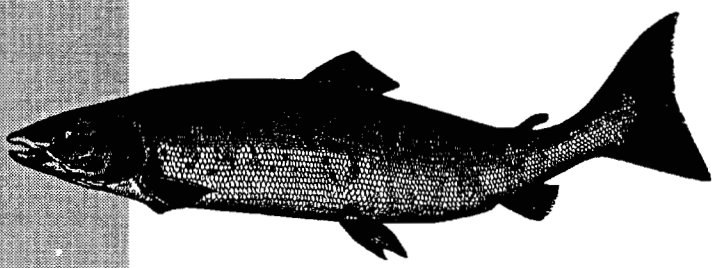
SOUTHEAST ALASKA/ YAKUTAT COMMERCIAL, SUBSISTENCE, AND PERSONAL USE SALMON FISHERIES

1994

Report to the Board of Fisheries



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January 1996

Alaska Department of Fish and Game
Commercial Fisheries Management
and Development Division
Juneau, Alaska
Region 1

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SOUTHEAST ALASKA SALMON FISHERIES

1994 REGION I SUMMARY

Regional Information Report No.[1] 1J96-07

Alaska Department of Fish and Game
Commercial Fisheries Management and Development Division
Juneau, Alaska

January 1996

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COMMERCIAL, PERSONAL USE, AND
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SUMMARY OF 1994 SOUTHEAST ALASKA/YAKUTAT COMMERCIAL, PERSONAL USE AND SUBSISTENCE SALMON FISHERIES

By

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Alaska Department of Fish and Game
Commercial Fisheries Management and Development Division
Juneau, Alaska

January 1996

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INTRODUCTION

This report provides a general overview of the 1994 salmon fisheries in Southeast Alaska and Yakutat. Southeast Alaska salmon fisheries harvest all five species of Pacific salmon. Preliminary estimates indicate that the total salmon harvest during 1994 was worth an exvessel value of approximately $107,900,000.

Description of the Southeast Region

The Southeast Alaska/Yakutat (Region I) consists of Alaskan waters between Cape Suckling on the north and Dixon Entrance on the south (Figure 1). The region is divided into two salmon net registration areas; Area A, the Southeast Alaska area, extends from Dixon Entrance to Cape Fairweather and Area D, the Yakutat area, extends from Cape Fairweather to Cape Suckling. By regulation, the Yakutat Area is divided into the Yakutat District, extending from Cape Fairweather to Icy Cape, and the Yakataga District extending westward from Icy Cape to Cape Suckling (Figure 2). The Southeast Alaska Area is divided into 17 regulatory districts - Districts 1 through 16 and the Dixon Entrance District (Figure 3). Some districts are further divided into regulatory sections.

For management and administrative purposes the region is divided into six management areas with area offices in Juneau, Ketchikan, Petersburg, Sitka, Haines, and Yakutat (Figure 1). Additionally, a department office is also maintained in Wrangell, for the Petersburg area.

Fisheries Management Organization

Management of the Region I salmon fisheries is accomplished via coordination of the area management biologists and overall regional management biologists. There are six area management biologists in Region I, corresponding to the six area management offices. Each area biologist is primarily responsible for the management of the commercial salmon net, herring and subsistence fisheries in his respective management area. Management of the groundfish, shellfish, and salmon troll fisheries is accomplished by management biologists with regional responsibility. Because of the movement of fish and fishermen between the various management areas, there is a closely coordinated regional management approach for every fishery.

Historical Summary

Commercial utilization of the Southeast Alaska salmon resources began in the late 1870s. Until the early 1900s, sockeye salmon was the primary species harvested. Pink salmon began to dominate the catch in the early 1900s and, in recent years, pinks have comprised 75% to 90% of the region's total salmon catch. The relative order of production (in numbers of fish) from highest to lowest is usually pink, chum, coho, sockeye and king salmon.

The harvest of salmon in Southeast Alaska peaked in the late 1930s and early 1940s and declined to historic low levels in the 1950s and early 1960s. During the mid to late 1960s catches increased, but in the early 1970s another decline in production occurred. The recent trend has been for increased production levels. The recent 10-year average (1985-1994) of approximately 51,131,000 salmon surpasses the 1933-1942 average by about 6,000,000 fish.

Fishery Characteristics

Salmon are commercially harvested in the Southeast Alaska registration area (Area A) with purse seines, drift gillnets, floating fish traps, and hatchery cost recovery; in the Yakutat area (Area D) with setnets; and, in both areas with hand and power troll gear. The salmon net fisheries are confined to state waters; however, the troll fishery operates in both state waters and in the federal waters of the Exclusive Economic Zone (EEZ). The use of floating fish traps is restricted to the Annette Islands Fishery Reserve, established by Presidential Proclamation in 1916.

The region's salmon fisheries are extremely complex due to the mixed stock and mixed species nature of the returns and to the existence of several distinct gear groups harvesting the same stocks of salmon. Because the Southeast Region contains over 2,500 salmon streams with various productivity levels, it is difficult to apply stock-specific fisheries management according to the run strength of individual returns. Additionally, some salmon harvested in the region originate from other states (primarily Washington and Oregon) and Canada. Often, a fishery targeting on a specific salmon species incurs major incidental catches of other species.

Fishery Participation

According to preliminary information from the Commercial Fisheries Entry Commission (CFEC), 411 purse seine, 475 drift gillnet, 167 set gillnet, 928 power troll, and 1,310 hand troll permits were renewed and could have fished in 1994 (Table 1). Preliminary fish ticket information indicates that a total of 2,383

permits, including 417 purse seine, 456 drift gillnet, 151 set gillnet, 809 power troll, and 550 hand troll permitees reported salmon landings. No landings were reported from fish traps authorized on the Annette Island Reserve.

Salmon Harvest

The Southeast Alaska region's commercial salmon harvest by all gear types, including hatchery cost recovery, totaled almost 76,400,000 fish in 1994 (Tables 2 and 3). This was the highest catch since statehood and exceeds the 1993 record harvest by over 4,000,000 salmon. The 1994 harvest exceeded the projected harvest of 55,500,000 salmon by 137%.

The harvest of almost 57,650,000 pink salmon was only 7% less than the record 1991 catch (approximately 62,000,000) and was almost twice the last 5-even year average of 29,900,000. Pink salmon accounted for 75% of the 1994 salmon catch. The chum salmon harvest of about 10,400,000 fish is the highest reported since statehood, exceeding the 1993 previous record by 2,500,000 fish, and is almost 256% greater than the previous five year average. Landings of over 5,700,000 coho also exceeded the previous record harvest, established in 1992, by 155%. Region-wide landings of 2,390,000 sockeye salmon were the third highest since Alaska statehood in 1959, and approximately equal to the recent five year average. The 1994 commercial catch of chinook salmon was 241,300 fish, including those caught in the winter troll fishery (October 1993 to April 1994).

Harvest by Gear Type

The 1994 Southeast Alaska salmon catch by gear type and species is summarized in Tables 4-9. Salmon landed by purse seine gear accounted for 79% of the total salmon catch, followed by driftnet and troll, both at 6%. Troll gear accounted for 75% of the region's landings of chinook salmon and 61% of the coho salmon harvest. Purse seine fisheries harvested 89% of the pink, 61% of the chum, and 60% of the region's sockeye salmon harvest. Drift gillnet gear accounted for 29% of the sockeye, 18% of the chum, 12% of the coho, and 2% of the pink salmon harvest. The set gillnet landings of sockeye and coho salmon represented 9% and 6% of the regional harvest of these species, respectively. Approximately 7% of the chinook, 16% of the chum, 7% of the pink, and 3% of the overall coho salmon harvest was taken in hatchery-controlled, cost recovery fisheries.

Exvessel Value

The exvessel value of the 1994 Southeast Alaska regional commercial salmon harvest was estimated at approximately $107,900,000 (Table 10) and is the highest exvessel value since 1989 ($130,400,000). These estimates are considered conservative as they are based on the price reported on fish tickets and do not include unreported price adjustments, or situations where price information was not reported. The actual exvessel value, which may be from 10% to 20% higher, will not be known until final processor reports are received and analyzed.

The regional, all-gear harvest of coho salmon was valued at over $36,700,000, followed by pink ($29,200,000), chum ($20,200,000), sockeye ($15,300,000), and chinook salmon ($6,500,000). The exvessel value was highest for purse seine gear ($49,700,000), followed by troll ($31,400,000), drift gillnet ($13,700,000), hatchery cost recovery ($8,300,000), and set gillnet ($3,400,000).

Subsistence and Personal Use Salmon Fisheries

A total of 2,494 salmon subsistence, personal use, and combined (subsistence and personal use) fishing permits were issued in the Southeast Alaska portion of the region in 1994. This included 633 subsistence, 152 personal use, and 1,709 combined permits (Table 11). The preliminary salmon harvest of 54,823 fish included 12,948 in the subsistence fisheries, 1,370 in the personal use fisheries, and 40,505 in the combined fisheries. Over 84% of the harvest consisted of sockeye salmon.

A preliminary subsistence harvest of 5,461 salmon was reported from the Yakutat portion of the region (Table 12) of which 61% and 26% were sockeye and coho salmon, respectively. A total of 137 subsistence permits were issued for the Yakutat area during 1994.

Table 1. Number of limited entry and interim use permits issued and fished in the Southeast Alaska and Yakutat salmon fisheries, 1977 to 1994.

Number of Permits

Year	Purse Seine		Drift Gillnet		Set Gillnet		Hand Troll		Power Troll	
	Issued[1]	Fished[2]	Issued[1]	Fished[2]	Issued[1]	Fished[2]	Issued[1]	Fished[2]	Issued[1]	Fished[2]
1977	414	325	474	438	159	144	2,953	1,836	970	750
1978	420	376	491	474	164	155	3,923	2,624	976	816
1979	418	319	491	449	167	155	3,702	2,207	979	819
1980	417	335	489	445	167	159	2,436	1,667	974	842
1981	418	364	487	447	167	158	2,048	1,153	970	793
1982	421	370	486	431	164	147	1,909	1,067	968	810
1983	421	337	480	432	165	145	2,150	946	968	810
1984	422	383	481	437	164	140	2,147	860	963	795
1985	420	368	485	446	164	148	2,028	903	963	830
1986	420	368	488	460	164	154	1,975	804	957	827
1987	420	381	486	465	165	154	1,931	763	957	828
1988	420	394	485	470	165	159	1,867	777	956	828
1989	420	365	485	466	166	160	1,820	694	955	830
1990	420	360	486	465	166	158	1,782	699	956	839
1991	420	383	485	466	168	161	1,745	700	958	847
1992	420	336	484	443	170	153	1,689	636	957	814
1993	408	394	480	464	167	160	1,276	599	934	839
Average 1977-1993	418	362	484	453	165	153	2,199	1,113	962	818
Preliminary 1994	411	417	475	456	167	151	1,310	550	928	809

[1] Data provided by Commercial Fisheries Entry Commission.
[2] Data from Integrated Fisheries Data Base (IFDB) fish tickets.

Table 2. Southeast Alaska region annual commercial salmon catches, in numbers, by species, 1960 to 1994.

Year	Chinook[1] ≥28"		Chinook[1] ≤21"		Sockeye		Coho		Pink		Chum		Total
1960	301,344	(6%)	-	(0%)	533,118	(10%)	681,604	(13%)	2,712,146	(53%)	932,430	(18%)	5,160,642
1961	220,397	(1%)	-	(0%)	682,292	(4%)	833,609	(5%)	11,459,298	(73%)	2,446,331	(16%)	15,641,927
1962	196,650	(1%)	-	(0%)	727,437	(5%)	1,156,277	(8%)	11,255,790	(74%)	1,837,010	(12%)	15,173,164
1963	257,706	(1%)	-	(0%)	675,750	(3%)	1,265,328	(6%)	19,115,942	(84%)	1,470,239	(6%)	22,784,965
1964	357,139	(2%)	-	(0%)	919,124	(4%)	1,586,258	(7%)	18,580,259	(80%)	1,927,834	(8%)	23,370,614
1965	287,109	(2%)	-	(0%)	1,076,998	(7%)	1,543,807	(10%)	10,879,097	(71%)	1,466,256	(10%)	15,253,267
1966	308,042	(1%)	-	(0%)	1,046,075	(4%)	1,218,827	(5%)	20,350,917	(78%)	3,227,402	(12%)	26,151,263
1967	300,938	(4%)	-	(0%)	966,398	(14%)	864,250	(12%)	3,109,343	(44%)	1,806,940	(26%)	7,047,869
1968	331,511	(1%)	-	(0%)	826,195	(3%)	1,539,686	(5%)	25,077,871	(82%)	2,636,207	(9%)	30,411,470
1969	314,012	(4%)	-	(0%)	811,232	(11%)	596,407	(8%)	4,869,056	(68%)	561,366	(8%)	7,152,073
1970	322,370	(2%)	-	(0%)	667,909	(4%)	758,911	(5%)	10,657,293	(72%)	2,446,110	(16%)	14,852,593
1971	333,997	(3%)	-	(0%)	623,269	(5%)	914,420	(7%)	9,344,830	(71%)	1,946,105	(15%)	13,162,621
1972	286,826	(2%)	-	(0%)	916,720	(5%)	1,508,654	(8%)	12,399,801	(69%)	2,942,712	(16%)	18,054,713
1973	343,833	(3%)	-	(0%)	1,011,595	(10%)	836,400	(8%)	6,455,488	(62%)	1,832,215	(17%)	10,479,531
1974	346,570	(4%)	-	(0%)	687,422	(8%)	1,276,941	(14%)	4,888,711	(55%)	1,684,315	(19%)	8,883,959
1975	300,707	(5%)	-	(0%)	245,191	(4%)	427,357	(8%)	4,026,520	(71%)	686,615	(12%)	5,686,390
1976	241,762	(3%)	-	(0%)	595,259	(7%)	823,667	(10%)	5,329,598	(66%)	1,030,877	(13%)	8,021,163
1977	285,178	(2%)	-	(0%)	1,085,143	(6%)	944,654	(6%)	13,843,520	(82%)	738,723	(4%)	16,897,218
1978	401,424	(2%)	-	(0%)	788,319	(3%)	1,714,508	(7%)	21,243,378	(85%)	868,963	(3%)	25,016,592
1979	363,617	(2%)	-	(0%)	1,073,657	(7%)	1,284,637	(9%)	10,978,334	(75%)	888,273	(6%)	14,588,518
1980	324,457	(2%)	-	(0%)	1,108,349	(6%)	1,116,237	(6%)	14,500,066	(78%)	1,642,266	(9%)	18,691,375
1981	268,317	(1%)	-	(0%)	1,072,201	(5%)	1,358,806	(6%)	19,038,296	(84%)	837,240	(4%)	22,574,860
1982	292,141	(1%)	-	(0%)	1,490,034	(5%)	2,117,303	(7%)	24,211,210	(82%)	1,329,501	(5%)	29,440,189
1983	289,378	(1%)	-	(0%)	1,556,615	(4%)	1,947,099	(5%)	37,528,922	(88%)	1,168,606	(3%)	42,490,620
1984	270,196	(1%)	-	(0%)	1,215,861	(4%)	1,909,478	(6%)	24,704,782	(77%)	4,083,866	(13%)	32,184,183
1985	255,224	(0%)	-	(0%)	1,861,685	(3%)	2,598,874	(4%)	51,954,805	(87%)	3,275,127	(5%)	59,945,715
1986	262,344	(0%)	1,162	(0%)	1,442,512	(3%)	3,403,972	(6%)	46,156,323	(84%)	3,359,139	(6%)	54,625,452
1987	261,495	(2%)	1,792	(0%)	1,377,707	(9%)	1,543,119	(10%)	10,281,145	(64%)	2,721,509	(17%)	16,186,767
1988	263,770	(2%)	1,038	(0%)	1,460,358	(8%)	1,046,390	(6%)	11,206,533	(64%)	3,533,109	(20%)	17,511,198
1989	281,195	(0%)	4,579	(0%)	2,124,803	(3%)	2,204,083	(3%)	59,460,187	(90%)	1,968,821	(3%)	66,043,668
1990	342,299	(1%)	3,776	(0%)	2,155,677	(5%)	2,867,270	(7%)	32,385,512	(81%)	2,212,913	(6%)	39,967,447
1991	324,909	(0%)	5,585	(0%)	2,062,586	(3%)	3,194,323	(5%)	61,923,461	(87%)	3,335,297	(5%)	70,846,161
1992	234,145	(1%)	2,363	(0%)	2,666,421	(6%)	3,695,613	(8%)	34,963,312	(75%)	4,936,499	(11%)	46,498,353
1993	280,791	(0%)	3,951	(0%)	3,194,052	(4%)	3,664,633	(5%)	57,258,285	(79%)	7,877,790	(11%)	72,279,502
Average 1960 to 1993	295,641	(1%)	3,031[2]	(0%)	1,198,470	(5%)	1,601,277	(6%)	20,945,589	(80%)	2,225,253	(8%)	26,266,942
Average 1989 to 1993	292,668	(0%)	4,051	(0%)	2,440,708	(4%)	3,125,184	(5%)	49,198,151	(83%)	4,066,264	(7%)	59,127,026
Preliminary 1994	241,332	(0%)	6,338	(0%)	2,392,414	(3%)	5,715,646	(7%)	57,646,063	(75%)	10,395,569	(14%)	76,397,362

[1] Chinook troll catch is calendar year for 1960 through September 1979, and by season (Oct. 1-Sept. 30) for 1980-1994.

[2] Chinook ≤21" average for 1986 - 1993.

Table 3. Southeast Alaska region commercial salmon catches, in numbers, by gear and fishery, 1994.

Fishery	Chinook ≥28"	Chinook ≤21"	Sockeye	Coho	Pink	Chum	Total
Total Seine	14,824	6,265	1,430,891	967,711	51,282,419	6,376,295	60,078,405
Southern [1]	10,371	401	1,249,572	500,395	19,890,189	1,594,879	23,245,807
Northern [2]	4,453	5,864	181,319	467,316	31,392,230	4,781,416	36,832,598
Total Drift Gillnet	16,733		686,760	698,094	1,029,807	1,823,326	4,254,720
Tree Point	957		100,377	47,014	263,648	490,170	902,166
Prince of Wales	754		211,048	267,831	179,994	176,018	835,645
Stikine	1,996		97,224	44,891	35,405	27,658	207,174
Taku-Snettisham	5,045		105,861	188,501	401,525	214,039	914,971
Lynn Canal	980		171,729	140,764	147,277	685,449	1,146,199
Hatchery Terminal	7,001		521	9,093	1,958	229,992	248,565
Set Gillnet	3,897		206,683	343,843	12,324	4,229	570,976
Total Troll [3]	186,167		21,761	3,461,607	942,747	330,374	4,942,656
Hand Troll	14,873		1,878	435,947	56,958	32,061	541,717
Power Troll	171,294		19,883	3,025,660	885,789	298,313	4,400,939
Total Annette Isl. Res.	230	0	41,615	48,900	498,031	136,341	725,117
Seine	15	0	5,157	2,409	158,961	3,135	169,677
Drift Gillnet	183		36,458	46,433	339,070	133,206	555,350
Total Troll c/	32		0	58	0	0	90
Hand Troll	22		0	0	0	0	22
Power Troll	10		0	58	0	0	68
Trap	0		0	0	0	0	0
Hatchery Controlled	17,967	70	3,322	188,760	3,831,458	1,710,851	5,752,428
Miscellaneous [7]	1,514	3	1,382	6,731	49,277	14,153	73,060
Southern Totals [4]	55,594	403	1,704,158	1,732,989	21,059,465	3,441,209	27,993,818
Northern Totals [5]	177,198	5,935	480,005	3,221,753	36,572,888	6,949,119	47,406,898
Yakutat Totals [6]	8,540	0	208,251	760,567	13,710	5,241	996,309
Region Totals	241,332	6,338	2,392,414	5,715,646	57,646,063	10,395,569	76,397,362

[1] Districts 101-107. Includes hatchery terminal area fisheries.

[2] Districts 109-114. Includes hatchery terminal area fisheries.

[3] Catch accounting period for the 1994 chinook salmon season goes from 11 Oct. 1993 to 30 Sept. 1994.

[4] Districts 101-108, 150, and 152.

[5] Districts 109-116, 154, 156, and 157.

[6] Districts 181, 182, 183, 185, 186, 189, 191, 192.

[7] Includes salmon that were confiscated, caught in sportfish derbies, or commercial test fisheries.

Table 4. Southeast Alaska region annual commercial total salmon catches by gear, in numbers and percent, 1960 to 1994.

