

Operational Plan: Upper Cook Inlet Salmon Personal Use Harvest Monitoring (2015–2018)

by

Kristine Dunker

July 2016

Alaska Department of Fish and Game

Divisions of Sport Fish and Commercial Fisheries



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

REGIONAL OPERATIONAL PLAN SF.2A.2016.19

**OPERATIONAL PLAN: UPPER COOK INLET SALMON PERSONAL
USE HARVEST MONITORING (2015–2018)**

by

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The Regional Operational Plan Series was established in 2012 to archive and provide public access to operational plans for fisheries projects of the Divisions of Commercial Fisheries and Sport Fish, as per joint-divisional Operational Planning Policy. Documents in this series are planning documents that may contain raw data, preliminary data analyses and results, and describe operational aspects of fisheries projects that may not actually be implemented. All documents in this series are subject to a technical review process and receive varying degrees of regional, divisional, and biometric approval, but do not generally receive editorial review. Results from the implementation of the operational plan described in this series may be subsequently finalized and published in a different department reporting series or in the formal literature. Please contact the author if you have any questions regarding the information provided in this plan. Regional Operational Plans are available on the Internet at: <http://www.adfg.alaska.gov/sf/publications/>

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SIGNATURE PAGE

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Project leader(s): Kristine Dunker

Division, Region, and Area: Division of Sport Fish, Region II, Anchorage Office

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Period Covered: 2015-2018

Field Dates: Fisheries occur between June and August each year

Plan Type: Category II

Approval

<u>Title</u>	<u>Name</u>	<u>Signature</u>	<u>Date</u>
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TABLE OF CONTENTS

	Page
LIST OF TABLES.....	iii
LIST OF FIGURES	iii
LIST OF APPENDICES	iii
ABSTRACT	1
INTRODUCTION.....	1
OBJECTIVES.....	3
Primary Objectives	3
Secondary Objective.....	4
METHODS.....	4
Study Design	4
Data Collection.....	7
Data Reduction	8
Data Analysis.....	10
SCHEDULE AND DELIVERABLES	12
RESPONSIBILITIES	13
BUDGET SUMMARY	13
REFERENCES CITED	15
APPENDIX A: COOK INLET PERSONAL USE FISHING REGULATIONS	17
APPENDIX B: SALMON HARVESTS, STANDARD ERRORS, AND RELATIVE PRECISIONS IN THE UPPER COOK INLET PERSONAL USE FISHERIES	21
APPENDIX C: EXAMPLES OF A PERSONAL USE PERMIT AND REMINDER LETTER	29
APPENDIX D: FILE STRUCTURE FOR PERSONAL USE SALMON DATABASES	35

LIST OF TABLES

Table	Page
1 Number of permits issued and response rates by mailing.	2
2 Fishery start and end dates for the Kasilof, Kenai, and Fish Creek personal use fisheries.....	9

LIST OF FIGURES

Figure	Page
1 Number of personal use permits issued in Upper Cook Inlet in 1996–2014.	3

LIST OF APPENDICES

Appendix	Page
A1 Cook Inlet personal use fishing regulations.	18
B1 Upper Cook Inlet personal use fisheries totals.	22
B2 Harvests, standard errors, and relative precisions of the Kenai River personal use dip net fishery.	23
B3 Harvests, standard errors, and relative precisions of the Kasilof River personal use dip net fishery.	24
B4 Harvests, standard errors, and relative precisions of the Kasilof River personal use gillnet fishery.	25
B5 Harvests, standard errors, and relative precisions of the Fish Creek personal use dip net fishery.	26
B6 Harvests, standard errors, and relative precisions where fishery is unknown.	27
C1 Example of a personal use permit.	30
C2 Example of reminder letter mailed to nonrespondents.	32
D1 File structure for personal use salmon databases.....	36

ABSTRACT

The goals of this study are to estimate the participation and harvest of 4 personal use salmon fisheries that occur in Upper Cook Inlet. Harvests of sockeye and Chinook salmon will be estimated from the Kasilof gillnet fishery; harvests of sockeye, coho, and pink salmon will be estimated from the Kasilof dipnet fishery; harvests of sockeye, Chinook, coho, and pink salmon will be estimated from the Kenai dipnet fishery; and harvest of sockeye salmon will be estimated from the Fish Creek dipnet fishery. Incidental harvest of flounder will also be estimated for all for fisheries.

Key words: personal use, Upper Cook Inlet, Kasilof River, Kenai River, Fish Creek, harvest, salmon, *Oncorhynchus spp.*

INTRODUCTION

Prior to the State of Alaska's subsistence priority law in 1978, individuals could meet their needs for fish under the subsistence fishing regulations in Cook Inlet. Court actions changed the definition of subsistence in 1978 and precluded some from participating in customary and traditional subsistence fisheries. The Alaska Board of Fisheries (BOF) countered these court changes by creating a new fishery class called "personal use" in areas that have a surplus of salmon beyond escapement, subsistence, commercial, and sport needs. The intent of personal use fishing regulations are to permit the taking of fish when that take does not jeopardize the sustained yield of the resource and does not negatively impact an existing resource use or is in broad public interest (Alaska Administrative Code [5 AAC 77.001]).

With the establishment of personal use fisheries, management plans and regulations governing harvest opportunities were implemented to ensure salmon harvests are sustainable. Harvest monitoring is essential for sustained yield salmon management.

This operational plan focuses on 4 of the personal use salmon fisheries that occur in Upper Cook Inlet (UCI) above Anchor Point:

- 1) gillnetting at the mouth of the Kasilof River from June 15 through June 24,
- 2) dipnetting at the mouth of the Kasilof River from June 25 through August 7,
- 3) dipnetting at the mouth of the Kenai River from July 10 through July 31, and
- 4) dipnetting at the mouth of Fish Creek opened by emergency order only.

A single permit authorizes an Alaskan household to participate in all 4 fisheries. This permitting process identifies an Alaskan household and assigns a uniquely numbered harvest record to each permit. Permit regulations require returning harvest data to the Alaska Department of Fish and Game (ADF&G) by August 15th. A permit holder may obtain their annual limit of 25 salmon per head of household and 10 additional salmon per listed dependent. Each household permit is allowed the incidental take of 10 flounders. UCI personal use regulations are given in Appendix A1. Since 1996, both the number of permits issued and the amount of salmon harvested in the personal use fisheries in Upper Cook Inlet have increased to approximately 36,000 permits (Table 1, Figure 1), and overall harvests across all fisheries have peaked at 645,000 salmon (Appendices B1–B6).

Table 1.—Number of permits issued and response rates by mailing.

Year	Permits issued		Permits returned								Permits not returned	
			Voluntary		Mailing 1		Mailing 2		Total			
	Number ^a	SE	Number	%	Number	%	Number	%	Number	%	Number	%
1996	14,576		9,986	69	2,501	17	569	4	13,452	92	1,124	8
1997	14,919		7,031	47	4,792	32	1,148	8	13,756	92	1,163	8
1998	15,535	19	8,209	53	3,391	22	1,590	10	13,190	85	2,345	15
1999	17,197	25	8,960	52	3,771	22	1,485	9	14,216	83	2,981	17
2000	16,107	11	8,070	50	3,962	25	1,546	10	13,582	84	2,525	16
2001	16,915	1	8,515	50	3,896	23	1,987	12	14,398	85	2,517	15
2002	17,568	1	8,881	51	3,247	18	2,156	12	14,284	81	3,284	19
2003	19,110	2	9,602	50	3,587	19	2,537	13	15,726	82	3,384	18
2004	21,910	2	10,653	49	2,075	10	5,020	23	17,748	82	3,868	18
2005	21,905	1	12,760	59	4,150	19	2,171	10	19,081	88	2,680	12
2006	18,563	1	11,658	63	3,632	20	1,242	7	16,532	89	1,996	11
2007	23,046	1	14,090	61	4,250	18	1,972	9	20,312	88	2,734	12
2008	23,722	1	13,743	58	4,385	19	2,131	9	20,259	85	3,289	14
2009	29,619	1	18,426	63	4,715	16	1,888	6	25,029	85	4,384	15
2010	31,590	1	17,193	55	5,355	17	2,674	9	25,222	81	6,092	19
2011	34,515	3	20,276	60	4,825	14	2,080	6	27,181	80	6,789	20
2012	34,315	3	20,266	60	4,610	14	2,172	7	27,048	81	6,616	19
2013	35,211	2	17,865	51	5,840	17	3,050	9	27,180	77	8,031	23
2014	35,989	2	21,574	61	3,777	11	2,518	7	27,866	79	7,627	21
Minimum	14,576		7,031	47	2,075	10	569	4	13,190	77	1,124	8
Average	23,280		13,040	56	4,040	19	2,102	9	19,266	84	3,865	16
Maximum	35,989		21,574	69	5,840	32	5,020	23	27,866	92	8,031	23

^a Voluntary households are those that voluntarily returned their completed permits without being mailed a reminder letter.

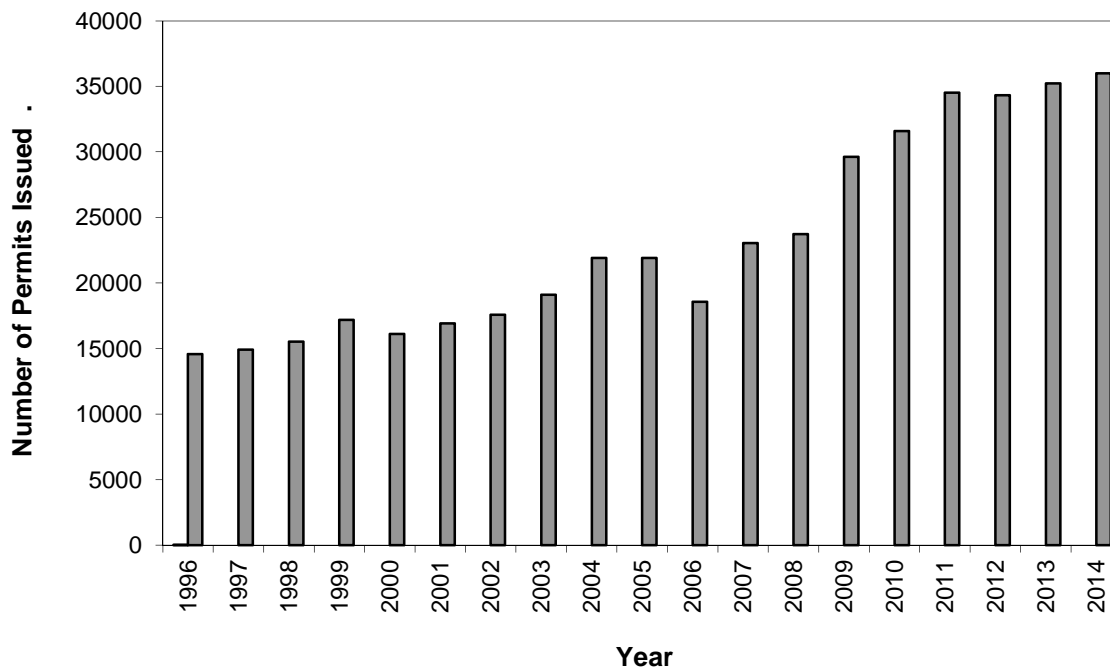


Figure 1.—Number of personal use permits issued in Upper Cook Inlet in 1996–2014.

