

Special Publication No. 09-17

**Summary of Bristol Bay Sockeye Salmon Harvests by
Gear Type, 2007–2009**

by

Paul Salomone

November 2009

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

SPECIAL PUBLICATION NO. 09-17

**SUMMARY OF BRISTOL BAY SOCKEYE SALMON HARVESTS
BY GEAR TYPE, 2007–2009**

by

Paul Salomone
Division of Commercial Fisheries, Anchorage

Alaska Department of Fish and Game
Division of Sport Fish, Research and Technical Services
333 Raspberry Road, Anchorage, Alaska, 99518-1565

November 2009

The Special Publication series was established by the Division of Sport Fish in 1991 for the publication of techniques and procedures manuals, informational pamphlets, special subject reports to decision-making bodies, symposia and workshop proceedings, application software documentation, in-house lectures, and became a joint divisional series in 2004 with the Division of Commercial Fisheries. Special Publications are intended for fishery and other technical professionals. Special Publications are available through the Alaska State Library, Alaska Resources Library and Information Services (ARLIS) and on the Internet: <http://www.sf.adfg.state.ak.us/statewide/divreports/html/intersearch.cfm>. This publication has undergone editorial and peer review.

*Paul Salomone,
Alaska Department of Fish and Game, Division of Commercial Fisheries,
333 Raspberry Road, Anchorage, AK 99518, USA*

This document should be cited as:

Salomone, P. 2009. Summary of Bristol Bay sockeye salmon harvests by gear type, 2007–2009. Alaska Department of Fish and Game, Special Publication No. 09-17, Anchorage.

The Alaska Department of Fish and Game (ADF&G) administers all programs and activities free from discrimination based on race, color, national origin, age, sex, religion, marital status, pregnancy, parenthood, or disability. The department administers all programs and activities in compliance with Title VI of the Civil Rights Act of 1964, Section 504 of the Rehabilitation Act of 1973, Title II of the Americans with Disabilities Act (ADA) of 1990, the Age Discrimination Act of 1975, and Title IX of the Education Amendments of 1972.

If you believe you have been discriminated against in any program, activity, or facility please write:

ADF&G ADA Coordinator, P.O. Box 115526, Juneau, AK 99811-5526
U.S. Fish and Wildlife Service, 4401 N. Fairfax Drive, MS 2042, Arlington, VA 22203
Office of Equal Opportunity, U.S. Department of the Interior, 1849 C Street NW MS 5230, Washington DC 20240

The department's ADA Coordinator can be reached via phone at the following numbers:

(VOICE) 907-465-6077, (Statewide Telecommunication Device for the Deaf) 1-800-478-3648,
(Juneau TDD) 907-465-3646, or (FAX) 907-465-6078

For information on alternative formats and questions on this publication, please contact:

ADF&G Division of Sport Fish, Research and Technical Services, 333 Raspberry Road, Anchorage AK 99518 (907) 267-2375.

TABLE OF CONTENTS

	Page
LIST OF TABLES.....	ii
LIST OF FIGURES.....	ii
ABSTRACT.....	1
INTRODUCTION.....	1
Effort.....	2
Sockeye Salmon Harvest.....	2
General District.....	3
Alagnak River Special Harvest Area.....	3
REFERENCES CITED.....	4
TABLES AND FIGURES.....	5

LIST OF TABLES

Table	Page
1. Drift and set gillnet fishing effort by year and district, 1975–2009.....	6
2. Bristol Bay sockeye salmon harvest in percent and numbers by gear type, 1965–2009.	7
3. Naknek-Kvichak District sockeye salmon harvest in percent and numbers by gear type, 1965–2009.	8
4. Egegik District sockeye salmon harvest in percent and numbers by gear type, 1965–2009.	9
5. Ugashik District sockeye salmon harvest in percent and numbers by gear type, 1965–2009.	10
6. Nushagak District sockeye salmon harvest in percent and numbers by gear type, 1965–2009.....	11
7. Togiak District sockeye salmon harvest in percent and numbers by gear type, 1965–2009.	12
8. Bristol Bay average harvest in numbers of sockeye salmon by gear type and year, 1965–2009.	13
9. Average harvest in numbers of sockeye salmon by gear type and district, 1984–2009.	14
10. Nushagak District sockeye salmon harvest by gear type, in numbers of fish and percent of total catch, 1978–2009.....	15
11. Nushagak District sockeye salmon harvest by gear type, in numbers of fish and percent of the total harvest through the allocation period, 1998–2009.	16
12. Naknek-Kvichak District sockeye salmon harvest by gear type, in numbers of fish and percent of total catch, 1985–2009.	17
13. Naknek/Kvichak District sockeye salmon harvest by gear type, in numbers of fish and percent of total harvest through the allocation period, 1998–2009.	18
14. Bristol Bay interim-use and permanent entry permits, and permits actually fished, 1980–2009.	19
15. Alagnak River and General District harvest numbers by gear type, 2004–2007.....	21

LIST OF FIGURES

Figure	Page
1. Bristol Bay area commercial salmon fishery management districts.....	22

ABSTRACT

The purpose of this report is to provide the Alaska Board of Fisheries (board) with background information regarding the fishing effort and sockeye salmon (*Oncorhynchus nerka*) harvest by gear type for the Bristol Bay Area. Data in this report were obtained from previous reports to the board in 2003 (Weiland 2003), 2006 (Salomone 2006), 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 2008. The 2009 data are preliminary. For a more complete historical perspective, data from 1965 to 2009 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 (5AAC 06.330), drift and set gillnets are the only two types of legal fishing gear in the Bristol Bay commercial salmon fishery. Drift gillnet fishermen are limited to 150 fathoms of gear unless two permit holders are on board a vessel and it is marked accordingly, in which case, 200 fathoms of gear may be used. Set gillnet fishermen are limited to 50 fathoms of gear. Set gillnets fished in Naknek-Kvichak, Egegik, Ugashik, and Togiak districts must be at least 300 feet apart, while in Nushagak District set gillnets must be at least 450 feet apart. There is no minimum distance required between drift gillnets, but they 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 (5AAC 06.335 and 5AAC 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 (5AAC 06.357 (e), 5AAC 06.358 (1) and (2), and 5AAC 06.360 (d) and (e)).