Year	Seine[1]		Driftnet		Setnet		Troll[2]		Annette Is.[2]		Hatchery		Misc.[1,3]		Total
1960	3,789,373	(73%)	432,438	(8%)	177,916	(3%)	707,570	(14%)	53,345	(1%)	0	(0%)	0	(0%)	5,160,642
1961	13,778,020	(88%)	766,804	(5%)	288,253	(2%)	627,467	(4%)	181,383	(1%)	0	(0%)	0	(0%)	15,641,927
1962	12,394,256	(82%)	1,010,200	(7%)	274,139	(2%)	896,277	(6%)	598,292	(4%)	0	(0%)	0	(0%)	15,173,164
1963	20,120,230	(88%)	1,232,700	(5%)	283,814	(1%)	1,051,912	(5%)	96,309	(0%)	0	(0%)	0	(0%)	22,784,965
1964	20,060,487	(86%)	1,431,389	(6%)	302,962	(1%)	1,188,373	(5%)	387,403	(2%)	0	(0%)	0	(0%)	23,370,614
1965	12,490,889	(82%)	1,426,018	(9%)	252,443	(2%)	1,044,147	(7%)	39,770	(0%)	0	(0%)	0	(0%)	15,253,267
1966	22,697,106	(87%)	1,658,535	(6%)	257,968	(1%)	880,209	(3%)	657,445	(3%)	0	(0%)	0	(0%)	26,151,263
1967	5,151,431	(73%)	880,264	(12%)	222,423	(3%)	782,935	(11%)	10,816	(0%)	0	(0%)	0	(0%)	7,047,869
1968	27,306,485	(90%)	1,432,710	(5%)	189,474	(1%)	1,213,591	(4%)	269,210	(1%)	0	(0%)	0	(0%)	30,411,470
1969	5,099,984	(71%)	1,017,462	(14%)	239,271	(3%)	764,490	(11%)	30,866	(0%)	0	(0%)	0	(0%)	7,152,073
1970	12,173,362	(82%)	1,756,875	(12%)	166,517	(1%)	646,033	(4%)	109,740	(1%)	0	(0%)	0	(0%)	14,852,527
1971	10,495,932	(80%)	1,593,806	(12%)	257,077	(2%)	815,806	(6%)	0	(0%)	0	(0%)	0	(0%)	13,162,621
1972	14,269,165	(79%)	1,937,570	(11%)	199,266	(1%)	1,213,688	(7%)	435,024	(2%)	0	(0%)	0	(0%)	18,054,713
1973	7,316,094	(70%)	1,926,658	(18%)	198,914	(2%)	994,199	(9%)	43,385	(0%)	0	(0%)	0	(0%)	10,479,250
1974	5,583,200	(63%)	1,570,365	(18%)	170,616	(2%)	1,446,714	(16%)	113,064	(1%)	0	(0%)	0	(0%)	8,883,959
1975	3,925,990	(69%)	867,832	(15%)	196,691	(3%)	582,276	(10%)	110,901	(2%)	2,700	(0%)	0	(0%)	5,686,390
1976	5,023,411	(63%)	1,373,943	(17%)	219,987	(3%)	955,304	(12%)	446,652	(6%)	0	(0%)	0	(0%)	8,019,297
1977	12,216,997	(72%)	2,516,042	(15%)	364,295	(2%)	1,077,142	(6%)	630,283	(4%)	92,459	(1%)	0	(0%)	16,897,218
1978	19,596,101	(78%)	1,690,223	(7%)	309,944	(1%)	2,122,965	(8%)	1,293,536	(5%)	0	(0%)	3,807	(0%)	25,016,576
1979	9,955,755	(68%)	1,884,812	(13%)	424,693	(3%)	1,913,985	(13%)	362,004	(2%)	35,448	(0%)	11,773	(0%)	14,588,470
1980	13,581,616	(73%)	2,178,863	(12%)	445,334	(2%)	1,281,977	(7%)	1,191,683	(6%)	0	(0%)	11,150	(0%)	18,690,623
1981	17,472,456	(77%)	2,094,774	(9%)	428,332	(2%)	1,705,196	(8%)	729,389	(3%)	137,749	(1%)	6,964	(0%)	22,574,860
1982	23,757,840	(81%)	1,978,246	(7%)	378,093	(1%)	2,069,894	(7%)	1,227,885	(4%)	20,270	(0%)	7,961	(0%)	29,440,189
1983	35,373,471	(83%)	2,527,671	(6%)	271,517	(1%)	2,072,650	(5%)	2,091,874	(5%)	143,178	(0%)	9,918	(0%)	42,490,279
1984	24,330,951	(76%)	3,132,688	(10%)	337,983	(1%)	1,978,114	(6%)	1,736,331	(5%)	652,340	(2%)	10,557	(0%)	32,178,964
1985	50,240,276	(84%)	4,117,169	(7%)	467,790	(1%)	2,845,052	(5%)	1,603,899	(3%)	637,133	(1%)	31,628	(0%)	59,942,947
1986	46,141,141	(84%)	3,160,907	(6%)	268,165	(0%)	2,605,662	(5%)	2,155,047	(4%)	278,525	(1%)	14,813	(0%)	54,624,260
1987	8,705,028	(54%)	3,017,320	(19%)	413,922	(3%)	1,793,481	(11%)	542,799	(3%)	1,642,578	(10%)	70,122	(0%)	16,185,250
1988	11,278,824	(64%)	2,603,833	(15%)	518,378	(3%)	1,349,345	(8%)	1,057,896	(6%)	647,179	(4%)	55,743	(0%)	17,511,198
1989	54,285,491	(82%)	4,450,677	(7%)	580,470	(1%)	3,511,693	(5%)	2,691,267	(4%)	480,770	(1%)	43,300	(0%)	66,043,668
1990	30,330,840	(76%)	2,917,580	(7%)	530,740	(1%)	2,963,003	(7%)	1,727,274	(4%)	1,452,617	(4%)	45,323	(0%)	39,967,377
1991	62,198,669	(88%)	2,813,755	(4%)	403,855	(1%)	2,446,927	(3%)	1,124,897	(2%)	1,802,083	(3%)	49,391	(0%)	70,839,577
1992	34,808,120	(75%)	3,832,020	(8%)	632,646	(1%)	2,894,280	(6%)	1,190,691	(3%)	3,094,606	(7%)	45,990	(0%)	46,498,353
1993	60,201,181	(83%)	3,946,402	(5%)	598,572	(1%)	4,075,833	(6%)	1,725,676	(2%)	1,685,496	(2%)	46,342	(0%)	72,279,502
Average 1960 to 1993	21,063,240	(80%)	2,093,487	(8%)	331,543	(1%)	1,603,476	(6%)	784,295	(3%)	376,622	(1%)	13,670	(0%)	26,266,333
Preliminary 1994	60,078,405	(79%)	4,254,720	(6%)	570,976	(1%)	4,942,656	(6%)	725,117	(1%)	5,752,428	(8%)	73,060	(0%)	76,397,362

[1] Includes Chinook ≤ 21"

[2] Chinook troll catch is calendar year for 1960 through Sept. 1979 and by season (Oct - Sept.) for 1980 - 1994

[3] Includes salmon that were confiscated, caught in sportfish derbies, or commercial test fisheries.

Table 5. Southeast Alaska region annual commercial chinook salmon catches by gear, in numbers and percent, 1960 to 1994.

Year	Seine[1]		Driftnet		Setnet		Troll[2]		Annette Is.[2]		Hatchery		Misc.[1,3]		Total
1960	6,509	(2%)	11,523	(4%)	908	(0%)	282,404	(94%)	0	(0%)	0	(0%)	0	(0%)	301,344
1961	4,134	(2%)	9,440	(4%)	2,534	(1%)	204,289	(93%)	0	(0%)	0	(0%)	0	(0%)	220,397
1962	10,145	(5%)	10,161	(5%)	2,747	(1%)	173,597	(88%)	0	(0%)	0	(0%)	0	(0%)	196,650
1963	6,659	(3%)	6,427	(2%)	941	(0%)	243,679	(95%)	0	(0%)	0	(0%)	0	(0%)	257,706
1964	16,819	(5%)	9,371	(3%)	1,488	(0%)	329,461	(92%)	0	(0%)	0	(0%)	0	(0%)	357,139
1965	14,992	(5%)	11,892	(4%)	1,323	(0%)	258,902	(90%)	0	(0%)	0	(0%)	0	(0%)	287,109
1966	11,874	(4%)	12,527	(4%)	1,555	(1%)	282,083	(92%)	3	(0%)	0	(0%)	0	(0%)	308,042
1967	9,054	(3%)	16,464	(5%)	742	(0%)	274,678	(91%)	0	(0%)	0	(0%)	0	(0%)	300,938
1968	13,335	(4%)	12,902	(4%)	697	(0%)	304,455	(92%)	122	(0%)	0	(0%)	0	(0%)	331,511
1969	6,730	(2%)	15,178	(5%)	1,936	(1%)	290,168	(92%)	0	(0%)	0	(0%)	0	(0%)	314,012
1970	5,954	(2%)	9,460	(3%)	2,299	(1%)	304,602	(95%)	0	(0%)	0	(0%)	0	(0%)	322,315
1971	4,799	(1%)	15,718	(5%)	2,041	(1%)	311,439	(93%)	0	(0%)	0	(0%)	0	(0%)	333,997
1972	16,786	(6%)	25,142	(9%)	2,467	(1%)	242,282	(84%)	149	(0%)	0	(0%)	0	(0%)	286,826
1973	8,751	(3%)	24,471	(7%)	2,733	(1%)	307,806	(90%)	25	(0%)	0	(0%)	0	(0%)	343,786
1974	6,759	(2%)	15,481	(4%)	2,214	(1%)	322,101	(93%)	15	(0%)	0	(0%)	0	(0%)	346,570
1975	2,056	(1%)	9,082	(3%)	2,224	(1%)	287,342	(96%)	3	(0%)	0	(0%)	0	(0%)	300,707
1976	1,426	(1%)	7,222	(3%)	1,830	(1%)	231,239	(96%)	45	(0%)	0	(0%)	0	(0%)	241,762
1977	5,242	(2%)	5,578	(2%)	2,549	(1%)	271,735	(95%)	74	(0%)	0	(0%)	0	(0%)	285,178
1978	13,972	(3%)	8,266	(2%)	3,057	(1%)	375,433	(94%)	197	(0%)	0	(0%)	486	(0%)	401,411
1979	10,079	(3%)	13,738	(4%)	4,299	(1%)	334,317	(92%)	339	(0%)	0	(0%)	832	(0%)	363,604
1980	11,701	(4%)	5,433	(2%)	2,800	(1%)	303,732	(94%)	180	(0%)	0	(0%)	611	(0%)	324,457
1981	10,264	(4%)	6,317	(2%)	2,069	(1%)	248,618	(93%)	301	(0%)	0	(0%)	748	(0%)	268,317
1982	31,165	(11%)	15,238	(5%)	1,456	(0%)	242,236	(83%)	1,140	(0%)	0	(0%)	906	(0%)	292,141
1983	13,578	(5%)	4,734	(2%)	976	(0%)	269,717	(93%)	367	(0%)	0	(0%)	6	(0%)	289,378
1984	20,762	(8%)	10,338	(4%)	1,062	(0%)	235,444	(87%)	236	(0%)	937	(0%)	1,263	(0%)	270,042
1985	23,073	(9%)	10,411	(4%)	1,231	(0%)	215,975	(85%)	705	(0%)	2,658	(1%)	961	(0%)	255,014
1986	13,342	(5%)	8,437	(3%)	1,428	(1%)	237,548	(90%)	117	(0%)	1,093	(0%)	1,076	(0%)	263,041
1987	6,292	(2%)	8,430	(3%)	2,072	(1%)	242,667	(92%)	532	(0%)	2,376	(1%)	918	(0%)	263,287
1988	12,163	(5%)	9,076	(3%)	893	(0%)	231,256	(87%)	735	(0%)	9,643	(4%)	1,042	(0%)	264,808
1989	17,556	(6%)	9,613	(3%)	798	(0%)	235,816	(83%)	892	(0%)	19,704	(7%)	1,395	(0%)	285,774
1990	14,793	(4%)	14,692	(4%)	664	(0%)	287,058	(83%)	1,840	(1%)	26,638	(8%)	390	(0%)	346,075
1991	17,147	(5%)	18,593	(6%)	1,750	(1%)	262,935	(80%)	1,880	(1%)	28,136	(9%)	51	(0%)	330,492
1992	20,308	(9%)	11,285	(5%)	2,025	(1%)	183,586	(78%)	1,210	(1%)	16,723	(7%)	1,371	(1%)	236,508
1993	12,292	(4%)	18,011	(6%)	1,311	(0%)	226,527	(80%)	640	(0%)	23,209	(8%)	2,752	(1%)	284,742
Average 1960 to 1993															
	11,780	(4%)	11,784	(4%)	1,798	(1%)	266,327	(90%)	346	(0%)	3,856	(1%)	436	(0%)	296,326
Preliminary 1994															
	21,089	(9%)	16,733	(7%)	3,897	(2%)	186,167	(75%)	300	(0%)	17,967	(7%)	1,517	(1%)	247,670

[1] Includes Chinook ≤ 21"

[2] Chinook troll catch is calendar year for 1960 through Sept. 1979 and by season (Oct - Sept.) for 1980 - 1994.

[3] Includes salmon that were confiscated, caught in sportfish derbies, or commercial test fisheries.

Table 6. Southeast Alaska region annual commercial sockeye catches by gear, in numbers and percent, 1960 to 1994.

Year	Seine		Driftnet		Setnet		Troll		Annette Is.		Hatchery		Misc.[1]		Total
1960	358,697	(67%)	127,058	(24%)	44,671	(8%)	939	(0%)	1,753	(0%)	0	(0%)	0	(0%)	533,118
1961	418,952	(61%)	169,724	(25%)	82,403	(12%)	1,264	(0%)	9,949	(1%)	0	(0%)	0	(0%)	682,292
1962	411,748	(57%)	233,082	(32%)	73,937	(10%)	1,181	(0%)	7,489	(1%)	0	(0%)	0	(0%)	727,437
1963	422,605	(63%)	194,420	(29%)	52,517	(8%)	2,014	(0%)	4,194	(1%)	0	(0%)	0	(0%)	675,750
1964	570,250	(62%)	246,250	(27%)	90,175	(10%)	1,004	(0%)	11,445	(1%)	0	(0%)	0	(0%)	919,124
1965	672,001	(62%)	279,349	(26%)	120,417	(11%)	1,872	(0%)	3,359	(0%)	0	(0%)	0	(0%)	1,076,998
1966	480,024	(46%)	334,702	(32%)	185,360	(18%)	679	(0%)	45,310	(4%)	0	(0%)	0	(0%)	1,046,075
1967	600,602	(62%)	274,038	(28%)	88,431	(9%)	157	(0%)	3,170	(0%)	0	(0%)	0	(0%)	966,398
1968	494,851	(60%)	245,865	(30%)	80,776	(10%)	574	(0%)	4,129	(0%)	0	(0%)	0	(0%)	826,195
1969	338,217	(42%)	348,298	(43%)	123,303	(15%)	444	(0%)	970	(0%)	0	(0%)	0	(0%)	811,232
1970	307,793	(46%)	240,700	(36%)	115,992	(17%)	477	(0%)	2,947	(0%)	0	(0%)	0	(0%)	667,909
1971	162,823	(26%)	328,774	(53%)	130,743	(21%)	929	(0%)	0	(0%)	0	(0%)	0	(0%)	623,269
1972	323,927	(35%)	449,019	(49%)	134,536	(15%)	1,060	(0%)	8,178	(1%)	0	(0%)	0	(0%)	916,720
1973	348,679	(34%)	532,164	(53%)	128,412	(13%)	1,222	(0%)	1,118	(0%)	0	(0%)	0	(0%)	1,011,595
1974	235,934	(34%)	363,857	(53%)	82,413	(12%)	2,603	(0%)	2,615	(0%)	0	(0%)	0	(0%)	687,422
1975	61,877	(25%)	108,334	(44%)	73,260	(30%)	1,098	(0%)	622	(0%)	0	(0%)	0	(0%)	245,191
1976	135,811	(23%)	322,984	(54%)	130,176	(22%)	1,266	(0%)	5,022	(1%)	0	(0%)	0	(0%)	595,259
1977	327,966	(30%)	538,301	(50%)	185,377	(17%)	5,701	(1%)	27,798	(3%)	0	(0%)	0	(0%)	1,085,143
1978	272,197	(35%)	358,917	(46%)	130,681	(17%)	2,804	(0%)	23,619	(3%)	0	(0%)	101	(0%)	788,319
1979	397,137	(37%)	472,610	(44%)	165,069	(15%)	7,018	(1%)	31,345	(3%)	0	(0%)	478	(0%)	1,073,657
1980	513,266	(46%)	408,296	(37%)	159,564	(14%)	2,921	(0%)	23,734	(2%)	0	(0%)	568	(0%)	1,108,349
1981	438,921	(41%)	438,824	(41%)	149,273	(14%)	7,476	(1%)	37,528	(4%)	1	(0%)	178	(0%)	1,072,201
1982	457,198	(31%)	748,963	(50%)	211,613	(14%)	2,366	(0%)	69,689	(5%)	1	(0%)	204	(0%)	1,490,034
1983	775,780	(50%)	586,594	(38%)	152,527	(10%)	8,017	(1%)	32,478	(2%)	1	(0%)	1,157	(0%)	1,556,554
1984	457,160	(38%)	593,278	(49%)	102,565	(8%)	9,654	(1%)	49,740	(4%)	7	(0%)	2,283	(0%)	1,214,687
1985	714,714	(38%)	830,285	(45%)	234,896	(13%)	7,724	(0%)	67,885	(4%)	18	(0%)	6,115	(0%)	1,861,637
1986	587,720	(41%)	658,561	(46%)	150,770	(10%)	6,889	(0%)	36,171	(3%)	6	(0%)	2,236	(0%)	1,442,353
1987	310,622	(23%)	736,745	(53%)	259,979	(19%)	9,727	(1%)	54,292	(4%)	1,121	(0%)	5,221	(0%)	1,377,707
1988	654,731	(45%)	601,019	(41%)	162,168	(11%)	9,306	(1%)	30,979	(2%)	90	(0%)	2,065	(0%)	1,460,358
1989	822,490	(39%)	893,996	(42%)	329,461	(16%)	20,197	(1%)	50,466	(2%)	724	(0%)	7,469	(0%)	2,124,803
1990	965,902	(45%)	767,491	(36%)	344,604	(16%)	9,174	(0%)	59,625	(3%)	75	(0%)	8,806	(0%)	2,155,677
1991	1,051,167	(51%)	714,669	(35%)	229,903	(11%)	9,886	(0%)	45,153	(2%)	1,459	(0%)	9,351	(0%)	2,061,588
1992	1,336,901	(50%)	922,069	(35%)	314,187	(12%)	22,829	(1%)	61,169	(2%)	2,108	(0%)	7,158	(0%)	2,666,421
1993	1,693,530	(53%)	1,022,072	(32%)	345,897	(11%)	25,342	(1%)	95,063	(3%)	7,545	(0%)	4,603	(0%)	3,194,052
Average 1960 to 1992	533,006	(44%)	473,274	(39%)	157,825	(13%)	5,465	(0%)	26,735	(2%)	387	(0%)	1,706	(0%)	1,198,398
Preliminary 1994	1,430,891	(60%)	686,760	(29%)	206,683	(9%)	21,761	(1%)	41,615	(2%)	3,322	(0%)	1,382	(0%)	2,392,414

[1] Includes salmon that were confiscated, caught in sportfish derbies, or commercial test fisheries.

Table 7. Southeast Alaska region annual commercial coho salmon catches by gear, in numbers and percent, 1960 to 1994.

Year	Seine		Driftnet		Setnet		Troll		Annette Is.		Hatchery		Misc.[1]		Total
1960	125,871	(18%)	37,986	(6%)	119,149	(17%)	396,211	(58%)	2,387	(0%)	0	(0%)	0	(0%)	681,604
1961	246,524	(30%)	52,743	(6%)	128,670	(15%)	399,932	(48%)	5,740	(1%)	0	(0%)	0	(0%)	833,609
1962	239,382	(21%)	98,404	(9%)	170,776	(15%)	643,740	(56%)	3,975	(0%)	0	(0%)	0	(0%)	1,156,277
1963	316,449	(25%)	112,776	(9%)	141,365	(11%)	693,050	(55%)	1,688	(0%)	0	(0%)	0	(0%)	1,265,328
1964	506,341	(32%)	172,411	(11%)	169,780	(11%)	730,766	(46%)	6,960	(0%)	0	(0%)	0	(0%)	1,586,258
1965	556,981	(36%)	166,452	(11%)	122,207	(8%)	695,887	(45%)	2,280	(0%)	0	(0%)	0	(0%)	1,543,807
1966	451,888	(37%)	155,922	(13%)	66,252	(5%)	528,621	(43%)	16,144	(1%)	0	(0%)	0	(0%)	1,218,827
1967	188,959	(22%)	134,029	(16%)	97,211	(11%)	443,677	(51%)	374	(0%)	0	(0%)	0	(0%)	864,250
1968	463,270	(30%)	202,955	(13%)	92,005	(6%)	779,500	(51%)	1,956	(0%)	0	(0%)	0	(0%)	1,539,686
1969	109,956	(18%)	65,053	(11%)	32,555	(5%)	388,443	(65%)	400	(0%)	0	(0%)	0	(0%)	596,407
1970	294,574	(39%)	163,901	(22%)	30,279	(4%)	267,647	(35%)	2,499	(0%)	0	(0%)	0	(0%)	758,900
1971	326,264	(36%)	159,143	(17%)	37,734	(4%)	391,279	(43%)	0	(0%)	0	(0%)	0	(0%)	914,420
1972	390,325	(26%)	275,393	(18%)	46,289	(3%)	791,941	(52%)	4,706	(0%)	0	(0%)	0	(0%)	1,508,654
1973	129,593	(15%)	124,349	(15%)	41,776	(5%)	540,125	(65%)	324	(0%)	0	(0%)	0	(0%)	836,167
1974	166,687	(13%)	186,583	(15%)	77,556	(6%)	845,109	(66%)	1,006	(0%)	0	(0%)	0	(0%)	1,276,941
1975	70,193	(16%)	102,321	(24%)	37,403	(9%)	214,170	(50%)	570	(0%)	2,700	(1%)	0	(0%)	427,357
1976	87,473	(11%)	156,469	(19%)	51,743	(6%)	524,762	(64%)	1,354	(0%)	0	(0%)	0	(0%)	821,801
1977	150,535	(16%)	182,934	(19%)	92,214	(10%)	506,845	(54%)	12,126	(1%)	0	(0%)	0	(0%)	944,654
1978	242,961	(14%)	221,134	(13%)	139,500	(8%)	1,100,902	(64%)	8,671	(1%)	0	(0%)	1,337	(0%)	1,714,505
1979	176,354	(14%)	81,324	(6%)	95,873	(7%)	918,845	(72%)	5,649	(0%)	5,893	(0%)	665	(0%)	1,284,603
1980	184,570	(17%)	109,516	(10%)	119,684	(11%)	696,391	(62%)	5,263	(0%)	0	(0%)	813	(0%)	1,116,237
1981	237,402	(17%)	114,503	(8%)	132,579	(10%)	860,898	(63%)	7,839	(1%)	5,003	(0%)	582	(0%)	1,358,806
1982	428,700	(20%)	194,672	(9%)	148,854	(7%)	1,316,013	(62%)	14,345	(1%)	12,150	(1%)	2,569	(0%)	2,117,303
1983	356,946	(18%)	210,332	(11%)	81,541	(4%)	1,276,363	(66%)	17,498	(1%)	4,220	(0%)	95	(0%)	1,946,995
1984	350,037	(18%)	190,971	(10%)	182,256	(10%)	1,132,637	(59%)	25,123	(1%)	26,836	(1%)	1,421	(0%)	1,909,281
1985	418,725	(16%)	309,693	(12%)	202,835	(8%)	1,600,294	(62%)	30,679	(1%)	33,145	(1%)	3,453	(0%)	2,598,824
1986	568,333	(17%)	395,932	(12%)	92,097	(3%)	2,127,922	(63%)	145,545	(4%)	72,810	(2%)	1,288	(0%)	3,403,927
1987	122,254	(8%)	165,138	(11%)	124,406	(8%)	1,041,175	(67%)	35,794	(2%)	50,455	(3%)	3,897	(0%)	1,543,119
1988	156,997	(15%)	163,786	(16%)	205,866	(20%)	500,267	(48%)	8,671	(1%)	7,631	(1%)	3,172	(0%)	1,046,390
1989	330,761	(15%)	234,424	(11%)	176,804	(8%)	1,415,511	(64%)	23,870	(1%)	19,162	(1%)	3,551	(0%)	2,204,083
1990	372,473	(13%)	351,080	(12%)	148,820	(5%)	1,831,492	(64%)	35,104	(1%)	125,762	(4%)	2,469	(0%)	2,867,200
1991	405,727	(13%)	544,247	(17%)	166,172	(5%)	1,718,963	(54%)	62,339	(2%)	285,872	(9%)	10,753	(0%)	3,194,073
1992	488,399	(13%)	645,159	(17%)	290,288	(8%)	1,929,043	(52%)	71,282	(2%)	268,913	(7%)	2,529	(0%)	3,695,613
1993	473,246	(13%)	417,678	(11%)	237,390	(6%)	2,395,047	(65%)	32,690	(1%)	106,476	(3%)	2,106	(0%)	3,664,633
Average 1960 to 1993	298,093	(19%)	202,924	(13%)	120,586	(8%)	930,690	(58%)	17,496	(1%)	30,207	(2%)	1,197	(0%)	1,601,192
Preliminary 1994	967,711	(17%)	698,094	(12%)	343,843	(6%)	3,461,607	(61%)	48,900	(1%)	188,760	(3%)	6,731	(0%)	5,715,646

[1] Includes salmon that were confiscated, caught in sportfish derbies, or commercial test fisheries.

