	1,436	726	120,784	166	431	149	37,835	254	1,867	875	158,619	181
average												
(2003–												
2007)												

Table 14.-Estimated harvests of halibut for home use, Petersburg.

		_					
	Number of	Removed from	Rod			Total without	95% confidence
	fishing	commercial	and	Other		commercial	range
Year	households	harvests	reel	methods ^a	Total	removal	$(\pm)^{\mathrm{b}}$
1987	604	11,728	107,448		119,176	107,448	51%
2000	468	6,951	49,023	0	55,974	49,023	39%
Annual average	536	9,339	78,236	0	87,575	78,236	

a. Harvest data not collected for "other methods" in 1987.

b. Pertains to estimate of total harvests.

Sources ADF&G Division of Subsistence CPDB; ADF&G Division of Subsistence household survey, 2001.

	Pounds usable (net) weight								
	Number	Removed					95%		
	of	from	Rod			Total without	confidence		
	fishing	commercial	and	Other		commercial	range		
Year	households	harvests	reel	methods	Total	removal	$(\pm)^{\mathrm{b}}$		
1985	228	3,776	31,002	1,752	36,530	32,754	29%		
1988	343	18,701	119,873	348	138,922	120,221	62%		
1991	272	25,107	25,493	116	50,716	25,609	33%		
1992	401	11,383	60,612	0	71,995	60,612	48%		
1993	382	3,762	39,556	2,056	45,374	41,612	32%		
1997	321	3,551	58,647	4,252	66,450	62,899	41%		
Annual average	325	11,047	55,864	1,421	68,331	57,285			

Table 15.-Estimated harvests of halibut for home use, Cordova.

a Pertains to estimate of total harvests.

Source ADF&G Division of Subsistence CPDB.

Table 16.-Estimated harvests of halibut for home use, Port Graham.

	Pounds usable (net) weight							
	Number	Removed					95%	
	of	from	Rod			Total without	confidence	
	fishing	commercial	and	Other		commercial	range	
Year	households	harvests	reel	methods	Total	removal	$(\pm)^{\mathrm{b}}$	
1987	42	1,237	3,809	3,389	8,435	7,198	14%	
1989	29	3,217	1,482	1,222	5,921	2,704	47%	
1990	32	3,003	4,106	3,171	10,280	7,277	22%	
1991	35	1,663	2,332	4,846	8,841	7,178	17%	
1992	42	24	7,867	3,365	11,256	11,232	14%	
1993	42	86	3,105	1,346	4,537	4,451	14%	
1997	36	79	2,881	5,326	8,286	8,207	28%	
Annual average ^a	38	1,015	4,017	3,574	8,606	7,591		

a. Excludes 1989, the year of the Exxon Valdez oil spill.

b. Pertains to estimate of total harvests.

Source ADF&G Division of Subsistence CPDB.

		Pounds usable (net) weight								
	Number	Removed					95%			
	of	from	Rod			Total without	confidence			
	fishing	commercial	and	Other		commercial	range			
Year	households	harvests	reel	methods	Total	removal	$(\pm)^{a}$			
1982	1,404	NA	NA	NA	451,223	360,113	45%			
1991	1,178	48,245	206,692	40,591	295,528	247,283	30%			
1992	1,178	89,625	329,345	18,732	437,702	348,077	33%			
1993	1,336	142,108	479,391	31,863	653,362	511,254	33%			
Annual average	1,306	93,326	338,476	30,395	462,197	366,682				

Table 17.-Estimated harvests of halibut for home use, Kodiak road system.

Note Harvest data are available based on random samples drawn from the entire road system population for 1982 and 1991. Just Kodiak City was sampled in 1992 and 1993. Estimates for the entire road system population were developed for this table based on the known portion of the total road system harvest harvested by city residents in 1982 and 1991.

a. Pertains to estimate of total harvests.

Source ADF&G Division of Subsistence CPDB.

Table 18.–Halibut removals in Alaska, by regulatory area, 2008.

	Pounds net weight									
Regulatory area	Commercial ^a	Sport ^b	Subsistence ^c	Wastage	Bycatch	Total				
2C	6,206,000	3,083,000	458,360	224,000	344,000	10,315,360				
3A	24,521,000	5,629,000	337,403	985,000	2,964,000	34,436,403				
3B	10,748,000	18,000	42,248	685,000	1,338,000	12,831,248				
4	8,654,000	43,000	70,642	276,000	5,588,000	14,631,642				
Alaska	50,129,000	8,773,000	908,654	2,170,000	10,234,000	72,214,654				

a. Commercial catch includes IPHC research catch and, in Area 2C, the Metlakatla fishery catch.

b. Projected harvests.

c. Includes 21,666 lb of sublegal halibut legally retained by CDQ organizations in areas 4D and 4E for personal use. The subsistence harvest by SHARC holders was 886,988 lb, including 48,976 lb in Area 4.

Sources Williams 2009; ADF&G Division of Subsistence SHARC survey, 2009.

				Percentage change				
							2008 compared to	2008 compared to previous 5-year
	2003	2004	2005	2006	2007	2008	2007	average
Response to survey								
Number of SHARCs issued	11,635	13,813	14,306	14,206	15,047	11,565	-23.1%	-16.2%
Number of surveys returned	7,593	8,524	8,565	8,426	8,682	7,316	-15.7%	-12.5%
Response rate	65.3%	61.7%	59.9%	59.3%	57.7%	63.3%	9.6%	4.1%
Subsistence halibut fishing								
Estimated number of subsistence halibut fishers	4,942	5,984	5,621	5,909	5,933	5,303	-10.6%	-6.6%
Percentage of all SHARC holders subsistence fishing	42.5%	43.3%	39.3%	41.6%	39.4%	45.9%	16.3%	11.2%
Estimated number of subsistence-harvested halibut	43,926	52,412	55,875	54,089	53,697	48,604	-9.5%	-6.5%
Estimated net pounds of subsistence-harvested halibut	1,041,330	1,193,162	1,178,222	1,125,312	1,032,293	886,988	-14.1%	-20.4%
Average weight of subsistence-harvested halibut	23.7	22.8	21.1	20.8	19.2	18.2	-5.1%	-15.2%
Average harvest per fisher, fish	8.9	8.8	9.9	9.2	9.1	9.2	1.3%	0.1%
Average harvest per fisher, net pounds	210.7	199.4	209.6	190.4	174.0	167.3	-3.9%	-15.0%
Sport halibut fishing by SH	ARC holde	ers						
Estimated number of sport halibut fishers	2,580	3,107	3,147	2,894	2,566	2,609	1.7%	-8.7%
Percentage of all SHARC holders sport fishing	22.2%	22.5%	22.0%	20.4%	17.1%	22.6%	32.3%	8.4%
Estimated number of sport- harvested halibut	10,784	12,530	14,096	11,219	10,959	11,427	4.3%	-4.1%
Estimated net pounds of sport-harvested halibut	245,947	251,092	293,415	223,639	196,198	197,760	0.8%	-18.3%
Average weight of sport- harvested halibut	22.8	20.0	20.8	19.9	17.9	17.3	-3.3%	-14.7%
Average harvest per fisher, fish	4.2	4.0	4.5	3.9	4.3	4.4	2.6%	5.1%
Average harvest per fisher, net pounds	95.3	80.8	93.2	77.3	76.5	75.8	-0.9%	-10.4%

Table 19.-Comparison of selected SHARC survey results, 2003-2007 project years.

Table 19. Page 2 of 2.

8	Project year							Percentage change		
	2003	2004	2005	2006	2007	2008	2008 compared to 2007	2008 compared to previous 5-year average		
Total number of halibut fishe										
Estimated number of fishers, subsistence or sport	5,941	6,980	6,876	6,899	6,787	6,202	-8.6%	-7.4%		
Percentage of total SHARC holders who fished	51.1%	50.5%	48.1%	48.6%	45.1%	53.6%	18.9%	10.2%		
Incidental rockfish harvests										
Number of rockfish harvesters	1,239	1,616	1,544	1,529	1,568	1,404	-10.5%	-6.3%		
Percentage of all SHARC holders	10.6%	11.7%	10.8%	10.8%	10.4%	12.1%	16.5%	11.8%		
Percentage of all subsistence halibut fishers	25.1%	27.0%	27.5%	25.9%	26.4%	26.5%	0.2%	0.4%		
Number of rockfish harvested	14,870	19,001	12,395	16,945	15,266	14,346	-6.0%	-8.6%		
Average number of rockfish harvested, all subsistence halibut fishers	3.0	3.2	2.2	2.9	2.6	2.7	5.1%	-2.2%		
Average number of rockfish harvested, subsistence halibut fishers who harvested rockfish	12.0	11.8	8.0	11.1	9.7	10.2	4.9%	-2.9%		
Incidental lingcod harvests										
Number of lingcod harvesters	699	953	862	927	959	854	-10.9%	-2.9%		
Percentage of all SHARC holders	6.0%	6.9%	6.0%	6.5%	6.4%	7.4%	15.9%	16.0%		
Percentage of all subsistence halibut fishers	14.1%	15.9%	15.3%	15.7%	16.2%	16.1%	-0.3%	4.3%		
Number of lingcod harvested	3,298	4,407	2,355	3,486	3,402	3,479	2.3%	2.7%		
Average number of lingcod harvested, all subsistence halibut fishers	0.7	0.7	0.4	0.6	0.6	0.7	14.4%	9.9%		
Average number of lingcod harvested, subsistence halibut fishers who harvested lingcod	4.7	4.6	2.7	3.8	3.5	4.1	14.8%	5.1%		

Sources Fall et al. 2004, 2005, 2006, 2007; Fall and Koster 2008; ADF&G Division of Subsistence SHARC survey, 2009.

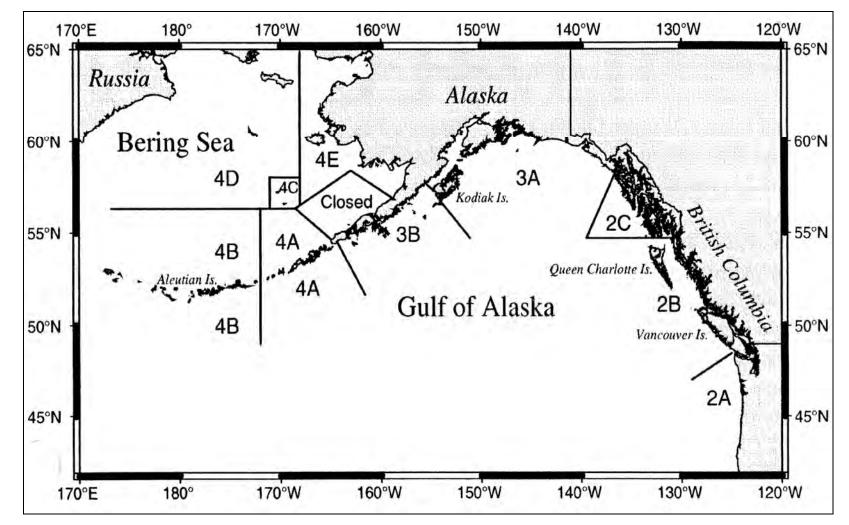


Figure 1.–Regulatory areas for the federal Pacific halibut subsistence fishery.

74

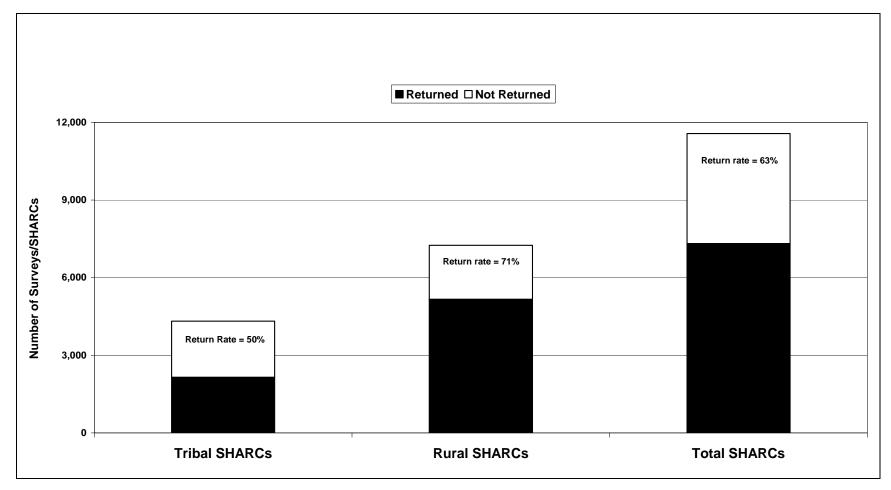


Figure 2.-Number of surveys returned and return rates for subsistence halibut surveys, by SHARC type, 2008.

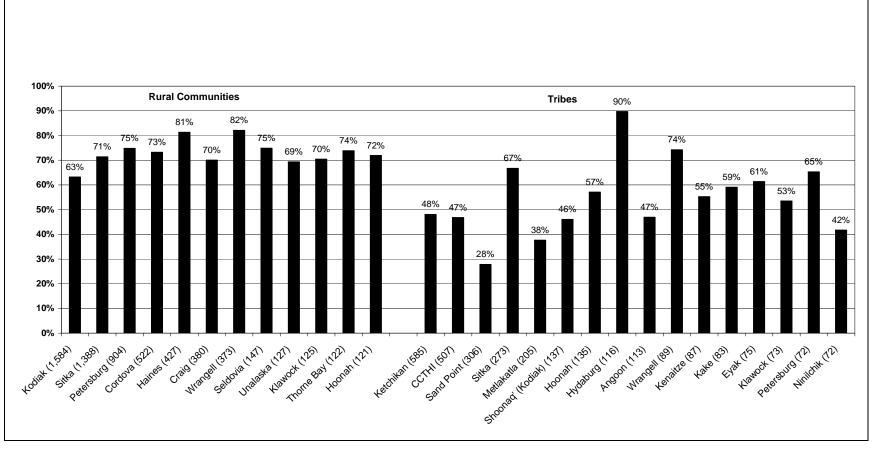


Figure 3.-SHARC survey return rates, communities with more than 100 SHARCs issued and tribes with more than 70 SHARCs issues, 2008.

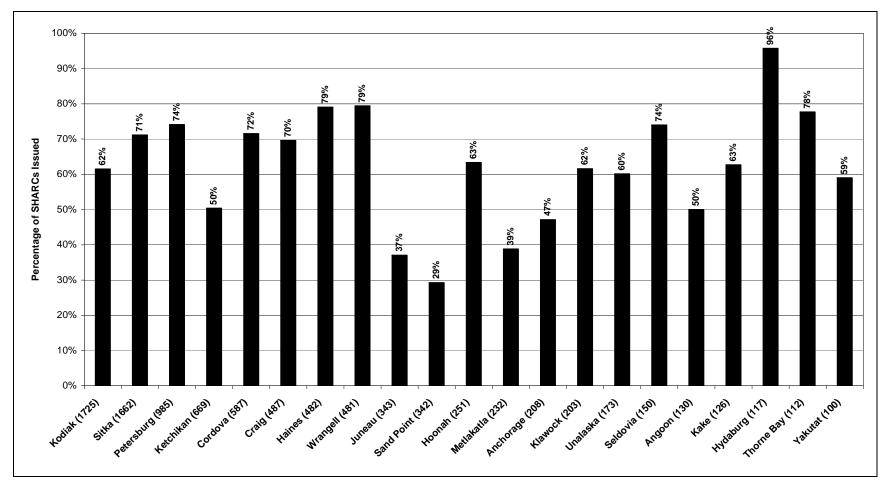


Figure 4.–Return rate by place of residence, 2008.

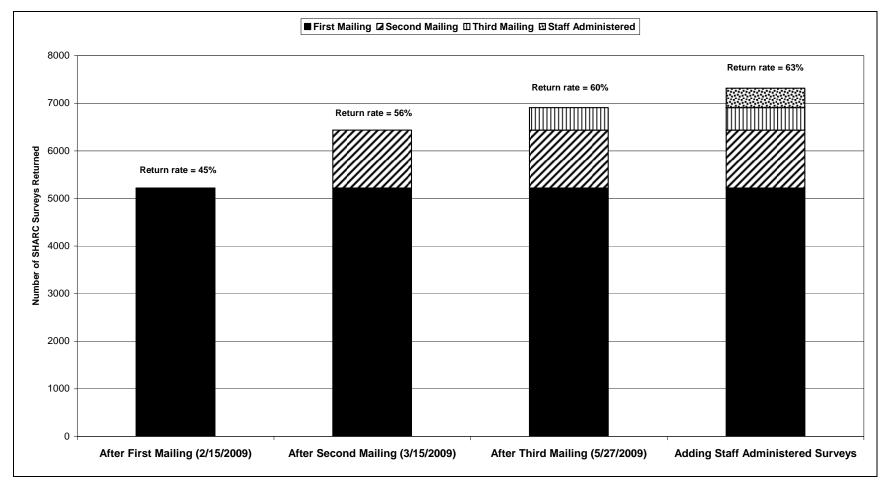


Figure 5.-Number of survey responses, by response category, 2008.

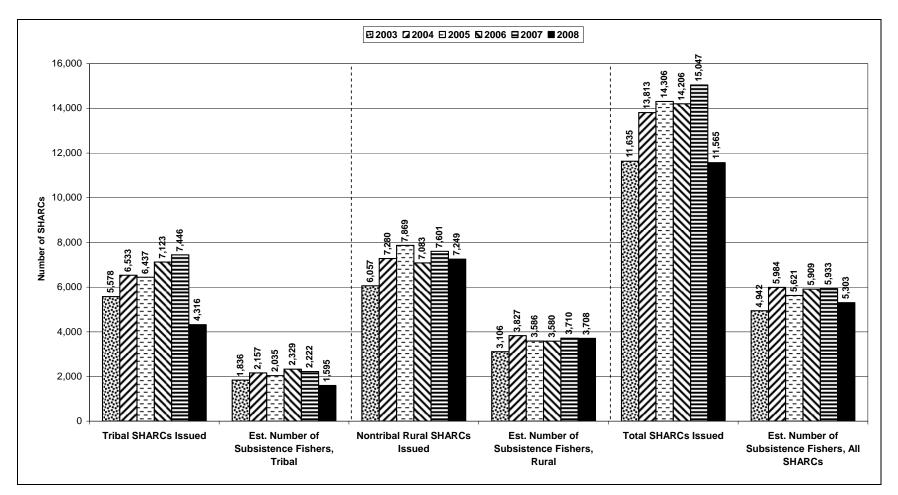


Figure 6.-Number of SHARCs issued and estimated number of subsistence halibut fishers, by SHARC type, 2003–2008.

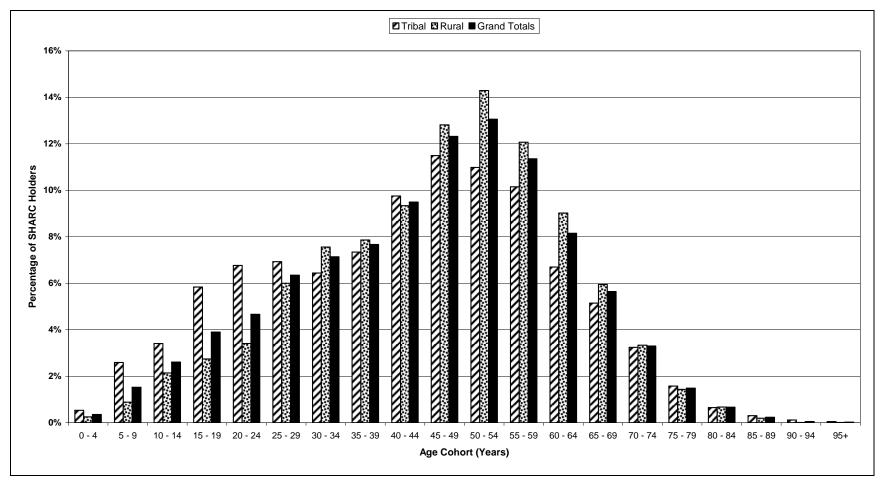


Figure 7.-Age of SHARC holders, by SHARC type, 2008.

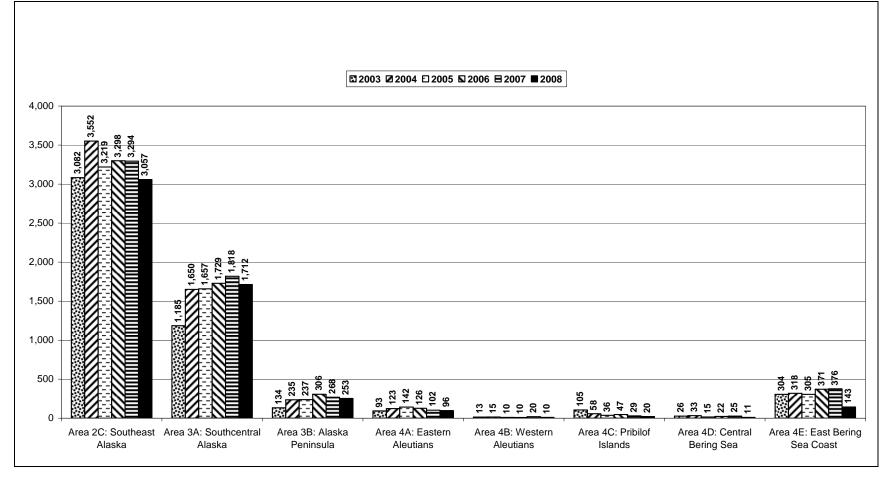


Figure 8.-Estimated number of Alaska subsistence halibut fishers, by regulatory area of tribe or rural community, 2003–2008.

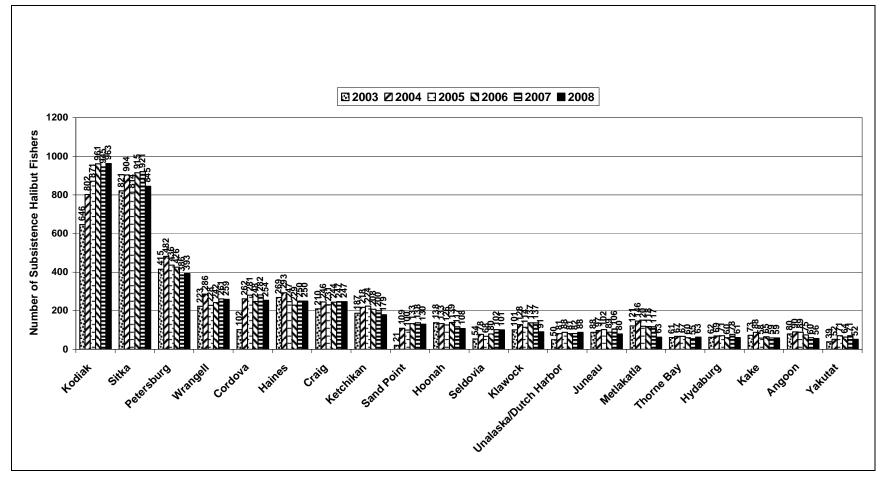


Figure 9.-Estimated number of subsistence halibut fishers, by place of residence, 2003–2008, communities with 50 or more fishers in 2008.

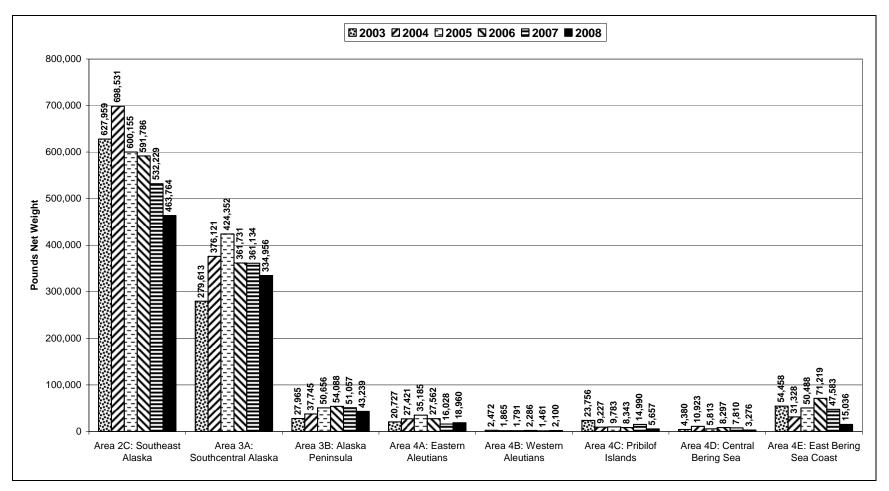


Figure 10.-Estimated subsistence halibut harvests, pounds net weight, by regulatory area of tribe and rural community, 2003–2008.

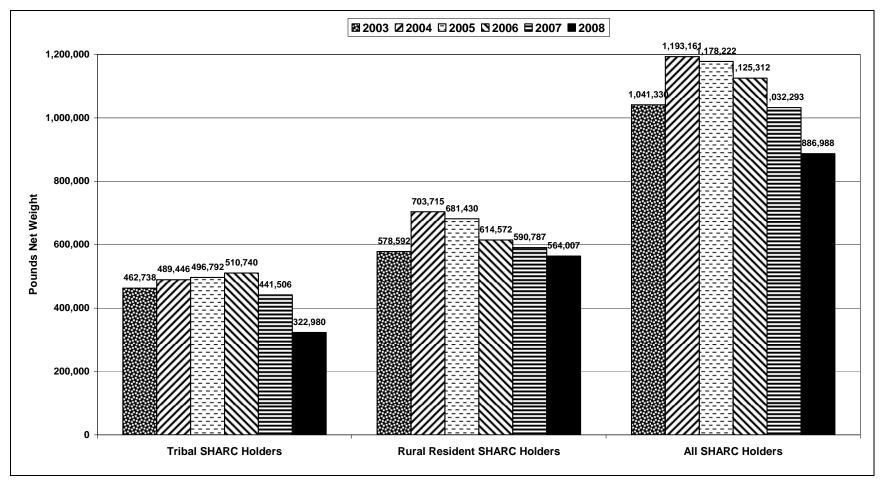


Figure 11.-Estimated Alaska subsistence halibut harvests, pounds net weight, by SHARC type, 2003-2008.

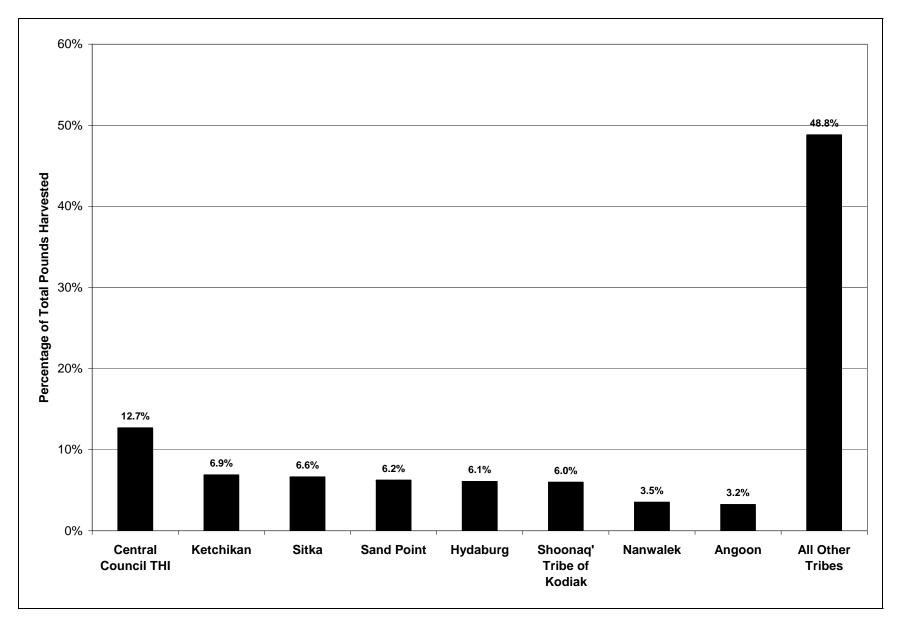


Figure 12.–Percentage of tribal subsistence halibut harvest, by tribe, 2008.

85

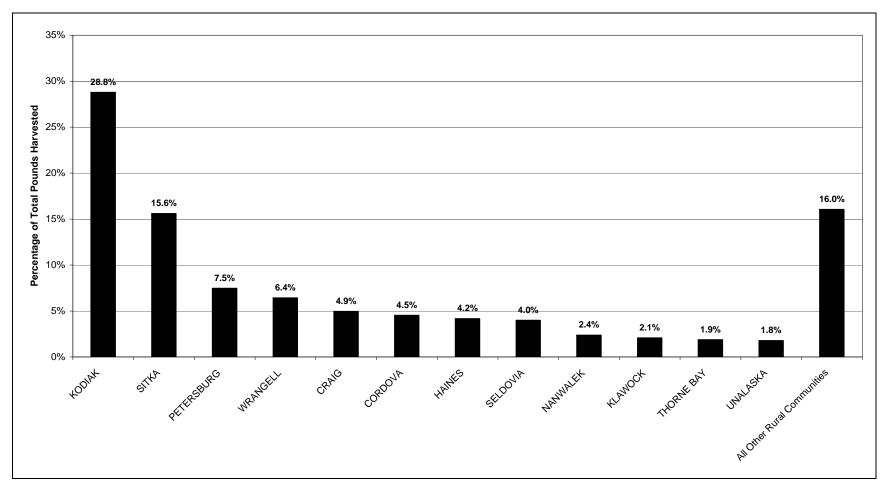


Figure 13.-Percentage of rural community subsistence halibut harvest, by community, 2008.

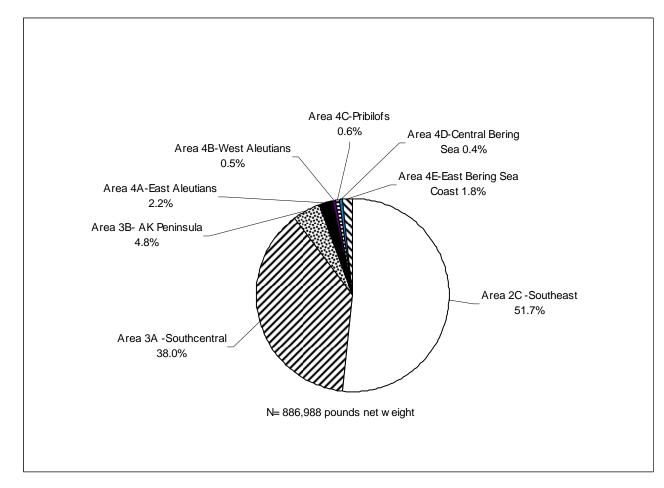


Figure 14.–Percentage of subsistence halibut harvest, by regulatory area fished, 2008.

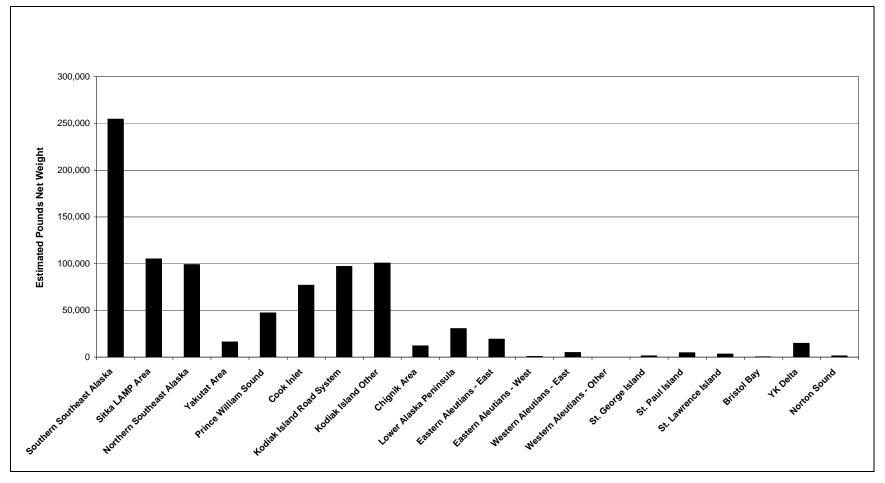


Figure 15.–Alaska subsistence halibut harvests, by geographic area, 2008.

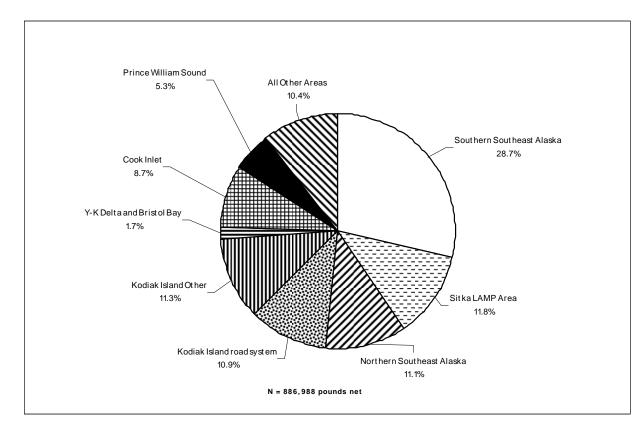


Figure 16.–Percentage of Alaska subsistence halibut harvest, by geographic area, 2008.

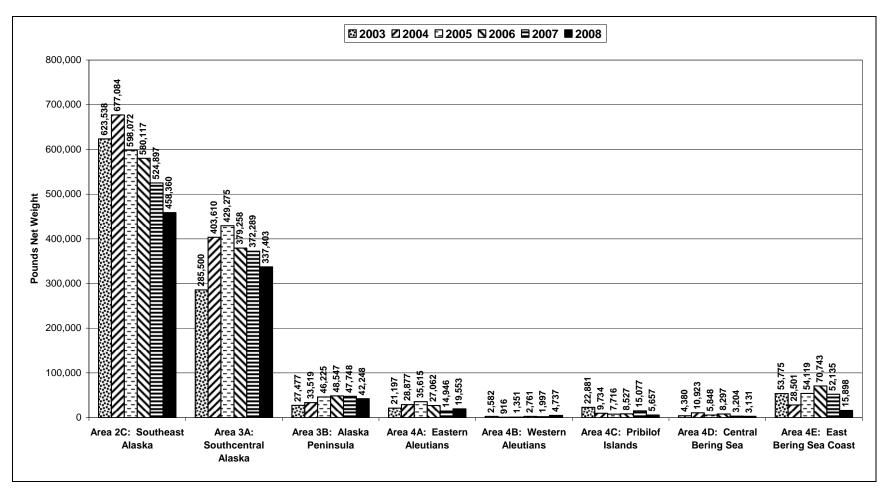


Figure 17.–Estimated subsistence halibut harvests, pounds net weight, by regulatory area fished, 2003–2008.