The timing of these personal use fisheries capitalizes on sockeye salmon (*Oncorhynchus nerka*) abundance. Often the total salmon harvest in the personal use fisheries of Upper Cook Inlet are composed of more than 95% sockeye salmon (Appendix B1). With few exceptions, participants are allowed to harvest all species of salmon, but Chinook salmon (*O. tshawytscha*) must be released in the dip net fisheries of the Kasilof River and Fish Creek. The harvest of only 1 Chinook salmon per permit is allowed in the Kenai River dip net fishery unless closed by Emergency Order. Effective in 2005, the BOF granted the harvest of flounder (various species) under this salmon permit with a household limit of ten flounder. Methods, means, dates, and period duration are in regulation to provide predictable fishing opportunities (5 AAC 77.540). Additionally, managers possess authority to increase or decrease fishing time or area in times of above-average or below-average returns for conservation purposes. Nelson et al. (1999) provide a historical perspective of personal use salmon fishery development in Upper Cook Inlet, Reimer and Sigurdsson (2004) provide a historical harvest report from 1996 to 2003, Dunker and Lafferty (2007) provide harvest and participation trends from 2004 to 2006, Dunker and Lafferty (*In prep*) provide harvest and participation trends from 2007 to 2009, and Dunker 2013 discusses harvest and participation trends between 2010 and 2012. A report for the 2013–2015 period will be published in late 2016.

OBJECTIVES

PRIMARY OBJECTIVES

- 1) Estimate participation (household-days fished) in each of the 4 personal use fisheries such that the estimates are within 5% of the true value 95% of the time.

- 2) Estimate sockeye salmon harvest in each of the 4 personal use fisheries. Harvest of sockeye salmon from the Kasilof dipnet, Kenai dipnet, and the Kasilof gillnet fisheries will be estimated within 5% of true values 95% of the time. Harvest from the Fish Creek dipnet fishery will be estimated within 20% of true values 95% of the time.
- 3) Estimate Chinook salmon harvest in the Kenai dipnet and the Kasilof gillnet fisheries such that the estimates are within 10% of true values 95% of the time.
- 4) Estimate coho salmon (*O. kisutch*) harvest in the Kasilof and Kenai dipnet fisheries such that the estimates are within 15% of true values 95% of the time.
- 5) Estimate pink salmon (*O. gorbuscha*) harvest in the Kasilof and Kenai dipnet fisheries such that the estimates are within 15% of true values 95% of the time.

SECONDARY OBJECTIVE

- 1) Estimate the incidental harvest of flounder in each of the 4 personal use fisheries.

METHODS

To accomplish the objectives given above, we will annually print personal use permits and distribute them via fishing license vendors so Alaskan households may participate in the Upper Cook Inlet personal use fisheries. Beginning in 2015, Alaskan households will be able to acquire their personal use permits online and print them from their home computers. Reliance on paper permits provided by ADF&G is expected to decrease throughout this project period. In the first year of the online permitting program, 50,000 paper permits will be distributed to vendors. In 2016, this amount will be cut by 25% so that 37,500 permits will be provided to vendors. It is anticipated that the quantity of paper permits provided by ADF&G will decrease again in both 2017 and 2018, but the rate of decrease will be determined by the growth in usage of the online permitting system.

Over the last 5 years (2010–2014) the number of permits that were issued has increased to a peak of 35,989 in 2014 (Figure 1, Table 1). The anticipated demand for personal use permits is likely to continue growing, and it is hoped that transitioning the permitting program to the online system will facilitate acquisition of timely harvest data and provide participants a more efficient means of obtaining permits and reporting harvests.

STUDY DESIGN

All Alaskan households with valid Alaska resident sport fishing licenses, as well as those who are exempt from licensing (PID), qualify to receive a permit. Alaskan residents who wish to participate in the Upper Cook Inlet personal use salmon fisheries can obtain their permit in 1 of 3 ways.

Online

Since 2015, permits can be obtained online through ADF&G's online store (<https://www.adfg.alaska.gov/Store/>). Permits obtained online can be printed by the applicant following the check-out process. These permits are also e-mailed to the e-mail address provided by the applicant.E-vendors

Beginning in 2016, permits can be obtained via e-vendors. Applicants can obtain permits electronically with the assistance of ADF&G staff with access to the online permitting system

from computer terminals in information centers and at large licensing venues like the Great Alaska Sportsman Show. In future years, this system will expand to non-ADF&G licensing vendors. Permits obtained through e-vendors will be both printed by the vendor and given to the applicant and e-mailed to the applicant's e-mail address.

Nonelectronic vendors

Instead of obtaining permits electronically, applicants can obtain a physical preprinted permit from approximately 60 fishing license vendors across Southcentral Alaska. The number of preprinted permits issued is expected to decrease annually as use of the electronic options increases. The paper application has 2 components (Appendix C1). The top half or "vendor copy" contains the permit holder's address and license information, and the bottom half is the participant's harvest recording document that must be in possession while participating in the fishery. License vendors and ADF&G area offices return the vendor copy to ADF&G Research and Technical Services (RTS) in Anchorage for key punching on a monthly basis. Permit quantities sent or delivered to nonelectronic vendors will be based on the number of permits issued the previous year.

Electronically – new in 2015

1. Online through ADF&G's online store (<https://www.adfg.alaska.gov/Store/>).
 - Permits obtained online can be printed by the applicant following the check-out process. These permits will also be e-mailed to the e-mail address provided by the applicant.
2. E-vendors
 - Beginning in 2016, applicants will be able to obtain permits electronically with the assistance of ADF&G staff who access the online permitting system from computer terminals in information centers and at large licensing venues like the Great Alaska Sportsman Show. In future years, this system will expand to non-ADF&G licensing vendors.
 - Permits obtained through e-vendors will be both printed by the vendor and given to the applicant and e-mailed to the applicant's e-mail address.

Non-electronically

3. Non-electronic Vendors
 - Instead of obtaining permits electronically, applicants can obtain a physical pre-printed permit from approximately 60 fishing license vendors across Southcentral Alaska. The number of pre-printed permits issued, however, is expected to decrease annually as use of the electronic options increases.
 - The Non-electronic (paper) application has two components. The top half or "vendor copy" contains the permit holder's address and license information, and the bottom half is the participant's harvest recording document that must be in possession while participating in the fishery. License vendors and Department offices return the vendor copy to Research and Technical Services (RTS) in Anchorage for key punching on a monthly basis.
 - Permit quantities sent or delivered to non-electronic vendors will be based on the number of permits issued the previous year.

Overall, we expect between 34,000–40,000 permits to be issued annually during this project period.

All participants are required to have their permit (and current sport fishing license) with them when taking or transporting fish caught in the personal use fishery. All permit holders must record their participation and household harvest on their permit immediately upon harvesting a fish. If no fish are harvested, the date and the fishery must be recorded on the permit. Participation and harvest data recorded on the permit must be reported to ADF&G by August 15th of the year the permit was issued.

Permit holders currently have 3 options for reporting their participation and household harvest data:

- 1) attaching postage and mailing the permit to the address printed on the back of the permit
- 2) dropping their permits at any ADF&G office
- 3) reporting participation and harvest online at: <https://www.adfg.alaska.gov/sf/PU/>.

For the third option, all permits have a QR code to quickly direct the permit holder to this website. For those participants who obtained their permits online, online harvest reporting is very quick because all user information already exists in the system. For those who did not obtain their permit electronically, the online harvest reporting process is still efficient. However, these participants may have to enter their household information in addition to their harvests if their vendor copies have not yet been entered by ADF&G data entry staff.

Permittees who do not report their harvest data will receive a reminder e-mail (for those with valid, legible e-mail addresses) and up to 2 courtesy mail-out reminders. The e-mail will precede the physical mailings primarily as a cost-savings measure and will contain the link to the online reporting system. Physical reminder letters are essentially a copy of the permit and will be mailed as soon as data entry staff have scanned all returned harvest information. A second reminder letter will be sent a month later to those permits holders that did not responded to the e-mail or first reminder letter (Appendix C2).

Return rates, following the courtesy reminders, have averaged 84% since the UCI personal use fisheries began in 1996. Since 2010, the return rate has dropped to between 77% and 81%. It is anticipated that the availability of online harvest reporting will increase reporting compliance.

The vendor copies from the nonelectronic applications and the database of electronic applications will be used to estimate the total number of permits issued. Unfortunately, a few vendors will not return all of the top portions of issued permits. If we do not receive all the vendor copies, the number of permits issued will need to be estimated. Some permits will be returned for which we have no corresponding vendor copy. These are considered “orphan permits.” Assuming the “orphan permits” have the same response rate as the voluntary returns for which we have a vendor copy, we will apply this response rate to the “orphan permits” to estimate the total number of permits issued for which we have no vendor copy. In the past, we received approximately 100–150 orphan permits per year. Because there are fewer than 65 vendors issuing permits, it is possible to contact vendors during and at the end of the season to minimize the loss of permit holder contact information.

As described above, an e-mail and up to 2 reminder letters will be mailed to permit holders who do not return their permits by the August 15 deadline. All participation and harvest information

reported by permit holders who promptly return their permits and those permits returned before the second reminder letter will be treated as a census of “compliant” households. Information obtained by permit holders who return their permits after the second reminder letter is mailed will be treated as a sample of “noncompliant” households.

Annual estimates of participation and harvest by noncompliant households will be estimated by first calculating the mean participation (household-days fished) and harvest of each species for all households that return completed permits after the second reminder mailing. Mean estimates will be expanded to include all nonrespondents.

Annual estimates of participation and harvest by species for each fishery will be obtained by summing the estimates for the noncompliant households with the corresponding information obtained from permits returned by the compliant households.

Information from the 1996–2014 personal use permit-holders (Appendix B1) was used to predict the sampling variances and related levels of relative precision. If annual return rates for this project period are high as expected, then the annual precision levels should well exceed the desired objective criteria listed in the objectives.

