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# **Cook Inlet Update**

by

**Ronald T. Stanek**

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1987

Alaska Department of Fish and Game

Division of Subsistence



## Symbols and Abbreviations

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<b>Weights and measures (metric)</b>		<b>General</b>		<b>Mathematics, statistics</b>	
centimeter	cm	Alaska Administrative Code	AAC	<i>all standard mathematical signs, symbols and abbreviations</i>	
deciliter	dL	all commonly-accepted abbreviations	e.g., Mr., Mrs., AM, PM, etc.	alternate hypothesis	$H_A$
gram	g			base of natural logarithm	e
hectare	ha			catch per unit effort	CPUE
kilogram	kg	all commonly-accepted professional titles	e.g., Dr., Ph.D., R.N., etc.	coefficient of variation	CV
kilometer	km			confidence interval	CI
liter	L	at	@	correlation coefficient (multiple)	R
meter	m	compass directions:		correlation coefficient (simple)	r
milliliter	mL	east	E	covariance	cov
millimeter	mm	north	N	degree (angular)	$^\circ$
		south	S	degrees of freedom	df
<b>Weights and measures (English)</b>		west	W	expected value	E
cubic feet per second	ft <sup>3</sup> /s	copyright	©	greater than	>
foot	ft	corporate suffixes:		greater than or equal to	≥
gallon	gal	Company	Co.	harvest per unit effort	HPUE
inch	in	Corporation	Corp.	less than	<
mile	mi	Incorporated	Inc.	less than or equal to	≤
nautical mile	nmi	Limited	Ltd.	logarithm (natural)	ln
ounce	oz	District of Columbia	D.C.	logarithm (base 10)	log
pound	lb	et alii (and others)	et al.	logarithm (specify base)	log <sub>2</sub> , etc.
quart	qt	et cetera (and so forth)	etc.	minute (angular)	'
yard	yd	exempli gratia (for example)	e.g.	not significant	NS
		Federal Information Code	FIC	null hypothesis	$H_0$
<b>Time and temperature</b>		id est (that is)	i.e.	percent	%
day	d	latitude or longitude	lat. or long.	probability	P
degrees Celsius	°C	monetary symbols (U.S.)	\$, ¢	probability of a type I error (rejection of the null hypothesis when true)	$\alpha$
degrees Fahrenheit	°F	months (tables and figures)	first three letters (Jan.,...,Dec)	probability of a type II error (acceptance of the null hypothesis when false)	$\beta$
degrees kelvin	K	registered trademark	®	second (angular)	"
hour	h	trademark	™	standard deviation	SD
minute	min	United States (adjective)	U.S.	standard error	SE
second	s	United States of America (noun)	USA	variance	
		U.S.C.	United States Code	population	Var
<b>Physics and chemistry</b>		U.S. state	two-letter abbreviations (e.g., AK, WA)	sample	var
<i>all atomic symbols</i>					
alternating current	AC	<b>Measures (fisheries)</b>			
ampere	A	fork length	FL		
calorie	cal	mid-eye-to-fork	MEF		
direct current	DC	mid-eye-to-tail-fork	METF		
hertz	Hz	standard length	SL		
horsepower	hp	total length	TL		
hydrogen ion activity (negative log of)	pH				
parts per million	ppm				
parts per thousand	ppt, ‰				
volts	V				
watts	W				

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Ronald T. Stanek

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

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

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*Ronald T. Stanek  
Alaska Department of Fish and Game, Division of Subsistence,  
333 Raspberry Road, Anchorage, AK 99518-1599, USA*

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COOK INLET UPDATE

Ronald T. Stanek  
Resource Specialist II

Division of Subsistence  
Alaska Department of Fish and Game

May 15, 1987

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HB

## COOK INLET UPDATE

This document is a description of resource harvest monitoring being conducted during 1987 and 1988 in the Cook Inlet area under the purview of Cook Inlet Communities project of the FY 87 and 88 budget process. These sub-projects are presented by resource group categories and community in which the work occurs. Three broad resource groups are being studied and include salmon, bottomfish, and marine mammals. The communities in which the work will take place include Tyonek, English Bay, and Port Graham. Reports cited later in this document describe each community in detail. All three communities are located on the shores of Cook Inlet, and derive major parts of their cash incomes and subsistence harvests from wild resources taken in inlet waters.