Table 8. Southeast Alaska region annual commercial pink salmon catches by gear, in numbers and percent, 1960 to 1994.

Year	Seine		Driftnet		Setnet		Troll		Annette Is.		Hatchery		Misc.[1]		Total
1960	2,572,279	(95%)	55,984	(2%)	12,911	(0%)	25,563	(1%)	45,409	(2%)	0	(0%)	0	(0%)	2,712,146
1961	10,936,344	(95%)	282,997	(2%)	63,608	(1%)	19,303	(0%)	157,046	(1%)	0	(0%)	0	(0%)	11,459,298
1962	10,139,595	(90%)	435,132	(4%)	26,063	(0%)	75,083	(1%)	579,917	(5%)	0	(0%)	0	(0%)	11,255,790
1963	18,188,335	(95%)	653,826	(3%)	78,697	(0%)	106,939	(1%)	88,145	(0%)	0	(0%)	0	(0%)	19,115,942
1964	17,305,646	(93%)	753,312	(4%)	40,038	(0%)	124,566	(1%)	356,697	(2%)	0	(0%)	0	(0%)	18,580,259
1965	10,061,346	(92%)	698,339	(6%)	4,402	(0%)	81,127	(1%)	33,883	(0%)	0	(0%)	0	(0%)	10,879,097
1966	18,906,895	(93%)	790,314	(4%)	1,405	(0%)	63,623	(0%)	588,680	(3%)	0	(0%)	0	(0%)	20,350,917
1967	2,807,759	(90%)	205,683	(7%)	31,580	(1%)	57,372	(2%)	6,949	(0%)	0	(0%)	0	(0%)	3,109,343
1968	24,083,473	(96%)	607,275	(2%)	2,130	(0%)	126,271	(1%)	258,722	(1%)	0	(0%)	0	(0%)	25,077,871
1969	4,312,402	(89%)	379,423	(8%)	64,266	(1%)	83,727	(2%)	29,238	(1%)	0	(0%)	0	(0%)	4,869,056
1970	9,628,138	(90%)	848,376	(8%)	7,800	(0%)	70,072	(1%)	102,907	(1%)	0	(0%)	0	(0%)	10,657,293
1971	8,505,647	(91%)	654,434	(7%)	80,192	(1%)	104,557	(1%)	0	(0%)	0	(0%)	0	(0%)	9,344,830
1972	11,369,376	(92%)	443,866	(4%)	3,087	(0%)	166,771	(1%)	416,701	(3%)	0	(0%)	0	(0%)	12,399,801
1973	5,609,519	(87%)	652,692	(10%)	16,998	(0%)	134,586	(2%)	41,692	(1%)	0	(0%)	0	(0%)	6,455,487
1974	4,174,219	(85%)	338,108	(7%)	4,248	(0%)	263,083	(5%)	109,053	(2%)	0	(0%)	0	(0%)	4,888,711
1975	3,410,755	(85%)	350,440	(9%)	80,043	(2%)	76,882	(2%)	108,400	(3%)	0	(0%)	0	(0%)	4,026,520
1976	4,286,896	(80%)	384,003	(7%)	28,492	(1%)	193,786	(4%)	436,421	(8%)	0	(0%)	0	(0%)	5,329,598
1977	11,394,597	(82%)	1,424,639	(10%)	75,504	(1%)	281,244	(2%)	575,077	(4%)	92,459	(1%)	0	(0%)	13,843,520
1978	18,545,091	(87%)	812,947	(4%)	30,525	(0%)	617,633	(3%)	1,235,444	(6%)	0	(0%)	1,738	(0%)	21,243,378
1979	8,934,010	(81%)	915,976	(8%)	152,053	(1%)	629,144	(6%)	308,234	(3%)	29,555	(0%)	9,361	(0%)	10,978,333
1980	11,869,988	(82%)	1,107,229	(8%)	143,135	(1%)	266,885	(2%)	1,105,442	(8%)	0	(0%)	7,387	(0%)	14,500,066
1981	16,268,867	(85%)	1,264,900	(7%)	133,756	(1%)	579,524	(3%)	653,409	(3%)	132,744	(1%)	5,096	(0%)	19,038,296
1982	22,014,056	(91%)	570,555	(2%)	9,850	(0%)	503,578	(2%)	1,101,882	(5%)	7,346	(0%)	3,943	(0%)	24,211,210
1983	33,649,518	(90%)	1,209,372	(3%)	25,278	(0%)	498,245	(1%)	2,017,294	(5%)	120,688	(0%)	8,416	(0%)	37,528,811
1984	21,069,273	(85%)	1,307,853	(5%)	19,870	(0%)	572,351	(2%)	1,556,283	(6%)	171,356	(1%)	4,622	(0%)	24,701,608
1985	47,231,253	(91%)	1,832,505	(4%)	16,362	(0%)	968,151	(2%)	1,418,244	(3%)	470,949	(1%)	15,044	(0%)	51,952,508
1986	42,772,257	(93%)	1,282,458	(3%)	7,254	(0%)	181,912	(0%)	1,856,013	(4%)	47,461	(0%)	8,647	(0%)	46,156,002
1987	7,031,060	(68%)	1,359,523	(13%)	12,910	(0%)	487,069	(5%)	343,013	(3%)	994,190	(10%)	53,143	(1%)	10,280,908
1988	8,830,068	(79%)	687,318	(6%)	120,204	(1%)	520,123	(5%)	890,245	(8%)	115,761	(1%)	42,814	(0%)	11,206,533
1989	52,036,028	(88%)	2,769,805	(5%)	57,174	(0%)	1,771,181	(3%)	2,550,624	(4%)	247,752	(0%)	27,623	(0%)	59,460,187
1990	27,915,150	(86%)	1,167,876	(4%)	30,839	(0%)	772,468	(2%)	1,546,186	(5%)	923,643	(3%)	29,350	(0%)	32,385,512
1991	58,597,975	(95%)	824,121	(1%)	3,051	(0%)	426,683	(1%)	933,405	(2%)	1,112,852	(2%)	21,010	(0%)	61,919,097
1992	29,769,079	(85%)	1,408,331	(4%)	18,526	(0%)	673,809	(2%)	954,756	(3%)	2,111,411	(6%)	27,400	(0%)	34,963,312
1993	53,415,336	(93%)	1,087,453	(2%)	9,909	(0%)	903,136	(2%)	1,521,794	(3%)	293,603	(1%)	27,054	(0%)	57,258,285
Average 1960 to 1993															
	18,754,183	(90%)	869,620	(4%)	41,534	(0%)	365,484	(2%)	703,741	(3%)	202,111	(1%)	8,607	(0%)	20,945,280
Preliminary 1994															
	51,282,419	(89%)	1,029,807	(2%)	12,324	(0%)	942,747	(2%)	498,031	(1%)	3,831,458	(7%)	49,277	(0%)	57,646,063

[1] Includes salmon that were confiscated, caught in sportfish derbies, or commercial test fisheries.

Table 9. Southeast Alaska region annual commercial chum salmon catches by gear, in numbers and percent, 1960 to 1994.

Year	Seine		Driftnet		Setnet		Troll		Annette Is.		Hatchery		Misc.[1]		Total
1960	726,017	(78%)	199,887	(21%)	277	(0%)	2,453	(0%)	3,796	(0%)	0	(0%)	0	(0%)	932,430
1961	2,172,066	(89%)	251,900	(10%)	11,038	(0%)	2,679	(0%)	8,648	(0%)	0	(0%)	0	(0%)	2,446,331
1962	1,593,386	(87%)	233,421	(13%)	616	(0%)	2,676	(0%)	6,911	(0%)	0	(0%)	0	(0%)	1,837,010
1963	1,186,182	(81%)	265,251	(18%)	10,294	(1%)	6,230	(0%)	2,282	(0%)	0	(0%)	0	(0%)	1,470,239
1964	1,661,431	(86%)	250,045	(13%)	1,481	(0%)	2,576	(0%)	12,301	(1%)	0	(0%)	0	(0%)	1,927,834
1965	1,185,569	(81%)	269,986	(18%)	4,094	(0%)	6,359	(0%)	248	(0%)	0	(0%)	0	(0%)	1,466,256
1966	2,846,425	(88%)	365,070	(11%)	3,396	(0%)	5,203	(0%)	7,308	(0%)	0	(0%)	0	(0%)	3,227,402
1967	1,545,057	(86%)	250,050	(14%)	4,459	(0%)	7,051	(0%)	323	(0%)	0	(0%)	0	(0%)	1,806,940
1968	2,251,556	(85%)	363,713	(14%)	13,866	(1%)	2,791	(0%)	4,281	(0%)	0	(0%)	0	(0%)	2,636,207
1969	332,679	(59%)	209,510	(37%)	17,211	(3%)	1,708	(0%)	258	(0%)	0	(0%)	0	(0%)	561,366
1970	1,936,903	(79%)	494,438	(20%)	10,147	(0%)	3,235	(0%)	1,387	(0%)	0	(0%)	0	(0%)	2,446,110
1971	1,496,399	(77%)	435,737	(22%)	6,367	(0%)	7,602	(0%)	0	(0%)	0	(0%)	0	(0%)	1,946,105
1972	2,168,751	(74%)	744,150	(25%)	12,887	(0%)	11,634	(0%)	5,290	(0%)	0	(0%)	0	(0%)	2,942,712
1973	1,219,552	(67%)	592,982	(32%)	8,995	(0%)	10,460	(1%)	226	(0%)	0	(0%)	0	(0%)	1,832,215
1974	999,601	(59%)	666,336	(40%)	4,185	(0%)	13,818	(1%)	375	(0%)	0	(0%)	0	(0%)	1,684,315
1975	381,109	(56%)	297,655	(43%)	3,761	(1%)	2,784	(0%)	1,306	(0%)	0	(0%)	0	(0%)	686,615
1976	511,805	(50%)	503,265	(49%)	7,746	(1%)	4,251	(0%)	3,810	(0%)	0	(0%)	0	(0%)	1,030,877
1977	338,657	(46%)	364,590	(49%)	8,651	(1%)	11,617	(2%)	15,208	(2%)	0	(0%)	0	(0%)	738,723
1978	521,880	(60%)	288,959	(33%)	6,181	(1%)	26,193	(3%)	25,605	(3%)	0	(0%)	145	(0%)	868,963
1979	438,175	(49%)	401,164	(45%)	7,399	(1%)	24,661	(3%)	16,437	(2%)	0	(0%)	437	(0%)	888,273
1980	1,002,091	(61%)	548,389	(33%)	20,151	(1%)	12,048	(1%)	57,064	(3%)	0	(0%)	1,771	(0%)	1,641,514
1981	517,002	(62%)	270,230	(32%)	10,655	(1%)	8,680	(1%)	30,312	(4%)	1	(0%)	360	(0%)	837,240
1982	826,721	(62%)	448,818	(34%)	6,320	(0%)	5,701	(0%)	40,829	(3%)	773	(0%)	339	(0%)	1,329,501
1983	577,649	(49%)	516,639	(44%)	11,195	(1%)	20,308	(2%)	24,237	(2%)	18,269	(2%)	244	(0%)	1,168,541
1984	2,433,719	(60%)	1,030,248	(25%)	32,230	(1%)	28,028	(1%)	104,949	(3%)	453,204	(11%)	968	(0%)	4,083,346
1985	1,852,511	(57%)	1,134,275	(35%)	12,466	(0%)	52,908	(2%)	86,386	(3%)	130,363	(4%)	6,055	(0%)	3,274,964
1986	2,199,489	(65%)	815,519	(24%)	16,616	(0%)	51,391	(2%)	117,201	(3%)	157,155	(5%)	1,566	(0%)	3,358,937
1987	1,234,800	(45%)	747,484	(27%)	14,555	(1%)	12,843	(0%)	109,168	(4%)	594,436	(22%)	6,943	(0%)	2,720,229
1988	1,624,865	(46%)	1,142,634	(32%)	29,247	(1%)	88,393	(3%)	127,266	(4%)	514,054	(15%)	6,650	(0%)	3,533,109
1989	1,078,656	(55%)	542,839	(28%)	16,233	(1%)	68,988	(4%)	65,415	(3%)	193,428	(10%)	3,262	(0%)	1,968,821
1990	1,062,522	(48%)	616,441	(28%)	5,813	(0%)	62,811	(3%)	84,519	(4%)	376,499	(17%)	4,308	(0%)	2,212,913
1991	2,126,653	(64%)	712,125	(21%)	2,979	(0%)	28,460	(1%)	82,120	(2%)	373,764	(11%)	8,226	(0%)	3,334,327
1992	3,193,433	(65%)	845,176	(17%)	7,620	(0%)	85,013	(2%)	102,274	(2%)	695,451	(14%)	7,532	(0%)	4,936,499
1993	4,606,777	(58%)	1,401,188	(18%)	4,065	(0%)	525,781	(7%)	75,489	(1%)	1,254,663	(16%)	9,827	(0%)	7,877,790
Average 1960 to 1993															
	1,466,179	(66%)	535,886	(24%)	9,800	(0%)	35,510	(2%)	35,977	(2%)	140,061	(6%)	1,725	(0%)	2,225,137
Preliminary 1994															
	6,376,295	(61%)	1,823,326	(18%)	4,229	(0%)	330,374	(3%)	136,341	(1%)	1,710,851	(16%)	14,153	(0%)	10,395,569

[1] Includes salmon that were confiscated, caught in sportfish derbies, or commercial test fisheries.

Table 10. Southeast Alaska region salmon exvessel value, catch, average weight, and average price paid per pound by gear and species, 1994.

Fishery	Chinook ≥28"	Chinook ≤21"[1]	Sockeye	Coho	Pink	Chum	Total
			-----Exvessel Value in Dollars-----[2]				
Purse Seine	204,840	5,721	9,195,478	4,099,988	25,778,134	10,380,761	49,664,922
Drift Gillnet	253,105		4,576,872	4,595,731	635,231	3,681,552	13,742,492
Setnet	38,104		1,182,518	2,174,331	8,368	7,177	3,410,499
Troll[3]	5,746,858		102,319	24,373,756	504,909	722,846	31,450,689
Annette Isl. Res.[4]	5,341	0	219,532	283,469	270,053	367,796	1,146,191
Hatchery Controlled	169,767	64	17,887	1,163,269	1,982,561	4,991,584	8,325,132
Miscellaneous[5]	45,532	3	7,046	51,256	24,201	23,202	151,239
Total	6,463,549	5,787	15,301,652	36,741,800	29,203,457	20,174,919	107,891,164
			-----Catch in Numbers of Salmon-----				
Purse Seine	14,824	6,265	1,430,891	967,711	51,282,419	6,376,295	60,078,405
Drift Gillnet	16,733		686,760	698,094	1,029,807	1,823,326	4,254,720
Setnet	3,897		206,683	343,843	12,324	4,229	570,976
Troll[3]	186,167		21,761	3,461,607	942,747	330,374	4,942,656
Annette Isl. Res.[4]	230	0	41,615	48,900	498,031	136,341	725,117
Hatchery Controlled	17,967	70	3,322	188,760	3,831,458	1,710,851	5,752,428
Miscellaneous[5]	1,514	3	1,382	6,731	49,277	14,153	73,060
Total	241,332	6,338	2,392,414	5,715,646	57,646,063	10,395,569	76,397,362
			-----Average Weight in Pounds-----[6]				
Purse Seine	16.30	4.27	5.80	7.18	3.01	7.47	N/A
Drift Gillnet	14.93		6.32	8.37	3.49	8.11	N/A
Setnet	11.85		6.05	10.13	4.33	7.86	N/A
Troll[3]	16.33		5.30	7.24	3.08	7.22	N/A
Annette Isl. Res.[4]	15.62		5.62	8.44	3.17	8.70	N/A
Hatchery Controlled	16.02	4.27	5.82	7.71	2.99	7.74	N/A
Miscellaneous[5]	15.52	4.27	5.95	7.96	3.21	8.16	N/A
			-----Average Exvessel Price Paid Per Pound-----[7]				
Purse Seine	0.85	0.21	1.11	0.59	0.17	0.22	N/A
Drift Gillnet	1.01		1.05	0.79	0.18	0.25	N/A
Setnet	0.83		0.95	0.62	0.16	0.22	N/A
Troll[3]	1.89		0.89	0.97	0.17	0.30	N/A
Annette Isl. Res.[4]	1.49		0.94	0.69	0.17	0.31	N/A
Hatchery Controlled	0.59	0.21	0.93	0.80	0.17	0.38	N/A
Miscellaneous[5]	1.94	0.21	0.86	0.96	0.15	0.20	N/A

[1] Estimated average weight and exvessel price of all (6,338) chinook salmon ≤21"

[2] (number caught) *(average weight) * (average exvessel price)

[3] Catch accounting period for the 1994 chinook salmon season goes from 11 Oct. 1993 to 30 Sept. 1994.

[4] Annette Island Reserve includes seine, drift gillnet, hand and power troll, and trap gears.

[5] Includes salmon that were confiscated, caught in sportfish derbies, or commercial test fisheries.

[6] (total pounds for all fish tickets) / (total number fish for all fish tickets), where pounds and numbers ≠ 0

[7] (total value for all fish tickets) / (total pounds for all fish tickets), where value and pounds ≠ 0

Table 11. Southeast Alaska reported subsistence and personal use salmon harvest, by species, and number of permits issued, 1961 to 1994.