As noted above, the levels of precision achieved by this project have been substantially better than the objective criterion. There are two causes for this high precision. First, it is assumed that about 50% of the permit holders will comply with the reporting deadline, that these compliant households account for more than 50% of the harvest, and that this component of the total harvest estimate is measured with no sampling error. Second, it is assumed that reminders issued to all noncompliant households leads to relatively precise estimates of this component of the harvest. As such, the precisions that we expect for the 2015–2018 surveys may not be as good as predicted if any of these factors change dramatically.

Issuing reminders to all noncompliant households is not directed at obtaining the objective criteria, but rather to ensure that all households with personal use permits are treated equally (so that each household is given the same opportunity to comply with reporting requirements prior to the next season).

DATA COLLECTION

Permits issued by nonelectronic vendors (Appendix C1) are sequentially numbered and perforated horizontally across the middle. Identifying information (applicant’s name, address, telephone number, sport fishing license number, total number of household members, total household salmon harvest limit, and Alaska driver’s license number) will be completed on the top half of the permit. The number of household members and their names will also be recorded on the bottom half of the permit at the issuing office or license vendor. The issuing officer will write the total household salmon harvest limit on both halves of the permit and sign the top half. The applicant will also sign the top half of the permit. ADF&G or the license vendor will retain the top half (the vendor copy) of the permit with the identifying information. The bottom half will be issued to the applicant. License vendors will be given postage-paid envelopes to mail the vendor copies of their issued permits to RTS each month. They will be asked to return all vendor copies and unused permits to RTS by mid-September. Vendors will be sent a letter and then contacted by phone or in person after the fishery closes in the beginning of August to remind them to send in their vendor copies.

For permits obtained electronically, all of the identifying information will be entered by the applicant. The system will automatically calculate the household fishing limit and print it on the applicant's permit. Applicant information from permits obtained electronically is automatically retained in a database.

While fishing, permit holders will record all fishing activity by their household on the permit, including the fishery, dates fished, salmon harvest by species, and flounder harvest (Appendix C1). A check box is also provided for households that did not participate. When the permit holder's household completes fishing for the season, they are required to report their participation and household harvest to ADF&G by 1 of the 3 methods described above.

After data entry is complete, nonrespondents will be identified. For cost savings, a reminder e-mail will be sent via GovDelivery to all nonrespondents for which we have a valid e-mail address. Approximately 2 weeks after the e-mail reminder, the first reminder letter will be sent (Appendix C2). Four weeks after the first reminder letter is mailed, the remaining nonrespondents will be identified and a second reminder letter will be mailed.

The permit number will be printed on the reminder letter. The reminder letter will also contain a blank copy of the harvest information portion of the permit, in case the permit holder has lost or misplaced the original. Reminder letters will also display a QR code that quickly takes the permit holder to the online reporting website (Appendix C2).

Records from physically returned permits will be scanned, and the mailing to which they responded will be identified. Note that some respondents will send their original permit although they are responding to a reminder letter. The date of the response will be used to identify the response and not the form the response is returned on. Forms will be electronically scanned and identified by the permit number. Each permit number will be used to identify the source of data in all database records.

DATA REDUCTION

RTS staff will scan the permit applications and harvest information for physically returned permits. To reduce duplication of reminders, permit applications will be searched for identical fishing license numbers and driver's license numbers recorded on more than 1 permit. If matching numbers are detected, all but 1 of the permits will be marked as "duplicate" in the database so that the total count of participants will be correct and the affected person will only be contacted once in each reminder. The permit number that replaces the original will be coded in the "dupapp" field of the original permit.

As permits return with harvest information, permit information will be scanned and entered into the database. If a permit holder returns 2 copies of their permit or reports both online and by returning a physical copy of their permit, all the information will be entered into "raw" database tables. This table contains information from all permits and harvest reports that are processed. The table is then filtered for duplicate or invalid permits and harvest reports, and the records are copied to "corrected" database tables (Appendix D1). The corrected tables will be used for all reporting, and the "raw" tables will be used to monitor complete and accurate entry of information.

Current software programming identifies outliers during the keypunching process. Erroneous information, keystroke errors, and outliers are identified in comparison to established criteria listed below. Identified errors are flagged and checked by comparing the keypunched or scanned

data to the permit itself. If the entered data accurately reflects what is written on the permit, then no changes will be made. Lists of flagged records remaining after all corrections are made will be given to the project leader for further evaluation. Only those records that meet all checks will be placed in the “corrected” database tables.

The following represents a list of the most common issues discovered during data entry and editing. Each issue requires a unique but standard approach that is consistently addressed for each year that these fisheries take place.

- 1) Records are marked as having no vendor card (NOVENDCARD = 1) but there is a fishing license or driver’s license number coded.
- 2) There are outliers: harvests that are higher than the legal limit allowed for the household, or harvests of more than 1 Chinook salmon, or more than 100 salmon, or more than 10 flounders.
- 3) On occasion, gear is not recorded in the Kasilof River fisheries. Dates of participation and harvest will be used to correct this omission. The Kasilof gillnet fishery is open from June 15 to 24, and the dip net fishery is open from June 25 through August 7. Accordingly, harvest and participation recorded during June 15–24 in the Kasilof fishery with an unspecified gear will be assumed to be Kasilof gillnet. Harvest and participation recorded after June 24 in the Kasilof fishery with an unspecified gear will be assumed to be Kasilof dip net.
- 4) There are unreasonable dates; that is, dates are not from 1990 (the year used for unknown dates), or the current year. Unreasonable dates will be changed to the current year or 1990. All 1990 dates should be the first of the month, if not, they should be checked and changed to the current year.
- 5) There are dates outside legal season; that is, records not within the correct time periods for the fishery (Table 2). The Fish Creek personal use dip net fishery does not open every year because of low sockeye salmon escapements. Decisions to open the fishery occur inseason, and it is opened by emergency order (EO) only. If sockeye salmon escapements allow, Fish Creek will open for personal use during this project period.

Table 2.–Fishery start and end dates for the Kasilof, Kenai, and Fish Creek personal use fisheries.

Fishery	Start date	End date
Kasilof River gillnet	June 15	June 24
Kasilof River dip net	June 25	Aug 7
Kenai River dip net	July 10	July 31
Fish Creek dip net	Announced by EO	

- 6) Permits cannot be identified as returned, but have harvest data; that is, permits that do not have “harvrptlog” marked (meaning harvest record returned), but do have harvest data (either a harvest date or fish harvested) or are marked “True” in the “did not fish” field.
- 7) There are duplicates without replacements; that is, permits that are marked as duplicates but have no final, replacement permit associated with them.

- 8) There are duplicates with harvest or participation data; that is, permits are marked as duplicates but have a harvest date, harvest, or “did not fish” information. This information needs to be transferred to the “corrected database” tables, as described for situations where there are 2 copies of 1 permit.
- 9) Permits are marked as returned blank (BLANKRPT=1), but there is a harvest date or harvest.
- 10) There is no mailing information; that is, permits that have harvest data or “did not fish” is marked as “true,” were not assigned to a mailing.
- 11) Permits are apparently incorrectly marked as returned; that is, permits are marked as returned (harvrptlog = true or are assigned to a mailing), but are not duplicates, have no harvest data, and are not marked as “true” for “did not fish.”
- 12) Permits have harvest records, but are not in the permit file. Every permit in the harvest file must have a record in the permit file.

DATA ANALYSIS

Because some vendors do not return all of their permits, the total number of permits issued will be estimated as follows:

$$\hat{N} = N_E + \hat{N}_{NE} \quad (1)$$

where

\hat{N} = the total number of household permits issued,
 N_E = the number of household permits issued electronically (online + e-vendor),
 and

$$\hat{N}_{NE} = \frac{o}{\hat{p}} + M \quad (2)$$

where

N_{NE} = the number of household permits issued nonelectronically,
 o = the number of permits issued nonelectronically and returned by households before the first reminder letter, but with no vendor card (“orphan permits”),
 and

$$\hat{p} = \frac{m}{M} \quad (3)$$

where

\hat{p} = the response rate of households with nonelectronically issued permits with vendor cards before the first reminder letter,
 m = the number of nonelectronically issued permits with vendor cards that were returned before the first reminder letter mailing, and
 M = the total number of nonelectronically issued permits with vendor cards.

Variance of \hat{N} is estimated as follows:

$$\hat{V}[\hat{N}] = \left[\frac{o^2 \hat{V}[\hat{p}]}{\hat{p}^4} \right], \quad (4)$$

where

$$\hat{V}[\hat{p}] = \left(\frac{\hat{p}(1-\hat{p})}{M-1} \right). \quad (5)$$

The estimated number of issued permits will then be divided into 4 groups:

$$\hat{N} = N_{cf} + N_{cz} + \hat{N}_{df} + \hat{N}_{dz}, \quad (6)$$

where

N_{cf} = the number of compliant households who reported fishing,

N_{cz} = the number of compliant households who reported they did not fish,

and

$$\hat{N}_{df} = (\hat{N} - (N_{cf} + N_{cz}))\hat{w} \quad (7)$$

where

\hat{N}_{df} = the estimated number of noncompliant households who fished,

and

$$\hat{w} = \frac{n_{df}}{n_d} \quad (8)$$

where

n_d = the number of noncompliant households responding to the last reminder,

n_{df} = the number of noncompliant households who responded to the last reminder and reported fishing,

and finally, where

$$\hat{N}_{dz} = \hat{N} - (N_{cf} + N_{cz} + \hat{N}_{df}) \quad (9)$$

where

\hat{N}_{dz} = the estimated number of noncompliant households who reported they did not fish.

Harvest for each species or participation for each site is estimated by the following procedure (with subscripts denoting parameter of estimation deleted for simplicity):

$$\hat{H} = H_{cf} + \hat{H}_{df} \quad (10)$$

where

\hat{H} = estimated total harvest or participation,

H_{cf} = harvest or participation reported by compliant households,

and

$$\hat{H}_{df} = \hat{N}_{df} \bar{h}_{df} \quad (11)$$

where

\hat{H}_{df} = estimated harvest by non-compliant households

and

$$\bar{h}_{df} = \frac{\left(\sum_{j=1}^{n_{df}} h_{dfj} \right)}{n_{df}} \quad (12)$$

where

\bar{h}_{df} = the mean harvest or participation per household for noncompliant households that fished,

h_{dfj} = reported harvest by household j that responded, was noncompliant, and fished

n_{df} = the number of households that responded, were noncompliant, and fished.