### SALMON

#### English Bay and Port Graham

In the vicinity of each village are two rivers, the English Bay River and the Port Graham River, which have small annual runs of five species of salmon - sockeye, coho, and pink are the primary species, while chum and chinook occur in minor numbers. The three primary species play a significant role in the economies of both communities. Commercial fishing is the single largest source of cash income, while subsistence salmon fishing provides the bulk of the meat and fish portion of household diets. The harvest and use of salmon for subsistence purposes has been documented by Stanek (1985).

Beginning in May 1981, the subsistence salmon set net fishery in the Port Graham subdistrict has been monitored by Department of Fish and Game personnel with the use of monthly calendars on which fishermen recorded their daily totals by species of salmon caught. This method of harvest monitoring was quite successful and positively received by both villages over the past six years. Essential to the operation of this system has been the presence of someone to collect and distribute calendars. Over the years this has been either an ADF&G representative or someone hired in each village.

Annual quantities of salmon harvested by each community were found to vary dramatically. For example between 1982 and 1983 English Bay's total harvests decreased by nearly 100 percent. In addition total numbers of each species caught varied from year to year (Tables 1 and 2). These variations were influenced by such factors as weather, numbers of returning salmon, availability of equipment, employment status of fishermen, and social conditions in each village. In 1985 and 86 the most drastic declines in harvests occurred as a result of extremely low run returns to the English Bay River.

The continued monitoring of the subsistence salmon fishery

in the Port Graham Subdistrict is required by regulation (5 AAC 01.015), and is necessary for the management of the English Bay River system which has had dramatic decreases in returning numbers of sockeye salmon in recent years.

For the 1987 season, monthly permit/calendars (Appendix A ) will be issued prior to the May 10th opening to all interested fishermen. Calendars will be collected at the end of May and at the close of the season on June 15th. A second set of calendars will be issued before the opening of the season again on August 16th. Collection will be made at the end of August and after the close of the season on September 30th.

Harvest data will be entered into the Division of Subsistence computer data files. These files of past years' data have been developed by Data Management, and are available in several formats (Appendix B). Summary harvest reports will be made on a regular basis to the Commercial Fisheries Division Area Biologist in Homer.

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TABLE 1. ESTIMATED SALMON HARVESTS FOR DOMESTIC USE AT ENGLISH BAY, ALASKA 1981 TO 1986

Year	Chinook	Sockeye	Coho	Pink	Chum	Subtotal
1981	24	1075	314	621	19	2053
1982	13	1584	1305	1850	36	4788
1983	0	1784	367	363	10	2524
1984	18	1225	385	404	0	2032
1985	5	696	530	313	2	1546
1986	4	378	296	825	2	1505
1987a	1	563	178	183	4	929
1987b	1	628	322	476	45	1472
Average =	9	1053	503	693	16	2274

a = setnet harvest only; b = setnet and rod and reel harvests combined.

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TABLE 2. ESTIMATED SALMON HARVESTS FOR DOMESTIC USE AT PORT GRAHAM, ALASKA 1981 TO 1986

Year	Chinook	Sockeye	Coho	Pink	Chum	Subtotal
1981	116	1694	625	298	150	2883
1982	98	798	508	851	193	2448
1983	57	1066	440	169	65	1797
1984	21	2095	166	215	6	2503
1985	156	469	190	42	22	879
1986	118	279	179	234	13	823
1987a	21	170	251	139	25	606
1987b	21	186	574	264	69	1114
Average =	84	941	383	296	74	1778

a = setnet harvest only; b = setnet and rod and reel harvests combined.

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## Tyonek

Since May 1980, the Alaska Department of Fish and Game has monitored and documented the harvest of chinook salmon in the subsistence set net fishery at Tyonek (Stanek and Foster 1980; Webster 1982; Ruesch and Browning 1982; Browning 1985). The continued collection of subsistence salmon harvest data is required by the Alaska Board of Fisheries under 5 AAC 01.015.