Year	Permits Issued	Chinook	Sockeye	Coho	Pink	Chum	Total
1961	554						14,826
1962	309						7,067
1963	696						6,514
1964	642						9,525
1965	665						10,303
1966	2,372						15,384
1967	632	6	7,238	489	482	4,059	12,274
1968	815	62	8,382	624	1,328	4,260	14,656
1969	774	9	6,305	70	1,771	3,180	11,335
1970	788	13	10,751	0	2,246	2,415	15,425
1971	1,067	0	9,598	0	3,648	6,123	19,369
1972	936	10	9,098	0	1,253	3,970	14,331
1973	1,031	6	7,584	63	2,675	6,799	17,127
1974	1,042	6	7,822	61	2,690	6,819	17,398
1975	944	0	9,454	96	11,428	5,277	26,255
1976	1,166	0	9,625	9	1,590	3,594	14,818
1977	888	0	6,484	68	1,963	3,007	11,522
1978	1,490	0	10,662	57	4,832	3,150	18,701
1979	1,611	0	17,078	60	5,585	4,001	26,724
1980	3,612	40	21,586	10	1,439	3,741	26,816
1981	2,751	1	20,268	129	6,065	4,512	30,975
1982	2,956	8	32,117	99	4,239	3,717	40,180
1983	2,763	38	15,877	211	1,859	2,559	20,544
1984	2,996	55	19,204	721	2,560	2,502	25,042
1985	3,013	19	20,031	360	2,136	2,926	25,472
1986	2,777	29	21,977	277	971	2,840	26,094
1987	2,678	34	25,430	117	1,491	3,881	30,953
1988	2,820	94	20,086	120	1,080	3,015	24,395
1989							
Subsistence	1,631	25	18,323	241	1,160	2,485	22,234
Personal Use	1,457	206	10,502	312	2,912	361	14,293
Combined	30		299	18	25	20	362
Total 1989	3,118	231	29,124	571	4,097	2,866	36,889
1990							
Subsistence	1,810	69	21,580	396	2,290	2,737	27,072
Personal Use	1,327	94	12,006	420	1,125	617	14,262
Combined	4						0
Total 1990	3,141	163	33,586	816	3,415	3,354	41,334
1991							
Subsistence	2,704	118	32,987	366	1,408	2,175	37,054
Personal Use	742	83	4,485	272	413	1,080	6,333
Combined	2		50				50
Total 1991	3,448	201	37,522	638	1,821	3,255	43,437
1992							
Subsistence	521	23	20,901	566	1,478	2,134	25,102
Personal Use	497	24	3,923	617	221	45	4,830
Combined	1,285	18	22,841	111	1,206	985	25,161
Total 1992	2,303	65	47,665	1,294	2,905	3,164	55,093
1993							
Subsistence	695	50	18,310	650	486	1,307	20,803
Personal Use	614	19	4,557	509	402	306	5,793
Combined	1,782	19	28,308	93	1,249	945	30,614
Total 1993	3,091	88	51,175	1,252	2,137	2,558	57,210
Average 1961 - 1993							
	1,815						23,272
Average 1967 - 1993							
	2,024	44	19,101	304	2,878	3,761	26,088
Preliminary 1994							
Subsistence	633	57	9,458	292	1,436	1,705	12,948
Personal Use	152	8	1,197	4	35	126	1,370
Combined	1,709	32	35,593	894	1,843	2,143	40,505
Total 1994	2,494	97	46,248	1,190	3,314	3,974	54,823

Table 12. Yakutat Area reported subsistence and personal use salmon harvest, by species, and number of permits issued, 1975 to 1994.

Year	Number of Permits	Chinook	Sockeye	Coho	Pink	Chum	Total
1975	18	27	510	40	0	0	577
1976	35	83	1,060	55	0	0	1,198
1977	45	92	1,242	781	0	0	2,115
1978	127	59	870	912	0	0	1,841
1979	73	238	525	720	0	0	1,483
1980	68	284	961	982	0	0	2,227
1981	88	167	952	1,701	0	0	2,820
1982	71	198	1,645	2,180	0	0	4,023
1983	N/A	188	1,175	360	0	0	1,723
1984	88	233	890	572	0	0	1,695
1985	46	230	1,003	59	0	0	1,292
1986	170	301	2,357	586	0	0	3,244
1987	120	372	3,598	883	0	0	4,853
1988	111	196	2,119	176	46	2	2,539
1989							
Subsistence	117	355	3,327	863	220	49	4,814
Personal Use	36	4	167	17	1	2	191
Total 1989	153	359	3,494	880	221	51	5,005
1990							
Subsistence	116	360	3,146	729	35	2	4,272
Personal Use	12	1	186	80	0	0	267
Total 1990	128	361	3,332	809	35	2	4,539
1991							
Subsistence	132	59	861	198	1	0	1,119
Personal Use	2	2	35	15	0	0	52
Total 1991	134	61	896	213	1	0	1,171
1992							
Subsistence	139	549	5,469	3,645	37	12	9,712
Personal Use	0	0	0	0	0	0	0
Total 1992	139	549	5,469	3,645	37	12	9,712
1993							
Subsistence	130	449	5,073	2,263	6	1	7,792
Personal Use	-	-	-	-	-	-	-
Total 1993	130	449	5,073	2,263	6	1	7,792
Average 1975 - 1992	90	227	1,880	945	17	4	3,073
Preliminary 1994							
Subsistence	137	552	3,357	1,449	1	102	5,461
Personal Use							-
Total 1994	137	552	3,357	1,449	1	102	5,461

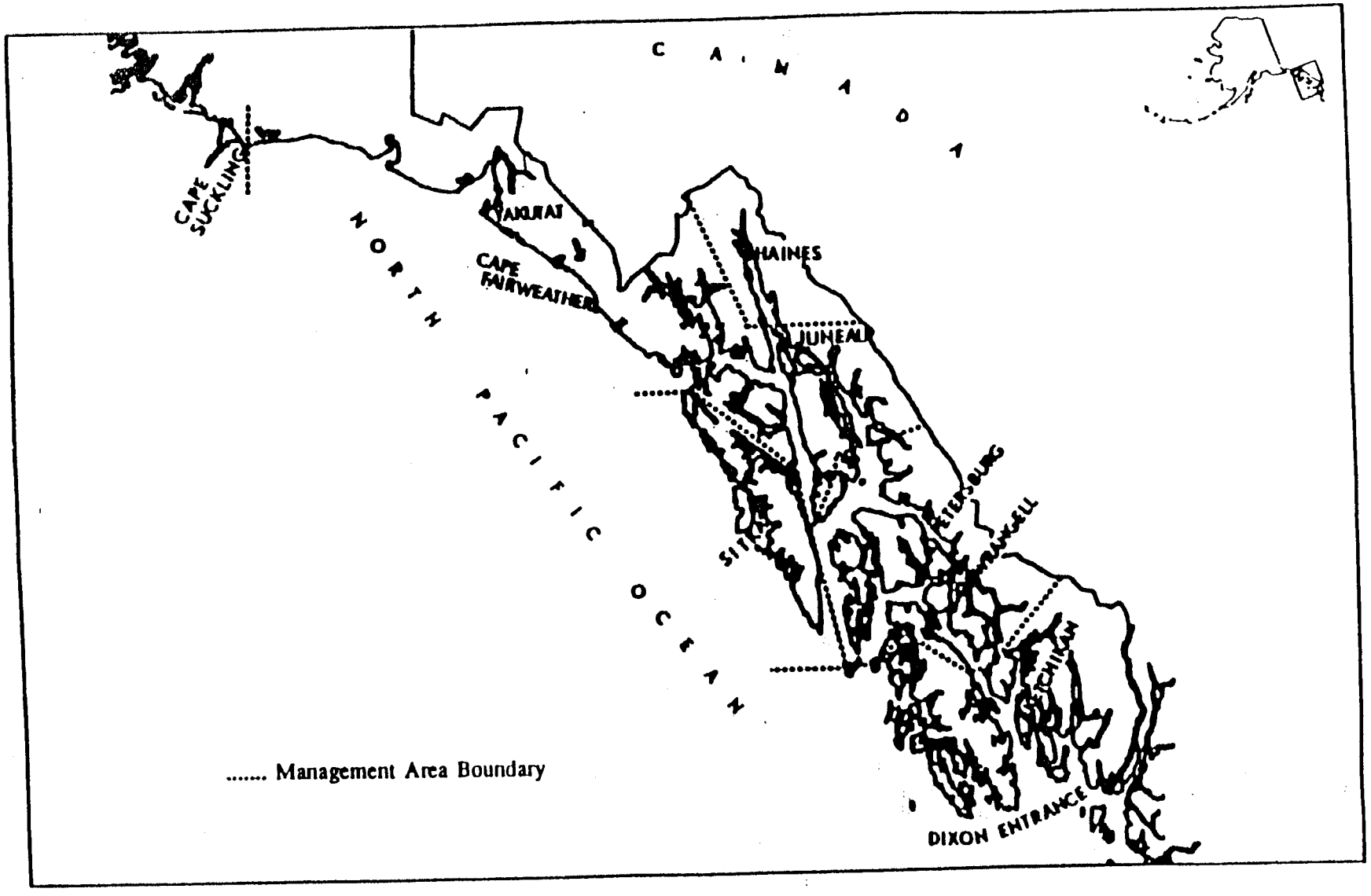

Figure 1. Region 1 (Southeast Alaska and Yakutat) management area boundaries.

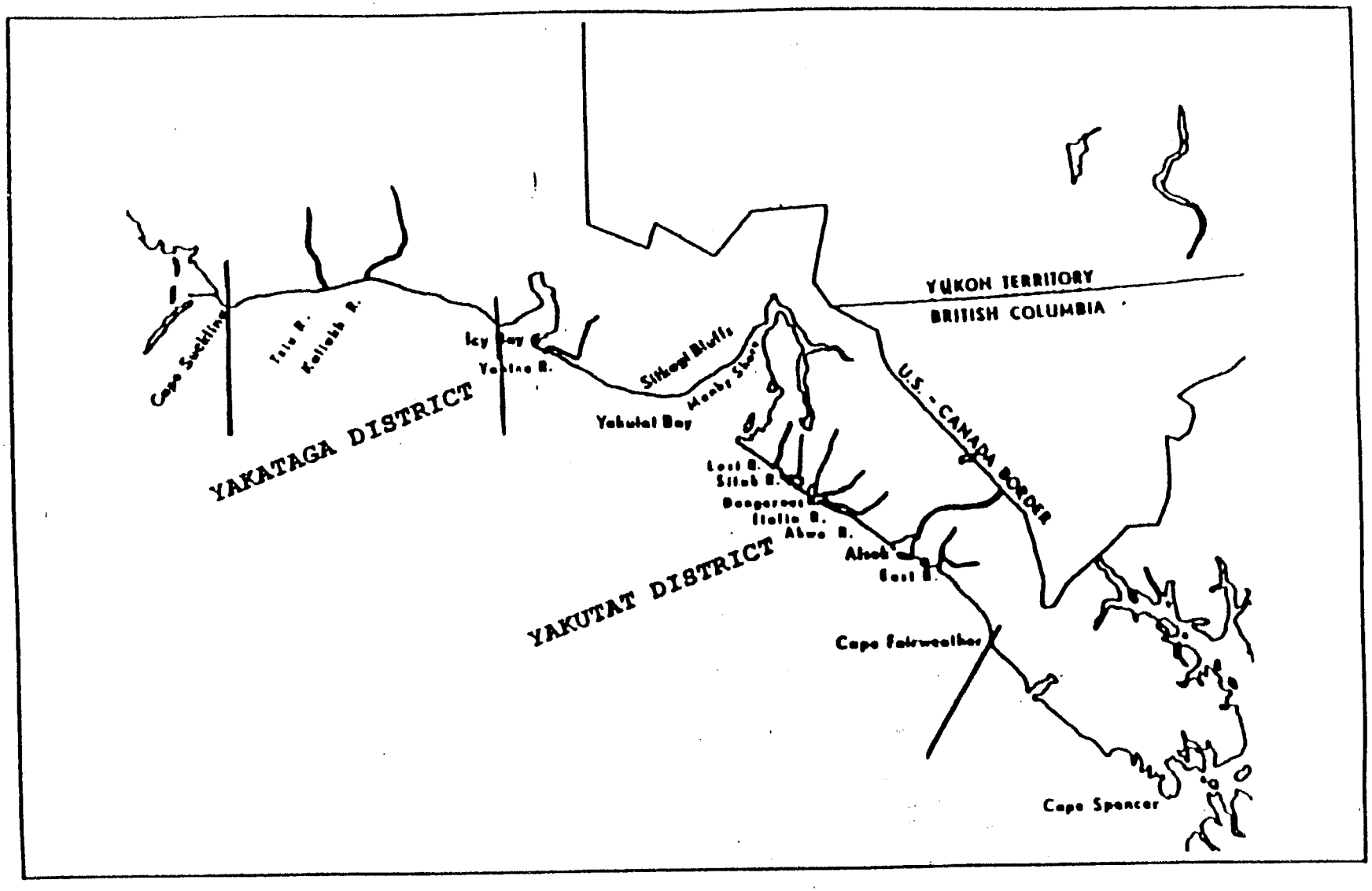

Figure 2. Yakutat's Yakataga and Yakutat Districts.

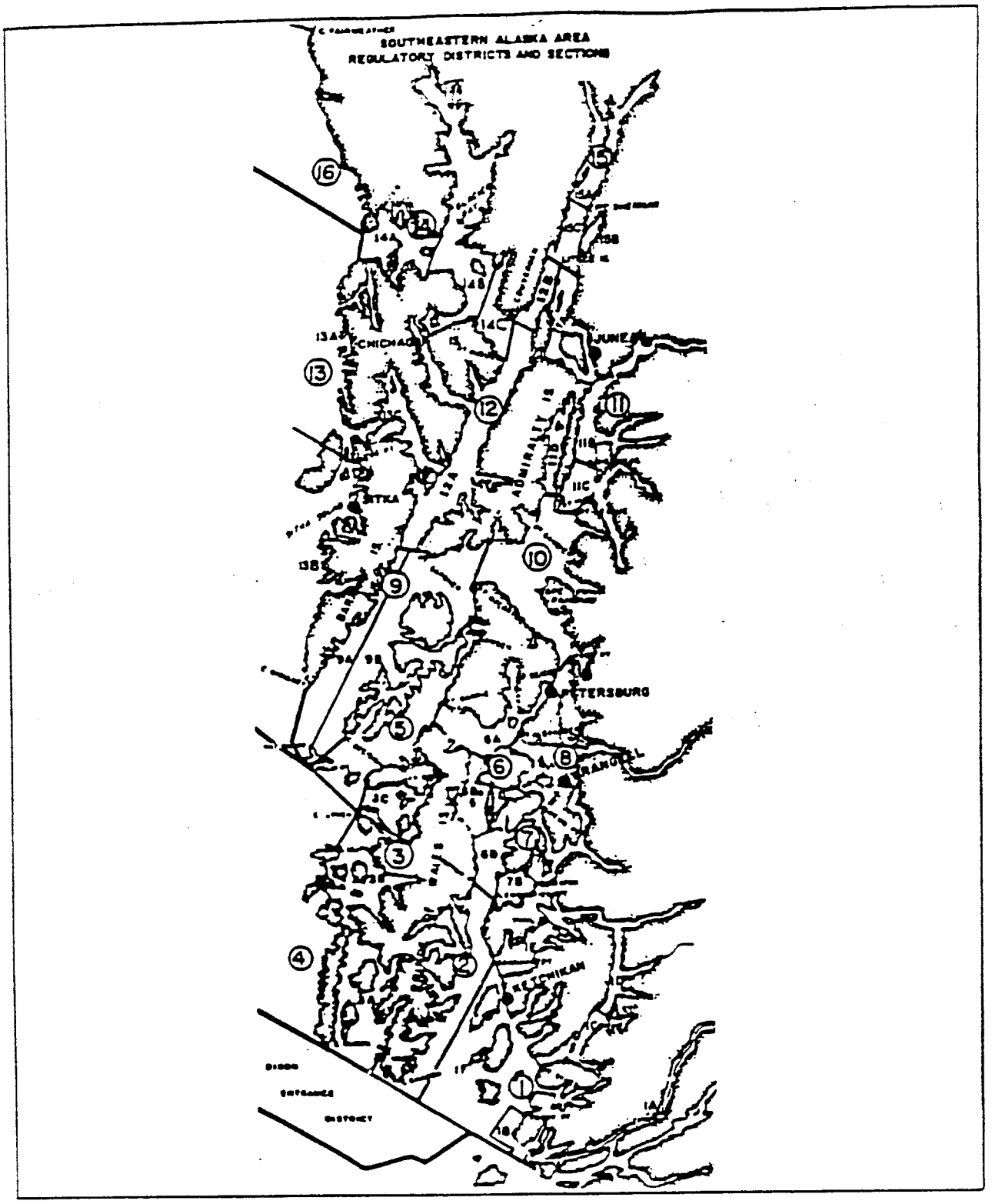

Figure 3. Southeast Alaska regulatory areas and districts.

SECTION 2

SOUTHEAST ALASKA COMMERCIAL PURSE SEINE
AND DRIFT GILLNET FISHERIES, 1994

SUMMARY OF SOUTHEAST ALASKA

1994 COMMERCIAL PURSE SEINE AND

DRIFT GILLNET FISHERIES

By

Southeast Alaska Region Staff

Alaska Department of Fish and Game
Commercial Fisheries Management and Development Division
Juneau, Alaska

January 1996

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Drift gillnet and purse seine information was drafted by Phil Doherty (Ketchikan Area Management Biologist (AMB)), William Bergmann (Petersburg AMB), Randy Timothy (Assistant AMB in Wrangell), Bob DeJong (Sitka AMB), Andy McGregor (Juneau AMB), Joe Muir (Assistant AMB in Juneau), and Ray Staska (Haines AMB). This information was compiled and tables were prepared by Marc Pritchett. The final document was edited by Doug Mecum (Region I Management Biologist).

ABSTRACT

This report summarizes the commercial salmon purse seine and drift gillnet fisheries and hatchery cost recovery fisheries in Southeast Alaska during 1994. The 1994 purse seine harvest of approximately 60,250,000 salmon was the third largest catch since statehood and only 4% less than the 1991 record harvest. The pink salmon catch of over 51,400,000 fish represented 85% of the total purse seine harvest. Over 4,800,000 salmon were harvested in all drift gillnet fisheries in 1994, the second highest harvest since statehood, and almost 20% greater than the recent 10-year-average (4,018,062). About 41% (1,9600,000) of the drift gillnet catch was comprised of chum salmon, followed by pink at 28% (1,370,000) and coho salmon at 15% (745,000). Both chum and coho salmon driftnet catches were record harvests, exceeding previous record harvests by 33% (1993) and 6% (1992), respectively. Hatchery cost recovery accounted for 8% of the total salmon harvest.

INTRODUCTION

This chapter describes the commercial salmon purse seine, drift gillnet, and hatchery cost recovery fisheries that occurred during 1994 in the Southeast Alaska portion of Region 1. A discussion of fishery management actions is included and preliminary landing estimates are presented and compared to historical production. An overview of the regional salmon fisheries and a description of the region is available in the previous chapter of this report. A review of the Region 1 troll and Yakutat set gillnet fisheries is presented in subsequent chapters.

SALMON PURSE SEINE FISHERIES

The purse seine fishery normally accounts for between 70% and 90% of the total commercial salmon harvest in the Southeast Alaska region. Pink salmon are the primary species targeted by the seine fleet and management actions are therefore based primarily on inseason assessments of the abundance of pink salmon. Other species are generally harvested incidental to the pink salmon purse seine fishery. On average, chum salmon account for approximately 7%, sockeye 2%, coho 2%, and chinook salmon less than 1%, of the total purse seine salmon harvest.

Commercial salmon fishing regulations allow purse seine fishing in Districts 1 (Sections 1-C, 1-D, 1-E, and 1-F only), 2, 3, 4, 5, 6 (Sections 6-C and 6-D only), 7, 9, 10, 11 (Sections 11-A and 11-D only), 12, 13, and 14. Purse seining is also allowed in terminal hatchery fishing areas at Nakat Inlet, Carroll Inlet, Neets Bay, Eastern Passage, Silver Bay, Deep Inlet, Hidden Falls, and Kendrick Bay. These terminal hatchery seine fisheries are discussed in a later section of this chapter; this section will discuss the general common property purse seine fishery. Although the areas specified above are generally open to seine fishing, regulations also mandate that the specific open areas and fishing periods are to be established by emergency order.

For purposes of forecasting, catch tabulation, and management, Districts 1-8 are grouped as "southern Southeast" and Districts 9-16 as "northern Southeast" (see Figure 1, Chapter 1, Introduction to 1994 Finfish Fisheries). In general, management of the northern and southern Southeast purse seine fisheries is independent. However, because both the northern and southern portions are included in the same salmon registration area, purse seine fishermen are free to move between them. Inseason assessments of pink salmon run strength are determined primarily from spawning escapement information obtained from aerial surveys of sanctuary areas and streams and from fishery performance data (i.e., catch per unit effort or CPUE). In addition, the department often charters purse seine vessels to conduct test fishing assessments of run strength in selected areas.

The department did not develop separate pre-season pink salmon forecasts for northern and southern Southeast Alaska for the 1994 season. The 1994 forecast was based on a combination of a model forecast using winter temperatures and parent-year escapement indexes, and historic average harvests. The total 1994 Southeast pink salmon return was projected to be strong with an estimated 78,000,000 fish returning (includes 1.2 million hatchery returns). The total Southeast escapement goal of 30,900,000 pink salmon left a commercial Southeast harvest projection of 47,100,000 fish.

The 1994 general purse seine season was open from June 26 through October 17 (Table 1). The summer season ran from June 26 through September 2, and the fall season from September 11 until the season closure on November 2. The total 1994 purse seine harvest of approximately 60,250,000 salmon was the third largest catch since statehood and only 4% less than the record catch in 1991 of 62,757,700 (Tables 2 and 3). The total purse seine harvest consisted of over 51,400,000 pink, a record catch of 6,400,000 chum, over 1,400,000 sockeye, and a record coho harvest of 970,000 salmon. The chum salmon harvest was 38% greater than the previous record harvest (1993) while the coho harvest was almost 65% greater than the previous high harvest set in 1986. Pink salmon accounted for 85% of the total harvest followed by chum (11%), sockeye (2%), coho (1%), and chinook salmon (less than 0.1%).

Non-Retention of Chinook Salmon

Regulations specify a seasonal harvest guideline of 11,400 chinook salmon, 28 inches or larger, for the purse seine fishery. The 28-inch size limit also exists for the commercial troll and recreational fisheries; no size limit exists for the drift gillnet fishery. The Alaska Board of Fisheries adopted the chinook harvest guideline as part of an overall allocation scheme among commercial users resulting from implementation of the U.S./Canada Pacific Salmon Treaty (PST). Similar harvest guidelines are specified for the drift gillnet (7,600) and set gillnet (1,000) fisheries. Regulations further prohibit seiners from selling, but not possession of, chinook salmon between 21 and 28 inches. Chinook salmon less than 21 inches (approximately 5 pounds or less) may be sold but do not count against the seasonal harvest guideline. In addition, the PST specifies that chinook salmon produced by Alaska hatcheries, minus adjustments for "pre-Treaty" hatchery production and estimation error, do not count against the seasonal harvest guideline.