Variance will be calculated as follows (Goodman 1960):

$$\hat{V}[\hat{H}] = \hat{V}[\hat{H}_{df}] = \hat{N}_{df}^2 \hat{V}[\bar{h}_{df}] + \bar{h}_{df}^2 \hat{V}[\hat{N}_{df}] - \hat{V}[\bar{h}_{df}] \hat{V}[\hat{N}_{df}] \quad (13)$$

where

$$\hat{V}[\hat{N}_{df}] = \hat{V}[\hat{N}] \hat{V}[\hat{w}] = \hat{N}^2 \hat{V}[\hat{w}] + \hat{w}^2 \hat{V}[\hat{N}] - \hat{V}[\hat{w}] \hat{V}[\hat{N}], \quad (14)$$

$$\hat{V}[\hat{w}] = \left(\frac{\hat{w}(1 - \hat{w})}{n_d - 1} \right), \quad (15)$$

$$\hat{V}[\bar{h}_{df}] = \left(1 - \frac{n_{df}}{\hat{N}_{df}} \right) \frac{s_{df}^2}{n_{df}}, \text{ and} \quad (16)$$

$$s_{df}^2 = \frac{\sum_{j=1}^{n_{df}} (h_{dfj} - \bar{h}_{df})^2}{n_{df} - 1}. \quad (17)$$

Standard errors are simply the square root of the variance estimate.

Analysis will be done to determine if there is a significant difference in the harvest rate between participants that reported their harvest electronically and those that returned their permits. If a difference exists, participation and harvest estimates will be estimated for each group separately following the same procedures described above.

SCHEDULE AND DELIVERABLES

Dates	Activity
By March 10	Project staff designs, modifies, and reviews the permit.
By March 15	Permits are made available through ADF&G's online store.
Second week in May	Permits are printed and delivered to the office.

By first week of June	Permits are bundled and distributed to area offices and vendors. Permits for Anchorage vendors are distributed to vendors by the project biologist. Permits for the Matanuska–Susitna and Kenai Peninsula vendors are distributed by the area offices or the project biologist.
By August 31	Vendor portions of the permits will be collected from license vendors.
By September 30	All permit holder identification information from the top copies of the permits and harvest information from returned permits will be scanned by the data entry staff. Nonrespondents will be identified and sent an e-mail and reminder letter.
October 30	Nonrespondents from the first mailing will be identified, and second reminder letters will be mailed 1 month later (October 30).
By November 30	License numbers and harvest and participation information from respondents to the second reminder will be keypunched or scanned by November 30 or 1 month following the second reminder letter.
By end of December	The final , clean data set, along with metadata and log of edits will be given to the project leader.
Early January	Annual summary tables of participation and harvest will be available for management purposes.

RESPONSIBILITIES

Principal Investigator

Duties: Supervises all aspects of the project and coordinates with all project staff to ensure that project milestones are on schedule. Primary author of the project operational plan, reports, correspondence with license vendors and permit holders. Responsible for permit modifications, permit distribution and tracking, issuing reminders, contracting printing services and project budgeting.

Analyst Programmer

Duties: Assists the principal investigator with all programming aspects of the database application used for project permitting, harvest reporting, and data archiving. Conducts data quality reviews prior to finalizing the database and develops data files for principal investigator and project biometrician.

Project Biometrician

Duties: Assists the principal investigator with data analysis, reporting, and operational planning.

Key Punch Clerk Supervisor

Duties: Assists the principal investigator by supervising the data entry process. Ensures that permit information and harvest reporting are entered into the database according to the operational plan and conducts daily quality control measures of all key punching clerks entering permit or harvest information into the database.

BUDGET SUMMARY

FY 17

Line item	Category	Budget (\$K)
100	Personal Services	61.2
200	Travel	1.2
300	Contractual	19.2
400	Commodities	0.6
500	Equipment	
Total		81.2

Budget manager: Kristine Dunker, Fishery Biologist.

Project personnel

Name	Job class	Months budgeted
Kirk Brogdon	Analyst Programmer V	1.0
Vacant	Administrative Clerk II	1.0
Vacant	Administrative Clerk II	1.0
Vacant	Administrative Clerk II	2.0
Vacant	Administrative Clerk II	1.0
Kristine Dunker	Fishery Biologist III	1.0
Total		7.0

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APPENDIX A: COOK INLET PERSONAL USE FISHING REGULATIONS

UPPER COOK INLET PERSONAL USE SALMON REGULATIONS

Kenai River, Kasilof River, Fish Creek Dip Net and Kasilof River Gillnet

GET A PERMIT

- A permit is required. With one permit you may participate in all of the above fisheries.
- To receive a permit you must have a current Alaska resident sport fishing license. A resident is a person who for the preceding 12 consecutive months has maintained a permanent home in the state of Alaska and is not claiming residency anywhere else. If you are exempt from purchasing a resident license, other appropriate identification is required.
- These are **household permits**. One permit is issued per household, and the number of people in your household determines the number of salmon you may keep. Household members are people who are living with you and are not paying rent to you. So they may be family members, or live-in friends, but *not* visiting relatives.
- In Cook Inlet only one personal use salmon fishing permit may be issued to each household per year. A holder of an Upper Cook Inlet Personal Use Salmon Permit may not receive a permit for the Kachemak Bay gillnet fishery.
- The seasonal limit is 25 salmon per head of household with 10 additional salmon for each family member.

GO FISHING

- You must have both the personal use permit and your current sport fishing license with you when while taking or transporting salmon in these personal use fisheries. That means don't leave the permit in your truck back in the parking lot!
- Each person who fishes must have a current Alaskan resident sport fishing license. **Non-residents may not fish in personal use fisheries, even when accompanying residents with permits.** This means that non-residents may accompany you, but may not handle the gear or operate a boat used in these fisheries.
- Your **dip net** must be a bag-shaped net supported on all sides by a rigid frame. The maximum straight line distance between any two points on the net frame as measured through the net opening may not exceed five feet. The depth of the bag must be at least one half the greatest straight line distance as measured through the net opening. No portion of the bag may be constructed of webbing that exceeds a stretched measurement of 4.5 inches. The frame must be attached to a single rigid handle and be operated by hand.
- All fish harvested must be recorded on the permit, in ink, immediately upon harvesting the fish. Immediately means before concealing the salmon from plain view or transporting the salmon from the fishing site. **Even if no fish are harvested, the date and fishery must be recorded on your permit.**
- A person may not possess salmon taken under a personal use salmon fishing permit unless both tips of the tail fin have been immediately removed from the salmon. Immediately means before concealing the salmon from plain view or transporting the salmon from the fishing site.

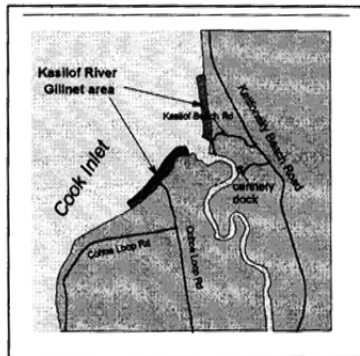


C O O K I N L E T

SEND THE PERMIT BACK!

The permit must be returned to the department no later than August 15. Return it in person to any Fish and Game office or mail it to the address on the permit. The permit must be returned *regardless of whether or not you fished or caught any fish*. Notice there is a box to check on the permit if you did not fish at all. If you fish, but don't catch anything, write in the date and put zeros in the harvest boxes. A permittee who fails to comply with reporting requirements may be denied personal use salmon harvest privileges in the future.

-continued-



GILLNET FISHERY

Gillnet fishery adjacent to the Kasilof River:

Season: The fishery opens at 6:00 a.m. June 16. Fishing is permitted only from 6:00 a.m.-6:00 p.m. The fishery will close June 25 at 6:00 p.m., but may be closed earlier by emergency order if harvests are higher than anticipated.

Legal gear: is a gillnet not to exceed 10 fathoms in length and a mesh size of six (6) inches. Depth of the net may not exceed 45 meshes. Nets must be at least 100 feet apart and only one set gillnet may be operated per household. The permit must be in possession of the person fishing the net and that person's name must appear on the permit.

Open area: The area open is between the ADF&G regulatory markers located near the mouth of the Kasilof River. Fishing is prohibited beyond one mile from the mean high water mark, and is also prohibited within the flowing waters or over the stream bed or channel of the Kasilof River at any stage of the tide.

King salmon: All species of salmon, including all king salmon caught, may be retained.

DIPNET FISHERIES

Kenai River dip net fishery:

Season: The fishery occurs from July 10 through July 31. Fishing is permitted 24 hours per day, 7 days per week.

Open area: The area open to dip netting from shore is from the commercial fishing regulatory markers outside the terminus of the river in Cook Inlet, upstream to the downstream edge of the Warren Ames Bridge, excluding that portion of the north shore of the Kenai River from an ADF&G marker near the terminus of Main Street to an ADF&G marker near the Kenai City Dock. The area open to dip netting from boats is from a regulatory marker in close proximity to the Kenai City Dock upstream to the downstream edge of the Warren Ames Bridge.

King salmon: A total of only one king salmon per permit may be retained from the Kenai and Kasilof River dip net fisheries combined. If additional king salmon are caught, they must be immediately released.

Kasilof River dip net fishery:

Season: The fishery occurs from July 10 through August 5. Fishing is permitted 24 hours per day, 7 days per week.

Open area: The area open is from the commercial fishing regulatory markers outside the terminus of the river in Cook Inlet, upstream for one mile. Dip netting in this area is permitted from shore or from a boat.

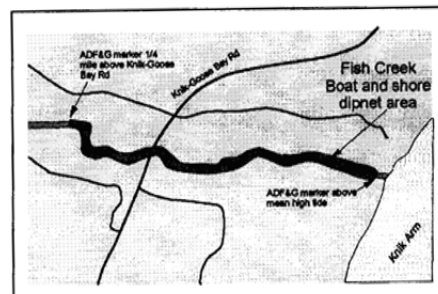
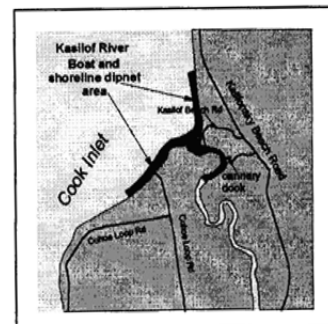
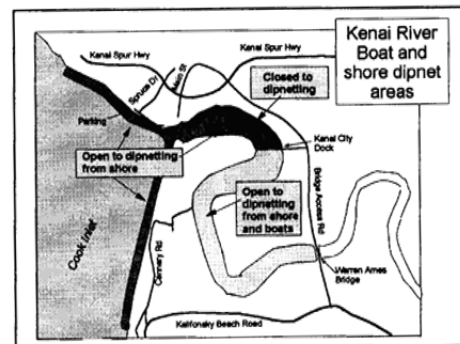
King salmon: A total of only one king salmon per permit may be retained from the Kenai and Kasilof River dip net fisheries combined. If additional king salmon are caught, they must be immediately released.

Fish Creek dip net fishery:

Season: The fishery is open from July 10 through July 31. Fishing is permitted seven days weekly from 11:00 a.m. to 11:00 p.m. However, be aware that this fishery is often closed by Emergency Order before July 31. Call 746-6300 to check.

