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FISH AND WILDLIFE COMMISSION

MEETING Handout – TABLE OF CONTENTS

Regular Meeting

02/16/2023

Pg.---Item:

Physical Location of Meeting: LLCR, DSJ Bldg, 350 E. Dahlia Ave., Palmer.
Remote Participation: See attached agenda.

Planning and Land Use Department - Planning Division

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MEMORANDUM

TO:	Distribution	DATE:	January 18, 2023
FROM:	Nick DeCovich, Northern Cook Inlet Area Research Biologist Division of Sport Fish, Region II	SUBJECT:	Forecast for the 2023 Deshka River king salmon run, and accuracy of the 2022 forecast

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The point estimate of the preseason forecast for the 2023 Deshka River king salmon total run is 7,243 fish (ages 1.1–1.4). The 80% prediction interval (PI), based upon the variability between forecast and actual total runs, is 2,603 to 11,883 fish (Table 1). The escapement, without harvest, is forecast to fall below the biological escapement goal of 9,000–18,000 fish. The preseason forecast estimate is 53% less than the recent ten-year (2013–2022) average run of 15,503 age-1.1–1.4 fish, and 76% less than the long-term (1979–2022) average of 30,383 fish.

The forecast for 2023 is the sum of individual age class forecasts. We examined estimates for three classes of models: sibling relationships, Ricker spawner-recruit relationships, and moving averages (Table 2). The models chosen were those with statistically significant parameters that have the greatest past reliability (accuracy and precision). The variability among forecasted and actual total runs for each model was assessed by using the mean absolute deviation (MAD) (Table 1). The choice of model used for each age class had minimum values of the 5-year MAD in 2018–2022 hindcasts of forecasts, as compared to the actual runs in those years (Table 1). The hindcasts were produced for each return year as one step ahead predictions using the estimates from all prior years.

The 5-year moving average was used for age-1.1 fish, as it is the only applicable model as this age class has no prior years' returns to inform other types of models. The 5-year moving average model was selected for age-1.2 fish. The sibling model (relationship between age-1.2 and age-1.3 fish) was chosen for age-1.3 fish, and the univariate time series model was chosen for age-1.4 fish (Table 1). For a description of each model considered, see Table 2.

Weir counts of age-1.1 'jack' king salmon are considered a minimum because an unknown number pass through the gaps between weir pickets and go uncounted. In many years, zero to only a few hundred fish of this age class are counted through the weir. However, the enumerated jacks count toward the escapement goal, which is based on all ages. The recent 5-year average of age-1.1 fish is 2,137. In recent years, there has been an increase in the number of jacks counted at the weir, and efforts are underway to evaluate how this phenomenon could impact future production (Table 3).

The preliminary 2022 escapement estimate, which is simply the weir count as no inriver harvest was allowed, was 5,437, which is below the lower end of the escapement goal (9,000–18,000) and is also the lowest escapement on record. The second lowest escapement was 7,284, observed in 2008. The

forecast estimate of total run for 2022 for all age classes was 11,435, and the estimated total run (escapement plus marine harvest) was 5,714, a difference of -50% (Table 3).

The 2016 brood year return was completed with the 2022 run of age-1.4 fish. The 2016 brood year produced a total return of 21,522 king salmon (return per spawner = 0.97). This was more productive than the 2015 brood year, which had a return-per-spawner of 0.27.

There is considerable uncertainty in the total 2023 Deshka River king salmon forecast estimate. The models used for Deshka River king salmon tend to over-forecast the total run (Table 4). Total run was over-forecasted in 16 of 24 years and under-forecasted in 8 of 24 years. The forecast was within 5% of the estimated run in only 2 years. The Deshka king salmon forecast has differed by -52% to +44% from the estimated run in the past ten years (-15% average) (Table 4).

The best way to consider this salmon forecast is in terms of 3 broad categories: approximately average run (within 25% of the historical average), below average run, or above average run. The 2023 forecast gives the expectation of a run in the below average run category (see footnote Table 4).

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Table 1. – Forecast king salmon total run with 80% prediction interval (PI) for the Deshka River in 2023 using various models, and the relative performance of each model to the previous 5 years of runs as measured by mean absolute deviation (MAD).

Model	Forecast 2023	Model chosen	5-year MAD
Age 1.1			
5-year moving average	1,919	*	N/A
Age 1.2			
5-year moving average	2,402	*	2,271
Exponential smoothing	2,569		4,223
Univariate time series	3,045		3,052
Sibling	[a]		
Ricker	4,279		3,143
Age 1.3			
5-year moving average	4,195		4,650
Exponential smoothing	4,623		5,265
Univariate time series	6,354		7,384
Sibling	2,737	*	1,930
Ricker	4,695		7,276
Age 1.4			
5-year moving average	183		727
Exponential smoothing	191		329
Univariate time series	185	*	320
Sibling	155		335
Ricker	[b]		
Total forecast	7,243 (2,603 - 11,883 80% PI)		

[a]The sibling relationship between age 1.1 and 1.2 fish was insignificant ($p > 0.05$).

[b]The Ricker model was insignificant ($p > 0.05$) age 1.4 fish.

Table 2. – Brief description of statistical models used to forecast the 2023 Deshka River king salmon run.

Model	Description
5-year moving average	A moving average on the natural log of abundance in each age class.
Expontential smoothing	A weighted moving average on the natural log of abundance in each class.
Univariate time series	AutoRegressive Integrated Moving Average analysis on the natural log of abundance in each age class.
Sibling model	Regression between the natural logs of annual abundance in an age class and the most recent return of siblings from the same brood year.
Ricker Model	Ricker-style regression on the natural log of abundance for each age class.

Table 3. – Estimates of Deshka River king salmon by age class for years 1979–2022.

	Number per Age Class					Total Run	Total Run	Escapement
Run Year	1.1	1.2	1.3	1.4	1.5	age 1.2 - 1.4	all ages	all ages
1979	0	4,455	38,185	21,002	0	63,642	63,642	60,607
1980	0	3,915	19,967	15,269	0	39,151	39,151	35,096
1981	0	2,626	14,969	8,666	0	26,261	26,261	23,162
1982	0	5,472	18,940	18,098	0	42,510	42,510	37,222
1983	0	10,341	22,620	16,258	0	49,219	49,219	43,871
1984	0	7,681	21,235	16,265	0	45,180	45,180	39,054
1985	0	7,219	20,962	20,337	12	48,518	48,530	41,640
1986	17	18,532	22,480	15,206	46	56,218	56,281	47,657
1987	8	6,877	23,659	12,448	10	42,984	43,002	35,226
1988	494	6,175	12,809	30,545	1,002	49,529	51,025	43,795
1989	510	8,287	8,559	15,311	419	32,157	33,086	23,246
1990	451	8,320	21,394	19,134	155	48,848	49,454	41,671
1991	0	4,753	10,866	15,713	1	31,332	31,333	21,020
1992	3,036	5,733	8,811	10,437	10	24,980	28,026	20,248
1993	3	4,688	10,309	7,294	8	22,292	22,302	16,207
1994	5	1,753	4,620	4,338	102	10,711	10,817	9,832
1995	109	4,070	3,106	3,295	168	10,472	10,749	10,048
1996	11	7,098	5,562	2,007	0	14,667	14,678	14,349
1997	77	6,094	23,652	6,080	0	35,825	35,902	35,587
1998	0	10,682	15,639	10,351	116	36,672	36,788	36,310
1999	0	10,358	14,707	8,560	69	33,625	33,695	29,649
2000	2	4,514	32,807	4,261	0	41,581	41,583	33,965
2001	479	8,038	15,505	9,413	2	32,955	33,436	27,966
2002	534	8,853	18,865	5,272	0	32,991	33,525	28,535
2003	474	16,694	22,575	6,545	0	45,813	46,288	39,257
2004	662	11,916	43,691	9,930	0	65,536	66,198	56,659
2005	541	12,932	25,598	5,247	0	43,778	44,318	36,433
2006	0	8,729	21,153	8,493	0	38,375	38,375	29,922
2007	0	2,166	17,021	4,745	0	23,932	23,932	17,594
2008	0	1,565	3,796	4,635	0	9,996	9,996	7,284
2009	0	8,468	3,052	1,149	0	12,668	12,668	11,641
2010	196	4,573	15,288	1,895	0	21,756	21,952	18,223
2011	508	5,900	14,147	1,523	0	21,569	22,077	18,553
2012	659	8,674	4,117	2,416	0	15,207	15,866	13,952
2013	776	4,229	11,549	3,244	0	19,023	19,799	18,378
2014	1,536	6,996	7,035	2,157	0	16,188	17,724	16,099
2015	2,855	7,089	12,673	3,304	0	23,065	25,920	23,627
2016	4,029	10,858	8,701	1,750	0	21,310	25,339	22,099
2017	1,111	1,564	8,959	1,229	0	11,752	12,863	11,034
2018	3,401	2,180	3,052	87	0	5,319	8,720	8,549
2019	960	1,377	7,260	251	0	8,888	9,848	9,705
2020	2,148	7,053	1,468	286	0	8,807	10,955	10,638
2021	2,898	3,034	13,321	175	0	16,530	19,428	18,524
2022	1,280	1,246	3,000	189	0	4,434	5,714	5,437

Table 4. – Accuracy of the Deshka River king salmon forecast for the three major age classes, 1999–2022. Note that this table excludes age-1.1 fish because forecasts for this age class have not been consistently produced.