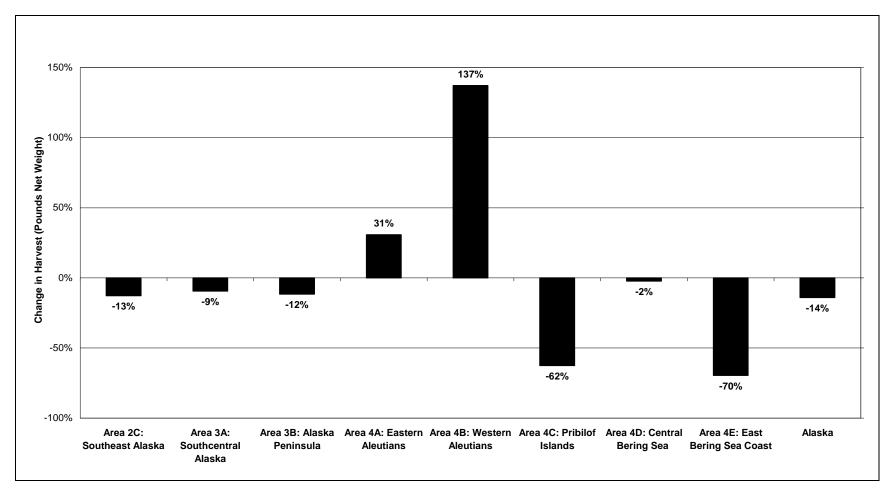


Figure 18.–Change in Alaska subsistence halibut harvests from 2007 to 2008, by regulatory area fished.

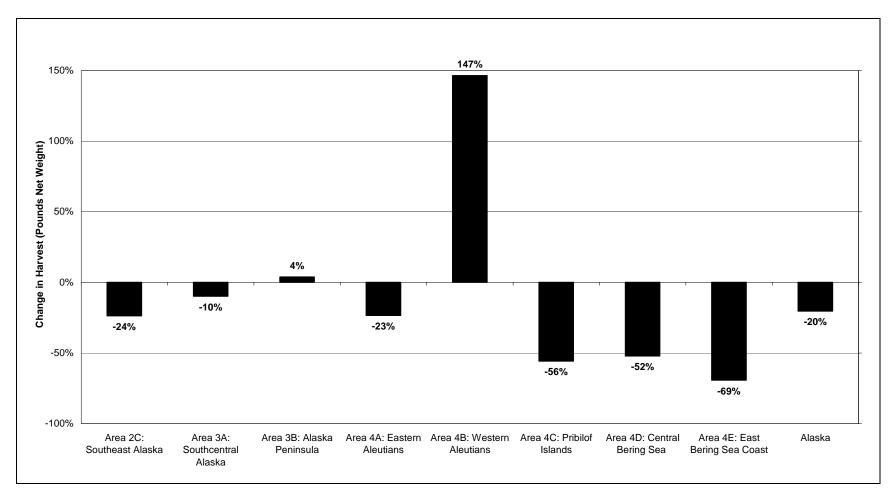


Figure 19.-Change in Alaska subsistence halibut harvests in 2008 compared to recent 5-year average (2003–2007), by regulatory area fished.

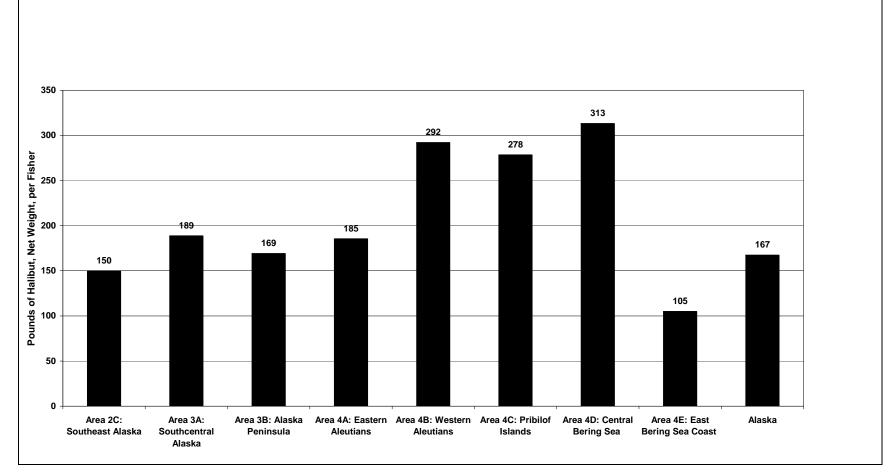


Figure 20.-Average subsistence harvest of halibut per fisher in Alaska, pounds net weight, by regulatory area, 2008.

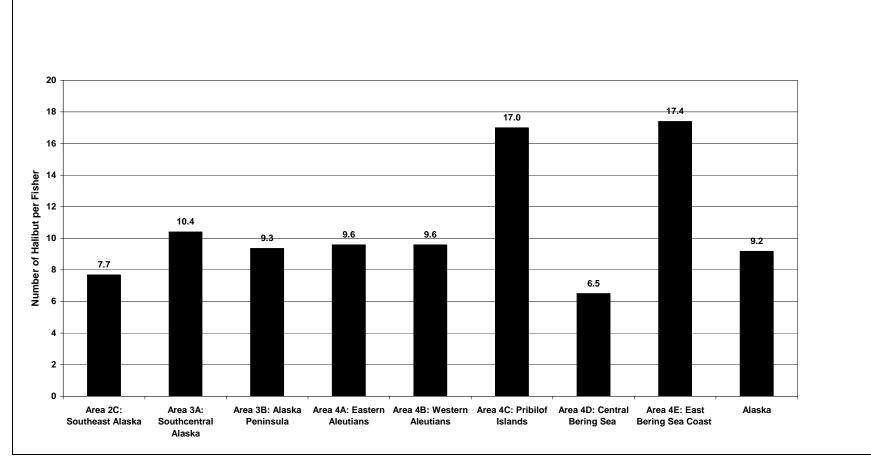


Figure 21.-Average subsistence harvest of halibut per fisher in Alaska, numbers of fish, by regulatory area, 2008.

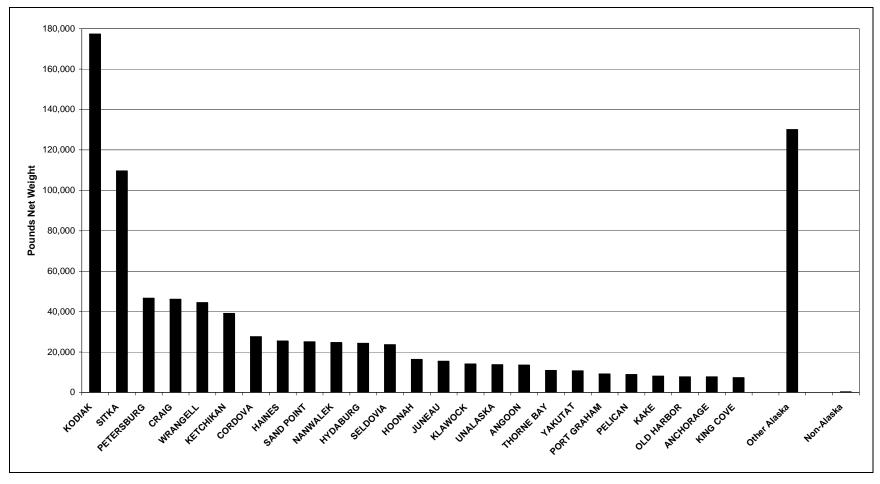


Figure 22.-Alaska subsistence halibut harvests, by place of residence, 2008.

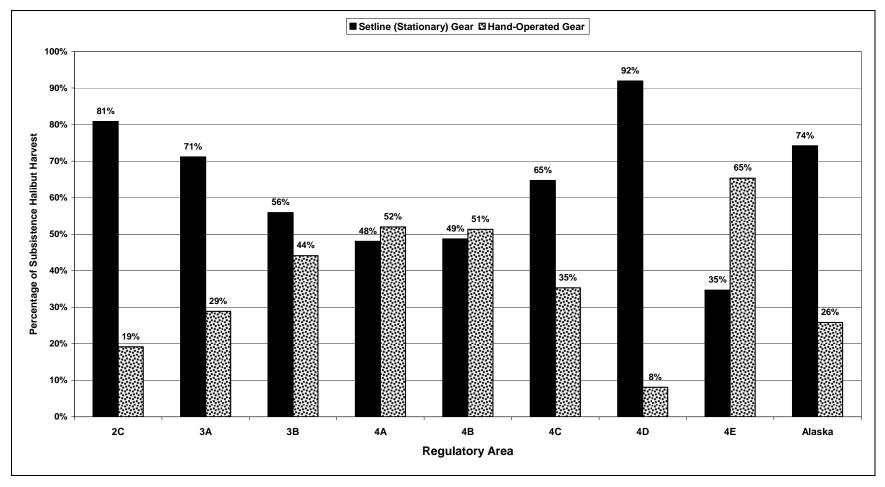


Figure 23.–Percentage of subsistence halibut harvest, by gear type, by regulatory area, 2008.

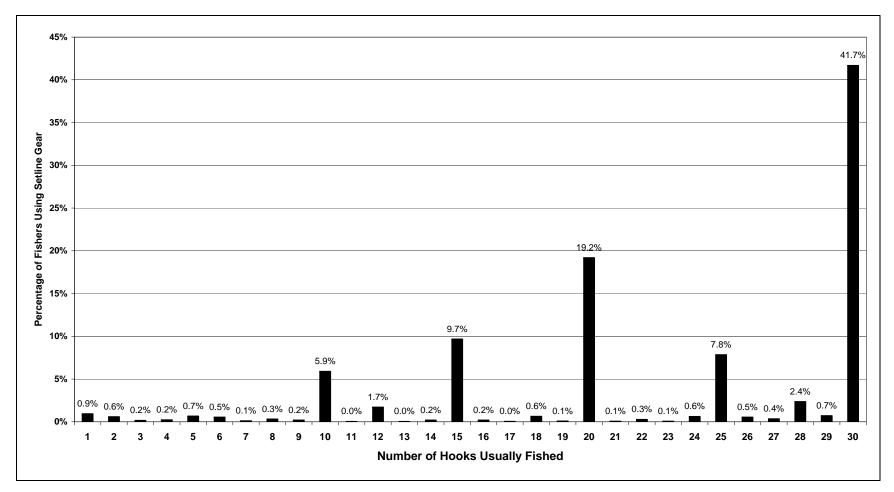


Figure 24.–Number of hooks usually fished, percentage of fishers using setline (stationary) gear, Alaska subsistence halibut fishery, 2008.

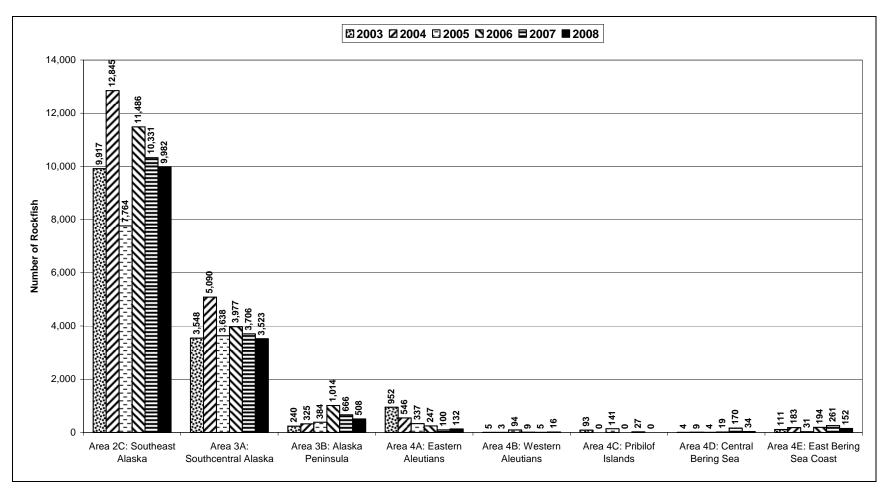


Figure 25.–Estimated incidental harvests of rockfish in the Alaska subsistence halibut fishery, numbers of fish, by regulatory area fished, 2003–2008.

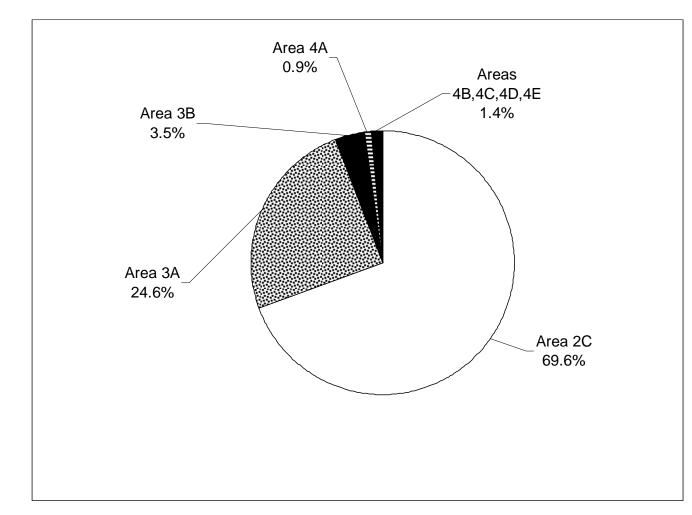


Figure 26.–Percentage of incidental harvest of rockfish, by regulatory area fished, 2008.

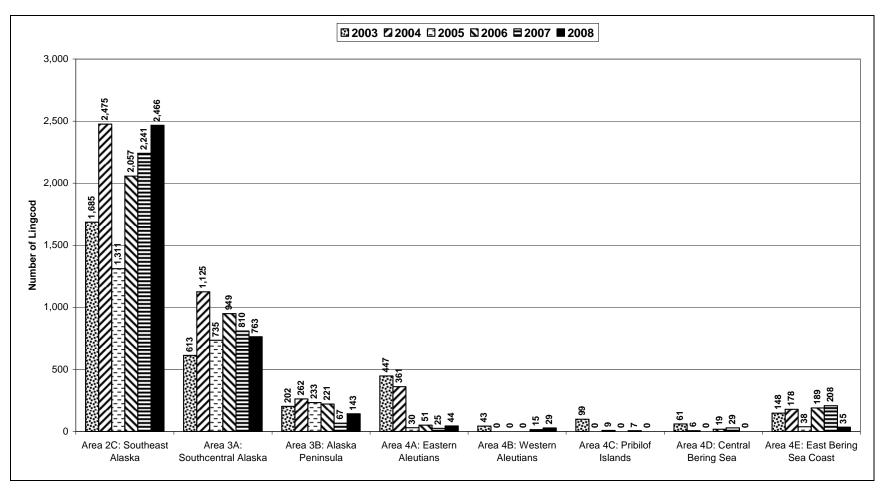


Figure 27.–Estimated incidental harvest of lingcod in the Alaska subsistence halibut fishery, numbers of fish, by regulatory area fished, 2003–2008.

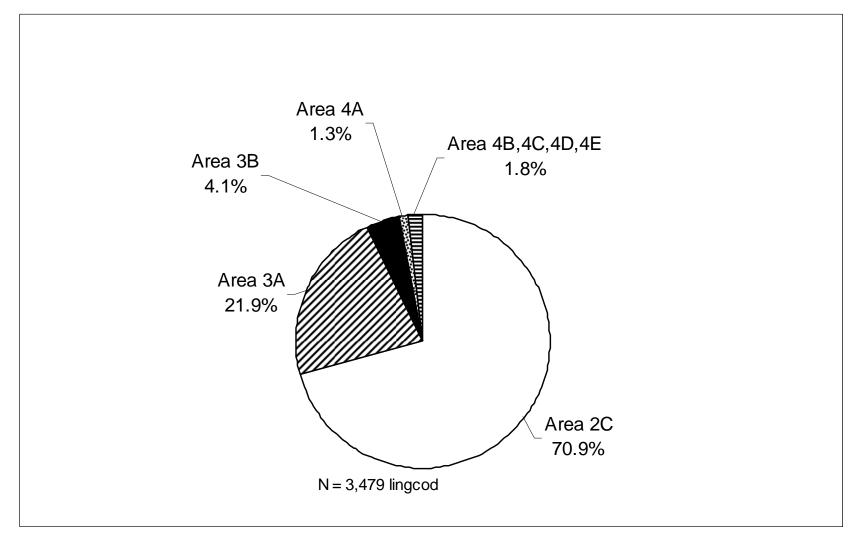


Figure 28.–Percentage of incidental harvest of lingcod, by regulatory area, 2008.

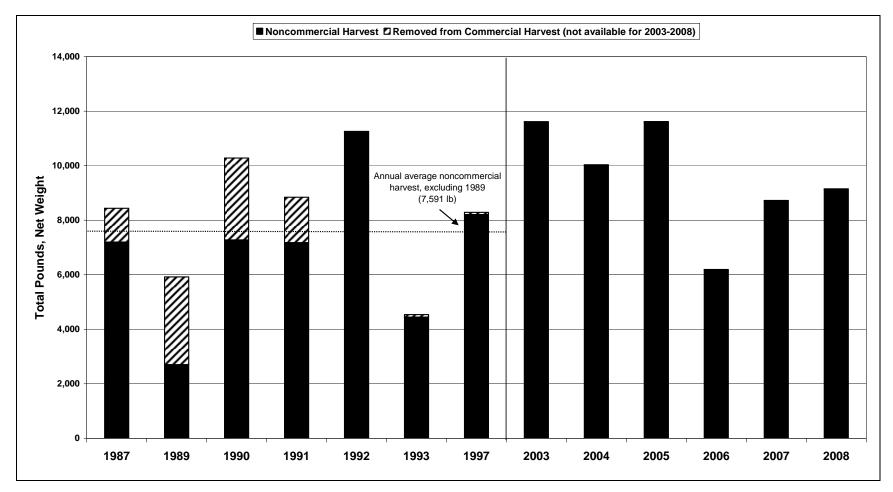


Figure 29.-Estimated harvests of halibut for home use, Port Graham.

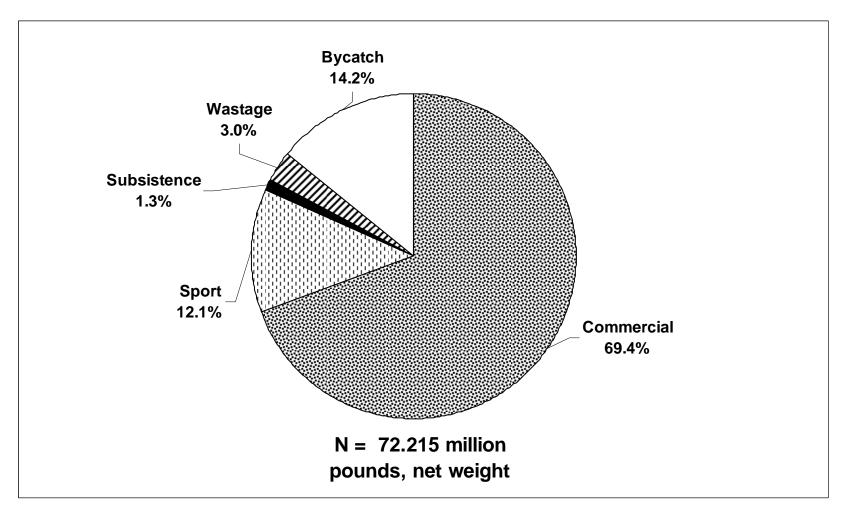


Figure 30.-Halibut removals, Alaska, 2008.

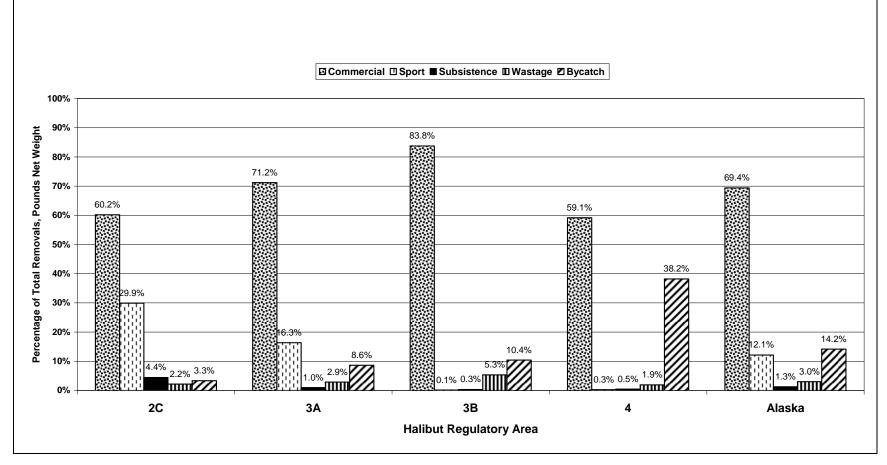


Figure 31.–Halibut removals in Alaska, by regulatory area and removal category, 2008.

APPENDIX A: LIST OF ELIGIBLE TRIBES AND RURAL COMMUNITIES (FROM FEDERAL REGISTER)

Note: Naukati was added as an eligible rural community in September 2008 [Federal Register/Vol 73, no. 186/Wednesday, September 24, 2008/Rules and Regulations].

Federal Register/Vol. 68, No. 72/Tuesday, April 15, 2003/Rules and Regulations 18157

Chichagof Island at 57°22'03' N. lat., 135°43'00' W. long., and (B) A line from Chichagof Island at 57°22'35' N. lat., 135°41'18' W. long. to Barano Island at 57°22'18' N. lat., 135°40'57' W. lat., and (C) That is enclosed on the south and west by a line from Sitka Point at 55°53'23' N. lat., 135°40'34' W. long., to Hanus Point at 56°51'55' N. lat., 135°30'30' W. long., (D) To the green day marker in Dorothy Narrows at 56°40'27' N. lat., 135°240'7' N. lat., 135°24'26' W. long., (2) A person using a vessel greater than 35 ft 10.7 m li no versal length, as defined at 50 CFR 300.61, is prohibited from fishing for IFQ halibut with selline goar, as defined at 50 CFR 300.61, within Sitka Sound as defined in paragraph (d)(110) of this section. (3) A person using a vessel less than or equal to 35 ft (10.7 m) in overall length, as defined at 50 CFR 300.61, within Sitka Sound as defined in paragraph (d)(110) of this section. (1) Is prohibited from fishing for IFQ halibut with selline gear within Sitka Sound, as defined at 50 CFR 300.61; (1) Is prohibited from fishing for IFQ halibut with as the gear within Sitka Sound, as defined at 50 CFR 300.61; (1) Is prohibited from fishing for IFQ halibut with as linka Sound, as defined in paragraph (d)(10)) of this section, from June 1 through August 31; and (11) Is prohibited from fishing for IFQ halibut within Sitka Sound, as defined in paragraph (d)(10)) of this section, from June 1 through August 31; and (1) No thater vessel, as defined at 50 CFR 300.61, shall engage in sport fishing, as defined the section, as defined in paragraph (d)(10) of this section, from June 1 through August 31. (1) No thater vessel, as defined in 50 CFR 300.61, shall engage in sport fishing, as defined in sport fishing, as defined the section, has defined in (d)(10) of this section, may be retained oubcard a charter vessel engaged in sport fishing, as defined in section, from June 1 through August 31. (1) No thristen Sound, as defined in paragraph (d)(10) of this section, from june 1 through August 31.

56°55.5°N lat. 135°57.0°W long. (2) No person shall engage in commercial, sport or subsistence fishing as defined at \$300.61, for halibut within the Sitka Pinnacles Marine Reserve. (3) No person shall anchor a vessel within the Sitka Pinnacles Marine Reserve if halibut is on board. (1) Subsistence fishing in and off Alaska. No person shall engage in subsistence fishing for halibut unless that person meets the requirements in perseraphs (f(1) or (f(2) of this section. (1) A person is aligible to harvest subsistence halibut if he or she is a rural resident of a community with customary and traditional uses of halibut listed in the following table:

HALIBUT REGULATORY AREA 2C

Cordova

Rural Community Organized Entity Karluk Census Designated Place Place Municipality Municipality Census Designated Place Municipality Municipality Census Designated Kodiak City Larsen Bay Old Herbor Ouzinkie Port Graham Place Municipality Municipality Census Design Place Port Lions Seldovia Tatitlek nated Municipality Yakutat

HALIBUT REGULATORY AREA 3A-Continued

HALIBUT REGULATORY AREA 3B

Organized Entity Municipality Census Designated Place Census Designated Place

Place Municipality Municipality Census Designated Place Municipality Census Designated Dinas

Rural Community	Organized Entity	Rural Community
Angoon	Municipality	Chignik Bay
Coffman Cove	Municipality	Chignik Lagoon
Craig	Municipality	ang na 209000 militin
Edna Bay	Census Designated Place	Chignik Lake
Elfin Cove	Census Designated Place	Cold Bay False Pass
Gustavus	Census Designated Place	Ivanof Bay
Haines	Municipality	King Caus
Hollis	Census Designated Place	King Cove
Hoonah Hydaburg	Municipality Municipality	Perryville
Hyder	Census Designated	Sand Point
	Place	Sand Point
Kake	Municipality	
Kasaan	Municipality	HALIBUT REGU
Klawock	Municipality	
Klukwan	Census Designated Place	Rural Community
Metlakatla	Census Designated	Akutan
	Place	Nikolski
Meyers Chuck	Census Designated Place	Unalaska
Pelican	Municipality	
Petersburg	Municipality	
Point Baker	Census Designated Place	HALIBUT REGU
Port Alexander	Municipality	Rural Community
Port Protection	Census Designated Place	Adak
Saxman	Municipality	Adak
Silka	Municipality	Atka
Skagway	Municipality	Auka
Tenakee Springs	Municipality	
Thome Bay	Municipality	HALIBUT REGUL
Whale Pass	Census Designated	TALLOUT TALLOUT
windle Pass	Place	Rural Community
Wrangell	Municipality	- cardi domininity
	ATORY AREA 3A	St. George St. Paul

Rural Community Organized Entity Municipality Census Designated Place Municipality Akhiok Chenega Bay Gambell ... Savoonga

the ben Eugeen manne	Place
Perryville	Census Designated
Sand Point	Place Municipality
Sang Polit	municipanty
HALIBUT REGUL	ATORY AREA 4A
Rural Community	Organized Entity
Akutan	
Nikolski	Census Designated Place
Unalaska	Municipality
HALIBUT REGU	ATORY AREA 4B
Rural Community	Organized Entity
Rural Community Adak	

Organized Entity Municipality Municipality HALIBUT REGULATORY AREA 4D

Rural Community Organized Entity

Municipality Municipality

106

18158 Federal Register / Vol. 68, No. 72 / Tuesday, April 15, 2003 / Rules and Regulations

HALIBUT REGULAT Contin		HALIBUT REGULA Conti		HALIBUT REGULAT	
Rural Community	Organized Entity	Rural Community	Organized Entity	Place with Tribal Headquarters	Organized Tribal Entity
Diomede (Inalik)	Municipality	Twin Hills	Census Designated Place	Cordova	Native Village of
HALIBUT REGULA	TORY AREA 4E	Ugashik	Census Designated Place Municipality	Karluk	Eyak Native Village of Karluk
Rural Community	Organized Entity	Wales	Municipality Municipality	Kenal-Soldotna	
Alakanuk	Municipality				Village of
Aleknegik	Municipality	(2) A person is elig			Salamatoff
Bethel	Municipality	subsistence halibut i		Kodiak City	Lesnol Village
Brevig Mission	Municipality	member of an Alaska	Native tribe with		(Woody Island)
Chefomak	Municipality	customary and tradit	ional uses of		Native Village of
Chevak	Municipality	halibut listed in the			Afognak
Clark's Point	Municipality	and the second site and s	0		Shoonaq' Tribe of
Council	Census Designated	HALIBUT REGUL	TORY AREA 2C		Kodiak
Dillochom	Place Municipality			Larsen Bay	Native Village of
Dillingham	Municipality	Place with Tribal	Organized Tribal		Larsen Bay
Eek		Headquarters	Entity	Nanwalek	Native Village of
Egegik	Municipality				Nanwalek
Elim	Municipality	Angoon	Angoon Community	Ninilchik	Ninilchik Village
Emmonak	Municipality Municipality	-	Association	Old Harbor	Village of Old Har-
Golovin		Craig	Craig Community		bor
Goodnews Bay	Municipality		Association	Ouzinkie	Native Village of
Hooper Bay	Municipality Census Designated	Haines	Chilkoot Indian As-		Ouzinkie
King Salmon	Place	Hoonah	sociation	Port Graham	Native Village of
Kipnuk	Census Designated Place		sociation	Port Lions	Port Graham Native Village of
Kongiganak	Census Designated	Hydaburg	Hydaburg Coopera- tive Association		Port Lions
Kotlik	Place Municipality	Juneau	Aukquan Traditional	Seldovia	Seldovia Village Tribe
Koyuk	Municipality		Council	Tatitlek	Native Village of
Kwigillingok	Census Designated		Central Council Tlingit and Haida		Tatitlek
Levelock	Place Census Designated Place		Indian Tribes Douglas Indian As-	Yakutat	Yakutat Tlingit Trib
Manokotak	Municipality		sociation	HALIBUT REGULA	TORY AREA 2R
Mekoryak	Municipality	Kake		TALIBUT ILCOULA	IONT AND 3D
Naknek	Census Designated		Kake	Dises with Tab.	Our start Tr
	Place	Kasaan	Kasaan	Place with Tribal Headquarters	Organized Triba Entity
Napakiak	Municipality	Ketchikan		Chienily Day	Mathie Million
Napaskiak Newtok	Municipality Census Designated	Klawock	Corporation Klawock Coopera-	Chignik Bay	Native Village of Chignik
	Place		tive Association	Chignik Lagoon	Native Village of
Nightmute	Municipality Municipality	Klukwan		Oblastik Labo	Chignik Lagoon
Nome	Census Designated		lage	Chignik Lake	Chignik Lake Villa
	Place	Metlakatia	Metlakatla Indian	False Pass	Native Village of
Pilot Point	Municipality		Community, An- nette Island Re-		False Pass
Platinum	Municipality		serve	Ivanof Bay	
Port Heiden	Municipality	Petersburg		King Cove	
Quinhagak	Municipality		Association		King Cove Native Village of
Scammon Bay	Municipality	Saxman			Belkofski
Shaktoolik	Municipality		Saxman	Nalson Lagoon	
Sheldon Point (Nunam Igua).	Municipality	Sitka	Sitka Tribe of Alas-	Nelson Lagoon	Nelson Lagoon
Shishmaref	Municipality	Chamilton	ka Skagway Village	Perryville	Native Village of
Solomon	Census Designated	Skagway Wrangelit	Wrangell Coopera-		Perryville
	Place		tive Association	Sand Point	Pauloff Harbor Village
South Naknek	Census Designated Place				Native Village of
St. Michael	Municipality	HALIBUT REGUL	ATORY AREA 3A		Unga Ordan Towagungi
Stebbins	Municipality				Qagan Toyagungi Tribe of Sand
Felier Togiak	Municipality Municipality	Place with Tribal Headquarters	Organized Tribal Entity		Point Village
Foksook Bay	Municipality				
Funtutuliak	Census Designated Place	Akhiok	Native Village of Akhiok		

Federal Register/Vol. 68, No. 72/Tuesday, April 15, 2003/Rules and Regulations 18159

HALIBUT REGULA		HALIBUT REGULAT Contin		HALIBUT REGULAT	
Place with Tribal Headquarters	Organized Tribal Entity	Place with Tribal Headquarters	Organized Tribal Entity	Place with Tribal Headquarters	Organized Triba
Akutan	Native Village of Akutan	Elm	Native Village of	Stebbins	Stebbins Commu-
Nikolski	Native Village of		Elim		nity Association
Unalaska	Nikolski Qawalingin Tribe of Unalaska	Emmonak	Chulconawick Na- tive Village Emmonak Village	Teller	Native Village of Mary's Igloo Native Village of
HALIBUT REGULA	TORY AREA 4B	Golovin	Chinik Eskimo Com- munity Native Village of	Togiak	Teller Traditional Village Togiak
Place with Tribal Headquarters	Organized Tribal Entity	Hooper Bay	Goodnews Bay Native Village of Hooper Bay	Toksook Bay	Native Village of Toksook Bay Native Village of
Aller	Native Village of		Native Village of		Tuntutuliak
Atka	Atka	King Salmon	Paimlut King Salmon Tribal Council	Tununak	Native Village of Tununak
HALIBUT REGULA	TORY AREA 4C	Kipnuk	Native Village of Kipnuk	Twin Hills Ugashik Unalakleet	Twin Hills Village Ugashik Village Native Village of
Place with Tribal	Organized Tribal	Kongiganak	Native Village of		Unalakleet
Headquarters	Entity	Kotlik	Kongiganak Native Village of	Wales	Native Village of Wales
St. George	Pribilof Islands Aleut		Hamilton Village of Bill Moore's Slough	White Mountain	Native Village of White Mountain
St. Paul	Communities of St. Paul Island		Village of Kotlik	(a) Limitations on a	ubaiatanaa fiahin
	and St. George Island	Koyuk	Native Village of Koyuk	(g) Limitations on s Subsistence fishing for	or halibut may be
	isiand	Kwigillingok	Native Village of Kwigillingok	conducted only by pe for such fishing pursu	rsons who qualif ant to paragraph
HALIBUT REGULA	TORY AREA 4D	Levelock Manokotak	Levelock Village Manokotak Village	(f) of this section and subsistence halibut re	who hold a valid
Place with Tribal	Organized Tribal	Mekoryak	Native Village of	certificate in that pers	
Headquarters	Entity	Naknek	Mekoryak Naknek Native Vil-	by NMFS pursuant to	paragraph (h) of
Gambell	Native Village of Gambell	Napakiak	lage Native Village of	this section, provided is consistent with the	that such fishing following
Savoonga	Native Village of		Napakiak	limitations.	
Diomede (Inalik)	Savoonga Native Village of	Napaskiak	Native Village of Napaskiak	 Subsistence fish setline gear and hand 	
Diotheod (menty minin	Diomede (Inalik)	Newtok Nightmute	Newtok Village Native Village of	including longline, ha	andline, rod and
HALIBUT REGULA	TORY AREA 4E	Nghanata	Nightmute Umkumiute Native	reel, spear, jig and ha (i) Subsistence fish have more than 30 ho	ing gear must not
Place with Tribal Headquarters	Organized Tribal Entity	Nome	Village King Island Native Community	registered in accordar (h) of this section and	nce with paragrag
			Nome Eskimo Com-	vessel from which ge	ar is being set or
Alakanuk Aleknagik	Village of Alakanuk Native Village of Aleknagik	Oscarville	munity Oscarville Tradi-	retrieved. (ii) All setline gear	
Bethel	Orutsararmuit Na-	Pilot Point	tional Village Native Village of	carried on board or us regulated under this s	sed by any vessel
Brevig Mission	Brevig Mission	Platinum	Pilot Point Platinum Traditional Village	marked with the follo last name, and address	wing: first initial
Chefornak	Village of Chefornak	Port Heiden	Native Village of	state), followed by the	
Chevak	Chevak Native Vil-		Port Heiden	indicate that it is used	to harvest
Clark's Point	lage Village of Clark's Point	Quinhagak	Native Village of Kwinhagak	subsistence halibut. (iii) Markings on se	tline marker buo
Council	Native Village of	Scammon Bay	Native Village of Scammon Bay	shall be in characters	at least 4 inches
Dillingham	Council Native Village of	Shaktoolik	Native Village of Shaktoolik	(10.16 cm) in height a cm) in width in a con	trasting color
	Dillingham Native Village of	Sheldon Point (Nuna Iqua).	Native Village of Sheldon's Point	visible above the wate maintained so the ma	er line and shall l
	Ekuk Native Village of	Shishmaref	Native Village of	visible.	go are steart
	Kanakanak	Solomon	Shishmaref Village of Solomon	(2) The daily retent	ion of subsistence
Eek	Native Village of Eek	South Naknek	South Naknek Vil- lage	halibut in rural areas more than 20 fish per	is limited to no
Egegik	Egegik Village Village of Kanatak	St. Michael	Native Village of	conduct subsistence f	ishing for halibu

108

APPENDIX B: LETTER SENT TO TRIBES ABOUT THE PROJECT

STATE OF ALASKA

DEPARTMENT OF FISH AND GAME

DIVISION OF SUBSISTENCE

000 Brenchermer Brend

SARAH PALIN, GOVERNOR

333 Raspberry Road ANCHORAGE, AK 99518-1599 PHONE: (907) 267-2353 FAX: (907) 267-2450

January 21, 2009

TO:

SUBJECT: Subsistence Halibut Fishing Report and Harvest Survey

In December 2007, we informed you about the fifth year of the project conducted by the Division of Subsistence of ADF&G to estimate the subsistence harvests of halibut in Alaska. As part of a contract with the National Marine Fisheries Service (NMFS), in early 2008 we mailed a short (one-page) questionnaire to every person who obtained a subsistence halibut registration certificate (called a "SHARC") from NMFS. Through the survey, we collected information about participation in the fishery and the number of halibut, rockfish, and lingcod harvested for subsistence use in 2007. Participation in the survey was voluntary. Of the 15,047 SHARC holders, 8,682 (58%) completed the survey – an excellent response.