Figure 1 illustrates the five fishing districts of Bristol Bay. The mobility of the drift gillnet fleet enables it to fish more than one district and many drift fishermen will land fish in more than one district in a season. Most set gillnet fishermen fish one district in a season. Set gillnet fishermen are much less mobile and are limited by availability of fishing sites, existing tideland leases, and the base of operation that is 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. Both gear groups are currently effective in harvesting substantial numbers of salmon in relatively short periods of time and they compete intensely for these fish.

For the purposes of this report, total annual effort in a district is defined as the total number of permits that made at least one sockeye salmon (*Oncorhynchus nerka*) delivery in that district for the season. The average sockeye catches were calculated using total effort for each district.

In 1997, the Alaska Board of Fisheries (board) allocated sockeye salmon harvests in Naknek/Kvichak, Egegik, Ugashik, and Nushagak districts between set and drift gillnet gear. The allocation period is from June 1 to July 17 in all districts except Togiak, which has no allocation between gear groups. Some data 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 (Table 1). According to the Commercial Fisheries Entry Commission, the number of Bristol Bay permit holders that could have received licenses to fish during the 2009 season totaled 2,845 permits, consisting of 1,863 drift gillnet permits and 982 set gillnet permits. Of these active permits, 1,793 drift gillnet and

940 set gillnet permits were renewed, and of these renewed permits, preliminary information shows 1,451 drift gillnet and 821 set gillnet permits recorded landings (Tables 1 and 14).

EFFORT

Fishing effort by district from 1975 to 2009 is listed in Table 1. Effort has been greatest in districts with the largest sockeye harvest predictions. In all districts, sockeye harvest predictions increased from 2007–2009. The largest annual drift gillnet effort recorded for a single district was 1,387 permit holders in Naknek-Kvichak District in 1990. Naknek-Kvichak District drift gillnet effort has exceeded 1,000 permit holders in 14 of the 35 years from 1975 to 2009, but has averaged 731 from 2007–2009. Egegik District has exceeded 1,000 drift permits three times since 1975; the other three districts have yet to reach that level of effort. The largest set gillnet effort has also occurred in Naknek/Kvichak District with a peak level of 441 permit holders in 1990. Effort levels within districts tend to fluctuate with run size. Until 1999, drift effort in 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 2001–2004, but has rebounded since then as runs have improved.

SOCKEYE SALMON HARVEST

The 2007 to 2009 Bristol Bay percentages of sockeye salmon harvest by gear type are listed in Table 2. Over the last 20 years, the drift gillnet gear group has averaged 83% of the total harvest and the set gillnet gear group has averaged 17%. The average set gillnet harvest percent from 2007 to 2009 is approximately 18%. 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, 8% each; 2) Nushagak, 74% drift gillnet, and 26% set gillnet split between Igushik and Nushagak set gillnetters, 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 Naknek-Kvichak, Nushagak, Egegik, and Ugashik districts have attempted to achieve the 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 4% of the allocations (Tables 3–6 and Tables 11–13) with the exception of Naknek-Kvichak District. The Naknek/Kvichak District fishery occurred much of or all season in the Naknek River Special Harvest Area (NRSHA) from 1999 through 2007, which makes management of the Naknek River escapement difficult. Allocation between gear groups when the fishery is in the NRSHA is not based on percentage, but on a ratio of tides fished, which is three tides for drift gillnet gear to one tide for set gillnet gear. The fishery has occurred in 2008 and 2009 without the use of the NRSHA. Generally, runs to all districts from 2007 through 2009 have been near or above long term averages. During periods of processor limits and suspensions, management of the escapement has taken priority over management of the allocation.

The total set gillnet harvests by section for Nushagak District and Naknek/Kvichak District (2007 through 2009) are listed in Tables 10 and 12. Tables 11 and 13 list the allocation breakdown by section and inriver fisheries for the allocation periods; June 1–July 17. During the 2007–2009 period:

- 1) Igushik Section set gillnet average percent of the total harvest is 4% (Table 10) and during the allocation period (June 1–July 17), it has been 4% (Table 11);
- 2) Nushagak Section set gillnet percentage of the harvests has averaged 18%;
- 3) Naknek Section set gillnet average percent of the harvest, during the allocation period, has been 8% when the section was fished, while Kvichak Section set gillnetters have averaged 6% (Table 13);
- 4) Egegik District set gillnetter's average harvest has been 15% (Table 4); and
- 5) Ugashik set gillnetters averaged 10% (Table 5).

Comparisons of the average harvests for each gear type in numbers of sockeye are listed in Table 8 with pre and post allocation plan averages calculated. Average sockeye salmon harvests are up for both gear groups from 2007 through 2009 primarily because of increased abundance, but improvements in the processing sector have also been a factor.