Return year	Forecast run	Forecast category[a]	Estimated run	Estimated run category[a]	Forecast difference by major age class (forecast-estimated) Age 1.2	Age 1.3	Age 1.4	Overall effect	Relative difference
1999	26,810	average	33,625	above	-4,421	-463	-1,931	underforecast	25%
2000	33,337	above	41,581	above	3,648	-17,550	5,657	underforecast	25%
2001	40,753	above	32,955	above	514	-5,693	12,976	overforecast	-19%
2002	43,805	above	32,991	above	983	5,625	4,207	overforecast	-25%
2003	41,041	above	45,813	above	-8,386	-782	4,395	underforecast	12%
2004	60,833	above	65,536	above	-2,383	-369	-1,952	underforecast	8%
2005	48,687	above	43,778	above	-4,587	3,133	6,364	overforecast	-10%
2006	49,071	above	38,375	above	-611	12,098	-791	overforecast	-22%
2007	37,007	above	23,932	average	6,601	4,188	2,286	overforecast	-35%
2008	20,268	average	9,996	below	6,375	1,931	1,967	overforecast	-51%
2009	20,593	average	12,668	below	1,059	4,161	2,704	overforecast	-38%
2010	30,775	average	21,756	average	4,959	3,059	1,001	overforecast	-29%
2011	21,080	average	21,569	average	401	-3,992	3,101	underforecast	2%
2012	21,665	average	15,207	below	-4,046	9,484	1,020	overforecast	-30%
2013	26,791	average	19,023	average	3,183	6,659	-2,073	overforecast	-29%
2014	19,063	average	16,188	below	-499	1,527	1,846	overforecast	-15%
2015	20,418	average	23,065	average	-862	-2,012	226	underforecast	13%
2016	24,638	average	21,310	average	-4,032	4,132	3,229	overforecast	-14%
2017	17,813	below	11,752	below	5,248	-560	1,373	overforecast	-34%
2018	10,595	below	5,319	below	4,725	-1,788	2,339	overforecast	-50%
2019	8,466	below	8,888	below	2,517	-3,736	797	underforecast	5%
2020	10,570	below	8,807	below	-3,970	5,838	-105	overforecast	-17%
2021	11,464	below	16,530	below	3,298	-8,469	105	underforecast	44%
2022	9,332	below	4,434	below	1,268	3,621	8	overforecast	-52%
								Average relative difference, 1999-2022	-14%

[a]Average category is defined as within +/- 25% of the the 1999-2022 estimated run average of 23,962 age 1.2-1.4 fish.

Fishery Management Report No. 22-16

Upper Cook Inlet Commercial Fisheries Annual Management Report, 2021

by

Brian Marston

and

Alyssa Frothingham

August 2022

Alaska Department of Fish and Game Divisions of Sport Fish and Commercial Fisheries

Symbols and Abbreviations

The following symbols and abbreviations, and others approved for the Système International d'Unités (SI), are used without definition in the following reports by the Divisions of Sport Fish and of Commercial Fisheries: Fishery Manuscripts, Fishery Data Series Reports, Fishery Management Reports, and Special Publications. All others, including deviations from definitions listed below, are noted in the text at first mention, as well as in the titles or footnotes of tables, and in figure or figure captions.

Weights and measures (metric)	
centimeter	cm
deciliter	dL
gram	g
hectare	ha
kilogram	kg
kilometer	km
liter	L
meter	m
milliliter	mL
millimeter	mm

Weights and measures (English)	
cubic feet per second	ft^3/s
foot	ft
gallon	gal
inch	in
mile	mi
nautical mile	nmi
ounce	oz
pound	lb
quart	qt
yard	yd

Time and temperature	
day	d
degrees Celsius	°C
degrees Fahrenheit	°F
degrees kelvin	K
hour	h
minute	min
second	s

Physics and chemistry	
all atomic symbols	
alternating current	AC
ampere	A
calorie	cal
direct current	DC
hertz	Hz
horsepower	hp
hydrogen ion activity (negative log of)	pH
parts per million	ppm
parts per thousand	ppt, ‰
volts	V
watts	W

General	
Alaska Administrative Code	AAC
all commonly accepted abbreviations	e.g., Mr., Mrs., AM, PM, etc.
all commonly accepted professional titles	e.g., Dr., Ph.D., R.N., etc.
at	@
compass directions:	
east	E
north	N
south	S
west	W
copyright	©
corporate suffixes:	
Company	Co.
Corporation	Corp.
Incorporated	Inc.
Limited	Ltd.
District of Columbia	D.C.
et alii (and others)	et al.
et cetera (and so forth)	etc.
exempli gratia (for example)	e.g.
Federal Information Code	FIC
id est (that is)	i.e.
latitude or longitude	lat or long
monetary symbols (U.S.)	$, ¢
months (tables and figures): first three letters	Jan,...,Dec
registered trademark	®
trademark	™
United States (adjective)	U.S.
United States of America (noun)	USA
U.S.C.	United States Code
U.S. state	use two-letter abbreviations (e.g., AK, WA)

Mathematics, statistics *all standard mathematical signs, symbols and abbreviations*	
alternate hypothesis	H_A
base of natural logarithm	e
catch per unit effort	CPUE
coefficient of variation	CV
common test statistics	(F, t, χ^2, etc.)
confidence interval	CI
correlation coefficient (multiple)	R
correlation coefficient (simple)	r
covariance	cov
degree (angular)	°
degrees of freedom	df
expected value	E
greater than	>
greater than or equal to	≥
harvest per unit effort	HPUE
less than	<
less than or equal to	≤
logarithm (natural)	ln
logarithm (base 10)	log
logarithm (specify base)	$\log_2$, etc.
minute (angular)	'
not significant	NS
null hypothesis	H_O
percent	%
probability	P
probability of a type I error (rejection of the null hypothesis when true)	α
probability of a type II error (acceptance of the null hypothesis when false)	β
second (angular)	"
standard deviation	SD
standard error	SE
variance	
population	Var
sample	var

Appendix A2.–Upper Cook Inlet sockeye salmon count by watershed and date, 2021.

Date	Kenai River		Kasilof River		Fish Creek		Larson Lake		Judd Lake	
	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum
Jun 15	–	–	4,890	4,890	–	–	–	–	–	–
Jun 16	–	–	4,842	9,732	–	–	–	–	–	–
Jun 17	–	–	4327	14,059	–	–	–	–	–	–
Jun 18	–	–	3,870	17,929	–	–	–	–	–	–
Jun 19	–	–	3,012	20,941	–	–	–	–	–	–
Jun 20	–	–	3,738	24,679	–	–	–	–	–	–
Jun 21	–	–	5,178	29,857	–	–	–	–	–	–
Jun 22	–	–	9,468	39,325	–	–	–	–	–	–
Jun 23	–	–	2,274	41,599	–	–	–	–	–	–
Jun 24	–	–	3,369	44,968	–	–	–	–	–	–
Jun 25	–	–	3,738	48,706	–	–	–	–	–	–
Jun 26	–	–	5,136	53,842	–	–	–	–	–	–
Jun 27	–	–	2,976	56,818	–	–	–	–	–	–
Jun 28	–	–	11,893	68,711	–	–	–	–	–	–
Jun 29	–	–	10,602	79,313	–	–	–	–	–	–
Jun 30	–	–	20,454	99,767	–	–	–	–	–	–
Jul 1	7,248	7,248	13,717	113,484	–	–	–	–	–	–
Jul 2	6,476	13,724	6,078	119,562	–	–	–	–	–	–
Jul 3	6,430	20,154	12,060	131,622	–	–	–	–	–	–
Jul 4	6,685	26,839	5,592	137,214	–	–	–	–	–	–
Jul 5	6,122	32,961	9,562	146,776	–	–	–	–	–	–
Jul 6	11,298	44,259	6,054	152,830	0	0	–	–	–	–
Jul 7	9,182	53,441	10,422	163,252	0	0	0	0	–	–
Jul 8	14,040	67,481	6,533	169,785	0	0	0	0	–	–
Jul 9	10,655	78,136	4,955	174,740	0	0	0	0	–	–
Jul 10	10,842	88,978	8,214	182,954	0	0	0	0	–	–
Jul 11	13,986	102,964	12,316	195,270	0	0	0	0	–	–
Jul 12	16,461	119,425	11,699	206,969	50	50	0	0	–	–
Jul 13	12,738	132,163	4,669	211,638	467	517	0	0	–	–
Jul 14	9,852	142,015	7,167	218,805	1,818	2,335	0	0	–	–
Jul 15	19,982	161,997	7,894	226,699	2,223	4,558	0	0	0	0