Past harvest data collection methods have included onsite counting by Department personnel, and a permit, calendar on which individual fishermen recorded their daily harvests. Harvest levels for chinook salmon, the target species, have ranged from a high of 2,750 fish in 1983 to a low of 1,571 (harvested by Tyonek residents) in 1986 (Table 3).

During the past seven years Tyonek fishermen have become accustomed to the permit system of self-reporting, and permit return levels have been 90 percent or better. At the end of each season Department personnel have sent reminder letters and visited the village to collect outstanding permits. The practice of Department representatives visiting the village has had several positive affects. It has established an excellent rapport with village authorities, and demonstrated the Department's interest in villager's fishing activities. It has also created a positive air of expectancy among village fishermen to receive permits, report their harvests, and provide information valuable to the fishery's management.

For the 1987 season permits will be issued beginning May 13th at Tyonek village offices by Department of Fish and Game, Division of Subsistence personnel. Regulations require that permit holders be domiciled in the village. To assure compliance, permit applicant's names will be verified with village council representatives. A two-permit system will be implemented to achieve more expedient return of chinook salmon harvest data. In this system one permit will be issued for the fishery beginning May 15th and ending June 15th (Appendix B). "Other species" permits will then be exchanged for the chinook permits with those people wishing to participate in the June 16 to October 15 fishery (Appendix C). On a regular basis (to be determined) Division of Subsistence personnel will determine subtotals of king salmon caught and report this information to the Soldotna office of Commercial Fisheries.

To conduct their activities in the village subsistence personnel will use an ATC three-wheeler for transportation, and reside either at community guest house facilities, or at the homes or camps of village residents.

Harvest data for 1987 will be entered into a computerized file along with permit ID numbers, net length, hours fished, fish site location, and number of household dependants. These data will later be combined with similar data from Tyonek permits for 1980 to 1986. Summary reports will then be quickly and easily available for Departmental use.

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TABLE 3. TYONEK SUBSISTENCE SALMON HARVESTS 1980 TO 1986

Year	Number Permits	Chinook Salmon	sockeye Salmon	Coho Salmon	Pink Salmon	Chum Salmon
1980a	67	1936	262	-	-	-
1981b	70	2002	269	64	32	15
1982c	69	1565	209	-	-	-
1983d	75	2750	185	40	-	2
1984e	75	2354	na	na	na	na
1985f	? 76	1720	44	8	-	na
1986g	? 65	1523	198	210	45	44
-----						
Average =	51	1979	167	46	11	9

a Stanek and Foster 1980

b Webster 1982

c Ruesch and Browning 1982

d Ruesch and Browning 1983

e Browning pers. comm., 1984

f Ruesch and Browning 1986

g Division of Subsistence Data Files 1986

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## BOTTOMFISH

### English Bay and Port Graham

Bottomfish are an integral part of the subsistence resource harvests of English Bay and Port Graham. Of primary importance is halibut, but flounder, cod, rockfish, and several other species are also harvested in significant quantities for subsistence uses.

Documentation of the harvest and use of bottomfish by Port Graham and English Bay residents occurred between 1981 and 1983. Additional harvest data was collected in the spring and summer of 1986 (Stanek 1985; Stanek 1986, Field Notes).

Quantities of bottomfish harvested by the two communities included from 287 halibut, and 131 flounder, and 328 rockfish in 1981-82, to 152 halibut, 216 flounder, and 123 rockfish in 1986 (Tables 4, 5, and 6). In addition to the three species mentioned above, there were 365 "other fish" caught. These included lingcod, tomcod, and pacific cod. In 1986 bottomfish fishing activity was monitored from March to September, while in 1981-82 there were 12 months of data.

The actual poundage of halibut used by each community has not been reliably determined because of the lack of data on the sizes of halibut harvested. In 1986 a small sample of calendar holders were provided with tape measures and methods of determining halibut length. Results are reported in Table 7. The average net weight of halibut caught by the two communities was 16.2 pounds. Additional weight data will be collected in the 1987 season.