Average sockeye catches per permit holder by gear type and by district, from 1984 through 2009, are listed in Table 9. These data indicate that the Egegik District drift gillnet group has achieved the largest 10-year average (2000–2009) sockeye harvest per permit holder of any district, with 10,394 fish per permit. Nushagak District fishermen were second with 9,005. Preliminary data indicate the largest single season individual drift delivery average of 18,387 sockeye per permit holder was recorded in Egegik District in 2009. Egegik District set gillnet fishermen have the highest 10-year average harvest in Bristol Bay with 5,728 sockeye per permit holder and Nushagak District set gillnet fishermen are second with a 10-year average of 5,102 sockeye salmon. Egegik District fishermen posted the largest single season individual set gillnet average harvest per permit in the last 20 years with 9,042 sockeye per permit, in 2009 (preliminary). Togiak District fishermen have had the lowest average annual harvest for both gear groups in the last 10 years with drift gillnet fishermen averaging 2,924 sockeye salmon per permit holder and set gillnetters averaging 2,525 fish. However, during the superexclusive periods from 1996–2008, the average in the Togiak District was 3,910 for drift gillnet fishermen and 2,487 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 allowing the regulation to expire in December, 2004. Information on harvest and effort is presented in Table 15.

ALAGNAK RIVER SPECIAL HARVEST AREA

In response to strong runs to 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. No directed fishing occurred in the ARSHA in 2008 or 2009.

The ARSHA can be best characterized as shallow and braided. 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 can be more difficult after a fishing period when the vessels have fish on board. Harvest and effort information from Alagnak River is presented in Table 15.

REFERENCES CITED

- Salomone, P. 2006. Summary of Bristol Bay sockeye salmon harvests by gear type, 2001-2006; a report to the Alaska Board of Fisheries. Alaska Department of Fish and Game, Special Publication No. 06-27, Anchorage. <http://www.sf.adfg.state.ak.us/FedAidPDFs/sp06-27.pdf>
- Weiland, Keith. 2003. Summary of Bristol Bay sockeye salmon catches by gear type, 1965–2003. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report No. 2A03-25, Anchorage.

TABLES AND FIGURES

Table 1.—Drift and set gillnet fishing effort by year and district, 1975–2009.

Units of Effort (one or more sockeye salmon deliveries during season)												
Year	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	1,165	351	936	181	740	59	406	251	117	54	1,815	872
1986	722	298	833	279	844	136	750	340	141	110	1,823	869
1987	1,062	318	929	206	633	78	626	284	146	67	1,824	899
1988	1,015	354	1,010	193	578	70	534	282	321	123	1,837	922
1989	1,213	363	986	213	555	68	375	288	149	97	1,855	971
1990	1,387	441	969	214	420	64	446	342	127	77	1,878	971
1991	1,089	359	667	211	416	62	467	312	207	106	1,887	950
1992	976	349	947	203	501	67	478	298	278	116	1,889	968
1993	834	335	1,189	227	608	70	490	296	154	107	1,881	965
1994	1,139	326	1,087	228	477	67	455	295	171	115	1,882	939
1995	1,187	348	945	207	743	67	398	312	176	110	1,921	967
1996	761	348	933	203	626	53	570	278	140 ^a	111 ^b	1,884	941
1997	550	301	950	243	473	58	577	284	65 ^a	85 ^b	1,875	921
1998	1,053	297	947	209	393	51	648	277	62 ^a	82 ^b	1,858	901
1999	1,092	309	788	204	453	50	520	295	121 ^a	77 ^b	1,847	925
2000	797	325	817	204	520	54	668	298	187 ^a	87 ^b	1,823	921
2001	553	250	643	193	283	51	795	277	164 ^a	83 ^b	1,566	834
2002	338	230	423	147	378	35	490	215	94	59	1,183	680
2003	469	244	556	177	437	52	609	222	87	70	1,415	766
2004	435	277	609	176	344	44	434	229	72	70	1,415	796
2005	643	283	616	179	365	57	670	234	60	71	1,439	824
2006	774	302	525	184	243	56	677	231	79	76	1,469	798
2007	716	289	492	189	436	50	670	234	109	75	1,466	837
2008	803	283	401	189	287	53	539	252	132	73	1,468	850
2009 ^c	674	287	529	183	335	52	598	236	121	73	1,451	821
1975–2009 Avg.	864	305	668	185	393	51	576	259	147	75	1,681	835
1990–2009 Avg.	814	309	752	199	437	56	560	271	130	86	1,675	879
2000–2009 Avg.	620	277	561	182	363	50	615	243	110	74	1,470	813
1998–2009 Avg.	696	281	612	186	373	50	610	250	107	75	1,533	829
2007–2009 Avg.	731	286	474	187	353	52	602	241	121	74	1,462	836

^a Drift gillnet 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.

^b Set gillnet effort before July 24 1996–79, 1997–83, 1998–76, 1999–68, 2002–59, 2003–72 and before July 21, 2000–66, 2001–73.

^c Preliminary.

Table 2.—Bristol Bay sockeye salmon harvest in percent and numbers by gear type, 1965–2009.