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Date	Kenai River		Kasilof River		Fish Creek		Larson Lake		Judd Lake	
	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum
Jul 16	14,727	176,724	6,347	233,046	3,471	8,029	0	0	0	0
Jul 17	16,015	192,739	8,886	241,932	912	8,941	7	7	0	0
Jul 18	19,843	212,582	8,396	250,328	1,086	10,027	25	32	0	0
Jul 19	25,731	238,313	8,226	258,554	1,366	11,393	0	32	0	0
Jul 20	85,706	324,019	24,773	283,327	3,079	14,472	0	32	0	0
Jul 21	55,920	379,939	17,032	300,359	3,705	18,177	0	32	0	0
Jul 22	32,958	412,897	13,787	314,146	2,226	20,403	0	32	4	4
Jul 23	40,956	453,853	10,628	324,774	752	21,155	0	32	0	4
Jul 24	38,526	492,379	9,522	334,296	384	21,539	5	37	0	4
Jul 25	57,660	550,039	11,412	345,708	31	21,570	30	67	58	62
Jul 26	52,164	602,203	14,262	359,970	0	21,570	14	81	54	116
Jul 27	62,633	664,836	11,297	371,267	287	21,857	0	81	42	158
Jul 28	58,394	723,230	11,672	382,939	478	22,335	190	271	98	256
Jul 29	74,864	798,094	11,601	394,540	538	22,873	379	650	24	280
Jul 30	47,866	845,960	11,253	405,793	423	23,296	249	899	158	438
Jul 31	77,985	923,945	9,942	415,735	532	23,828	287	1,186	12	450
Aug 1	87,653	1,011,598	12,854	428,589	12,656	36,484	560	1,746	775	1,225
Aug 2	151,525	1,163,123	15,248	443,837	12,867	49,351	762	2,508	1,369	2,594
Aug 3	136,740	1,299,863	12,792	456,629	12,770	62,121	1,241	3,749	1,538	4,132
Aug 4	109,902	1,409,765	11,508	468,137	7,713	69,834	1,392	5,141	1,931	6,063
Aug 5	80,538	1,490,303	7,053	475,190	6,481	76,315	916	6,057	2,078	8,141
Aug 6	80,029	1,570,332	5,163	480,353	1,619	77,934	1,288	7,345	2,363	10,504
Aug 7	73,260	1,643,592	5,702	486,055	268	78,202	1,477	8,822	1,932	12,436
Aug 8	89,750	1,733,342	7,988	494,043	93	78,295	785	9,607	1,157	13,593
Aug 9	72,734	1,806,076	4,716	498,759	7,400	85,695	1,181	10,788	1,846	15,439
Aug 10	56,226	1,862,302	4,978	503,737	3,714	89,409	1,376	12,164	2,026	17,465
Aug 11	54,827	1,917,129	3,294	507,031	3,925	93,334	869	13,033	1,766	19,231
Aug 12	48,605	1,965,734	4,368	511,399	1,856	95,190	1,310	14,343	2,460	21,691
Aug 13	40,367	2,006,101	2,758	514,157	2,749	97,939	1,440	15,783	3,308	24,999
Aug 14	52,677	2,058,778	3,802	517,959	787	98,726	988	16,771	3,726	28,725
Aug 15	59,856	2,118,634	3,900	521,859	598	99,324	804	17,575	3,216	31,941

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	Kenai River		Kasilof River		Fish Creek		Larson Lake		Judd Lake	
Date	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum
Aug 16	55,844	2,174,478	–	–	–	–	651	18,226	2,053	33,994
Aug 17	61,737	2,236,215	–	–	–	–	947	19,173	2,594	36,588
Aug 18	41,519	2,277,734	–	–	–	–	676	19,849	2,054	38,642
Aug 19	41,335	2,319,069	–	–	–	–	627	20,476	1,523	40,165
Aug 20	37,664	2,356,733	–	–	–	–	494	20,970	1,754	41,919
Aug 21	31,436	2,388,169	–	–	–	–	268	21,238	1,224	43,143
Aug 22	23,330	2,411,499	–	–	–	–	215	21,453	1,170	44,313
Aug 23	18,104	2,429,603	–	–	–	–	281	21,734	1,323	45,636
Aug 24	12,222	2,441,825	–	–	–	–	195	21,929	1,122	46,758
Aug 25	–	–	–	–	–	–	58	21,987	858	47,616
Aug 26	–	–	–	–	–	–	–	–	657	48,273
Aug 27	–	–	–	–	–	–	–	–	590	48,863
Aug 28	–	–	–	–	–	–	–	–	369	49,232
Aug 29	–	–	–	–	–	–	–	–	18	49,250

Note: En dash (–) = no data; Cum = cumulative.

Appendix A3.–Commercial Chinook salmon catch by area and date, Upper Cook Inlet, 2021.

Upper subdistrict set gillnet

	244-21 Ninilchik		244-22 Cohoe		244-25 KRSHA		244-31 South K-Beach		244-32 North K-Beach		244-41 Salamatof		244-42 E. Forelands		Total	
Date	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum
Jun 22	20	20	21	21	0	0	8	8	0	0	0	0	0	0	49	49
Jun 24	23	43	9	30	0	0	5	13	0	0	0	0	0	0	37	86
Jun 26	22	65	13	43	0	0	10	23	0	0	0	0	0	0	45	131
Jun 28	20	85	33	76	0	0	17	40	0	0	0	0	0	0	70	201
Jul 1	20	105	12	88	0	0	20	60	0	0	0	0	0	0	52	253
Jul 3	17	122	16	104	0	0	20	80	0	0	0	0	0	0	53	306
Jul 5	16	138	13	117	0	0	20	100	2	2	0	0	0	0	51	357
Jul 6	3	141	1	118	0	0	1	101	0	2	0	0	0	0	5	362
Jul 7	8	149	10	128	0	0	8	109	1	3	0	0	0	0	27	389
Jul 8	13	162	13	141	0	0	15	124	6	9	98	98	3	3	148	537
Jul 12	11	173	23	164	0	0	28	152	51	60	95	193	3	6	211	748
Jul 13	9	182	10	174	0	0	1	153	3	63	0	193	0	6	23	771
Jul 14	7	189	16	190	0	0	4	157	0	63	0	193	0	6	27	798
Jul 15	17	206	22	212	0	0	18	175	38	101	90	283	9	15	194	992
Jul 18	0	206	0	212	5	5	0	175	0	101	0	283	0	15	5	997
Jul 19	20	226	31	243	0	5	38	213	29	130	99	382	9	24	226	1,223
Jul 20	10	236	4	247	0	5	11	224	4	134	43	425	2	26	74	1,297

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Northern District set gillnet

	247-10 Trading Bay		247-20 Tyonek		247-30 Beluga		247-41 Susitna Flats		247-42 Pt. McKenzie		247-43 Fire Island		247-70 Pt. Possession		247-80 Birch Hill		247-90 #3 Bay		Total	
Date	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum
May 31	13	13	20	20	0	0	5	5	10	10	30	30	32	32	17	17	1	1	128	128
Jun 7	0	13	58	78	0	0	0	5	57	67	109	139	39	71	11	28	2	3	276	404
Jun 14	17	30	218	296	0	0	9	14	52	119	73	212	54	125	8	36	3	6	434	838
Jun 21	54	84	489	785	0	0	0	14	25	144	18	230	44	169	12	48	1	7	643	1,481
Jun 28	9	93	66	851	0	0	0	14	9	153	7	237	14	183	11	59	3	10	119	1,600
Jul 1	6	99	29	880	0	0	0	14	0	153	0	237	6	189	1	60	1	11	43	1,643
Jul 5	4	103	207	1,087	2	2	0	14	0	153	1	238	5	194	3	63	1	12	223	1,866
Jul 8	0	103	5	1,092	0	2	0	14	0	153	0	238	0	194	0	63	0	12	5	1,871
Jul 12	1	104	1	1,093	0	2	0	14	1	154	1	239	0	194	0	63	0	12	4	1,875
Jul 15	0	104	2	1,095	1	3	0	14	2	156	0	239	1	195	0	63	1	13	7	1,882
Jul 19	1	105	1	1,096	1	4	0	14	0	156	0	239	0	195	1	64	0	13	4	1,886
Jul 22	0	105	1	1,097	0	4	0	14	0	156	0	239	1	196	1	65	1	14	4	1,890
Jul 26	0	105	0	1,097	0	4	0	14	1	157	0	239	0	196	0	65	0	14	1	1,891
Aug 9	0	105	0	1,097	0	4	0	14	0	157	0	239	0	196	0	65	1	15	1	1,892
Aug 12	0	105	0	1,097	0	4	0	14	0	157	0	239	0	196	0	65	1	16	1	1,893

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Central District - west side set gillnet

	245-10 Chinitna Bay		245-20 Silver Salmon		245-30 Tuxedni Bay		245-40 Polly Cr.		245-50 L. J. Slough		245-55 Big River		245-60 W. Forelands		246-10 Kalgin - west		246-20 Kalgin - east		Total	
Date	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum
Jun 2	0	0	0	0	0	0	0	0	0	0	30	30	0	0	103	103	0	0	133	133
Jun 4	0	0	0	0	0	0	0	0	0	0	8	38	0	0	78	181	0	0	86	219
Jun 7	0	0	0	0	0	0	0	0	0	0	2	40	0	0	33	214	0	0	35	254
Jun 9	0	0	0	0	0	0	0	0	0	0	4	44	0	0	29	243	0	0	33	287
Jun 11	0	0	0	0	0	0	0	0	0	0	1	45	0	0	36	279	0	0	37	324
Jun 14	0	0	0	0	0	0	0	0	0	0	8	53	0	0	63	342	0	0	71	395
Jun 16	0	0	0	0	0	0	0	0	0	0	0	53	0	0	7	349	0	0	7	402
Jun 17	0	0	0	0	9	9	0	0	2	2	0	53	0	0	0	349	0	0	11	413
Jun 18	0	0	0	0	0	9	0	0	0	2	39	92	0	0	14	363	0	0	53	466
Jun 21	0	0	0	0	2	11	0	0	1	3	2	94	0	0	5	368	0	0	10	476
Jun 23	0	0	0	0	0	11	0	0	0	3	0	94	0	0	2	370	0	0	2	478
Jun 24	0	0	0	0	2	13	0	0	0	3	0	94	0	0	0	370	0	0	2	480
Jun 28	0	0	0	0	7	20	0	0	3	6	0	94	0	0	10	380	3	3	23	503
Jul 1	0	0	0	0	15	35	0	0	0	6	0	94	0	0	3	383	0	3	18	521
Jul 5	0	0	0	0	11	46	0	0	1	7	0	94	0	0	3	386	0	3	15	536
Jul 8	0	0	0	0	6	52	0	0	0	7	0	94	0	0	0	386	1	4	7	543
Jul 12	0	0	0	0	0	52	0	0	0	7	0	94	0	0	6	392	1	5	7	550
Jul 15	0	0	0	0	4	56	0	0	0	7	0	94	0	0	3	395	0	5	7	557
Jul 19	0	0	0	0	1	57	0	0	0	7	0	94	0	0	0	395	0	5	1	558
Jul 22	0	0	0	0	0	57	0	0	0	7	0	94	0	0	2	397	0	5	2	560
Jul 26	0	0	0	0	1	58	0	0	0	7	0	94	0	0	1	398	0	5	2	562
Jul 29	0	0	0	0	1	59	0	0	0	7	0	94	0	0	0	398	0	5	1	563
Aug 2	0	0	0	0	1	60	0	0	0	7	0	94	0	0	0	398	0	5	1	564
Aug 5	0	0	0	0	2	62	0	0	0	7	0	94	0	0	0	398	0	5	2	566

