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**Summary of Bristol Bay Sockeye Salmon Harvests by  
Gear Type, 2009–2012: a Report to the Alaska Board of  
Fisheries**

**by**

**Paul Salomone**

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November 2012

Alaska Department of Fish and Game

Divisions of Sport Fish and Commercial Fisheries



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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.

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

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**SUMMARY OF BRISTOL BAY SOCKEYE SALMON HARVESTS  
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ALASKA BOARD OF FISHERIES**

by

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Division of Sport Fish, Research and Technical Services  
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## ABSTRACT

The purpose of this report is to provide the Alaska Board of Fisheries with background information regarding fishing effort and sockeye salmon (*Oncorhynchus nerka*) harvest by gear type in the Bristol Bay commercial salmon fishery. Data in this report were obtained from previous reports to the board in 2003 from the Commercial Fisheries Entry Commission, and from the commercial fisheries fish ticket database. Information in this report is considered final for all years through 2011. The 2012 data are preliminary. For a more complete historical perspective, data from 1965 to 2012 are included.

Key words: Alaska Board of Fisheries, board, BOF, effort, harvest, gear type, Commercial Fisheries Entry Commission, CFEC, sockeye salmon, *Oncorhynchus nerka*.

## INTRODUCTION

By regulation (5 AAC 06.330), drift and set gillnets are the only two types of legal fishing gear in the Bristol Bay commercial salmon *Oncorhynchus* spp fishery. Drift gillnet fishermen are limited to 150 fathoms of gear, while set gillnet fishermen are limited to 50 fathoms, except that under dual permit regulations, 200 fathoms of gear can be used by drift gillnetters (5 AAC 06.333). Set gillnetters are allowed to own two permits and operate two full complements of gear (5 AAC 06.331(u)); however, that regulation is scheduled to sunset in 2012. Set gillnets fished in the Naknek-Kvichak, Egegik, Ugashik, and Togiak districts must be at least 300 feet apart, while in the Nushagak District set gillnets must be at least 450 feet apart. There is no minimum distance required between drift gillnets, but drift gillnets must be at least 300 feet from the side of a set gillnet or at least 100 feet from the offshore end of a set gillnet out to the allowable offshore distance for set gillnets (see 5 AAC 06.335 and 5 AAC 06.331(m) and (n)). In the Ugashik River Special Harvest Area (URSHA), Wood River Special Harvest Area (WRSHA), and Naknek River Special Harvest Area (NRSHA), reduced limits of gear and reduced distances between gear apply (see URSHA 5 AAC 06.357(e), WRSHA 5 AAC 06.358(1) and (2), NRSHA 5 AAC 06.360(d) and (e)).

The five fishing districts of Bristol Bay are illustrated in Figure 1. The drift fleet's mobility enables it to fish more than one district and many drift fishermen will land fish in more than one district in a given season. Most set gillnetters usually fish one district in a season. Set gillnet fishermen are less mobile and are limited by availability of fishing sites, existing tideland leases, and the base of operation necessary to conduct set gillnet fishing activities, mainly fish delivery logistics. However, both gear groups have evolved to take full advantage of available fishing opportunities and are effective in harvesting substantial numbers of salmon in relatively short time periods.

For this report, annual total effort in a district is defined as the total number of permits that had at least one delivery recorded within that district for the season. Average sockeye salmon *O. nerka* catches were calculated using total effort for each district.

In 1997, the board allocated sockeye salmon harvests in the Naknek-Kvichak, Egegik, Ugashik, and Nushagak districts between set and drift gillnet gear. In most cases, the allocation period is from June 1 to July 17. Some statistics in this report, as footnoted, are calculated using only that time frame.

The Bristol Bay commercial salmon fishery became a "limited entry" fishery in 1975, and due to court adjudication, the number of permits has fluctuated since then (Tables 1 and 2). According

to the Commercial Fisheries Entry Commission, the number of Bristol Bay permit holders that could have received licenses to fish during the 2012 season totaled 2,841 permits, consisting of 1,862 drift gillnet permits and 979 set gillnet permits. Of these active permits, 1,823 drift gillnet and 956 set gillnet permits were renewed, and of these renewed permits, preliminary information shows 1,455 drift gillnet and 853 set gillnet permits recorded landings.

## **EFFORT**

Fishing effort by district from 1975 to 2012 is presented in Table 1. Effort has been greatest in districts with the largest sockeye salmon harvest predictions, but the largest annual drift gillnet effort recorded for a single district was 1,387 permit holders in the Naknek-Kvichak District during 1990. The Naknek-Kvichak District drift gillnet effort has exceeded 1,000 permit holders in 14 of the 37 years from 1975 to 2012, and has averaged 875 from 2009 to 2012. The Egegik District has exceeded 1,000 drift fishermen two times (1975–2012) while the other three districts have yet to reach that level of effort. The largest set gillnet effort also occurred in the Naknek-Kvichak District, with a peak level of 574 permit holders in 1985. Effort levels among districts tend to fluctuate with run sizes. Until 1999, drift effort in the Naknek-Kvichak District increased on pre-peak and peak years. Set gillnet effort has remained relatively stable in most districts. In general, effort was at a low point for both gear groups during years of poor sockeye salmon abundance from 2001 to 2004, but has rebounded since then as runs have improved.

## **SOCKEYE SALMON HARVEST**

The 2009 to 2012 Bristol Bay percentages of sockeye salmon harvest by gear type are presented in Table 3. Over the last 20 years, the average percent of drift gillnet harvest is 83%, and for set gillnet harvest it is 17% (Table 4). Breakdown of catch between gear groups within districts is presented in Table 5. District allocation goals are as follows: 1) Naknek-Kvichak - 84% drift gillnet and 16% set gillnet, which is split between Kvichak and Naknek set gillnetters at 8% each; 2) Nushagak - 74% drift gillnet and 26% set gillnet, which is split between Igushik and Nushagak set gillnetters at 6% and 20%, respectively; the Wood River Special Harvest Area (WRSHA) also has a 74% drift and 26% set gillnet split; 3) Egegik - 86% drift gillnet and 14% set gillnet; and 4) Ugashik - 90% drift gillnet and 10% set gillnet. Since 1998, managers in the Naknek-Kvichak, Nushagak, Egegik, and Ugashik districts have attempted to achieve allocations by adjusting fishing times for the two gear groups. In some cases, this has meant separate fishing periods for each gear group.

Over the last 5 years, sockeye salmon harvests have generally been within 2 to 4% of the allocations (Tables 6–14), with the exception of the Naknek-Kvichak District. The Naknek-Kvichak District fishermen spent much of the season in the Naknek River Special Harvest Area (NRSHA) from 1999 to 2007, which made management of the Naknek River escapement difficult. The fishery has occurred since 2008 without the use of the NRSHA. In case of processing capacity issues, management of escapement takes priority over management of the allocation targets.

The total set gillnet harvest, by section, for the Nushagak District and the Naknek-Kvichak District (2009 to 2012) are listed in Tables 11 and 13. Tables 12 and 14 list the allocation breakdown for those districts, by section and inriver fisheries, for the allocation period, June 1–July 17. From 2009 to 2012: 1) the Igushik Section set gillnet average percent of the total harvest is 5% (Table 11), and during the allocation period (June 1–July 17), it has been 6%



(Table 12); 2) the Nushagak Section set gillnet percentage of the harvests has averaged 20% (Table 12); 3) the Naknek Section set gillnet average percent of the harvest during the allocation period has been 10% when the section was fished, while Kvichak Section set gillnetters have averaged 8% (Table 14); 4) Egegik set gillnetters' average harvest has been 16% (Table 7); and 5) Ugashik set gillnetters averaged 11% (Table 8).

Comparisons of average harvests for each gear type in numbers of sockeye salmon per permit are presented in Table 4 with pre and post allocation plan averages calculated. Beginning in 2009, the Bay has seen a downward trend in abundance (Table 3). Since the allocation plan was put into place in 1998, the average total harvest has been down by approximately 11% from the 1978 to 1997 average of approximately 25 million. Average sockeye salmon harvest for the drift gillnet group has decreased by approximately 19% from a 1978–1997 average of 22 million to a 1998–2012 average of 18 million sockeye salmon. For set gillnet fishermen, the average sockeye salmon harvest for the group has increased approximately 25% from a 1978–1997 average of 3.2 million to a 1998–2012 average of 4.1 million. From 2009 to 2012, average harvests have been 19.5 million for the drift group and 4.5 million for the set gillnet group.