The primary management tool employed by the department to stay within the chinook salmon harvest guideline for the purse seine fishery is to establish periods, by emergency order, when chinook salmon greater than 28 inches may not be retained. "Non-retention" is usually implemented early in the season when the total salmon catch rate is low. This allows for more efficient release of large chinook salmon and minimizes the impact of incidental mortality. Retention of larger chinook salmon is permitted as long as possible during the period when catch rates for other species is high. Once the chinook harvest guideline is obtained, non-retention is again required. During the 1994 general summer seine season (June 26 - September 2), retention of 28-inch or larger chinook salmon was allowed during 12 of the 19 open fishing periods, or for 17 of the 30 open days.

During the first nine open fishing periods (11-days, June 26 - July 25), chinook salmon retention was allowed in the Hidden Falls Terminal Harvest Area, only, with non-retention in effect in the remainder of the fishery. The harvest of chinook salmon in the Hidden Falls area is comprised almost entirely of Alaskan hatchery-produced fish. Chinook salmon non-retention in all areas was in effect for fishing periods occurring July 28 through August 1 (two open periods for 3-days). Chinook salmon retention was allowed for the next open periods, August 4 through August 9, and again on August 20 and 21. For all other open purse seine fishing periods chinook salmon non-retention was in effect.

The 1994 purse seine catch of chinook salmon totaled 21,089 fish of which 14,824 were reported as 28 inches or larger and 6,265 less than 21 inches (jacks). Of the large chinook, 6,751 were Alaska hatchery-produced fish (2,437 common property harvest and 4,314 hatchery terminal area fish) that did not count against the seasonal harvest guideline. When both the catch of small chinook and hatchery-produced chinook salmon are considered, the 1994 season seine harvest of chinook salmon was 3,327 fish below the harvest guideline of 11,400 fish.

Northern Southeast Purse Seine Fisheries

Northern Southeast Alaska consists of regulatory Districts 9-16, although purse seine fishing is allowed only by regulation in Districts 9-14. The fishery is managed primarily for pink salmon during the summer season and chum salmon during the fall season. A minor fishery for sockeye occurs during the summer season in the vicinity of Redfish Bay and Necker Bay on the outer coast of Baranof Island in District 13. Additionally, the harvesting of summer-run chum salmon is a major concern during the pink salmon season; this includes targeted seining for chum salmon in selected locations during the early portions of the summer season.

The summer season is separated into distinct inside and outside fisheries. The inside areas include Districts 9, 10, 11, 12, and 14 and Section 13-C. The outside area consists of the waters of Sections 13-A and 13-B along the outer coasts of Baranof and Chichagof Islands. The inside fisheries target on two major pink salmon stock groups: 1) stocks that return through Icy Strait and disperse locally and throughout Chatham Strait, Tenakee Inlet, Peril Strait, Frederick Sound, Stephens Passage, Lynn Canal, and Seymour Canal, and 2) stocks that return through lower Chatham Strait and disperse locally and into portions of Frederick Sound. Although some intermingling of the two stock groups occurs in some seine fishing areas, independent management for each group is usually possible. The Icy Strait stock group consists of middle and late run returns, while the lower Chatham Strait stock group consists primarily of late returning pink salmon stocks. The Icy Strait group has considerable more pink salmon production potential than the lower Chatham Strait or the outside stock groups.

The 1994 season began in northern Southeast on June 26 with a 15-hour opening in Frederick Sound in District 10, Tenakee Inlet, the Lower Admiralty Shoreline, a small area adjacent to Point Augusta, and Hidden Falls Hatchery in District 12, and Peril Strait in Section 13-C.

Inside Fisheries

In District 9, Section 9-A was open beginning July 21 for a series of 15 to 39-hour openings. Openings were limited to the northern portion of Section 9-A near Redbluff Bay through August 13. Beginning August 20, openings were extended to include the southern portion of Section 9-A near Port Walter. The total pink salmon catch in Section 9-A was 2,151,000 fish which was the largest since statehood. A return of 2,000,000 pink salmon was forecast to return to the Port Armstrong Hatchery in 1994, however, the return was much lower then expected and only 938,000 fish were harvested in the Special Harvest Area (SHA) for cost recovery purposes. It is uncertain how many Port Armstrong hatchery pink salmon were harvested in Section 9-A during traditional common property openings. It is suspected that the hatchery contributed significantly to the record catch. The total coho return to the Northern Southeast Regional Aquaculture Association's Mist Cove lake stocking project on lower Baranof Island was 264,000 fish. Approximately 114,000 were harvested by troll gear, 53,000 by seine gear and 94,000 for cost recovery. Pink salmon escapements were at record levels in streams in Section 9-A.

Section 9-B was initially open for 39-hours beginning July 31. Returns to the inside portions of Frederick Sound and Stephens Passage appeared to be strong, even though run timing was a week to 10-days late. During the first opening of Section 9-B which was limited to the Admiralty Island shoreline, catches were high with 30 seiners taking 330,000 fish (303,500 pink salmon). The fishery was expanded to include the Kingsmill shoreline during the second opening. Catches and effort increased and by August 8 and 9 all of Section 9-B was opened, except for closures at Tyee, Keku Strait and inner Port Malmesbury. The catch and effort peaked that opening with 96 boats harvesting just over 2,000,000 fish. The regulatory closure lines in Elena Bay were relaxed beginning August 16 because of the large number of fish escaping into Alecks Creek and the adjacent systems. Port Camden was also opened on August 16 for the first time, but effort and catch remained low there throughout the season with a disappointing harvest of 12,000 chum salmon. Harvests remained large throughout the month, dropping below 10,000 fish per boat for the first time on August 28 and 29 when 53 seiners harvested 412,000 fish. The pink salmon season closed on September 2 with a record harvest of 8.2 million fish. The major portion of the catch was taken along the Kingsmill shoreline (3.9 million pinks), the Deepwater Point shoreline (1.6 million pinks), Tebenkof Bay (1.0 million pinks) and the Table Bay and Port Malmesbury shoreline (1.2 million pinks). These were record pink catches in each of these areas except Tebenkof Bay. There were also record numbers of sockeye (30,000) and coho salmon (135,000) taken in Section 9-B. Pink salmon escapements were also above goal in District 9 with a combined escapement in Sections 9-A and 9-B of 1,357,000 compared to the goal of 600,000 (Table 5). One fall chum salmon opening was held in Tebenkof Bay and in Security Bay on September 11 and 12, however, no effort or catch was reported.

In District 10, pink salmon returns were the highest on record. The first opening occurred on June 26 with the Admiralty Island shoreline closed because of expected poor returns to Seymour Canal. Although early openings usually do not produce catches of any significance, the harvest of 12,000 fish by seven seiners indicated that at least the early run would be strong. Catches increased during the next two 15-hour openings on July 3 and July 8. During the first 39-hour opening on July 11, the entire district was open, and the catch totaled 293,000 fish by 44 seiners. Prior to this fishery, openings had been based upon good parent-year escapements, pink catches in outer districts, pink catches in areas in Chatham Strait, and initial observations which indicated escapements were building. Two indicators of early run strength, the Icy Strait troll fishery on pinks and the interception of pink salmon at the Hidden Fall Hatchery terminal fishery, were both at record levels. The first test fishery at Point Gardner on July 7 indicated the early run would be exceptional with a record harvest of 9,955 pink salmon and 2,000 chum salmon in eight test sets.

Although run strength was expected to be strong, pink salmon returns to the eastern portions of Frederick Sound appeared weak. In addition, early returns to southern Southeast were noticeably weaker than northern Southeast. Fishing periods were reduced to 15-hours beginning July 15 and this pattern continued until the end of July. On July 18, major closures occurred in District 10 including all of the mainland and Kupreanof Island shorelines from Hobart Bay south. Forty boats harvested 318,000 fish in the district. Pink salmon catches were extremely good, chum salmon catches were strong, and even though the numbers of coho salmon being harvested were only 60 fish per boat, that was exceptional for mid-July.

By July 25, pink salmon returns to southern Southeast were weak while the northern Southeast areas had good catches. As a result, the opening was delayed by 1-day. Normally, during years of good returns, the fishery would have been open 2-days (39-hours) out of every 4-days by this time in the season. Escapements into Port Houghton had increased substantially from July 21 to July 22 when 105,000 salmon were counted. Windham Bay was also on track for an escapement of over 200,000 pink salmon with 122,000 fish in the inner bay and the Chuck River. Forty-seven seiners caught 552,000 fish this period, averaging more than 10,000 fish per boat per day on the first opening.

A 39-hour opening in northern Southeast was allowed on July 31 and the fishing area in District 10 was expanded in a number of locations. Early run escapements along the mainland shoreline were excellent with Windham Bay and Port Houghton Salt Chuck both having escapements of over a quarter of a million fish. Catches in the district exceeded two million fish in July and peaked this opening at almost 1.7 million fish from 86 seiners. Effort was much higher than normal because of the poor fishing in southern Southeast and the resulting reductions in fishing time. Catches remained very high, however, effort declined significantly to 21 vessels by August 8 and 9. Normally, even during years of good pink salmon returns the fishery was finished; however this was the opening when the catch per unit effort peaked with an average of almost 35,000 fish per boat. The last large catches in District 10 occurred on August 12 and 13 when 48 seiners harvested 749,000 fish.

The final harvests in District 10 occurred on August 24 and 25, even though the district was also open the following fishing period. New records were set for catch and escapement and 1994 was the sixth year since

statehood and the sixth year since 1985 that the District 10 escapement goal was reached with 1,282,000 pink salmon counted in the district's streams. A record harvest of just over 7,000,000 pink salmon occurred which was more than twice the previous record harvest of 2,700,000 million fish. There was also a record harvest of 141,000 chum salmon and 58,000 coho and the third highest sockeye catch of 19,000 fish. The vast majority of the fish were caught outside the bays, especially along the Windham Bluffs and False Point Pybus shorelines.

Section 11-D was not open to purse seine fishing in 1994 due to the department's continued efforts to rebuild the depressed Seymour Canal pink salmon stocks.

In District 12, many separate fisheries occur due to its large size. In District 12, the upper Baranof Island shoreline was opened several times, beginning June 26, to harvest chum salmon returning to the Hidden Falls Hatchery. Openings were mostly limited to the vicinity of the hatchery to minimize interception of wild chum salmon returning to Kelp Bay where returns were weak. A record catch of 2,842,000 chum salmon was taken at the hatchery. This year's catch almost doubled the previous record set in 1993. The largest catch for an opening occurred on July 3 and 4 when 133 boats harvested over 500,000 chum salmon. The second highest catch of 1.8 million pink salmon was also taken along the upper Baranof Island shoreline. Most of this catch was taken incidental to directed fishing for Hidden Falls Hatchery chum salmon returns. Pink salmon escapements to Kelp Bay streams were very good. Early season aerial surveys in Tenakee Inlet and along the lower west Admiralty Island shoreline indicated an early abundance of chum salmon. This triggered an early opening along the lower Admiralty Island shoreline, and more fishing area inside Tenakee Inlet than is normal for the first opening. Good initial catches and strong early escapements of pink and chum salmon prompted an unprecedented 15-hour mid-week opening on June 30, and a 39-hour opening the following week. A liberal fishing area within Tenakee Inlet was maintained until July 11, when the inlet was closed inside the longitude of Corner Bay Point because pink salmon escapements into Kadashan Bay were lagging. This area remained open until July 25, when Tenakee Inlet was closed for the season. Except fcr a 39-hour period beginning July 11, the remaining weeks were restricted to 15-hour openings.

The lower Admiralty Island shoreline fishery was open on July 3 and 4 (39-hours) and July 15 (15-hours) to harvest summer run chum salmon. Although chum salmon catches were good, local chum salmon escapements were lagging, and the area was closed until July 28 when the area was reopened between Point Hepburn and Fishery Point to intercept the large pink salmon runs entering southern Chatham Straits.

Portions of the northern Admiralty Island shoreline were open on July 15 and 18 above Point Marsden to access strong northern inside pink salmon returns and between Point Marsden and Point Hepburn on July 21 and July 25 to catch south migrating pink salmon. The area above Point Marsden is known as the Hawk Inlet Shoreline fishery. This was the fourth year this area has been open since it's inception in 1989. Openings are based on several criteria used to evaluate northern pink salmon run strength as described in the 1994 Purse Seine Management Plan. The plan stipulates that any portion of the area north of Point Marsden may be opened when a harvestable surplus of pink salmon is observed. The area must be closed after

15,000 sockeye salmon have been harvested. Due to delays in obtaining accurate catch reports, the department underestimated the sockeye salmon harvest during the two openings on July 15 and July 18. The area north of Point Marsden was then closed until August 1, after the 15,000 sockeye salmon cap was no longer in effect.

Beginning July 28, fishing was allowed along portions of the northern and lower Admiralty Island shoreline to access the strong late run pink salmon returns moving south through Chatham Straits. On August 1 the area above Point Marsden was reopened to continue to harvest above average pink salmon runs moving to northern inside waters. Beginning August 12, the purse seine fishery along the Admiralty Island shore between the latitude of Hanus Reef Light and Parker Point and south of Distant Point went on a "two on, two off" fishing regime until the end of the season. The area above Point Marsden closed on August 17 and the area above Parker Point closed on August 25. The Admiralty Island shoreline finally closed to purse seine fishing on September 2, 1994.

Because of below average escapements in outer Peril Straits early in the season, the Basket Bay shoreline was not open until July 31. Except for a small area around Basket Bay needed to protect sockeye escapements into Kook Lake during this week, and a closure below Whiterock Creek to protect late run pink salmon escapements into Peril Straits, beginning August 8, this shoreline maintained a "two on, two off" fishing schedule until it closed on September 2, 1994. Due to the increased protection needed for Peril Strait stocks, the Basket Bay shoreline was not opened during that period which would have significantly increased the harvest of Tenakee Inlet pink salmon stocks. The majority of the catch along the Basket Bay shoreline in 1994 was likely comprised of pink salmon bound for streams in Peril Straits.

For the third consecutive year, the department opened up a one-mile section of shoreline below Point Augusta in District 12 to provide an additional assessment of incoming run strength of early run pink salmon. This index fishery was only open 15-hours a week during the first four weekly fishing periods. Midweek openings were not allowed at Point Augusta since they are usually not common early in the season, and would not be comparable to other years when fisheries did not occur. The Point Augusta test fishery catch per unit effort of coho, pink, and chum salmon during the first four weeks, reflected fairly accurately the general strength of these runs as they materialized later in the season.

Numerous openings occurred in Peril Strait, Section 13-C, and lower Peril Strait in Section 13-B north of Rose Point. Openings began June 26 to harvest good pink salmon returns to Hoonah Sound. The total pink salmon catch of 1,243,000 was the second largest since statehood. Additionally, a record 235,000 chum salmon were harvested. The highest effort in Peril Strait occurred on July 8 when 40 boats fished. Pink salmon escapements were good in Hoonah Sound, but generally poor in outer Peril Strait, including streams in Rodman Bay, Saook Bay, and Sitkoh Bay.

The Whitestone Shoreline in District 14 was open on July 25 for 15-hours but soon switched to a "two on, two off" fishing period beginning July 31, which continued until the season was closed on September 2,

1994. The fishery was allowed to continue to harvest strong returns of local pink salmon stocks. Coho salmon returns to northern Southeast were at record levels and did not need additional protection.

Early season escapement surveys in Port Frederick in District 14 indicated that returns of summer run chum salmon were poor and no directed chum salmon fishing was allowed. Although pink salmon returns were good in the area, chum escapements lagged throughout the season. As a result, pink salmon fishing was restricted to the area outside Port Frederick along the Whitestone shoreline. Poor pink salmon returns to Idaho Inlet prevented a fishery from occurring in this area in 1994.

Outside Fisheries

Management of Sections 13-A and 13-B, along the outer coastal areas of Baranof and Chichagof Islands, is distinct from the management of the other northern Southeast districts. In general, pink salmon entering this area migrate directly from the ocean and do not pass through major migration corridors.

In 1994, the outside coast of Baranof and Chichagof Islands received unexpectedly good returns of pink salmon to most streams. Returns were especially good to Slocum Arm, Deep Bay, Sitka Sound, West Crawfish Inlet, and Whale Bay. One exception was Lisianski Inlet streams, where pink salmon stocks continue to be below escapement goals.

Several 39-hour openings were allowed in Slocum Arm and Sisters Lake beginning July 18, to harvest a record return of pink salmon. The total catch amounted to 485,000 pink salmon; the largest ever reported for this area. Peak catches occurred on August 8 when 156,000 pinks were caught by 8 boats. Chum catches in Slocum Arm were the second largest recorded with over 29,000 harvested. Pink and chum salmon escapements to Slocum Arm streams were excellent.

Limited openings were allowed in Salisbury Sound to harvest good returns to Deep Bay. Only 79,000 pinks were harvested. Escapements to Salisbury Sound and Fish Bay were generally fair with the exception of Deep Bay where excellent escapements were recorded.

Pink salmon returns to Sitka Sound were unexpectedly strong given the very poor escapements observed in the parent-year. Optimum over-winter survival and marine conditions may account for returns that were 10 to 15 times the parent-year escapement. Three openings were allowed in Sitka Sound to harvest surplus pink salmon returns and approximately 200,000 pinks were taken. Additionally, another 132,000 hatchery chum salmon were harvested in Silver Bay and Eastern Channel that were returning to the Northern Southeastern Regional Aquaculture Association's (NSRAA) Deep Inlet remote release site and the Medvejie Hatchery.

Whale Bay and Crawfish Inlet experienced excellent pink and chum salmon returns and escapements, however, even after numerous openings, fishing effort and catches were low.

Northern Southeast Alaska Pink Salmon Escapements

The large number of spawning streams in Southeast Alaska makes it impossible to obtain a count of pink salmon spawning escapements to all systems. Instead, a spawning escapement index is estimated each year, with index escapement goals established for each of the major districts. The escapement index is used primarily to compare yearly variations in pink salmon spawning escapements. The index is based on a summation of the highest (peak) pink salmon spawning counts observed in a large number of selected streams during the season.

The northern Southeast Alaska pink salmon escapement index goal is 4,800,000 fish. The 1994 escapement index totaled over 8,700,000 (Table 5). Escapement goals were exceeded in Districts 9, 10, 11, 12, and 13. Escapements were only slightly below goal in District 14.

Southern Southeast Alaska Purse Seine Fisheries

Purse seine fishing in southern Southeast Alaska occurs in Districts 1-7. As in northern Southeast Alaska, fishery management is driven primarily by pink salmon stock abundance. However, large numbers of sockeye salmon are also harvested in District 4. In addition, a directed sockeye fishery has taken place in the Yes Bay area of District 1 and a targeted fall chum salmon fishery normally occurs in portions of District 2.

District 4: Noyes Island Purse Seine Fishery

For the 1994 purse seine fishing season, no formal agreement was reached with Canada on the conduct of the District 4 fishery. As a result, the pre-season management plan for District 4 was to manage the fishery for the 1994 season to limit the fishing time and sockeye harvest prior to Statistical Week 31, to levels similar to the 1990/1993 time period. There were three weeks of fishing prior to Statistical Week 31 in 1994.

The 1994 season began with a 10-hour opening on July 3 (Statistical Week 28) during which 11,900 sockeye salmon were harvested by thirty-five purse seine boats. The District 4 fishery was not opened again in Week 28, although inside districts were opened for an additional 15-hours on July 8. During this time, the northern Southeast fishery was experiencing record harvests of pink and chum salmon and most of the purse seine effort was located in the northern districts. On July 11 and 12 the district was open for a two-day "split" opening of 7-hours per day. The inside districts at this time were opened for a continuous 39-hour period. During this 14-hour opening, twenty-five purse seine boats harvested approximately 19,000 sockeye, 33,000 pink, and 36,000 chum salmon. Another 8-hour opening was allowed on July 15 and forty-

one boats harvested approximately 22,500 sockeye, 36,000 pink, and 25,000 chum salmon. This brought the total sockeye harvest to approximately 49,000 fish. During a subsequent 15-hour opening on July 18, fifty-two purse seine boats caught approximately 47,500 sockeye, 92,000 pink, and 40,000 chum salmon. Through July 18, approximately 101,000 sockeye had been harvested. With the department managing the district for a harvest of approximately 120,000 sockeye, it was decided to re-open the fishery on July 21 for 8-hours. During this opening, 52 boats caught 57,000 sockeye, 153,000 pink, and 25,000 chum salmon, resulting in a sockeye harvest prior to Statistical Week 31 of 158,000 fish.

Beginning July 25 and continuing through the final day of fishing on August 29, the District 4 fishery was managed according to the strength of the pink salmon return. On July 25, July 28, and July 31 the purse seine fishery was opened for 15-hours. This conservative management approach was the result of relatively weak pink salmon returns to early run systems, primarily in District 1. However, beginning with the August 4 opening through the end of the fishery on August 29, the pink returns to the middle and late run systems in Districts 2 and 3 were strong enough to allow a two-day-on/two-day-off fishing schedule. Effort levels in District 4 were generally below those in recent years due to a larger portion of the fleet harvesting a record number of pink and chum salmon in the northern Southeast Alaska districts.

The total 1994 season harvest in District 4 of 12,429,000 pink salmon was slightly above the 1985-1993 average of 12,100,000 fish. This harvest constituted approximately 60% of the pink salmon harvest in southern Southeast Alaska. The harvests of 1,134,000 sockeye, 714,000 chum salmon, and 345,000 coho salmon were the largest ever in the district.

Southern Southeast Alaska Inside Summer Purse Seine Fishery

The Districts 1 and 2 purse seine fisheries opened for 15-hours on July 3 and July 8. These initial openings were intended to distribute the purse seine fleet and to gauge the strength of the salmon returns. In the past several years the department has also attempted to harvest a higher percentage of the early returns because they are comprised largely of male pink salmon.