In recent years there has been a growing interest among sport and commercial users to harvest bottomfish, particularly halibut, in the vicinity of Port Graham and English Bay. As many as 25 private and charter boats at one time have been observed anchored in the vicinity of the two villages. The waters off Point Bede and Flat Island are noted for the large size, and abundant numbers of halibut they produce.

There is also a need for bottomfish harvest data in regard to regulatory changes. Currently, it is illegal to possess sport and subsistence caught halibut on the same day. The only difference between the two methods is that sport gear includes rod and reel while subsistence gear includes a handheld line. Bag limits for the two fisheries are the same, two fish per person per day. Neither of these regulations have any relevance to fishing activities nor have they been of any consequence to the two villages. Awareness of the regulations only makes villagers frustrated and confused. Other than obtaining a sportfishing license, there is almost no compliance with existing sport regulations inspite of the majority of the fishermen using rod and reel gear. This noncompliance is understandable in light of the primary objective of village fishermen which is to fill their household's annual food stores, and to meet family social obligations.

Typically, several village fishermen go out together in

small skiffs during calm weather. Their goal normally is to catch as many halibut as possible. Fish are taken to the village and distributed, usually among extended family members. Fish are also distributed to non-family members who are close friends or who are owed favors. Halibut meat is preserved in two ways. The most popular method is to

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TABLE 4. REPORTED QUANTITIES OF SALTWATER FINFISH FOR PORT GRAHAM AND ENGLISH BAY, ALASKA MAY 1981 THROUGH APRIL 1982

Species	Port Graham			English Bay		
	1981 May-Dec.	1982 Jan.-Apr.	Total	1981 May-Dec.	1982 Jan.-Apr.	Total
Halibut	132	102	234	<del>148</del>	19	<del>165</del>
Flounder	72	10	82	8	41	49
Sculpin	9	5	14	6	56	62
Rockfish	154	106	260	48	0	48
Lingcod	18	0	18	0	0	0
Greenling	37	18	55	0	0	0
Herring	1165	683	1848	0	0	0

Source: Stanek 1985      Subsistence Division Data Files ~~1985~~



TABLE 5. MONTHLY ESTIMATES OF BOTTOMFISH TAKEN BY ENGLISH BAY IN 1986

Month	Species				
	Halibut	Rockfish	Greenling	Flounder	Other Fish*
March	0	0	1	23	18
April	0	0	0	0	2
May	6	40	2	13	27
June	2	0	0	0	25
Totals	8	40	3	36	72

\* Includes sculpin, tomcod, pacific cod and other unidentified bottomfish.

TABLE 6. MONTHLY ESTIMATES OF BOTTOMFISH TAKEN BY PORT GRAHAM IN 1986

Month	Species				
	Halibut	Rockfish	Greenling	Flounder	Other Fish*
March	1	55	38	73	21
April	3	10	12	70	182
May	82	0	1	44	86
June	61	18	4	3	14
Totals	147	83	65	180	293

\* Includes sculpin, tomcod, pacific cod and other unidentified bottomfish.

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TABLE . AVERAGE LENGTHS AND WEIGHTS OF HALIBUT CAUGHT AT PORT GRAHAM AND ENGLISH BAY, ALASKA, 1986 AND 1987 (N=52 fish)

Length (in)	Length (cm)	Gross Weight	Net Weight
26.3	73.5	18.8	16.2

Length = Tip of nose to fork in tail

Gross Weight (Eviserated, Heads on) =  $0.0022046(0.00364 \times \text{Length} ^ 3.24^*$

Net Weight = Gross Weight x 0.8624\*

\*Source: International Pacific Halibut Commission

cut halibut into strips which are air-dried into "tamuq". Large quantities of this traditional food are stored for winter use. Fishermen try to put up as much as possible during spring and early summer while drying conditions are best and there are no flies. Although some halibut is frozen, freezing is not the preferred method of preservation.