Year	Percentage of Harvest by Gear Type		Harvest in Numbers by Gear Type (1,000's)		Total Harvest (1,000's)
	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	21,352	2,344	23,696
1986	85	15	13,356	2,420	15,776
1987	87	13	13,911	2,158	16,069
1988	86	14	12,038	1,952	13,990
1989	86	14	24,642	4,093	28,735
1990 ^a	87	13	29,067	4,377	33,444
1991 ^a	86	14	22,241	3,580	25,821
1992 ^a	87	13	27,877	3,985	31,862
1993 ^a	87	13	35,306	5,156	40,462
1994 ^a	88	12	31,121	4,098	35,219
1995 ^a	87	13	38,516	5,649	44,165
1996 ^a	86	14	25,510	4,079	29,589
1997 ^a	82	18	9,944	2,127	12,071
1998 ^a	80	20	7,941	1,987	9,928
1999 ^a	81	19	20,859	4,738	25,597
2000 ^a	81	19	16,458	3,894	20,352
2001 ^a	79	21	11,090	2,989	14,079
2002 ^a	79	21	8,351	2,175	10,526
2003 ^a	79	21	12,046	3,231	15,277
2004 ^a	85	15	22,276	3,985	26,261
2005 ^a	81	19	19,991	4,529	24,520
2006 ^a	84	16	23,787	4,659	28,446
2007 ^a	83	17	24,481	5,203	29,684
2008 ^a	82	18	22,523	5,039	27,562
2009 ^{a,b}	81	19	25,229	5,848	31,077
1965–2009 Avg.	86	14	16,612	2,718	19,329
20-yr. Avg.	83	17	21,731	4,066	25,797
10-yr. Avg.	81	19	18,623	4,155	22,778
1978–1997 Avg.	87	13	22,196	3,252	25,448
1998–2009 Avg.	81	19	17,919	4,023	21,942
2007–2009 Avg.	82	18	24,078	5,363	29,441

^a Harvest numbers exclude personal use and test fisheries harvests.

^b Preliminary harvest figures.

Table 3.–Naknek-Kvichak District sockeye salmon harvest in percent and numbers by gear type, 1965–2009.

Year	Percentage of Harvest by Gear Type		Harvest in Numbers by Gear Type (1,000's)		Season Total Harvest
	Drift	Set	Drift	Set	(1,000's)
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	17,947	2,306	20,253
1996	83	17	6,804	1,411	8,215
1997	73	27	420	157	577
1998 ^a	85	15	1,878 ^a	327 ^a	2,539
1999 ^a	84	16	7,091 ^a	1,310 ^a	9,407
2000 ^{a,b}	82	18	3,747 ^a	829 ^a	4,689
2001 ^{a,b}	77	23	4,051 ^a	1,180 ^a	5,243
2002 ^{a,b}	65	35	889 ^a	487 ^a	1,384
2003 ^{a,b}	66	34	2,139 ^a	1,104 ^a	3,243
2004 ^a	80	20	3,561 ^a	883 ^a	4,444
2005 ^a	78	22	4,937 ^a	1,430 ^a	6,367
2006 ^a	83	17	5,021 ^a	1,014 ^a	6,035
2007 ^a	81	19	6,884 ^a	1,666 ^a	8,550
2008 ^a	81	19	8,121 ^a	1,919 ^a	10,040
2009 ^{a,c}	80	20	6,698 ^a	1,696 ^a	8,394
1965–2009 Avg.	86	14	6,737	946	7,717
20-yr. Avg.	81	19	6,754	1,262	8,090
10-yr. Avg.	77	23	4,605	1,221	5,839
1978–1997 Avg.	86	14	9,322	1,238	10,559
1998–2009 Avg.	78	21	4,585	1,154	5,861
2007–2009 Avg.	81	19	7,234	1,760	8,995
Allocation	84	16			

^a Allocation accounting period: June 1 to July 17, test fishery and personal use fish are excluded.

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

^c Preliminary data.

Table 4.–Egegik District sockeye salmon harvest in percent and numbers by gear type, 1965–2009.

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	6,999	539	7,538
1986	89	11	4,336	516	4,852
1987	91	9	4,859	498	5,357
1988	90	10	5,841	616	6,457
1989	90	10	7,968	934	8,902
1990	91	9	9,486	886	10,372
1991	91	9	6,164	633	6,797
1992	91	9	14,259	1,376	15,635
1993	93	7	20,034	1,563	21,597
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	2,911 ^a	462 ^a	3,503
1999	85	15	6,031 ^a	1,097 ^a	7,384
2000	84	16	5,834 ^a	1,095 ^a	6,996
2001	85	15	2,391 ^a	409 ^a	2,837
2002	85	15	3,812 ^a	696 ^a	4,525
2003	80	20	1,767 ^a	450 ^a	2,217
2004	85	15	8,360 ^a	1,473 ^a	9,833
2005	82	18	6,489 ^a	1,417 ^a	7,906
2006	84	16	5,605 ^a	1,076 ^a	6,681
2007	84	16	5,228 ^a	983 ^a	6,211
2008	85	15	6,165 ^a	1,121 ^a	7,286
2009 ^b	85	15	9,726 ^a	1,651 ^a	11,377
1965–2009 Avg.	86	14	4,840	669	5,521
20-yr. Avg.	87	13	7,669	1,033	8,728
10-yr. Avg.	84	16	5,538	1,037	6,587
1978–1997 Avg.	87	13	6,982	806	7,788
1998–2009 Avg.	84	16	5,360	994	6,396
2007–2009 Avg.	85	15	7,040	1,252	8,291
Allocation	86	14			

^a Allocation accounting period: June 1 to July 17, test fishery and personal use fish are excluded.

^b Preliminary data.

Table 5.—Ugashik District sockeye salmon harvest in percent and numbers by gear type, 1965–2009.

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	6,212	251	6,463
1986	95	5	4,765	238	5,003
1987	94	6	2,001	128	2,129
1988	91	9	1,383	140	1,523
1989	87	13	2,752	394	3,146
1990	91	9	1,960	189	2,149
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 ^a	78 ^a	716
1999	89	11	1,654 ^a	197 ^a	2,255
2000	87	13	1,326 ^a	190 ^a	1,517
2001	80	20	357 ^a	90 ^a	475
2002	88	12	1,341 ^a	181 ^a	1,570
2003	88	12	1,505 ^a	205 ^a	1,710
2004	88	12	2,573 ^a	354 ^a	2,927
2005	87	13	1,740 ^a	259 ^a	1,999
2006	87	13	1,469 ^a	205 ^a	1,674
2007	92	8	4,167 ^a	354 ^a	4,521
2008	92	8	2,036 ^a	174 ^a	2,210
2009 ^b	87	13	2,192 ^a	329 ^a	2,521
1965–2009 Avg.	86	14	1,672	165	1,852
20-yr. Avg.	89	11	2,292	240	2,566
10-yr. Avg.	88	12	1,871	234	2,112
1978–1997 Avg.	91	9	2,586	216	2,801
1998–2009 Avg.	87	12	1,734	218	2,008
2007–2009 Avg.	90	10	2,798	286	3,084
Allocation	90	10			

^a Allocation accounting period: 1998–June 1 to July 26; 1999–June 1 to July 19; 2000–June 1 to July 31; 2001 to 2009 June 1 to July 17; test fishery and personal use fish are excluded.