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Northern district set gillnet – Commercial Coho Catch 2021

	247-10 Trading Bay		247-20 Tyonek		247-30 Beluga		247-41 Susitna Flats		247-42 Pt. McKenzie		247-43 Fire Island		247-70 Pt. Possession		247-80 Birch Hill		247-90 #3 Bay		Total	
Date	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum
Jul 1	1	1	4	4	0	0	0	0	0	0	0	0	1	1	0	0	0	0	6	6
Jul 5	15	16	26	30	13	13	0	0	0	0	2	2	2	3	7	7	2	2	67	73
Jul 8	23	39	169	199	46	59	0	0	0	0	6	8	11	14	11	18	4	6	270	343
Jul 12	84	123	916	1,115	360	419	20	20	26	26	29	37	23	37	6	24	4	10	1,468	1,811
Jul 15	97	220	680	1,795	463	882	32	52	29	55	50	87	30	67	18	42	22	32	1,421	3,232
Jul 19	48	268	1,050	2,845	686	1,568	74	126	52	107	57	144	64	131	96	138	31	63	2,158	5,390
Jul 22	236	504	2,455	5,300	715	2,283	80	206	110	217	156	300	459	590	410	548	296	359	4,917	10,307
Jul 26	286	790	1,702	7,002	774	3,057	1,274	1,480	386	603	399	699	212	802	126	674	106	465	5,265	15,572
Jul 29	319	1,109	1,879	8,881	1,153	4,210	1,259	2,739	440	1,043	536	1,235	404	1,206	311	985	156	621	6,457	22,029
Aug 2	440	1,549	1,048	9,929	613	4,823	1,191	3,930	408	1,451	323	1,558	354	1,560	135	1,120	154	775	4,666	26,695
Aug 5	152	1,701	1,211	11,140	505	5,328	685	4,615	382	1,833	620	2,178	401	1,961	480	1,600	164	939	4,600	31,295
Aug 9	161	1,862	604	11,744	0	5,328	0	4,615	59	1,892	202	2,380	453	2,414	349	1,949	163	1,102	1,991	33,286
Aug 12	163	2,025	450	12,194	195	5,523	0	4,615	131	2,023	577	2,957	827	3,241	561	2,510	380	1,482	3,284	36,570
Aug 16	18	2,043	453	12,647	0	5,523	0	4,615	0	2,023	182	3,139	422	3,663	720	3,230	404	1,886	2,199	38,769
Aug 19	108	2,151	510	13,157	0	5,523	0	4,615	37	2,060	95	3,234	214	3,877	834	4,064	563	2,449	2,361	41,130
Aug 23	19	2,170	141	13,298	0	5,523	0	4,615	0	2,060	0	3,234	124	4,001	803	4,867	177	2,626	1,264	42,394
Aug 26	0	2,170	121	13,419	0	5,523	0	4,615	0	2,060	0	3,234	111	4,112	765	5,632	351	2,977	1,348	43,742
Aug 30	79	2,249	156	13,575	0	5,523	0	4,615	0	2,060	0	3,234	96	4,208	897	6,529	437	3,414	1,665	45,407
Sep 2	0	2,249	14	13,589	0	5,523	0	4,615	0	2,060	0	3,234	0	4,208	112	6,641	40	3,454	166	45,573
Sep 6	46	2,295	0	13,589	0	5,523	0	4,615	0	2,060	0	3,234	40	4,248	59	6,700	80	3,534	225	45,798
Sep 13	0	2,295	0	13,589	0	5,523	0	4,615	0	2,060	0	3,234	0	4,248	27	6,727	0	3,534	27	45,825

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Central District drift gillnet

		244-56 Exp. Ken/Kas		244-57 Exp. Ken/Kas/AP		244-60 Area 1 district wide		244-61 Kasilof section		244-60 Areas 3 and 4		245-10 Chinitna Bay		Total	
Date	Deliveries	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum
Jun 24	<3	0	0	0	0	1	1	0	0	0	0	0	0	1	1
Jun 28	4	0	0	0	0	9	10	0	0	0	0	0	0	9	10
Jul 1	22	0	0	0	0	26	36	0	0	0	0	0	0	26	36
Jul 5	63	0	0	0	0	115	151	0	0	0	0	0	0	115	151
Jul 8	139	0	0	0	0	596	747	0	0	0	0	0	0	596	747
Jul 12	147	0	0	0	0	1,013	1,760	0	0	0	0	0	0	1,013	1,760
Jul 13	68	143	143	0	0	0	1,760	0	0	0	0	0	0	143	1,903
Jul 14	69	170	313	0	0	0	1,760	0	0	0	0	0	0	170	2,073
Jul 15	219	0	313	0	0	2,941	4,701	0	0	0	0	0	0	2,941	5,014
Jul 19	225	0	313	0	0	7,217	11,918	0	0	0	0	0	0	7,217	12,231
Jul 20	151	0	313	1,641	1,641	0	11,918	0	0	0	0	0	0	1,641	13,872
Jul 21	174	0	313	4,564	6,205	0	11,918	0	0	0	0	0	0	4,564	18,436
Jul 22	201	0	313	3,417	9,622	0	11,918	0	0	0	0	0	0	3,417	21,853
Jul 26	226	0	313	0	9,622	17,488	29,406	0	0	0	0	0	0	17,488	39,341
Jul 27	157	0	313	2,738	12,360	0	29,406	0	0	0	0	0	0	2,738	42,079
Jul 28	59	0	313	933	13,293	0	29,406	0	0	0	0	0	0	933	43,012
Jul 29	137	1,461	1,774	0	13,293	0	29,406	0	0	0	0	0	0	1,461	44,473
Aug 1	125	0	1,774	2,886	16,179	0	29,406	0	0	0	0	0	0	2,886	47,359
Aug 2	176	0	1,774	0	16,179	6,504	35,910	0	0	0	0	0	0	6,504	53,863
Aug 3	103	0	1,774	2,153	18,332	0	35,910	0	0	0	0	0	0	2,153	56,016
Aug 4	150	0	1,774	2,122	20,454	0	35,910	0	0	0	0	0	0	2,122	58,138

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Appendix A9.–Commercial salmon catch per permit by statistical area, Upper Cook Inlet, 2021.

Gear	District	Subdistrict	Stat area	Permits[a]	Chinook	Sockeye	Coho	Pink	Chum	Total
Drift	Central	All	All	364	1	2,340	222	185	180	2,928
Set	Central	Upper	244-21	92	3	865	1	20	0	981
			244-22	85	3	829	1	23	0	941
			244-25	11	0	120	0	1	0	121
			244-31	49	5	1,385	0	4	0	1,443
			244-32	46	3	1,113	1	4	0	1,166
			244-41	53	8	1,920	3	8	0	1,992
			244-42	41	1	852	13	31	0	938
			All	377	3	1,080	2	16	0	1,478
		Kalgin Is.	246-10	24	17	1,758	343	84	27	2,252
			246-20	4	1	2,055	616	110	9	2,794
			All	28	14	1,801	382	87	25	2,337
		Chinitna	245-10	1	0	0	137	1	81	220
		Western	245-20	0	0	0	0	0	0	0
			245-30	16	4	1,026	212	26	81	1,365
			245-40	0	0	0	0	0	0	0
			245-50	5	1	220	143	9	3	380
			All	21	3	949	270	26	64	1,333
		Kustatan	245-55	10	9	357	93	2	0	471
			245-60	3	0	2,173	831	88	12	3,108
			All	13	7	776	263	22	3	1,084
		All	All	439	4	1,111	47	21	5	1,627
	Northern	General	247-10	8	13	548	287	9	4	870
			247-20	6	183	1,863	2,265	17	24	4,356
			247-30	7	1	831	789	116	141	1,885
			247-41	6	2	509	769	39	91	1,416
			247-42	8	20	385	258	18	51	740
			247-43	7	34	217	462	10	38	768
			All	42	38	691	746	34	57	1,608
		Eastern	247-70	11	18	861	386	109	17	1,402
			247-80	11	6	1,310	612	105	6	2,050
			247-90	7	2	2,643	505	133	2	3,292
			All	29	10	1,461	500	113	10	2,123
		All	All	71	27	1,006	645	66	37	1,853
	All	All	All	510	7	1,096	131	27	10	1,781
All	All	All	All	874	5	1,614	169	93	80	2,835

[a] Permit totals may be less than the sum of individual stat areas if the same permit was fished in multiple stat areas.