We have completed the final report for the project as part of our Technical Paper Series (No. 342). A copy is enclosed. Also enclosed are copies of a short overview of the study findings. You can also obtain the overview and the complete report through the Division of Subsistence website at <u>www.subsistence.adfg.state.ak.us</u>. Please contact us if you have questions.

We also wanted to let you know that we will be doing the survey again beginning in late January 2009, to collect information about subsistence halibut harvests in 2008. Again, we'll be mailing a short questionnaire to every SHARC holder, and asking them to voluntarily fill it out and send it back to us (we pay the postage). We will again compile the harvest information in a report to NMFS that will be available to tribes and to the public in late 2009. In our view, collecting and reporting accurate information about subsistence halibut harvests is important in supporting this fishery.

In addition to mailing out the survey forms, Division of Subsistence staff plan to visit some communities in 2009 to provide information about the subsistence halibut fishery program, and to encourage subsistence fishers to obtain registration cards (SHARCs) and return the surveys. We will of course coordinate these visits with tribal governments. We

will also coordinate collection of subsistence halibut harvest information with other subsistence projects taking place in some communities, such as the collection of harbor seal and sea lion harvest data in communities of southeast, southcentral, and southwest Alaska.

As we noted, an important feature of the subsistence halibut regulations is that eligible people who want to subsistence fish need to obtain a subsistence halibut registration certificate (called a "SHARC" for short). Applications are available from NMFS at the address below. People can also submit applications on the Internet by logging on to: www.fakr.noaa.gov/ram and following the links to the subsistence halibut program. We encourage you to get the word out about this program to your tribal members who subsistence fish for halibut. More information about the subsistence halibut fishing program is available from NMFS as follows:

On the Internet:	www.fakr.noaa.gov/ram/subsistence/halibut.htm
By e-mail:	RAM.Alaska@noaa.gov
By phone:	800-304-4846 (option #2)
By mail:	Alaska Region, National Marine Fisheries Service
	Restricted Access Management (RAM) Program
	PO Box 21668
	Juneau, AK 99802

We will develop public notices about our subsistence halibut harvest survey within the next month or so, and will be contacting tribes in communities that we would like to visit. Again, the survey form itself will be mailed in late January. In the meantime, if you have questions about our project, please contact me (see below), or contact Jim Simon in our Fairbanks office (907-459-7317; james.simon@alaska.gov) or Mike Turek in our Juneau office (907-465-3617; mike.turek@alaska.gov).

Sincerely,

James Fall Statewide Program Manager 907-267-2359 jim.fall@alaska.gov

Enclosures: "Subsistence Harvests of Pacific Halibut in Alaska, 2007"; Technical Paper 342.

cc: Jim Simon, Mike Turek, Dave Koster, Craig Fleener

APPENDIX C: NEWSPAPER NOTICE

Notice to Subsistence halibut fishers

regarding mail-out harvest survey that arrived around March 6, 2009

Around March 6, 2009, all holders of Subsistence Halibut Registration Certificates (SHARCs) received a 1-page harvest survey in the mail from the Alaska Department of Fish and Game Division of Subsistence. A second mailing to non-respondents will occur around April 1, 2009.

You were asked whether you subsistence fished for halibut in 2008, and how many halibut you harvested. Even if you did not fish, please complete the survey and return it to ADF&G.

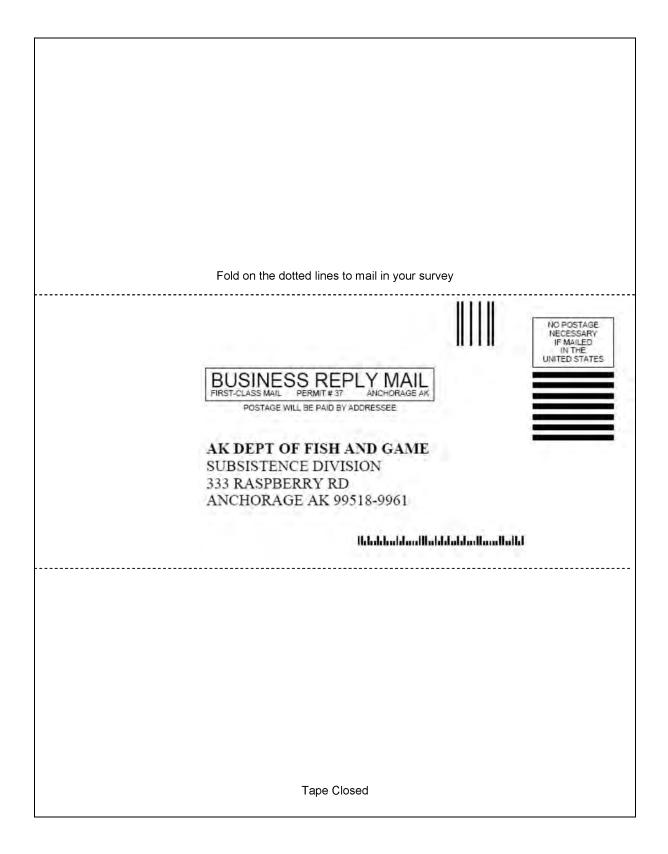
In April 2003, the National Marine Fisheries Service (NMFS) issued regulations allowing the harvest of halibut for subsistence purposes. Residents of 117 rural Alaska communities and 123 Alaska Native tribes with customary and traditional uses of halibut are eligible to participate after they obtain a SHARC from NMFS.

Accurate and complete subsistence harvest information is essential for proper management of the fishery and to ensure future subsistence fishing opportunities. Even if you did not fish, please complete the survey and return it to ADF&G.

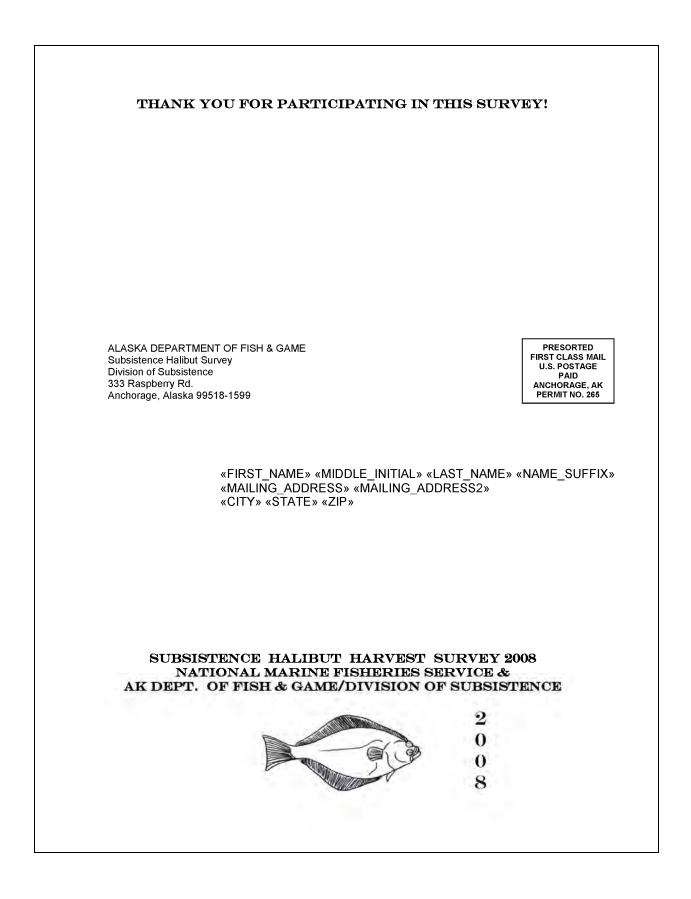
NORR
A A A A A A A A A A A A A A A A A A A
A.F.

Alaska Department of Fish and Game Division of Subsistence 333 Raspberry Road, Anchorage, AK, 99518 Phone: (907) 267-2353 Fax: (907) 267-2450	Thank you for
E-mail: dfg.sub.halibut@alaska.gov Internet: www.subsistence.adfg.state.ak.us	your support of this program!

APPENDIX D: SURVEY INSTRUMENT



HARVEST SURVEY 2008 National Marine Fisheries Service & AK Dept. Fish & Game/Division of Subsi	stence	
Please make address changes as needed)	sterioe	8
Fisher's Name		Date of Birth
First name M.L. Las	f name	Mo. Day Year
Mailing Address	, name	Wo. Day fear
, in the second s		
	City	State Zip code
Community of Residence	Daytime Telephone	SHARC Number
Tribe (if you are on a tribal role)		_
Please answer each question to the be	est of your knowledge	
1. Did you subsistence fish for halibut during 2008? (Pl	ease check one) 🔲 Yes	□ No
3. How many halibut did you harvest with hook-and-rod (Please write in both the number and pounds of halibut. Do not count 3a. Number of halibut 3b. Pounds of halibut	fish reported in Question 6. Pounds she	
4. How many lingcod and rockfish did you harvest while	subsistence halibut fishing duri	ng 2008?
(Please write in numbers of fish only.)	g	
4a. Number of lingcod 4b. Number of rockfish		
	eck one) 🗖 Yes	□ No
5. Did you sport fish for halibut during 2008? (Please ch		
5. Did you sport fish for halibut during 2008? (Please che 6. How many halibut did you harvest while sport fishing a (Please write in both the number and pounds of halibut. Do not count 6a. Number of halibut 6b. Pounds of halibut	fish reported in Question 3. Pounds she	ould be round (live) weight.) y, bay or sound usually sport fished
 How many halibut did you harvest while sport fishing of (Please write in both the number and pounds of halibut. Do not count 	fish reported in Question 3. Pounds sho 6c. Water bod	



APPENDIX E: SURVEY EXPLANATORY LETTER

INSTRUCTIONS FOR SUBSISTENCE HALIBUT HARVEST SURVEY, 2008

PLEASE COMPLETE AND RETURN THE SURVEY EVEN IF YOUR SHARC HAS EXPIRED

Question 1.

• Mark "yes" even if you fished but were unsuccessful

Questions 2 and 3.

- Include only those fish harvested by you, the individual fisher (SHARC holder). If you fished with someone else and split the catch, count only your share of the catch. Other household members who harvested halibut should fill out their own forms.
- Include fish that you harvested and kept for your household's use AND fish you harvested and gave away or traded. DO NOT include fish that you received from someone else.
- Identify both the number and pounds of halibut harvested; if you cannot provide both, please provide what you are able. Pounds should be **ROUND (LIVE) WEIGHT**. If you only know the dressed weight of your halibut harvest, record that number and make a note of "dressed, head on" (equals about 88% of round weight) or "dressed, head off" (equals about 75% of round weight).
- Number of hooks: write in the number that you use most often each time you set a line. That is, the number of hooks you usually have on your longline/skate.
- Water body, bay, or sound: record the general location where you did most of your subsistence halibut fishing (for example, "Chiniak Bay," "Sitka Sound"). If you used more than one general area for a significant portion of your catch, please provide the portion of your harvest from each.

Question 4.

- DO NOT include all the lingcod and rockfish you harvested, <u>but just those you harvested</u> <u>while subsistence halibut fishing.</u>
- "Rockfish" means all fish of the genus *Sebastes*. These include fish with common English names such as red snapper, black bass, and sea bass.
- "Rockfish" DO NOT include sculpin, greenling, sablefish (black cod), tomcod, or Pacific cod. Please DO NOT include these other fish in your harvest estimates for rockfish.

Questions 5 and 6.

• Sport fishing for halibut requires an Alaska sport fishing license. Sport fishers for halibut must fish with a line attached to a rod or pole. There is a limit of two hooks. The daily bag limit is two halibut and the possession limit is four halibut.

Do you still have questions?

Call the National Marine Fisheries Service at: 1-800-304-4846 (option 2); Or visit <u>http://www.fakr.noaa.gov/ram/subsistence/halibut.htm;</u> Or call ADF&G Division of Subsistence at: 907-267-2353; Or contact the Division of Subsistence via e-mail at: dfg.sub.halibut@alaska.gov

APPENDIX F: SET OF FREQUENTLY-ASKED QUESTIONS AND RESPONSES

RAM: FAQ's for Subsistence Halibut Harvest Survey

The following is a list of standard responses that may be given to common questions regarding the Subsistence Halibut Harvest Survey. Any question that cannot be answered by the responses below or by other personnel in RAM division may be directed to ADF&G Division of Subsistence at the phone number(s) indicated at the bottom of the page.

- 1. I got my SHARC from NMFS. Why is this survey being done by ADF&G?
- NMFS contracted with ADF&G Division of Subsistence to conduct this survey because the Division of Subsistence has a lot of experience in collecting and analyzing subsistence harvest data. They have staff who are familiar with local communities and subsistence harvest patterns.
- 2. What happens to this information after I send it in?
- The survey responses are entered into a database by ADF&G. They will use the responses to
 estimate and report subsistence harvests at a community level. NMFS will receive a report
 from ADF&G with the survey results. The report will not include individual responses.
- 3. Why do you need my birth date?
- ADF&G needs birth date only to distinguish between individuals who may have the same name. For instance, there may be many John Smith's in area 2C. Providing birth date prevents ADF&G from counting the same person more than once or even counting multiple people as the same person. However, ADF&G is required to maintain birth date confidential under the Privacy Act.

4. I live in an isolated area near [insert]. What do I put down as my Community of Residence?

Your Community of Residence is defined as the geographical location of your home. If you
live in a remote location, you may list the community nearest your home. "Community of
residence" is not necessarily the same as where you receive your mail.

5. The survey asks me to put down Pounds of Halibut. Does this mean I should weigh all my halibut on a scale?

No. While an actual weight using a scale would be helpful to ADF&G, you only need to
estimate the total pounds of halibut you harvested. If you know how many halibut you
harvested, but have no idea how much they weighed, leave the "pounds" area blank. If you
know about how many pounds you harvested but have no idea how many fish you caught,
leave the "number" area blank. We will calculate the pounds or number based on standard
conversion factors. However, we prefer that you do your best to provide an estimate of both
numbers and pounds, because this information is lacking for the subsistence fishery.

6. Should I record the weight of my halibut before or after I process them?

 The survey asks for ROUND WEIGHT, which is the weight of the fish BEFORE it is gutted and beheaded. If you only know the approximate weight of the fish after you gutted them, write "dressed, head on" next to the weight (this equals about 88% of round/live weight). If you only know the approximate weight of the fish after you gutted and beheaded them, write "dressed, head off" next to the weight (this equals about 72% of round/live weight).

7. I fish near [insert]. What is the water body, bay, or sound?

• The water body, bay, or sound is the area in which you subsistence fished for halibut. For instance, a subsistence fisher from Sitka might put down that he subsistence fished for halibut in Sitka Sound or a subsistence fisher from Kodiak might put down that he subsistence fished for halibut in Chiniak Bay. However, a subsistence fisher from Akutan might put down that he subsistence fished for halibut in Unimak Pass, which is neither a bay nor sound but would be classified as a water body. Likewise, a subsistence fisher from St. Paul might put down that he subsistence fished for halibut in the Bering Sea, which is also a water body. However, the more specific the description, the more helpful it will be to ADF&G.

8. What is a lingcod?

 A lingcod is a relatively long fish that ranges from black, to grey, to greenish, to bluishpurple, usually with dark brown or copper blotches arranged in clusters, and has a large mouth with 18 large teeth. For a more accurate description and local or tribal names, you can refer to the sheet distributed by ADF&G in the original mailing that also contained your Subsistence Halibut Harvest Survey or visit the NMFS website http://www.afsc.noaa.gov/race/media/photo_gallery/fish_by_family.htm.

9, What is a rockfish?

 These fish are characterized by having bony plates or spines on the head and body and a large mouth. Some species are brightly colored, and many are difficult to distinguish from one another. They are also known as sea bass, black bass, and red snapper. For a more accurate description and local or tribal names, you can refer to the instruction sheet distributed by ADF&G in the original mailing that also contained your Subsistence Halibut Harvest Survey or visit the NMFS website

http://www.afsc.noaa.gov/race/media/photo_gallery/fish_by_family.htm.

10. What is "sport fishing"?

 Sport fishing is defined as all fishing other than commercial fishing, personal use fishing, and subsistence fishing. Typically, sport fishing is conducted with a rod and reel using no more than 2 hooks under ADF&G regulations.

11. Why do I need to report my sport-caught halibut on this subsistence harvest survey form (Question 6)?

The survey is designed to prevent double-counting of harvested halibut. If you fish for
halibut with a rod and reel and have a sport fishing license, you may include your harvests in
Question 2 if you consider your activity to be subsistence fishing, or under Question 6 if you
consider it sport fishing. DO NOT INCLUDE THE SAME FISH IN YOUR REPSONSES
TO QUESTIONS 2 AND 6. We will exclude responses to Question 6 from our estimate of
subsistence halibut harvests. Holders of sport fishing licenses may receive a survey from
ADF&G about their sport harvests. If you do, you should report the halibut you record in
Question 6 in that survey too, but do not include the halibut you record in Question 2.

All other inquiries regarding the survey should be directed to ADF&G Division of Subsistence at (907) 267-2353 (Anchorage) or 907-465-3617, or e-mail at subsistence halibut@fishgame.state.ak.us

APPENDIX G: APPENDIX TABLES

Appendix Table G-1.–Results from returned surveys, by eligible Alaska tribe, eligible Alaska rural community, and community of residence, 2008.

			D.		G 1 1 1	<i>с</i> . 1 . 1		stence	G	C 1 1	G . 1				D 161	
			Return ra	te	Subsister	nce fished	har	vest	Sport	fished	Sport h	arvest Pounds	Lingcod b	bycatch	Rockfish	bycatch
Eligible Alaska tribe ^a	Regulatory area	SHARCs issued	Surveys returned	Percentage returned	Number respondents	Percentage respondents			Number respondents	Percentage respondents			Number respondents	Number lingcod		Number rockfish
Angoon Community Association	2C	113	53	46.9%	22	41.5%	213	7,345	4	7.5%	7	151	0	0	5	35
Central Council Tlingit And Haida Indian Tribes	2C	507	237	46.7%	88	37.1%	931	28,407	53	22.4%	271	5,646	22	119	29	424
Chilkat Indian Village	2C	18	15	83.3%	6	40.0%	25	870	1	6.7%	4	175	0	0	0	0
Chilkoot Indian Association	2C	45	24	53.3%	6	25.0%	17	1,175	3	12.5%	1	100	0	0	0	0
Craig Community Association	2C	46	29	63.0%	15	51.7%	69	3,395	7	24.1%	9	325	5	13	6	55
Douglas Indian Association	2C	16	4	25.0%	1	25.0%	25	750	1	25.0%	10	300	0	0	0	0
Hoonah Indian Association	2C	135	77	57.0%	30	39.0%	235	6,857	12	15.6%	37	930	0	0	5	59
Hydaburg Cooperative Association	2C	116	104	89.7%	50	48.1%	435	25,873	11	10.6%	18	1,110	15	71	25	493
Ketchikan Indian Corporation	2C	585	281	48.0%	69	24.6%	772	18,001	49	17.4%	168	3,502	15	51	29	289
Klawock Cooperative Association	2C	73	39	53.4%	19	48.7%	118	3,790	4	10.3%	10	440	1	3	1	10
Metlakatla Indian Community, Annette Island Reserve	2C	205	77	37.6%	20	26.0%	88	1,712	6	7.8%	6	207	3	7	6	43

Appendix Tab							Subsi	stence								
			Return ra	te	Subsister	nce fished	har	vest	Sport	fished	Sport h		Lingcod b	ycatch	Rockfish l	bycatch
Eligible Alaska tribe ^a	Regulatory area	SHARCs issued	Surveys returned	0		Percentage respondents		Pounds halibut ^b	Number respondents	Percentage respondents		Pounds halibut	Number respondents	Number lingcod	Number respondents	Number rockfish
Organized Village Of Kake	2C	83	49	59.0%	17	34.7%	115	3,035	3	6.1%	1	60	2	10	3	25
Organized Village Of Kasaan	2C	15	11	73.3%	2	18.2%	37	970	1	9.1%	3	128	0	0	0	0
Organized Village Of Saxman	2C	38	12	31.6%	6	50.0%	91	4,750	1	8.3%	0	0	1	40	3	52
Petersburg Indian Association	2C	72	47	65.3%	17	36.2%	116	3,021	10	21.3%	13	360	2	6	3	5
Sitka Tribe Of Alaska	2C	273	182	66.7%	74	40.7%	673	21,145	15	8.2%	14	365	20	82	26	266
Skagway Village	2C	4	3	75.0%	0	0.0%	0	0	1	33.3%	1	20	0	0	0	0
Wrangell Cooperative Association	2C	89	66	74.2%	29	43.9%	275	7,401	16	24.2%	49	1,439	1	6	5	75
Subtota	l, Area 2C	2,433	1,310	53.8%	471	36.0%	4,235	138,497	198	15.1%	622	15,258	87	408	146	1,831
Kenaitze Indian Tribe	3A	87	48	55.2%	17	35.4%	417	7,355	6	12.5%	37	690	3	7	4	49
Lesnoi Village (Woody Island)	3A	69	43	62.3%	7	16.3%	64	2,470	0	0.0%	0	0	1	2	2	18
Native Village Of Afognak	3A	23	14	60.9%	8	57.1%	52	1,770	5	35.7%	21	615	1	2	1	5
Native Village Of Akhiok	3A	15	6	40.0%	5	83.3%	42	780	2	33.3%	19	835	0	0	2	14
Native Village Of Chenega	3A	20	12	60.0%	5	41.7%	100	5,070	3	25.0%	24	1,335	3	23	4	86
Native Village Of Eyak	3A	75	46	61.3%	15	32.6%	104	2,395	8	17.4%	21	579	0	0	4	37
Native Village Of Karluk	3A	1	0	0.0%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0

Appendix Table G-1, section 1: eligible Alaska tribes, page 2 of 15.

	,		2	<u>SKA 1110CS</u> ,			Subsi	stence								
			Return ra	te	Subsister	nce fished		vest	Sport	fished	Sport h		Lingcod b	ycatch	Rockfish l	bycatch
Eligible Alaska tribe ^a	Regulatory area	SHARCs issued	Surveys returned	Percentage returned		Percentage respondents			Number respondents	Percentage respondents		Pounds halibut	Number respondents	Number lingcod	Number respondents	Number rockfish
Native Village Of Larsen Bay	3A	36	9	25.0%	7	77.8%	96	1,885	3	33.3%	15	285	0	0	0	0
Native Village Of Nanwalek	3A	42	19	45.2%	16	84.2%	311	7,327	1	5.3%	0	0	4	55	7	260
Native Village Of Ouzinkie	3A	33	19	57.6%	14	73.7%	104	3,403	7	36.8%	31	820	3	9	4	124
Native Village Of Port Graham	3A	40	24	60.0%	13	54.2%	329	5,165	1	4.2%	20	45	2	9	4	70
Native Village Of Port Lions	3A	32	21	65.6%	10	47.6%	72	2,169	5	23.8%	14	500	3	9	3	39
Native Village Of Tatitlek	3A	33	16	48.5%	8	50.0%	95	2,532	1	6.3%	0	0	1	1	3	40
Ninilchik Village	3A	72	30	41.7%	7	23.3%	133	1,917	8	26.7%	88	1,046	0	0	0	0
Seldovia Village Tribe	3A	49	30	61.2%	18	60.0%	160	4,609	5	16.7%	18	315	1	4	2	4
Shoonaq' Tribe Of Kodiak	3A	137	63	46.0%	42	66.7%	453	12,575	13	20.6%	45	1,180	5	18	10	95
Village Of Kanatak	3A	5	0	0.0%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0
Village Of Old Harbor	3A	63	30	47.6%	16	53.3%	133	4,373	6	20.0%	31	615	0	0	0	0
Village Of Salamatof	3A	21	14	66.7%	2	14.3%	40	900	2	14.3%	7	190	0	0	0	0
Yakutat Tlingit Tribe	3A	37	18	48.6%	7	38.9%	88	1,735	0	0.0%	0	0	1	2	0	0
Subtota	l, Area 3A	890	462	51.9%	217	47.0%	2,793	68,430	76	16.5%	391	9,050	28	141	50	841
Agdaadux Tribe Of King Cove	3B	68	45	66.2%	25	55.6%	232	6,423	7	15.6%	27	825	1	50	2	23
Chignik Lake Village	3B	10	5	50.0%	3	60.0%	18	185	0	0.0%	0	0	0	0	1	15

Appendix Table G-1, section 1: eligible Alaska tribes, page 3 of 15.

							Subsi	stence								
			Return rat	te	Subsister	nce fished	har	vest	Sport	fished	Sport h		Lingcod b	oycatch	Rockfish l	bycatch
Eligible Alaska tribe ^a	Regulatory area		Surveys returned	Percentage returned	Number respondents	Percentage respondents	Number halibut	Pounds halibut ^b	Number respondents	Percentage respondents	Number halibut		Number respondents	Number lingcod	Number respondents	Number rockfish
Ivanoff Bay Village	3B	14	4	28.6%	1	25.0%	2	60	0	0.0%	0	0	0	0	0	0
Native Village Of Belkofski	3B	3	0	0.0%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0
Native Village Of Chignik	3B	7	7	100.0%	2	28.6%	16	560	1	14.3%	0	0	0	0	0	0
Native Village Of Chignik Lagoon	3B	24	19	79.2%	10	52.6%	70	2,161	0	0.0%	0	0	1	7	4	49
Native Village Of False Pass	3B	1	1	100.0%	1	100.0%	12	60	0	0.0%	0	0	1	10	0	0
Native Village Of Nelson Lagoon	3B	3	3	100.0%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0
Native Village Of Perryville	3B	36	20	55.6%	13	65.0%	119	3,185	2	10.0%	15	720	3	16	2	20
Native Village Of Unga	3B	11	2	18.2%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0
Pauloff Harbor Village	3B	46	17	37.0%	7	41.2%	125	1,950	2	11.8%	3	70	2	6	2	9
Qagan Tayagungin Tribe Of Sand Point Village	3B	306	85	27.8%	37	43.5%	372	8,956	7	8.2%	52	1,195	3	4	9	80
Subtota	l, Area 3B	529	208	39.3%	99	47.6%	966	23,540	19	9.1%	97	2,810	11	93	20	196
Native Village Of Akutan	4A	18	17	94.4%	12	70.6%	104	8,135	3	17.6%	7	2,475	2	28	2	25
Qawalangin Tribe Of Unalaska	4A	43	17	39.5%	9	52.9%	60	1,560	2	11.8%	2	45	2	20	2	5
Subtotal	l, Area 4A	61	34	55.7%	21	61.8%	164	9,695	5	14.7%	9	2,520	4	48	4	30
Native Village Of Atka	4B	5	2	40.0%	0	0.0%	0	0	1	50.0%	1	40	0	0	0	0
Subtota	l, Area 4B	5	2	40.0%	0	0.0%	0	0	1	50.0%	1	40	0	0	0	0

Appendix Table G-1, section 1: eligible Alaska tribes, page 4 of 15.

	,	Subsistence															
		Return rate			Subsister	nce fished	har	vest	Sport fished		Sport harvest		Lingcod bycatch		Rockfish bycatch		
Eligible Alaska tribe ^a	Regulatory area	SHARCs issued	Surveys returned	Percentage returned		Percentage respondents			Number respondents	Percentage respondents		Pounds halibut	Number respondents	Number lingcod	Number respondents	Number rockfish	
Pribilof Islands Aleut Community Of St. George	4C	6	3	50.0%	3	100.0%	31	900	0	0.0%	0	0	0	0	0	0	
Pribilof Islands Aleut Community Of St. Paul	4C	46	18	39.1%	6	33.3%	124	2,795	0	0.0%	0	0	0	0	0	0	
Subtotal, Area 4C 52		21	40.4%	9	42.9%	155	3,695	0	0.0%	0	0	0	0	0	0		
Native Village Of Gambell	4D	1	1	100.0%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0	
Native Village Of Savoonga	4D	20	10	50.0%	6	60.0%	33	2,370	0	0.0%	0	0	0	0	1	18	
Subtota	l, Area 4D	21	11	52.4%	6	54.5%	33	2,370	0	0.0%	0	0	0	0	1	18	
Chevak Native Village (Kashunamiut)	4E	6	4	66.7%	3	75.0%	4	15	0	0.0%	0	0	1	2	2	36	
Chinik Eskimo Community	4E	1	1	100.0%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0	
Egegik Village	4E	1	1	100.0%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0	
King Island Native Community	4E	1	1	100.0%	1	100.0%	15	500	0	0.0%	0	0	1	4	1	4	
Levelock Village	4E	1	0	0.0%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0	
Naknek Native Village	4E	9	4	44.4%	1	25.0%	1	30	1	25.0%	2	60	0	0	0	0	
Native Village Of Aleknagik	4E	6	4	66.7%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0	
Native Village Of Brevig Mission	4E	1	0	0.0%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0	
Native Village Of Council	4E	2	0	0.0%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0	

Appendix Table G-1, section 1: eligible Alaska tribes, page 5 of 15.

		Subsistence																
		Return rate			Subsistence fished has			vest	Sport fished		Sport harvest		Lingcod bycatch		Rockfish bycatch			
Eligible Alaska tribe ^a	Regulatory area	SHARCs issued	Surveys returned	Percentage returned		Percentage respondents			Number respondents	Percentage respondents		Pounds halibut	Number respondents	Number lingcod	Number respondents	Number rockfish		
Native Village Of Dillingham (Curyung)	4E	21	7	33.3%	0	0.0%	0	0	1	14.3%	2	40	0	0	0	0		
Native Village Of Eek	4E	7	4	57.1%	3	75.0%	8	320	0	0.0%	0	0	0	0	0	0		
Native Village Of Goodnews	4E	4	3	75.0%	1	33.3%	0	0	1	33.3%	0	0	0	0	0	0		
Bay (Mumtraq)																		
Native Village Of Hooper Bay	4E	17	8	47.1%	4	50.0%	681	1,470	1	12.5%	100	200	1	2	0	0		
Native Village Of Kanakanak	4E	1	1	100.0%	1	100.0%	4	100	0	0.0%	0	0	0	0	0	0		
Native Village Of Kipnuk	4E	12	1	8.3%	1	100.0%	17	200	0	0.0%	0	0	0	0	0	0		
Native Village Of Kongiganak	4E	6	2	33.3%	2	100.0%	7	176	1	50.0%	0	0	0	0	0	0		
Native Village Of Koyuk	4E	1	0	0.0%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0		
Native Village Of Kwigillingok	4E	46	2	4.3%	1	50.0%	3	60	0	0.0%	0	0	0	0	0	0		
Native Village Of Kwinhagak	4E	4	2	50.0%	1	50.0%	1	15	0	0.0%	0	0	0	0	0	0		
Native Village Of Mekoryuk	4E	6	4	66.7%	3	75.0%	55	1,000	1	25.0%	8	200	1	10	0	0		
Native Village Of Nightmute	4E	5	1	20.0%	1	100.0%	10	90	0	0.0%	0	0	0	0	1	2		
Native Village Of Port Heiden	4E	1	0	0.0%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0		
Native Village Of Scammon Bay	4E	5	3	60.0%	1	33.3%	6	40	0	0.0%	0	0	0	0	0	0		

Appendix Table G-1, section 1: eligible Alaska tribes, page 6 of 15.