^b Preliminary data.

Table 6.–Nushagak District sockeye salmon harvest in percent and numbers by gear type, 1965–2009.

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	64	36	830	477	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	2,384	1,149	3,533
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	3,009	1,437	4,446
1996	81	19	4,589	1,076	5,665
1997	70	30	1,760	747	2,507
1998	72	28	2,148 ^a	830 ^a	2,978
1999	72	28	4,464 ^a	1,702 ^a	6,166
2000	78	22	4,934 ^a	1,364 ^a	6,355
2001	79	21	3,708 ^a	979 ^a	4,712
2002	75	25	2,117 ^a	692 ^a	2,814
2003	84	16	5,589 ^a	1,051 ^a	6,640
2004	84	16	5,077 ^a	989 ^a	6,066
2005	85	15	6,008 ^a	1,024 ^a	7,032
2006	88	12	9,324 ^a	1,298 ^a	10,622
2007	80	20	6,620 ^a	1,668 ^a	8,288
2008	79	21	5,366 ^a	1,434 ^a	6,800
2009 ^b	76	24	5,828 ^a	1,798 ^a	7,626
1965–2009 Avg.	78	22	2,840	767	3,609
20-yr. Avg.	76	24	4,237	1,195	5,436
10-yr. Avg.	81	19	5,457	1,230	6,696
1978–1997 Avg.	75	25	2,919	875	3,794
1998–2009 Avg.	79	21	5,099	1,236	6,342
2007–2009 Avg.	78	22	5,938	1,633	7,571
Allocation	74	26			

^a Allocation accounting period: 1998- June 1 -Sept 30; 1999- June 1 to Sept. 30; 2000 to 2009 - June 1 to July 17; test fishery and personal use fish are excluded. Totals contain Wood River Special Harvest Area (WRSWA) harvest.

^b Preliminary data.

Table 7.—Togiak District sockeye salmon harvest in percent and numbers by gear type, 1965–2009.

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	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	75	25	157	52	209
1986	68	32	210	99	309
1987	66	34	228	115	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	52	90	142
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	58	42	275	197	472
2004	54	46	152	130	282
2005	55	45	196	159	355
2006	53	47	329	297	626
2007	60	40	494	323	817
2008	59	41	388	264	652
2009 ^a	61	39	352	219	571
1965–2009 Avg.	72	28	263	125	387
20-yr. Avg.	55	45	279	212	491
10-yr. Avg.	58	42	332	230	561

^a Preliminary data.

Table 8.—Bristol Bay average harvest in numbers of sockeye salmon by gear type and year, 1965–2009.

Year	Estimated Permits Actually Fished		Harvest of Sockeye (No. of Fish) by 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	1,815	872	11,764	2,688	90	10
1986	1,823	869	7,326	2,785	85	15
1987	1,824	899	7,627	2,400	87	13
1988	1,837	922	6,553	2,117	86	14
1989	1,855	971	13,284	4,215	86	14
1990	1,869	971	15,552	4,508	87	13
1991	1,873	950	11,875	3,768	86	14
1992	1,879	968	14,836	4,116	88	13
1993	1,875	965	18,830	5,343	87	13
1994	1,865	939	16,687	4,364	88	12
1995	1,882	967	20,465	5,841	87	13
1996	1,884	941	13,541	4,334	86	14
1997	1,875	921	5,303	2,310	82	18
1998	1,850	901	4,293	2,206	80	20
1999	1,847	925	11,294	5,122	81	19
2000	1,823	921	9,028	4,228	81 ^a	19 ^a
2001	1,566	834	7,082	3,584	79 ^a	21 ^a
2002	1,183	680	7,060	3,199	79 ^a	21 ^a
2003	1,415	765	5,225	3,931	79 ^a	21 ^a
2004	1,411	794	19,723	3,829	84 ^a	16 ^a
2005	1,439	821	19,371	4,289	82 ^a	18 ^a
2006	1,466	837	21,570	3,759	85 ^a	15 ^a
2007	1,461	827	23,106	4,859	83 ^a	17 ^a
2008	1,455	842	21,855	4,814	84 ^a	16 ^a
2009 ^b	1,446	824	24,627	5,602	81 ^a	19 ^a
1965–2009 Avg.	1,615	758	10,591	3,098	86	14
20 year Avg.	1,668	880	14,566	4,200	83	17
10 year Avg.	1,469	813	14,891	4,055	82	18
1978–1997 Avg.	1,819	891	12,124	3,599	87	13
1998–2009 Avg.	1,530	831	14,520	4,119	82 ^a	19 ^a
2007–2009 Avg.	1,454	831	23,196	5,092	83	17 ^a

^a June 1 to July 17.

^b Preliminary data.

Table 9.—Average harvest in numbers of sockeye salmon by gear type and district, 1984–2009.