Open area: The area open is from regulatory markers located on both sides of the terminus of Fish Creek, upstream to markers located approximately ¼ mile upstream from the Knik-Goose Bay Road. Dip netting in this area is permitted from shore or from a boat.

King salmon: King salmon may not be retained.



**APPENDIX B: SALMON HARVESTS, STANDARD ERRORS,
AND RELATIVE PRECISIONS IN THE UPPER COOK
INLET PERSONAL USE FISHERIES**

Appendix B1.—Upper Cook Inlet personal use fisheries totals.

Year	Days fished			Sockeye			Chinook			Coho			Pink			Chum			Total		
	Est.	SE	RP ^a (%)	Est.	SE	RP ^a (%)	Est.	SE	RP ^a (%)	Est.	SE	RP ^a (%)	Est.	SE	RP ^a (%)	Est.	SE	RP ^a (%)	Est.	SE	RP ^a (%)
1996	16,606	85	1	145,545	644	1	452	12	5	4,811	56	2	2,973	50	3	350	12	6	154,131	655	1
1997	14,923	114	1	148,940	592	1	464	13	6	777	26	7	844	27	6	88	6	14	151,113	604	1
1998	17,360	84	1	176,581	1,032	1	549	14	5	2,685	102	7	1,933	70	7	220	34	30	181,968	1,043	1
1999	19,752	101	1	208,589	1,309	1	1,108	31	5	1,413	119	17	2,078	66	6	168	15	18	213,356	1,320	1
2000	17,930	88	1	149,267	961	1	1,102	28	5	3,638	114	6	2,482	86	7	290	35	23	156,779	976	1
2001	20,625	86	1	218,688	1,176	1	1,138	24	4	2,637	112	8	1,821	46	5	276	39	28	224,560	1,197	1
2002	21,224	74	1	259,623	1,092	1	1,070	17	3	3,271	91	5	8,470	149	3	757	38	10	273,191	1,136	1
2003	21,668	63	1	298,831	1,061	1	1,711	34	4	2,250	85	7	2,082	101	9	371	24	13	305,245	1,079	1
2004	25,360	43	0	350,091	678	0	1,098	9	2	3,754	75	4	2,715	32	2	502	14	5	358,158	689	0
2005	27,253	21	0	369,776	311	0	1,132	3	1	3,415	29	2	2,520	17	1	428	3	1	377,271	314	0
2006	20,543	20	0	216,047	236	0	1,405	4	1	3,759	27	1	12,434	41	1	746	10	3	234,391	242	0
2007	28,677	29	0	356,717	386	0	1,924	5	1	2,727	26	2	2,352	24	2	614	17	5	364,334	388	0
2008	28,491	34	0	318,594	412	0	1,601	11	1	3,249	24	1	11,869	52	1	727	10	3	336,040	416	0
2009	37,754	46	0	457,539	629	0	1,384	7	1	4,204	45	2	6,969	34	1	559	13	5	470,655	631	0
2010	41,387	56	0	514,254	808	0	1,059	8	1	8,405	113	3	6,482	47	1	1,091	20	4	531,291	818	0
2011	43,450	72	0	630,242	1,176	0	1,453	11	1	6,754	122	4	4,880	100	4	1,169	50	8	644,498	1,187	0
2012	43,543	74	0	629,344	1,232	0	163	5	6	5,512	128	5	4,846	111	4	623	19	6	640,489	1,244	0
2013	43,698	73	0	454,314	958	0	83	3	7	5,119	122	5	4,423	53	2	1,052	35	7	464,993	968	0
2014	50,819	94	0	506,047	1,164	0	50	2	8	9,370	199	4	26,795	217	2	1,859	56	6	544,121	1,202	0
2015	46,697	91	0	521,985	1,256	0	127	4	6	10,648	191	4	7,257	137	4	1,927	62	6	541,943	1,279	0
Min.	14,923			145,545			50			777			844			88			151,113		
Average	29,388			346,551			954			4,420			5,811			691			358,426		
Max.	50,819			630,242			1,924			10,648			26,795			1,927			644,498		

^a Relative precision is (SE × 1.96)/estimate.

Appendix B2.—Harvests, standard errors, and relative precisions of the Kenai River personal use dip net fishery.

Year	Days open	Days fished			Sockeye			Chinook			Coho			Pink			Chum			Total		
		Est.	SE	RP ^a (%)	Est.	SE	RP ^a (%)	Est.	SE	RP ^a (%)	Est.	SE	RP ^a (%)	Est.	SE	RP ^a (%)	Est.	SE	RP ^a (%)	Est.	SE	RP ^a (%)
1996	27	10,503	60	1	102,821	367	1	295	5	3	1,932	29	3	2,404	33	3	175	10	11	107,627	375	1
1997	22	11,023	87	2	114,619	439	1	364	13	7	559	21	7	619	14	4	58	5	17	116,219	448	1
1998	18	10,802	59	1	103,847	716	1	254	10	8	1,011	62	12	1,032	62	12	85	3	7	106,229	724	1
1999	22	13,738	79	1	149,504	1,084	1	488	13	5	1,009	108	21	1,666	64	8	102	13	25	152,769	1,094	1
2000	22	12,354	69	1	98,262	752	1	410	18	9	1,449	62	8	1,457	75	10	193	31	31	101,771	762	1
2001	22	14,772	66	1	150,766	909	1	638	15	5	1,555	105	13	1,326	37	5	155	19	24	154,440	926	1
2002	22	14,840	56	1	180,028	844	1	606	11	4	1,721	64	7	5,662	102	4	551	36	13	188,568	874	1
2003	22	15,263	50	1	223,580	891	1	1,016	18	3	1,332	68	10	1,647	98	12	249	22	17	227,824	905	1
2004	22	18,513	35	0	262,831	583	0	792	7	2	2,661	66	5	2,103	27	3	387	12	6	268,774	905	1
2005	22	20,977	18	0	295,496	273	0	997	3	1	2,512	24	2	1,806	12	1	321	2	1	301,132	275	0
2006	20	12,685	16	0	127,630	183	0	1,034	3	1	2,235	15	1	11,127	37	1	551	9	3	142,577	203	0
2007	22	21,908	23	0	291,270	335	0	1,509	4	1	2,111	24	2	1,939	23	2	472	17	7	297,301	337	0
2008	22	20,772	27	0	234,109	338	0	1,362	10	1	2,609	21	2	10,631	49	1	504	8	3	249,215	343	0
2009	22	26,171	35	0	339,993	524	0	1,189	7	1	2,401	29	2	5,482	27	1	285	7	5	349,350	525	0
2010	22	28,342	44	0	389,552	702	0	865	7	2	2,870	56	4	3,655	28	2	508	15	6	397,451	705	0
2011	22	32,818	60	0	537,765	1,105	0	1,243	10	2	4,745	107	4	3,914	86	4	915	47	10	548,583	1,115	0
2012	22	34,374	61	0	526,992	1,109	0	40	3	17	4,008	117	6	3,770	102	5	425	15	7	535,236	1,120	0
2013	22	33,193	63	0	347,222	822	0	11	1	18	3,169	74	5	3,625	49	3	701	29	8	354,727	827	0
2014	22	36,380	81	0	379,823	1,023	1	0	0	0	4,710	157	7	19,140	184	2	1,194	51	8	404,866	1,053	1
2015	22	31,487	75	0	377,532	1,088	1	66	2	0	4,150	130	6	4,147	99	5	957	45	9	386,853	1,101	1
Min.	18	10,503			98,262			0			559			619			58			101,771		
Avg.	22	21,046			261,682			659			2,437			4,358			439			269,576		
Max.	27	36,380			537,765			1,509			4,745			19,140			1,194			548,583		

^a Relative precision is (SE × 1.96)/estimate.

Appendix B3.—Harvests, standard errors, and relative precisions of the Kasilof River personal use dip net fishery.

Year	Days open	Days fished			Sockeye			Chinook			Coho			Pink			Chum			Total		
		Est.	SE	RP ^a (%)	Est.	SE	RP ^a (%)	Est.	SE	RP ^a (%)	Est.	SE	RP ^a (%)	Est.	SE	RP ^a (%)	Est.	SE	RP ^a (%)	Est.	SE	RP ^a (%)
1996	27	1,300	23	3	11,197	127	2	50	1	4	334	18	11	103	2	4	17	0	0	11,701	130	2
1997	27	1,091	32	6	9,737	150	3	35	2	11	90	3	7	19	2	21	19	1	10	9,900	153	3
1998	27	3,421	33	2	45,161	525	2	134	3	4	731	18	5	610	25	8	74	32	85	46,710	528	2
1999	27	3,611	43	2	37,176	507	3	127	5	8	286	50	34	264	12	9	52	8	30	37,905	511	3
2000	27	2,622	36	3	23,877	403	3	134	7	10	1,004	16	3	841	39	9	34	0	0	25,890	407	3
2001	27	3,382	37	2	37,612	505	3	138	6	9	766	25	6	307	14	9	23	0	0	38,846	511	3
2002	44	4,020	38	2	46,769	530	2	106	6	11	1,197	59	10	1,862	73	8	139	7	10	50,073	553	2
2003	44	3,874	28	1	43,870	440	2	57	4	14	592	49	16	286	21	14	30	1	7	44,835	447	2
2004	44	4,432	19	1	48,315	259	1	44	3	13	668	21	6	396	15	7	90	5	11	49,513	263	1
2005	44	4,500	9	0	43,151	100	0	16	1	12	538	16	6	658	12	4	102	2	4	44,465	103	0
2006	44	5,763	10	0	56,144	113	0	55	1	4	1,057	15	3	992	8	2	105	4	7	58,353	117	0
2007	44	4,627	9	0	43,293	105	0	35	1	6	487	8	3	383	6	3	136	2	3	44,334	106	0
2008	44	5,552	14	0	54,051	153	1	46	3	13	509	11	4	787	10	2	143	4	5	55,536	154	1
2009	44	7,650	21	1	73,035	246	1	34	1	6	1,441	30	4	1,274	19	3	173	3	3	75,957	248	1
2010	44	7,588	27	1	70,774	303	1	31	2	13	1,768	45	5	974	24	5	279	9	6	73,826	307	1
2011	44	6,571	35	1	49,766	351	1	24	3	25	977	39	8	652	40	12	144	14	19	51,562	355	1
2012	44	6,536	32	1	73,419	448	1	16	1	12	1,170	42	7	896	38	8	147	11	15	75,649	452	1
2013	44	8,556	36	1	85,528	473	1	18	1	1	1,666	84	10	683	19	5	339	15	9	88,233	481	1
2014	44	10,236	51	1	88,513	547	1	0	0	0	2,606	106	8	2,769	66	5	342	15	9	94,230	561	1
2015	44	10,346	52	1	89,000	566	1	0	0	0	2,723	95	7	1,607	74	9	597	31	10	93,927	579	1
Min.	27	1,091			9,737			0			90			19			17			9,900		
Average	39	5,284			51,519			55			1,031			818			149			53,572		
Max.	44	10,346			89,000			138			2,723			2,769			597			94,230		

^a Relative precision is (SE × 1.96)/estimate.