Average sockeye salmon catches per permit holder by gear type and district are listed in Table 5. Egegik District drift gillnet fishermen have achieved the largest 10-year average (2003–2012) sockeye salmon harvest per permit holder of any district, with 10,138 fish per permit. However, from 2009 to 2012, the Naknek-Kvichak District drift fleet has averaged 10,329 fish per permit, while the Naknek-Kvichak setnet group has averaged 6,100 fish for the same period. The largest single season individual drift delivery average of 17,346 sockeye salmon per permit holder was recorded in the Egegik District in 2009. Egegik District set gillnet fishermen have the highest 10-year average harvest in Bristol Bay with 5,696 sockeye salmon per permit holder and Ugashik set gillnet fishermen are second with a 10-year average of 5,424 sockeye salmon. Egegik District fishermen posted the largest single-season individual set gillnet average harvest per permit in the last 20 years with 8,528 sockeye salmon per permit, in 2009. Togiak District fishermen have had the lowest average annual harvest for both gear groups in the last 10 years, with drift gillnet fishermen averaging 3,420 sockeye salmon per permit holder and set gillnetters averaging 3,401 fish. However, during the exclusive periods from 1996 to 2012, the average in the Togiak District was 3,467 for drift gillnet fishermen and 2,929 for set gillnet fishermen.

## **GENERAL DISTRICT**

In anticipation of a large sockeye salmon run in 2004, the board allowed fishing in the General District. The regulation allowing fishing in this district had a sunset clause that caused the regulation to expire in December of 2004. Information on harvest and effort is presented in Table 15.

## **ALAGNAK RIVER SPECIAL HARVEST AREA**

In response to large sockeye salmon runs in the Alagnak (Branch) River, the board created an inriver fishery in the Alagnak River Special Harvest Area (ARSHA). In 2005 the ARSHA was fished exclusively by set gillnet gear, but after action by the board in 2006, drift gillnet fishing was also allowed. Harvest and effort information is presented in Table 15. No directed fishing occurred in the ARSHA since 2007.

The ARSHA can be best characterized as being shallow, with a broad single channel and strong currents. There are few set gillnet sites and limited drift gillnet fishing can only occur during a

couple of hours on either side of high tides. Fishermen must exit the river while there is still sufficient water depth or risk grounding. This exercise is made difficult after a fishing period when the vessels have fish on board.

For reference, all data in this report were obtained from previous reports to the board and can be found in Weiland 2003 and Salomone 2006 and 2009.

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## **TABLES AND FIGURES**

Table 1.–Drift and set gillnet fishing effort by year and district, 1975–2012.

Year	Units of Effort (one or more sockeye salmon deliveries during season)											
	Naknek-Kvichak		Egegik		Ugashik		Nushagak		Togiak		Bristol Bay Total	
	Drift	Set	Drift	Set	Drift	Set	Drift	Set	Drift	Set	Drift	Set
1975	705	147	235	88	34	8	421	141	92	24	1,235	445
1976	664	182	256	96	75	18	422	178	86	31	1,353	501
1977	621	179	324	94	47	7	476	166	130	31	1,359	498
1978	798	280	386	130	48	4	641	216	151	38	1,575	656
1979	1,060	298	332	159	103	23	656	236	162	57	1,714	770
1980	1,011	347	283	179	187	29	666	241	181	47	1,764	807
1981	993	348	345	167	270	33	658	260	178	54	1,785	841
1982	801	332	420	168	253	49	980	252	202	56	1,792	859
1983	1,064	361	483	171	346	47	792	260	251	58	1,797	865
1984	1,091	338	573	180	313	53	575	260	225	63	1,804	869
1985	1,184	574	928	180	757	65	403	265	340	106	1,836	877
1986	730	302	838	220	829	86	749	281	146	101	1,836	901
1987	1,059	320	927	205	628	74	584	282	145	211	1,828	899
1988	1,014	356	999	307	578	71	512	306	319	211	1,849	1,215
1989	1,219	364	986	215	551	65	415	288	138	96	1,866	972
1990	1,387	441	969	214	420	64	446	342	127	77	1,878	975
1991	1,089	359	667	211	416	62	467	312	207	106	1,887	958
1992	976	349	947	203	501	67	478	298	278	116	1,889	969
1993	834	335	1,189	227	608	70	490	296	154	107	1,881	971
1994	1,139	326	1,087	228	477	67	455	295	171	115	1,882	946
1995	1,187	348	945	207	743	67	398	312	176	110	1,921	991
1996	761	348	933	203	626	53	570	278	140 <sup>a</sup>	111 <sup>b</sup>	1,890	942
1997	550	301	950	243	473	58	577	284	65 <sup>a</sup>	85 <sup>b</sup>	1,881	924
1998	1,053	297	947	209	393	51	648	277	62 <sup>a</sup>	82 <sup>b</sup>	1,858	901
1999	1,092	309	788	204	453	50	520	295	121 <sup>a</sup>	77 <sup>b</sup>	1,849	924
2000	797	325	817	204	520	54	668	298	187 <sup>a</sup>	87 <sup>b</sup>	1,823	924
2001	553	250	643	193	283	51	795	277	164 <sup>a</sup>	83 <sup>b</sup>	1,566	834
2002	338	230	423	147	378	35	490	215	94	59	1,184	680
2003	508	254	557	181	438	52	609	222	137	76	1,424	761
2004	470	278	610	176	358	44	436	230	102	72	1,417	797
2005	668	288	617	183	372	57	672	236	89	71	1,450	828
2006	774	302	525	184	243	56	677	231	79	76	1,475	843
2007	716	289	497	189	436	50	670	234	109	75	1,469	834
2008	803	283	401	189	287	53	539	252	132	73	1,468	850
2009	668	275	565	194	286	54	483	253	125	70	1,442	843
2010	899	280	675	189	362	53	544	273	88	75	1,492	861
2011	923	270	713	194	398	53	441	287	137	82	1,525	878
2012 <sup>c</sup>	802	279	570	191	354	53	535	260	118	75	1,455	853
1975-2012 Avg.	819	277	585	191	337	53	508	265	120	75	1,476	857
1993-2012 Avg.	777	293	723	197	424	54	561	265	123	83	1,618	869
2003-2012 Avg.	723	280	573	187	353	52	561	248	112	75	1,462	835
1998-2012 Avg.	738	281	623	188	371	51	582	256	116	76	1,526	841
2009-2012 Avg.	875	276	653	191	371	53	507	273	114	77	1,491	864

<sup>a</sup> Drift effort before July 24 is as follows: 1996 - 37, 1997 - 40, 1998 - 33, 1999 - 44, 2002 - 80, 2003 - 118, and before July 21, 2000 - 40, 2001 - 81.

<sup>b</sup> Setnet effort before July 24 1996 - 79, 1997 - 83, 1998 - 76, 1999 - 68, 2002 - 59, 2003 - 72 and before July 21, 2000 - 66, 2001 - 73.

<sup>c</sup> Preliminary.

Table 2.—Bristol Bay interim-use and permanent entry permits and permits actually fished, 1980–2012.

Year	Number of permits issued			Permits Fished		
	Interim use	Permanent	Total	Number	Duals	Percent
<b>Drift Gillnet</b>						
1980	110	1,717	1,827	1,764		97
1981	107	1,720	1,827	1,785		98
1982	100	1,724	1,824	1,792		98
1983	94	1,727	1,821	1,797		99
1984	89	1,729	1,818	1,804		99
1985	96	1,738	1,834	1,815		99
1986	95	1,743	1,838	1,823		99
1987	91	1,746	1,837	1,824		99
1988	90	1,749	1,839	1,837		100
1989	91	1,776	1,867	1,855		99
1990	93	1,785	1,878	1,869		100
1991	88	1,793	1,881	1,873		100
1992	86	1,797	1,883	1,879		100
1993	81	1,805	1,886	1,875		99
1994	77	1,810	1,887	1,865		99
1995	75	1,813	1,888	1,882		100
1996	70	1,821	1,891	1,884		100
1997	67	1,832	1,899	1,875		99
1998	55	1,844	1,899	1,858		98
1999	52	1,846	1,898	1,847		97
2000	38	1,852	1,890	1,823		96
2001	24	1,859	1,883	1,566		83
2002	2	1,878	1,880	1,183		63
2003	7	1,860	1,867	1,415		76
2004	3	1,857	1,860	1,417		76
2005	3	1,859	1,862	1,450		78
2006	1	1,857	1,858	1,475		79
2007	1	1,862	1,863	1,469		79
2008	0	1,863	1,863	1,468		79
2009	0	1,861	1,863	1,442		77
2010	0	1,861	1,863	1,492	360	80
2011	0	1,845	1,862	1,525	224	82
2012 <sup>a</sup>	0	1,823	1,862	1,455	326	78
Average	60	1,806	1,864	1,696		92