130

	e G-1, seci		Subsistence													
			Return rat	e	Subsister	nce fished	har	vest	Sport fished		Sport harvest		Lingcod b	ycatch	Rockfish bycatch	
Eligible Alaska tribe ^a	Regulatory area	SHARCs issued	Surveys returned	Percentage returned		Percentage respondents			Number respondents	Percentage respondents		Pounds halibut	Number respondents	Number lingcod	Number respondents	Number rockfish
Native Village Of Toksook Bay (Nunakauyak)	4E	34	10	29.4%	8	80.0%	236	3,038	0	0.0%	0	0	0	0	0	0
Native Village Of Tununak	4E	71	7	9.9%	3	42.9%	68	712	0	0.0%	0	0	1	2	1	38
Native Village Of Unalakleet	4E	3	2	66.7%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0
Native Village Of White Mountain	4E	1	0	0.0%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0
Newtok Village	4E	1	1	100.0%	1	100.0%	20	200	0	0.0%	0	0	0	0	0	0
Nome Eskimo Community	4E	12	7	58.3%	3	42.9%	24	460	1	14.3%	22	660	0	0	0	0
Orutsararmuit Native Village	4E	7	5	71.4%	3	60.0%	41	737	2	40.0%	7	210	0	0	1	1
South Naknek	4E	2	0	0.0%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0
Stebbins Community Association	4E	4	4	100.0%	4	100.0%	6	145	4	100.0%	0	0	0	0	0	0
Traditional Village Of Togiak	4E	6	4	66.7%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0
Twin Hills Village	4E	1	0	0.0%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0
Ugashik Village	4E	1	0	0.0%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0
Village Of Chefornak	4E	15	6	40.0%	3	50.0%	54	577	0	0.0%	0	0	0	0	0	0
Village Of Clark's Point	4E	2	2	100.0%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0
Village Of Kotlik	4E	1	1	100.0%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0
Subtota	l, Area 4E	325	102	31.4%	49	48.0%	1,261	9,885	13	12.7%	141	1,370	5	20	6	81
Subtotal, elig	ible tribes	4,316	2,150	49.8%	872	40.6%	9,607	256,112	312	14.5%	1,261	31,048	135	710	227	2,997

Appendix Table G-1, section 1: eligible Alaska tribes, page 7 of 15.

Eligible	D 1.		Return rat		Subsistence fished		harvest		Sport fished		Sport harvest		Lingcod bycatch		Rockfish bycatch	
Alaska rural community ^a	Regulatory area	SHARCs issued	Surveys returned	Percentage returned		Percentage respondents			Number respondents	Percentage respondents	Number halibut		Number respondents	Number lingcod		Number rockfish
Angoon	2C	16	10	62.5%	5	50.0%	69	1,695	3	30.0%	6	168	0	0	2	
Coffman	2C	47	37	78.7%	24	64.9%	164	5,380	11	29.7%	87	1,475	2	5	6	28
Cove																
Craig	2C	380	266	70.0%	127	47.7%	1,194	29,195	84	31.6%	398	8,364	38	95	71	595
Edna Bay	2C	45	36	80.0%	23	63.9%	152	4,044	9	25.0%	14	405	2	5	13	73
Elfin Cove	2C	18	10	55.6%	3	30.0%	12	419	2	20.0%	6	225	1	2	3	12
Gustavus	2C	74	57	77.0%	30	52.6%	228	6,408	20	35.1%	121	3,011	1	2	2	7
Haines	2C	427	347	81.3%	193	55.6%	849	27,890	65	18.7%	92	3,024	9	27	13	43
Hollis	2C	36	25	69.4%	12	48.0%	54	1,534	8	32.0%	26	582	4	7	9	69
Hoonah	2C	121	87	71.9%	45	51.7%	407	8,647	20	23.0%	100	1,912	2	11	6	23
Hydaburg	2C	13	12	92.3%	8	66.7%	90	7,341	2	16.7%	10	600	3	12	6	155
Hyder	2C	36	29	80.6%	17	58.6%	138	3,199	4	13.8%	2	70	0	0	5	16
Kake	2C	42	27	64.3%	19	70.4%	91	2,510	10	37.0%	9	390	1	1	4	24
Kasaan	2C	10	10	100.0%	6	60.0%	34	870	1	10.0%	0	0	1	2	5	35
Klawock	2C	125	88	70.4%	59	67.0%	581	12,192	31	35.2%	174	3,347	11	24	33	204
Metlakatla	2C	40	18	45.0%	9	50.0%	83	1,620	3	16.7%	6	207	4	7	2	9
Meyers Chuck	2C	8	8	100.0%	7	87.5%	26	843	0	0.0%	0	0	0	0	2	9
Naukati Bay	2C	6	4	66.7%	2	50.0%	8	250	2	50.0%	24	840	0	0	0	0
Pelican	2C	44	33	75.0%	17	51.5%	151	5,085	5	15.2%	18	515	7	60	12	213
Petersburg	2C	904	676	74.8%	277	41.0%	1,996	46,286	197	29.1%	747	17,829	13	48	41	295
Port Alexander	2C	34	21	61.8%	13	61.9%	119	4,290	6	28.6%	16	362	9	39	12	241
Port Protection	2C	20	16	80.0%	13	81.3%	50	1,559	3	18.8%	11	272	3	5	9	82
Point Baker	2C	17	15	88.2%	12	80.0%	55	1,910	5	33.3%	6	200	3	4	9	79
Saxman	2C	16	13	81.3%	6	46.2%	238	1,991	2	15.4%	34	645	2	14	3	63
Sitka	2C	1,388	990	71.3%	523	52.8%	3,197	91,192	200	20.2%	473	12,448	223	838	247	2,510
Skagway	2C	51	41	80.4%	23	56.1%	57	1,972	7	17.1%	7	204	1	1	4	15
Tenakee Springs	2C	44	41	93.2%	29	70.7%	168	4,675	17	41.5%	39	989	0	0	9	51
Thorne Bay	2C	122	90	73.8%	50	55.6%	394	12,479	30	33.3%	92	2,742	9	52	27	221
Whale Pass	2C	22	20	90.9%	9	45.0%	79	2,170	6	30.0%	22	605	0	0	1	1

Appendix Table G-1, section 2: eligible Alaska rural community, page 8 of 15.

132

Eligible			Return rat	e	Subsister	nce fished		istence vest	Sport	fished	Sport	harvest	Lingcod b	vcatch	Rockfish b	vcatch
Alaska rural	Regulatory				Number	Percentage			Number	Percentage	1		Number	Number		Number
community ^a	area	issued	returned	returned		respondents			respondents	respondents			respondents	lingcod	respondents	rockfish
Wrangell	2C	373	306	82.0%	173	56.5%	1,637	41,946	79	25.8%	382	10,038	10	47	45	271
Subtota	l, Area 2C	4,479	3,333	74.4%	1,734	52.0%	12,321	329,592	832	25.0%	2,922	71,469	359	1,308	601	5,373
Akhiok	3A	1	1	100.0%	1	100.0%	5	95	0	0.0%	0	0	0	0	0	0
Chenega Bay	3A	10	7	70.0%	4	57.1%	68	1,370	5	71.4%	31	840	1	2	3	14
Cordova	3A	522	382	73.2%	176	46.1%	1,075	27,970	87	22.8%	215	5,865	13	25	18	149
Kodiak	3A	1,584	1,001	63.2%	576	57.5%	5,743	150,082	435	43.5%	2,423	66,440	51	148	95	777
Larsen Bay	3A	13	8	61.5%	4	50.0%	81	1,285	5	62.5%	213	2,550	1	3	1	8
Nanwalek	3A	11	3	27.3%	3	100.0%	159	4,150	1	33.3%	2	50	0	0	2	18
Old Harbor	3A	18	15	83.3%	10	66.7%	63	1,758	3	20.0%	14	330	0	0	0	0
Ouzinkie	3A	25	17	68.0%	10	58.8%	51	1,525	2	11.8%	11	400	1	6	3	89
Port Graham	3A	14	7	50.0%	5	71.4%	92	2,660	0	0.0%	0	0	0	0	2	14
Port Lions	3A	16	11	68.8%	8	72.7%	69	1,412	9	81.8%	61	940	0	0	1	2
Seldovia	3A	147	110	74.8%	74	67.3%	1,116	24,422	32	29.1%	192	4,216	7	27	7	41
Tatitlek	3A	11	8	72.7%	7	87.5%	108	3,136	0	0.0%	0	0	2	8	5	108
Yakutat	3A	64	41	64.1%	21	51.2%	193	5,409	5	12.2%	13	260	11	63	2	45
Subtota	l, Area 3A	2,436	1,611	66.1%	899	55.8%	8,823	225,274	584	36.3%	3,175	81,891	87	282	139	1,265
Chignik	3B	5	3	60.0%	3	100.0%	41	1,085	0	0.0%	0	0	1	4	1	20
Chignik Lagoon	3B	2	1	50.0%	1	100.0%	10	360	0	0.0%	0	0	0	0	0	0
Chignik Lake	3B	3	3	100.0%	1	33.3%	8	420	0	0.0%	0	0	0	0	0	0
Cold Bay	3B	24	19	79.2%	13	68.4%	91	2,240	9	47.4%	36	869	0	0	0	0
False Pass	3B	2	1	50.0%	1	100.0%	3	150	0	0.0%	0	0	0	0	0	0
King Cove	3B	23	18	78.3%	14	77.8%	98	3,034	5	27.8%	12	415	1	5	2	22
Nelson Lagoon	3B	1	0	0.0%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0
Perryville	3B	1	0	0.0%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0
Sand Point	3B	16	12	75.0%	8	66.7%	77	2,656	2	16.7%	44	940	0	0	3	45
Subtota	l, Area 3B	77	57	74.0%	41	71.9%	328	9,945	16	28.1%	92	2,224	2	9	6	87
Akutan	4A	1	1	100.0%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0
Nikolski	4A	2	2	100.0%	1	50.0%	7	600	0	0.0%	0	0	0	0	0	0
Unalaska	4A	127	88	69.3%	44	50.0%	501	10,245	27	30.7%	126	2,749	2	6	6	57
	l, Area 4A	130	91	70.0%	45	49.5%	508	10,845	27	29.7%	126	2,749	2	6	6	57

Appendix Table G-1, section 2: eligible Alaska rural community, page 9 of 15.

133

Eligible			Return ra	te	Subsister	nce fished		stence vest	Sport	fished	Sport	harvest	Lingcod b	weatch	Rockfish	bycatch
Alaska rural	Regulatory	SHARCs			Number	Percentage		Pounds	Number	Percentage	Number	Pounds	Number	Number		Number
community ^a	area	issued	returned		respondents	respondents	halibut		respondents	respondents	halibut	halibut ^b	respondents	lingcod	respondents	rockfish
Adak	4B	26	13	50.0%	3	23.1%	23	895	1	7.7%	3	220	0	0	0	0
Atka	4B	2	1	50.0%	1	100.0%	4	130	0	0.0%	0	0	0	0	0	0
Subtota	al, Area 4B	28	14	50.0%	4	28.6%	27	1,025	1	7.1%	3	220	0	0	0	0
St. George Island	4C	1	0	0.0%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0
St. Paul Island	4C	2	2	100.0%	2	100.0%	18	371	0	0.0%	0	0	0	0	0	0
Subtota	al, Area 4C	3	2	66.7%	2	100.0%	18	371	0	0.0%	0	0	0	0	0	0
Alakanuk	4E	1	1	100.0%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0
Aleknagik	4E	2	1	50.0%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0
Bethel	4E	3	3	100.0%	1	33.3%	14	477	0	0.0%	0	0	0	0	1	4
Chefornak	4E	1	0	0.0%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0
Clark's Point	4E	1	0	0.0%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0
Dillingham	4E	43	30	69.8%	2	6.7%	0	0	2	6.7%	5	110	0	0	0	0
Hooper Bay	4E	1	0	0.0%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0
King Salmon	4E	2	2	100.0%	1	50.0%	0	0	1	50.0%	0	0	0	0	0	0
Kongiganak	4E	1	1	100.0%	1	100.0%	1	12	0	0.0%	0	0	0	0	0	0
Kwigillingok	4E	1	0	0.0%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0
Manokotak	4E	2	0	0.0%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0
Mekoryuk	4E	1	1	100.0%	1	100.0%	40	205	0	0.0%	0	0	1	2	0	0
Naknek	4E	5	3	60.0%	1	33.3%	0	0	1	33.3%	0	0	0	0	0	0
Nightmute	4E	3	1	33.3%	1	100.0%	50	150	0	0.0%	0	0	0	0	0	0
Nome	4E	13	9	69.2%	3	33.3%	35	800	1	11.1%	0	0	0	0	0	0
Platinum	4E	1	0	0.0%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0
Port Heiden	4E	3	1	33.3%	1	100.0%	5	30	0	0.0%	0	0	0	0	0	0
Quinhagak	4E	2	2	100.0%	1	50.0%	3	40	0	0.0%	0	0	0	0	0	0
Sheldon Point	4E	1	0	0.0%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0
South Naknek	4E	1	0	0.0%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0
Teller	4E	2	1	50.0%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0
Togiak	4E	3	1	33.3%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0
Toksook Bay	4E	1	1	100.0%	1	100.0%	2	23	0	0.0%	0	0	0	0	0	0

Appendix Table G-1, section 2: eligible Alaska rural community, page 10 of 15.

134

							Subsi	stence								
Eligible			Return rat	te	Subsister	nce fished	har	vest	Sport	fished	Sport	harvest	Lingcod b	ycatch	Rockfish l	oycatch
Alaska rural	Regulatory	SHARCs	Surveys	Percentage	Number	Percentage	Number	Pounds	Number	Percentage	Number	Pounds	Number	Number	Number	Number
community a	area	issued	returned	returned	respondents	respondents	halibut	halibut ^b	respondents	respondents	halibut	halibut ^b	respondents	lingcod	respondents	rockfish
White	4E	2	0	0.0%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0
Mountain																
Subtot	al, Area 4E	96	58	60.4%	14	24.1%	150	1,737	5	8.6%	5	110	1	2	1	4
	total, rural ommunities		5,166	71.3%	2,739	53.0%	22,175	578,789	1,465	28.4%	6,323	158,663	451	1,607	753	6,786
	, tribal and ommunities	,	7,316	63.3%	3,611	49.4%	31,782	834,901	1,777	24.3%	7,584	189,711	586	2,317	980	9,783

Appendix Table G-1, section 2: eligible Alaska rural community, page 11 of 15.

Appendix Table G-1, section 3: community of residence of SHARC holders, page 11 of 15.

Community of		Return rat	e	Subsister	nce fished	Subsisten	ce harvest	Sport	fished	Sport	harvest	Lingcod b	ycatch	Rockfish b	oycatch
residence of	SHARCs	Surveys	Percentage	Number	Percentage	Number	Pounds	Number	Percentage	Number	Pounds	Number	Number	Number	Number
SHARC holder ^a	issued	returned	returned	respondents	respondents	halibut	halibut ^b	respondents	respondents	halibut	halibut ^b	respondents	lingcod	respondents	rockfish
Adak	29	15	51.7%	5	33.3%	41	1,703	1	6.7%	3	220	1	16	2	7
Akhiok	14	6	42.9%	5	83.3%	34	770	1	16.7%	15	820	0	0	1	2
Akutan	17	17	100.0%	12	70.6%	104	8,135	3	17.6%	7	2,475	2	28	2	25
Alakanuk	1	1	100.0%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0
Aleknagik	3	1	33.3%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0
Anchor Point	8	3	37.5%	1	33.3%	12	200	1	33.3%	4	40	0	0	0	0
Anchorage	208	98	47.1%	32	32.7%	196	6,910	17	17.3%	58	1,761	4	11	4	40
Angoon	130	65	50.0%	29	44.6%	291	9,290	10	15.4%	34	631	1	2	8	70
Atka	3	1	33.3%	1	100.0%	4	130	0	0.0%	0	0	0	0	0	0
Auke Bay	4	2	50.0%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0
Barrow	1	1	100.0%	1	100.0%	25	1,000	0	0.0%	0	0	0	0	0	0
Bethel	11	7	63.6%	3	42.9%	20	520	0	0.0%	0	0	0	0	0	0
Chefornak	15	6	40.0%	3	50.0%	54	577	0	0.0%	0	0	0	0	0	0
Chenega Bay	11	8	72.7%	6	75.0%	148	5,445	6	75.0%	48	2,035	3	23	5	88
Chevak	6	4	66.7%	3	75.0%	4	15	0	0.0%	0	0	1	2	2	36
Chignik	16	12	75.0%	7	58.3%	193	4,749	2	16.7%	4	150	2	9	3	39
Chignik Lagoon	18	14	77.8%	9	64.3%	66	2,141	0	0.0%	0	0	0	0	3	35
Chignik Lake	8	7	87.5%	3	42.9%	18	525	0	0.0%	0	0	0	0	0	0

Community of		Return rat			nce fished		ce harvest		fished		harvest	Lingcod b		Rockfish b	2
residence of SHARC holder ^a	SHARCs issued	Surveys returned	Percentage returned	Number respondents	Percentage respondents	Number halibut	Pounds halibut ^b	Number respondents	Percentage respondents	Number halibut	Pounds halibut ^b	Number respondents	Number lingcod	Number respondents	Number rockfish
Chiniak	20	12	60.0%	10 10	83.3%	97	3,008	4	33.3%	13	310	0	0	1 1	8
Chugiak	3	3	100.0%	1	33.3%	20	400	0	0.0%	0	0	0	0	0	0
Clark's Point	3	1	33.3%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0
Coffman Cove	44	35	79.5%	23	65.7%	158	4,975	10	28.6%	60	995	2	5	5	26
Cold Bay	26	22	84.6%	13	59.1%	105	2,420	10	45.5%	39	909	0	0	0	0
Cordova	587	420	71.6%	188	44.8%	1,163	29,845	92	21.9%	219	5,864	13	25	21	183
Craig	487	339	69.6%	177	52.2%	1,639	44,710	102	30.1%	445	9,661	51	123	97	824
Dillingham	56	35	62.5%	2	5.7%	0	0	1	2.9%	2	50	0	0	0	0
Douglas	16	4	25.0%	1	25.0%	15	300	1	25.0%	16	250	1	4	1	6
Dutch Harbor	82	48	58.5%	25	52.1%	308	6,975	21	43.8%	106	2,611	1	2	6	57
Eagle River	4	3	75.0%	2	66.7%	68	1,112	1	33.3%	2	60	0	0	0	0
Edna Bay	23	20	87.0%	12	60.0%	87	2,279	5	25.0%	7	155	1	1	6	41
Eek	6	3	50.0%	2	66.7%	0	0	0	0.0%	0	0	0	0	0	0
Elfin Cove	17	9	52.9%	3	33.3%	12	419	2	22.2%	6	225	1	2	3	12
Fairbanks	5	3	60.0%	1	33.3%	2	65	0	0.0%	0	0	0	0	0	0
False Pass	3	2	66.7%	2	100.0%	15	210	0	0.0%	0	0	1	10	0	0
Fritz Creek	1	1	100.0%	0	0.0%	0	0	1	100.0%	2	30	0	0	0	0
Gakona	1	0	0.0%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0
Gambell	1	1	100.0%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0
Golovin	2	1	50.0%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0
Goodnews Bay	4	3	75.0%	1	33.3%	0	0	1	33.3%	0	0	0	0	0	0
Gustavus	74	57	77.0%	31	54.4%	228	6,408	20	35.1%	121	3,011	1	2	2	7
Haines	482	381	79.0%	201	52.8%	861	29,349	64	16.8%	82	2,744	10	28	13	43
Hollis	4	1	25.0%	0	0.0%	0	0	1	100.0%	4	100	0	0	0	0
Homer	25	16	64.0%	10	62.5%	100	1,854	6	37.5%	22	500	0	0	0	0
Hoonah	251	159	63.3%	73	45.9%	642	15,504	29	18.2%	120	2,602	2	11	11	82
Hooper Bay	17	7	41.2%	3	42.9%	669	1,270	1	14.3%	100	200	1	2	0	0
Hydaburg	117	112	95.7%	55	49.1%	507	32,508	13	11.6%	28	1,710	17	81	28	621
Hyder	35	28	80.0%	17	60.7%	138	3,199	4	14.3%	2	70	0	0	5	16
Juneau	343	127	37.0%	44	34.6%	467	11,905	35	27.6%	200	4,429	2	4	11	69
Kake	126	79	62.7%	38	48.1%	253	6,725	14	17.7%	14	750	4	41	7	49
Kasaan	18	16	88.9%	7	43.8%	62	1,520	1	6.3%	3	128	1	2	5	35

Appendix Table G-1, section 3: community of residence of SHARC holders, page 12 of 15.

Community of		Return rat		Subsister			ce harvest		fished		harvest	Lingcod b	2	Rockfish b	2
residence of SHARC holder ^a	SHARCs issued	Surveys returned	Percentage returned	Number respondents	Percentage respondents	Number halibut	Pounds halibut ^b	Number respondents	Percentage respondents	Number halibut	Pounds halibut ^b	Number respondents	Number lingcod	Number respondents	Number rockfish
Kasilof	12	6	50.0%	5	83.3%	156	2,200	1	16.7%	6	180	2	2	2	41
Kenai	76	45	59.2%	12	26.7%	172	4,485	5	11.1%	24	430	1	5	0	0
Ketchikan	669	337	50.4%	104	30.9%	1,241	29,400	63	18.7%	270	5,989	23	121	46	501
King Cove	82	56	68.3%	33	58.9%	293	8,139	11	19.6%	39	1,240	2	55	3	42
King Salmon	2	2	100.0%	1	50.0%	0	0	1	50.0%	0	0	0	0	0	0
Kipnuk	11	1	9.1%	1	100.0%	17	200	0	0.0%	0	0	0	0	0	0
Klawock	203	125	61.6%	64	51.2%	583	14,061	31	24.8%	156	3,060	10	24	27	191
Kodiak	1,725	1,061	61.5%	617	58.2%	6,013	159,230	439	41.4%	2,408	66,100	53	158	106	874
Kongiganak	6	3	50.0%	3	100.0%	8	188	1	33.3%	0	0	0	0	0	0
Kotzebue	2	2	100.0%	1	50.0%	10	350	1	50.0%	3	60	1	2	1	6
Kwigillingok	46	2	4.3%	1	50.0%	3	60	0	0.0%	0	0	0	0	0	0
Larsen Bay	39	16	41.0%	11	68.8%	181	3,090	8	50.0%	228	2,835	1	3	1	8
Manokotak	2	0	0.0%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0
McGrath	1	1	100.0%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0
Mekoryuk	5	4	80.0%	4	100.0%	95	1,205	0	0.0%	0	0	2	12	0	0
Metlakatla	232	90	38.8%	28	31.1%	169	3,152	8	8.9%	11	394	7	14	8	52
Meyers Chuck	8	8	100.0%	7	87.5%	26	843	0	0.0%	0	0	0	0	2	9
Naknek	9	5	55.6%	2	40.0%	1	30	1	20.0%	0	0	0	0	0	0
Nanwalek	51	20	39.2%	18	90.0%	469	11,473	2	10.0%	2	50	4	55	9	278
Naukati	17	11	64.7%	6	54.5%	28	1,085	4	36.4%	11	490	1	4	6	18
Nelson Lagoon	1	1	100.0%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0
Newtok	1	1	100.0%	1	100.0%	20	200	0	0.0%	0	0	0	0	0	0
Nightmute	8	2	25.0%	2	100.0%	60	240	0	0.0%	0	0	0	0	1	2
Nikiski	12	6	50.0%	4	66.7%	54	1,615	3	50.0%	13	405	0	0	0	0
Nikolski	2	2	100.0%	1	50.0%	7	600	0	0.0%	0	0	0	0	0	0
Ninilchik	44	17	38.6%	3	17.6%	71	1,095	4	23.5%	22	375	0	0	0	0
Nome	17	11	64.7%	5	45.5%	49	1,110	1	9.1%	0	0	0	0	0	0
North Pole	4	2	50.0%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0
Old Harbor	71	42	59.2%	27	64.3%	209	6,236	10	23.8%	49	960	0	0	1	12
Ouzinkie	53	33	62.3%	21	63.6%	137	4,723	8	24.2%	38	1,055	5	15	6	207
Palmer	5	2	40.0%	1	50.0%	8	120	0	0.0%	0	0	0	0	0	0
Pelican	51	40	78.4%	22	55.0%	239	8,635	8	20.0%	23	740	11	110	17	435

Appendix Table G-1, section 3: community of residence of SHARC holders, page 13 of 15.

Community of		Return rat			nce fished		ce harvest		fished	Sport l	harvest	Lingcod b		Rockfish l	oycatch
residence of SHARC holder ^a	SHARCs issued	Surveys returned	Percentage returned	Number respondents	Percentage respondents	Number halibut	Pounds halibut ^b	Number respondents	Percentage respondents	Number halibut	Pounds halibut ^b	Number respondents	Number lingcod	Number respondents	Number rockfish
Perryville	39	16		11	68.8%	98	2,215	1	6.3%	2	40	3	16	2	20
Petersburg	985	730	74.1%	298	40.8%	2,150	50,382	206	28.2%	765	18,247	15	54	44	300
Point Baker	22	20	90.9%	17	85.0%	82	2,677	5	25.0%	6	200	5	7	14	139
Port Alexander	31	19	61.3%	12	63.2%	116	4,190	4	21.1%	6	162	9	39	11	228
Port Graham	48	29	60.4%	18	62.1%	342	4,774	1	3.4%	20	45	1	4	5	49
Port Heiden	2	1	50.0%	1	100.0%	5	30	0	0.0%	0	0	0	0	0	0
Port Lions	45	27	60.0%	17	63.0%	147	3,788	13	48.1%	72	1,300	2	3	4	33
Port Protection	1	1	100.0%	0	0.0%	0	0	1	100.0%	10	250	0	0	0	0
Port William	2	1	50.0%	1	100.0%	3	80	1	100.0%	0	0	0	0	0	0
Quinhagak	7	4	57.1%	2	50.0%	4	55	0	0.0%	0	0	0	0	0	0
Sand Point	342	100	29.2%	48	48.0%	545	12,662	8	8.0%	91	1,950	4	8	14	134
Savoonga	19	10	52.6%	6	60.0%	33	2,370	0	0.0%	0	0	0	0	1	18
Saxman	13	2	15.4%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0
Scammon Bay	1	0	0.0%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0
Seldovia	150	111	74.0%	75	67.6%	1,117	24,957	31	27.9%	189	4,026	8	31	8	43
Seward	17	12	70.6%	4	33.3%	22	685	1	8.3%	0	0	1	7	1	14
Sitka	1,662	1,183	71.2%	605	51.1%	3,908	111,932	218	18.4%	509	13,188	248	933	277	2,797
Skagway	56	45	80.4%	24	53.3%	49	1,772	9	20.0%	8	224	1	1	3	12
Soldotna	24	11	45.8%	2	18.2%	40	800	3	27.3%	66	720	0	0	0	0
South Naknek	2	0	0.0%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0
St. George Island	4	3	75.0%	3	100.0%	31	900	0	0.0%	0	0	0	0	0	0
St. Paul Island	42	19	45.2%	8	42.1%	142	3,166	0	0.0%	0	0	0	0	0	0
Sterling	5	2	40.0%	0	0.0%	0	0	1	50.0%	6	30	0	0	0	0
Tatitlek	24	18	75.0%	12	66.7%	159	4,551	1	5.6%	0	0	2	7	7	113
Teller	2	1	50.0%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0
Tenakee Springs	45	42	93.3%	30	71.4%	173	4,840	17	40.5%	39	989	1	1	10	52
Thorne Bay	112	87	77.7%	51	58.6%	400	12,884	28	32.2%	84	2,307	9	52	28	223
Togiak	9	5	55.6%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0
Toksook Bay	34	11	32.4%	9	81.8%	238	3,061	0	0.0%	0	0	0	0	0	0
Trapper Creek	1	1	100.0%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0

Appendix Table G-1, section 3: community of residence of SHARC holders, page 14 of 15.

Community of		Return rat	te	Subsister	nce fished	Subsister	ce harvest	Sport	fished	Sport	harvest	Lingcod b	ycatch	Rockfish l	bycatch
residence of	SHARCs	Surveys	Percentage	Number	Percentage	Number	Pounds	Number	Percentage	Number	Pounds	Number	Number	Number	Number
SHARC holder ^a	issued	returned	returned		respondents		halibut ^b	respondents	· ·	halibut	halibut ^b	respondents	lingcod	respondents	
Tununak	68	7	10.3%	3	42.9%	68	712	0	0.0%	0	0	1	2	1	38
Twin Hills	2	1	50.0%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0
Unalakleet	1	0	0.0%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0
Unalaska	91	56	61.5%	31	55.4%	307	5,950	8	14.3%	27	363	3	12	2	21
Valdez	35	23	65.7%	9	39.1%	178	3,932	4	17.4%	9	290	3	6	6	59
Ward Cove	32	14	43.8%	3	21.4%	14	260	4	28.6%	4	135	0	0	1	10
Wasilla	37	17	45.9%	4	23.5%	45	930	1	5.9%	2	60	0	0	0	0
Waterfall	1	0	0.0%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0
Whale Pass	4	4	100.0%	2	50.0%	18	530	0	0.0%	0	0	0	0	0	0
Whittier	3	2	66.7%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0
Willow	1	1	100.0%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0
Wrangell	481	382	79.4%	208	54.5%	1,929	50,237	99	25.9%	431	11,457	11	49	50	336
Yakutat	100	59	59.0%	28	47.5%	266	6,544	5	8.5%	13	260	13	71	2	45
Subtotal, Alaska communities of residence	11,455	7,247	63.3%	3,609	49.8%	31,774	834,701	1,760	24.3%	7,448	186,102	586	2,317	979	9,781
Non-Alaska communities of residence	110	69		2		8	200	17		136	3,609	0	0	1	2
Total, all communities of residence ^c	11,565	7,316	63.3%	3,611	49.4%	31,782	834,901	1,777	24.3%	7,584	189,711	586	2,317	980	9,783

Appendix Table G-1, section 3: community of residence of SHARC holders, page 15 of 15.

a. To protect confidentiality, data for tribes and communities with 5 or fewer SHARCs issued are not reported in this table. Tribal and community subtotals include all tribes and communities.

b. In this table, pounds are round (whole) weight, as reported by respondents. Data in other tables have been converted into pounds net (dressed) weight. Net weight is 75% of round (whole) weight.

c. Note that members of eligible Alaska tribes could obtain SHARCs regardless of their place of residence. All non-Alaska resident SHARC holders were members of eligible tribes.

Appendix Table G-2.–Reported harvests of halibut in numbers of fish by return category (eligible Alaska tribe, eligible Alaska rural community, and community of residence of SHARC holders), 2008.

			First ma	ailing respo	nse			Second n	nailing resp	onse			Third ma	ailing respo	onse			Staff	administere	ed	
				Number		Mean,			Number		Mean,			Number		Mean,			Number		Mean
	~ .		Number	of	Mean,	those		Number	of	Mean,	those		Number	of	Mean,	those		Number	of	Mean,	those
T11 11 41 1 41 8	Regulatory				all			subsistence		all			subsistence		all			subsistence		all	who
Eligible Alaska tribe ^a	area	returned	fished	harvested			returned	fished	harvested				fished	harvested			returned		harvested		
Angoon Community Association	2C	22	11	112	5.1	10.2	18	6	48	2.7	8.0	11	4	50	4.5	12.5	2	1	3	1.5	3.0
Central Council Tlingit And Haida Indian Tribes	2C	161	64	788	4.9	12.3	60	18	112	1.9	6.2	11	3	25	2.3	8.3	5	3	6	1.2	2.0
Chilkat Indian Village	2C	11	5	22	2.0	4.4	3	1	3	1.0	3.0	1	0	0	0.0	0.0	0	0	0	0.0	0.0
Chilkoot Indian Association	2C	19	5	17	0.9	3.4	3	0	0	0.0	0.0	2	1	0	0.0	0.0	0	0	0	0.0	0.0
Craig Community Association	2C	20	13	60	3.0	4.6	6	0	0	0.0	0.0	2	2	9	4.5	4.5	1	0	0	0.0	0.0
Douglas Indian Association	2C	3	1	25	8.3	25.0	0	0	0	0.0	0.0	1	0	0	0.0	0.0	0	0	0	0.0	0.0
Hoonah Indian Association	2C	48	20	135	2.8	6.8	21	5	37	1.8	7.4	6	4	18	3.0	4.5	2	1	45	22.5	45.0
Hydaburg Cooperative Association	2C	21	11	55	2.6	5.0	7	1	13	1.9	13.0	1	2	23	23.0	11.5	75	36	344	4.6	9.6
Ketchikan Indian Corporation	2C	143	34	489	3.4	14.4	42	16	149	3.5	9.3	26	11	70	2.7	6.4	70	8	64	0.9	8.0
Klawock Cooperative Association	2C	20	8	66	3.3	8.3	11	6	29	2.6	4.8	8	5	23	2.9	4.6	0	0	0	0.0	0.0
Metlakatla Indian Community, Annette Island Reserve	2C	42	11	26	0.6	2.4	30	7	59	2.0	8.4	4	1	1	0.3	1.0	1	1	2	2.0	2.0
Organized Village Of Kake	2C	33	10	51	1.5	5.1	11	6	61	5.5	10.2	5	1	3	0.6	3.0	0	0	0	0.0	0.0
Organized Village Of Kasaan	2C	7	2	37	5.3	18.5	4	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Organized Village Of Saxman	2C	5	2	12	2.4	6.0	3	2	14	4.7	7.0	0	0	0	0.0	0.0	4	2	65	16.3	32.5
Petersburg Indian Association	2C	28	13	87	3.1	6.7	5	1	8	1.6	8.0	11	2	21	1.9	10.5	3	1	0	0.0	0.0
Sitka Tribe Of Alaska	2C	94	32	196	2.1	6.1	24	14	246	10.3	17.6	8	5	23	2.9	4.6	56	23	208	3.7	9.0
Skagway Village	2C	1	0	0	0.0	0.0	2	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Wrangell Cooperative Association	2C	58	25	262	4.5	10.5	5	2	7	1.4		3	2	6	2.0		0	0	0	0.0	
Subtotal, Area	2C	736	267	2,440	3.3	9.1	255	85	786	3.1	9.2	100	43	272	2.7	6.3	219	76	737	3.4	9.7

			First ma	iling respo	nse			Second m	nailing resp	onse			Third ma	ailing respo	onse			Staff a	administere	d	
				Number		Mean,			Number		Mean,			Number		Mean,			Number		Mea
	D		Number	of	Mean,	those		Number	of	Mean,	those		Number	of	Mean,	those		Number	of	Mean,	thos
Elizible Alestro tribe ^a			subsistence		all			subsistence		all			subsistence		all			subsistence		all	who
Eligible Alaska tribe ^a	area	returned	fished	harvested				fished	harvested				fished	harvested			returned	fished	harvested		
Kenaitze Indian Tribe	3A	34	13	218	6.4		7	2	159	22.7	79.5	6	2	40	6.7		1	0	0	0.0	
Lesnoi Village (Woody Island)	3A	36	7	64	1.8	9.1	5	0	0	0.0	0.0	2	0	0	0.0	0.0	0	0	0	0.0	0.
Native Village Of Afognak	3A	11	7	52	4.7	7.4	2	0	0	0.0	0.0	1	1	0	0.0	0.0	0	0	0	0.0	0
Native Village Of Akhiok	3A	3	3	29	9.7	9.7	3	2	13	4.3	6.5	0	0	0	0.0	0.0	0	0	0	0.0	0
Native Village Of Chenega	3A	9	4	33	3.7	8.3	2	1	67	33.5	67.0	1	0	0	0.0	0.0	0	0	0	0.0	0.
Native Village Of Eyak	3A	40	13	96	2.4	7.4	2	1	5	2.5	5.0	4	1	3	0.8	3.0	0	0	0	0.0	0.
Native Village Of Karluk	3A	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.
Native Village Of Larsen Bay	3A	6	5	64	10.7	12.8	1	1	29	29.0	29.0	2	1	3	1.5	3.0	0	0	0	0.0	0.
Native Village Of Nanwalek	3A	8	6	62	7.8	10.3	6	5	102	17.0	20.4	5	5	147	29.4	29.4	0	0	0	0.0	0
Native Village Of Ouzinkie	3A	11	6	28	2.5	4.7	5	5	66	13.2	13.2	3	3	10	3.3	3.3	0	0	0	0.0	0
Native Village Of Port Graham	3A	20	11	321	16.1	29.2	4	2	8	2.0	4.0	0	0	0	0.0	0.0	0	0	0	0.0	0.
Native Village Of Port Lions	3A	19	9	66	3.5	7.3	2	1	6	3.0	6.0	0	0	0	0.0	0.0	0	0	0	0.0	0.
Native Village Of Tatitlek	3A	8	3	40	5.0	13.3	4	1	0	0.0	0.0	4	4	55	13.8	13.8	0	0	0	0.0	0.
Ninilchik Village	3A	27	6	111	4.1	18.5	2	0	0	0.0	0.0	1	1	22	22.0	22.0	0	0	0	0.0	0.
Seldovia Village Tribe		22	14	145	6.6		6	3	13	2.2	4.3	2	1	2	1.0			0	0	0.0	
Shoonaq' Tribe Of Kodiak	3A	51	38	416	8.2	10.9	7	1	6	0.9	6.0	4	2	11	2.8	5.5	1	1	20	20.0	20.
Village Of Kanatak	3A	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.
Village Of Old Harbor	3A	23	15	127	5.5		4	1	6	1.5		3	0	0	0.0			0	0	0.0	
Village Of Salamatof	3A		1	20	2.2		5	1	20	4.0		0	0	0	0.0			0	0	0.0	
Yakutat Tlingit Tribe	3A	13	4	20 75	5.8		3	1	10	3.3		2	2	3	1.5		0	0	0	0.0	
Subtotal, Area		350	165	1,967	5.6		70	28	510	7.3		40	23	296	7.4		2	1	20	10.0	
Agdaadux Tribe Of King Cove	3B	33	19	214	6.5		10	4	9	0.9		2	2	9	4.5		0	0	0	0.0	
Chignik Lake Village	3B	5	3	18	3.6	6.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0
Ivanoff Bay Village	3B	3	1	2	0.7		1	0	0	0.0	0.0	0	0	0	0.0			0	0	0.0	
Native Village Of Belkofski	3B 3B	0	0	0	0.0		0	0	0	0.0	0.0	0	0	0	0.0		0	0	0	0.0	

Appendix Table G-2, section 1: eligible Alaska tribe, page 2 of 13.