Appendix B4.—Harvests, standard errors, and relative precisions of the Kasilof River personal use gillnet fishery.

Year	Days open	Days fished			Sockeye			Chinook			Coho			Pink			Chum			Total		
		Est.	SE	RP ^a (%)	Est.	SE	RP ^a (%)	Est.	SE	RP ^a (%)	Est.	SE	RP ^a (%)	Est.	SE	RP ^a (%)	Est.	SE	RP ^a (%)	Est.	SE	RP ^a (%)
1996	5	582	16	5	9,506	156	3	46	3	13	0	0		8	0	0	1	0	0	9,561	157	3
1997	5	815	26	6	17,997	231	3	65	2	6	1	0	0	102	7	13	3	1	65	18,168	233	3
1998	5	1,075	24	4	15,975	425	5	126	7	11	0	0		15	4	52	12	10	163	16,128	426	5
1999	10	1,287	39	6	12,832	371	6	442	27	12	25	2	16	10	0	0	10	0	0	13,319	374	6
2000	13	1,252	23	4	14,774	275	4	514	15	6	9	0	0	17	2	23	10	0	0	15,324	276	4
2001	8	1,001	20	4	17,201	394	4	174	6	7	6	0	0	11	0	0	7	5	140	17,399	397	4
2002	10	1,025	16	3	17,980	274	3	192	5	5	12	0	0	30	2	13	13	4	60	18,227	277	3
2003	10	1,206	17	3	15,706	277	3	400	13	6	107	0	0	9	0	0	4	0	0	16,226	284	3
2004	10	1,272	10	2	25,417	203	2	163	4	5	58	13	44	6	1	33	0	0	0	25,644	205	2
2005	11	1,506	6	1	26,609	104	1	87	1	2	326	5	3	16	1	12	1	0	0	27,039	104	1
2006	10	1,724	5	1	28,867	91	1	287	2	1	420	16	7	11	0	0	6	0	0	29,591	94	1
2007	10	1,570	7	1	14,943	66	1	343	3	2	68	4	12	2	0	0	0	0	0	15,356	66	1
2008	10	1,534	7	1	23,432	107	1	151	2	3	65	3	9	35	4	22	23	3	26	23,706	107	1
2009	10	1,761	9	1	26,646	167	1	127	2	3	165	0	0	14	1	14	11	2	36	26,963	167	1
2010	10	1,855	13	1	21,924	170	2	136	3	4	23	5	43	23	5	43	1	0	0	22,106	170	2
2011	10	1,846	16	2	26,780	244	2	167	4	5	47	10	42	23	1	9	3	0	0	27,020	244	2
2012	10	1,696	21	2	15,638	197	2	103	3	6	161	19	23	53	19	70	15	1	13	15,969	199	2
2013	5	1,082	13	2	14,439	187	3	46	2	9	129	32	49	3	0	0	5	1	39	14,621	187	3
2014	10	1,386	17	2	22,567	302	3	50	2	8	30	10	65	105	44	82	18	0	0	22,770	306	3
2015	10	1,741	22	2	27,567	339	2	61	3	10	191	41	42	20	5	49	2	1	98	27,841	341	2
Min.	5	582			9,506			46			0			2			0			9,561		
Average	9	1,361			19,840			184			92			26			7			20,149		
Max.	13	1,855			28,867			514			420			105			23			29,591		

^a Relative precision is (SE × 1.96)/estimate.

Appendix B5.—Harvests, standard errors, and relative precisions of the Fish Creek personal use dip net fishery.

Year	Days open	Days fished			Sockeye			Chinook			Coho			Pink			Chum			Total		
		Est.	SE	RP ^a (%)	Est.	SE	RP ^a (%)	Est.	SE	RP ^a (%)	Est.	SE	RP ^a (%)	Est.	SE	RP ^a (%)	Est.	SE	RP ^a (%)	Est.	SE	RP ^a (%)
1996	22	3,749	41	2	17,260	161	2	37	8	42	2,414	25	2	331	9	5	153	5	6	20,195	168	2
1997	13	991	34	7	3,277	76	5	0	0		63	5	16	53	7	26	4	1	49	3,397	84	5
1998	15	1,141	21	4	4,036	113	5	1	0	0	649	19	6	80	10	25	29	2	14	4,795	117	5
1999	16	432	16	7	1,083	138	25	0	0		17	3	35	12	7	114	0	0		1,112	139	25
2000	16	1,054	25	5	6,925	211	6	0	0		958	72	15	83	12	28	29	3	20	7,995	225	6
2001	3	131	7	10	436	40	18	0	0		18	7	76	2	0	0	1	0	0	457	41	18
2002	0	—	—	—			—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2003	0	—	—	—			—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2004	0	—	—	—			—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2005	0	—	—	—			—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2006	0	—	—	—			—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2007	0	—	—	—			—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2008	0	—	—	—			—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2009	7	1,452	8	1	9,898	73	1	10	0	0%	53	6	22	66	3	9	33	5	30	10,060	73	1
2010	8	2,843	14	1	23,705	161	1	12	2	33%	3,576	84	5	1,721	28	3	290	9	6	29,303	184	1
2011	3	1,379	14	2	5,236	86	3	2	0	0%	905	29	6	155	10	13	72	7	19	6,371	92	3
2012	0	—	—	—			—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2013	0	—	—	—			—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2014	7	1,792	22	2	5,829	113	4	0	0	0%	1,895	48	5	4,218	74	3	227	8	7	12,170	144	2
2015	8	2,303	22	2	19,260	280	3	0	0	0%	3,321	87	5	1,329	48	7	329	27	16	24,239	298	2
Min.	0	131			436			0			17			2			0			457		
Average	6	1,570			8,813			6			1,261			732			106			10,918		
Max.	22	3,749			23,705			37			3,576			4,218			329			29,303		

^a Relative precision is (SE × 1.96)/estimate.

Appendix B6.—Harvests, standard errors, and relative precisions where fishery is unknown.

Year	Days open	Days fished			Sockeye			Chinook			Coho			Pink			Chum			Total		
		Est.	SE	RP ^a (%)	Est.	SE	RP ^a (%)	Est.	SE	RP ^a (%)	Est.	SE	RP ^a (%)	Est.	SE	RP ^a (%)	Est.	SE	RP ^a (%)	Est.	SE	RP ^a (%)
1996	—	472	33	14	4,761	463	19	24	7	61	131	37	55	127	37	57	4	3	120	5,047	467	18
1997	—	1,003	50	10	3,310	276	16	0	0	0	64	14	43	51	21	80	4	3	139	3,429	282	16
1998	—	921	39	8	7,562	287	7	34	5	29	294	77	51	196	19	19	20	0	0	8,106	301	7
1999	—	684	20	6	7,994	352	9	51	5	19	76	7	18	126	2	3	4	0	0	8,251	353	8
2000	—	648	23	7	5,429	274	10	44	13	58	218	60	54	84	11	26	24	15	123	5,799	282	10
2001	—	1,339	34	5	12,673	380	6	188	17	18	292	30	20	175	24	27	90	34	74	13,418	394	6
2002	—	1,339	26	4	14,846	353	5	166	10	12	341	25	14	916	81	17	54	8	29	16,323	380	5
2003	—	1,325	21	3	15,675	247	3	238	25	21	219	14	13	140	9	13	88	9	20	16,360	254	3
2004	—	1,143	13	2	13,527	179	3	99	3	6	366	25	13	210	10	9	25	4	31	14,227	185	3
2005	—	270	2	1	4,520	38	2	32	1	6	39	1	5	40	2	10	4	0	0	4,635	38	2
2006	—	371	2	1	3,406	34	2	29	1	7	47	2	8	304	16	10	84	0	0	3,870	41	2
2007	—	534	3	1	6,729	52	2	37	1	5	61	3	10	28	1	7	6	0	0	6,861	52	1
2008	—	622	4	1	6,890	63	2	41	2	10	66	3	9	412	9	4	58	3	10	7,467	64	2
2009	—	719	7	2	7,968	84	2	25	1	8	144	10	14	133	4	6	57	5	17	8,327	85	2
2010	—	760	8	2	8,300	125	3	15	1	13	168	7	8	109	2	4	12	1	16	8,605	125	3
2011	—	836	11	3	10,695	136	2	17	1	12	80	5	12	135	17	25	72	7	19	10,962	137	2
2012	—	937	14	3	13,295	219	3	4	1	49	173	25	28	127	9	14	36	5	27	13,635	221	3
2013	—	867	15	3	7,126	154	4	9	2	44	155	17	21	113	8	14	8	2	49	7,411	154	4
2014	—	1,022	14	3	9,315	131	3	0	0	0	129	18	27	563	22	8	78	15	38	10,085	135	3
2015	—	820	14	3	8,626	183	4	0	0	0	263	19	14	153	12	15	41	3	14	9,084	184	4
Min.		270			3,310			0			39			28			4			3,429		
Average		832			8,632			53			166			207			38			9,095		
Max.		1,339			15,675			238			366			916			90			16,360		

^a Relative precision is (SE × 1.96)/estimate.

APPENDIX C: EXAMPLES OF A PERSONAL USE PERMIT AND REMINDER LETTER

Appendix C1.-Example of a personal use permit.