-continued-

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Year	Number of permits issued			Permits fished		
	Interim Use	Permanent	Total	Number	Duals	Percent
<b>Set Gillnet</b>						
1980	34	913	947	807		85
1981	42	914	956	841		88
1982	41	916	957	859		90
1983	31	929	960	865		90
1984	31	931	962	869		90
1985	28	931	959	872		91
1986	22	940	962	869		90
1987	18	942	960	899		94
1988	17	941	958	922		96
1989	18	1,007	1025	971		95
1990	15	1,011	1026	971		95
1991	12	1,012	1024	950		93
1992	8	1,017	1025	968		94
1993	8	1,014	1022	965		94
1994	7	1,012	1019	939		92
1995	8	1,011	1019	967		95
1996	6	1,011	1017	941		93
1997	7	1,012	1019	921		90
1998	6	1,009	1015	901		89
1999	6	1,008	1014	925		91
2000	6	1,007	1013	921		91
2001	2	1,010	1012	834		82
2002	2	1,004	1006	680		68
2003	1	1,000	1001	756		76
2004	0	989	989	797		81
2005	0	988	988	828		84
2006	0	985	985	843		86
2007	0	983	983	834		85
2008	0	981	981	850		87
2009	0	980	982	843		86
2010	0	979	982	861		88
2011	0	959	981	878		90
2012 <sup>a</sup>	0	956	979	853		87
Average	13	979	992	880		89

Note: Use of dual setnet permits not tracked. "Permits actually fished" is defined as the number of permits that recorded a delivery.

<sup>a</sup> Preliminary data.

Table 3.—Bristol Bay sockeye salmon harvest in percent and numbers by gear type, 1965–2012.

Year	Percentage of harvest by gear type		Harvest in numbers by gear type (1,000s)		Total Harvest (1,000s)
	Drift	Set	Drift	Set	
1965	92	8	22,315	1,940	24,255
1966	89	11	8,289	1,025	9,314
1967	89	11	3,855	476	4,331
1968	90	10	2,514	279	2,793
1969	88	12	5,827	795	6,622
1970	93	7	19,271	1,450	20,721
1971	90	10	8,626	958	9,584
1972	93	7	2,247	169	2,416
1973	92	8	700	61	761
1974	79	21	1,076	286	1,362
1975	91	9	4,458	441	4,899
1976	90	10	5,057	562	5,619
1977	89	11	4,341	537	4,878
1978	88	12	8,737	1,191	9,928
1979	88	12	18,858	2,571	21,429
1980	86	14	20,435	3,327	23,762
1981	86	14	22,019	3,584	25,603
1982	87	13	13,318	1,942	15,260
1983	90	10	33,448	3,924	37,372
1984	90	10	22,219	2,486	24,705
1985	90	10	21,345	2,350	23,695
1986	85	15	13,356	2,420	15,776
1987	87	13	13,916	2,152	16,068
1988	86	14	12,038	1,952	13,990
1989	86	14	24,642	4,093	28,735
1990 <sup>a</sup>	87	13	29,067	4,377	33,444
1991 <sup>a</sup>	86	14	22,241	3,580	25,821
1992 <sup>a</sup>	87	13	27,861	3,985	31,846
1993 <sup>a</sup>	87	13	35,303	5,156	40,459
1994 <sup>a</sup>	88	12	31,119	4,098	35,217
1995 <sup>a</sup>	87	13	38,514	5,649	44,163
1996 <sup>a</sup>	86	14	25,510	4,078	29,588
1997 <sup>a</sup>	82	18	9,944	2,127	12,071
1998 <sup>a</sup>	80	20	7,941	1,987	9,928
1999 <sup>a</sup>	81	19	20,859	4,738	25,597
2000 <sup>a</sup>	81	19	16,458	3,894	20,352
2001 <sup>a</sup>	79	21	11,090	2,985	14,075
2002 <sup>a</sup>	79	21	8,351	2,175	10,526
2003 <sup>a</sup>	79	21	11,498	3,132	14,630
2004 <sup>a</sup>	83	17	20,031	3,986	24,017
2005 <sup>a</sup>	82	18	19,991	4,529	24,520
2006 <sup>a</sup>	85	15	24,117	4,330	28,447
2007 <sup>a</sup>	82	18	24,481	5,203	29,684
2008 <sup>a</sup>	82	18	22,523	5,039	27,562
2009 <sup>a</sup>	81	19	25,069	5,799	30,868
2010 <sup>a</sup>	81	19	23,441	5,558	28,999
2011 <sup>a</sup>	82	18	18,052	4,040	22,092
2012 <sup>a,b</sup>	82	18	16,996	3,778	20,774
1965-2012 Avg.	86	14	16,737	2,817	19,553
20-yr. Avg.	83	17	20,564	4,114	24,678
10-yr. Avg.	82	18	20,620	4,539	25,159
1978-1997 Avg.	87	13	22,195	3,252	25,447
1998-2012 Avg.	81	19	18,060	4,078	22,138
20010-2012 Avg.	82	18	19,496	4,459	23,955

<sup>a</sup> Catch numbers exclude personal use and test fishery harvests.

<sup>b</sup> Preliminary data.

Table 4.—Bristol Bay average harvest in numbers of sockeye salmon by gear type and year, 1965–2012.

Year	Estimated permits actually fished		Average number of sockeye / permit Permit type		Drift gillnet % of total harvest	Set gillnet % of total harvest
	Drift	Set	Drift	Set		
1965	1,395	582	15,996	3,333	92	8
1966	1,715	549	4,833	1,867	89	11
1967	1,555	439	2,479	1,084	89	11
1968	1,237	493	2,032	566	90	10
1969	1,633	511	3,568	1,556	88	12
1970	1,674	623	11,512	2,327	93	7
1971	1,710	421	5,044	2,276	90	10
1972	1,467	490	1,532	345	93	7
1973	953	542	735	113	92	8
1974	659	214	1,633	1,336	79	21
1975	1,235	445	3,610	991	91	9
1976	1,353	501	3,738	1,122	90	10
1977	1,359	498	3,194	1,078	89	11
1978	1,575	656	5,547	1,816	88	12
1979	1,714	770	11,002	3,339	88	12
1980	1,764	807	11,584	4,123	86	14
1981	1,785	841	12,336	4,262	86	14
1982	1,792	859	7,432	2,261	87	13
1983	1,797	865	18,613	4,536	90	10
1984	1,804	869	12,317	2,861	90	10
1985	1,836	877	11,626	2,680	90	10
1986	1,836	901	7,275	2,685	85	15
1987	1,828	899	7,613	2,394	87	13
1988	1,849	922	6,510	2,117	86	14
1989	1,866	972	13,206	4,211	86	14
1990	1,878	975	15,478	4,489	87	13
1991	1,887	958	11,787	3,737	86	14
1992	1,889	969	14,749	4,112	87	13
1993	1,881	971	18,768	5,310	87	13
1994	1,882	946	16,535	4,332	88	12
1995	1,921	991	20,049	5,700	87	13
1996	1,890	942	13,498	4,329	86	14
1997	1,881	924	5,286	2,302	82	18
1998	1,859	901	4,272	2,205	80	20
1999	1,849	924	11,281	5,128	81	19
2000	1,819	919	8,847	4,062	81 <sup>a</sup>	19 <sup>a</sup>
2001	1,562	831	6,950	3,441	79 <sup>a</sup>	21 <sup>a</sup>
2002	1,174	678	7,022	3,126	80 <sup>a</sup>	20 <sup>a</sup>
2003	1,415	757	7,968	3,973	79 <sup>a</sup>	21 <sup>a</sup>
2004	1,411	794	13,978	4,822	84 <sup>a</sup>	16 <sup>a</sup>
2005	1,439	821	13,461	5,224	82 <sup>a</sup>	18 <sup>a</sup>
2006	1,466	837	14,714	4,492	85 <sup>a</sup>	15 <sup>a</sup>
2007	1,461	827	15,815	5,876	83 <sup>a</sup>	17 <sup>a</sup>
2008	1,455	842	15,021	5,717	82 <sup>a</sup>	18 <sup>a</sup>
2009	1,435	837	17,102	6,656	81 <sup>a</sup>	19 <sup>a</sup>
2010	1,482	851	14,711	6,110	81 <sup>a</sup>	19 <sup>a</sup>
2011	1,516	865	11,558	4,417	82 <sup>a</sup>	18 <sup>a</sup>
2012 <sup>b</sup>	1,460	839	11,503	4,431	82 <sup>a</sup>	18 <sup>a</sup>
1965-2012 Avg.	1,610	766	9,903	3,318	86	14
20 year Avg.	1,613	865	12,417	4,583	83	17
10 year Avg.	1,454	827	13,583	5,172	82	18
1978-1997 Avg.	1,828	896	12,061	3,580	87	13
1998-2012 Avg.	1,520	835	11,614	4,645	81 <sup>a</sup>	19 <sup>a</sup>
2009-2012 Avg.	1,473	848	13,719	5,404	82 <sup>a</sup>	18 <sup>a</sup>

<sup>a</sup> Preliminary data.