During the first two weeks of the season, pink salmon run strength appeared similar to previous years. Districts 1 and 2 were opened for two 15-hours, a 39-hour, and another 15-hour opening. On July 8 in District 1, the open fishing area was restricted in the Boca de Quadra area in order to limit the harvest of Hugh Smith Lake sockeye salmon. The pre-season prediction for Hugh Smith Lake sockeye returns was for a weak return and early season escapements were well below desired levels. The closure at the mouth of Boca de Quadra continued through July and the early portion of August. The final sockeye escapement into Hugh Smith Lake was about 9,000 fish compared to the escapement goal range of 18,000 to 35,000 fish.

During the remainder of the season, pink salmon run strength was below average in District 1, and fishing time and area were adjusted as the season progressed to ensure escapement goals were reached. Pink salmon escapements into Smeaton Bay, the major pink salmon producing area in the district, were well

below levels observed in recent years. In order to achieve the desired escapement levels, the Point Sykes and Point Alava areas were closed for much of the season. These closures, along with the Boca de Quadra closure, effectively closed the mainland area for most of the season. The effort levels in the district were indicative of the run strength with less than thirty boats fishing during most mid-season openings. For the season only 1,840,000 pink salmon were harvested by the purse seine fleet in District 1. This is the lowest harvest recorded since 1987 and 1988. The most recent 10-year-average pink salmon harvest in the district is approximately 5,700,000 fish.

Chum salmon catches were strong in District 1 during the first three weeks of the season, but dropped during the rest of the season as effort declined. Summer chum escapements to most mainland systems in District 1 were well above average.

In District 2, pink salmon run strength was below average during late July, but picked up in early August and was average through of the remainder of the season. The total harvest of 2,419,000 pink salmon was below the previous 10-year-average of 3,500,000 pink salmon. As in District 1, the effort levels in the district were well below average for most of the pink salmon season. The pink salmon index escapement goal of 600,000 fish was exceeded in District 2, with a final escapement index of 841,566 fish. Chum salmon catches in District 2 were above average all season.

In District 3, the season started July 28 with a 15-hour opening. The district was opened earlier than normal and more area was opened in an attempt to evenly distribute the pink salmon harvest between the District 4 fishery and the inside seine districts. However, as in 1983, 1986, and 1991 pink salmon did not enter the inside districts until mid-August. So while catches in District 4 were at very high levels, the catches in District 3 were well below average until mid-season. Over 2,266,000 pink salmon were harvested in District 3 during the 1994 purse seine season. This compares with a 10-year-average of 3,700,000 fish. Pink salmon escapements in District 3 were generally strong and evenly distributed. The pink salmon index escapement for 1994 was 2,501,000 compared to the goal of 1,700,000 fish. Chum salmon escapements were about average in District 3.

Affleck Canal was the only portion of District 5 opened to purse seining in 1994. Affleck Canal was open each fishing period from August 12, through the end of the season. Effort was minimal because of the extremely good catches in the northern districts. On August 16, the regulatory closure lines were relaxed almost to the tidal flats at Bear Harbor and at the following opening all closure restrictions were removed at Kell Creek in Kell Bay. Escapements had continued to build excessively in both systems due to lack of effort and harvest. Only 85,000 fish were taken in Affleck Canal in 1994. If fishing effort had been average, an additional 100,000 to 200,000 fish probably would have been harvested. The overall District 5 escapement of 477,388 pink salmon was slightly below the goal of 500,000 fish.

The first opening in District 6 on August 24 and 25, was limited to the Ratz Harbor shoreline. During this opening, ten boats harvested approximately 140,000 pink salmon. The following opening, fishing effort increased to 27 boats with the opening of the Steamer Point/Screen Island shoreline, but catch declined to

112,000 fish. The same area was opened during the last fishing period of the pink salmon season. Pink catches were low and coho catches were again high with 14 seiners taking about 8,000 coho. The catch for the year was 297,000 pinks, slightly above the 1960 to 1993 average catch of 220,000 pinks. The coho catch of 22,000 fish was the highest coho harvest in District 6 since 1971. The 600,000 pink salmon escapement goal was exceeded with peak counts totaling 670,000 pink salmon with 108 Creek in Whale Pass producing a significant portion of that escapement. That system was also the only stream in the management area where a significant low water mortality took place with at least 65,000 dead, unspawned pink salmon in the stream on August 28. Fortunately there were enough fish still in saltwater to adequately fill the streams when the drought ended in early September.

Openings in District 7 began on July 3 when Section 7-A (Anan Creek) was opened south of the latitude of Point Warde. The initial openings of the district were based upon the expectation that good parent-year escapements would enable a fishery on early run stocks. The catches were disappointing however, and during the first opening, ten seiners only harvested 19,000 pink salmon. The fishery was not reopened until July 11 and 12 when ten boats took 120,000 fish and had the best catch per unit effort in the region. The same area was reopened on July 15, when 24 seiners harvested 75,000 fish. High effort was a result of the closure of District 4, and the resulting transition of effort during this opening. Anan had parent escapements roughly the same size as the large systems in Port Houghton and Windham Bay. However, it was obvious from both catches and initial escapements that run strength to this early run portion of southern Southeast was much lower than in comparable systems in northern Southeast. As a result, Section 7-A was not reopened.

The opening of Section 7-B was delayed until August 16 to help increase escapements to Section 7-A and even then only the southern portion of the section was opened. Twelve seiners harvested 189,000 fish. Because returns did not look strong, the next opening occurred on August 24 and 25 when effort and catch were almost identical to the previous opening. The final opening occurred on August 28 and 29 when eight seiners took 23,000 fish from Union Bay. The catches in the district totaled 548,000 pinks which is slightly above the average annual catch since statehood. The escapement of 554,900 pink salmon was below the District 7 goal of 600,000.

Southern Southeast Alaska Chum Salmon Fishery

Directed purse seine fisheries on natural fall chum salmon returns were mostly limited to District 2 in 1994. This fishery targets on chum salmon returning to watersheds primarily in Cholmondeley Sound. Due to the above average catches of chum salmon observed during the summer season, the District 2 fall season was opened for 39-hours on September 11 and 12. Approximately 66,000 chum salmon were harvested by 26 boats. From the next opening on September 18 through the end of the month, the fishery was opened for nine out of 13-days. Both catches and escapements into Disappearance Creek and Lagoon Creek were at high levels during this time. Starting on September 28, through the end of the fishery on November 2, the fishery was opened on a continuous basis with more open area added once escapement goals for

Disappearance and Lagoon Creeks were met. Approximately sixty different boats participated in this year's fishery. For the fall season there was a record harvest of 260,000 chum salmon. The previous record harvest for District 2 was 190,000 chum salmon in 1993.

Southern Southeast Alaska Pink Salmon Escapements

The 1994 Southern Southeast Alaska escapement index totaled approximately 7,104,000 pink salmon compared to the escapement index goal of 6,000,000 fish (Table 7). Pink salmon escapements were above goal in Districts 2, 3, and 6. Pink salmon escapements were close to or slightly below goals in Districts 1, 5, and 7.

DRIFT GILLNET FISHERIES

Drift gillnet fishing is allowed by regulation in Districts 1 (Sections 1-A and 1-B), 6 (Sections 6-A, 6-B, 6-C, and 6-D), 8, 11 (Sections 11-B and 11-C), and 15 (Sections 15-A, 15-B, and 15-C). Additionally, drift gillnet openings occurred in 1994 in terminal hatchery areas at Wrangell Narrows, Ohmer Creek, Nakat Inlet, Deep Inlet, Earl West Cove, and Boat Harbor. These hatchery terminal fisheries are discussed in the hatchery harvest section of this report; this section will concentrate on the general drift gillnet fishing season. The salmon species, run timing, management problems and information used to manage the fisheries are quite variable among the areas, hence each area is discussed separately.

The 1994 general drift gillnet season extended for 17 weeks from June 13 through October 11 (Table 8). Although the above general areas are specified for gillnetting, regulations mandate that the specific open areas and fishing periods are established by emergency order.

Overall, the drift gillnet fishery (including hatchery terminal areas) harvested 4,810,070 salmon during the 1994 season, the second largest catch since statehood (Tables 9 and 10). The catch consisted of 1,956,532 chum (41%), 1,368,877 pink (28%), 744,527 coho (15%), 723,218 sockeye (15%), and 16,916 chinook salmon (0.4%).

Chinook Salmon Harvests

Regulations specify a seasonal harvest guideline of 7,600 chinook salmon for the drift gillnet fishery, not including chinook produced by Alaska hatcheries. The Board of Fisheries adopted this catch limit as an allocation measure to ensure that all user groups share in the reduced chinook salmon catch limit specified

by the U.S./Canada Pacific Salmon Treaty (PST). The Board has specified that inseason management measures for maintaining the catch levels should include early season area closures for the protection of mature chinook and nighttime fishing restrictions to minimize the harvest of immature "feeder" fish.

The 1994 drift gillnet landings of chinook salmon totaled 16,733 fish. Of these, 11,568 were Alaska hatchery-produced fish (7,001 terminal area, and an estimated 4,567 common property harvest fish) that did not count against the seasonal harvest guideline. As a result, the total drift gillnet harvest was roughly 2,435 fish below the 7,600 fish harvest guideline.

Early season area closures adjacent to the Stikine, Taku, and Chilkat Rivers were maintained, as in recent years, to minimize the harvest of mature chinook salmon taken incidental to the harvest of sockeye salmon.

District 1: Tree Point/Portland Canal Drift Gillnet Fishery

The Tree Point drift gillnet fishery opens by regulation on the third Sunday of June. During the early stages of the fishery, management is based on the run strength of Alaskan wild stock chum and sockeye salmon and on the strength of Nass River (in northern British Columbia) sockeye salmon. The PST calls for an average annual harvest of 130,000 sockeye salmon for the Tree Point Fishery. Beginning in the third week of July when pink salmon stocks begin to enter the fishery in large numbers, management emphasis shifts to that species. By regulation, the District 1 Pink Salmon Management Plan (PSMP) begins on the third Sunday of July. The PSMP sets gillnet fishing time at Tree Point in relation to the District 1 purse seine fishing time, when both fleets are concurrently harvesting the same pink salmon stocks.

In 1994, the gillnet fishery at Tree Point was opened for a 4-day fishing week on June 19. Catches of chum salmon during the early weeks of the fishery (open fishing periods through July 21) were at record levels. During this time period, 267,300 chum salmon were harvested. Sockeye salmon catches were below average and though chum salmon catches were at record levels, the department reduced fishing time and area to ensure sufficient numbers of sockeye salmon escapement needs for both Hugh Smith Lake and the Nass River were met.

Due to below average catches of sockeye salmon, Tree Point was opened only 3-days during Statistical Week 27 (Table 8). In Statistical Week 28, fishing time was limited to 3-days due to below average catches of sockeye salmon. In addition, the southern end of the fishing area was closed due to poor escapements of sockeye salmon in the Nass River. During Statistical Week 29, fishing time was again held to 3-days. During this week, sockeye catches improved and a 4-day fishing week was subsequently announced for Statistical Week 30.

The Tree Point fishery was managed according to the PSMP from Statistical Week 31 through Statistical Week 36, with the length of each opening based on a formula of fishing time allowed in the District 1 purse

seine fishery. In Statistical Week 31, due to below average pink escapements in early run systems, a 2-day opening was announced with a possible extension if pink salmon escapements improved. At that time, the fleet was put on notice that even though the fishery was being managed according to the PSMP, if sockeye escapements to the Nass River did not improve and the fishery was extended, the lower portion of the fishing area might be closed. Pink escapements did improve however, and the fishery was extended. The lower end of the fishery was re-opened during this extension due to improved sockeye salmon escapements in the Nass River. Four-days of fishing time occurred in Statistical Week 31, with 5-days of fishing time being mandated by the PSMP from Statistical Weeks 32 through 35. In Statistical Week 36, a 4-day opening was allowed because pink salmon catches were below average during this time period. Sockeye catches were above average in Statistical Weeks 33 through 36. Starting in Statistical Week 37, the fishery was managed according to the fall management plan with openings based on chum and coho salmon run strength. For that week and the next two weeks, 3-days of fishing time was allowed each opening. Coho salmon catches were above average during Statistical Weeks 29, 33, 35, 36, 37, and 39. Chum salmon catches were above average during Statistical Weeks 35, 37, 38, and 39. Due to strong coho and fall chum salmon catches, 2-days of fishing time was allowed for Statistical Weeks 40 and 41.

Portland Canal was open to fishing to Hattie Island Light in 1994 due to the strong returns of chum salmon observed in the Canal. This was the first time since 1984 that Portland Canal had been opened as far north as Hattie Island. However, there was no recorded gillnet fishing effort in the upper Canal.

The total harvest of sockeye salmon at Tree Point was 100,377 fish. This the second lowest year of sockeye harvest since 1985 (85,690 in 1990) and brings the average annual harvest since 1985 to 164,360 sockeye salmon. The total harvest of chum salmon was over 490,000 fish. This is the largest chum salmon harvest of record. The coho catch of 47,000 fish was the third largest harvest on record.

District 6 and 8: Prince of Wales and Stikine Drift Gillnet Fishery

The Prince of Wales and Stikine River drift gillnet fisheries occur in adjoining waters of District 6 and 8 (Figure 1). The District 6 drift gillnet area includes Section 6-A in Sumner Strait, 6-B, 6-C, and a portion of 6-D in Clarence Strait. The District 8 fishery consists of Section 8-A, waters north of the Stikine flats, and Section 8-B, waters south of the Stikine flats. The management of these fisheries is interrelated due to their close proximity and to the salmon migration patterns which expose some major stocks to harvest in both fisheries. Management is based on sockeye salmon in the early part of the season, pink salmon in the middle, and coho salmon at the end of the season. Salmon stocks of Stikine River origin, a major transboundary river extending into Canada, are available for harvest in both districts. The PST specifiès a sharing arrangement for Stikine River sockeye and coho salmon stocks.

Beginning in 1994, the Board of Fisheries adopted two new regulations for the District 8 drift gillnet fishery. The seasonal opening date was moved up one week so the fishery can now start on the second

Sunday in June, and the closure line for the Stikine River was moved to just above the flats (Indian Point to Point Rothsay) from the third Sunday in June through the first Saturday in August. These regulations were established to provide more flexibility in managing the enhanced sockeye returns to the Stikine River. Both of these regulations were implemented this season; District 8 was open for 24-hours during Statistical Week 25 (June 12 - 18) and during all of July and the first week of August. The closure line for the Stikine River was moved to include the new area.

The District 6 drift gillnet fishery was open for 43-days from June 19 through October 4 (Table 8). This exceeded the previous 10-year-average fishing time of 32-days by 34%. Sections 6-A, 6-B and 6-C were open simultaneously each week throughout the season. The District 8 fishery started on June 13 and ran through October 4; openings were very extensive during the sockeye season. The 58-days the district was open was twice the previous 10-year-average of 28-days. Area restrictions were used for the first three weeks of the season near the mouth of the Stikine River to protect adult chinook salmon returning to the Stikine River. This season, as in 1993, closures were implemented along shorelines where extensive milling of chinook salmon is known to occur rather than closing large general areas that would have also severely restricted the sockeye salmon fishery. Area restrictions were also used each week during the sockeye and pink salmon fisheries in portions of Frederick Sound.

Fishing effort in District 6 was slightly below average the first four weeks of the sockeye season. The remainder of the season, the effort was above the previous 10-year-average, especially during the peak of the sockeye and coho seasons. The last week of July and first week of August, effort was approximately 40% and 60% above average, respectively. During the sockeye season, District 8 weekly fishing effort was about average during the regular openings but increased to three times the average during the midweek extensions. Effort remained average during the rest of the season.

From June 12 through August 3, management of both Districts 6 and 8 was based primarily on the harvest of sockeye salmon. The sockeye fisheries were managed in accordance with the Stikine Management Model (SMM) an inseason model developed by the Transboundary River Technical Committee to meet the mandated Stikine sharing agreement of the PST. Preseason expectations were for an above average return to the Stikine River of 345,540 sockeye, with the U.S. Total Allowable Catch (TAC) of 145,770, and an average return to local Alaskan sockeye salmon systems. The District 6 harvest of approximately 211,000 sockeye was the second highest on record and 27% above the recent 10-year-average of 166,200 (Table 12). The District 8 sockeye harvest of approximately 97,200 was the highest on record and considerably above the 10-year-average of 18,400 (Table 13). The combined 1994 Districts 6 and 8 sockeye catches were also the highest on record.

During the first four weeks that both Districts 6 and 8 were open (June 19 - July 16), the fishing periods were restricted to 2-days per week to avoid over harvesting local island sockeye salmon stocks. District 8 was given a 2-day mid-week extension for the first two weeks that both fisheries were open. During the following two weeks the SMM indicated a strong return to the Stikine River. Three-day and 3.5-day mid-week extensions were given respectively for the third and fourth weeks.

During the next three weeks the SMM continued to indicate a very strong return to the Stikine River while the inseason catch information indicated that the returns to the local sockeye stocks were improving. The fishing period for the next three weeks in both Districts 6 and 8 were increased to 3-days. During this time period, District 8 mid-week openings were 2.5-days, then 1-day followed by no mid-week opening at the end of the three week period. This management approach was used to optimize the harvest of the large return of Stikine River sockeye and limit the harvest of smaller local island sockeye salmon stocks in District 6 while maximizing the harvest of Stikine River sockeye salmon later in the week in District 8. Area closures around Salmon Bay, Petersburg Creek and Muddy River were used to protect fish milling around these systems. The sockeye salmon spawning escapement to Tahltan Lake was good at 36,133 fish (an additional 6,852 were harvested by Canada at the Tahltan Lake weir). Index escapement counts to the local sockeye systems were average to above average. The Stikine TAC for the U.S. fishing fleet began at 145,800 based upon the preseason projection, dropped to 60,200 sockeye in early July, and ended up at 151,100. The final inseason estimate of the U.S. harvest of Stikine sockeye was 142,900 or 46% of the sockeye catch from both District 6 and 8. The final Stikine sockeye catch will change once postseason analysis of scale and otolith data are completed.

The management emphasis changed from sockeye to pink salmon during Statistical Week 33 (August 7 to 13). This season there were approximately 179,900 and 35,400 pink salmon harvested in Districts 6 and 8, respectively (Tables 13 and 14). The District 6 catch is below the recent five-even-year-average of 227,000 while District 8 was above the recent five-even-year-average of 18,000. Pink catches in both districts were not a true reflection of the number of pinks in the area due to the low price that fishermen were receiving. During the two weeks the fishery was managed for pink salmon, most of the fleet used sockeye nets to target late-run sockeye and coho and only a small number of pink salmon nets were used. Two-day fishing periods were allowed during the two weeks of pink salmon management in both districts. The estimated pink salmon escapement into Districts 6 and 8 was 678,000, slightly above the goal of 600,000.

Coho salmon management in both the District 6 and 8 gillnet fisheries usually commences during late August or early September. During Statistical Week 35 (August 21 to 27) the management emphasis changed from pink to coho salmon. Early season coho salmon abundance indicators were all above average and catches in the troll fishery indicated an excellent return. Prior to the change to coho salmon management, the sockeye and pink salmon fisheries harvested approximately 45% of the total District 6 coho salmon catch, and about 33% of the total District 8 catch. During Statistical Weeks 35 and 36 both districts were initially open for 3-days and were subsequently extended to a fourth day due to District 6 being opened for purse seining. During the following four weekly openings, beginning with week 37 (September 4 to 10), the fishery was open for 3-days each week. Effort and the total coho salmon catch each week were above average while the CPUE was generally near average. Normally, the percentage of hatchery coho salmon increases gradually over the course of the season and by the end of the season makes up a high percent of the weekly catch. This season the hatchery contribution increased towards the end of the season but did not comprise a high percent of the total catch. The District 6 coho salmon catch of 267,800 (Table 12) was the second highest catch on record and twice the recent 10-year-average of 135,500

coho salmon. The District 8 catch of 44,900 coho salmon (Table 13) was the highest on record and was over five times the recent 10-year-average of 7,900 coho salmon. Alaska hatchery coho salmon contributed approximately 32,300 (12%) fish to the District 6 harvest and 1,800 (4%) fish to the District 8 harvest.

The District 6 chum salmon catch of 176,000 fish was the highest on record and almost twice the previous 10-year-average of 87,300. The District 8 chum salmon catch of 27,700 was also a new record harvest and almost four times the recent 10-year-average of 7,600. All of the chum salmon harvested in both districts are caught incidental to targeted fisheries for sockeye and coho salmon. The harvest is not always a true reflection of the strength of the chum return, but rather a reflection of the fishing effort. Chum salmon escapements into both districts appear to be near average or above. Hatchery chum salmon accounted for 62,800 fish or 36% of the District 6 harvest and 2,700 fish or 10% of the District 8 harvest.

District 11: Taku/Snettisham Drift Gillnet Fishery

The Taku/Snettisham drift gillnet fishery (District 11) occurs in the waters of Section 11-B, including Taku Inlet, Port Snettisham, and Stephens Passage south to the latitude of Midway Island, and Section 11-C including the waters of Stephens Passage south of the latitude of Midway Island and north of a line from Point League to Point Hugh (Figure 1). The fishery targets on sockeye, pink and summer chum salmon early in the season and coho and fall chum salmon late in the season.

Management of the District 11 drift gillnet fishery is also affected by the PST because the Taku River, a major transboundary river extending into Canada, contributes substantial portions of the salmon harvested in the district. For the period 1988-1993, the PST mandated that the fishery be managed for Taku River spawning escapement needs plus an annual Canadian harvest of 18% of the total allowable harvest of sockeye salmon originating in the Canadian portion of the Taku River. The PST also provided for a Canadian harvest of 3,000 coho salmon. Even though a harvest sharing agreement between the U.S. and Canada was not in place for the 1994 fishing season, the department continued to manage the fishery according to the previous agreement.