			First ma	iling respo	nse			Second n	nailing resp	onse			Third ma	ailing respo	onse			Staff	administere	ed	
				Number		Mean,			Number		Mean,			Number		Mean,			Number		Mea
			Number	of	Mean,	those		Number	of	Mean,	those		Number	of	Mean,	those		Number	of	Mean,	thos
			subsistence		all			subsistence		all			subsistence		all			subsistence		all	who
Eligible Alaska tribe ^a	area	returned	fished	harvested	returned	fished 1	returned	fished	harvested	returned	fished	returned	fished	harvested	returned	fished	returned	fished	harvested	returned	fishe
Native Village Of Chignik	3B	6	1	12	2.0	12.0	1	1	4	4.0	4.0	0	0	0	0.0	0.0	0	0	0	0.0	0
Native Village Of Chignik Lagoon	3B	14	9	66	4.7	7.3	4	0	0	0.0	0.0	1	1	4	4.0	4.0	0	0	0	0.0	0
Native Village Of False Pass	3B	0	0	0	0.0	0.0	1	1	12	12.0	12.0	0	0	0	0.0	0.0	0	0	0	0.0	0
Native Village Of Nelson Lagoon	3B	3	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0
Native Village Of Perryville	3B	16	11	91	5.7	8.3	2	2	28	14.0	14.0	2	0	0	0.0	0.0	0	0	0	0.0	0
Native Village Of Unga	3B	1	0	0	0.0	0.0	1	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.
Pauloff Harbor Village	3B	10	5	114	11.4	22.8	7	2	11	1.6	5.5	0	0	0	0.0	0.0	0	0	0	0.0	0.
Qagan Tayagungin Tribe Of Sand Point Village	3B	60	29	251	4.2	8.7	18	7	112	6.2	16.0	7	1	9	1.3	9.0	0	0	0	0.0	0.
Subtotal, Area	3B	151	78	768	5.1	9.8	45	17	176	3.9	10.4	12	4	22	1.8	5.5	0	0	0	0.0	0
Native Village Of Akutan	4A	7	5	63	9.0	12.6	1	2	13	13.0	6.5	0	0	0	0.0	0.0	9	5	28	3.1	5
Qawalangin Tribe Of Unalaska	4A	14	8	51	3.6	6.4	2	1	9	4.5	9.0	0	0	0	0.0	0.0	1	0	0	0.0	0.
Subtotal, Area	44	21	13	114	5.4	8.8	3	3	22	7.3	7.3	0	0	0	0.0	0.0	10	5	28	2.8	5.
Native Village Of Atka	4B	2	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0		0	0	0	0.0	
Subtotal, Area	4R	2	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0
Pribilof Islands Aleut Community Of St. George	4C	2	2	14	7.0	7.0	1	1	17	17.0		0		0	0.0		0	0	0	0.0	
Pribilof Islands Aleut Community Of St. Paul	4C	9	3	56	6.2	18.7	4	3	68	17.0	22.7	5	0	0	0.0	0.0	0	0	0	0.0	0
Subtotal, Area	4C	11	5	70	6.4	14.0	5	4	85	17.0	21.3	5	0	0	0.0	0.0	0	0	0	0.0	0.
Native Village Of Gambell	4D	1	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.
Native Village Of Savoonga	4D	7	4	25	3.6	6.3	3	2	8	2.7	4.0	0	0	0	0.0	0.0	0	0	0	0.0	0
Subtotal, Area	4D	8	4	25	3.1	6.3	3	2	8	2.7	4.0	0	0	0	0.0	0.0	0	0	0	0.0	0
Chevak Native Village (Kashunamiut)	4E	3	3	4	1.3	1.3	0	0	0	0.0	0.0	1	0	0	0.0	0.0	0	0	0	0.0	0
Chinik Eskimo Community	4E	0	0	0	0.0	0.0	1	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0
Egegik Village	4E	1	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0

Appendix Table G-2, section 1: eligible Alaska tribe, page 3 of 13.

			First ma	iling respo	nse			Second n	ailing resp	onse			Third ma	ailing respo	onse			Staff a	administere		
				Number		Mean,			Number		Mean,			Number		Mean,			Number		Mean
	D1		Number	of	Mean,	those		Number	of	Mean,	those		Number	of	Mean,	those		Number	of	Mean,	those
Eligible Alaska tribe ^a	area	returned	subsistence fished	halibut	all			subsistence fished	halibut	all			subsistence fished	halibut	all			subsistence fished	halibut harvested	all	who
King Island Native Community	4E	0	0	0			0	0	0	0.0		0	0	0	0.0		1	1	15	15.0	
Levelock Village	4E	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Naknek Native Village		3	1	1	0.3	1.0	0	0	0	0.0	0.0	1	0	0	0.0		0		0	0.0	0.0
Native Village Of Aleknagik	4E	2	0	0			2	0	0	0.0	0.0	0	0	0	0.0		0		0	0.0	
Native Village Of Brevig Mission	4E	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Native Village Of Council	4E	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Native Village Of Dillingham (Curyung)	4E	5	0	0	0.0	0.0	2	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Native Village Of Eek	4E	1	1	8	8.0	8.0	2	2	0	0.0	0.0	1	0	0	0.0	0.0	0	0	0	0.0	0.0
Native Village Of Goodnews Bay (Mumtraq)	4E	1	0	0	0.0	0.0	1	1	0	0.0	0.0	1	0	0	0.0	0.0	0	0	0	0.0	0.0
Native Village Of Hooper Bay	4E	4	3	675	168.8	225.0	3	0	0	0.0	0.0	1	1	6	6.0	6.0	0	0	0	0.0	0.0
Native Village Of Kanakanak	4E	1	1	4	4.0	4.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Native Village Of Kipnuk	4E	1	1	17	17.0	17.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Native Village Of Kongiganak	4E	2	2	7	3.5	3.5	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Native Village Of Koyuk	4E	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Native Village Of Kwigillingok	4E	1	1	3	3.0	3.0	1	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Native Village Of Kwinhagak	4E	1	1	1	1.0	1.0	0	0	0	0.0	0.0	1	0	0	0.0	0.0	0	0	0	0.0	0.0
Native Village Of Mekoryuk	4E	3	2	30	10.0	15.0	1	1	25	25.0	25.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Native Village Of Nightmute	4E	0	0	0	0.0	0.0	0	0	0	0.0	0.0	1	1	10	10.0	10.0	0	0	0	0.0	0.0
Native Village Of Port Heiden	4E	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Native Village Of Scammon Bay	4E	3	1	6	2.0	6.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Native Village Of Toksook Bay (Nunakauyak)	4E	7	5	100	14.3	20.0	2	2	104	52.0	52.0	1	1	32	32.0	32.0	0	0	0	0.0	0.0

Appendix Table G-2, section 1: eligible Alaska tribe, page 4 of 13.

143

			First ma	iling respo	nse			Second n	nailing resp	onse			Third ma	ailing respo	nse			Staff a	administere	ed	
				Number		Mean,			Number		Mean,			Number		Mean,			Number		Mea
			Number	of	Mean,	those		Number	of	Mean,	those		Number	of	Mean,	those		Number	of	,	thos
F1: 11 A1 1 (1 a)			subsistence		all			subsistence		all			subsistence		all			subsistence	halibut	all	who
Eligible Alaska tribe ^a	area	returned	fished	harvested			returned	fished	harvested				fished	harvested				fished	harvested		
Native Village Of Tununak	4E	3	2	58	19.3	29.0	1	0	0	0.0	0.0	3	1	10	3.3	10.0	0	0	0	0.0	0.
Native Village Of Unalakleet	4E	1	0	0	0.0	0.0	1	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.
Native Village Of White Mountain	4E	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.
Newtok Village	4E	0	0	0	0.0	0.0	1	1	20	20.0	20.0	0	0	0	0.0	0.0	0	0	0	0.0	0.
Nome Eskimo Community	4E	5	2	14	2.8	7.0	1	0	0	0.0	0.0	1	1	10	10.0	10.0	0	0	0	0.0	0.
Orutsararmuit Native Village	4E	5	3	41	8.2	13.7	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.
South Naknek Village	4E	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.
Stebbins Community Association	4E	4	4	6	1.5	1.5	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.
Traditional Village Of Togiak	4E	1	0	0	0.0	0.0	3	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.
Twin Hills Village	4E	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.
Ugashik Village	4E	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.
Village Of Chefornak	4E	6	3	54	9.0	18.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.
Village Of Clark's Point	4E	1	0	0	0.0	0.0	1	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.
Village Of Kotlik	4E	0	0	0	0.0	0.0	1	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.
Subtotal, Area	ı 4E	65	36	1,029	15.8	28.6	24	7	149	6.2	21.3	12	5	68	5.7	13.6	1	1	15	15.0	15.
Subtotal, eligible Al	aska tribe	1,344	568	6,413	4.8	11.3	405	146	1,736	4.3	11.9	169	75	658	3.9	8.8	232	83	800	3.4	9.

Appendix Table G-2, section 1: eligible Alaska tribe, page 5 of 13.	
representative of 2, section 1, engible musicu tribe, puge 5 of 15.	

			First ma	ailing respo	nse			Second n	nailing resp	onse			Third m	ailing respo	onse			Staff	administered	1	
						Mean,					Mean,					Mean,					Mean,
Eligible Alaska rural				Number		those		Number	Number		those		Number	Number		those		Number	Number		those
community ^a	area	Number returned	subsistence fished	of halibut harvested	all returned			subsistence fished	of halibut harvested	all returned		Number returned	subsistence fished	of halibut harvested				subsistence fished	of halibut harvested	all returned	who fished
Angoon	2C	7	4		9.6	16.8		0		0.0	0.0		1	2		2.0				0	
Coffman	2C	26	15	96	3.7	6.4	4	3	18	4.5	6.0	7	6	50	7.1	8.3	0	0	0	0.0	0.0
Cove																					
Craig	2C	204	102	974	4.8	9.5	51	22	203	4.0	9.2	9	3	17	1.9	5.7	2	0	0	0.0	0.0
Edna Bay	2C	29	18	96	3.3	5.3	4	3	30	7.5	10.0	3	2	26	8.7	13.0	0	0	0	0.0	0.0
Elfin Cove	2C	8	2	10	1.3	5.0	1	1	2	2.0	2.0	1	0	0	0.0	0.0	0	0	0	0.0	0.0
Gustavus	2C	49	26	212	4.3	8.2	6	2	7	1.2	3.5	2	2	9	4.5	4.5	0	0	0	0.0	0.0
Haines	2C	273	163	751	2.8	4.6	55	22	87	1.6	4.0	19	8	11	0.6	1.4	0	0	0	0.0	0.0
Hollis	2C	15	5	29	1.9	5.8	10	7	25	2.5	3.6	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Hoonah	2C	74	42	386	5.2	9.2	12	3	21	1.8	7.0	1	0	0	0.0	0.0	0	0	0	0.0	0.0
Hydaburg	2C	6	6	30	5.0	5.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	6	2	60	10.0	30.0
Hyder	2C	23	14	132	5.7	9.4	2	2	0	0.0	0.0	4	1	6	1.5	6.0	0	0	0	0.0	0.0
Kake	2C	23	15	60	2.6	4.0	4	4	31	7.8	7.8	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Kasaan	2C	10	6	34	3.4	5.7	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Klawock	2C	73	53	555	7.6	10.5	8	4	19	2.4	4.8	6	1	2	0.3	2.0	1	1	5	5.0	5.0
Metlakatla	2C	9	6	73	8.1	12.2	7	3	10	1.4	3.3	2	0	0	0.0	0.0	0	0	0	0.0	0.0
Meyers Chuck	2C	8	7	26	3.3	3.7	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Naukati Bay	2C	1	1	5	5.0	5.0	2	1	3	1.5	3.0	0	0	0	0.0	0.0	1	0	0	0.0	0.0
Pelican	2C	24	11	132	5.5	12.0	7	5	19	2.7	3.8	2	1	0	0.0	0.0	0	0	0	0.0	0.0
Petersburg	2C	510	228	1,723	3.4	7.6	121	36	196	1.6	5.4	43	12	76	1.8	6.3	2	1	1	0.5	1.0
Port Alexander	2C	16	11	99	6.2	9.0	3	1	18	6.0	18.0	2	1	2	1.0	2.0	0	0	0	0.0	0.0
Port	2C	13	11	42	3.2	3.8	1	1	0	0.0	0.0	2	1	8	4.0	8.0	0	0	0	0.0	0.0
Protection			_						_												
Point Baker	2C	11	9			5.1	3	2	5	1.7	2.5		1	4		4.0		0	0	0.0	
Saxman	2C	11	6		21.6	39.7	1	0	0	0.0	0.0		0	0		0.0		0		0.0	
Sitka	2C	650	373	,	3.4	6.0	137	69	415	3.0	6.0		25	138	3.1	5.5		56		2.7	7.5
Skagway	2C	35	21	57	1.6	2.7	4	2		0.0	0.0		0	0	0.0	0.0				0.0	
Tenakee Springs	2C	38	27	162	4.3	6.0	2	1	2	1.0	2.0	1	1	4	4.0	4.0	0	0	0	0.0	0.0
Thorne Bay	2C	69	44	364	5.3	8.3	12	4	15	1.3	3.8	9	2	15	1.7	7.5	0	0	0	0.0	0.0
Whale Pass	2C	14	6	37	2.6	6.2	5	3	42	8.4	14.0	1	0	0	0.0	0.0	0	0	0	0.0	0.0
Wrangell	2C	240	145	1,361	5.7	9.4	48	22	243	5.1	11.0	16	5	23	1.4	4.6	2	1	10	5.0	10.0
Subtotal, A	Area 2C	2,469	1,377	10,020	4.1	7.3	511	223	1,411	2.8	6.3	180	73	393	2.2	5.4	173	61	497	2.9	8.1

Appendix Table G-2, section 2: eligible Alaska rural community, page 6 of 13.

			_	ailing respon				Second n	nailing resp	onse			Third ma	ailing respo	nse			Staff	administere	l	
Eligible Alaska			Number	Number		Mean, those		Number	Number	Mean,	Mean, those		Number	Number	Mean,	Mean, those		Number	Number	Mean,	Mean, those
rural community ^a	Regulatory area	Number returned	subsistence fished		all	who		subsistence fished		all	who	Number returned	subsistence fished		all	who	Number returned	subsistence fished		all	who
Akhiok	3A	1	1	5	5.0	5.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Chenega Bay	3A	6	4	68	11.3	17.0	1	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Cordova	3A	274	131	822	3.0	6.3	74	33	213	2.9	6.5	34	12	40	1.2	3.3	0	0	0	0.0	0.0
Kodiak	3A	787	467	4,726	6.0	10.1	150	81	690	4.6	8.5	63	26	311	4.9	12.0	1	2	16	16.0	8.0
Larsen Bay	3A	6	2	13	2.2	6.5	2	2	68	34.0	34.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Nanwalek	3A	2	2	35	17.5	17.5	0	0	0	0.0	0.0	1	1	124	124.0	124.0	0	0	0	0.0	0.0
Old Harbor	3A	13	9	57	4.4	6.3	2	1	6	3.0	6.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Ouzinkie	3A	14	8	21	1.5	2.6	2	1	28	14.0	28.0	1	1	2	2.0	2.0	0	0	0	0.0	0.0
Port Graham	3A	6	4	77	12.8	19.3	1	1	15	15.0	15.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Port Lions	3A	9	7	69	7.7	9.9	2	1	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Seldovia	3A	85	57	935	11.0	16.4	20	13	87	4.4	6.7	4	3	82	20.5	27.3	1	1	12	12.0	12.0
Tatitlek	3A	6	6	96	16.0	16.0	1	1	12	12.0	12.0	1	0	0	0.0	0.0	0	0	0	0.0	0.0
Yakutat	3A	32	17	146	4.6	8.6	7	3	33	4.7	11.0	2	1	14	7.0	14.0	0	0	0	0.0	0.0
Subtota	l, Area 3A	1,241	715	7,070	5.7	9.9	262	137	1,152	4.4	8.4	106	44	573	5.4	13.0	2	3	28	14.0	9.3
Chignik	3B	3	3	41	13.7	13.7	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Chignik Lagoon	3B	1	1	10	10.0	10.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Chignik Lake	3B	3	1	8	2.7	8.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Cold Bay	3B	16	11	68	4.3	6.2	3	2	23	7.7	11.5	0	0	0	0.0	0.0	0	0	0	0.0	0.0
False Pass	3B	1	1	3	3.0	3.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
King Cove	3B	14	10	77	5.5	7.7	4	4	21	5.3	5.3	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Nelson Lagoon	3B	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Perryville	3B	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Sand Point	3B	10	6	70	7.0	11.7	1	1	4	4.0	4.0	1	1	3	3.0	3.0	0	0	0	0.0	0.0
Subtotal, A	Area 3B	48	33	277	5.8	8.4	8	7	48	6.0	6.9	1	1	3	3.0	3.0	0	0	0	0.0	0.0
Akutan	4A	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	1	0	0	0.0	0.0
Nikolski	4A	2	1	7	3.5	7.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Unalaska	4A	69	38	381	5.5	10.0	17	5	85	5.0	17.0	2	1	35	17.5	35.0	0	0	0	0.0	0.0
Subtota	l, Area 4A	71	39	388	5.5	9.9	17	5	85	5.0	17.0	2	1	35	17.5	35.0	1	0	0	0.0	0.0
Adak	4B	3	2	16	5.3	8.0	3	1	7	2.3	7.0	7	0	0	0.0	0.0	0	0	0	0.0	0.0
Atka	4B	1	1	4	4.0	4.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Subtota	l, Area 4B	4	3	20	5.0	6.7	3	1	7	2.3	7.0	7	0	0	0.0	0.0	0	0	0	0.0	0.0
St. George Island	4C	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0

Appendix Table G-2, section 2: eligible Alaska rural community, page 7 of 13.

			First ma	ailing respo	nse			Second n	ailing resp	onse			Third ma	ailing respo	nse			Staff	administered	1	
Eligible Alaska rural community ^a	Regulatory area	Number returned	Number subsistence fished	Number of halibut harvested	Mean, all returned			Number subsistence fished	Number of halibut harvested	Mean, all returned		Number returned	Number subsistence fished	Number of halibut harvested	Mean, all returned	Mean, those who fished	Number returned	Number subsistence fished	Number of halibut harvested	Mean, all returned	Mean, those who fished
St. Paul Island	4C	2	2	18	9.0	9.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Subtota	l, Area 4C	2	2	18	9.0	9.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Alakanuk	4E	0	0	0	0.0	0.0	0	0	0	0.0	0.0	1	0	0	0.0	0.0	0	0	0	0.0	0.0
Aleknagik	4E	0	0	0	0.0	0.0	1	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Bethel	4E	2	1	14	7.0	14.0	1	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Chefornak	4E	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Clark's Point	4E	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Dillingham	4E	23	2	0	0.0	0.0	6	0	0	0.0	0.0	1	0	0	0.0	0.0	0	0	0	0.0	0.0
Hooper Bay	4E	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
King Salmon	4E	2	1	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Kongiganak	4E	1	1	1	1.0	1.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Kwigillingok	4E	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Manokotak	4E	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Mekoryuk	4E	1	1	40	40.0	40.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Naknek	4E	3	1	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Nightmute	4E	0	0	0	0.0	0.0	0	0	0	0.0	0.0	1	1	50	50.0	50.0	0	0	0	0.0	0.0
Nome	4E	4	2	35	8.8	17.5	2	1	0	0.0	0.0	3	0	0	0.0	0.0	0	0	0	0.0	0.0
Platinum	4E	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Port Heiden	4E	1	1	5	5.0	5.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Quinhagak	4E	1	1	3	3.0	3.0	0	0	0	0.0	0.0	1	0	0	0.0	0.0	0	0	0	0.0	0.0
Sheldon Point	4E	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
South Naknek	4E	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Teller	4E	1	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Togiak	4E	0	0	0	0.0	0.0	0	0	0	0.0	0.0	1	0	0	0.0	0.0	0	0	0	0.0	0.0
Toksook Bay	4E	1	1	2	2.0	2.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
White Mountain	4E	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Subtota	l, Area 4E	40	12	100	2.5	8.3	10	1	0	0.5	0.0	8	1	50	6.3	50.0	0	0	0	0.0	0.0
Al	al, eligible aska rural ommunity	3,875	2,181	17,893	4.6	8.2	811	374	2,703	0.5	7.2	304	120	1,054	3.5	8.8	176	64	525	3.0	8.2
Subtotal, elig and eligi	•	5,219	2,749	24,306	4.7	8.8	1,216	520	4,439	3.7	8.5	473	195	1,712	3.6	8.8	408	147	1,325	3.2	9.0

Appendix Table G-2, section 2: eligible Alaska rural community, page 8 of 13.

		First n	nailing respo	nse			Second 1	nailing resp	onse			Third m	ailing respo	onse			Staff	administere	d	
Community of		Number	Number	Mean,	Mean, those		Number	Number	Mean,	Mean, those		Number	Number	Mean,	Mean, those		Number	Number	Mean,	Mean, those
residence of SHARC holder ^a	Number returned	subsistence fished	of halibut	all returned	who fished	Number returned	subsistence fished		all returned	who fished	Number returned	subsistence fished		all	who fished	Number returned	subsistence fished		all returned	who
Adak	5	4	34	6.8	8.5	3	1	7	2.3	7.0	7	0	0	0.0	0.0	0	0	0	0.0	0.0
Akhiok	3	3	21	7.0	7.0	3	2	13	4.3	6.5	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Akutan	6	5	63	10.5	12.6	1	2	13	13.0	6.5	0	0	0	0.0	0.0	10	5	28	2.8	5.6
Alakanuk	0	0	0	0.0	0.0	0	0	0	0.0	0.0	1	0	0	0.0	0.0	0	0	0	0.0	0.0
Aleknagik	0	0	0	0.0	0.0	1	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Anchor Point	3	1	12	4.0	12.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Anchorage	77	31	189	2.5	6.1	21	1	7	0.3	7.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Angoon	29	16	182	6.3	11.4	19	7	54	2.8	7.7	15	5	52	3.5	10.4	2	1	3	1.5	3.0
Atka	1	1	4	4.0	4.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Auke Bay	2	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Barrow	1	1	25	25.0	25.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Bethel	6	3	20	3.3	6.7	1	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Chefornak	6	3	54	9.0	18.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Chenega Bay	7	5	81	11.6	16.2	1	1	67	67.0	67.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Chevak	3	3	4	1.3	1.3	0	0	0	0.0	0.0	1	0	0	0.0	0.0	0	0	0	0.0	0.0
Chignik	11	6	189	17.2	31.5	1	1	4	4.0	4.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Chignik Lagoon	10	8	62	6.2	7.8	3	0	0	0.0	0.0	1	1	4	4.0	4.0	0	0	0	0.0	0.0
Chignik Lake	7	3	18	2.6	6.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Chiniak	10	8	92	9.2	11.5	2	2	5	2.5	2.5	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Chugiak	2	0	0	0.0	0.0	0	0	0	0.0	0.0	1	1	20	20.0	20.0	0	0	0	0.0	0.0
Clark's Point	1	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Coffman Cove	25	14	90	3.6	6.4	3	3	18	6.0	6.0	7	6	50	7.1	8.3	0	0	0	0.0	0.0
Cold Bay	18	11	82	4.6	7.5	4	2	23	5.8	11.5	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Cordova	307	141	902	2.9	6.4	76	34	218	2.9	6.4	37	13	43	1.2	3.3	0	0	0	0.0	0.0
Craig	251	136	1,298	5.2	9.5	72	35	303	4.2	8.7	14	6	38	2.7	6.3	2	0	0	0.0	0.0
Dillingham	24	2	0	0.0	0.0	10	0	0	0.0	0.0	1	0	0	0.0	0.0	0	0	0	0.0	0.0
Douglas	3	1	15	5.0	15.0	1	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Dutch Harbor	38	21	204	5.4	9.7	8	3	69	8.6	23.0	2	1	35	17.5	35.0	0	0	0	0.0	0.0

Appendix Table G-2, section 3: community of residence of SHARC holders, page 9 of 13.

		First n	nailing respor	ıse			Second 1	nailing resp	onse			Third m	ailing respo	onse			Staff	administere	d	
Community of		Number	Number	Mean,	Mean, those		Number	Number	Mean,	Mean, those		Number	Number	Mean,	Mean, those		Number	Number	Mean,	Mean,
residence of	Number	Number subsistence		all	who	Number	subsistence		all		Number	subsistence		all		Number	subsistence		all	those who
SHARC holder ^a	returned	fished		returned	fished	returned	fished		returned	fished	returned	fished	harvested			returned	fished	harvested		
Eagle River	3	2	68	22.7	34.0		0	0	0.0	0.0	0	0	0	0.0			0	0	0.0	
Edna Bay	16	9	44	2.8	4.9		2	25	12.5	12.5	2	1	18	9.0	18.0		0	0	0.0	
Eek	0	0	0	0.0	0.0		2	0	0.0	0.0	1	0	0	0.0	0.0		0	0	0.0	
Elfin Cove	7	2	10	1.4	5.0		1	2	2.0	2.0	1	0	0	0.0	0.0		0	0	0.0	
Fairbanks	3	1	2	0.7	2.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
False Pass	1	1	3	3.0	3.0	1	1	12	12.0	12.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Fritz Creek	1	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Gakona	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Gambell	1	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Golovin	0	0	0	0.0	0.0	1	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Goodnews	1	0	0	0.0	0.0	1	1	0	0.0	0.0	1	0	0	0.0	0.0	0	0	0	0.0	0.0
Bay																				
Gustavus	48	26	212	4.4	8.2	6	2	7	1.2	3.5	3	3	9	3.0	3.0	0	0	0	0.0	
Haines	294	168	769	2.6	4.6		24	81	1.2	3.4	22	9	11	0.5	1.2		0	0	0.0	
Hollis	1	0	0	0.0	0.0		0	0	0.0	0.0	0	0	0	0.0	0.0		0	0	0.0	
Homer	14	9	94	6.7	10.4	2	1	6	3.0	6.0	0	0	0	0.0	0.0	0	0	0	0.0	
Hoonah	120	61	521	4.3	8.5	31	8	58	1.9	7.3	6	3	18	3.0	6.0	2	1	45	22.5	
Hooper Bay	3	2	663	221.0	331.5	3	0	0	0.0	0.0	1	1	6	6.0	6.0	0	0	0	0.0	
Hydaburg	23	14	67	2.9	4.8	7	1	13	1.9	13.0	1	2	23	23.0	11.5	81	38	404	5.0	10.6
Hyder	22	14	132	6.0	9.4	2	2	0	0.0	0.0	4	1	6	1.5	6.0	0	0	0	0.0	0.0
Juneau	94	35	409	4.4	11.7	29	9	58	2.0	6.4	4	0	0	0.0	0.0	0	0	0	0.0	
Kake	56	25	148	2.6	5.9	17	11	100	5.9	9.1	6	2	5	0.8	2.5	0	0	0	0.0	0.0
Kasaan	13	7	62	4.8	8.9	3	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Kasilof	4	3	29	7.3	9.7	2	2	127	63.5	63.5	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Kenai	35	9	98	2.8	10.9	7	3	74	10.6	24.7	3	0	0	0.0	0.0		0	0	0.0	
Ketchikan	175	58	856	4.9	14.8	54	21	167	3.1	8.0	28	11	66	2.4	6.0	80	14	152	1.9	10.9
King Cove	41	23	254	6.2	11.0	13	8	30	2.3	3.8	2	2	9	4.5	4.5	0	0	0	0.0	0.0
King Salmon	2	1	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Kipnuk	1	1	17	17.0	17.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Klawock	91	52	543	6.0	10.4	21	6	22	1.0	3.7	12	5	13	1.1	2.6	1	1	5	5.0	5.0
Kodiak	830	505	4,964	6.0	9.8	160	81	711	4.4	8.8	70	29	322	4.6	11.1	1	2	16	16.0	8.0
Kongiganak	3	3	8	2.7	2.7	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0

Appendix Table G-2, section 3: community of residence of SHARC holders, page 10 of 13.

149

		First m	ailing respor	ıse			Second 1	nailing resp	onse			Third m	ailing respo	onse			Staff	administere	d	
Community of		N7 1	N7 1	X	Mean,		N7 1	N7 1	N	Mean,		N7 1	N7 1	м	Mean,		N 1	N7 1	M	Mean,
Community of residence of	Number	Number subsistence	Number of halibut	Mean, all	those who	Number	Number subsistence	Number of halibut	Mean, all	those who	Number	Number subsistence	Number of halibut	Mean, all	those who	Number	Number subsistence	Number of halibut	Mean, all	those who
SHARC holder ^a	returned	fished	harvested	returned	fished	returned	fished	harvested		fished	returned	fished	harvested			returned	fished	harvested	returned	
Kotzebue	1	0	0	0.0	0.0	1	1	10	10.0	10.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Kwigillingok	1	1	3	3.0	3.0	1	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Larsen Bay	12	7	81	6.8	11.6	3	3	97	32.3	32.3	1	1	3	3.0	3.0	0	0	0	0.0	
Manokotak	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
McGrath	1	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Mekoryuk	3	3	70	23.3	23.3	1	1	25	25.0	25.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Metlakatla	51	17	99	1.9	5.8	34	10	69	2.0	6.9	5	1	1	0.2	1.0	0	0	0	0.0	0.0
Meyers Chuck	8	7	26	3.3	3.7	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Naknek	5	2	1	0.2	0.5	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Nanwalek	10	8	97	9.7	12.1	4	4	101	25.3	25.3	6	6	271	45.2	45.2	0	0	0	0.0	0.0
Naukati	10	6	28	2.8	4.7	0	0	0	0.0	0.0	0	0	0	0.0	0.0	1	0	0	0.0	0.0
Nelson	1	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Lagoon																				
Newtok	0	0	0	0.0	0.0		1	20	20.0	20.0	0	0	0	0.0	0.0		0	0	0.0	
Nightmute	0	0	0	0.0	0.0	0	0	0	0.0	0.0	2	2	60	30.0		0	0	0	0.0	
Nikiski	5	3	52	10.4	17.3	1	1	2	2.0	2.0	0	0	0	0.0	0.0	0	0	0	0.0	
Nikolski	2	1	7	3.5	7.0		0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	
Ninilchik	15	2	49	3.3	24.5	1	0	0	0.0	0.0	1	1	22	22.0	22.0		0	0	0.0	
Nome	6	4	49	8.2	12.3	2	1	0	0.0	0.0	3	0	0	0.0	0.0		0	0	0.0	
North Pole	2	0	0	0.0	0.0		0	0	0.0	0.0	0	0	0	0.0	0.0		0	0	0.0	
Old Harbor	36	25	197	5.5	7.9		2	12	4.0	6.0	3	0	0	0.0	0.0		0	0	0.0	
Ouzinkie	23	12	41	1.8	3.4		5	84	14.0		4	4	12	3.0	3.0		0	0	0.0	
Palmer	2	1	8	4.0	8.0		0	0	0.0	0.0	0	0	0	0.0	0.0		0	0	0.0	
Pelican	29	15	211	7.3	14.1	9	6	28	3.1	4.7	2	1	0	0.0	0.0	0	0	0	0.0	
Perryville	13	10	90	6.9	9.0		1	8	8.0	8.0	2	0	0	0.0	0.0	0	0	0	0.0	
Petersburg	547	242	1,812	3.3	7.5		40	222	1.8		55	15	115	2.1	7.7	2	1	1	0.5	1.0
Point Baker	15	13	65	4.3	5.0		2	5	1.7	2.5	2	2	12	6.0	6.0		0	0	0.0	
Port Alexander		10	96	6.9	9.6	3	1	18	6.0	18.0	2	1	2	1.0	2.0		0	0	0.0	
Port Graham	23	14	318	13.8	22.7	6	4	24	4.0	6.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Port Heiden	1	1	5	5.0	5.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0

Appendix Table G-2, section 3: community of residence of SHARC holders, page 11 of 13.