<sup>b</sup> June 1 to July 17.



Table 5.—Average harvest in numbers of sockeye salmon by gear type and district, 1984–2012.

Year	Average harvest in numbers of sockeye salmon (per permit)									
	Naknek-Kvichak		Egegik		Ugashik		Nushagak		Togiak	
	Drift	Set	Drift	Set	Drift	Set	Drift	Set	Drift	Set
1984	12,009	4,272	8,293	2,417	7,847	3,811	2,887	1,277	1,107	1,159
1985	6,042	1,786	7,538	3,017	8,205	3,862	2,057	1,804	459	509
1986	2,759	2,907	5,174	2,345	5,748	2,767	2,713	2,445	1,438	980
1987	4,034	2,231	5,242	2,429	3,193	1,676	4,368	2,493	1,579	540
1988	2,969	1,320	5,847	2,007	2,393	1,972	2,488	1,415	1,658	1,389
1989	10,062	4,245	8,081	4,344	4,995	6,062	3,877	4,094	355	417
1990	10,951	4,723	9,750	4,140	4,595	2,953	5,321	3,360	1,787	922
1991	8,560	3,214	9,241	3,000	6,291	5,290	8,171	3,968	1,556	2,142
1992	8,552	2,951	15,057	6,778	5,956	4,955	3,808	3,255	1,619	2,379
1993	8,945	4,319	16,850	6,885	6,189	5,914	7,663	5,007	1,883	2,336
1994	12,755	5,518	9,123	3,640	8,484	4,522	5,312	3,305	1,222	1,661
1995	15,120	6,626	13,744	6,744	5,725	3,313	7,555	4,606	1,801	2,618
1996	8,941	4,055	10,420	5,355	6,695	4,151	8,046	3,971	1,750 <sup>b</sup>	2,309 <sup>b</sup>
1997	764	522	6,836	3,984	2,594	2,862	3,033	2,630	1,250 <sup>b</sup>	1,024 <sup>b</sup>
1998 <sup>a</sup>	2,053	1,165	3,140	2,287	1,373	1,696	3,322	2,931	13,290 <sup>b</sup>	1,317 <sup>b</sup>
1999 <sup>a</sup>	7,310	4,313	7,765	5,490	3,669	4,063	8,674	5,314	1,344 <sup>b</sup>	2,364 <sup>b</sup>
2000 <sup>a</sup>	4,978	2,579	7,216	5,387	2,572	3,519	7,514	4,658	2,449 <sup>b</sup>	3,874 <sup>b</sup>
2001 <sup>a</sup>	7,384	4,750	3,736	2,188	1,286	1,978	4,696	3,545	3,154 <sup>b</sup>	3,337 <sup>b</sup>
2002 <sup>a</sup>	2,686	2,149	9,019	4,781	3,601	5,314	4,320	3,228	1,511 <sup>b</sup>	1,559 <sup>b</sup>
2003 <sup>a</sup>	4,561	4,525	3,178	2,542	3,444	3,942	9,177	4,734	3,182 <sup>b</sup>	3,553 <sup>b</sup>
2004 <sup>a, c</sup>	8,186	3,188	13,727	8,369	7,480	8,045	11,698	4,319	2,373 <sup>b</sup>	2,708 <sup>b</sup>
2005 <sup>a</sup>	7,678	5,053	10,534	7,916	4,767	4,544	8,967	4,376	2,921 <sup>b</sup>	2,859 <sup>b</sup>
2006 <sup>a</sup>	7,596	3,403	11,099	5,945	7,166	3,661	13,834	5,693	4,165 <sup>b</sup>	3,908 <sup>b</sup>
2007 <sup>a</sup>	11,157	5,825	11,006	5,229	10,114	7,080	9,940	7,159	4,532 <sup>b</sup>	4,307 <sup>b</sup>
2008 <sup>a</sup>	11,438	6,805	15,727	5,931	7,144	3,412	10,182	5,759	2,939 <sup>b</sup>	3,616 <sup>b</sup>
2009 <sup>a</sup>	11,523	6,204	17,346	8,528	7,710	6,037	12,164	7,099	2,696 <sup>b</sup>	3,171 <sup>b</sup>
2010 <sup>a</sup>	9,585	7,347	5,979	4,227	9,896	6,981	12,191	6,981	4,557 <sup>b</sup>	3,547 <sup>b</sup>
2011 <sup>a</sup>	8,492	5,549	5,559	3,979	5,721	5,808	8,465	3,888	3,270 <sup>b</sup>	3,610 <sup>b</sup>
2012 <sup>a, c</sup>	11,719	5,301	7,228	4,293	6,374	4,730	3,211	3,845	3,562 <sup>b</sup>	2,733 <sup>b</sup>
1984–1997 Avg.	8,033	3,478	9,371	4,078	5,636	3,865	4,807	3,116	1,390	1,456
1998–2012 Avg.	7,756	4,544	8,817	5,140	5,488	4,721	8,557	4,902	3,730	3,098
2003–2012 Avg.	9,193	5,320	10,138	5,696	6,982	5,424	9,983	5,385	3,467 <sup>d</sup>	2,929 <sup>d</sup>
2009–2012 Avg.	10,329	6,100	9,028	5,257	7,425	5,889	9,008	5,453	3,521	3,265

Note: Averages prior to 1998 are computed using the total effort listed in Table 1.

<sup>a</sup> Data from 1998 to 2003, for Naknek-Kvichak, Egegik, Ugashik, and Nushagak districts, are for the allocation periods only.

<sup>b</sup> Averages for the superexclusive periods only: 1996–1999 from June 1 through July 24; 2000–2001 from June 1 through July 20; 2002–2009 from June 1 through July 23; and from 2010 to 2012 from June 1 to July 27.

<sup>c</sup> Preliminary data.

<sup>d</sup> 1996 to 2012 average.

Table 6.—Naknek-Kvichak District sockeye salmon harvest in percent and numbers by gear type, 1965–2012.