Average Harvest in Numbers of Sockeye Salmon (Per Permit)										
Year	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	6,141	2,920	7,478	2,978	8,395	4,254	2,044	1,900	1,342	963
1986	2,789	2,946	5,205	1,849	5,646	1,750	2,709	2,021	1,489	900
1987	4,023	2,245	5,230	2,417	3,161	1,641	4,075	2,475	1,562	1,716
1988	2,967	1,328	5,783	3,192	2,393	2,000	2,386	1,535	1,648	2,382
1989	10,111	4,256	8,081	4,385	4,959	5,794	4,291	4,094	329	412
1990	10,951	4,723	9,789	4,140	4,595	2,953	6,137	3,360	992	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	4,216 ^a	2,633 ^a
1997	764	522	6,836	3,984	2,594	2,862	3,033	2,630	1,250 ^a	1,024 ^a
1998 ^b	2,035	1,128	3,140	2,287	1,373	1,696	3,315	2,996	2,333 ^a	1,342 ^a
1999 ^b	7,273	4,267	7,712	5,431	3,785	4,104	8,585	5,750	3,386 ^a	2,191 ^a
2000 ^b	4,996	2,567	7,202	5,394	2,550	3,393	7,498	4,624	6,850 ^a	4,379 ^a
2001 ^b	7,406	4,758	3,730	2,141	1,261	2,000	4,694	3,534	4,815 ^a	3,000 ^a
2002 ^b	2,686	2,155	9,012	4,767	3,548	5,171	4,320	3,249	1,025 ^a	1,000 ^a
2003 ^b	4,561	4,525	3,178	2,542	3,444	3,942	9,177	4,734	3,161 ^a	2,814 ^a
2004 ^b	8,186	3,188	13,727	8,369	7,480	8,045	11,698	4,319	2,111 ^a	1,857 ^a
2005 ^b	7,678	5,053	10,534	7,916	4,767	4,544	8,967	4,376	3,267 ^a	2,239 ^a
2006 ^b	7,439	4,447	11,099	5,945	7,063	3,661	13,773	5,619	4,000 ^a	3,213 ^a
2007 ^b	10,214	5,825	11,006	5,229	10,114	7,080	9,940	7,159	5,241 ^a	3,466 ^a
2008 ^b	11,438	6,805	15,727	5,931	7,144	3,412	10,182	5,759	4,845 ^a	3,178 ^a
2009 ^{b,c}	10,676	6,254	18,725	9,042	6,791	6,376	9,798	7,645	3,788 ^a	2,804 ^a
1984–1997 Avg.	8,045	3,564	9,367	4,126	5,638	3,801	4,865	3,100	1,573	1,661
1998–2009 Avg.	7,049	4,248	9,566	5,416	4,943	4,452	8,496	4,980	3,735	2,624
2000–2009 Avg.	7,528	4,558	10,394	5,728	5,416	4,762	9,005	5,102	3,910	2,487 ^d
2007–2009 Avg.	10,776	6,295	15,153	6,734	8,016	5,623	9,973	6,854	4,625	3,149

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

^a Averages for the superexclusive periods only: 1996–1999, 2002–2006 from June 1 through July 23, 2000–2001 from June 1 through July 20.

^b Data from 1998 to 2003, for Naknek/Kvichak, Egegik, Ugashik, and Nushagak Districts, are for the allocation periods only.

^c Preliminary data.

^d 1996 to 2008 average.

Table 10.—Nushagak District sockeye salmon harvest by gear type, in numbers of fish and percent of total catch, 1978–2009.

Year	Set Net						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	99,944	8%	377,108	29%	477,052	36%	830,209	64%	1,307,261
1986	154,013	6%	533,479	20%	687,492	25%	2,031,821	75%	2,719,313
1987	138,889	4%	564,346	17%	703,235	22%	2,551,485	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	312,455	9%	836,091	24%	1,148,546	33%	2,383,997	67%	3,532,543
1991	399,745	8%	837,990	17%	1,237,735	24%	3,816,110	76%	5,053,845
1992	130,827	5%	839,067	30%	969,894	35%	1,819,947	65%	2,789,841
1993	308,822	6%	1,173,070	22%	1,481,892	28%	3,754,665	72%	5,236,557
1994	242,273	7%	732,943	22%	975,216	29%	2,417,927	71%	3,393,143
1995	492,937	11%	944,230	21%	1,437,167	32%	3,008,733	68%	4,445,900
1996	243,006	4%	795,250	14%	1,076,320	^a 19%	4,588,549	81%	5,664,869
1997	28,887	1%	491,076	20%	746,985	^a 30%	1,759,833	70%	2,506,818
1998	116,398	4%	676,264	23%	830,453	^a 28%	2,148,148	72%	2,978,601
1999	247,509	4%	1,053,905	17%	1,701,963	^a 28%	4,464,182	72%	6,166,145
2000	247,744	4%	769,242	12%	1,395,083	^a 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%	483,566	17%	694,317	^a 25%	2,119,672	75%	2,813,989
2003	132,053	2%	926,975	14%	1,059,028	16%	5,589,272	84%	6,648,300
2004	73,846	1%	934,420	15%	1,009,506	17%	5,072,559	83%	6,082,065
2005	130,972	2%	1,057,984	15%	1,058,088	15%	6,022,274	85%	7,080,362
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 ^b	305,042	4%	1,525,212	20%	1,830,254	24%	5,795,807	76%	7,626,062
1978–1997 Avg.	185,456	5%	676,532	19%	875,243	25%	2,918,609	75%	3,793,852
20-yr. Avg.	219,471	4%	935,471	18%	1,211,935	24%	4,249,641	76%	5,461,576
10-yr. Avg.	186,657	3%	1,032,952	16%	1,263,252	19%	5,483,073	81%	6,746,325
1998–2009 Avg.	185,873	3%	1,004,974	16%	1,263,745	21%	5,120,255	79%	6,384,000
2007–2009 Avg.	294,068	4%	1,384,029	18%	1,678,097	22%	5,957,147	78%	7,635,244

^a Combined sections catches include Wood River Special Harvest Area catches.