In order to quickly fill winter stores with halibut, most fishermen harvest as much as possible in a short time. This is often accomplished with the use of short skates with 10 to 20 hooks. Skates are prohibited for subsistence halibut fishing, however commercial gear is legal for other bottomfish species. Skates used for subsistence purposes are normally one-half or less the size of the typical commercial skates.

For 1987, calendars will be distributed to a sample of households which volunteer to record their daily halibut and other bottomfish harvests. Calendar format will list the most common bottomfish species harvested on each day of the month. The reverse side of each calendar will be set up for recording halibut lengths (Appendix D). Monthly calendar distribution will take place in March and continue through September or October. Monthly collection of calendars will be done by someone from each village. A Division of Subsistence researcher will make bi-monthly visits to each village in order to monitor the status of the project in conjunction with the subsistence salmon fishing season.

#### MARINE MAMMALS

A variety of marine mammals inhabit all parts of Cook Inlet. Included are five species of whales of which belukha are the most widely distributed, and are utilized for human consumption. Harbor seals and Steller sea lions also occupy much of the inlet, although sea lions are rarely found north of Kalgin Island. Both seals and sea lions are hunted and used for subsistence purposes by Native residents of almost all Cook Inlet communities. Belukha whales are also utilized by Native peoples of the region.

#### Port Graham and English Bay

Located on the southwestern tip of the Kenai Peninsula, these two Chugach Eskimo communities have large numbers of harbor seal and Steller sea lion in their vicinity. Each community uses moderate numbers of seal and sea lions every year. Numbers of animals taken annually in recent years have ranged from 30 to 100 seals, and from four to ten sea lions (Stanek 1985: 169; Stanek 1986: Field Notes). Marine mammal products are an important component of these villager's diet, and are frequently shared among extended family networks. With regard to sharing, marine mammals are a significant aspect of village social relations.

The importance of collecting marine mammal harvest data has increased due to concern from federal and state agencies, and the

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general public, for the management of marine species. In addition, a growing number of conflicts among user groups of marine mammals has occurred in the Kachemak Bay area. For example, hunters from Port Graham and English Bay often encounter people opposed to seeing seals and sea lions harvested and have, on several occasions, been requested not to take the animals. This kind of activity has occurred in the vicinity of Yukon Island and Tutka Bay. There has also been an increase in the number of occurrences where native hunters from upper Kenai Peninsula communities compete with Kachemak Bay hunters for marine mammals. These events also have occurred around Yukon Island. These conflicts point to future needs for information to resolve such issues.

#### Other Cook Inlet Communities

##### Background

Although Native residents of many Cook Inlet communities harvest marine mammals in Cook Inlet, of concern here is the harvest of seals and belukha whales in the vicinity of the Susitna and Beluga Rivers. Located along the western shores of the upper reaches of Cook Inlet, the mouths of these rivers are important feeding and resting areas, and possible calving and pupping areas for belukha and harbor seals.

Historically, both belukha and seals were taken by the Tanaina Indians living in the along the shores of Cook Inlet. Around the turn of the century, a belukha processing plant was operated by the Beluga Whaling Company near the Beluga River (DeArmond 1969). In the 1930s, 40s, and 50s the federal government gave bounties for seals killed to protect dwindling salmon populations (C. Forsberg 1985, pers. comm.) During the same period the muktuk and meat of seals and belukha were sold to the Alaska Native Health Service Hospital for tuberculosis patients (ANS 1987). Products of marine mammals were also shipped to communities in northwest Alaska to meet local needs during years when environmental conditions precluded harvest of belukha in those areas.

From 1980 to 1986 Division of Subsistence researchers travelling to and from Tyonek observed belukha hunting activities occurring in the vicinity of the Susitna River. Tyonek hunters' activities were described by Fall, Foster, and Stanek (1984). In 1986 several hunters from outside Tyonek were contacted and some information was collected on hunting patterns, and harvest quantities. Five hunting groups were identified as using the area from Fire Island to the Susitna and Beluga Rivers. An estimated 20 belukha were harvested between May and August of 1986. The hunting parties were found to originate from the Anchorage, Nome, and Kotzebue areas. Those from northwest Alaska travelled to Cook Inlet because of poor hunting conditions in Kotzebue Sound due to prolonged spring ice conditions. White muktuk from Cook Inlet

belukha was shipped to northwest Alaska where it was sold in local stores and shared among hunters' families. It was also distributed to households as far east as Kaktovik.