Alaska Department of Fish & Game 2015 Upper Cook Inlet Personal Use Salmon Fishery Permit ALASKA RESIDENTS ONLY		 0 0 0 0
Last Name	First Name	Initial
<div style="border: 1px solid black; height: 20px; width: 100%;"></div>	<div style="border: 1px solid black; height: 20px; width: 100%;"></div>	<div style="border: 1px solid black; height: 20px; width: 100%;"></div>
Mailing Address		
<div style="border: 1px solid black; height: 20px; width: 100%;"></div>		
City	State	Zip Code
<div style="border: 1px solid black; height: 20px; width: 100%;"></div>	<div style="border: 1px solid black; height: 20px; width: 100%;"></div>	<div style="border: 1px solid black; height: 20px; width: 100%;"></div>
E-Mail Address		Phone Number
<div style="border: 1px solid black; height: 20px; width: 100%;"></div>		<div style="border: 1px solid black; height: 20px; width: 100%;"></div>
AK Driver's License #		Sport Fishing License #
<div style="border: 1px solid black; height: 20px; width: 100%;"></div>		<div style="border: 1px solid black; height: 20px; width: 100%;"></div>
<p>The head of a household is allowed 25 salmon and each additional member is allowed 10 salmon. A household is allowed 10 flounders.</p> <p>These are your limits for the entire 2015 season.</p>		
Total Household Members		Total Household Salmon Limit
<div style="border: 1px solid black; height: 20px; width: 100%;"></div>		<div style="border: 1px solid black; height: 20px; width: 100%;"></div>
<p><i>I have read and understand the permit requirements (listed on the reverse of this card) and agree to report my participation and harvest to the Alaska Department of Fish and Game by August 15th, 2015. I understand that failure to report my participation and harvest to ADF&G is a violation of 5AAC 77.015(c) which is subject to a \$200 fine and the loss of my future fishing privileges.</i></p>		
Permit Holder Signature	Date	Vendor Signature
<div style="border: 1px solid black; height: 20px; width: 100%;"></div>	<div style="border: 1px solid black; height: 20px; width: 100%;"></div>	<div style="border: 1px solid black; height: 20px; width: 100%;"></div>

Alaska Department of Fish & Game 2015 Upper Cook Inlet Personal Use Salmon Fishery Permit TIPS OF TAILS MUST BE REMOVED AND SALMON HARVEST MUST BE RECORDED PRIOR TO LEAVING FISHING SITE OR CONCEALING FISH FROM PLAIN VIEW.		 0 0 0 0								
Last Name	First Name	Initial								
<div style="border: 1px solid black; height: 20px; width: 100%;"></div>	<div style="border: 1px solid black; height: 20px; width: 100%;"></div>	<div style="border: 1px solid black; height: 20px; width: 100%;"></div>								
Names of Other Household Members:										
<div style="border: 1px solid black; height: 20px; width: 100%;"></div>										
<p>The head of a household is allowed 25 salmon and each additional member is allowed 10 salmon. A household is allowed 10 flounders.</p> <p>These are your limits for the entire 2015 season.</p>										
Total Household Members		Total Household Salmon Limit								
<div style="border: 1px solid black; height: 20px; width: 100%;"></div>		<div style="border: 1px solid black; height: 20px; width: 100%;"></div>								
<p>Did you fish for personal use in 2015? <input type="radio"/> YES <input type="radio"/> NO</p> <p><small>This permit is for the Kenai and Kaslof rivers and Fish Creek only. You must have this permit with you while fishing. You must remove tips of tails and record your harvest in ink at the place where salmon were taken from the water whether fishing waters open to personal use from a shoreline, streambank, or boat. Check the Southcentral Sport Fishing Regulations for legal times, gear, and species restrictions.</small></p>										
DATE		LOCATION FISHED (CHOOSE ONE)			HARVEST BY SPECIES					
MM	DD	Kenai River	Fish Creek	Kaslof River	Red	Chum	King	Coho	Pink	Flounder
1.	<div style="border: 1px solid black; height: 20px; width: 100%;"></div>	<div style="border: 1px solid black; height: 20px; width: 100%;"></div>	<div style="border: 1px solid black; height: 20px; width: 100%;"></div>	<div style="border: 1px solid black; height: 20px; width: 100%;"></div>	<div style="border: 1px solid black; height: 20px; width: 100%;"></div>	<div style="border: 1px solid black; height: 20px; width: 100%;"></div>	<div style="border: 1px solid black; height: 20px; width: 100%;"></div>	<div style="border: 1px solid black; height: 20px; width: 100%;"></div>	<div style="border: 1px solid black; height: 20px; width: 100%;"></div>	<div style="border: 1px solid black; height: 20px; width: 100%;"></div>
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3.	<div style="border: 1px solid black; height: 20px; width: 100%;"></div>	<div style="border: 1px solid black; height: 20px; width: 100%;"></div>	<div style="border: 1px solid black; height: 20px; width: 100%;"></div>	<div style="border: 1px solid black; height: 20px; width: 100%;"></div>	<div style="border: 1px solid black; height: 20px; width: 100%;"></div>	<div style="border: 1px solid black; height: 20px; width: 100%;"></div>	<div style="border: 1px solid black; height: 20px; width: 100%;"></div>	<div style="border: 1px solid black; height: 20px; width: 100%;"></div>	<div style="border: 1px solid black; height: 20px; width: 100%;"></div>	<div style="border: 1px solid black; height: 20px; width: 100%;"></div>
4.	<div style="border: 1px solid black; height: 20px; width: 100%;"></div>	<div style="border: 1px solid black; height: 20px; width: 100%;"></div>	<div style="border: 1px solid black; height: 20px; width: 100%;"></div>	<div style="border: 1px solid black; height: 20px; width: 100%;"></div>	<div style="border: 1px solid black; height: 20px; width: 100%;"></div>	<div style="border: 1px solid black; height: 20px; width: 100%;"></div>	<div style="border: 1px solid black; height: 20px; width: 100%;"></div>	<div style="border: 1px solid black; height: 20px; width: 100%;"></div>	<div style="border: 1px solid black; height: 20px; width: 100%;"></div>	<div style="border: 1px solid black; height: 20px; width: 100%;"></div>
5.	<div style="border: 1px solid black; height: 20px; width: 100%;"></div>	<div style="border: 1px solid black; height: 20px; width: 100%;"></div>	<div style="border: 1px solid black; height: 20px; width: 100%;"></div>	<div style="border: 1px solid black; height: 20px; width: 100%;"></div>	<div style="border: 1px solid black; height: 20px; width: 100%;"></div>	<div style="border: 1px solid black; height: 20px; width: 100%;"></div>	<div style="border: 1px solid black; height: 20px; width: 100%;"></div>	<div style="border: 1px solid black; height: 20px; width: 100%;"></div>	<div style="border: 1px solid black; height: 20px; width: 100%;"></div>	<div style="border: 1px solid black; height: 20px; width: 100%;"></div>
Report each day and location you fished and record your harvest, even if you did not catch anything.										


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VENDOR INSTRUCTIONS	
<p>Permit Requirements:</p> <ol style="list-style-type: none"> 1. Applicant must be an <u>Alaska Resident</u>. 2. Applicant must have a valid 2015 Alaska resident Sport Fishing License or be under 16 years of age. 3. Applicants who are Disabled Alaska Veterans (DAV) or over age 60 must have an ADF&G Permanent Identification Card (PID) if they do not have a current resident Sport Fishing License. 4. Only <u>ONE</u> permit per household is allowed. 5. Harvest information is vital to the management and conservation of the resource. Participation and harvest must be reported to ADF&G by August 15, 2015 even if the permit holder did not fish. Failure to report is a violation which is subject to a \$200 fine and the loss of future personal use fishing privileges. <p>Special Instructions To The Vendor:</p> <p>Return your vendor copies each month to ADF&G in the envelopes provided. All vendor copies of issued permits and remaining unissued permits must be returned after the fishery closes or by September 15th, 2015.</p> <p>Return copies of issued permits and unissued forms to:</p> <p>State of Alaska - Department of Fish & Game Personal Use Salmon Permits 333 Raspberry Rd. Anchorage, AK 99518-1599</p>	<p>Issuing a Permit:</p> <ol style="list-style-type: none"> 1. Ask to see the applicant's 2015 Alaska resident sport fishing license or PID, unless the applicant is under 16 years of age. 2. Write the sport fishing license number or PID number in the space provided on the top half of the form. 3. Have the applicant fill out their name, address, and drivers license number on the top half of the form. Then have them fill out their name and the names of other household members on the bottom half of the form. 4. The head of a household is allowed 25 salmon and each additional member is allowed 10 salmon. A household is allowed up to 10 flounders. 5. Vendor must determine the total salmon harvest limit according to number of people in the household. The total limits must be recorded on both the top and bottom of the form. 6. Applicant must sign and date the top portion. The Vendor must also sign and provide their vendor number. 7. Vendors keep the top half, and the applicant gets the bottom half along with the regulations/access brochure. 8. Vendors are responsible for verifying that ALL the identifying information on the top and bottom of the form is complete. Do NOT leave any blank spaces. Do NOT allow people to walk out with blank permits. <p>Additional Questions? Call the Sport Fish Information Center at (907) 267-2218</p>
<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border-bottom: 1px solid black; width: 200px; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid black; width: 200px; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid black; width: 200px; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid black; width: 200px; margin-bottom: 5px;"></div> </div> <div style="display: flex; justify-content: center; align-items: center; gap: 20px;"> <div style="border: 1px solid black; padding: 10px; text-align: center;"> PLACE FIRST- CLASS POSTAGE HERE </div> </div>	
<p style="writing-mode: vertical-rl; transform: rotate(180deg); font-size: small;">Tips of tails must be removed and salmon harvest must be recorded in ink prior to concealing the fish from plain view or transporting fish from the shoreline adjacent to waters open to fishing where the salmon were taken when fishing from shore or from the waters open to fishing when fishing from a boat.</p>	<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <p>IMPORTANT: Report online at http://fish.alaska.gov/PU OR mail this permit to Fish and Game by August 15th, 2015 even if you did not fish.</p> </div> <div style="text-align: center;"> </div> <div style="text-align: center; margin-top: 20px;"> <p>STATE OF ALASKA DEPARTMENT OF FISH & GAME PERSONAL USE SALMON PERMITS 333 RASPBERRY ROAD ANCHORAGE, AK 99518-1599</p> </div>

Appendix C2.—Example of reminder letter mailed to nonrespondents.

STATE OF ALASKA
DEPARTMENT OF FISH & GAME
PERSONAL USE SALMON PERMITS
333 RASPBERRY ROAD
ANCHORAGE, AK 99518-1599

PRESORTED
STANDARD
U.S. Postage
PAID
Anchorage, AK
Permit No. 531



Alaska Department of Fish & Game
2015 Upper Cook Inlet Personal Use Salmon Fishery Permit
Return Reminder #X

00000

Dear XXXXXXXXXXXXXXXXXXXX,

Our records indicate that you have not returned your 2015 Upper Cook Inlet Personal Use Salmon Permit. Please take a few minutes to return the original permit or use the form below to report your harvest. Your harvest information is vital to continuing management and conservation of personal use salmon fisheries.

The head of a household is allowed 25 salmon and each additional member is allowed 10 salmon. A household is allowed 10 flounders.
These are your limits for the entire 2015 season.

Total Household Members


Total Household Salmon Limit

Did you fish for personal use in 2015? ☐ YES ☐ NO Remember that you must report online or return your permit even if you did not fish. Failure to report your participation and harvest is a violation of 5 AAC 77.015(c) which is subject to a \$200 fine and the loss of your future personal use fishing privileges.