		First m	ailing respo	nse			Second 1	nailing resp	onse			Third m	ailing respo	nse			Staff	administere	d	
Community of		N7 1	N7 1		Mean,		N7 1	N7 1		Mean,		N7 1	N7 1		Mean,		NT 1	N7 1	N	Mean,
Community of residence of	Number	Number subsistence	Number of halibut	Mean, all	those who	Number	Number subsistence	Number of halibut	Mean, all	those who	Number	Number subsistence	Number of halibut	Mean, all	those who	Number	Number subsistence	Number of halibut	Mean, all	those who
SHARC holder ^a	returned	fished	harvested	returned	fished	returned	fished	harvested			returned	fished	harvested	returned			fished	harvested	returned	
Port Lions	23	15	141	6.1	9.4	4	2	6	1.5	3.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Port Protection	0	0	0	0.0	0.0	0	0	0	0.0	0.0	1	0	0	0.0	0.0	0	0	0	0.0	0.0
Port William	1	1	3	3.0	3.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Quinhagak	2	2	4	2.0	2.0	0	0	0	0.0	0.0	2	0	0	0.0	0.0	0	0	0	0.0	0.0
Sand Point	67	36	406	6.1	11.3	25	10	127	5.1	12.7	8	2	12	1.5	6.0	0	0	0	0.0	0.0
Savoonga	7	4	25	3.6	6.3	3	2	8	2.7	4.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Saxman	1	0	0	0.0	0.0	1	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Scammon 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
Seldovia	83	57	936	11.3	16.4	21	13	85	4.0	6.5	6	4	84	14.0	21.0	1	1	12	12.0	12.0
Seward	10	4	22	2.2	5.5	1	0	0	0.0	0.0	1	0	0	0.0	0.0	0	0	0	0.0	0.0
Sitka	749	410	2,435	3.3	5.9	160	82	651	4.1	7.9	54	31	173	3.2	5.6	220	82	649	3.0	7.9
Skagway	37	22	49	1.3	2.2	6	2	0	0.0	0.0	2	0	0	0.0	0.0	0	0	0	0.0	0.0
Soldotna	5	1	20	4.0	20.0	3	0	0	0.0	0.0	3	1	20	6.7	20.0	0	0	0	0.0	0.0
South Naknek	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
St. George Island	2	2	14	7.0	7.0	1	1	17	17.0	17.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
St. Paul Island	11	5	74	6.7	14.8	3	3	68	22.7	22.7	5	0	0	0.0	0.0	0	0	0	0.0	0.0
Sterling	0	0	0	0.0	0.0	1	0	0	0.0	0.0	0	0	0	0.0	0.0	1	0	0	0.0	0.0
Tatitlek	8	6	92	11.5	15.3	5	2	12	2.4	6.0	5	4	55	11.0	13.8	0	0	0	0.0	0.0
Teller	1	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Tenakee Springs	38	27	162	4.3	6.0	2	1	2	1.0	2.0	2	2	9	4.5	4.5	0	0	0	0.0	0.0
Thorne Bay	67	45	370	5.5	8.2	11	4	15	1.4	3.8	9	2	15	1.7	7.5	0	0	0	0.0	0.0
Togiak	1	45 0	370 0	0.0	0.0	3	4 0	0	0.0	0.0	1	0	15	0.0	0.0		0	0	0.0	
Toksook Bay	8	6	102	12.8	17.0		2	104	52.0		1	0	32	32.0	32.0		0	0	0.0	
Trapper Creek	0	0	102	0.0	0.0		2	0	0.0		0	1	52 0	0.0	0.0		0	0	0.0	
	3	2	58	0.0 19.3	29.0	1	0		0.0	0.0	3	1	10	3.3	10.0		0	0	0.0	
Tununak Twin Hills	3	2	58 0	19.3 0.0	29.0	1	0	0	0.0	0.0	5 0	1	10	5.5 0.0	10.0		0	0	0.0	
	1	0	0	0.0	0.0	0	0	0	-continu		U	0	0	0.0	0.0	0	0	0	0.0	0.0

Appendix Table G-2, section 3: community of residence of SHARC holders, page 12 of 13.

		First m	ailing respo	nse			Second 1	nailing resp	onse			Third m	ailing respo	onse			Staff	administere	d	
					Mean,					Mean,					Mean,					Mean
Community of		Number	Number	Mean,	those		Number	Number	Mean,	those		Number	Number	Mean,	those		Number	Number	Mean,	those
residence of SHARC holder ^a	Number returned	subsistence fished	of halibut harvested	all returned	who fished	Number returned	subsistence fished	of halibut harvested	all returned		Number returned	subsistence fished	of halibut harvested	all returned	who fished	Number returned	subsistence fished	of halibut harvested	all returned	who fished
Unalakleet	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Unalaska	44	28	282	6.4	10.1	11	3	25	2.3	8.3	0	0	0	0.0	0.0	1	0	0	0.0	0.0
Valdez	21	9	178	8.5	19.8	1	0	0	0.0	0.0	1	0	0	0.0	0.0	0	0	0	0.0	0.0
Ward Cove	11	2	10	0.9	5.0	2	1	4	2.0	4.0	1	0	0	0.0	0.0	0	0	0	0.0	0.0
Wasilla	11	3	35	3.2	11.7	4	0	0	0.0	0.0	2	1	10	5.0	10.0	0	0	0	0.0	0.0
Waterfall	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Whale Pass	2	2	18	9.0	9.0	2	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Whittier	2	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Willow	1	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0.0	0.0
Wrangell	303	175	1,637	5.4	9.4	58	25	253	4.4	10.1	19	7	29	1.5	4.1	2	1	10	5.0	10.0
Yakutat	45	21	206	4.6	9.8	10	4	43	4.3	10.8	4	3	17	4.3	5.7	0	0	0	0.0	0.0
Subtotal, Alaska communities of residence	5	2,747	24,298	4.7	8.8	1,207	520	4,439	3.7	8.5	472	195	1,712	3.6	8.8	407	147	1,325	3.3	9.0
Non-Alaska communities of residence	58	2	8	0.0	0.0	9	0	0	0.0	0.0	1	0	0	0.0	0.0	1	0	0	0.1	(
Total, all communities of residence ^b	5,219	2,749	24,306	4.7	8.8	1,216	520	4,439	3.7	8.5	473	195	1,712	3.6	8.8	408	147	1,325	3.2	9.(

Appendix Table G-2, section 3: community of residence of SHARC holders, page 13 of 13.

a. To protect confidentiality, data for tribes or communities with 5 or fewer SHARCs issued are not reported in this table. Subtotals and totals include all tribes and communities.

b. Note that members of eligible Alaska tribes could obtain SHARCs regardless of their place of residence. All non-Alaska resident SHARC holders were members of eligible tribes.

Source ADF&G Division of Subsistence SHARC survey, 2009.

Appendix Table G-3.-Estimated Alaska subsistence harvests of halibut, by eligible Alaska tribe, eligible Alaska rural community, gear type, and regulatory area

			Setli	ne (fixed) ge	ar ^a	На	nd-operated	b			All gear		
		Number	Estimated			Estimated	Estimated		Estimated	Estimated	Confidence	Estimated	Confidence
		of	number	number	pounds	number	number	pounds	number	number	interval for	pounds	interval for
Eligible Alaska tribe ^c				halibut	halibut	respondents	halibut	halibut	respondents	halibut	number of	halibut	pounds of
2	area	issued	fished		harvested d	fished		harvested d	fished	harvested	halibut	harvested d	
Angoon Community Association	2C	113	35	406	7,521	24	152	2,909	45	558	38.0%	10,430	34.5%
Central Council Tlingit And Haida Indian Tribes	2C	507	157	1,427	33,138	84	473	7,810	187	1,901	21.6%	40,948	30.9%
Chilkat Indian Village	2C	18	7	30	731	0	0	0	7	30	44.3%	731	36.9%
Chilkoot Indian Association	2C	45	10	27	1,323	2	0	0	10	27	75.3%	1,323	73.5%
Craig Community Association	2C	46	16	66	2,785	14	34	724	22	100	35.1%	3,509	43.8%
Douglas Indian Association	2C	16	4	94	1,969	0	0	0	4	94	284.6%	1,969	284.6%
Hoonah Indian Association	2C	135	46	310	6,598	17	88	1,515	51	398	31.1%	8,113	31.1%
Hydaburg Cooperative Association	2C	116	54	439	18,305	16	38	1,310	56	477	10.9%	19,614	12.6%
Ketchikan Indian Corporation	2C	585	100	812	14,881	60	550	7,321	127	1,362	27.9%	22,202	26.9%
Klawock Cooperative Association	2C	73	27	171	4,070	8	27	375	32	198	34.6%	4,446	34.2%
Metlakatla Indian Community, Annette Island Reserve	2C	205	32	157	2,861	14	46	742	46	203	52.5%	3,603	52.3%

				ne (fixed) ge			nd-operated				All gear		
		Number	Estimated	Estimated	Estimated	Estimated	Estimated		Estimated	Estimated	Confidence	Estimated	Confidence
		of	number	number	pounds	number	number	pounds	number	number	interval for	pounds	interval for
Eligible Alaska	••••		1	halibut		respondents	halibut	halibut	respondents	halibut	number of	halibut	pounds of
tribe ^c	area	issued	fished		harvested d	fished		harvested d		harvested	halibut	harvested d	
Organized Village Of Kake	2C	83	22	151	2,957	12	33	759	27	184	40.6%	3,716	37.9%
Organized Village Of Kasaan	2C	15	2	29	578	2	12	169	2	41	91.9%	747	85.4%
Organized Village Of Saxman	2C	38	17	290	8,644	15	111	2,672	18	401	95.6%	11,316	115.5%
Petersburg Indian Association	2C	72	19	104	2,003	14	64	1,052	25	168	28.0%	3,055	30.2%
Sitka Tribe Of Alaska	2C	273	98	817	18,979	31	162	2,430	108	979	23.1%	21,409	19.0%
Skagway Village	2C	4	0	0	0	0	0	0	0	0	0.0%	0	0.0%
Wrangell Cooperative Association	2C	89	33	321	6,099	17	48	875	38	369	24.1%	6,974	22.9%
Subtot	al, Area 2C	2,433	679	5,650	133,440	331	1,837	30,663	804	7,488	9.2%	164,104	10.2%
Kenaitze Indian Tribe	3A	87	11	406	2,909	22	321	6,061	29	727	45.4%	8,969	40.9%
Lesnoi Village (Woody Island)	3A	69	11	92	2,471	3	6	183	11	98	60.9%	2,654	71.9%
Native Village Of Afognak	3A	23	8	58	1,387	6	22	506	12	79	57.6%	1,892	57.6%
Native Village Of Akhiok	3A	15	3	18	185	6	50	689	8	67	58.9%	874	70.6%
Native Village Of Chenega	3A	20	8	125	4,268	5	29	1,217	8	155	93.9%	5,485	91.6%
Native Village Of Eyak	3A	75	20	129	2,064	9	31	499	23	160	42.4%	2,563	37.5%
Native Village Of Karluk	3A	1	0	0	0	0	0	0	0	0	0.0%	0	0.0%

Appendix Table G-3, section 1: eligible Alaska tribe, page 2 of 11.

154

			Setli	ne (fixed) ge	ar ^a		nd-operated				All gear		
		Number	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated	Confidence	Estimated	Confidence
		of	number	number	pounds	number	number	pounds	number	number	interval for	pounds	interval for
Eligible Alaska				halibut	halibut	respondents	halibut	halibut	respondents	halibut	number of	halibut	pounds of
tribe ^c	area	issued	fished		harvested d	fished		harvested d		harvested		harvested d	
Native Village Of Larsen Bay	3A	36	12	93	1,939	7	83	800	17	177	62.2%	2,739	53.4%
Native Village Of Nanwalek	3A	42	22	475	8,721	29	212	2,617	35	687	43.5%	11,338	52.3%
Native Village Of Ouzinkie	3A	33	19	111	2,600	14	49	1,081	21	160	41.6%	3,680	35.2%
Native Village Of Port Graham	3A	40	13	376	7,817	14	153	1,340	21	529	42.6%	9,157	56.8%
Native Village Of Port Lions	3A	32	11	88	1,817	3	14	326	14	102	45.0%	2,143	38.4%
Native Village Of Tatitlek	3A	33	14	130	3,097	4	21	447	16	151	81.4%	3,544	78.0%
Native Village Of Tatitlek	3A	33	14	130	3,097	4	21	447	16	151	81.4%	3,544	78.0%
Seldovia Village Tribe	3A	49	15	149	3,498	19	98	1,453	27	247	39.0%	4,951	49.7%
Shoonaq' Tribe Of Kodiak	3A	137	76	851	16,092	31	146	3,174	89	997	45.1%	19,266	39.7%
Village Of Kanatak	3A	5	0	0	0	0	0	0	0	0	0.0%	0	0.0%
Village Of Old Harbor	3A	63	8	71	1,318	32	165	4,733	35	237	41.2%	6,051	43.6%
Village Of Salamatof	3A	21	0	0	0	2	46	735	2	46	86.8%	735	87.5%
Yakutat Tlingit Tribe	3A	37	12	148	2,947	2	4	92	12	152	65.2%	3,039	75.1%
Subtot	al, Area 3A	890	272	3,445	64,342	223	1,641	27,986	398	5,085	14.0%	92,328	14.7%
Agdaadux Tribe Of King Cove		68	8	119	2,716	29	212			331		6,366	
Chignik Lake Village	3B	10	2	9	74	5	23	153	5	32	92.0%	227	97.5%
Ivanoff Bay Village	3B	14	0	0	0	2	5	98	2	5	279.1%	98	279.1%

Appendix Table G-3, section 1: eligible Alaska tribe, page 3 of 11.

			Setlin	ne (fixed) ge	ar ^a	Ha	nd-operated	b			All gear		
		Number	Estimated	Estimated	Estimated	Estimated	Estimated		Estimated	Estimated	Confidence		Confidence
		of	number	number	pounds	number	number	pounds	number	number	interval for	pounds	interval for
Eligible Alaska tribe [°]			-	halibut	halibut	respondents	halibut	halibut	respondents	halibut	number of	halibut	pounds of
	area	issued	fished		harvested d	fished		harvested d		harvested	halibut	harvested d	
Native Village Of Belkofski	3B	3	0	0	0	0	0	0	0	0	0.0%	0	0.0%
Native Village Of Chignik	3B	7	0	0	0	2	16	392	2	16	0.0%	392	0.0%
Native Village Of Chignik Lagoon	3B	24	5	34	809	14	52	1,078	14	86	28.0%	1,887	32.5%
Native Village Of False Pass	3B	1	1	12	42	0	0	0	1	12	0.0%	42	0.0%
Native Village Of Nelson Lagoon	3B	3	0	0	0	0	0	0	0	0	0.0%	0	0.0%
Native Village Of Perryville	3B	36	12	128	2,283	10	26	602	17	154	42.0%	2,885	48.6%
Native Village Of Unga	3B	11	0	0	0	0	0	0	0	0	0.0%	0	0.0%
Pauloff Harbor Village	3B	46	11	238	2,140	14	100	1,553	19	338	99.0%	3,694	92.8%
Qagan Tayagungin Tribe Of Sand Point Village	3B	306	65	786	13,032	75	345	7,135	113	1,131	36.1%	20,167	34.4%
Subtot	al, Area 3B	529	104	1,326	21,096	151	778	14,662	208	2,104	21.2%	35,758	20.0%
Native Village Of Akutan	4A	18	7	23	2,186	11	87	3,843	13	110	15.1%	6,029	29.8%
Qawalangin Tribe Of Unalaska	4A	43	11	73	912	12	57	1,586	20	131	52.4%	2,497	64.9%
Subtot	al, Area 4A	61	18	97	3,098	23	144	5,429	33	241	30.1%	8,527	67.8%
Native Village Of Atka	4B	5	0	0	0	0	0	0	0	0	0.0%	0	0.0%
0-14-4	al, Area 4B	5	0	0	0	0	0	0	0	0	0.0%	0	0.0%

Appendix Table G-3, section 1: eligible Alaska tribe, page 4 of 11.

			Setlin	ne (fixed) ge	ar ^a		nd-operated	b			All gear		
		Number	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated	Confidence	Estimated	Confidence
		of	number	number	pounds	number	number	pounds	number	number	interval for	pounds	interval for
Eligible Alaska				halibut	halibut	respondents	halibut	halibut	respondents	halibut	number of	halibut	pounds of
tribe ^c	area	issued	fished		harvested ^d	fished	harvested	harvested ^d		harvested	halibut	harvested ^d	
Pribilof Islands Aleut Community Of St. George	4C	6	0	0	0	5	52	1,050	5	52	109.1%	1,050	0.0%
Pribilof Islands Aleut Community Of St. Paul	4C	46	11	249	3,500	7	27	848	13	276	66.9%	4,348	82.6%
Subto	al, Area 4C	52	11	249	3,500	12	78	1,898	18	327	53.2%	5,398	61.7%
Native Village Of Gambell	4D	1	0	0	0	0	0	0	0	0	0.0%	0	0.0%
Native Village Of Savoonga	4D	20	11	58	3,087	2	2	189	11	59	97.0%	3,276	99.2%
Subto	al, Area 4D	21	11	58	3,087	2	2	189	11	59	93.9%	3,276	96.1%
Chevak Native Village (Kashunamiut)	4E	6	1	0	0	3	4	11	3	4	201.3%	11	201.3%
Chinik Eskimo Community	4E	1	0	0	0	0	0	0	0	0	0.0%	0	0.0%
Egegik Village	4E	1	0	0	0	0	0	0	0	0	0.0%	0	0.0%
King Island Native Community	4E	1	1	10	210	1	5	140	1	15	0.0%	350	0.0%
Levelock Village	4E	1	0	0	0	0	0	0	0	0	0.0%	0	0.0%
Naknek Native Village	4E	9	1	1	21	0	0	0	1	1	251.6%	21	251.6%
Native Village Of Aleknagik	4E	6	0	0	0	0	0	0	0	0	0.0%	0	0.0%
Native Village Of Brevig Mission	4E	1	0	0	0	0	0	0	0	0	0.0%	0	0.0%
Native Village Of Council	4E	2	0	0	0	0	0	0	0	0	0.0%	0	0.0%

Appendix Table G-3, section 1: eligible Alaska tribe, page 5 of 11.

			Setli	ne (fixed) ge	ar ^a	На	nd-operated	b			All gear		
		Number	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated	Confidence	Estimated	Confidence
		of	number	number	pounds	number	number	pounds	number	number	interval for	pounds	interval for
Eligible Alaska	••••		1	halibut	halibut	respondents	halibut	halibut	respondents	halibut	number of	halibut	pounds of
tribe ^c	area	issued	fished		harvested ^d			harvested d		harvested		harvested d	
Native Village Of Dillingham (Curyung)	4E	21	0	0	0	-	0	-	-	0	,.	0	
Native Village Of Eek	4E	7	0	0	0	5	14	392	5	14	225.0%	392	225.0%
Native Village Of Goodnews Bay (Mumtraq)	4E	4	1	0	0	1	0	0	1	0	0.0%	0	0.0%
Native Village Of Hooper Bay	4E	17	3	703	820	7	684	1,233	7	1,387	154.0%	2,053	116.2%
Native Village Of Kanakanak	4E	1	1	4	70	0	0	0	1	4	0.0%	70	0.0%
Native Village Of Kipnuk	4E	12	0	0	0	12	204	1,680	12	204	0.0%	1,680	0.0%
Native Village Of Kongiganak	4E	6	1	2	36	5	20	350	5	22	487.1%	386	477.8%
Native Village Of Koyuk	4E	1	0	0	0	0	0	0	0	0	0.0%	0	0.0%
Native Village Of Kwigillingok	4E	46	0	0	0	42	126	1,764	42	126	1256.4%	1,764	1256.4%
Native Village Of Kwinhagak	4E	4	0	0	0	2	2	16	2	2	1037.5%	16	1037.5%
Native Village Of Mekoryuk	4E	6	4	44	569	3	25	306	4	69	81.1%	875	94.4%
Native Village Of Nightmute	4E	5	0	0	0	1	10	63	1	10	0.0%	63	0.0%
Native Village Of Port Heiden	4E	1	0	0	0	0	0	0	0	0	0.0%	0	0.0%
Native Village Of Scammon Bay	4E	5	0	0	0	1	6	28	1	6	304.2%	28	304.29
Native Village Of Toksook Bay (Nunakauyak)	4E	34	6	178	707	7	58	1,420	8	236	88.9%	2,127	120.19

Appendix Table G-3, section 1: eligible Alaska tribe, page 6 of 11.

158

			Setlin	ne (fixed) ge	ar ^a	Ha	nd-operated	b			All gear		
		Number	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated	Confidence	Estimated	Confidence
		of	number	number	pounds	number	number	pounds	number	number	interval for	pounds	interval for
Eligible Alaska	••••		respondents	halibut	halibut	respondents	halibut	halibut	respondents	halibut	number of	halibut	pounds of
tribe ^c	area	issued	fished		harvested d	fished		harvested d	fished	harvested	halibut	harvested d	
Native Village Of Tununak	4E	71	0	0	0	8	177	1,296	8	177	156.3%	1,296	178.8%
Native Village Of Unalakleet	4E	3	0	0	0	0	0	0	0	0	0.0%	0	0.0%
Native Village Of White Mountain	4E	1	0	0	0	0	0	0	0	0	0.0%	0	0.0%
Newtok Village	4E	1	1	0	0	1	20	140	1	20	0.0%	140	0.0%
Nome Eskimo Community	4E	12	4	26	398	2	18		6	44		590	
Orutsararmuit Native Village	4E	7	2	46	559	2	4	60	4	49	160.3%	619	160.3%
South Naknek Village	4E	2	0	0	0	0	0	0	0	0	0.0%	0	0.0%
Stebbins Community Association	4E	4	4	6	102	0	0	0	4	6	0.0%	102	0.0%
Traditional Village Of Togiak	4E	6	0	0	0	0	0	0	0	0	0.0%	0	0.0%
Twin Hills Village	4E	1	0	0	0	0	0	0	0	0	0.0%	0	0.0%
Ugashik Village	4E	1	0	0	0	0	0	0	0	0	0.0%	0	0.0%
Village Of Chefornak	4E	15	0	0	0	8	135	1,010	8	135	112.2%	1,010	105.8%
Village Of Clark's Point	4E	2	0	0	0	0	0	0	0	0	0.0%	0	0.0%
Village Of Kotlik	4E	1	0	0	0	0	0	0	0	0	0.0%	0	0.0%
Subtot	al, Area 4E	325	30	1,019	3,490	111	1,512	10,101	124	2,531	80.1%	13,591	41.8%
Subtotal, elig	gible Alaska tribes	4,316	1,124	11,843	232,053	852	5,992	90,928	1,595	17,835	10.9%	322,980	7.9%

Appendix Table G-3, section 1: eligible Alaska tribe, page 7 of 11.

159

			Setli	ne (fixed) ge	ar ^a	Ha	nd-operated	b			All gear		
Eligible Alaska rural community ^c	Regulatory area	Number of SHARCs issued	Estimated number respondents fished	number halibut	Estimated pounds halibut harvested ^d	Estimated number respondents fished	Estimated number halibut harvested	Estimated pounds halibut harvested ^d	Estimated number respondents fished	Estimated number halibut harvested	Confidence interval for number of halibut	Estimated pounds halibut harvested ^d	Confidence interval for pounds of halibut
Angoon	2C	16	7	148	2,581	3	10	137	8	157	83.9%	2,718	85.0%
Coffman Cove	2C	47	27	141	3,776	13	70	1,073	31	211	19.3%	4,850	16.0%
Craig	2C	380	148	1,298	23,728	65	350	4,178	173	1,648	11.1%	27,906	10.2%
Edna Bay	2C	45	25	165	3,138	5	17	255	27	182	20.1%	3,393	15.0%
Elfin Cove	2C	18	3	11	269	1	1	25	3	12	87.9%	293	80.0%
Gustavus	2C	74	28	176	3,461	22	86	1,714	36	262	20.0%	5,175	22.0%
Haines	2C	427	226	977	22,767	56	43	714	233	1,019	8.6%	23,481	10.0%
Hollis	2C	36	12	40	962	6	37	453	15	77	42.7%	1,415	35.4%
Hoonah	2C	121	52	416	5,911	27	137	2,267	60	553	15.0%	8,178	15.3%
Hydaburg	2C	13	8	88	5,090	3	2	49	8	90	26.9%	5,139	33.7%
Hyder	2C	36	19	155	2,511	3	1	32	19	157	28.8%	2,543	20.8%
Kake	2C	42	22	107	2,046	9	16	451	24	123	34.8%	2,496	28.9%
Kasaan	2C	10	6	31	546	2	3	63	6	34	0.0%	609	0.0%
Klawock	2C	125	51	325	6,436	43	488	5,246	80	813	16.2%	11,682	14.9%
Metlakatla	2C	40	15	86	1,337	8	56	840	20	142	71.4%	2,177	55.5%
Meyers Chuck	2C	8	7	22	552	2	4	39	7	26	0.0%	590	0.0%
Naukati Bay	2C	6	2	5	79	2	8	184	3	12	123.3%	263	133.5%
Pelican	2C	44	23	163	4,036	8	16	301	23	179	43.6%	4,337	38.6%
Petersburg	2C	904	264	1,718	27,956	185	884	14,176	361	2,602	12.4%	42,132	7.0%
Port Alexander	2C	34	18	148	3,768	7	27	750	21	175	33.6%	4,518	35.0%
Port Protection	2C	20	13	39	795	13	17	418	16	56	22.5%	1,213	26.4%
Point Baker	2C	17	12	47	1,054	5	8	284	12	55	18.5%	1,337	21.5%
Saxman	2C	16	5	185	798	5	103	849	7	288	45.1%	1,647	38.3%
Sitka	2C	1,388	670	3,768	77,278	197	681	10,667	722	4,449	6.1%	87,945	5.6%
Skagway	2C	51	28	66	1,678	7	4	50	28	70	22.6%	1,728	24.6%
Tenakee Springs	2C	44	26	135	2,751	15	49	807	31	183	9.7%	3,558	9.0%

Appendix Table G-3, section 2: eligible Alaska rural communities, page 8 of 11.

160

			Setlin	ne (fixed) ge	ear ^a	На	nd-operated	b			All gear		
		Number	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated	Confidence	Estimated	Confidence
Eligible		of	number	number	pounds	number	number	pounds	number	number	interval for	pounds	interval for
Alaska rural			respondents	halibut	halibut	respondents	halibut	halibut	respondents	halibut	number of	halibut	pounds of
community ^c	area	issued	fished		harvested ^d	fished		harvested ^d	fished	harvested	halibut	harvested d	
Thorne Bay	2C	122	52		8,279	26			62		17.0%	,	15.1%
Whale Pass	2C	22	6	24		7			10		24.3%	1,635	20.7%
Wrangell	2C	373	175	1,508		86			210	y	8.0%	36,207	8.6%
	al, Area 2C	4,479	1,950	12,332	-	830	-) -	· · · · ·	2,254	16,076		<i>,</i>	3.2%
Akhiok	3A	1	0			1	5		1	5		67	0.0%
Chenega Bay	3A	10	4	52		4			5	81	73.0%	1,054	75.1%
Cordova	3A	522	214	1,143	,	89	293		236	1,436		25,500	10.2%
Kodiak	3A	1,584	684	5,832	115,019	450	2,865	47,307	876	8,696	6.4%	162,326	6.3%
Larsen Bay	3A	13	2	15	217	5	96		5	111	92.6%	1,180	71.2%
Nanwalek	3A	11	9	660	13,020	2	30	350	9	690	268.0%	13,370	311.5%
Old Harbor	3A	18	3	26	373	10	49	1,172	12	75	24.1%	1,545	24.5%
Ouzinkie	3A	25	5	43	676	11	40	955	13	82	65.5%	1,631	55.4%
Port Graham	3A	14	2	78	2,520	7	72	854	9	150	81.0%	3,374	115.1%
Port Lions	3A	16	8	31	554	4	53	700	12	84	60.9%	1,254	48.7%
Seldovia	3A	147	53	617	10,295	69	850	12,151	97	1,467	12.5%	22,446	12.3%
Tatitlek	3A	11	8	153	3,098	2	5	63	9	158	51.5%	3,161	50.3%
Yakutat	3A	64	29	289	5,042	5	57	679	31	345	27.0%	5,721	25.1%
Subtot	al, Area 3A	2,436	1,020	8,938	172,003	657	4,443	70,625	1,314	13,380	5.1%	242,628	5.1%
Chignik	3B	5	1	25	420	3	16	340	3	41	237.5%	760	226.8%
Chignik Lagoon	3B	2	0	0	0	1	10	252	1	10	0.0%	252	0.0%
Chignik Lake	3B	3	1	4	147	1	4	147	1	8	0.0%	294	0.0%
Cold Bay	3B	24	8	64	1,162	6	27	406	13	91	24.2%	1,568	26.1%
False Pass	3B	2	0	0	0	1	3	105	1	3	0.0%	105	0.0%
King Cove	3B	23	4	10	140	16	96	2,175	17	106	45.1%	2,315	42.2%
Nelson Lagoon	3B	1	0	0		0		-	0	0	0.0%	0	
Perryville	3B	1	0	0	0	0	0	0	0	0	0.0%	0	0.0%
Sand Point	3B	16	5	40	1,342	8	48	846	10	88	47.4%	2,188	61.9%
	al, Area 3B	77	18	143		36	204		45	347	21.0%		22.7%

Appendix Table G-3, section 2: eligible Alaska rural communities, page 9 of 11.

161

		0		ne (fixed) ge			nd-operated	b			All gear		
		Number	Estimated	Estimated		Estimated	Estimated		Estimated	Estimated	Confidence	Estimated	Confidence
Eligible		of	number	number	pounds	number	number	pounds	number	number	interval for	pounds	interval for
Alaska rural			respondents	halibut	halibut	respondents	halibut	halibut	respondents	halibut	number of	halibut	pounds of
community ^c	area	issued	fished		harvested ^d	fished		harvested d	fished	harvested	halibut	harvested ^d	
Nikolski	4A	2		0		1	7		1	7		420	
Unalaska	4A	127	46	375		27	319		63		19.3%		21.2%
Subtot	al, Area 4A	130	46	375	· · · ·	28		,	64	702	18.9%	,	20.4%
Adak	4B	26	4	14		6	52	1,750	8	66		,	
Atka	4B	2	2	8	182	0	0	0	2	8	0.0%	182	0.0%
Subtot	al, Area 4B	28	6	22	350	6	52	1,750	10	74	73.0%	2,100	82.1%
St. George Island	4C	1	0	0	0	0	0	0	0	0	0.0%	0	0.0%
St. Paul	4C	2	1	13	161	2	5	99	2	18	0.0%	260	0.0%
Island							_						
	al, Area 4C	3		13		2			2				
Alakanuk	4E	1	0	0		0			0			0	
Aleknagik	4E	2	0	0		0			0				0.0%
Bethel	4E	3	1	14		0			1	14			0.0%
Chefornak	4E	1	0	0	0	0	0	0	0	0		0	
Clark's Point	4E	1	0	0	0	0	0	0	0	0	0.0%	0	0.0%
Dillingham	4E	43	5	0	0	5	0	0	5	0	0.0%	0	0.0%
Hooper Bay	4E	1	0	0	0	0	0	0	0	0	0.0%	0	0.0%
King Salmon	4E	2	1	0	0	1	0	0	1	0	0.0%	0	0.0%
Kongiganak	4E	1	0	0	0	1	1	8	1	1	0.0%	8	0.0%
Kwigillingok	4E	1	0	0	0	0	0	0	0	0	0.0%	0	0.0%
Manokotak	4E	2	0	0	0	0	0	0	0	0	0.0%	0	0.0%
Mekoryuk	4E	1	1	25	91	1	15	53	1	40	0.0%	144	0.0%
Naknek	4E	5	1	0	0	1	0	0	1	0	0.0%	0	0.0%
Nightmute	4E	3	1	50	105	0	0	0	1	50	0.0%	105	0.0%
Nome	4E	13	4	47	747	1	0	0	4	47	90.3%	747	88.9%
Platinum	4E	1	0	0	0	0	0	0	0	0	0.0%	0	0.0%
Port Heiden	4E	3	3	15	63	0	0	0	3	15	0.0%	63	0.0%
Quinhagak	4E	2	0	0	0	1	3	28	1	3	0.0%	28	0.0%
Sheldon Point	4E	1	0	0	0	0	0	0	0	0	0.0%	0	0.0%
South Naknek	4E	1	0	0	0	0	0	0	0	0	0.0%	0	0.0%

Appendix Table G-3, section 2: eligible Alaska rural communities, page 10 of 11.

			Setlin	ne (fixed) ge	ear ^a	На	nd-operated	b			All gear		
		Number	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated	Confidence	Estimated	Confidence
Eligible		of	number	number	pounds	number	number	pounds	number	number	interval for	pounds	interval for
Alaska rural	Regulatory	SHARCs	respondents	halibut	halibut	respondents	halibut	halibut	respondents	halibut	number of	halibut	pounds of
community ^c	area	issued	fished	harvested	harvested d	fished	harvested	harvested d	fished	harvested	halibut	harvested d	halibut
Teller	4E	2	0	0	0	0	0	0	0	0	0.0%	0	0.0%
Togiak	4E	3	0	0	0	0	0	0	0	0	0.0%	0	0.0%
Toksook Bay	4E	1	0	0	0	1	2	16	1	2	0.0%	16	0.0%
White	4E	2	0	0	0	0	0	0	0	0	0.0%	0	0.0%
Mountain													
Subtot	tal, Area 4E	96	16	151	1,340	12	21	105	19	172	58.2%	1,445	56.0%
Subtotal, elig rural c	gible Alaska ommunities	,	3,057	21,973	425,964	1,571	8,796	138,043	3,708	30,769	2.9%	564,007	2.7%

Appendix Table G-3, section 2: eligible Alaska rural communities, page 11 of 11.