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## Methodology

Based on information collected during the past two years, and a limited budget, two types of baseline data are required to form a basis for future studies. Harvest quantities presently hold the greatest significance in the opinions of both federal and state resource managers. Harvest pattern and use data are also required for any future, possible allocation decisions. This information is also required to fully realize the economic and social importance of these resources to their users.

Literature sources on this subject for recent years are extremely limited and very little is expected to be found. A search will be conducted to locate all available sources. The primary methods of data collection will be interviews with local hunters and key informants, and possible field observations.

Data to be collected will include harvest quantity estimates and use pattern information. Harvest estimates will include animals struck and lost, and animals landed. The timing of these harvests as to the date and time of day will be determined. The geographic location of harvests will be mapped. Further data collection will include methods of harvest, preservation, distribution, and use.

An additional, possible item of information will be historical harvests. Informants will be asked to recall previous year's harvests. The reliability of obtaining this information will have to be determined upon talking to informants. Such information would be very useful in determining the long-term sustained production of the belukha herd.

### Jim Fall's recommendations - May 1987.

- ✓ Develop the following tables and matrices.
- ✓ Estimates of per capita harvests of all wild resources for English Bay and Port Graham for 1987.
- ✓ Procedure: Keep "running count" of harvest of all households participating in calendars and permit hunts by asking about other harvests during visits. Also trace sharing of major harvests.

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### HOUSEHOLD PARTICIPATION TALLY FORM FOR 1987

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	Attempt	Successful	Gear	
Use	Harvest	Harvest	Type	Gave Received
Salmon				
King				
Red				
Chum				
Pink				
Silver				

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Freshwater Fish  
Dolly Varden

Marine Fish

Marine Invertebrates

etc.

\* Data set similar to what is obtained from survey recall; one "event" earns a household a "yes" for the year.

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Do a village census, similar to page one of harvest surveys.

Could be as of late June, then correct in January.

January - a "fill-in-the-blank" survey. Take all data compiled so far, put on survey form, and fill in gaps ( or confirm previous data).