^b Preliminary data.

Table 11.—Nushagak District sockeye salmon harvest by gear type, in numbers of fish and percent of the total harvest through the allocation period, 1998–2009.

Year	Drift Nushagak District		Set Net						Wood River Special Harvest				Nushagak District Total
			Nushagak Section	Igushik Section	Combined Section				Drift Net	Set Net			
1998 ^a	2,007,865	72%	676,264	24%	116,398	4%	792,662	28%	140,283	79%	37,791	21%	2,978,601
1999 ^a	2,929,091	69%	1,053,905	25%	247,509	6%	1,301,414	31%	1,535,091	79%	400,549	21%	6,166,145
2000 ^b	4,077,020	80%	747,120	15%	242,527	5%	989,647	20%	857,423	70%	374,371	30%	6,298,461
2001 ^b	3,707,549	79%	780,934	17%	198,319	4%	979,253	21%					4,686,802
2002 ^b	1,749,893	78%	483,566	21%	22,786	1%	506,352	22%	366,742	66%	185,526	34%	2,808,513
2003 ^b	5,588,718	84%	919,677	14%	130,895	2%	1,050,572	16%					6,639,290
2004 ^b	5,076,849	84%	914,710	15%	74,080	1%	988,790	16%					6,065,639
2005 ^b	6,007,737	85%	893,364	13%	130,972	2%	1,024,336	15%					7,032,073
2006 ^b	9,323,622	88%	1,121,198	11%	177,110	2%	1,298,308	12%					10,621,930
2007	6,619,684	80%	1,432,765	17%	235,271	3%	1,668,036	20%					
2008	5,366,333	79%	1,115,275	16%	319,114	5%	1,434,389	21%					
2009 ^{b,c}	5,795,807	76%	1,525,212	20%	305,042	4%	1,830,254	24%					
2007–2009 Avg.	5,927,275	78%	1,357,751	18%	286,476	4%	1,644,226	22%	724,885	74%	249,559	26%	5,921,939
Allocation		74%		20%		6%		26%		74%		26%	

^a Allocation Period June 1 to September 30.

^b Allocation Period June 1 to July 17.

^c Data is preliminary.

Table 12.–Naknek-Kvichak District sockeye salmon harvest by gear type, in numbers of fish and percent of total catch, 1985–2009.

Year	Set Net						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 ^a	18%	3,833,644	82%	4,688,499
2001	368,665	7%	50,428	1%	1,189,144 ^a	23%	4,056,909	77%	5,246,053
2002	491,302	36%	0	0%	491,302 ^a	36%	892,578	64%	1,383,880
2003	1,119,840	26%	0	0%	2,170,692 ^a	50%	2,170,692	50%	4,341,384
2004	539,043	12%	369,410	8%	908,453 ^a	20%	3,620,332	80%	4,528,785
2005	1,144,301	17%	336,300	5%	1,480,601 ^{a,b}	22%	5,245,664	78%	6,726,265
2006	902,848	13%	244,573	3%	1,147,421 ^{a,b}	16%	5,989,891	84%	7,137,312
2007	1,415,937	16%	342,617	4%	1,758,554 ^{a,b}	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 ^c	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%	

^a Includes Naknek inriver harvest.

^b Includes Alagnak inriver harvest.

^c Preliminary data.

Table 13.—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		Set Net						Naknek River Special Harvest				District Total
	Naknek/Kvichak District ^a		Naknek Section		Kvichak Section		Combined Section ^b		Drift Net		Set Net		
1998 ^c	1,877,531	85%	158,226	7%	168,311	8%	326,537	15%					2,204,068
1999 ^c	7,090,670	84%	726,640	9%	583,129	7%	1,309,769	16%	132,864	2%			8,400,439
2000 ^c	3,746,989	82%	443,043	10%	192,483	4%	828,933	18%	744,185	16%	193,407	4%	4,575,922
2001 ^c	4,050,707	77%	365,935	7%	50,428	1%	1,179,555	23%	2,144,345	41%	763,192	15%	5,230,262
2002 ^{c,d}	888,978	65%					487,445	35%	888,978	65%	487,445	35%	1,376,423
2003 ^c	2,139,203	66%	21,567	1%			1,104,474	34%	1,963,632	61%	1,083,201	33%	3,243,677
2004 ^c	3,561,125	80%	4,821	0%	399	0%	882,879	20%				0%	4,444,004
2005 ^c	4,937,268	78%	150,733	2%	76,208	1%	1,430,093	22%	3,530,899	55%	946,577	15%	6,367,361
2006 ^c	3,157,094	76%	301,596	7%	186,433	5%	978,120	24%	1,853,663	45%	490,091	12%	4,135,214
2007 ^c	6,883,574	81%	542,422	6%	288,954	3%	1,657,968	19%	3,122,366	37%	826,592	10%	8,541,542
2008 ^c	8,121,362	81%	700,185	7%	1,218,335	12%	1,918,520	19%	0		0		10,039,882
2009 ^{c,e}	6,552,048	80%	982,808	12%	655,205	8%	1,638,013	20%	0		0		8,190,060
1998–2009 Avg.	4,417,212	78%	399,816	6%	341,989	5%	1,145,192	22%	1,438,093	40%	532,278	16%	5,562,405
2007–2009 Avg.	7,185,661	80%	741,805	8%	720,831	8%	1,738,167	20%	1,040,789	37%	275,531	10%	8,923,828
Allocation		84%		8%		8%		16%					

^a Includes all drift gillnet harvest, district and inriver.