Appendix Table G-3, section 3: totals by regulatory area, page 11 of 11.

		Setli	ne (fixed) ge	ar ^a	Ha	nd-operated	b			All gear		
	Number	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated	Confidence	Estimated	Confidence
	of	number	number	pounds	number	number	pounds	number	number	interval for	pounds	interval for
	SHARCs	respondents	halibut	halibut	respondents	halibut	halibut	respondents	halibut	number of	halibut	pounds of
Regulatory area	issued	fished	harvested	harvested d	fished	harvested	harvested d	fished	harvested	halibut	harvested d	halibut
Regulatory Area 2C	6,912	2,628	17,982	376,419	1,161	5,582	87,345	3,057	23,564	3.6%	463,764	3.6%
Regulatory Area 3A	3,326	1,292	12,382	236,344	881	6,083	98,611	1,712	18,466	5.1%	334,956	5.1%
Regulatory Area 3B	606	122	1,469	24,307	187	983	18,933	253	2,451	17.0%	43,239	16.7%
Regulatory Area 4A	191	64	472	9,019	50	470	9,941	96	942	16.4%	18,960	29.8%
Regulatory Area 4B	33	6	22	350	6	52	1,750	10	74	74.1%	2,100	83.0%
Regulatory Area 4C	55	12	262	3,661	14	83	1,996	20	345	47.2%	5,657	55.1%
Regulatory Area 4D	21	11	58	3,087	2	2	189	11	59	93.9%	3,276	96.1%
Regulatory Area 4E	421	47	1,170	4,830	122	1,533	10,206	143	2,702	68.5%	15,036	35.6%
Total	11,565	4,182	33,816	658,017	2,423	14,788	228,971	5,303	48,604	3.6%	886,988	3.0%

a. Setline = longline or skate.

b. Hand-operated gear = rod and reel or handline.

c. To protect confidentiality, data for tribes and communities with 5 or fewer SHARCs issued are not reported in this table. Tribal and community subtotals include all tribes and communities.

d. Pounds are net (dressed) weight. Net weight is 75% of round (whole) weight.

Source ADF&G Division of Subsistence SHARC survey, 2009.

		Subsistence fished	Chintern	h	Careat fished	Smooth	.	Lineard	h	De al-fielt	have a talk
Community of	Number of	Estimated	Estimated	ce harvest Estimated	Sport fished Estimated	Estimated	harvest Estimated	Lingcod Estimated	Estimated	Rockfish Estimated	Estimated
residence of	SHARCs	number	number	pounds	number	number	pounds	number	number	number	number
SHARC holder ^a		respondents	halibut	halibut ^b	respondents	halibut	halibut ^b	respondents	lingcod	respondents	rockfish
Adak	29	12	102	3,058	4	12	616	2	38	4	14
Akhiok	14	7	51	823	2	24	918	0	0	2	3
Akutan	17	13	110	6,029	3	7	1,834	2	30	2	26
Alakanuk	1	0	0	0	0	0	0	0	0	0	0
Aleknagik	3	0	0	0	0	0	0	0	0	0	0
Anchor Point	8	2	19	218	2	9	61	0	0	0	0
Anchorage	208	48	324	7,692	31	87	1,785	7	19	5	62
Angoon	130	56	732	13,476	18	62	786	2	4	14	118
Atka	3	2	8	182	0	0	0	0	0	0	0
Auke Bay	4	0	0	0	0	0	0	0	0	0	0
Barrow	1	2	44	1,225	0	0	0	0	0	0	0
Bethel	11	5	40	692	0	0	0	0	0	0	0
Chefornak	15	8	135	1,010	0	0	0	0	0	0	0
Chenega Bay	11	8	205	5,462	8	62	1,985	5	35	7	131
Chevak	6	3	4	11	0	0	0	1	2	2	36
Chignik	16	9	306	5,130	3	7	193	3	13	5	54
Chignik Lagoon	18	12	81	1,859	0	0	0	0	0	3	37
Chignik Lake	8	5	26	423	0	0	0	0	0	0	0
Chiniak	20	15	146	3,106	6	19	316	0	0	2	12
Chugiak	3	2	36	503	0	0	0	0	0	0	0
Clark's Point	3	0	0	0	0	0	0	0	0	0	0
Coffman Cove	44	30	204	4,509	12	75	855	2	6	6	32
Cold Bay	26	13	110	1,737	10	40	646	0	0	0	0
Cordova	587	254	1,573	27,547	126	297	5,562	17	33	29	253
Craig	487	247	2,354	46,082	145	618	9,586	74	178	135	1,186
Dillingham	56	5	0	0	2	3	54	0	0	0	0

Appendix Table G-4.–Estimated subsistence and sport harvests of halibut, and harvests of lingcod and rockfish, by community of residence of SHARC holder, 2008.

		Subsistence	~		~ ~ ~ .	~			_	5 1 0 1	
Community of	Number of	fished		ce harvest	Sport fished	Sport Estimated	harvest	Lingcod l Estimated	*	Rockfish	2
residence of	SHARCs	Estimated number	Estimated number	Estimated pounds	Estimated number	number	Estimated pounds	number	Estimated number	Estimated number	Estimated number
SHARC holder ^a		respondents	halibut	halibut ^b	respondents	halibut	halibut ^b	respondents	lingcod	respondents	rockfish
Douglas	16	6	93	1,298	6	99	1,082	6	25	6	37
Dutch Harbor	82	37	444	6,996	31	149	2,584	2	3	9	82
Eagle River	4	3	108	1,188	1	2	50	0	0	0	0
Edna Bay	23	14	99	1,871	5	8	116	1	1	6	45
Eek	6	4	0	0	0	0	0	0	0	0	0
Elfin Cove	17	3	12	293	2	6	158	1	2	3	12
Fairbanks	5	2	4	85	0	0	0	0	0	0	0
False Pass	3	2	15	147	0	0	0	1	10	0	0
Fritz Creek	1	0	0	0	2	3	33	0	0	0	0
Gakona	1	0	0	0	0	0	0	0	0	0	0
Gambell	1	0	0	0	0	0	0	0	0	0	0
Golovin	2	0	0	0	0	0	0	0	0	0	0
Goodnews Bay	4	1	0	0	1	0	0	0	0	0	0
Gustavus	74	38	262	5,175	26	161	2,781	2	3	3	8
Haines	482	250	1,053	25,408	78	98	2,296	12	33	15	51
Hollis	4	0	0	0	3	10	175	0	0	0	0
Homer	25	20	163	1,948	13	29	465	0	0	0	0
Hoonah	251	108	951	16,291	46	203	3,053	2	12	16	130
Hooper Bay	17	5	1,362	1,753	2	214	300	1	2	0	0
Hydaburg	117	61	549	24,259	14	30	1,279	18	87	30	661
Hyder	35	19	157	2,543	6	2	49	0	0	6	18
Juneau	343	80	870	15,388	70	420	6,964	4	8	21	135
Kake	126	59	404	8,021	18	19	768	6	71	10	72
Kasaan	18	7	65	1,110	1	3	99	1	2	5	35
Kasilof	12	9	279	2,772	2	11	237	4	4	4	74
Kenai	76	19	275	5,150	10	44	557	2	9	0	0
Ketchikan	669	179	2,219	39,067	105	428	6,856	42	269	83	947
King Cove	82	43	382	7,319	14	49	1,043	3	81	4	53

Appendix Table G-4, community of residence of SHARC holders: page 2 of 5.

		Subsistence	G 1 · ·	1 .	a	<u> </u>					
Community of Number of		fished Estimated	Subsistence harvest Estimated Estimated		Sport fished	Sport harvest		Lingcod bycatch Estimated Estimated		Rockfish bycatch Estimated Estimated	
residence of	SHARCs	number	number	pounds	Estimated number	Estimated number	Estimated pounds	number	number	number	Estimated number
SHARC holder ^a		respondents	halibut	halibut ^b	respondents	halibut	halibut ^b	respondents	lingcod	respondents	rockfish
King Salmon	2	1	0	0	1	0	0	0	0	0	0
Kipnuk	11	12	204	1,680	0	0	0	0	0	0	0
Klawock	203	91	834	14,073	42	201	2,820	13	32	36	249
Kodiak	1,725	963	9,366	177,334	693	3,835	72,915	87	255	169	1,408
Kongiganak	6	6	23	394	1	0	0	0	0	0	0
Kotzebue	2	2	16	389	2	5	65	2	3	2	10
Kwigillingok	46	42	126	1,764	0	0	0	0	0	0	0
Larsen Bay	39	21	286	3,381	14	361	3,207	2	5	2	12
Manokotak	2	0	0	0	0	0	0	0	0	0	0
McGrath	1	0	0	0	0	0	0	0	0	0	0
Mekoryuk	5	5	109	1,019	0	0	0	2	15	0	0
Metlakatla	232	63	340	5,490	18	25	639	15	31	20	123
Meyers Chuck	8	7	26	590	0	0	0	0	0	2	9
Naknek	9	2	1	21	1	0	0	0	0	0	0
Nanwalek	51	42	1,375	24,701	4	4	70	9	122	22	620
Naukati	17	7	37	923	6	17	496	1	5	7	21
Nelson Lagoon	1	0	0	0	0	0	0	0	0	0	0
Newtok	1	1	20	140	0	0	0	0	0	0	0
Nightmute	8	2	60	168	0	0	0	0	0	1	2
Nikiski	12	5	67	1,401	4	16	358	0	0	0	0
Nikolski	2	1	7	420	0	0	0	0	0	0	0
Ninilchik	44	7	154	1,661	9	48	569	0	0	0	0
Nome	17	7	72	1,145	1	0	0	0	0	0	0
North Pole	4	0	0	0	0	0	0	0	0	0	0
Old Harbor	71	48	333	7,714	16	76	1,051	0	0	2	19
Ouzinkie	53	31	219	5,181	13	64	1,257	8	26	9	357
Palmer	5	2	15	158	0	0	0	0	0	0	0
Pelican	51	31	339	8,851	11	30	671	17	164	25	659

Appendix Table G-4, community of residence of SHARC holders: page 3 of 5.

		Subsistence									
	NT 1 C	fished			Sport fished	Sport harvest		Lingcod bycatch		Rockfish bycatch	
Community of residence of	Number of SHARCs	Estimated number	Estimated number	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated
SHARC holder ^a		respondents	halibut	pounds halibut ^b	number respondents	number halibut	pounds halibut ^b	number respondents	number lingcod	number respondents	number rockfish
Perryville	39	14	127	2,007	1 1	3	36	4	21	3	26
Petersburg	985	393	2,841	46,600	279	1,034	17,506	20	71	57	389
Point Baker	22	17	83	1,908	5	6	140	5	7	14	140
Port Alexander	31	18	166	4,308	4	7	133	12	53	15	323
Port Graham	48	30	553	9,097	2	32	51	2	6	7	75
Port Heiden	2	3	15	63	0	0	0	0	0	0	0
Port Lions	45	24	188	3,465	22	97	1,407	3	4	6	47
Port Protection	1	0	0	0	1	10	175	0	0	0	0
Port William	2	2	5	85	2	0	0	0	0	0	0
Quinhagak	7	3	5	44	0	0	0	0	0	0	0
Sand Point	342	130	1,510	25,013	19	134	2,195	9	20	33	331
Savoonga	19	11	59	3,276	0	0	0	0	0	2	32
Saxman	13	0	0	0	0	0	0	0	0	0	0
Scammon Bay	1	0	0	0	0	0	0	0	0	0	0
Seldovia	150	101	1,494	23,577	40	243	3,642	12	42	12	59
Seward	17	6	30	635	2	0	0	1	7	1	15
Sitka	1,662	845	5,513	109,581	307	732	13,055	340	1,290	381	3,864
Skagway	56	30	62	1,597	12	10	200	1	1	4	16
Soldotna	24	3	56	783	5	136	994	0	0	0	0
South Naknek	2	0	0	0	0	0	0	0	0	0	0
St. George	4	5	52	1,050	0	0	0	0	0	0	0
Island											
St. Paul Island	42	15	294	4,607	0	0	0	0	0	0	0
Sterling	5	0	0	0	2	11	38	0	0	0	0
Tatitlek	24	20	251	5,621	2	0	0	2	7	10	179
Teller	2	0	0	0	0	0	0	0	0	0	0
Tenakee Springs		33	193	3,789	18	42	733	2	2	11	54
Thorne Bay	112	63	474	10,837	40	117	2,135	10	62	37	276

Appendix Table G-4, community of residence of SHARC holders: page 4 of 5.

		Subsistence	~								
G	NT 1 C	fished		ce harvest	Sport fished	1	harvest	Lingcod	2	Rockfish	2
Community of residence of	Number of	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated
SHARC holder ^a	SHARCs issued	number respondents	number halibut	pounds halibut ^b	number respondents	number halibut	pounds halibut ^b	number respondents	number lingcod	number respondents	number rockfish
Togiak	9	0	0	0	0	0	0	0	0	0	0
Toksook Bay	34	9	238	2,143	0	0	0	0	0	0	0
Trapper Creek	1	0	0	0	0	0	0	0	0	0	0
Tununak	68	8	177	1,296	0	0	0	3	5	3	99
Twin Hills	2	0	0	0	0	0	0	0	0	0	0
Unalakleet	1	0	0	0	0	0	0	0	0	0	0
Unalaska	91	51	471	6,714	12	36	377	5	21	4	39
Valdez	35	14	289	4,374	6	14	315	4	8	9	74
Ward Cove	32	7	26	374	7	7	162	0	0	2	17
Wasilla	37	6	71	1,016	3	5	105	0	0	0	0
Waterfall	1	0	0	0	0	0	0	0	0	0	0
Whale Pass	4	2	20	410	0	0	0	0	0	0	0
Whittier	3	0	0	0	0	0	0	0	0	0	0
Willow	1	0	0	0	0	0	0	0	0	0	0
Wrangell	481	259	2,365	44,417	125	534	10,049	14	59	59	411
Yakutat	100	52	563	10,615	7	21	292	28	155	3	62
Subtotal, Alaska communities of residence	11,455	5,299	48,591	886,750	2,581	11,224	193,998	854	3,479	1,402	14,343
Subtotal, non- Alaska communities of residence ^c	110	3	13	237	28	203	3,762	0	0	2	3
Total	11,565	5,303	48,604	886,988	2,609	11,427	197,760	854	3,479	1,404	14,346

Appendix Table G-4, community of residence of SHARC holders: page 5 of 5.

a. To protect confidentiality, data for tribes and communities with 5 or fewer SHARCs issued are not reported in this table. Tribal and community subtotals include all tribes and communities.

b. Pounds are net (dressed) weight. Net weight is 75% of round (whole) weight.

c. Note that members of eligible Alaska tribes could obtain SHARCs regardless of their place of residence. All non-Alaska resident SHARC holders were members of eligible tribes.

Source ADF&G Division of Subsistence SHARC surveys, 2009.

	-					d harvest by g				
	-		line (fixed) ge	ar		and line or han	dline		All gear	
C	NTC	Estimated	F (1		Estimated			Estimated		
Community of residence of	Number of SHARCs	number respondents	Estimated number fish	Estimated pounds fish	number respondents	Estimated number fish	Estimated pounds fish	number respondents	Estimated number fish	Estimated pounds fish
SHARC holder ^a	issued	fished	harvested	harvested ^b	fished	harvested	harvested ^b	fished	harvested	harvested ^b
Adak	29	5	26	507	8	76	2,551	12	102	3,058
Akhiok	14	2	5	101	6	47	722	7	51	823
Akutan	17	7	23	2,186	11	87	3,843	13	110	6,029
Alakanuk	1	0	0	0	0	0	0	0	0	0
Aleknagik	3	0	0	0	0	0	0	0	0	0
Anchor Point	8	0	0	0	2	19	218	2	19	218
Anchorage	208	30	236	5,644	30	88	2,047	48	324	7,692
Angoon	130	45	568	10,418	29	163	3,059	56	732	13,476
Atka	3	2	8	182	0	0	0	2	8	182
Auke Bay	4	0	0	0	0	0	0	0	0	0
Barrow	1	2	44	1,225	0	0	0	2	44	1,225
Bethel	11	0	0	0	5	40	692	5	40	692
Chefornak	15	0	0	0	8	135	1,010	8	135	1,010
Chenega Bay	11	7	151	4,017	7	54	1,445	8	205	5,462
Chevak	6	1	0	0	3	4	11	3	4	11
Chignik	16	5	259	4,369	9	46	761	9	306	5,130
Chignik Lagoon	18	4	31	780	12	50	1,079	12	81	1,859
Chignik Lake	8	1	4	147	5	22	276	5	26	423
Chiniak	20	13	122	2,718	4	24	388	15	146	3,106
Chugiak	3	0	0	0	2	36	503	2	36	503
Clark's Point	3	0	0	0	0	0	0	0	0	0
Coffman Cove	44	26	134	3,436	13	70	1,073	30	204	4,509
Cold Bay	26	8	83	1,331	6	27	406	13	110	1,737
Cordova	587	231	1,266	22,301	95	306	5,246	254	1,573	27,547
Craig	487	209	1,853	39,967	95	501	6,115	247	2,354	46,082
Dillingham	56	5	0	0	5	0	0	5	0	0

Appendix Table G-5.–Estimated subsistence harvests of halibut, by gear type and community of residence of SHARC holders, 2008.

	_					d harvest by ge				
	_		line (fixed) ge	ar		and line or han	dline		All gear	
		Estimated			Estimated			Estimated		
Community of	Number of	number	Estimated	Estimated	number	Estimated	Estimated	number	Estimated	Estimated
residence of SHARC holder ^a	SHARCs issued	respondents	number fish	pounds fish	respondents	number fish	pounds fish	respondents	number fish	pounds fish
-	16	fished	harvested 31	harvested ^b 433	fished	harvested 62	harvested ^b	fished	harvested 93	harvested ^b
Douglas		6			6		865	6		1,298
Dutch Harbor	82	27	214	3,567	17	230	3,429	37	444	6,996
Eagle River	4	3	82	862	3	25	326	3	108	1,188
Edna Bay	23	13	98	1,824	I	1	47	14	99	1,871
Eek	6	0	0	0	4	0	0	4	0	0
Elfin Cove	17	3	11	269	1	1	25	3	12	293
Fairbanks	5	2	4	85	0	0	0	2	4	85
False Pass	3	1	12	42	1	3	105	2	15	147
Fritz Creek	1	0	0	0	0	0	0	0	0	0
Gakona	1	0	0	0	0	0	0	0	0	0
Gambell	1	0	0	0	0	0	0	0	0	0
Golovin	2	0	0	0	0	0	0	0	0	0
Goodnews Bay	4	1	0	0	1	0	0	1	0	0
Gustavus	74	30	176	3,461	22	86	1,714	38	262	5,175
Haines	482	243	1,014	24,777	55	39	632	250	1,053	25,408
Hollis	4	0	0	0	0	0	0	0	0	0
Homer	25	10	22	207	18	142	1,741	20	163	1,948
Hoonah	251	95	726	12,509	44	225	3,783	108	951	16,291
Hooper Bay	17	3	703	820	5	659	933	5	1,362	1,753
Hydaburg	117	59	510	22,925	17	39	1,334	61	549	24,259
Hyder	35	19	155	2,511	3	1	32	19	157	2,543
Juneau	343	64	595	11,530	40	275	3,859	80	870	15,388
Kake	126	52	347	6,417	23	57	1,604	59	404	8,021
Kasaan	18	7	51	893	3	14	217	7	65	1,110
Kasilof	12	6	243	1,654	5	37	1,118	9	279	2,772
Kenai	76	4	29	622	18	246	4,528	19	275	5,150
Ketchikan	669	141	1,411	27,009	100	808	12,058	179	2,219	39,067

Appendix Table G-5, community of residence of SHARC holders: page 2 of 6.

	_					d harvest by g				
	_		line (fixed) ge	ar		and line or han	dline		All gear	
~		Estimated			Estimated			Estimated		
Community of	Number of	number	Estimated	Estimated	number	Estimated	Estimated	number	Estimated	Estimated
residence of SHARC holder ^a	SHARCs issued	respondents	number fish	pounds fish	respondents	number fish		respondents	number fish	pounds fish
	82	fished 7	harvested 95	harvested ^b 2,207	fished 39	harvested 287	harvested ^b	fished 43	harvested 382	harvested ^b 7,319
King Cove		/					5,112			
King Salmon	2 11	1	0	0	1	0	0	1	0	0
Kipnuk		0	0	0	12	204	1,680	12	204	1,680
Klawock	203	65	385	9,185	40	450	4,887	91	834	14,073
Kodiak	1,725	763	6,447	128,226	479	2,918	49,108	963	9,366	177,334
Kongiganak	6	1	2	36	6	21	358	6	23	394
Kotzebue	2	2	16	389	0	0	0	2	16	389
Kwigillingok	46	0	0	0	42	126	1,764	42	126	1,764
Larsen Bay	39	10	87	1,198	14	199	2,183	21	286	3,381
Manokotak	2	0	0	0	0	0	0	0	0	0
McGrath	1	0	0	0	0	0	0	0	0	0
Mekoryuk	5	5	69	660	4	40	359	5	109	1,019
Metlakatla	232	47	243	4,198	20	97	1,292	63	340	5,490
Meyers Chuck	8	7	22	552	2	4	39	7	26	590
Naknek	9	2	1	21	1	0	0	2	1	21
Nanwalek	51	31	1,135	21,741	29	240	2,960	42	1,375	24,701
Naukati	17	6	25	751	4	11	172	7	37	923
Nelson Lagoon	1	0	0	0	0	0	0	0	0	0
Newtok	1	1	0	0	1	20	140	1	20	140
Nightmute	8	1	50	105	1	10	63	2	60	168
Nikiski	12	0	0	0	5	67	1,401	5	67	1,401
Nikolski	2	0	0	0	1	7	420	1	7	420
Ninilchik	44	2	48	455	4	106	1,206	7	154	1,661
Nome	17	7	72	1,145	1	0	0	7	72	1,145
North Pole	4	0	0	0	0	0	0	0	0	0
Old Harbor	71	13	110	1,775	43	222	5,939	48	333	7,714
Ouzinkie	53	24	139	3,366	22	80	1,815	31	219	5,181

Appendix Table G-5, community of residence of SHARC holders: page 3 of 6.

	_		Silline noider			d harvest by ge				
	_		line (fixed) ge	ar		and line or han	dline		All gear	
		Estimated			Estimated			Estimated		
Community of	Number of	number	Estimated	Estimated	number	Estimated	Estimated	number	Estimated	Estimated
residence of SHARC holder ^a	SHARCs issued	respondents	number fish	pounds fish	respondents	number fish	pounds fish harvested ^b	respondents	number fish	pounds fish harvested ^b
Palmer	5	fished 2	harvested 4	harvested ^b 39	fished 2	harvested 11	118	fished 2	harvested 15	158
Palmer Pelican	5 51	31			11	32			339	
	31 39	51 9	307 101	7,809	11 10	32 26	1,042 602	31		8,851
Perryville		-		1,404				14	127	2,007
Petersburg	985	285	1,873	31,077	207	968	15,523	393	2,841	46,600
Point Baker	22	17	66	1,447	10	17	462	17	83	1,908
Port Alexander	31	15	139	3,558	4	27	750	18	166	4,308
Port Graham	48	13	326	6,896	23	227	2,200	30	553	9,097
Port Heiden	2	3	15	63	0	0	0	3	15	63
Port Lions	45	17	121	2,439	7	67	1,026	24	188	3,465
Port Protection	1	0	0	0	0	0	0	0	0	0
Port William	2	2	5	85	0	0	0	2	5	85
Quinhagak	7	0	0	0	3	5	44	3	5	44
Sand Point	342	71	1,026	15,766	88	484	9,247	130	1,510	25,013
Savoonga	19	11	58	3,087	2	2	189	11	59	3,276
Saxman	13	0	0	0	0	0	0	0	0	0
Scammon Bay	1	0	0	0	0	0	0	0	0	0
Seldovia	150	62	731	13,213	68	764	10,364	101	1,494	23,577
Seward	17	0	0	0	6	30	635	6	30	635
Sitka	1,662	784	4,654	96,314	232	859	13,266	845	5,513	109,581
Skagway	56	28	54	1,481	11	8	116	30	62	1,597
Soldotna	24	2	36	503	1	20	280	3	56	783
South Naknek	2	0	0	0	0	0	0	0	0	0
St. George Island	4	0	0	0	5	52	1,050	5	52	1,050
St. Paul Island	42	12	262	3,661	9	32	946	15	294	4,607
Sterling	5	0	0	0	0	0	0	0	0	0
Tatitlek	24	18	230	5,174	4	21	447	20	251	5,621
Teller	2	0	0	0	0	0	0	0	0	0

Appendix Table G-5, community of residence of SHARC holders: page 4 of 6.

	_					d harvest by ge							
	_	Setline (fixed) gear Hook and line or handline							All gear				
		Estimated			Estimated			Estimated					
2	Number of	number	Estimated	Estimated	number	Estimated	Estimated	number	Estimated	Estimated			
residence of SHARC holder ^a	SHARCs	respondents	number fish	pounds fish	respondents	number fish		respondents	number fish	1 .			
	issued 45	fished	harvested	harvested ^b	fished 17	harvested 59	harvested ^b	fished 33	harvested	harvested ^b			
Tenakee Springs		26	135	2,751			1,038		193	3,789			
Thorne Bay	112	53	349	8,619	26	126	2,218	63	474	10,837			
Togiak	9	0	0	0	0	0	0	0	0	0			
Toksook Bay	34	6	178	707	8	60	1,436	9	238	2,143			
Trapper Creek	1	0	0	0	0	0	0	0	0	0			
Tununak	68	0	0	0	8	177	1,296	8	177	1,296			
Twin Hills	2	0	0	0	0	0	0	0	0	0			
Unalakleet	1	0	0	0	0	0	0	0	0	0			
Unalaska	91	32	264	3,726	24	207	2,988	51	471	6,714			
Valdez	35	13	246	3,575	5	43	799	14	289	4,374			
Ward Cove	32	6	22	318	1	4	56	7	26	374			
Wasilla	37	3	50	736	3	21	280	6	71	1,016			
Waterfall	1	0	0	0	0	0	0	0	0	0			
Whale Pass	4	2	8	156	2	12	254	2	20	410			
Whittier	3	0	0	0	0	0	0	0	0	0			
Willow	1	0	0	0	0	0	0	0	0	0			
Wrangell	481	218	1,861	35,683	107	504	8,733	259	2,365	44,417			
Yakutat	100	50	503	9,844	7	60	771	52	563	10,615			
Subtotal, Alaska communities of residence	11,455	4,180	33,813	657,885	2,421	14,778	228,865	5,299	48,591	886,750			
Subtotal, non- Alaska communities of residence ^c	110	2	3	132	2	10	106	3	13	237			
Total	11,565	4,182	33,816	658,017	2,423	14,788	228,971	5,303	48,604	886,988			

Appendix Table G-5, community of residence of SHARC holders: page 5 of 6.

Appendix Table G-5, community of residence of SHARC holders: page 6 of 6.

- a. To protect confidentiality, data for tribes and communities with 5 or fewer SHARCs issued are not reported in this table. Tribal and community subtotals include all tribes and communities.
- b. Pounds are net (dressed) weight. Net weight is 75% of round (whole) weight.
- c. Note that members of eligible Alaska tribes could obtain SHARCs regardless of their place of residence. All non-Alaska resident SHARC holders were members of eligible tribes.

Source ADF&G Division of Subsistence SHARC surveys, 2009.

	Number of	Estimated number subsistence
Community of residence of	SHARCs	or
SHARC holder ^a	issued	sport fished
Adak	29	12
Akhiok	14	7
Akutan	17	13
Alakanuk	1	0
Aleknagik	3	0
Anchor Point	8	4
Anchorage	208	66
Angoon	130	60
Atka	3	2
Auke Bay	4	0
Barrow	1	2
Bethel	11	5
Chefornak	15	8
Chenega Bay	11	10
Chevak	6	3
Chignik	16	9
Chignik Lagoon	18	12
Chignik Lake	8	5
Chiniak	20	16
Chugiak	3	2
Clark's Point	3	0
Coffman Cove	44	32
Cold Bay	26	15
Cordova	587	292
Craig	487	298
Dillingham	56	6
Douglas	16	6
Dutch Harbor	82	45
Eagle River	4	3
Edna Bay	23	16
Eek	6	4
Elfin Cove	17	4
Fairbanks	5	2
False Pass	3	2
Fritz Creek	1	2
Gakona	1	0
Gambell	1	0
Golovin	2	0
Goodnews Bay	4	1
Gustavus	74	55
-continued		

Appendix Table G-6.–Estimated number of SHARC holders who either subsistence fished or sport fished for halibut, by community of residence of SHARC holder, 2008.

Appendix Table G-6, community of residence of
SHARC holder: page 2 of 4.

		Estimated
		number
	Number of	subsistence
Community of residence of	SHARCs	or
SHARC holder ^a	issued	sport fished
Haines	482	266
Hollis	4	3
Homer	25	21
Hoonah	251	122
Hooper Bay	17	5
Hydaburg	117	63
Hyder	35	20
Juneau	343	123
Kake	126	59
Kasaan	18	8
Kasilof	12	10
Kenai	76	27
Ketchikan	669	207
King Cove	82	43
King Salmon	2	1
Kipnuk	11	12
Klawock	203	105
Kodiak	1,725	1,213
Kongiganak	6	6
Kotzebue	2	3
Kwigillingok	46	42
Larsen Bay	39	24
Manokotak	2	0
McGrath	1	0
Mekoryuk	5	5
Metlakatla	232	70
Meyers Chuck	8	7
Naknek	9	2
Nanwalek	51	42
Naukati	17	10
Nelson Lagoon	1	0
Newtok	1	1
Nightmute	8	2
Nikiski	12	6
Nikolski	2	1
Ninilchik	44	15
Nome	17	7
North Pole	4	0
Old Harbor	71	52
Ouzinkie	53	31
-continued-		51

Appendix Table G-6, community of residence of SHARC holder: page 3 of 4.

SHARE HOULT. page 5 of 4.		Estimated
		number
	Number of	subsistence
Community of residence of	SHARCs	or or and fished
SHARC holder ^a Palmer	issued 5	sport fished 2
Pelican	51	33
Perryville	39	14
Petersburg	985	515
Point Baker	22	17
Port Alexander	31	18
Port Graham	48	30
Port Heiden	2	3
Port Lions	45	32
Port Protection	1	1
Port William	2	2
Quinhagak	7	3
Sand Point	342	132
Savoonga	19	11
Saxman	13	0
Scammon Bay	1	0
Seldovia	150	111
Seward	17	6
Sitka	1,662	932
Skagway	56	34
Soldotna	24	8
South Naknek	2	0
St. George Island	4	5
St. Paul Island	42	15
Sterling	5	2
Tatitlek	24	20
Teller	2	0
Tenakee Springs	45	36
Thorne Bay	112	74
Togiak	9	0
Toksook Bay	34	9
Trapper Creek	1	0
Tununak	68	8
Twin Hills	2	0
Unalakleet	1	0
Unalaska	91	56
Valdez	35	19
Ward Cove	32	12
Wasilla	32	9
Waterfall	1	0
-continued		•

Appendix Table G-6, community of residence of SHARC holder: page 4 of 4.

		Estimated
		number
	Number of	subsistence
Community of residence of	SHARCs	or
SHARC holder ^a	issued	sport fished
Whale Pass	4	2
Whittier	3	0
Willow	1	0
Wrangell	481	289
Yakutat	100	57
Subtotal, Alaska communities	11,455	6,171
of residence		
Subtotal, non-Alaska	110	31
communities of residence ^b		
Total	11,565	6,202

a. To protect confidentiality, data for tribes and communities with 5 or fewer SHARCs issued are not reported in this table. Tribal and community subtotals include all tribes and communities.

b. Note that members of eligible Alaska tribes could obtain SHARCs regardless of their place of residence. All non-Alaska resident SHARC holders were members of eligible tribes.

Source ADF&G Division of Subsistence SHARC surveys, 2009.

			_		Subsisten			ce halibut								
]	Return rate	9	hali	but	har	vest Estimated	Sport fish	ed halibut	Sport hali	out harvest Estimated		bycatch	Rockfish	bycatch
Eligible Alaska tribe ª	Regulatory area			Percentage	Estimated number of respondents	of		number of pounds	Estimated number of respondents	of	number	number	Estimated number of respondents	number	Estimated number of respondents	number
Agdaadux Tribe Of King Cove	3B	68	45	66.2%	35	51.4%	331	6,366	10	14.5%	37	752	1	74	3	34
Angoon Community Association	2C	113	53	46.9%	45	39.6%	558	10,430	8	7.2%	14	214	0	0	10	71
Central Council Tlingit And Haida Indian Tribes	2C	507	237	46.7%	187	36.8%	1,901	40,948	107	21.1%	609	9,069	54	294	59	828
Chevak Native Village (Kashunamiut)	4E	6	4	66.7%	3	50.0%	4	11	0	0.0%	0	0	1	2	2	36
Chignik Lake Village	3B	10	5	50.0%	5	52.5%	32	227	0	0.0%	0	0	0	0	2	26
Chilkat Indian Village	2C	18	15	83.3%	7	40.0%	30	731	1	6.7%	5	147	0	0	0	0
Chilkoot Indian Association	2C	45	24	53.3%	10	21.4%	27	1,323	5	10.7%	2	113	0	0	0	0
Chinik Eskimo Community	4E	1														
Craig Community Association	2C	46	29	63.0%	22	47.3%	100	3,509	10	20.9%	13	336	8	20	9	82
Douglas Indian Association	2C	16	4	25.0%	4	23.4%	94	1,969	4	23.4%	38	788	0	0	0	0
Egegik Village	4E	1														
Hoonah Indian Association	2C	135	77	57.0%	51	38.1%	398	8,113	22	16.0%	65	1,134	0	0	8	99

Appendix Table G-7.–Estimated subsistence harvests of halibut and sport harvests of halibut, pounds (net weight), and incidental harvests of lingcod and rockfish, by eligible Alaska tribe and eligible Alaska rural community, 2008.