Appendix A10.–Emergency orders issued during the 2021 Upper Cook Inlet season.

Emergency Order no.	Effective date	Action	Reason
2S-01-21	May 31	Reduced the hours the directed king salmon commercial fishery was open from 7:00 AM to 7:00 PM to 7:00 AM to 1:00 PM in all waters of the Northern District of Upper Cook Inlet for the 2021 season. The fishing dates affected by the announcement were May 31, and June 7, 14, and 21.	In compliance with 5 AAC 21.366 that states if the Deshka River is restricted to catch-and-release fishing, the commercial king salmon fishery will shall be restricted to 6-hour fishing periods that occur from 7:00 AM to 7:00 PM
2S-02-21	Jun 17	Reduced the hours the personal use set gillnet fishery at the mouth of the Kasilof River is open from 6:00 AM to 11:00 PM to 9:00 AM to 11:00 PM daily, from Thursday, June 17, 2021, through Thursday, June 24, 2021.	To reduce the harvest of Kasilof River king salmon.
2S-03-21	Jun 21	Restored fishing time to 12 hours per open period, or from 7:00 AM until 7:00 PM for the remaining fishing period on June 21, 2021, in the directed king salmon commercial set gillnet fishery in the Northern District of Upper Cook Inlet.	In compliance with 5 AAC 21.366.
2S-04-21	Jun 25	Modified weekly fishing periods in the Upper Subdistrict of the Central District beginning 12:01 AM on June 25, 2021.	To reduce the harvest of Kenai bound king salmon and to comply with the Kenai River Late-Run King Salmon Management Plan.
2S-05-21	Jun 22	Opened commercial fishing with set gillnets in the Kasilof Section of the Upper Subdistrict from 8:00 AM until 8:00 PM on Tuesday, June 22, 2021. Opened drift gillnetting in the Kasilof Section from 8:00 AM until 8:00 PM on Tuesday, June 22, 2021.	To reduce the escapement rate of Kasilof River sockeye salmon.
2S-06-21	Jun 24	'Opened commercial fishing with set gillnets in the Kasilof Section of the Upper Subdistrict from 7:00 AM until 10:00 PM on Thursday, June 24, 2021.	To reduce the escapement rate of Kasilof River sockeye salmon.

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Appendix A17.–Number of salmon harvested by gear, area, and species in personal use fisheries, Upper Cook Inlet, 2021.

	Harvest					
Fishery	Chinook	Sockeye	Coho	Pink	Chum	Total
Kasilof Gillnet	94	18,212	17	157	17	18,497
Kasilof Dip Net	9	96,454	1,117	2,823	756	101,159
Kenai Dip Net	50	326,491	1,080	4,285	752	332,659
Fish Creek Dip Net	3	14,558	1,029	604	63	16,257
Beluga Dip Net	0	0	0	0	0	0
Susitna Dipnet	0	1385	902	426	111	2,824
No Site Reported	0	101	21	0	0	0
Total	156	457,201	4,166	8,295	1,699	471,396

Appendix A18.–Personal use sockeye salmon harvest by day, 2021.

	Kasilof gillnet		Kasilof dipnet		Kenai dipnet		Susitna dipnet	
Date	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum
Jun 15	2,451	2,451	–	–	–	–	–	–
Jun 16	1,964	4,415	–	–	–	–	–	–
Jun 17	1,800	6,215	–	–	–	–	–	–
Jun 18	1,882	8,097	–	–	–	–	–	–
Jun 19	2,559	10,656	–	–	–	–	–	–
Jun 20	1,781	12,437	–	–	–	–	–	–
Jun 21	1,772	14,209	–	–	–	–	–	–
Jun 22	1,151	15,360	–	–	–	–	–	–
Jun 23	842	16,202	–	–	–	–	–	–
Jun 24	487	16,689	–	–	–	–	–	–
Jun 25	–	–	761	761	–	–	–	–
Jun 26	–	–	771	1,532	–	–	–	–
Jun 27	–	–	829	2,361	–	–	–	–
Jun 28	–	–	834	3,195	–	–	–	–
Jun 29	–	–	1,450	4,645	–	–	–	–
Jun 30	–	–	1,241	5,886	–	–	–	–
Jul 1	–	–	898	6,784	–	–	–	–
Jul 2	–	–	2,225	9,009	–	–	–	–
Jul 3	–	–	1,585	10,594	–	–	–	–
Jul 4	–	–	2,317	12,911	–	–	–	–
Jul 5	–	–	873	13,784	–	–	–	–
Jul 6	–	–	1,148	14,932	–	–	–	–
Jul 7	–	–	1,462	16,394	–	–	–	–
Jul 8	–	–	757	17,151	–	–	–	–
Jul 9	–	–	1,439	18,590	–	–	–	–
Jul 10	–	–	2,566	21,156	1,951	1,951	1	1
Jul 11	–	–	2,810	23,966	2,154	4,105	0	1
Jul 12	–	–	1,578	25,544	2,209	6,314	0	1
Jul 13	–	–	1,130	26,674	1,871	8,185	0	1
Jul 14	–	–	1,713	28,387	3,315	11,500	9	10
Jul 15	–	–	1,749	30,136	3,703	15,203	0	10
Jul 16	–	–	3,603	33,739	6,624	21,827	0	10
Jul 17	–	–	4,406	38,145	10,874	32,701	33	43
Jul 18	–	–	2,267	40,412	9,734	42,435	0	43
Jul 19	–	–	2,674	43,086	18,070	60,505	0	43
Jul 20	–	–	3,025	46,111	22,127	82,632	0	43
Jul 21	–	–	2,113	48,224	16,415	99,047	230	273
Jul 22	–	–	3,091	51,315	23,261	122,308	0	273
Jul 23	–	–	4,464	55,779	28,016	150,324	0	273
Jul 24	–	–	4,875	60,654	28,135	178,459	348	621
Jul 25	–	–	2,907	63,561	20,567	199,026	0	621
Jul 26	–	–	2,565	66,126	18,151	217,177	0	621
Jul 27	–	–	1,860	67,986	15,729	232,906	0	621
Jul 28	–	–	2,005	69,991	13,801	246,707	375	996
Jul 29	–	–	1,811	71,802	13,541	260,248	0	996
Jul 30	–	–	2,196	73,998	13,741	273,989	0	996
Jul 31	–	–	2,596	76,594	17,958	291,947	261	1,257
Aug 1	–	–	1,411	78,005	–	–	–	–
Aug 2	–	–	1,039	79,044	–	–	–	–
Aug 3	–	–	906	79,950	–	–	–	–
Aug 4	–	–	1,087	81,037	–	–	–	–
Aug 5	–	–	854	81,891	–	–	–	–
Aug 6	–	–	1,056	82,947	–	–	–	–
Aug 7	–	–	1,188	84,135	–	–	–	–

Note: En dash (–) = no data; Cum = cumulative.

Appendix A21.–Total sockeye salmon harvest from all sources in Upper Cook Inlet, 1996–2021.

	Commercial				Sport[a,b,c]			Personal use					Sub./Edu.		
Year	Drift	Set	Test fish	All	Kenai River	All other UCI	All	Kasilof gillnet	Kasilof dipnet	Kenai dipnet	Other[d]	All	Sub.[e]	Edu.[e]	Total
1996	2,205,067	1,683,855	2,424	3,891,346	205,976	16,863	222,839	9,506	11,197	102,821	22,021	145,545	259	2,405	4,262,394
1997	2,197,961	1,979,034	2,301	4,179,296	190,699	23,591	214,290	17,997	9,737	114,619	6,587	148,940	593	3,076	4,546,195
1998	599,396	620,121	5,456	1,224,973	189,885	23,477	213,362	15,975	45,161	103,847	11,598	176,581	636	3,567	1,619,119
1999	1,413,995	1,266,523	11,766	2,692,284	233,768	26,078	259,846	12,832	37,176	149,504	9,077	208,589	599	3,037	3,164,355
2000	656,427	666,055	9,450	1,331,932	261,779	32,194	293,973	14,774	23,877	98,262	12,354	149,267	442	2,933	1,778,547
2001	846,275	980,576	3,381	1,830,232	219,478	30,953	250,431	17,201	37,612	150,766	13,109	218,688	686	4,633	2,304,670
2002	1,367,251	1,405,867	37,983	2,811,101	259,759	21,770	281,529	17,980	46,769	180,028	14,846	259,623	623	3,722	3,356,598
2003	1,593,638	1,882,523	13,968	3,490,129	314,456	36,076	350,532	15,706	43,870	223,580	15,675	298,831	544	5,993	4,146,029
2004	2,529,642	2,397,442	10,677	4,937,761	317,233	28,823	346,056	25,417	48,315	262,831	13,527	350,090	484	5,237	5,639,628
2005	2,520,327	2,718,372	12,064	5,250,763	312,835	21,826	334,661	26,609	43,151	295,496	4,520	369,776	238	7,134	5,962,572
2006	784,771	1,407,959	10,698	2,203,428	203,602	24,517	228,119	28,867	56,144	127,630	3,406	216,047	408	5,444	2,653,446
2007	1,823,481	1,493,298	10,649	3,327,428	326,325	28,504	354,829	14,943	43,293	291,270	6,729	356,235	567	5,773	4,044,832
2008	983,303	1,396,832	16,957	2,397,092	254,387	30,155	284,542	23,432	54,051	234,109	6,890	318,482	450	4,761	3,005,327
2009	968,075	1,077,719	13,948	2,059,742	287,806	120,650	408,456	26,646	73,035	339,993	18,006	457,680	253	7,190	2,933,321
2010	1,587,657	1,240,685	6,670	2,835,012	316,233	55,831	372,064	21,924	70,774	389,552	32,052	514,302	865	5,652	3,727,895
2011	3,201,035	2,076,960	5,660	5,283,655	410,709	59,498	470,207	26,780	49,766	537,765	16,068	630,379	700	8,048	6,392,989
2012	2,924,144	209,695	11,839	3,145,678	471,096	50,164	521,260	15,638	73,419	526,992	13,304	629,353	441	4,418	4,301,150
2013	1,662,561	1,020,663	5,283	2,688,507	458,522	77,833	536,355	14,439	85,528	347,222	7,126	454,315	333	6,185	3,685,695
2014	1,501,678	842,356	5,648	2,349,682	380,055	89,785	469,840	22,567	88,513	379,823	15,144	506,047	587	7,724	3,333,880
2015	1,012,684	1,636,983	2,378	2,652,045	392,116	73,876	465,992	27,567	89,000	377,532	27,951	522,050	800	9,170	3,650,057
2016	1,266,696	1,130,112	2,096	2,398,904	342,446	53,768	396,214	26,539	58,723	259,057	4,837	349,156	659	7,449	3,152,382
2017	880,279	968,571	2,701	1,851,551	302,441	58,866	361,307	21,927	78,260	297,049	9,654	406,890	911	10,968	2,631,627
2018	400,285	417,610	1,546	819,441	188,715	43,042	231,757	14,390	92,034	165,028	2,085	273,537	622	8,581	1,390,877
2019	749,101	971,194	1,859	1,722,154	495,723	97,192	592,915	15,864	80,730	331,408	3,961	431,963	708	9,372	2,757,112
2020	283,727	412,027	1,562	697,316	300,000	58,000	358,000	14,745	94,064	257,864	32,321	398,994	557	9,379	1,464,246
2021	851,901	558,941	2,245	1,413,087	326,000	62,174	388,039	18,497	96,454	326,491	5,348	457,202	642	11,663	2,270,633