The District 11 drift gillnet fishery was opened June 19 and closed on October 11, for a total of 70 fishing days. Fishing time was 63% above the 1984 to 1993 average of 43-days. Fishing effort totaled 5,100 boat-days and was 58% above the previous 10-year-average of 3,219 boat-days. In Section 11-B, 60 fishing days were allowed in Taku Inlet, 62 in Stephens Passage and 31 in Port Snettisham. In Section 11-C, 15 days fishing were allowed in lower Stephens Passage.

Excellent catches of all species were experienced in the District 11 fishery in 1994. Coho, pink and chum salmon catches were the largest in the history of the fishery, and chinook and sockeye salmon catches were above previous 10-year-averages. The 1994 harvest included 5,000 chinook, 105,900

sockeye, 188,500 coho, 401,500 pink, and 214,000 chum salmon (Table 14). Enhanced stocks contributed significantly to catches of all species.

The chinook salmon harvest of 5,000 fish was 77% above the 1984 to 1993 average but less than the harvest of 6,700 taken in 1993. The harvest was comprised primarily of mature adult chinook salmon (68%) and the majority of the catch (58%) was of Alaska hatchery origin. Management actions for chinook salmon conservation were implemented only during the first week of the season when Taku Inlet was closed north of the latitude of Jaw Point. Peak catches occurred during the first three weeks of the fishery. A total of five fishing days were allowed to harvest hatchery chinook salmon returns during three limited area openings in Speel Arm of Port Snettisham. The catch of chinook salmon during these openings totaled 300 fish. The index escapement of chinook salmon (three-ocean age) to six tributaries of the Taku River, as estimated by aerial surveys, totaled 9,900 fish, above the previous 10-year-average of 8,900 but below the index escapement goal of 13,200 fish.

The sockeye salmon harvest of 105,900 fish was 9% above the 1984 to 1993 average of 97,000. This represents the seventh largest catch on record but the lowest in the last 5-years. Sockeye salmon catches were distributed between Taku Inlet (84%) and Stephens Passage (16%). Taku River and Port Snettisham sockeye salmon stocks are taken in the Taku Inlet and Stephens Passage areas, with Port Snettisham stocks being more prevalent in Stephens Passage than in Taku Inlet. As a result, management decisions regarding Taku River sockeye are generally made by controlling area and time in Taku Inlet. Until postseason analyses are completed, the contributions of Taku River sockeye salmon to the weekly commercial harvests are assumed to equal historical averages. Consequently, approximately 80,800 (76%) of the total season's catch was estimated to be of Taku River origin. Port Snettisham is assumed to have produced the balance of the District 11 sockeye harvest (25,100 fish). The contribution of enhanced returns from fry releases into Sweetheart Lake was 2,600 fish, as estimated inseason by recovery of thermal otolith marks. Escapement of sockeye salmon into Canadian portions of the Taku River was 97,300 fish, above the escapement goal range of 71,000 to 80,000 fish, but below the previous 10-year-average of 99,800 sockeye salmon. Escapements of sockeye salmon into Crescent and Speel lakes were not quantified in 1994, but observations made during egg takes at these locations indicated a strong escapement into Crescent Lake and a relatively poor escapement into Speel Lake.

The total summer chum salmon catch (through August 13; Statistical Week 33) was 197,800 fish, exceeding the 1984 to 1993 average of 80,400 by 146% and higher than the previous record of 156,000 taken in 1993. Quantitative contribution estimates of enhanced chum salmon to the catch are not available due to low marking rates, but chum salmon returning to Douglas Island Pink and Chum, Inc. (DIPAC) hatcheries in Gastineau Channel and to the Limestone Inlet remote release site undoubtedly contributed a large portion of the catch.

In contrast to the summer chum salmon return, the 1994 fall chum salmon run was very poor. The total fall chum salmon harvest (i.e., chum salmon caught after August 13) was 16,200 fish. This is 49% of the 1984 to 1993 average but the highest catch since 1990. Chum salmon taken in the fall in District 11 are

almost exclusively wild chum stocks from the Taku and Whiting rivers. Although no program was in place to estimate the escapement of chum salmon into the Taku River, the escapement was believed to have been very poor as evidenced by low chum salmon catches in the department's Taku River fish wheels and by the lack of chum salmon observed during aerial surveys of spawning grounds during the fall.

The District 11 pink salmon harvest of 401,500 was the largest catch in the history of the fishery, and 2.5 times the 1984 to 1993 even-year-average. The catch was comprised of wild stocks returning to Taku Inlet, Stephens Passage, Port Snettisham, and Seymour Canal systems as well as DIPAC hatchery stocks. Taku River pink salmon comprised a minor portion of the harvest in 1994 as evidenced by: 1) the majority of the harvest (51%) was taken outside Taku Inlet; 2) the catch peaked during the first three weeks of August after the bulk of the Taku River run had passed upriver past the ADF&G fish wheels; and 3) local wild and hatchery returns of pink salmon were extraordinarily strong in 1994.

Escapements of pink salmon to U.S. streams in District 11 (excluding the Taku River) were the highest ever recorded, with a pink salmon escapement index of 1,258,145 fish. The Taku River pink salmon escapement was also above average for even-years, as evidenced by the record, even-year Taku River fish wheel catch of 26,900 pink salmon. Run strength of hatchery pink salmon was also extremely high, with a return to the DIPAC terminal harvest area in Gastineau Channel exceeding 2,700,000 fish.

The total coho salmon catch of 188,500 fish was the largest in the history of the fishery and over 2.5 times the 1984 to 1993 average of 68,400 fish. This catch included a combination of wild coho salmon runs to the Taku River and local Juneau area streams as well as DIPAC hatchery fish. The preliminary estimate of contribution of hatchery coho salmon to the District 11 fishery was 26,500 fish, or 14% of the total coho salmon catch. Escapements of coho salmon to District 11 streams were generally excellent. The preliminary estimate of the escapement of coho salmon into Canadian portions of the Taku River was 87,500 fish, exceeding the interim escapement goal of 27,500 to 35,000 fish.

Weekly fishing time in Taku Inlet during the sockeye salmon season varied from three to 4-days. During the first two weeks of the season, 3-days of fishing were allowed in Taku Inlet. Fishing time was extended to 4-days during the first two weeks of July because of good catch rates in District 11 and the Canadian inriver fisheries and improved estimates of inriver abundance provided by the Taku River mark-recapture project. Fishing success for sockeye salmon during Statistical Week 30 (July 17 to 23) was below average and no extension of fishing time was allowed in Taku Inlet above the initial 3-days. During the following two weeks, sockeye salmon catches and CPUE were above average. The estimated above-border escapement had exceeded the escapement goal range, so 4-day fishing periods were allowed. The sockeye catch and CPUE dropped dramatically during the final week of the summer season (Statistical Week 33; August 7 to 10). Further extensions of fishing time in Taku Inlet were not allowed during Statistical Weeks 31 through 33, despite having achieved the above-border Taku River escapement goal for sockeye salmon, in order to provide for adequate escapement of late-run stocks including Tatsamenie Lake sockeye salmon. The U.S. and Canada have conducted joint sockeye salmon

enhancement programs at Tatsamenie and Trapper lakes since 1990; the scale of the Tatsamenie Lake program has been limited by low escapements since the enhancement program began.

Additional fishing time was allowed in the Stephens Passage portion of Section 11-B to target returns of enhanced Limestone Inlet chum salmon. A total of four extra days of fishing between July 14 and August 4 was allowed south of the latitude of Circle Point; a 6-inch minimum mesh restriction was employed to limit harvest rates on Snettisham sockeye salmon stocks during these extensions. A total of fifteen fishing days was allowed in Section 11-C in lower Stephens Passage during the first three weeks of August and 120,000 pink salmon were taken, with a peak weekly effort of 31 boats fishing.

Fall management was initiated on August 14 (Statistical Week 34) when the District 11 gillnet fishery was initially opened for 3-days. The fishery was extended for a fourth day during each of the first two weeks of the fall season because of high mark-recapture estimates of the inriver coho salmon run strength and above average coho salmon catches and CPUE. The Statistical Week 35 opening date was delayed from Sunday to Monday, August 22, to prevent gear conflicts between the commercial fleet and sport anglers fishing the Juneau salmon derby. Fishing time was limited to 3-days during Statistical Weeks 36 and 37 (August 28 through September 7), when fall chum salmon CPUE historically has peaked, to conserve a weak return of Taku River chum salmon despite evidence of an all-time record coho salmon return to northern Southeast Alaska and projections of Taku River coho salmon escapement in excess of the above-border escapement goal range. The peak weekly coho catch in the fishery occurred during the week 37 opening when 33,200 coho salmon were taken. Port Snettisham was reopened to fishing beginning on August 28, after the Snettisham sockeye salmon return was over.

Four-days of fishing were allowed during each of Statistical Weeks 38 through 41 (September 11 through October 6) and coho salmon catches remained far above average. Intense fall storms limited fishing activity late in the season, particularly during Statistical Weeks 39 through 41. The last opening of the season was for 2-days during the second week of October.

District 15: Lynn Canal Drift Gillnet Fishery

The Lynn Canal drift gillnet fishery occurs in the waters of District 15 which consists of Section 15-A in upper Lynn Canal, 15-C in lower Lynn Canal, and 15-B in Berners Bay (Figure 1). The fishery targets sockeye during the summer season, and chum and coho salmon during the fall season.

The summer season harvest of sockeye salmon in Lynn Canal totaled 171,700 fish. This catch is 47% below the 10-year-average, primarily due to a weak return of the Chilkoot Lake sockeye stock. Escapement of sockeye to Chilkoot Lake totaled 37,100 spawners, well below the escapement goal. Chilkat sockeye salmon stocks were predominant in the commercial catch this season. Escapement to Chilkat Lake totaled 80,800 sockeye salmon, above the mid-point of the escapement goal range. Chum salmon harvests during the

summer season reached a record 571,000 fish, of which the majority consisted of hatchery chum returning to the Boat Harbor and Amalga Harbor remote release sites.

Fall season salmon harvests were highlighted by a record 140,800 coho salmon landed. Fall chum salmon harvests totaled 115,800 fish, with indications of some improvement over the low returns of fall chum experienced during the previous five seasons.

The Lynn Canal district reached a total salmon harvest of 1,146,200 salmon. Effort levels during the 1994 season reached 149 boats during July and 139 vessels participating during the fall period.

District 15 opened by regulation on June 19 with a 2-day fishing period in Sections 15-A and 15-C. Section 15-A was closed north of the latitude of the northern tip of Sullivan Island as a conservation measure to protect mature chinook salmon returning to Chilkat River. Chilkoot Inlet was opened north of the latitude of Mud Bay to provide opportunity to harvest early run Chilkoot sockeye salmon. Early Chilkoot sockeye salmon run strength was near average. Two-day openings were held through the early stock return, with upper Chilkoot Inlet closed when necessary to regulate escapement flow through Chilkoot weir. During the third opening, in response to lagging sockeye salmon run strength, waters of the section north of the latitude of Talsani Island were closed to ensure weekly escapement levels of Chilkoot sockeye salmon and to provide escapement of chinook and sockeye salmon to the Chilkat River. Following this week, an aggressive management strategy to harvest Chilkat sockeye salmon stocks was implemented, earlier than in recent years, with Chilkat Inlet opened to Glacier Point as early as the second week in July. For the first time, a fish wheel in-river assessment project provided daily escapement data on Chilkat sockeye salmon stocks. In response to a significant increase in fish wheel catches, Chilkat Inlet was opened to the north tip of Kochu Island during the third week in July and to Letnikof Point during the first week in August. In order to increase harvest rates on Chilkat sockeye salmon stocks while providing maximum protection to the weak late stock Chilkoot sockeye salmon return, it became necessary to only open waters of the section west of the Eldred Rock line. This conservation measure closed Point Sherman, the rock wall, and Chilkoot Inlet through the next three weeks, in order to improve a critically low Chilkoot sockeye salmon escapement. Despite this protection, the Chilkoot sockeye salmon escapement totaled just 37,100 fish this season. Fishing time was increased to 3-days during the first week in August throughout the remainder of the sockeye salmon season in order to increase harvest rates on Chilkat sockeye salmon stocks. Also, additional area was opened (including all waters of Chikat Inlet to the mouth of the river) until the last week in August when it became necessary to close the inlet for chum salmon conservation. The peak weekly harvest of Chilkat sockeye salmon (14,350 fish) occurred during the third week in August, by 112 vessels. Total Chilkat sockeye salmon return was over 205,000 fish, 17% above the 10-year-average. In comparison, the total Chilkoot sockeye salmon return was 61,000 fish or 74% below average.

A record harvest of approximately 480,000 chum salmon occurred during the summer season in lower Lynn Canal. Hatchery chum salmon returning to remote release sites in Boat Harbor and Amalga Harbor accounted for approximately 70% (nearly 336,000) of this large chum salmon harvest.

Approximately 219,000 chum salmon were from the Boat Harbor remote release site. Section 15-C, as in recent years, was initially opened within two nautical miles of both the eastern and western shorelines in the lower portions of the district in order to access the anticipated surplus of hatchery chum salmon as well as wild stocks returning to nearby systems. Section 15-B, Berners Bay, remained closed due to extensive fishing outside the bay. This strategy has been successful in improving the quality of Berners fish harvested and provides for adequate escapement to stream systems within the bay. Two-day periods were held through June and July in waters of the section south of the latitude of Point Bridget, with the exception of the Boat Harbor area, within two nautical miles of the western shoreline. This area remained open indefinitely beginning during the first week in July in order to continue the harvest of surplus hatchery chum salmon returning to Boat Harbor.

Returns of wild stock summer chum salmon were above average this season. Chum escapements appeared to be well above normal, with the exception of systems within Saint James Bay, where escapements were poor. During the second and third weeks in August, Section 15-C was opened in all waters in order to increase the harvest of late run Chilkat sockeye salmon. However, sockeye salmon catches were generally low in this section during this season.

The fall fishery was dominated by a record coho salmon catch of over 141,000 fish. This was nearly 80% above the 10-year-average. Fall management initially began with the closure of Chilkat Inlet during the last week in August for conservation of Chilkat chum salmon stocks. Fall chum salmon stocks have been depressed over the previous five seasons. A moderate improvement in escapements was apparent this season. The anticipated abundance of coho salmon returning to Lynn Canal enabled a shift in management to target effort on coho salmon in Section 15-C, while closing extensive areas in upper portions of Section 15-A. During the second week in September, and for the remainder of the season, upper Lynn Canal was closed above the latitude of the northern tip of Sullivan Island. Three-day openings were held in the remainder of the district in response to record coho salmon harvests. In addition, Section 15-B, Berners Bay, was opened for the first time throughout the fall season in order to harvest surplus coho salmon returning to Berners River. Berners Bay was opened on September 13, and remained open through subsequent weeks. Following a final 2-day opening during the first week in October, Lynn Canal was closed for the season. Effort levels peaked with 109 vessels participating. The peak weekly harvest of 26,500 coho salmon occurred during the second period in September.

Escapement levels for coho salmon were generally well above average in index systems. Berners River escapement was particularly high, with 15,900 spawners, despite very high harvest rates on this stock. Fall chum escapement surveys were hampered by poor visibility, however chum salmon escapements in Herman Creek and side channels of the Chilkat River below Klukwan, indicated a definite improvement over recent year escapement levels.

HATCHERY HARVESTS

Both state and privately operated hatcheries contributed chinook, coho, pink, and chum salmon to the 1994 commercial drift gillnet and purse seine fisheries. Sockeye salmon enhancement production is presently very limited in Southeast Alaska. Hatchery-produced salmon are harvested in terminal-area common property fisheries and in private hatchery cost-recovery fisheries.

General Common Property Harvests

With the exception of chinook and coho salmon, and in limited instances for chum salmon, reliable information is not available for the harvest of hatchery-produced salmon in the general common property fisheries. Pink salmon production releases are seldom coded-wire-tagged, making it difficult to accurately estimate fishery contributions.

From a management standpoint, the availability of hatchery fish is of most concern in those mixed stock fisheries where fishery performance information is used for inseason management. During 1994, intensive coded-wire-tag sampling programs were conducted throughout Southeast Alaska to estimate contributions of hatchery and wild stocks to commercial fisheries. Particular emphasis was placed on sampling catches of chinook and coho salmon in the troll and net fisheries throughout the region. In addition, catches in commercial drift gillnet and purse seine fisheries were sampled to estimate coded wire tag contributions of wild and hatchery chum salmon stocks and wild sockeye salmon stocks during selected periods. A more detailed discussion of coded-wire-tagged contributions of wild and hatchery chinook and coho salmon is presented in a subsequent section of this report (Southeast and Yakutat Troll Fisheries).

Common Property Terminal Harvests

Common property fisheries were allowed for harvesting hatchery returns in terminal areas adjacent to state-operated facilities in Blind Slough in District 6 and Ohmer Creek in District 8 (Crystal Lake Hatchery) and at privately operated enhancement facilities in Nakat Inlet (SSRAA) in District 1, Kendrick Bay (SSRAA) in District 2, Earl West Cove (SSRAA) in District 7, Hidden Falls (NSRAA) in District 12, and Deep Inlet (NSRAA) in District 13 (Figure 2). In addition, terminal troll fisheries for chinook and coho salmon were also conducted.

Terminal hatchery seine and drift gillnet fisheries harvested 5,176,500 salmon in 1994, including 11,300 chinook (≥ 28"), 1,000 jacks (chinook salmon ≤ 21"), 14,800 sockeye, 24,800 coho, 1,510,500 pink, and 3,613,900 chum salmon (Tables 3 & 9). Terminal hatchery purse seine fisheries occurred in Nakat Inlet,

Kendrick Bay, Earl West Cove, Hidden Falls, and Deep Inlet. Terminal drift gillnet fisheries occurred in Nakat Inlet, Earl West Cove, Deep Inlet, and for the Crystal Lake Hatchery (Wrangell Narrows and Ohmer Creek).

Common property fisheries with drift gillnet gear were authorized in both Crystal Lake terminal fishing areas. In Wrangell Narrows (District 6) the area was open to the harvest of coho salmon only, while Ohmer Creek, in District 8, was opened for the harvest of chinook salmon. Due to the expected low chinook returns to the Crystal Lake Hatchery, no terminal chinook salmon gillnet fishery was allowed at Blind Slough. The Blind Slough terminal area was open for 6-days in the fall for the harvest of coho salmon. All fishing in Blind Slough was limited to the hours of daylight, on Mondays and Tuesdays, to minimize conflicts between fishing vessels and other vessels transiting Wrangell Narrows. Ohmer Creek was open for 10-days and had no night restrictions.

The Southern Southeast Regional Aquaculture Association (SSRAA) operates hatcheries and remote release sites within the southern Southeast management districts. Hatcheries are located in Neets Bay, Herring Cove, and at Beaver Falls. Remote release sites include Nakat Inlet, Earl West Cove, Carroll Inlet, Shrimp Bay, and Kendrick Bay. Chinook, summer chum, coho, and fall chum salmon are released in Neets Bay, chinook and coho salmon are released in Herring Cove, and sockeye salmon are released at Beaver Falls and Shrimp Bay. Summer and fall chum and coho salmon are released in Nakat Inlet, chinook; summer chum, and coho salmon are released in Earl West Cove; chinook salmon are released in Carroll Inlet; and summer chum salmon are released in Kendrick Bay.

In 1994, Nakat Inlet and Earl West Cove were opened on a rotational basis for gillnet and purse seine gear. Both of those areas opened in mid-June and closed in mid-to-late October. The Kendrick Bay Terminal Harvest Area was opened on a continual basis for purse seine gear from July 3 through August 29. The harvest of hatchery chinook, coho, chum, and sockeye salmon from other SSRAA terminal production areas was limited to brood stock and cost recovery harvests. The harvest of salmon in each of the SSRAA hatchery release sites is summarized in Tables 3 and 9.

In District 12, an early opening occurred at Hidden Falls Hatchery beginning June 26, and continued into early August. The total common property catch from Hidden Falls was 2,842,000 chum salmon, a new record. Total run size at Hidden Falls was approximately 3,200,000 chum salmon. The fishery was mostly confined to the terminal harvest area to minimize harvest of wild Kelp Bay chum salmon.

In Section 13-B, the second terminal fishery for chum salmon returning to the NSRAA Deep Inlet Terminal Harvest Area took place. The Board of Fisheries adopted a Deep Inlet Terminal Harvest Management Plan which requires a fishing time ratio for gillnet to seine of 2:1. Troll fishermen were allowed to fish in the terminal area when it was closed to net fishing. Fishing began on July 3 with weekly openings for gillnetters of two 16-hour periods per week on Thursday and Friday and one 16-hour period for seiners on Sundays. Beginning in late July, the fishing schedule was revised to allow additional fishing time per week to adequately harvest the return and maintain fish quality. The total chum return to Deep Inlet was over

1,132,000, including 826,800 commercial harvest, 152,500 cost recovery, and 20,000 broodstock. The commercial catch breakdown by gear included 159,900 taken by gillnet gear, 395,900 by seine gear, and approximately 271,000 by troll gear. The troll catch occurred primarily in Eastern Channel. Additionally 132,000 Deep Inlet chum salmon were taken by seine gear in Eastern Channel during a 39-hour pink salmon opening.

Cost Recovery Harvests

Harvests of salmon for hatchery cost recovery purposes were reported from 17 locations during 1994. Salmon landings totaled approximately 5,752,000 fish (Tables 16 and 17). The harvest consisted of 1,710,900 chum, 3,831,500 pink, 188,800 coho, 18,000 chinook, and 3,300 sockeye salmon. Chum and pink salmon made up 30% and 67%, respectively, of the total cost recovery catch.