					Subsisten	ce fished	Subsisten		Current Curl	- J h - 12h4	C		Thread	hh	Dl-fi-l	l
		1	Return rate	•	hali	but	harv	Estimated	Sport fish	ed nalibut	Sport halib	Estimated	Lingcod	bycatch	Rockfish	bycatch
Eligible Alaska tribe ^a	Regulatory area	SHARCs issued		Percentage	Estimated number of respondents	of		number	Estimated number of respondents	of	Estimated number	number	Estimated number of respondents	number	Estimated number of respondents	number
Hydaburg Cooperative Association	2C	116	104	89.7%	56	48.2%	477	19,614	12	10.4%	20	859	16	77	27	533
Ivanoff Bay Village	3B	14	4	28.6%	2	16.7%	5	98	0	0.0%	0	0	0	0	0	0
Kenaitze Indian Tribe	3A	87	48	55.2%	29	33.5%	727	8,969	10	11.5%	62	800	5	13	7	88
Ketchikan Indian Corporation	2C	585	281	48.0%	127	21.7%	1,362	22,202	86	14.7%	290	4,552	28	91	54	560
King Island Native Community	4E	1														
Klawock Cooperative Association	2C	73	39	53.4%	32	43.6%	198	4,446	7	9.2%	17	516	2	5	2	17
Lesnoi Village (Woody Island)	3A	69	43	62.3%	11	15.6%	98	2,654	0	0.0%	0	0	2	3	3	28
Levelock Village	4E	1														
Metlakatla Indian Community, Annette Island Reserve	2C	205	77	37.6%	46	22.5%	203	3,603	14	6.7%	14	334	7	16	14	99
Naknek Native Village	4E	9	4	44.4%	1	11.1%	1	21	3	27.8%	5	105	0	0	0	0
Native Village Of Afognak	3A	23	14	60.9%	12	50.0%	79	1,892	8	34.4%	33	682	2	3	2	8
Native Village Of Akhiok	3A	15	6	40.0%	8	53.3%	67	874	3	21.3%	30	935	0	0	3	22
Native Village Of Akutan	4A	18	17	94.4%	13	70.6%	110	6,029	3	17.6%	7	1,834	2	30	2	26

Appendix Table G-7, section 1: eligible Alaska tribe, page 2 of 12.

					Subsisten			ce halibut								
		Ret	turn rate	e	hali	but		vest	Sport fish	ed halibut	Sport halib		Lingcod	bycatch	Rockfish	bycatch
					Estimated	Dercentage		Estimated	Estimated	Dercentage		Estimated	Estimated	Estimated	Estimated	Estimated
Eligible	Regulatory	SHARCs Su	irveys		number of	of			number of	of			number of	number	number of	number
Alaska tribe ^a	area	issued ret	turned H	Percentage	respondents	SHARCs	of fish	b	respondents	SHARCs		b	respondents	of fish	respondents	of fish
Native Village	4E	6	4	66.7%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0
Of Aleknagik	15	_														
Native Village Of Atka	4B	5														
Native Village Of Belkofski	3B	3														
Native Village Of Brevig Mission	4E	1														
Native Village Of Chenega	3A	20	12	60.0%	8	38.6%	155	5,485	5	23.2%	37	1,444	5	36	6	133
Native Village Of Chignik	3B	7	7	100.0%	2	28.6%	16	392	1	14.3%	0	0	0	0	0	0
Native Village Of Chignik Lagoon	3B	24	19	79.2%	14	56.3%	86	1,887	0	0.0%	0	0	1	7	4	52
Native Village Of Council	4E	2														
Native Village Of Dillingham (Curyung)	4E	21	7	33.3%	0	0.0%	0	0	3	14.3%	6	84	0	0	0	0
Native Village Of Eek	4E	7	4	57.1%	5	75.0%	14	392	0	0.0%	0	0	0	0	0	0
Native Village Of Eyak	3A	75	46	61.3%	23	30.3%	160	2,563	11	15.2%	32	618	0	0	6	58
Native Village Of False Pass	3B	1														
Native Village Of Gambell	4D	1														
Native Village Of Goodnews	4E	4														
Bay (Mumtraq)																

Appendix Table G-7, section 1: eligible Alaska tribe, page 3 of 12.

181

			Return rate		Subsisten hali		Subsisten har	ce halibut vest	Sport fish	ed halibut	Sport halib	out harvest	Lingcod	bycatch	Rockfish	bycatch
Eligible Alaska tribe ^a	Regulatory area			ercentage	Estimated number of respondents	of	Estimated number of fish	Estimated number of pounds	Estimated number of respondents	of	Estimated number		Estimated number of respondents	number	Estimated number of respondents	number
Native Village Of Hooper Bay	4E	17	8	47.1%	7	43.7%	1,387	2,053	2	12.6%	214	300	1	2	0	0
Native Village Of Kanakanak	4E	1														
Native Village Of Karluk	3A	1														
Native Village Of Kipnuk	4E	12	1	8.3%	12	100.0%	204	1,680	0	0.0%	0	0	0	0	0	0
Native Village Of Kongiganak	4E	6	2	33.3%	5	83.3%	22	386	1	16.7%	0	0	0	0	0	0
Native Village Of Koyuk	4E	1														
Native Village Of Kwigillingok	4E	46	2	4.3%	42	91.3%	126	1,764	0	0.0%	0	0	0	0	0	0
Native Village Of Kwinhagak	4E	4														
Native Village Of Larsen Bay	3A	36	9	25.0%	17	48.3%	177	2,739	8	22.8%	44	582	0	0	0	0
Native Village Of Mekoryuk	4E	6	4	66.7%	4	62.5%	69	875	1	20.8%	10	175	1	13	0	0
Native Village Of Nanwalek	3A	42	19	45.2%	35	84.2%	687	11,338	2	5.3%	0	0	9	122	15	575
Native Village Of Nelson Lagoon	3B	3														
Native Village Of Nightmute	4E	5														
Native Village Of Ouzinkie	3A	33	19	57.6%	21	63.8%	160	3,680	11	33.7%	49	912	5	14	6	197
Native Village Of Perryville	3B	36	20	55.6%	17	46.7%	154	2,885	3	7.2%	19	652	4	21	3	26

Appendix Table G-7, section 1: eligible Alaska tribe, page 4 of 12.

		_			Subsisten			ce halibut								
		R	eturn rate	e	hali	but	har	vest	Sport fish	ed halibut	Sport halib		Lingcod	bycatch	Rockfish	bycatch
					Estimated	Dercentage	Estimated	Estimated	Estimated	Dercentage		Estimated	Estimated	Estimated	Estimated	Estimated
Eligible	Regulatory	SHARCs S	Surveys		number of	of			number of	of			number of	number	number of	number
Alaska tribe ^a	area			Percentage	respondents		of fish		respondents		of fish	• ,	respondents		respondents	
Native Village Of Port Graham	3A	40	24	60.0%	21	52.3%	529	9,157	2	4.0%	32	51	3	14	6	113
Native Village Of Port Heiden	4E	1														
Native Village Of Port Lions	3A	32	21	65.6%	14	44.1%	102	2,143	9	28.9%	31	738	4	13	4	55
Native Village Of Savoonga	4D	20	10	50.0%	11	54.0%	59	3,276	0	0.0%	0	0	0	0	2	32
Native Village Of Scammon Bay	4E	5														
Native Village Of Tatitlek	3A	33	16	48.5%	16	48.3%	151	3,544	2	6.5%	0	0	1	1	5	68
Native Village Of Toksook Bay (Nunakauyak)	4E	34	10	29.4%	8	23.5%	236	2,127	0	0.0%	0	0	0	0	0	0
Native Village Of Tununak	4E	71	7	9.9%	8	11.0%	177	1,296	0	0.0%	0	0	3	5	3	99
Native Village Of Unalakleet	4E	3														
Native Village Of Unga	3B	11	2	18.2%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0
Native Village Of White Mountain	4E	1														
Newtok Village	4E	1														
Ninilchik Village	3A	72	30	41.7%	18	25.0%	314	3,249	20	28.0%	196	1,648	0	0	0	0

Appendix Table G-7, section 1: eligible Alaska tribe, page 5 of 12.

					Subsisten	ce fished	Subsisten	ce halibut								
		Ret	urn rate		hali	but	harv		Sport fish	ed halibut	Sport halib		Lingcod	bycatch	Rockfish	bycatch
Eligible Alaska tribe ^a	Regulatory area	SHARCs Su		ercentage	Estimated number of respondents	Percentage of SHARCs	Estimated	of pounds	Estimated number of respondents	of	Estimated		Estimated number of respondents	number	Estimated number of respondents	number
Nome Eskimo Community	4E	12	7	58.3%	6		44	590	1			462	0	0	0	0
Organized Village Of Kake	2C	83	49	59.0%	27	32.7%	184	3,716	4	5.2%	2	69	3	14	5	41
Organized Village Of Kasaan	2C	15	11	73.3%	2	14.7%	41	747	1	7.3%	3	99	0	0	0	0
Organized Village Of Saxman	2C	38	12	31.6%	18	48.0%	401	11,316	3	9.1%	0	0	3	138	10	179
Orutsararmuit Native Village	4E	7	5	71.4%	4	51.4%	49	619	2	34.3%	8	176	0	0	1	1
Pauloff Harbor Village	3B	46	17	37.0%	19	41.2%	338	3,694	5	11.8%	8	133	5	16	5	24
Petersburg Indian Association	2C	72	47	65.3%	25	34.1%	168	3,055	14	20.1%	19	364	3	9	4	7
Pribilof Islands Aleut Community Of St. George	4C	6	3	50.0%	5	83.3%	52	1,050	0	0.0%	0	0	0	0	0	0
Pribilof Islands Aleut Community Of St. Paul	4C	46	18	39.1%	13	29.0%	276	4,348	0	0.0%	0	0	0	0	0	0
Qagan Tayagungin Tribe Of Sand Point Village	3B	306	85	27.8%	113	36.9%	1,131	20,167	20	6.6%	94	1,679	5	7	23	253
Qawalangin Tribe Of Unalaska	4A	43	17	39.5%	20	46.7%	131	2,497	3	7.9%	2	32	5	48	5	12

Appendix Table G-7, section 1: eligible Alaska tribe, page 6 of 12.

	· · ·	section 1.			Subsisten	-	Subsisten	ce halibut								
		Re	eturn rate		hali	but	har		Sport fish	ed halibut	Sport halil		Lingcod	bycatch	Rockfish	bycatch
					Estimated	Percentage	Estimated	Estimated	Estimated	Percentage	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated
Eligible	Regulatory	SHARCs S	urveys		number of	of			number of	of			number of	number	number of	number
Alaska tribe ^a	area			ercentage	respondents	SHARCs	of fish		respondents	SHARCs	of fish	ь	respondents		respondents	of fish
Seldovia	3A	49	30	61.2%	27	56.0%	247	4,951	8	15.9%	28	343	2	6	3	5
Village Tribe																
Shoonaq' Tribe Of Kodiak	3A	137	63	46.0%	89	65.0%	997	19,266	35	25.2%	161	1,909	16	55	26	253
	20	072	100	66 70	100	20 40/	070	21 400	20	7.20/	10	242	27	110	25	257
Sitka Tribe Of Alaska	2C	273	182	66.7%	108	39.4%	979	21,409	20	7.3%	19	343	27	110	35	357
Skagway Village	2C	4														
South Naknek Village	4E	2														
Stebbins Community Association	4E	4														
Traditional Village Of Togiak	4E	6	4	66.7%	0	0.0%	0	0	0	0.0%	0	0	0	0	0	0
Twin Hills Village	4E	1														
Ugashik Village	4E	1														
Village Of Chefornak	4E	15	6	40.0%	8	50.0%	135	1,010	0	0.0%	0	0	0	0	0	0
Village Of Clark's Point	4E	2														
Village Of Kanatak	3A	5														
Village Of Kotlik	4E	1														
Village Of Old Harbor	3A	63	30	47.6%	35	55.2%	237	6,051	10	16.1%	54	733	0	0	0	0
Village Of Salamatof	3A	21	14	66.7%	2	11.0%	46	735	3	12.4%	9	173	0	0	0	0

Appendix Table G-7, section 1: eligible Alaska tribe, page 7 of 12.

	,		0		~		~									
					Subsisten		Subsisten	ce halibut								
		H	Return rat	te	hali	but	har	vest	Sport fish	ed halibut	Sport halib	out harvest	Lingcod	bycatch	Rockfish	bycatch
								Estimated				Estimated				
					Estimated	Percentage	Estimated	number	Estimated	Percentage	Estimated	number	Estimated	Estimated	Estimated	Estimated
Eligible	Regulatory	SHARCs	Surveys		number of	of	number	of pounds	number of	of	number	of pounds	number of	number	number of	number
Alaska tribe ^a	area	issued	returned	Percentage	respondents	SHARCs	of fish	b	respondents	SHARCs	of fish	b	respondents	of fish	respondents	of fish
Wrangell	2C	89	66	74.2%	38	43.0%	369	6,974	21	23.2%	63	1,303	1	8	7	106
Cooperative																
Association																
Yakutat	3A	37	18	48.6%	12	31.1%	152	3,039	0	0.0%	0	0	2	4	0	0
Tlingit Tribe	ЗA	57	10	40.0%	12	51.1%	152	3,039	0	0.0%	0	0	2	4	0	0
Thigh The																
Subtotal, eligi	ble Alaska	4,316	2,150	49.8%	1,595	36.9%	17,835	322,980	553	12.8%	2,428	38,274	237	1,301	394	5,210
	tribe															

Appendix Table G-7, section 1: eligible Alaska tribe, page 8 of 12.

Appendix Table G-7, section 2: eligible Alaska rural community, page 8 of 12.

					Subsisten	ce fished	Subsisten	ce halibut						
	-		Return ra	te	hali	but	har	vest	Sport fishe	ed halibut	Sport halib	out harvest	Lingcod	bycatch
								Estimated				Estimated		
Eligible					Estimated	Percentage				Percentage		number	Estimated	Estimated
Alaska rural	Regulatory				number of	of	number	of pounds		of	number	of pounds		number
community ^a	areas	issued			respondents		of fish	-	respondents		of fish	U	respondents	of fish
Adak	4B	26	13	50.0%	8	30.8%	66	1,918	4	15.4%	12	616	0	0
Akhiok	3A	1												
Akutan	4A	1												
Alakanuk	4E	1												
Aleknagik	4E	2												
Angoon	2C	16	10	62.5%	8	50.0%	157	2,718	4	25.0%	8	162	0	0
Atka	4B	2												
Bethel	4E	3												
Chefornak	4E	1												
Chenega Bay	3A	10	7	70.0%	5	45.0%	81	1,054	6	60.0%	34	662	2	3
Chignik	3B	5												
Chignik Lagoon	3B	2												
Chignik Lake	3B	3												
Clark's Point	4E	1												

186

					Subsisten			ce halibut						
			Return ra	te	hali	but	har	vest	Sport fish	ed halibut	Sport halil	out harvest	Lingcod	bycatch
Eligible					Estimated	Percentage	Estimated	Estimated number	Estimated	Demoento de	Estimated	Estimated number	Estimated	Estimated
Alaska rural	Regulatory	SHARCs	Surveys		Estimated number of	of			number of	Percentage of		of pounds		number
community ^a	areas			Percentage	respondents		of fish	b	respondents		of fish	b	respondents	of fish
Coffman Cove	2C	47	37	78.7%	31	65.9%	211	4,850	14	28.8%	109	1,281	2	6
Cold Bay	3B	24	19	79.2%	13	54.2%	91	1,568	9	37.5%	36	608	0	0
Cordova	3A	522	382	73.2%	236	45.1%	1,436	25,500	120	22.9%	291	5,587	17	33
Craig	2C	380	266	70.0%	173	45.5%	1,648	27,906	121	31.8%	560	8,400	54	134
Dillingham	4E	43	30	69.8%	5	10.7%	0	0	3	7.2%	8	120	0	0
Edna Bay	2C	45	36	80.0%	27	60.4%	182	3,393	11	24.6%	19	360	2	6
Elfin Cove	2C	18	10	55.6%	3	16.7%	12	293	2	11.1%	6	158	1	2
False Pass	3B	2												
Gustavus	2C	74	57	77.0%	36	48.4%	262	5,175	26	35.8%	161	2,781	2	3
Haines	2C	427	347	81.3%	233	54.6%	1,019	23,481	78	18.4%	109	2,528	10	31
Hollis	2C	36	25	69.4%	15	42.9%	77	1,415	11	31.3%	37	562	6	11
Hoonah	2C	121	87	71.9%	60	49.3%	553	8,178	31	25.5%	167	2,223	2	12
Hooper Bay	4E	1												
Hydaburg	2C	13	12	92.3%	8	61.5%	90	5,139	2	15.4%	10	420	3	12
Hyder	2C	36	29	80.6%	19	53.4%	157	2,543	6	16.1%	2	49	0	0
Kake	2C	42	27	64.3%	24	56.9%	123	2,496	12	27.4%	10	304	1	1
Kasaan	2C	10	10	100.0%	6	60.0%	34	609	1	10.0%	0	0	1	2
King Cove	3B	23	18	78.3%	17	71.7%	106	2,315	6	23.9%	12	291	2	8
King Salmon	4E	2												
Klawock	2C	125	88	70.4%	80	64.0%	813	11,682	41	33.1%	227	3,114	16	32
Kodiak	3A	1,584	1,001	63.2%	876	55.3%	8,696	162,326	674	42.5%	3,778	72,934	77	218
Kongiganak	4E	1												
Kwigillingok	4E	1												
Larsen Bay	3A	13	8	61.5%	5	38.5%	111	1,180	6	46.2%	317	2,625	2	5
Manokotak	4E	2												
Mekoryuk	4E	1												
Metlakatla	2C	40	18	45.0%	20	48.9%	142	2,177	8	20.2%	15	353	8	15
Meyers Chuck	2C	8	8	100.0%	7	87.5%	26	590	0	0.0%	0		0	

Appendix Table G-7, section 2: eligible Alaska rural community, page 9 of 12.

187

					Subsisten			ice halibut						
			Return ra	te	hali	but	har	vest	Sport fish	ed halibut	Sport halil		Lingcod	bycatch
Eligible Alaska rural community ^a	Regulatory areas	SHARCs issued		Percentage	Estimated number of respondents	Percentage of SHARCs	Estimated number of fish		Estimated number of respondents	Percentage of SHARCs		Estimated number of pounds	Estimated number of respondents	Estimated number of fish
Naknek	4E	5												
Nanwalek	3A	11	3	27.3%	9	81.8%	690	13,370	2	18.2%	4	70	0	0
Naukati Bay	2C	6	4	66.7%	3	50.0%	12	263	3	50.0%	36	882	0	0
Nelson Lagoon	3B	1												
Nightmute	4E	3												
Nikolski	4A	2												
Nome	4E	13	9	69.2%	4	28.2%	47	747	1	10.3%	0	0	0	0
Old Harbor	3A	18	15	83.3%	12	65.3%	75	1,545	4	22.2%	16	301	0	0
Ouzinkie	3A	25	17	68.0%	13	52.8%	82	1,631	3	12.4%	21	529	2	12
Pelican	2C	44	33	75.0%	23	51.1%	179	4,337	6	13.6%	22	403	10	70
Perryville	3B	1												
Petersburg	2C	904	676	74.8%	361	39.9%	2,602	42,132	265	29.3%	1,006	17,077	17	62
Platinum	4E	1												
Port Alexander	2C	34	21	61.8%	21	61.5%	175	4,518	8	24.8%	17	273	12	53
Port Graham	3A	14	7	50.0%	9	61.9%	150	3,374	0	0.0%	0	0	0	0
Port Heiden	4E	3												
Port Lions	3A	16	11	68.8%	12	75.0%	84	1,254	14	87.5%	71	807	0	0
Port Protection	2C	20	16	80.0%	16	80.0%	56	1,213	4	20.0%	12	198	4	7
Point Baker	2C	17	15	88.2%	12	70.6%	55	1,337	5	29.4%	6	140	3	4
Quinhagak	4E	2												
Sand Point	3B	16	12	75.0%	10	60.0%	88	2,188	2	13.8%	45	678	0	0
Saxman	2C	16	13	81.3%	7	43.8%	288	1,647	2	12.5%	34	452	2	16
Seldovia	3A	147	110	74.8%	97	66.2%	1,467	22,446	41	27.7%	242	3,745	10	36
Sheldon Point	4E	1												
Sitka	2C	1,388	990	71.3%	722	52.0%	4,449	87,945	281	20.2%	681	12,326	304	1,157
Skagway	2C	51	41	80.4%	28	54.8%	70	1,728	9	17.7%	9	186	1	1

Appendix Table G-7, section 2: eligible Alaska rural community, page 10 of 12.

188

						Subsisten	ce halibut						
		Return rat	te	hali	but	har		Sport fish	ed halibut	Sport halil		Lingcod	bycatch
					D (F () (1			D (F (1)		E.C. (1	E.C. 1
Regulatory	SHADC	Surveye			•								Estimated number
			Percentage				b b				b b		of fish
	1		8-	<u>r</u>				r				r	
4C	1												
4C	2												
3A	11	8	72.7%	9	81.8%	158	3,161	0	0.0%	0	0	2	8
4E	2												
2C	44	41	93.2%	31	70.9%	183	3,558	18	41.5%	42	733	0	0
2C	122	90	73.8%	62	50.4%	467	10,497	42	34.1%	125	2,444	10	62
4E	3												
4E	1												
4A	127	88	69.3%	63	49.3%	695	10,013	39	30.6%	173	2,695	3	7
2C	22	20	90.9%	10	43.2%	83	1,635	6	29.0%	23	439	0	0
4E	2												
2C	373	306	82.0%	210	56.3%	1,953	36,207	96	25.8%	466	8,681	13	56
3A	64	41	64.1%	31	49.1%	345	5,721	7	11.1%	21	292	15	86
	7,249	5,166	71.3%	3,708	51.2%	30,769	564,007	2,056	28.4%	8,999	159,485	617	2,178
	areas 4E 4C 4C 3A 4E 2C 2C 4E 4E 4A 2C 4E 2C 3A	Regulatory areas SHARCs issued 4E 1 4C 1 4C 2 3A 11 4E 2 3A 11 4E 2 2C 44 2C 122 4E 3 4E 1 4A 127 2C 22 4E 2 2C 373 3A 64 7,249	Regulatory areas SHARCs issued Surveys returned 4E 1 4C 1 4C 2 3A 11 4E 2 3A 11 4E 2 2C 44 4E 3 4E 2 2C 122 90 4E 4E 1 4A 127 4A 127 4E 2 2C 373 306 3A 64 41 7,249 5,166	areas issued returned Percentage 4E 1 4C 1 4C 2 3A 11 8 72.7% 4E 2 2 2 2C 44 41 93.2% 2C 122 90 73.8% 4E 3 4 4 4E 3 4 4 4E 3 4 4 4E 3 4 4 4E 1 8 69.3% 2C 22 20 90.9% 4E 2 20 90.9% 4E 2 41 64.1% 7,249 5,166 71.3%	Regulatory areas SHARCs issued Surveys returned Estimated number of respondents 4E 1 Estimated number of respondents 4C 1 $4C$ 1 4C 2 $4C$ $4C$ $4C$ 3A 11 8 72.7% 9 4E 2 $4C$ 31 $4C$ 31 2C 44 41 93.2% 31 2C 122 90 73.8% 62 4E 3 $4E$ 16 63 2C 122 90 73.8% 62 4E 1 88 69.3% 63 2C 22 20 90.9% 10 4E 1 88 69.3% 63 2C 373 306 82.0% 210 3A 64 41 64.1% 31	Regulatory areas SHARCs issued Surveys returned Estimated Percentage Percentage of 4E 1 4C 1 4C 1 4C 2 3A 11 8 72.7% 9 81.8% 4E 2 2C 44 41 93.2% 2C 122 90 73.8% 4E 3 4E 1 4A 127 88 69.3% 63 49.3% 2C 22 2C 373 306 82.0% 210 56.3% 3A 64 41 64.1% 33 49.1%	Return rate halibit har Regulatory areas SHARCs issued Surveys returned Estimated percentage Percentage respondents Percentage SHARCs Estimated number of fish 4E 1 1 8 72.7% 9 81.8% 158 4C 2 - - - - - - 3A 11 8 72.7% 9 81.8% 158 4E 2 -	Return rate halibit harvest Regulatory areas SHARCs issued returned percentage respondents Percentage of of standed of fish Estimated number of of standed of fish Estimated number of of standed of fish b^{b} 4E 1 $+ + + + + + + + + + + + + + + + + + + $	Regulatory SHARCs Surveys Estimated number of returned Percentage respondents Estimated of Inumber stimated number of of Estimated number of Inumber stimated number of Estimated number of 4E 1 1 8 72.7% 9 81.8% 158 3,161 0 4C 2 2 90 73.8% 62 50.4% 467 10,497 42 4E 1 93.2% 31 70.9% 183 3,558 18 2C 122 90 73.8% 62 50.4% 467 10,497 42 4E 1 43.2% 31 70.9% 183 3,558 18 2C 122 90 73.8% 62 50.4% 467 10,497 42 4E 1 43.2% 83 1,635 66 66 67 695 10,013 39 2C 22 20 90.9% 10 43.2% 83	Return ratehalibithalibithalibithalibithalibithalibitRegulatorSHARCsSurveys returnedEstimated respondentsPercentage SHARCsPercentage of SHARCsEstimated number of of SHARCsEstimated number of of sthARCsRespondentsSHARCsPercentage number of of sthARCsPercentage number of sthARCsPercentage hereit sthARCsPercentage hereit sthARCsPercentage sthARCsPercentage hereit sthARCsPercentage hereit sthARCsPercentage hereit sthARCsPercentage hereit sthARCs<	Return rate halibit harvest Sport fished halibit Sport fished halibit Sport h	Return rate halibit $har \lor term rate Sport fished halibit Sport fishe fishe halibit Sport fishe fished halibit$	Return ratehalibutSport fished halibutSport fishe halibutSp

Appendix Table G-7, section 2: eligible Alaska rural community, page 11 of 12.

		Return rat	te	Subsisten hali			ce halibut vest	Sport fish	ed halibut	Sport halil	out harvest	Lingcod	bycatch	
	SHARCs	2		Estimated number of	Percentage of	number of	number of	number of	Percentage of	number of	number of		Estimated number of	
	issued	returned	Percentage	respondents	SHARCs	fish	pounds ^b	respondents	SHARCs	fish	pounds ^b	respondents	fish 1	r
Subtotal, eligible Alaska tribes Subtotal,	4,316	2,150	49.8%	1,595	36.9%	17,835	322,980	553	12.8%	2,428	38,274	237	1,301	

Appendix Table G-7, section 3: subtotals and totals, page 12 of 12.

a. To protect confidentiality, data for tribes and communities with 5 or fewer SHARCs issued are not reported in this table. Tribal and community subtotals include all tribes and communities.

28.4%

22.6%

2,056

2,609

8,999 159,485

11,427 197,760

30,769 564,007

48,604 886,988

Rockfish bycatch

number of number of

394

1,010

1,404

Estimated

 fish

5,210

9,136

14,346

Estimated

respondents

2,178

3,479

617

854

b. Pounds are net (dressed) weight. Net weight is 75% of round (whole) weight.

71.3%

63.3%

3,708

5,303

51.2%

45.9%

Source ADF&G Division of Subsistence SHARC surveys, 2009.

5,166

7,249

11,565 7,316

eligible Alaska rural

communities

Total

APPENDIX H: PROJECT FINDINGS SUMMARY



SUBSISTENCE HARVESTS OF PACIFIC HALIBUT IN ALASKA, 2008

Division of Subsistence, Alaska Department of Fish and Game 333 Raspberry Road, Anchorage, AK 99518 December 2009

Through a grant from the National Marine Fisheries Service (NMFS), the Alaska Department of Fish and Game (ADF&G) Division of Subsistence conducted a study to estimate the subsistence harvests of Pacific halibut in Alaska in 2008. The full results of the study appear in the Division's Technical Paper No. 348, "Subsistence Harvests of Pacific Halibut in Alaska, 2008" (December 2009). Key points in the report include the following:

- In May 2003, the NMFS published final federal regulations for a subsistence halibut fishery in Alaska. Residents of 118 rural communities and members of 123 tribes are eligible to participate. Fishers must obtain a subsistence halibut registration certificate (SHARC) from NMFS before fishing (www.fakr.noaa.gov/ram/subsistence/halibut.htm; 800-304-4846).
- 2008 was the sixth year in which subsistence halibut fishing took place under these regulations. Information about subsistence halibut harvests in 2003-2007 is reported in Division of Subsistence Technical Papers 288, 304, 320, 333, and 342, respectively.
- To estimate the 2008 harvests, a one-page survey form was mailed to SHARC holders in early 2009 or administered in person. After three mailings and a series of community visits, 7,316 of 11,565 SHARC holders (63%) responded. Participation in the survey was voluntary.
- An estimated 5,303 individuals subsistence fished for halibut in 2008 (Figure 8, below).
- The estimated subsistence harvest was 48,604 halibut for 886,988 pounds net weight.
- Of this total, 74% was harvested with setline (stationary) gear (longline or skate) and 26% was harvested with hand-operated gear (handline or rod and reel).
- The largest subsistence harvests occurred in Southeast Alaska (Halibut Regulatory Area 2C), at 52% of the total, followed by Southcentral Alaska (Area 3A) at 38%. Table 6 and Figure 17 (below) from the final report give more details on harvests by gear type and area.
- Based on place of residence of SHARC holders, communities with the largest subsistence halibut harvests in 2008 were Kodiak and Sitka (the eligible communities with the largest populations) (Figure 22, below).
- An estimated 14,346 rockfish were harvested by 1,404 fishers in the subsistence halibut fishery in 2008. Most (70%) were harvested in Southeast Alaska.
- An estimated 3,479 lingcod were harvested by 854 fishers in the subsistence halibut fishery in 2008. Most (71%) were harvested in Southeast Alaska.
- Based on preliminary data from the International Pacific Halibut Commission and this study, the estimated halibut removal in Alaska in 2008 was 72.214 million pounds, net weight. Subsistence harvests accounted for 1.3% of this total (Figure 30, below).
- The report concludes that the project was, overall, a success, with good public outreach, good response rates, and a reliable estimate of subsistence halibut harvests.
- The report recommends that monitoring of the Alaska subsistence halibut harvest continue in order to evaluate trends in the fishery.

For a copy of the full report, go to <u>www.subsistence.adfg.state.ak.us</u>, or call the Division of Subsistence of ADF&G at 907-267-2353 (Anchorage) or 907-465-4147 (Juneau).

Subarea	Halibut	Number of			Es	timated Subs	stence Harve	st by Gear Ty	pe'			Estin	nated Sport Ha	arvest
	Regulatory Area	SHARCs	Se	tline (fixed) G	ear	Ha	nd-Operated (Gear	All	Subsistence G	Sear			
	Alea	Fished ^a (any halibut fishing)	Estimated Number Fished	Estimated Number Harvested	Estimated Pounds Harvested ²	Estimated Number Fished	Estimated Number Harvested	Estimated Pounds Harvested ²	Estimated Number Fished	Estimated Number Harvested	Estimated Pounds Harvested ²	Estimated Number Fished	Estimated Number Harvested	Estimater Pounds Harvestee
Southern Southeast Alaska	2C	1.614	1.294	9.619	197.035	742	3,768	57,476	1,614	13,387	254,510	875	3.216	54.8
Sitka LAMP Area	2C	841	781	4,406	92,374	234	817	12,599		5,223	104,973	316	709	12,5
Vorthern Southeast Alaska	2C	743	669	3,806	81,166	271	1,053	17,711	743	4,859	98,877	350	1,204	19,6
Subtotal	2C	3,060	2,619	17,832	370,575	1,182	5,638	87,785	3,060	23,470	458,360	1,457	5,129	87,0
akutat Area	ЗA	77	69	853	14,417	19	115	1,667	77	968	16,084	15	31	4
rince William Sound	ЗA	342	311	2,051	38,995	134	423	8,117	342	2,473	47,112	177	447	9,3
Dook Inlet	ЗA	273	148	2,766	48,628	199	2,000	28,167	273	4,766	76,795	120	656	8,1
Kodiak Island Road System	ЗA	688	551	3,535	68,573	351	1,799	28,299	688	5,334	96,872	584	2,648	49,9
Kodiak Island Other	ЗА	658	499	3,405	69,471	352	1,638	31,069	658	5,043	100,540	404	1,852	32,6
Subtotal	3A	1,789	1,362	12,611	240,084	914	5,974	97,320	1,789	18,584	337,403	1,074	5,633	100,5
Chignik Area	3B	53	24	506	8.417	45	183	3.425	53	688	11.842	6	14	3
ower Alaska Peninsula	3B	198	90	838	15,197	149	810	15,209	198	1,648	30,406	53	227	3,5
Subtotal	3В	250	115	1,344	23,614	194	993	18,634	250	2,336	42,248	58	242	4,3
Eastern Aleutians - East	4A	103	66	503	9,324	53	460	9.720	103	964	19,043	47	170	4.2
Eastern Aleutians - West	4A	4	3	3	63	4	44	446		47	509	3	11	3
Subtotal	4A	106	68	506	9,387	56	504	10,166	106	1,010	19,553	48	181	4,6
Nestern Aleutians - East	4B	16	10	81	2,306	10	74	2.431	16	155	4,737	6	21	5
Vestern Aleutians - Other	4B	0	0	0	0	0	0	0	0	0	0	Ő	0	
Subtotal	4B	16	10	81	2,306	10	74	2,431	16	155	4,737	6	21	7
St. George Island	4C	8	2	0	0	8	56	1.150	8	56	1,150	0	0	
St. Paul Island	4C	15	12	262	3,661	9	27	846	15	289	4,507	0	0	
Subtotal	4C	20	12	262	3,661	14	83	1,996	20	345	5,657	0	0	
St. Lawrence Island	4D	10	9	53	2.879	3	12	252	10	65	3,131	0	0	
Area 4D, Other	4D	0	0	0	0	0	0	0	0	0	0	0	0	
Subtotal	4D	10	9	53	2,879	3	12	252	10	65	3,131	0	0	
Bristol Bay	4E	11	11	16	84	7	٥	٥	11	16	84	2	٥	
/ukon/Kuskokwim Delta	4E	134	38	1,040	4,283	115	1,510	10,386		2,550	14,669	13	222	6
lorton Sound	4E	7	7	72	1,145	1	0	0	7	72	1,145	1	0	
Subtotal	4E	152	56	1,128	5,511	123	1,510	10,386	152	2,638	15,898	16	222	e
Grand totals	Alaska	5,303	4.182	33.816	658.017	2,423	14,788	228.971	5,303	48.604	886,988	2.609	11.427	197.

Settine = kingline or skate. Hand-operated gear = rod and reel or handline.
 Pounds are net (dressed) weight. Net weight = 75% of round weight.
 ³ Because fishers might fish in more than one area, subtotals for regulatory areas and the state total might exceed the sum of the subarea values. Includes subsistence and sport fishing

Source: Alaska Department of Fish and Game, Division of Subsistence, SHARC Survey, 2009.