[a] Sport harvest in the Kenai River includes late-run stock only; early-run Russian River sockeye salmon harvest is excluded.

[b] Sport harvest is estimated from the annual state-wide sport fish harvest survey.

[c] Sport harvest in 2021 is unknown until the state-wide harvest survey is finalized; these figures are estimates based on previous 5-year averages.

[d] Area of harvest not identified on returned permits, other than Fish Creek dip net, which was open from 1996–2001, 2009–2010, & 2014–2015, 2017–2019 and Beluga dip net (2008–2019).

[e] See Appendices B15 and B16 for individual Sub. (Subsistence), Edu. (Educational) fishery harvests.

Appendix A22.–Hours fished in the Upper Subdistrict set gillnet fishery, 2021.

	Week of June 20–26						
	Sun 20	Mon 21	Tue 22	Wed 23	Thu 24	Fri 25	Sat 26
Midnight							
1							
2							
3							
4							
5							
6							
7					EO#6		
8			EO#5				
9							
10							
11							EO#7
Noon							
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							

	Week of June 26–July 3						
	Sun 27	Mon 28	Tue 29	Wed 30	Thu 1	Fri 2	Sat 3
Midnight							
1							
2							
3							
4							
5					EO#9		
6							
7		EO#8					
8							
9							
10							EO#10
11							
Noon							
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							

Regular Fishing Periods	EO #5	Kasilof Section from 8 AM to 8 PM
Additional Fishing Time	EO #6	Kasilof Section from 7 AM to 10 PM
No Commercial Fishing	EO #7	Kasilof Section from 10 AM to midnight

EO #8	Kasilof Section from 7 AM to 10 PM
EO #9	Kasilof Section &NKB 600ft from 4 AM to 7 PM
EO #10	Kasilof Section &NKB 600ft from 7 AM to midnight

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APPENDIX B: HISTORICAL DATA

Appendix B1.–Upper Cook Inlet commercial Chinook salmon harvest by gear type and area, 1970–2021. + Percentage

	Central District						Northern District		
	Drift gillnet		Upper subdistrict set		Kalgin/west side set		Set gillnet		
Year	Number[b]	%	Number[b]	%	Number[b]	%	Number[b]	%	Total
1970	356	4.3	5,368	64.4	1,152	13.8	1,460	17.5	8,336
1971	237	1.2	7,055	35.7	2,875	14.5	9,598	48.6	19,765
1972	375	2.3	8,599	53.5	2,199	13.7	4,913	30.5	16,086
1973	244	4.7	4,411	84.9	369	7.1	170	3.3	5,194
1974	422	6.4	5,571	84.5	434	6.6	169	2.6	6,596
1975	250	5.2	3,675	76.8	733	15.3	129	2.7	4,787
1976	690	6.4	8,249	75.9	1,469	13.5	457	4.2	10,865
1977	3,411	23.1	9,730	65.8	1,084	7.3	565	3.8	14,790
1978	2,072	12.0	12,468	72.1	2,093	12.1	666	3.8	17,299
1979	1,089	7.9	8,671	63.1	2,264	16.5	1,714	12.5	13,738
1980	889	6.4	9,643	69.9	2,273	16.5	993	7.2	13,798
1981	2,320	19.0	8,358	68.3	837	6.8	725	5.9	12,240
1982	1,293	6.2	13,658	65.4	3,203	15.3	2,716	13.0	20,870
1983	1,125	5.5	15,042	72.9	3,534	17.1	933	4.5	20,634
1984	1,377	13.7	6,165	61.3	1,516	15.1	1,004	10.0	10,062
1985	2,048	8.5	17,723	73.6	2,427	10.1	1,890	7.8	24,088
1986	1,834	4.7	19,826	50.5	2,108	5.4	15,488	39.5	39,256
1987	4,552	11.5	21,159	53.6	1,029	2.6	12,700	32.2	39,440
1988	2,237	7.7	12,859	44.2	1,148	3.9	12,836	44.1	29,080
1989	0	0.0	10,914	40.8	3,092	11.6	12,731	47.6	26,737
1990	621	3.9	4,139	25.7	1,763	10.9	9,582	59.5	16,105
1991	246	1.8	4,893	36.1	1,544	11.4	6,859	50.6	13,542
1992	615	3.6	10,718	62.4	1,284	7.5	4,554	26.5	17,171
1993	765	4.1	14,079	74.6	720	3.8	3,307	17.5	18,871
1994	464	2.3	15,575	78.0	730	3.7	3,193	16.0	19,962
1995	594	3.3	12,068	67.4	1,101	6.2	4,130	23.1	17,893
1996	389	2.7	11,564	80.8	395	2.8	1,958	13.7	14,306

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	Central District						Northern District		
	Drift gillnet		Upper subdistrict set		Kalgin/west side set		Set gillnet		
Year	Number[a]	%	Number[a]	%	Number[a]	%	Number[a]	%	Total
1997	627	4.7	11,325	85.2	207	1.6	1,133	8.5	13,292
1998	335	4.1	5,087	62.6	155	1.9	2,547	31.4	8,124
1999	575	4.0	9,463	65.8	1,533	10.7	2,812	19.6	14,383
2000	270	3.7	3,684	50.1	1,089	14.8	2,307	31.4	7,350
2001	619	6.7	6,009	64.6	856	9.2	1,811	19.5	9,295
2002	415	3.3	9,478	74.5	926	7.3	1,895	14.9	12,714
2003	1,240	6.7	14,810	80.0	770	4.2	1,683	9.1	18,503
2004	1,104	4.1	21,684	80.5	2,208	8.2	1,926	7.2	26,922
2005	1,958	7.1	21,597	78.1	739	2.7	3,373	12.2	27,667
2006	2,782	15.4	9,956	55.2	1,030	5.7	4,261	23.6	18,029
2007	912	5.2	12,292	69.7	603	3.4	3,818	21.7	17,625
2008	653	4.9	7,573	56.8	1,124	8.4	3,983	29.9	13,333
2009	859	9.8	5,588	63.9	672	7.7	1,631	18.6	8,750
2010	538	5.4	7,059	71.3	553	5.6	1,750	17.7	9,900
2011	593	5.3	7,697	68.4	659	5.9	2,299	20.4	11,248
2012	218	8.6	705	27.9	555	22.0	1,049	41.5	2,527
2013	493	9.1	2,988	55.4	590	10.9	1,327	24.6	5,398
2014	382	8.2	2,301	49.4	507	10.9	1,470	31.5	4,660
2015	556	5.1	7,781	72.1	538	5.0	1,923	17.8	10,798
2016	606	6.0	6,759	67.4	460	4.6	2,202	22.0	10,027
2017	264	3.4	4,779	62.4	387	5.1	2,230	29.1	7,660
2018	503	14.8	2,312	67.9	447	13.1	143	4.2	3,405
2019	178	5.7	2,246	71.3	523	16.6	202	6.4	3,149
2020	181	6.0	852	28.3	317	10.5	1,658	55.1	3,008
2021	217	5.5	1,297	32.6	566	14.2	1,893	47.6	3,973
1970–2020 Avg[b]	948	7	9,106	64	1,155	9	3,043	20	14,251
2011–2020 Avg	397	7	3,842	57	498	10	1,754	25	6,188

[a] Harvest data prior to 2022 reflect minor adjustments to historical catch database.