Year	Percentage of harvest by gear type		Harvest in numbers by gear type (1,000s)		Season total harvest
	Drift	Set	Drift	Set	(1,000s)
1965	95	5	18,206	964	19,170
1966	93	7	5,040	358	5,398
1967	90	10	2,115	223	2,338
1968	89	11	1,085	132	1,217
1969	91	9	4,250	405	4,655
1970	96	4	16,757	724	17,481
1971	93	7	5,426	431	5,857
1972	96	4	1,062	40	1,102
1973	88	12	149	20	169
1974	82	18	439	99	538
1975	94	6	2,888	198	3,086
1976	93	7	2,363	184	2,547
1977	90	10	1,956	211	2,167
1978	91	9	4,651	473	5,124
1979	90	10	13,548	1,443	14,991
1980	88	12	12,330	1,666	13,996
1981	89	11	9,732	1,261	10,993
1982	87	13	4,509	659	5,168
1983	92	8	19,774	1,785	21,559
1984	90	10	13,102	1,444	14,546
1985	87	13	7,154	1,025	8,179
1986	70	30	2,014	878	2,892
1987	86	14	4,272	714	4,986
1988	86	14	3,011	470	3,481
1989	89	11	12,265	1,545	13,810
1990	88	12	15,189	2,083	17,272
1991	89	11	9,322	1,154	10,476
1992	89	11	8,347	1,030	9,377
1993	84	16	7,460	1,447	8,907
1994	89	11	14,582	1,799	16,381
1995	89	11	17,948	2,306	20,254
1996	83	17	6,804	1,411	8,215
1997	73	27	420	157	577
1998 <sup>a</sup>	85	15	1,936 <sup>a</sup>	339 <sup>a</sup>	2,275
1999 <sup>a</sup>	85	15	7,251 <sup>a</sup>	1,324 <sup>a</sup>	8,575
2000 <sup>a,b</sup>	82	18	3,763 <sup>a</sup>	833 <sup>a</sup>	4,596
2001 <sup>a,b</sup>	77	23	4,054 <sup>a</sup>	1,178 <sup>a</sup>	5,232
2002 <sup>a,b</sup>	65	35	889 <sup>a</sup>	489 <sup>a</sup>	1,378
2003 <sup>a,b</sup>	66	34	2,139 <sup>a</sup>	1,104 <sup>a</sup>	3,243
2004 <sup>a</sup>	80	20	3,561 <sup>a</sup>	883 <sup>a</sup>	4,444
2005 <sup>a</sup>	78	22	4,937 <sup>a</sup>	1,430 <sup>a</sup>	6,367
2006 <sup>a</sup>	83	17	5,021 <sup>a</sup>	1,014 <sup>a</sup>	6,035
2007 <sup>a</sup>	81	19	6,884 <sup>a</sup>	1,666 <sup>a</sup>	8,550
2008 <sup>a</sup>	81	19	8,121 <sup>a</sup>	1,919 <sup>a</sup>	10,040
2009 <sup>a</sup>	80	20	6,637 <sup>a</sup>	1,675 <sup>a</sup>	8,312
2010 <sup>a</sup>	80	20	8,166 <sup>a</sup>	2,035 <sup>a</sup>	10,201
2011 <sup>a</sup>	83	17	7,337 <sup>a</sup>	1,465 <sup>a</sup>	8,802
2012 <sup>a,c</sup>	85	15	8,482	1,462	9,944
1965–2012 Avg.	86	14	6,820	991	7,810
20-yr. Avg.	80	20	6,320	1,297	7,616
10-yr. Avg.	80	20	6,129	1,465	7,594
1978–1997 Avg.	86	14	9,322	1,238	10,559
1998–2012 Avg.	79	21	5,279	1,254	6,533
2009–2012 Avg.	82	18	7,656	1,659	9,315
Allocation	84	16			

<sup>a</sup> Allocation accounting period: June 1 to July 17; test fishery and personal use fish are excluded.

<sup>b</sup> When the Naknek River Special Harvest Area (NRSHA) is in effect, fishing periods were alternated between gear groups.

<sup>c</sup> Harvest is preliminary.

Table 7.—Egegik District sockeye salmon harvest in percent and numbers by gear type, 1965–2012.

Year	Percentage of harvest by gear type		Harvest in numbers by gear type (1,000's)		Season total harvest (1,000's)
	Drift	Set	Drift	Set	
1965	83	17	2,655	525	3,180
1966	88	12	1,849	252	2,101
1967	90	10	959	112	1,071
1968	93	7	627	44	671
1969	80	20	713	176	889
1970	85	15	1,196	208	1,404
1971	87	13	1,137	170	1,307
1972	91	9	761	79	840
1973	90	10	199	22	221
1974	78	22	134	38	172
1975	90	10	867	97	964
1976	91	9	1,204	126	1,330
1977	88	12	1,564	217	1,781
1978	84	16	1,009	199	1,208
1979	78	22	1,756	501	2,257
1980	71	29	1,875	748	2,623
1981	77	23	3,349	1,012	4,361
1982	83	17	2,023	425	2,448
1983	86	14	5,805	953	6,758
1984	92	8	4,752	435	5,187
1985	93	7	6,995	543	7,538
1986	89	11	4,336	516	4,852
1987	91	9	4,859	497	5,356
1988	90	10	5,841	616	6,457
1989	90	10	7,968	934	8,902
1990	92	8	9,448	856	10,304
1991	91	9	6,164	633	6,797
1992	91	9	14,259	1,376	15,635
1993	93	7	20,035	1,564	21,599
1994	92	8	9,917	830	10,747
1995	90	10	12,988	1,396	14,384
1996	90	10	9,722	1,087	10,809
1997	87	13	6,494	968	7,462
1998	86	14	2,901 <sup>a</sup>	462 <sup>a</sup>	3,363
1999	85	15	6,088 <sup>a</sup>	1,109 <sup>a</sup>	7,197
2000	84	16	5,845 <sup>a</sup>	1,099 <sup>a</sup>	6,944
2001	85	15	2,395 <sup>a</sup>	419 <sup>a</sup>	2,814
2002	85	15	3,814 <sup>a</sup>	698 <sup>a</sup>	4,512
2003	80	20	1,767 <sup>a</sup>	450 <sup>a</sup>	2,217
2004	85	15	8,360 <sup>a</sup>	1,473 <sup>a</sup>	9,833
2005	82	18	6,489 <sup>a</sup>	1,417 <sup>a</sup>	7,906
2006	84	16	5,605 <sup>a</sup>	1,076 <sup>a</sup>	6,681
2007	84	16	5,228 <sup>a</sup>	983 <sup>a</sup>	6,211
2008	85	15	6,165 <sup>a</sup>	1,121 <sup>a</sup>	7,286
2009	85	15	9,679 <sup>a</sup>	1,646 <sup>a</sup>	11,325
2010	84	16	3,970 <sup>a</sup>	782 <sup>a</sup>	4,752
2011	84	16	3,947 <sup>a</sup>	768 <sup>a</sup>	4,715
2012 <sup>b</sup>	83	17	4,046 <sup>a</sup>	814 <sup>a</sup>	4,860
1965-2012 Avg.	86	14	4,787	677	5,463
20-yr. Avg.	86	14	6,773	1,008	7,781
10-yr. Avg.	84	16	5,526	1,053	6,579
1978-1997 Avg.	87	13	6,980	804	7,784
1998-2012 Avg.	84	16	5,087	954	6,041
2009-2012 Avg.	84	16	5,411	1,003	6,413
Allocation	86	14			

<sup>a</sup> Allocation accounting period: June 1 to July 17; test fishery and personal use fish are excluded.

<sup>b</sup> Preliminary data.

Table 8.–Ugashik District sockeye salmon harvest in percent and numbers by gear type, 1965–2012.

Year	Percentage of harvest by gear type		Harvest in numbers by gear type (1,000's)		Season total harvest (1,000's)
	Drift	Set	Drift	Set	
1965	82	18	760	166	926
1966	83	17	370	75	445
1967	81	19	133	31	164
1968	80	20	66	16	82
1969	84	16	142	28	170
1970	77	23	132	40	172
1971	89	11	848	106	954
1972	28	72	5	13	18
1973	75	25	3	1	4
1974	50	50	1	1	2
1975	80	20	12	3	15
1976	90	10	158	17	175
1977	90	10	84	9	93
1978	87	13	7	1	8
1979	84	16	328	62	390
1980	88	12	778	108	886
1981	89	11	1,884	232	2,116
1982	87	13	988	151	1,139
1983	93	7	3,116	233	3,349
1984	92	8	2,456	202	2,658
1985	96	4	6,211	251	6,462
1986	95	5	4,765	238	5,003
1987	94	6	2,005	124	2,129
1988	91	9	1,383	140	1,523
1989	87	13	2,752	394	3,146
1990	91	9	1,930	189	2,119
1991	89	11	2,617	328	2,945
1992	90	10	2,984	332	3,316
1993	90	10	3,763	414	4,177
1994	93	7	4,047	303	4,350
1995	95	5	4,254	222	4,476
1996	95	5	4,191	220	4,411
1997	88	12	1,227	166	1,393
1998	85	15	442 <sup>a</sup>	78 <sup>a</sup>	520
1999	89	11	1,596 <sup>a</sup>	195 <sup>a</sup>	1,791
2000	87	13	1,322 <sup>a</sup>	190 <sup>a</sup>	1,512
2001	80	20	364 <sup>a</sup>	91 <sup>a</sup>	455
2002	88	12	1,361 <sup>a</sup>	186 <sup>a</sup>	1,547
2003	88	12	1,505 <sup>a</sup>	205 <sup>a</sup>	1,710
2004	91	9	2,573 <sup>a</sup>	254 <sup>a</sup>	2,827
2005	87	13	1,740 <sup>a</sup>	259 <sup>a</sup>	1,999
2006	88	12	1,469 <sup>a</sup>	205 <sup>a</sup>	1,674
2007	92	8	4,167 <sup>a</sup>	354 <sup>a</sup>	4,521
2008	92	8	2,036 <sup>a</sup>	174 <sup>a</sup>	2,210
2009	87	13	2,128 <sup>a</sup>	326 <sup>a</sup>	2,454
2010	90	10	3,147 <sup>a</sup>	363 <sup>a</sup>	3,510
2011	88	12	2,237 <sup>a</sup>	302 <sup>a</sup>	2,539
2012 <sup>b</sup>	90	10	2,153 <sup>a</sup>	245 <sup>a</sup>	2,398
1965-2012 Avg.	86	14	1,722	172	1,893
20-yr. Avg.	89	11	2,286	238	2,524
10-yr. Avg.	89	11	2,316	269	2,584
1978-1997 Avg.	91	9	2,584	216	2,800
1998-2012 Avg.	88	12	1,883	228	2,111
2009-2012 Avg.	89	11	2,416	309	2,725
Allocation	90	10			

<sup>a</sup> Allocation accounting period: 1998 - June 1 to July 26; 1999 - June 1 to July 19; 2000 - June 1 to July 31; 2001 to 2012 - June 1 to July 17; test fishery and personal use fish are excluded.