^b Includes all set gillnet harvest, district and inriver.

^c Allocation Period June 1 to July 17.

^d Entire season was fished in the NRSHA.

^e Data is preliminary.

Table 14.—Bristol Bay interim-use and permanent entry permits, and permits actually fished, 1980–2009.

Year	Number of Permits Issued			Permits Fished	
	Interim Use	Permanent	Total	Number	Percent
Drift Gillnet					
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	1,411	76
2005	3	1,859	1,862	1,439	77
2006	1	1,857	1,858	1,570	84
2007	1	1,862	1,863	1,621	87
2008	0	1,863	1,863	1,636	88
2009 ^a	0	1,863	1,863	1,793	96
Average	60	1,804	1,864	1,742	93

-continued-

Table 14.–Page 2 of 2.

Year	Number of Permits Issued			Permits Fished	
	Interim Use	Permanent	Total	Number	Percent
Set Gillnet					
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	796	80
2005	0	988	988	824	83
2006	0	985	985	798	81
2007	0	983	983	836	85
2008	0	981	981	961	98
2009 ^a	0	982	982	940	96
Average	13	980	993	886	89

^a Preliminary data.

Table 15.—Alagnak River and General District harvest numbers by gear type, 2004–2007.

Year	Percentage of Harvest by Gear Type		Harvest in Numbers by Gear Type		Number of Permits	Season Total harvest
	Drift	Set	Drift	Set		
Alagnak River						
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					
General District						
2004	100	-	1,656,994	-	897 (D)	1,656,994

Note: (D) = drift gillnet; (S) = set gillnet.

^a Preliminary data.

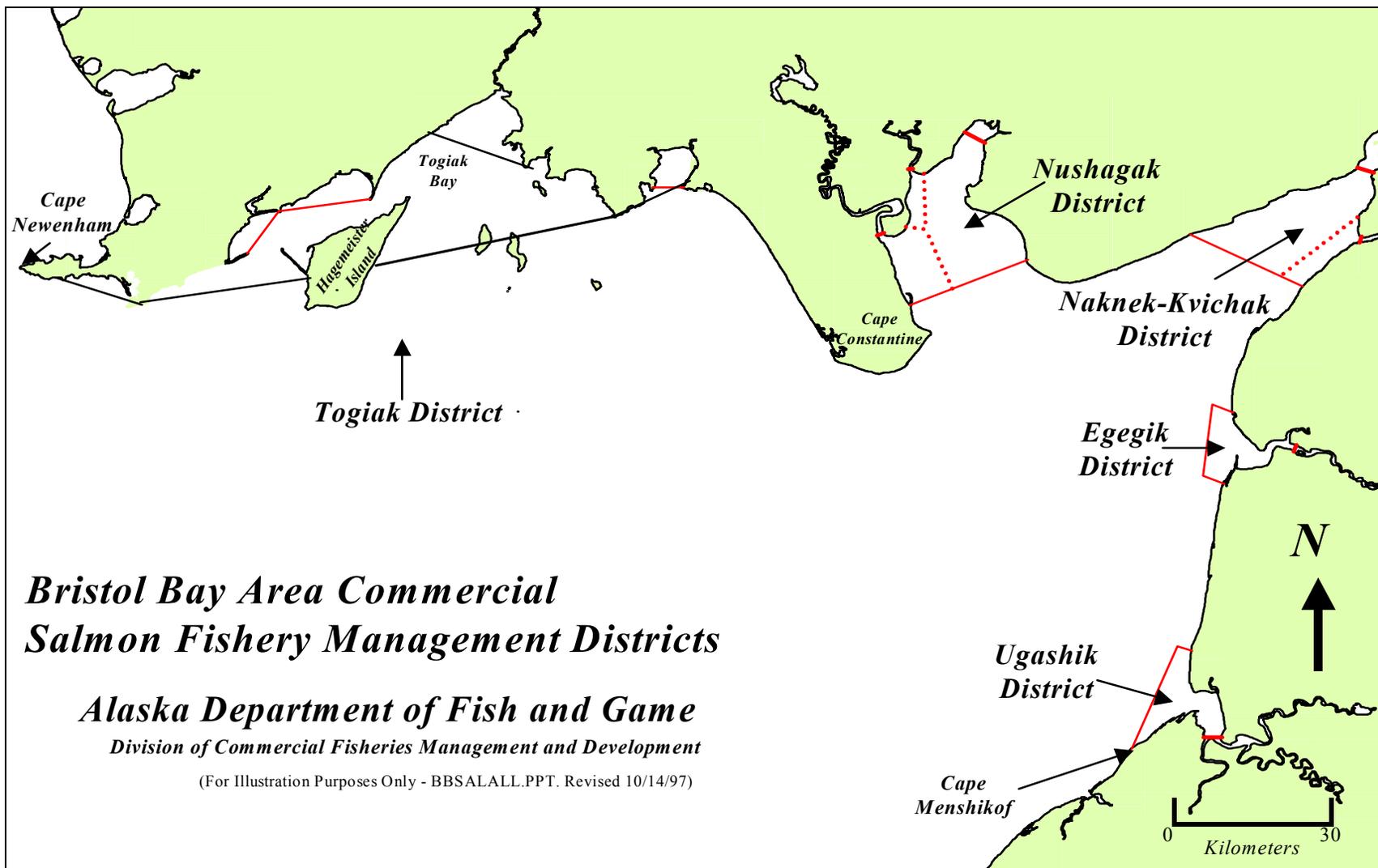


Figure 1.—Bristol Bay area commercial salmon fishery management districts.