[b] 1989 was not used in averages, as the drift fleet did not fish due to the Exxon Valdez oil spill, and this influenced all other fisheries.

Appendix B2.–Upper Cook Inlet commercial sockeye salmon harvest by gear type and area, 1970–2021. + Percentage

	Central District						Northern District		
	Drift gillnet		upper subdistrict set		Kalgin/West side set		set gillnet		
Year	Number[a]	%	Number[a]	%	Number[a]	%	Number[a]	%	Total
1970	460,690	62.9	142,701	19.5	62,723	8.6	66,458	9.1	732,572
1971	423,107	66.5	111,505	17.5	61,144	9.6	40,533	6.4	636,289
1972	506,281	57.5	204,599	23.3	83,176	9.5	85,755	9.7	879,811
1973	375,695	56.1	188,816	28.2	59,973	8.9	45,614	6.8	670,098
1974	265,771	53.5	136,889	27.5	52,962	10.7	41,563	8.4	497,185
1975	368,124	53.8	177,336	25.9	73,765	10.8	65,526	9.6	684,751
1976	1,055,786	63.4	476,376	28.6	62,338	3.7	69,649	4.2	1,664,149
1977	1,073,098	52.3	751,178	36.6	104,265	5.1	123,750	6.0	2,052,291
1978	1,803,479	68.8	660,797	25.2	105,767	4.0	51,378	2.0	2,621,421
1979	454,707	49.2	247,359	26.8	108,422	11.7	113,918	12.3	924,406
1980	770,247	48.9	559,812	35.6	137,882	8.8	105,647	6.7	1,573,588
1981	633,380	44.0	496,003	34.5	60,217	4.2	249,662	17.3	1,439,262
1982	2,103,429	64.5	971,423	29.8	66,952	2.1	118,060	3.6	3,259,864
1983	3,222,428	63.8	1,508,511	29.9	134,575	2.7	184,219	3.6	5,049,733
1984	1,235,337	58.6	490,273	23.3	162,139	7.7	218,965	10.4	2,106,714
1985	2,032,957	50.1	1,561,200	38.4	285,081	7.0	181,191	4.5	4,060,429
1986	2,837,857	59.2	1,658,671	34.6	153,714	3.2	141,830	3.0	4,792,072
1987	5,638,916	59.5	3,457,724	36.5	208,036	2.2	164,572	1.7	9,469,248
1988	4,139,358	60.5	2,428,385	35.5	146,377	2.1	129,713	1.9	6,843,833
1989	5	0.0	4,543,492	90.7	186,828	3.7	280,801	5.6	5,011,126
1990	2,305,742	64.0	1,117,621	31.0	84,949	2.4	96,398	2.7	3,604,710
1991	1,118,138	51.3	844,603	38.8	99,855	4.6	116,201	5.3	2,178,797
1992	6,069,495	66.6	2,838,076	31.2	131,304	1.4	69,478	0.8	9,108,353
1993	2,558,732	53.8	1,941,798	40.8	108,181	2.3	146,633	3.1	4,755,344
1994	1,901,475	53.3	1,458,162	40.9	85,830	2.4	120,142	3.4	3,565,609
1995	1,773,873	60.1	961,227	32.6	107,898	3.7	109,098	3.7	2,952,096
1996	2,205,067	56.7	1,483,008	38.1	96,719	2.5	104,128	2.7	3,888,922

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	Central District						Northern District		
	Drift gillnet		Upper subdistrict set		Kalgin/West side set		Set gillnet		
Year	Number[a]	%	Number[a]	%	Number[a]	%	Number[a]	%	Total
1997	2,197,961	52.6	1,832,856	43.9	48,723	1.2	97,455	2.3	4,176,995
1998	599,396	49.2	512,306	42.0	47,165	3.9	60,650	5.0	1,219,517
1999	1,413,995	52.8	1,092,946	40.8	114,454	4.3	59,123	2.2	2,680,518
2000	656,427	49.6	529,747	40.1	92,477	7.0	43,831	3.3	1,322,482
2001	846,275	46.3	870,019	47.6	59,709	3.3	50,848	2.8	1,826,851
2002	1,367,251	49.3	1,303,158	47.0	69,609	2.5	33,100	1.2	2,773,118
2003	1,593,638	45.8	1,746,841	50.3	87,193	2.5	48,489	1.4	3,476,161
2004	2,529,642	51.3	2,235,810	45.4	134,356	2.7	27,276	0.6	4,927,084
2005	2,520,327	48.1	2,534,345	48.4	157,612	3.0	26,415	0.5	5,238,699
2006	784,771	35.8	1,301,275	59.3	94,054	4.3	12,630	0.6	2,192,730
2007	1,823,481	55.0	1,353,407	40.8	122,424	3.7	17,467	0.5	3,316,779
2008	983,303	41.3	1,303,236	54.8	67,366	2.8	26,230	1.1	2,380,135
2009	968,075	47.3	905,853	44.3	131,214	6.4	40,652	2.0	2,045,794
2010	1,587,657	56.1	1,085,789	38.4	114,719	4.1	40,177	1.4	2,828,342
2011	3,201,035	60.6	1,877,939	35.6	163,539	3.1	35,482	0.7	5,277,995
2012	2,924,144	93.3	96,675	3.1	90,440	2.9	22,580	0.7	3,133,839
2013	1,662,561	62.0	921,533	34.3	75,707	2.8	23,423	0.9	2,683,224
2014	1,501,678	64.1	724,398	30.9	80,271	3.4	37,687	1.6	2,344,034
2015	1,012,684	38.2	1,481,336	55.9	99,771	3.8	55,876	2.1	2,649,667
2016	1,266,746	52.8	997,853	41.6	85,194	3.6	47,150	2.0	2,396,943
2017	880,279	47.6	832,220	45.0	79,788	4.3	56,956	3.1	1,849,243
2018	400,269	48.9	289,841	35.4	75,217	9.2	52,552	6.4	817,895
2019	749,101	43.5	784,543	45.6	113,695	6.6	73,220	4.3	1,720,559
2020	283,727	40.8	295,341	42.4	68,864	9.9	47,822	6.9	695,754
2021	851,901	60.4	407,007	28.9	80,443	5.7	71,417	5.1	1,410,768
1970–2020 Avg[b]	1,621,752	54.6	1,075,666	36.5	102,356	4.9	79,943	4.0	2,879,718
2011–2020 Avg	1,388,222	55.2	830,168	37.0	93,249	5.0	45,275	2.9	2,356,915

[a] Harvest data prior to 2022 reflect minor adjustments to historical catch database.

[b] 1989 was not used in averages as the drift fleet did not fish due to the Exxon Valdez oil spill and this influenced all other fisheries.

Appendix B3.–Upper Cook Inlet commercial coho salmon harvest by gear type and area, 1970–2021. + Percentage

	Central District						Northern District		
	Drift gillnet		Upper subdistrict set		Kalgin/West side set		Set gillnet		
Year	Number[a]	%	Number[a]	%	Number[a]	%	Number[a]	%	Total
1970	110,070	40.0	30,114	10.9	52,299	19.0	82,722	30.1	275,205
1971	35,491	35.4	16,589	16.5	26,188	26.1	22,094	22.0	100,362
1972	21,577	26.7	24,673	30.5	15,300	18.9	19,346	23.9	80,896
1973	31,784	30.4	23,901	22.9	24,784	23.7	23,951	22.9	104,420
1974	75,640	37.8	36,837	18.4	40,610	20.3	47,038	23.5	200,125
1975	88,579	39.0	46,209	20.3	59,537	26.2	33,051	14.5	227,376
1976	80,712	38.7	47,873	22.9	42,243	20.2	37,835	18.1	208,663
1977	110,184	57.2	23,693	12.3	38,093	19.8	20,623	10.7	192,593
1978	76,259	34.8	34,134	15.6	61,711	28.2	47,089	21.5	219,193
1979	114,496	43.2	29,284	11.0	68,306	25.8	53,078	20.0	265,164
1980	89,510	33.0	40,281	14.8	51,527	19.0	90,098	33.2	271,416
1981	226,366	46.7	36,024	7.4	88,390	18.2	133,625	27.6	484,405
1982	416,274	52.5	108,393	13.7	182,205	23.0	85,352	10.8	792,224
1983	326,965	63.3	37,694	7.3	97,796	18.9	53,867	10.4	516,322
1984	213,423	47.4	37,166	8.3	84,618	18.8	114,786	25.5	449,993
1985	357,388	53.6	70,657	10.6	147,331	22.1	91,837	13.8	667,213
1986	506,818	66.9	76,495	10.1	85,932	11.4	88,108	11.6	757,353
1987	202,506	44.8	74,981	16.6	75,201	16.6	97,062	21.9	449,750
1988	278,828	49.6	54,975	9.9	77,503	13.8	149,742	26.7	561,048
1989	856	0.2	82,333	24.1	81,004	23.9	175,738	51.8	339,931
1990	247,453	49.3	40,351	8.0	73,429	14.6	140,506	28.0	501,739
1991	176,245	41.2	30,436	7.1	87,515	20.6	132,302	31.0	426,498
1992	267,300	57.0	57,078	12.2	53,419	11.4	91,133	19.4	468,930
1993	121,829	39.7	43,098	14.0	35,661	11.6	106,294	34.6	306,882
1994	310,114	52.7	68,449	11.9	61,166	10.5	144,064	24.8	583,793
1995	241,473	54.0	44,751	10.0	71,606	16.0	89,300	20.0	447,130
1996	171,434	53.3	40,724	12.6	31,405	9.8	78,105	24.3	321,668