<sup>b</sup> Preliminary data.

Table 9.–Nushagak District sockeye salmon harvest in percent and numbers by gear type, 1965–2012.

Year	Percentage of harvest by gear type		Harvest in numbers by gear type (1,000's)		Season total harvest (1,000's)
	Drift	Set	Drift	Set	
1965	72	28	693	263	956
1966	72	28	840	331	1,171
1967	86	14	569	89	658
1968	90	10	674	75	749
1969	81	19	607	142	749
1970	67	33	791	397	1,188
1971	77	23	969	288	1,257
1972	92	8	352	30	382
1973	93	7	252	20	272
1974	73	27	371	139	510
1975	80	20	518	128	646
1976	85	15	1,071	195	1,266
1977	86	15	529	90	619
1978	85	15	2,666	471	3,137
1979	82	18	2,713	614	3,327
1980	85	15	3,802	696	4,498
1981	81	19	6,100	1,393	7,493
1982	90	10	5,299	611	5,910
1983	84	16	4,287	833	5,120
1984	83	17	1,660	332	1,992
1985	63	37	829	478	1,307
1986	75	25	2,032	687	2,719
1987	78	22	2,551	703	3,254
1988	75	25	1,274	433	1,707
1989	58	42	1,609	1,179	2,788
1990	67	33	2,373	1,149	3,522
1991	76	24	3,816	1,238	5,054
1992	65	35	1,820	970	2,790
1993	72	28	3,755	1,482	5,237
1994	71	29	2,418	975	3,393
1995	68	32	3,007	1,437	4,444
1996	81	19	4,586	1,104	5,690
1997	70	30	1,750	747	2,497
1998	72	28	2,122 <sup>b</sup>	809 <sup>b</sup>	2,931
1999	73	27	4,285 <sup>b</sup>	1,557 <sup>b</sup>	5,842
2000	78	22	4,944 <sup>b</sup>	1,374 <sup>b</sup>	6,318
2001	79	21	3,710 <sup>b</sup>	982 <sup>b</sup>	4,692
2002	75	25	2,117 <sup>b</sup>	694 <sup>b</sup>	2,811
2003	84	16	5,589 <sup>b</sup>	1,051 <sup>b</sup>	6,640
2004	84	16	5,077 <sup>b</sup>	989 <sup>b</sup>	6,066
2005	85	15	6,008 <sup>b</sup>	1,024 <sup>b</sup>	7,032
2006	88	12	9,324 <sup>b</sup>	1,298 <sup>b</sup>	10,622
2007	80	20	6,620 <sup>b</sup>	1,668 <sup>b</sup>	8,288
2008	79	21	5,366 <sup>b</sup>	1,434 <sup>b</sup>	6,800
2009	77	23	5,875 <sup>b</sup>	1,796 <sup>b</sup>	7,671
2010	77	23	6,327 <sup>b</sup>	1,885 <sup>b</sup>	8,212
2011	77	23	3,733 <sup>b</sup>	1,108 <sup>b</sup>	4,841
2012 <sup>a</sup>	63	37	1,693 <sup>a,b</sup>	992 <sup>a,b</sup>	2,685
1965-2012 Avg.	78	22	2,904	800	3,703
20-yr. Avg.	77	23	4,415	1,220	5,636
10-yr. Avg.	79	21	5,561	1,325	6,886
1978-1997 Avg.	75	25	2,917	877	3,794
1998-2012 Avg.	78	22	4,853	1,244	6,097
2009-2012 Avg.	73	27	4,407	1,445	5,852
Allocation	74	26			

<sup>a</sup> Preliminary data.

<sup>b</sup> Allocation accounting period: 1998 - June 1–Sept. 30; 1999 - June 1–Sept. 30; 2000–2012- June 1–July 17; test fishery and personal use fish are excluded. Total contains WRSHA harvest.

Table 10.—Togiak District sockeye salmon harvest in percent and numbers by gear type, 1965–2012.

Year	Percentage of harvest by gear type		Harvest in numbers by gear type (1,000s)		Season total harvest (1,000s)
	Drift	Set	Drift	Set	
1965	100	0	261	0	261
1966	98	3	195	5	200
1967	95	5	95	5	100
1968	99	1	72	1	73
1969	99	1	133	2	135
1970	99	1	153	1	154
1971	100	0	208	1	209
1972	100	0	75	0	75
1973	99	1	95	1	96
1974	91	9	127	12	139
1975	92	8	174	15	189
1976	92	8	277	25	302
1977	89	11	196	23	219
1978	84	16	378	74	452
1979	82	18	376	85	461
1980	83	17	528	107	635
1981	79	21	503	136	639
1982	84	16	500	96	596
1983	80	20	468	120	588
1984	77	23	249	73	322
1985	74	26	157	54	211
1986	68	32	210	99	309
1987	67	33	229	114	343
1988	64	36	529	293	822
1989	55	45	49	40	89
1990	64	36	126	71	197
1991	59	41	322	227	549
1992	62	38	450	276	726
1993	54	46	290	250	540
1994	52	48	209	191	400
1995	52	48	317	288	605
1996	45	55	207	255	462
1997	37	63	53	90	143
1998	43	57	82	108	190
1999	53	47	203	182	385
2000	58	42	458	337	795
2001	66	34	533	277	810
2002	61	39	142	92	234
2003	62	38	436	270	706
2004	55	45	241	195	436
2005	62	38	260	159	419
2006	53	47	329	297	626
2007	60	40	494	323	817
2008	59	41	388	264	652
2009	60	40	337	222	560
2010	60	40	401	266	668
2011	60	40	448	296	744
2012 <sup>a</sup>	67	33	421	205	626
1965–2012 Avg.	72	28	279	136	415
20-yr. Avg.	56	44	312	228	541
10-yr. Avg.	60	40	376	250	625

<sup>a</sup> Preliminary data.

Table 11.—Nushagak District sockeye salmon harvest by gear type, in numbers of fish and percent of total catch, 1978–2012.