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# 1986 SEPTEMBER 1986

## SUBSISTENCE SALMON SET NET PERMIT HARVEST CALENDAR PORT GRAHAM SUBDISTRICT



Net Length \_\_\_\_\_

Permit No. \_\_\_\_\_

Please record the number of salmon you catch and the number of hours fished.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
	RED _____ KING _____ PINK _____ CHUM _____ SILVER _____ HRS. FISHED _____	RED _____ KING _____ PINK _____ CHUM _____ SILVER _____ HRS. FISHED _____	RED _____ KING _____ PINK _____ CHUM _____ SILVER _____ HRS. FISHED _____	RED _____ KING _____ PINK _____ CHUM _____ SILVER _____ HRS. FISHED _____	RED _____ KING _____ PINK _____ CHUM _____ SILVER _____ HRS. FISHED _____	RED _____ KING _____ PINK _____ CHUM _____ SILVER _____ HRS. FISHED _____
<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>
RED _____ KING _____ PINK _____ CHUM _____ SILVER _____ HRS. FISHED _____	RED _____ KING _____ PINK _____ CHUM _____ SILVER _____ HRS. FISHED _____	RED _____ KING _____ PINK _____ CHUM _____ SILVER _____ HRS. FISHED _____	RED _____ KING _____ PINK _____ CHUM _____ SILVER _____ HRS. FISHED _____	RED _____ KING _____ PINK _____ CHUM _____ SILVER _____ HRS. FISHED _____	RED _____ KING _____ PINK _____ CHUM _____ SILVER _____ HRS. FISHED _____	RED _____ KING _____ PINK _____ CHUM _____ SILVER _____ HRS. FISHED _____
<b>14</b>	<b>15</b>	<b>16</b>	<b>17</b>	<b>18</b>	<b>19</b>	<b>20</b>
RED _____ KING _____ PINK _____ CHUM _____ SILVER _____ HRS. FISHED _____	RED _____ KING _____ PINK _____ CHUM _____ SILVER _____ HRS. FISHED _____	RED _____ KING _____ PINK _____ CHUM _____ SILVER _____ HRS. FISHED _____	RED _____ KING _____ PINK _____ CHUM _____ SILVER _____ HRS. FISHED _____	RED _____ KING _____ PINK _____ CHUM _____ SILVER _____ HRS. FISHED _____	RED _____ KING _____ PINK _____ CHUM _____ SILVER _____ HRS. FISHED _____	RED _____ KING _____ PINK _____ CHUM _____ SILVER _____ HRS. FISHED _____
<b>21</b>	<b>22</b>	<b>23</b>	<b>24</b>	<b>25</b>	<b>26</b>	<b>27</b>
RED _____ KING _____ PINK _____ CHUM _____ SILVER _____ HRS. FISHED _____	RED _____ KING _____ PINK _____ CHUM _____ SILVER _____ HRS. FISHED _____	RED _____ KING _____ PINK _____ CHUM _____ SILVER _____ HRS. FISHED _____	RED _____ KING _____ PINK _____ CHUM _____ SILVER _____ HRS. FISHED _____	RED _____ KING _____ PINK _____ CHUM _____ SILVER _____ HRS. FISHED _____	RED _____ KING _____ PINK _____ CHUM _____ SILVER _____ HRS. FISHED _____	RED _____ KING _____ PINK _____ CHUM _____ SILVER _____ HRS. FISHED _____
<b>28</b>	<b>29</b>	<b>30</b>				
RED _____ KING _____ PINK _____ CHUM _____ SILVER _____ HRS. FISHED _____	RED _____ KING _____ PINK _____ CHUM _____ SILVER _____ HRS. FISHED _____	RED _____ KING _____ PINK _____ CHUM _____ SILVER _____ HRS. FISHED _____				

518837

PERMIT NO. \_\_\_\_\_

PORT GRAHAM SUBDISTRICT SUBSISTENCE SALMON FISHING PERMIT  
1986

Please type or print plainly and include zip code in address.

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

DISTRICT \_\_\_\_\_ LOCATION OF NET \_\_\_\_\_

5 AAC 01.560. FISHING SEASONS AND WEEKLY FISHING PERIODS. (3) in the Port Graham subdistrict: (A) from May 10 through June 15 and from August 16 through September 30 from 6:00 a.m. Monday until 6:00 a.m. Wednesday and from 6:00 a.m. Thursday until 6:00 a.m. Saturday;

5 AAC 01.570. LAWFUL GEAR AND GEAR SPECIFICATIONS. (2) in the Port Graham subdistrict by set gill nets not exceeding 35 fathoms in length, six inches in mesh size and 45 meshes in depth; (C) No person may operate or assist in the operation of subsistence salmon net gear on the same day that person operates or assists in the operation of commercial salmon gear.

5 AAC 01.575. WATERS CLOSED TO SUBSISTENCE FISHING. (4) the Central, Kamishak Bay, Barren Island, Outer and Eastern districts.

5 AAC 01.580. SUBSISTENCE FISHING PERMITS. Only one subsistence salmon fishing permit may be issued to each household per year. (2) subsistence salmon fishing permits for the Port Graham subdistrict will be issued only to those persons domiciled in the villages of Port Graham and English Bay.

5 AAC 01.590. MARKING OF SUBSISTENCE TAKEN SALMON. No person may possess salmon taken under the authority of a subsistence fishing permit unless both lobes of the caudal fin (tail) have been immediately removed from the salmon. (b) It is unlawful to purchase or sell salmon from which both lobes of the caudal fin (tail) have been removed.

5 AAC 01.595. SUBSISTENCE BAG AND POSSESSION LIMITS. (1) there is no total annual possession limit for holders of Port Graham subdistrict subsistence salmon fishing permits; subsistence salmon catches must be recorded on forms provided by the department.