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Year	Central District Drift gillnet Number[a]	%	Central District upper subdistrict set Number[a]	%	Central District Kalgin/West side set Number[a]	%	Northern District set gillnet Number[a]	%	Total
1997	78,666	51.6	19,668	12.9	16,705	11.0	37,369	24.5	152,408
1998	83,338	51.9	18,677	11.6	24,286	15.1	34,387	21.4	160,688
1999	64,814	51.5	11,923	9.3	17,725	14.1	31,643	25.1	126,105
2000	131,478	55.5	11,078	4.7	22,840	9.6	71,475	30.2	236,871
2001	39,418	34.8	4,246	3.7	23,719	20.9	45,928	40.5	113,311
2002	125,831	51.1	35,153	14.3	35,005	14.2	50,292	20.4	246,281
2003	52,432	51.5	10,171	10.0	15,138	14.9	24,015	23.6	101,756
2004	199,587	64.2	30,154	9.7	36,498	11.7	44,819	14.4	311,058
2005	144,753	64.4	19,543	8.7	29,502	13.1	30,859	13.7	224,657
2006	98,473	55.4	22,167	12.5	36,845	20.7	20,368	11.5	177,853
2007	108,703	61.3	23,610	13.3	23,495	13.2	21,531	12.1	177,339
2008	89,428	52.0	21,823	12.7	18,441	10.7	42,177	24.5	171,869
2009	82,096	53.6	11,435	7.5	22,050	14.4	37,629	24.6	153,210
2010	110,275	53.2	32,683	15.8	26,281	12.7	38,111	18.4	207,350
2011	40,858	42.9	15,560	16.3	16,760	17.6	22,113	23.2	95,291
2012	74,678	69.9	6,537	6.1	12,354	11.6	13,206	12.4	106,775
2013	184,771	70.8	2,266	0.9	31,513	12.1	42,413	16.3	260,963
2014	76,932	56.0	5,908	4.3	19,379	14.1	35,200	25.6	137,419
2015	130,720	60.5	17,948	8.3	20,748	9.6	46,616	21.6	216,032
2016	90,242	61.2	11,606	7.9	15,171	10.3	30,476	20.7	147,495
2017	191,490	63.1	29,916	9.9	29,535	9.7	52,701	17.4	303,642
2018	108,906	46.9	4,705	2.0	51,581	22.2	67,098	28.9	232,290
2019	88,618	54.1	6,511	4.0	16,799	10.3	51,935	31.7	163,859
2020	48,803	35.0	372	0.3	35,612	25.6	54,453	39.1	139,240
2021	80,982	54.9	883	0.6	19,702	13.4	45,825	31.1	147,392
1970–2020 Avg[b]	146,881	50.0	30,970	11.3	46,635	16.5	60,396	22.3	284,882
2011–2020 Avg	103,602	56.0	10,133	6.0	24,945	14.3	41,621	23.7	180,301

[a] 1989 was not used in averages, as the drift fleet did not fish due to the Exxon Valdez oil spill, and this influenced all other fisheries.

[b] Harvest data prior to 2022 reflect minor adjustments to historical catch database.

Appendix B4.–Upper Cook Inlet commercial pink salmon harvest by gear type and area, 1970–2021.

	Central District						Northern District		
	Drift gillnet		Upper subdistrict set		Kalgin/West side set		Set gillnet		
Year	Pink[a]	%	Pink[a]	%	Pink[a]	%	Pink[a]	%	Total
1970	334,737	41.1	281,067	34.5	24,763	3.0	174,193	21.4	814,760
1971	6,433	18.1	18,097	50.8	2,637	7.4	8,423	23.7	35,590
1972	115,117	18.3	403,706	64.2	18,913	3.0	90,830	14.5	628,566
1973	91,901	28.2	80,596	24.7	16,437	5.0	137,250	42.1	326,184
1974	140,432	29.0	291,408	60.2	9,014	1.9	42,876	8.9	483,730
1975	113,868	33.9	112,423	33.4	19,086	5.7	90,953	27.0	336,330
1976	599,594	47.7	479,024	38.1	30,030	2.4	148,080	11.8	1,256,728
1977	286,308	51.7	125,817	22.7	25,212	4.6	116,518	21.0	553,855
1978	934,442	55.3	372,601	22.1	54,785	3.2	326,614	19.3	1,688,442
1979	19,554	26.8	19,983	27.4	7,061	9.7	26,382	36.1	72,980
1980	964,526	54.0	299,444	16.8	47,963	2.7	474,488	26.6	1,786,421
1981	53,888	42.4	15,654	12.3	4,276	3.4	53,325	41.9	127,143
1982	270,380	34.2	432,715	54.7	14,242	1.8	73,307	9.3	790,644
1983	26,629	37.9	18,309	26.0	3,785	5.4	21,604	30.7	70,327
1984	273,565	44.3	220,895	35.8	16,708	2.7	106,284	17.2	617,452
1985	34,228	39.0	17,715	20.2	5,653	6.4	30,232	34.4	87,828
1986	615,522	47.3	530,974	40.8	15,460	1.2	139,002	10.7	1,300,958
1987	38,714	35.4	47,243	43.2	5,229	4.8	18,203	16.6	109,389
1988	227,885	48.4	176,043	37.4	12,942	2.7	54,210	11.5	471,080
1989	2	0.0	37,982	56.3	5,580	8.3	23,878	35.4	67,442
1990	323,955	53.7	225,429	37.3	10,302	1.7	43,944	7.3	603,630
1991	5,791	39.5	2,670	18.2	1,049	7.2	5,153	35.1	14,663
1992	423,738	60.9	244,068	35.1	4,250	0.6	23,805	3.4	695,861
1993	46,463	46.0	41,690	41.3	2,313	2.3	10,468	10.4	100,934
1994	256,248	49.0	234,827	44.9	3,178	0.6	29,181	5.6	523,434
1995	64,632	48.4	53,420	40.0	3,813	2.9	11,713	8.8	133,578
1996	122,728	50.5	95,717	39.4	3,792	1.6	20,674	8.5	242,911

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Appendix B15.–Upper Cook Inlet subsistence and or personal use fishery salmon harvests (1990–2021 for Tyonek, 1996–2021 for Yentna).

Tyonek subsistence fishery								
	No. of permits							
Year	Issued	Returned	Chinook	Sockeye	Coho	Pink	Chum	Total
1990	42	37	886	75	400	14	23	1,397
1991	57	54	925	20	69	0	0	1,014
1992	57	44	1,170	96	294	24	9	1,594
1993	62	54	1,566	68	88	25	23	1,769
1994	58	49	905	101	122	27	0	1,154
1995	70	55	1,632	54	186	18	0	1,891
1996	73	49	1,615	88	177	9	27	1,917
1997	70	42	1,051	200	241	13	0	1,505
1998	74	49	1,430	251	97	3	2	1,783
1999	77	54	1,620	247	175	20	66	2,127
2000	60	47	1,461	78	103	0	8	1,649
2001	84	58	1,450	254	72	9	6	1,790
2002	101	71	1,609	314	162	6	14	2,106
2003	87	74	1,384	136	54	12	9	1,595
2004	97	75	1,751	121	168	0	0	2,040
2005	78	67	1,183	65	159	2	0	1,409
2006	82	55	1,366	32	23	1	0	1,422
2007	84	67	1,526	249	164	3	4	1,946
2008	94	77	1,492	146	227	11	16	1,892
2009	89	69	817	229	320	2	1	1,369
2010	105	77	1,116	281	223	3	3	1,626
2011	114	63	851	202	34	10	10	1,107
2012	89	69	1,102	223	174	3	5	1,507
2013	82	48	1,352	278	311	0	32	1,973
2014	92	73	896	487	575	15	5	1,978
2015	83	72	1,070	505	568	16	6	2,165
2016	74	64	1,030	188	225	8	12	1,462
2017	74	47	1,284	457	265	32	6	2,045
2018	65	22	1,413	217	154	10	11	1,805
2019	67	38	1,132	232	75	6	17	1,462
2020	54	15	1,342	164	423	0	0	1,929
2021	47	10	1,022	93	89	0	0	1,204

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Yentna subsistence fishery								
Year	No. of permits Issued	Returned	Chinook	Sockeye	Coho	Pink	Chum	Total
Personal use								
1996	17	14	0	242	46	115	51	454
1997	24	21	0	549	83	30	10	672
Subsistence								
1998	21	18	0	495	113	30	15	653
1999	18	16	0	516	48	18	13	595
2000	19	19	0	379	92	4	7	482
2001	16	15	0	545	50	10	4	609
2002	25	22	0	454	133	14	31	632
2003	19	15	0	553	67	2	8	630
2004	21	19	0	441	146	36	3	626
2005	18	17	0	177	42	24	25	268
2006	22	22	0	368	175	14	26	583
2007	22	22	0	367	66	17	18	468
2008	16	16	0	310	57	23	7	397
2009	17	17	0	253	14	0	6	273
2010	32	32	0	642	50	38	18	748
2011	25	25	0	598	90	337	21	1,046
2012	21	21	0	279	24	21	19	343
2013	22	19	0	160	92	128	32	412
2014	20	18	0	328	84	17	32	461
2015	29	27	0	578	151	47	69	845
2016	26	25	0	514	204	36	37	791
2017	26	26	0	454	185	47	10	696
2018	29	29	16	405	167	8	10	606
2019	24	22	0	476	107	40	18	641
2020	24	24	5	393	155	18	16	587
2021	25	25	13	549	186	5	11	712