	DATE		LOCATION FISHED (CHOOSE ONE)			HARVEST BY SPECIES					
	MM	DD	Kenai River	Fish Creek	Kasilof River	Red	Chum	King	Coho	Pink	Flounder
1.	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>
2.	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>
3.	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>
4.	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>
5.	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>

Report each day and location you fished and record your harvest, even if you did not catch anything.

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<div>PLACE FIRST-CLASS POSTAGE HERE</div>	
<div>IMPORTANT: Report online at http://fish.alaska.gov/PU OR mail this reminder to Fish and Game even if you did not fish.</div> <div></div>	
<div>STATE OF ALASKA DEPARTMENT OF FISH & GAME PERSONAL USE SALMON PERMITS 333 RASPBERRY ROAD ANCHORAGE, AK 99518-1599</div>	

APPENDIX D: FILE STRUCTURE FOR PERSONAL USE SALMON DATABASES

Appendix D1.-File structure for personal use salmon databases.

Table and Field Information for Database I:\DP\CISALMXX\CISAL_SQL.DBC
Cook Inlet Personal Use Salmon Permit Process - Corrected and Final Data
02/12/2004 - kpbrogdon

Respondent Harvest Table:

Table: CISLHVXXC

Number of records:

Num	Field Name	Type	Width	Dec	Nulls	Default
1	HVRECID	I	4	0	No	
2	PERMITNO	I	4	0	No	
3	NOCATCH	L	1	0	No	
4	NOHRVRPT	L	1	0	No	
5	HARVDATE	T	8	0	Yes	
6	RED	I	4	0	No	
7	KING	I	4	0	No	
8	COHO	I	4	0	No	
9	PINK	I	4	0	No	
10	CHUM	I	4	0	No	
11	FISHERY	C	20	0	No	
12	KEYDATE	T	8	0	No	
13	KEYID	C	16	0	No	
14	YEAR	I	4	0	No	
15	MAILING	I	4	0	No	
16	EDITED	L	1	0	No	
17	COMMENTS	C	20	0	Yes	

113

Additional Field Information For Corrected Harvest Table CISLHVXXC:

HVRECID

Comment: Unique Harvest Record ID as copied from the Raw Harvest Table

PERMITNO

Comment: Permit Holders Permit Number.

NOCATCH

Comment: Flag indicating that an unsuccessful attempt was made on this particular day.

NOHRVRPT

Comment: A date or fishery was indicated but all harvest fields are blank - if zeros or dashes are shown, then this would be a nocatch.

HARVDATE

Comment: Date that the actual Harvest or attempted harvest took place.

RED

Comment: Total Red salmon harvested on this day

KING

Comment: Total King salmon harvested on this day

-continued-

COHO

Comment: Total Coho salmon harvested on this day

PINK

Comment: Total Pink salmon harvested on this day

CHUM

Comment: Total Chum salmon harvested on this day

FISHERY

Comment: Valid Fishery - Choices are Kenai, Kasilof or Fish Creek.
All others are recorded as "Unknown"

KEYDATE

Comment: Date that the Harvest report was keyed by Data Entry

KEYID

Comment: Key ID of Data Entry clerk that enters the Harvest Report.

YEAR

Comment: Fishing Year that the Permit is valid for.

MAILING

Comment: Mailing value of the Harvest Report. This can be 0, 1 or 2.
If harvest data is received on different mailings with
identical Harvest

EDITED

Comment: Extraneous field. Not used

COMMENTS

Comment: Misc comments from Data Entry - Any comments enclosed in
[BRACKETS] are programatic changes made during the
conversion process.

Field Information for Corrected Permit Holder Information (XX Pertains to Year)

Respondent Permit Table (Vendor Copy)

Table: CISLPMXXC

Number of records:

Num	Field Name	Type	Width	Dec	Nulls	Default
1	PMRECID	I	4	0	No	
2	PERMITNO	I	4	0	No	
3	FIRST_NAME	C	15	0	Yes	
4	LAST_NAME	C	15	0	Yes	
5	INITIAL	C	1	0	Yes	
6	ADLNO	C	10	0	Yes	
7	LICENSE_NO	C	7	0	Yes	
8	ADDRESS	C	30	0	Yes	
9	CITY	C	30	0	Yes	
10	STATE	C	2	0	Yes	
11	ZIPCODE	C	10	0	Yes	
12	PHONE	C	13	0	Yes	
13	HHMEMBERS	C	50	0	Yes	
14	FAMILYSI	I	4	0	Yes	
15	ALLOWED	I	4	0	Yes	
16	BLANKRPT	L	1	0	No	

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Appendix D1.-3 of 6.

17	NOTFISH	L	1	0	No
18	OFFICE	C	20	0	Yes
19	DUPPREF	I	4	0	Yes
20	KEYDATE	T	8	0	Yes
21	KEYID	C	15	0	Yes
22	DATEISS	T	8	0	Yes
23	MAILING	I	4	0	No
24	STATUS	C	3	0	No
25	COMMENTS	C	50	0	Yes
26	YEAR	I	4	0	No

321

Field Information for Corrected Permit Holder Information (XX Pertains to Year)

Respondent Permit Table (Vendor Copy)

Table: CISLPMXXC

Number of records:

Num	Field Name	Type	Width	Dec	Nulls	Default
1	PMRECID	I	4	0	No	
2	PERMITNO	I	4	0	No	
3	FIRST_NAME	C	15	0	Yes	
4	LAST_NAME	C	15	0	Yes	
5	INITIAL	C	1	0	Yes	
6	ADLNO	C	10	0	Yes	
7	LICENSE_NO	C	7	0	Yes	
8	ADDRESS	C	30	0	Yes	
9	CITY	C	30	0	Yes	
10	STATE	C	2	0	Yes	
11	ZIPCODE	C	10	0	Yes	
12	PHONE	C	13	0	Yes	
13	HHMEMBERS	C	50	0	Yes	
14	FAMILYSI	I	4	0	Yes	
15	ALLOWED	I	4	0	Yes	
16	BLANKRPT	L	1	0	No	
17	NOTFISH	L	1	0	No	
18	OFFICE	C	20	0	Yes	
19	DUPPREF	I	4	0	Yes	
20	KEYDATE	T	8	0	Yes	
21	KEYID	C	15	0	Yes	
22	DATEISS	T	8	0	Yes	
23	MAILING	I	4	0	No	
24	STATUS	C	3	0	No	
25	COMMENTS	C	50	0	Yes	
26	YEAR	I	4	0	No	

321

-continued-

Appendix D1.-4 of 6.

Additional Field Information For Corrected Permit Holder Information CISLPMXXC:

PMRECID

Comment: Unique Record ID from the Raw Permit Table

PERMITNO

Comment: Unique Permit Number - Only Permits that responded are included in the table

FIRST_NAME

Comment: Permit Holders First Name

LAST_NAME

Comment: Permit Holders Last Name

INITIAL

Comment: Permit Holders Middle Initial

ADLNO

Comment: Permit Holders Drivers License Number

LICENSE_NO

Comment: Permit Holders Fishing License Number

ADDRESS

Comment: Permit Holders Street Address

CITY

Comment: Permit Holders Resident City

STATE

Comment: Permit Holders Resident State

ZIPCODE

Comment: Permit Holders Resident Zipcode

PHONE

Comment: Permit Holders Resident Phone Number

HHMEMBERS

Comment: All additional Household Members that are eligible to fish under this Permit

FAMILYSI

Comment: Permit Holders Total Family Size - This value can be calculated if it is not filled in by the vendor providing allowable Harvest and/or HHmembers exist. If not, Family Size and Allowed are set to NULL

ALLOWED

Comment: Permit Holders Allowable Harvest - This value can be calculated if it is not filled in by the vendor providing Family Size and/or HHmembers exist. If not, Family Size and Allowed are set to NULL

BLANKRPT

Comment: Flag indicating that a Harvest Report was received but was completely blank. No harvest values and the "Did Not Fish" box was not checked.

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Appendix D1.-5 of 6.

NOTFISH

Comment: Flag indicating that a Harvest Report was received and the "Did Not Fish" box was checked.

OFFICE

Comment: Issuing ADFG Office or licensed Vendor

DUPPREF

Comment: Permit numbers that refer to this permit as the master

KEYDATE

Comment: Date that the Permit was originally keyed into the Raw data table.

KEYID

Comment: Keyid of the original data entry clerk that entered the permit into the raw data table.

DATEISS

Comment: Date that the Permit was issued by either an ADFG office or a licensed vendor

MAILING

Comment: Mailing value that the Permit Holder responded to. Values are "0" for the Original, "1" for the First , "2" for the Second Reminder. Not necessarily the same as what was physically turned in as an Original will often be sent in after a reminder is recd.

STATUS

Comment: Harvest Report Status for the permit. "N" indicates Did Not Fish, "U" indicates Unknown (Blank Harvest Report) and "H" indicates actual Harvest data was received.

COMMENTS

Comment: Misc Comments. Any comments inside of [brackets] notate programatic changes from the Raw data to the corrected (ie: family size and allowable harvest corrections)

YEAR

Comment: Harvest Year that the Permit reflects.

-continued-

Non Respondent Permit Holder Information (Permits Issued but no Report Returned):

Table: CISLPMXXZ

Number of records: 14418

Num	Field Name	Type	Width	Dec	Nulls	Default
1	PMRECID	I	4	0	No	
2	PERMITNO	I	4	0	No	
3	FIRST_NAME	C	15	0	Yes	
4	LAST_NAME	C	15	0	Yes	
5	INITIAL	C	1	0	Yes	
6	ADLNO	C	10	0	Yes	
7	LICENSE_NO	C	7	0	Yes	
8	ADDRESS	C	30	0	Yes	
9	CITY	C	30	0	Yes	
10	STATE	C	2	0	Yes	
11	ZIPCODE	C	10	0	Yes	
12	PHONE	C	13	0	Yes	
13	HHMEMBERS	C	50	0	Yes	
14	FAMILYSI	I	4	0	Yes	
15	ALLOWED	I	4	0	Yes	
16	BLANKRPT	L	1	0	No	
17	NOTFISH	L	1	0	No	
18	OFFICE	C	20	0	Yes	
19	DUPPREF	I	4	0	Yes	
20	KEYDATE	T	8	0	Yes	
21	KEYID	C	15	0	Yes	
22	DATEISS	T	8	0	Yes	
23	MAILING	I	4	0	No	
24	STATUS	C	3	0	No	
25	COMMENTS	C	50	0	Yes	
26	YEAR	I	4	0	No	

321

Field Information should be identical to CISHPMXXC with the exception that all records are for Non Respondent Permit Holders. There should be no Harvest Records, Did Not Fish or Blank Reports for any permits in CISHPMXXZ. Status value is "Z" as opposed to "H", "N" or "U"