Year	Setnet						Drift Net	Total	
	Igushik Section		Nushagak Section		Combined	Sections			
1978	83,414	3%	387,730	12%	471,144	15%	2,666,022	85%	3,137,166
1979	106,010	3%	508,219	15%	614,229	18%	2,712,883	82%	3,327,112
1980	113,149	3%	582,873	13%	696,022	15%	3,801,765	85%	4,497,787
1981	236,129	3%	1,157,209	15%	1,393,338	19%	6,099,755	81%	7,493,093
1982	131,468	2%	479,496	8%	610,964	10%	5,298,763	90%	5,909,727
1983	145,225	3%	687,885	13%	833,110	16%	4,286,634	84%	5,119,744
1984	46,485	2%	285,712	14%	332,197	17%	1,660,484	83%	1,992,681
1985	101,435	8%	377,485	29%	478,920	37%	828,341	63%	1,307,261
1986	154,013	6%	533,479	20%	687,492	25%	2,031,821	75%	2,719,313
1987	138,889	4%	564,517	17%	703,406	22%	2,551,314	78%	3,254,720
1988	56,557	3%	376,479	22%	433,036	25%	1,273,680	75%	1,706,716
1989	238,887	9%	940,396	34%	1,179,283	42%	1,608,911	58%	2,788,194
1990	327,564	9%	820,982	23%	1,148,546	33%	2,373,108	67%	3,521,654
1991	401,066	8%	836,669	17%	1,237,735	24%	3,816,110	76%	5,053,845
1992	130,827	5%	839,067	30%	969,894	35%	1,819,601	65%	2,789,495
1993	308,812	6%	1,173,445	22%	1,482,257	28%	3,754,665	72%	5,236,922
1994	242,273	7%	732,939	22%	975,212	29%	2,417,451	71%	3,392,663
1995	492,937	11%	944,230	21%	1,437,167	32%	3,007,308	68%	4,444,475
1996	258,903	5%	845,498	15%	1,104,401 <sup>a</sup>	19%	4,585,957	81%	5,690,358
1997	28,887	1%	718,098	29%	746,985 <sup>a</sup>	30%	1,750,466	70%	2,497,451
1998	116,398	4%	714,055	24%	830,453 <sup>a</sup>	28%	2,148,148	72%	2,978,601
1999	247,496	4%	1,454,335	24%	1,701,831 <sup>a</sup>	28%	4,464,182	72%	6,166,013
2000	247,744	4%	1,147,339	18%	1,395,083 <sup>a</sup>	22%	4,960,106	78%	6,355,189
2001	198,699	4%	794,860	17%	993,559	21%	3,717,640	79%	4,711,199
2002	22,786	1%	671,531	24%	694,317 <sup>a</sup>	25%	2,119,065	75%	2,813,382
2003	132,053	2%	926,975	14%	1,059,028	16%	5,589,371	84%	6,648,399
2004	74,080	1%	934,420	15%	1,008,500	17%	5,082,559	83%	6,091,059
2005	130,972	2%	929,188	13%	1,060,160	15%	6,035,871	85%	7,096,031
2006	178,262	2%	1,210,390	11%	1,388,652	13%	9,477,766	87%	10,866,418
2007	241,913	3%	1,472,768	18%	1,714,681	20%	6,684,751	80%	8,399,432
2008	335,249	5%	1,154,107	17%	1,489,356	22%	5,390,882	78%	6,880,238
2009	314,479	3%	1,506,380	16%	1,820,859	24%	5,894,923	76%	7,715,782
2010	399,750	4%	1,576,420	13%	1,976,170	20%	6,439,343	77%	8,415,513
2011	365,596	8%	776,628	17%	1,142,224 <sup>a</sup>	25%	3,743,066	75%	4,885,290
2012 <sup>b</sup>	162,110	6%	729,494	27%	891,604 <sup>a</sup>	33%	1,810,226	67%	2,701,830
1978–1997 Avg.	187,147	5%	689,620	20%	876,767	25%	2,917,252	75%	3,794,019
20-yr. Avg.	224,970	4%	1,020,655	19%	1,245,625	23%	4,453,687	77%	5,699,312
10-yr. Avg.	233,446	4%	1,121,677	16%	1,355,123	20%	5,614,876	79%	6,969,999
1998–2012 Avg.	211,172	3%	1,066,593	18%	1,277,765	22%	4,903,860	78%	6,181,625
2009–2012 Avg.	310,484	5%	1,147,231	18%	1,457,714	25%	4,471,890	74%	5,929,604

<sup>a</sup> Combined sections catches include Wood River Special Harvest Area catches.

<sup>b</sup> Preliminary data.

Table 12.–Nushagak District sockeye salmon harvest by gear type, in numbers of fish and percent of the total harvest through the allocation period, 1998–2012.

Year	Drift Nushagak District		Setnet						Wood River Special Harvest				Nushagak District Total
	Nushagak District		Nushagak Section		Igushik Section		Combined Section		Drift Net		Setnet		
1998 <sup>a</sup>	2,007,865	72%	676,264	24%	116,398	4%	792,662	28%	140,283	79%	37,791	21%	2,978,601
1999 <sup>a</sup>	2,929,091	69%	1,053,905	25%	247,496	6%	1,301,401	31%	1,535,091	79%	400,430	21%	6,166,013
2000 <sup>b</sup>	4,083,873	80%	752,121	15%	245,583	5%	997,704	20%	859,825	70%	376,417	30%	6,317,819
2001 <sup>b</sup>	3,710,188	79%	783,242	17%	198,699	4%	981,941	21%					4,692,129
2002 <sup>b</sup>	1,749,286	78%	483,566	21%	22,786	1%	506,352	22%	368,212	66%	187,161	34%	2,811,011
2003 <sup>b</sup>	5,588,718	84%	919,595	14%	130,977	2%	1,050,572	16%					6,639,290
2004 <sup>b</sup>	5,076,849	84%	914,710	15%	74,080	1%	988,790	16%					6,065,639
2005 <sup>b</sup>	6,007,737	85%	893,364	13%	130,972	2%	1,024,336	15%					7,032,073
2006 <sup>b</sup>	9,323,622	88%	1,121,198	11%	177,110	2%	1,298,308	12%					10,621,930
2007 <sup>b</sup>	6,619,684	80%	1,432,765	17%	235,271	3%	1,668,036	20%					8,287,720
2008 <sup>b</sup>	5,366,333	79%	1,115,275	16%	319,114	5%	1,434,389	21%					6,800,722
2009 <sup>b</sup>	5,875,016	77%	1,483,308	19%	312,952	4%	1,796,260	23%					7,671,276
2010 <sup>b</sup>	5,644,975	77%	1,239,745	17%	399,750	5%	1,639,495	23%	794,368	70%	336,693	30%	8,415,531
2011 <sup>b</sup>	3,731,405	77%	758,198	16%	352,039	7%	1,110,237	23%					4,841,642
2012 <sup>b, c</sup>	1,511,369	64%	684,853	29%	170,837	7%	855,690	36%	181,806	57%	134,818	43%	2,683,683
2009–2012 Avg.	4,190,691	74%	1,041,526	20%	308,895	6%	1,350,421	26%	725,853	64%	250,450	36%	5,903,033
Allocation		74%		20%		6%		26%		74%		26%	

Note: Blank cells indicate no fishing occurred in the WRSWA.

<sup>a</sup> Allocation period: June 1 to September 30.

<sup>b</sup> Allocation period: June 1 to July 17.

<sup>c</sup> Preliminary data.



Table 13.–Naknek-Kvichak District sockeye salmon harvest by gear type, in numbers of fish and percent of total catch, 1985–2012.

Year	Setnet						Drift Net	Total	
	Naknek Section		Kvichak Section		Combined Sections				
1985	556,969	7%	84,078	1%	641,047	8%	7,144,809	92%	7,785,856
1986	557,705	36%	19,992	1%	577,697	37%	971,066	63%	1,548,763
1987	312,400	6%	296,197	6%	608,597	12%	4,272,334	88%	4,880,931
1988	214,059	6%	255,936	7%	469,995	14%	3,010,841	86%	3,480,836
1989	663,558	5%	881,849	6%	1,545,407	11%	12,264,549	89%	13,809,956
1990	1,045,752	6%	1,034,462	6%	2,080,214	12%	15,189,248	88%	17,269,462
1991	655,722	6%	496,732	5%	1,152,454	11%	9,321,417	89%	10,473,871
1992	779,371	8%	262,147	3%	1,041,518	11%	8,441,331	89%	9,482,849
1993	825,331	9%	569,432	6%	1,394,763	16%	7,513,113	84%	8,907,876
1994	556,696	3%	1,261,049	8%	1,817,745	11%	14,529,192	89%	16,346,937
1995	992,429	5%	1,313,263	6%	2,305,692	11%	17,973,847	89%	20,279,539
1996	824,221	10%	249,069	3%	1,073,290	14%	6,800,835	86%	7,874,125
1997	127,203	22%	29,752	5%	156,955	27%	432,356	73%	589,311
1998	210,998	8%	219,055	9%	430,053	17%	2,109,144	83%	2,539,197
1999	782,727	8%	625,526	7%	1,408,253	15%	7,972,244	85%	9,380,497
2000	447,011	10%	204,730	4%	854,855 <sup>a</sup>	18%	3,833,644	82%	4,688,499
2001	368,665	7%	50,428	1%	1,189,144 <sup>a</sup>	23%	4,056,909	77%	5,246,053
2002	491,302	36%	0	0%	491,302 <sup>a</sup>	36%	892,578	64%	1,383,880
2003	1,119,840	26%	0	0%	2,170,692 <sup>a</sup>	50%	2,170,692	50%	4,341,384
2004	539,043	12%	369,410	8%	908,453 <sup>a</sup>	20%	3,620,332	80%	4,528,785
2005	1,144,301	17%	336,300	5%	1,480,601 <sup>a,b</sup>	22%	5,245,664	78%	6,726,265
2006	902,848	13%	244,573	3%	1,147,421 <sup>a,b</sup>	16%	5,989,891	84%	7,137,312
2007	1,415,937	16%	342,617	4%	1,758,554 <sup>a,b</sup>	20%	7,239,794	80%	8,998,348
2008	1,240,840	12%	717,623	7%	1,958,463	19%	8,372,454	81%	10,330,917
2009 <sup>c</sup>	1,041,430	12%	694,287	8%	1,735,717	20%	6,942,869	80%	8,678,586
1985–1997 Avg.	623,955	10%	519,535	5%	1,143,490	15%	8,297,303	85%	9,440,793
1998–2009 Avg.	808,745	15%	317,046	5%	1,294,459	23%	4,870,518	77%	6,164,977
2007–2009 Avg.	1,232,736	13%	584,842	6%	1,817,578	20%	7,518,372	80%	9,335,950
Allocation		8%		8%		16%		84%	

<sup>a</sup> Includes Naknek inriver harvest.