5 AAC 01.010. METHODS, MEANS, AND GENERAL RESTRICTIONS. (H) Each subsistence fisherman shall plainly and legibly inscribe his first initial, last name, and address on his fishwheel, or on a keg or bouy attached to gill nets and other unattended subsistence fishing gear.

5 AAC 01.015. SUBSISTENCE FISHING PERMITS AND REPORTS. (3) permits must be retained in the possession of the permittee and be readily available for inspection while taking fish. A person who transports subsistence taken fish shall have a subsistence fishing permit in his possession.



All regulations pertaining to subsistence fishing for salmon in this area are to be observed. These regulations are published annually in the Regulations of the Alaska Board of Fish and Game for Subsistence fishing in Alaska.

Fish caught for subsistence use may NOT be sold, or allowed to enter into commercial channels.

This summary of regulations is intended for informational use only. The list of regulations is not complete nor should it be considered as official. The official regulations in the Alaska Administrative Code are filed with the Lieutenant Governor. Copies of complete regulations are available at the local Fish and Game office.

5 AAC 01.555. DESCRIPTION OF DISTRICTS AND SUBDISTRICTS. (a) Districts and subdistricts are as described in 5 AAC 21.200. (b) The Tyonek District includes those waters of the Northern District within mean lower low tide from a point one mile south of the southern edge of the Chuitna River south to the easternmost tip of Granite Point.

5 AAC 01.560. FISHING SEASONS AND WEEKLY FISHING PERIODS. (a) Salmon may be taken for subsistence purposes only as follows:

(1) in the Tyonek subdistrict:

(A) from May 15 through June 15 from 4:00 a.m. to 8:00 p.m. on Tuesday, Thursday, and Friday;

(B) from June 16 through October 15 from 6:00 a.m. to 6:00 p.m. on Saturdays;

(C) the season described in (A) of this paragraph shall close by emergency order when 4,200 king salmon have been taken;

(D) the season described in (B) of this paragraph shall not open until July 1 if 4,200 king salmon are taken before June 16.

5 AAC 01.570. LAWFUL GEAR AND GEAR SPECIFICATIONS. (a) unless restrictions in this section, sec. 575 of this chapter, or under the terms of a subsistence fishing permit fish may be taken by gear listed in sec. 10(a) of this chapter.

(b) Salmon may be taken only as follows:

(1) in the Tyonek Subdistrict by set gill nets not exceeding 10 fathoms in length, six inches in mesh size and 45 meshes in depth;

(2) no part of a set gill net may be set or operated within 600 feet of any part of another set gill net.

(c) No person may operate or assist in the operation of subsistence salmon net gear on the same day that person operates or assists in the operation of commercial salmon gear.

(d) In the Northern and Central Districts subsistence fishermen holding a subsistence permit must be physically present at the net at all times while the net is being fished.

5 AAC 01.575. WATERS CLOSED TO SUBSISTENCE FISHING. (a) The taking of salmon is prohibited in the following waters:

(1) in those waters described in 5 AAC 39.290. (See Commercial Regulations);

(2) all waters of the Northern District not part of the Tyonek subdistrict;

(3) the Seldovia Bay, Barbara Creek, Tutka Bay, Bumpy Creek and Northshore Subdistricts of the Southern District;

(4) the Central, Kamishak Bay, Barren Island, Outer and Eastern Districts.

5 AAC 21.350. CLOSED WATER. (c) within 500 yds. of the terminus of all streams or as posted. (Includes Tyonek and Old Tyonek Creeks).

5 AAC 01.595. SUBSISTENCE BAG AND POSSESSION LIMITS. (a) The total annual possession limit for each subsistence salmon fishing permit is as follows:

(1) 25 salmon for the head of a household and 10 salmon for each dependent of the permit holder;

(2) in addition to the limits in (1) of this subsection; the holder of a Tyonek Subdistrict subsistence salmon fishing permit may take 70 king salmon; no more than 4,200 king salmon may be taken in the Tyonek Subdistrict during the period May 15 through June 30.



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