<sup>b</sup> Includes Alagnak inriver harvest.

<sup>c</sup> Preliminary data.

Table 14.—Naknek/Kvichak District sockeye salmon harvest by gear type, in numbers of fish and percent of total harvest through the allocation period, 1998–2009.

Year	Drift		Setnet				Naknek River Special Harvest				District		
	Naknek/Kvichak District <sup>a</sup>		Naknek Section	Kvichak Section	Combined Section <sup>b</sup>		Drift Net		Setnet		Total		
1998 <sup>c</sup>	1,936,407	85%	163,577	7%	175,764	8%	339,341	15%				2,275,748	
1999 <sup>c</sup>	7,082,144	83%	732,219	9%	592,222	7%	1,324,441	16%	132,864	2%		8,539,449	
2000 <sup>c</sup>	3,002,804	65%	443,043	10%	192,483	4%	635,526	14%	760,630	17%	197,717	4%	4,596,677
2001 <sup>c</sup>	1,906,298	36%	363,200	7%	50,428	1%	413,628	8%	2,147,633	41%	764,312	15%	5,231,871
2002 <sup>c,d</sup>									888,978	64%	489,701	36%	1,378,679
2003 <sup>c</sup>	185,558	6%	21,273	1%	0		21,273	1%	1,953,645	60%	1,083,201	33%	3,243,677
2004 <sup>c</sup>	2,673,778	60%	393,118	9%	369,410	8%	762,528	17%	887,347	20%	120,351	3%	4,444,004
2005 <sup>c</sup>	1,714,765	25%	197,075	3%	336,300	5%	533,375	8%	3,530,899	52%	947,226	14%	6,726,265
2006 <sup>c</sup>	3,167,233	52%	301,596	5%	222,269	4%	523,865	9%	1,853,663	31%	490,091	8%	6,034,852
2007 <sup>c</sup>	3,761,208	44%	542,422	6%	296,543	3%	838,965	10%	3,122,366	37%	826,592	10%	8,549,131
2008 <sup>c</sup>	8,121,362	81%	1,218,335	12%	700,185	7%	1,918,520	19%					10,039,882
2009 <sup>c</sup>	6,636,945	80%	943,552	11%	731,291	9%	1,674,843	20%					8,311,788
2010 <sup>c</sup>	8,166,262	80%	1,064,066	10%	970,457	10%	2,034,523	20%					10,200,785
2011 <sup>c</sup>	7,334,242	83%	839,734	10%	627,899	7%	1,467,633	17%					8,801,875
2012 <sup>c,e</sup>	8,493,257		799,365		699,445		1,498,810						9,992,067
1998-2012 Avg.	4,584,447	60%	573,041	8%	426,050	6%	999,091	13%	1,697,558	36%	614,899	15%	6,557,783
2010-2012 Avg.	7,997,920	82%	901,055	10%	765,934	8%	1,666,989	18%					9,664,909
Allocation		84%		8%		8%		16%					

Note Blank cells indicate no fishing occurred in the NRSHA.

<sup>a</sup> Includes all drift harvest, district and inriver.

<sup>b</sup> Includes all setnet harvest, district and inriver.

<sup>c</sup> Allocation period: June 1 to July 17.

<sup>d</sup> Entire season was fished in the NRSHA.

<sup>e</sup> Preliminary data.

Table 15.—Alagnak River and General District harvest numbers by gear type, 2004–2012.

Year	Percentage of Harvest by Gear Type		Harvest in Numbers by Gear Type		Number of Permits	Season Total Harvest
	Drift (D)	Set (S)	Drift	Set		
<i>Alagnak River</i>						
2005	-	100	-	255,926	85(S)	255,926
2006	22	78	10,139	35,836	8 (D) 46(S)	45,975
2007	27	73	2,830	7,589	2 (D) 13(S)	10,419
2008	no harvest					
2009	no harvest					
2010	no harvest					
2011	no harvest					
2012	no harvest					
<i>General District</i>						
2004	100	-	1,656,994	-	897 (D)	1,656,994

*Note:* (S) = set gillnet, (D) = drift gillnet.

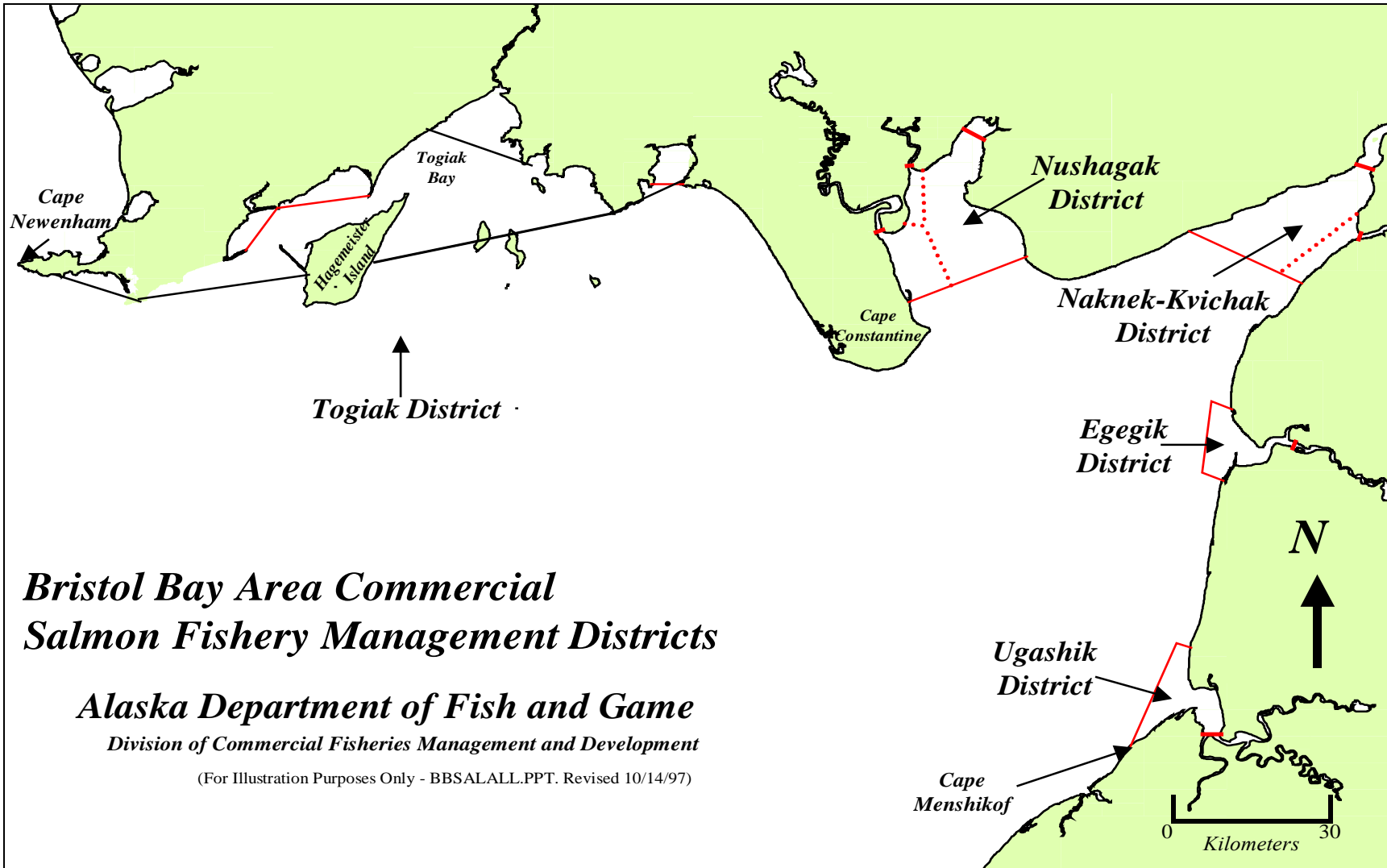


Figure 1.—Bristol Bay area commercial salmon fishery management districts.