CANADIAN TRANSBOUNDARY RIVER FISHERIES

Canadian aboriginal food fisheries have operated on the transboundary Stikine and Taku rivers for many years. A small scale commercial fishery has occurred on the upper Stikine River since 1975. In 1979 Canada initiated larger scale commercial fisheries in the lower portions of both the Taku and Stikine rivers. Both drift and set gillnets are used in the lower river fisheries and one fish wheel has been operated on the Taku River, although most fish have been taken with drift gillnet gear in recent years. The commercial fisheries are conducted primarily in the mainstem portions of the rivers by fishermen using small skiffs. Commercial and aboriginal food fisheries are included as part of the U.S./Canada PST which has provided for international harvest sharing arrangements between the two nations since 1985. In 1994, Canada adopted unilateral fishery management plans for the rivers based on their interpretation that several PST annexes had expired.

For the Stikine River, Canada's management plan adopted the PST arrangements for sockeye salmon but excluded the catch ceiling for 4,000 coho salmon that was stipulated for the years 1988 through 1993. The PST sockeye harvest sharing arrangement is for the U.S. and Canada to share equally the total allowable catch (TAC) of sockeye salmon destined for Canadian portions of the drainage during the years 1993 through 1995. The TAC is determined each week of the fishing season using a model to make inseason forecasts of the total sockeye run to the Stikine River. Unlike recent years when the two nations developed a joint management model, in 1994 each nation used slightly different input parameters in developing their own model versions. As required by the Transboundary Rivers Annex of the PST, preseason forecasts of the Stikine River sockeye salmon return were used to guide the initial fishing patterns of the U.S. and Canadian fisheries. Preseason forecasts ranged from 312,000 (Canada) to 346,000 (U.S.) fish. Beginning

the first full week of July, inseason forecasts of total run size and TAC, based on catch per unit effort data and the Stikine management model, were used to assist in determining the weekly fishing strategies.

Harvests in the combined 1994 Stikine River commercial and aboriginal fisheries totaled 2,140 chinook, 45,100 sockeye, 3,400 coho, 90 pink, and 170 chum salmon (Table 18). An additional 6,900 sockeye salmon were taken at the Tahltan Lake weir under terms specified in an "Excess Salmon to Spawning Requirements License" issued by the Canadian Department of Fisheries and Oceans. This harvest was allowed after it became apparent that the sockeye salmon escapement to Tahltan Lake would be far in excess of the escapement goal of 24,000 fish. The total Canadian sockeye salmon harvest of 57,700 fish was the highest ever recorded, exceeding the 1984 to 1993 average of 20,700 fish. Catches of other species were average to below average. The lower river fishery, which occurs just above the border, accounted for the major portion of the harvest. Nineteen fishermen participated in the fishery with an average of only six present each week, about 55% the usual number of fishermen. The total effort of 429 boat-days was 46% above the previous 10-year-average of 294. The high effort level in 1994 was due to the above average sockeye run size which resulted in extended fishing periods throughout most of the season. Weekly fishing periods of four to 6-days were allowed from June 27 through July 16. The fishery was open continuously during the remainder of the sockeye season, from July 17 through August 18. Extended fishing time was allowed through the coho-directed season due to good coho salmon abundance and little effort, with the fishery closing at the end of October. The other two fisheries, one commercial and the other an aboriginal food fishery, occur upstream near Telegraph Creek. The combined harvests in the two upper fisheries totaled 1,000 chinook. Fishing effort in the upper commercial fishery was far above average due to extended fishing time allowed to harvest the strong return of Tahltan Lake sockeye salmon. The fishery was open a total of 50-days and the total effort was 68 boat-days. For comparison, the previous 10-year-average fishing time was 9-days with an average effort of 21 boat-days.

The Stikine sockeye salmon return was the highest on record and roughly two times the previous 10-year-average of 128,700 sockeye salmon. The preliminary total run size estimate of 278,700 sockeye salmon was slightly below preseason expectations, and was composed of an estimated 176,800 Tahltan Lake origin and 101,900 of non-Tahltan origin fish. Escapements of Tahltan and non-Tahltan stocks were 39,500 and 41,100; exceeding the escapement goals of 24,000 and 30,000, respectively. Returns from the joint U.S./Canada sockeye enhancement program totaled 17% of the U.S. harvest of Tahltan Lake sockeye salmon; analysis is still being conducted to determine the total contribution of enhanced sockeye salmon to the inriver harvest and total run.

The PST arrangements for sockeye and coho salmon harvest sharing that covered the 1988 through 1993 seasons, specified that Canada was allowed to harvest 18% of the TAC of Taku River sockeye salmon of Canadian origin, and 3,000 coho salmon. The harvest of other species is allowed only incidentally during the inriver fishery. Canada's management plan for the 1994 season did not numerically constrain the Canadian harvests of sockeye and coho salmon.

The Canadian Taku River harvest totaled 2,400 chinook, 29,000 sockeye, and 14,700 coho salmon. Almost all of the harvest was taken in the commercial fishery; the aboriginal food fishery contributed only 120 chinook, 240 sockeye, and 160 coho salmon. The chinook salmon harvest was a record, exceeding the previous 10-year-average of 980 fish by 147%. The sockeye harvest was the third highest on record and 38% above the previous 10-year-average. The coho salmon catch was a record and more than four times the previous 10-year-average of 3,491 fish. The commercial fishery was open for a record 74-days, more than three times the previous 10-year-average of 24-days. Fishing effort totaled 497 boat-days, 93% above the 1984 to 1993 average of 258 boat-days. Based on the desired escapement goal range of 71,000 to 80,000 sockeye salmon for Canadian portions of the Taku River and the preliminary total run size estimate of 208,700 fish, Canada harvested approximately 21% to 23% of the 1994 TAC of Taku River sockeye salmon.

ANNETTE ISLAND FISHERIES

The Annette Island Fishery Reserve was established by Presidential Proclamation in 1916. It provides for a 3,000 foot offshore zone wherein the Reserve Natives have exclusive fishing rights. Salmon are harvested by purse seine, gillnet, and troll gear. The Annette Island Fishery Reserve also has the right to use fish traps, however that right was not exercised in 1994. The troll fleet is very small on the Island and harvests limited numbers chinook and coho salmon. Most of the harvest in recent years has been taken by the gillnet fleet (Tables 20, 21 and 22). The 1994 drift gillnet catch was 555,400 fish. The purse seine fishery harvested only 169,700 salmon, approximately 22% of the 1993 seine harvest (Tables 21 and 22).

Table 1. Southeast Alaska commercial purse seine fishing time in hours open per day by area, 1994.[1]

Stat. Week	Date	Day/ Week	Area																			Terminal Hatchery Area				
			1-F	2	3-A	3-B	3-C	4	5	6-C	6-D	7-A	7-B	9-A	9-B	10	12-A	13-A	13-B	13-C	14-C	Earl West	Nakat Inlet	Hidden Falls	Kendrick Bay	Deep Inlet
26	19/Jun	Sun	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	20/Jun	Mon	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	21/Jun	Tue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	-	-	-	-
	22/Jun	Wed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	23/Jun	Thu	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	24/Jun	Fri	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	-	-	-	-
	25/Jun	Sat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	26/Jun	Sun	-	-	-	-	-	-	-	-	-	-	-	-	-	15	15	-	-	15	-	-	-	15	-	-
	27/Jun	Mon	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	-	-	-	-
	28/Jun	Tue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	29/Jun	Wed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	30/Jun	Thu	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15	-	-	15	-	12	-	15	-	-
	01/Jul	Fri	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	02/Jul	Sat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	03/Jul	Sun	15	15	-	-	-	10	-	-	-	15	-	-	-	15	19	-	15	19	-	12	12	19	19	16
	04/Jul	Mon	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20	-	-	20	-	-	-	20	24	-
	05/Jul	Tue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24	-
	06/Jul	Wed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	12	-	24	-
	07/Jul	Thu	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24	-
	08/Jul	Fri	15	15	-	-	-	-	-	-	-	-	-	-	-	15	15	-	15	15		-	-	15	24	-
	09/Jul	Sat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	12	-	24	-
29	10/Jul	Sun	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24	16
	11/Jul	Mon	19	19	-	-	-	7	-	-	-	19	-	-	-	19	19	-	19	19	-	-	-	19	24	-
	12/Jul	Tue	20	20	-	-	-	7	-	-	-	20	-	-	-	20	20	-	20	20	-	12	12	20	24	-
	13/Jul	Wed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24	-
	14/Jul	Thu	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24	-
	15/Jul	Fri	15	15	-	-	-	8	-	-	-	15	-	-	-	15	15	15	-	15	-	12	12	15	24	-
	16/Jul	Sat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24	-

[1] Districts or Sections not listed were not open to commercial purse seine fishing in 1994.

- Continued -

Table 1 (page 2 of 5.)

Stat. Week	Date	Day/ Week	Area																			Terminal Hatchery Area				
			1-F	2	3-A	3-B	3-C	4	5	6-C	6-D	7-A	7-B	9-A	9-B	10	12-A	13-A	13-B	13-C	14-C	Earl West	Nakat Inlet	Hidden Falls	Kendrick Bay	Deep Inlet
30	17/Jul	Sun	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24	12
	18/Jul	Mon	15	15	-	-	-	15	-	-	-	-	-	-	-	15	15	15	-	-	-	12	12	15	24	-
	19/Jul	Tue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24	-
	20/Jul	Wed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24	12
	21/Jul	Thu	15	15	-	-	-	8	-	-	-	-	-	15	-	15	15	15	-	15	-	12	12	15	24	-
	22/Jul	Fri	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24	-
	23/Jul	Sat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24	-
31	24/Jul	Sun	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	12	-	24	12
	25/Jul	Mon	15	15	-	-	-	15	-	-	-	-	-	-	-	15	15	-	-	15	15	-	-	15	24	-
	26/Jul	Tue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24	-
	27/Jul	Wed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	12	-	24	12
	28/Jul	Thu	15	15	15	15	15	15	-	-	-	-	-	-	-	15	15	15	-	15	15	-	-	15	24	-
	29/Jul	Fri	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24	-
	30/Jul	Sat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	12	-	24	-
32	31/Jul	Sun	15	15	15	15	15	15	-	-	-	-	-	19	19	19	19	19	-	19	19	-	-	19	24	16
	01/Aug	Mon	-	-	-	-	-	-	-	-	-	-	-	20	20	20	20	20	-	20	20	-	-	20	24	-
	02/Aug	Tue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	12	-	24	-
	03/Aug	Wed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24	-
	04/Aug	Thu	19	19	19	19	19	19	-	-	-	-	-	19	19	19	19	19	-	19	19	-	-	19	24	-
	05/Aug	Fri	20	20	20	20	20	20	-	-	-	-	-	20	20	20	20	20	-	20	20	12	12	20	24	-
	06/Aug	Sat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24	-
33	07/Aug	Sun	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24	12
	08/Aug	Mon	19	19	19	19	19	19	-	-	-	-	-	19	19	19	19	19	19	19	19	12	12	19	24	-
	09/Aug	Tue	20	20	20	20	20	20	-	-	-	-	-	20	20	20	20	20	20	20	20	-	-	20	24	-
	10/Aug	Wed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24	12
	11/Aug	Thu	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	12	-	24	-
	12/Aug	Fri	18	18	18	18	18	18	18	-	-	-	-	18	18	18	18	18	18	18	18	-	-	18	24	-
	13/Aug	Sat	21	21	21	21	21	21	21	-	-	-	-	21	21	21	21	21	21	21	21	-	-	21	24	-

- Continued -

Table 1 (page 3 of 5.)

Stat. Week	Date	Day/ Week	Area																			Terminal Hatchery Area				
			1-F	2	3-A	3-B	3-C	4	5	6-C	6-D	7-A	7-B	9-A	9-B	10	12-A	13-A	13-B	13-C	14-C	Earl West	Nakat Inlet	Hidden Falls	Kendrick Bay	Deep Inlet
34	14/Aug	Sun	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	12	-	24	12
	15/Aug	Mon	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24	-
	16/Aug	Tue	18	18	18	18	18	18	18	-	-	-	18	18	18	18	18	18	18	18	18	-	-	18	24	-
	17/Aug	Wed	21	21	21	21	21	21	21	-	-	-	21	21	21	21	21	21	21	21	21	12	12	21	24	12
	18/Aug	Thu	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24	-
	19/Aug	Fri	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24	-
	20/Aug	Sat	18	18	18	18	18	18	18	-	-	-	-	18	18	18	18	18	18	-	18	12	12	-	24	-
35	21/Aug	Sun	21	21	21	21	21	21	21	-	-	-	-	21	21	21	21	21	21	-	21	-	-	-	24	12
	22/Aug	Mon	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24	-
	23/Aug	Tue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	12	-	24	-
	24/Aug	Wed	18	18	18	18	18	18	18	-	18	-	18	18	18	18	18	18	18	18	18	-	-	-	24	12
	25/Aug	Thu	21	21	21	21	21	21	21	-	21	-	21	21	21	21	21	21	21	21	21	-	-	-	24	-
	26/Aug	Fri	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	12	-	24	-
	27/Aug	Sat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24	-
36	28/Aug	Sun	18	18	18	18	18	18	18	18	18	-	18	18	18	18	18	18	-	-	18	-	-	-	24	12
	29/Aug	Mon	21	21	21	21	21	21	21	21	21	-	21	21	21	21	21	21	-	-	21	12	12	-	21	-
	30/Aug	Tue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	31/Aug	Wed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12
	01/Sep	Thu	-	18	18	18	18	-	18	18	18	-	-	18	18	-	18	-	-	-	18	12	12	-	-	-
	02/Sep	Fri	-	21	21	21	21	-	21	21	21	-	-	21	21	-	21	-	-	-	21	-	-	-	-	-
	03/Sep	Sat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
37	04/Sep	Sun	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	12	-	-	-
	05/Sep	Mon	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06/Sep	Tue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12
	07/Sep	Wed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	12	-	-	-
	08/Sep	Thu	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	09/Sep	Fri	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/Sep	Sat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	12	-	-	-

- Continued -

Table 1 (page 4 of 5.)

Stat. Week	Date	Day/ Week	Area																			Terminal Hatchery Area				
			1-F	2	3-A	3-B	3-C	4	5	6-C	6-D	7-A	7-B	9-A	9-B	10	12-A	13-A	13-B	13-C	14-C	Earl West	Nakat Inlet	Hidden Falls	Kendrick Bay	Deep Inlet
38	11/Sep	Sun	-	17	-	-	-	-	-	-	-	-	-	-	17	-	-	-	-	-	-	-	-	-	-	12
	12/Sep	Mon	-	19	-	-	-	-	-	-	-	-	-	-	19	-	-	-	-	-	-	-	-	-	-	-
	13/Sep	Tue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	12	-	-	-
	14/Sep	Wed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12
	15/Sep	Thu	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	16/Sep	Fri	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	12	-	-	-
	17/Sep	Sat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
39	18/Sep	Sun	-	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10
	19/Sep	Mon	-	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	12	-	-	-
	20/Sep	Tue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	21/Sep	Wed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10
	22/Sep	Thu	-	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	12	-	-	-
	23/Sep	Fri	-	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	24/Sep	Sat	-	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10
40	25/Sep	Sun	-	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	12	-	-	-
	26/Sep	Mon	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	27/Sep	Tue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28/Sep	Wed	-	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	12	-	-	-
	29/Sep	Thu	-	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	30/Sep	Fri	-	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	01/Oct	Sat	-	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	12	-	-	-
41	02/Oct	Sun	-	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	03/Oct	Mon	-	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	04/Oct	Tue	-	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	12	-	-	-
	05/Oct	Wed	-	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	06/Oct	Thu	-	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07/Oct	Fri	-	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	12	-	-	-
	08/Oct	Sat	-	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Table 1 (page 5 of 5.)

Stat. Week	Date	Day/ Week	Area																				Terminal Hatchery Area				
			1-F	2	3-A	3-B	3-C	4	5	6-C	6-D	7-A	7-B	9-A	9-B	10	12-A	13-A	13-B	13-C	14-C	Earl West	Nakat Inlet	Hidden Falls	Kendrick Bay	Deep Inlet
42	09/Oct	Sun	-	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/Oct	Mon	-	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	12	-	-	-
	11/Oct	Tue	-	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/Oct	Wed	-	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13/Oct	Thu	-	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	-	-	-
	14/Oct	Fri	-	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15/Oct	Sat	-	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
43	16/Oct	Sun	-	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	-	-	-
	17/Oct	Mon	-	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18/Oct	Tue	-	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	19/Oct	Wed	-	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	-	-	-
	20/Oct	Thu	-	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	21/Oct	Fri	-	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	22/Oct	Sat	-	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	-	-	-
44	23/Oct	Sun	-	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	24/Oct	Mon	-	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	25/Oct	Tue	-	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	-	-	-
	26/Oct	Wed	-	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	27/Oct	Thu	-	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28/Oct	Fri	-	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	-	-	-
	29/Oct	Sat	-	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
45	30/Oct	Sun	-	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	31/Oct	Mon	-	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	-	-	-
	01/Nov	Tue	-	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	02/Nov	Wed	-	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	03/Nov	Thu	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	04/Nov	Fri	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	05/Nov	Sat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 2. Southeast Alaska annual commercial purse seine salmon catches, in numbers, by species, 1960 to 1994.

Year	Chinook[1]	Jacks[2]	Sockeye	Coho	Pink	Chum	Total
1960	6,509	-	358,697	125,871	2,572,279	726,017	3,789,373
1961	4,134	-	418,952	246,524	10,936,344	2,172,066	13,778,020
1962	10,145	-	411,748	239,382	10,139,595	1,593,386	12,394,256
1963	6,659	-	422,633	316,491	18,189,644	1,186,260	20,121,687
1964	16,819	-	570,666	506,505	17,310,850	1,662,135	20,066,975
1965	14,992	-	672,015	557,005	10,061,603	1,185,571	12,491,186
1966	11,877	-	480,519	452,057	18,919,555	2,846,668	22,710,676
1967	9,054	-	600,628	188,965	2,807,783	1,545,059	5,151,489
1968	13,335	-	494,998	463,553	24,099,793	2,252,605	27,324,284
1969	6,730	-	338,217	109,956	4,312,402	332,679	5,099,984
1970	5,954	-	307,814	294,574	9,629,162	1,936,903	12,174,407
1971	4,799	-	162,823	326,264	8,505,647	1,496,399	10,495,932
1972	16,800	-	323,966	390,343	11,370,835	2,169,523	14,271,467
1973	8,751	-	348,679	129,593	5,609,519	1,219,552	7,316,094
1974	6,759	-	235,934	166,687	4,174,219	999,601	5,583,200
1975	2,056	-	61,878	70,201	3,410,938	381,307	3,926,380
1976	1,426	-	135,823	87,604	4,287,516	512,777	5,025,146
1977	5,243	-	329,396	160,519	11,600,431	342,322	12,437,911
1978	13,998	-	274,238	245,074	19,044,766	529,779	20,107,855
1979	10,079	-	397,448	176,593	9,000,060	441,686	10,025,866
1980	11,704	-	515,127	185,479	12,334,324	1,019,363	14,065,997
1981	10,268	-	440,237	238,502	16,514,018	521,749	17,724,774
1982	31,183	-	459,628	431,804	22,436,252	839,356	24,198,223
1983	13,581	-	781,719	360,287	34,651,168	582,666	36,389,421
1984	20,777	-	466,719	361,325	21,571,738	2,460,774	24,881,333
1985	23,120	-	720,787	422,636	47,719,676	1,861,639	50,747,858
1986	12,203	1,158	592,766	588,642	43,623,539	2,213,427	47,031,735
1987	4,510	1,787	311,240	131,458	7,059,644	1,252,791	8,761,430
1988	11,134	1,034	657,104	158,428	9,321,575	1,636,368	11,785,643
1989	13,168	4,461	837,032	332,888	53,267,309	1,090,872	55,545,730
1990	11,373	3,454	973,634	379,336	28,393,542	1,070,871	30,832,210
1991	11,618	5,585	1,056,258	411,240	59,141,387	2,131,625	62,757,713
1992	18,327	2,296	1,340,318	505,135	30,107,454	3,205,160	35,178,690
1993	8,377	3,945	1,708,337	477,114	54,151,235	4,615,730	60,964,738
Average 1960 to 1993							
	11,102	2,965[3]	535,529	301,119	19,008,112	1,471,608	21,328,167
Preliminary 1994							
	14,839	6,265	1,436,048	970,120	51,441,380	6,379,430	60,248,082

[1] Chinook salmon ≥ 28."

[2] Chinook salmon ≤ 21."

[3] Average 1986 through 1993.

Table 3. Southeast Alaska commercial purse seine salmon catches by area, in numbers, by species, 1994.

Area	Chinook[1]	Jacks[2]	Sockeye	Coho	Pink	Chum	Total
District 1 (traditional)	60	3	58,091	24,317	1,840,534	124,378	2,047,383
Nakat Inlet (hatchery terminal area)	-	-	24	129	5,513	45,057	50,723
Annette Island	15	-	5,157	2,409	158,961	3,135	169,677
District 2 (traditional)	60	4	28,679	63,623	2,419,258	485,077	2,996,701
Kendrick Bay (hatchery terminal area)	-	-	335	420	2,948	99,171	102,874
District 3 (traditional)	93	38	17,135	32,561	2,266,200	71,369	2,387,396
District 4 (traditional)	9,305	123	1,134,295	344,837	12,428,964	713,856	14,631,380
District 5 (traditional)	-	-	216	674	82,256	2,272	85,418
District 6 (traditional)	-	68	1,882	22,331	296,561	3,396	324,238
District 7 (traditional)	24	165	8,914	11,475	547,953	48,578	617,109
Earl West Cove (hatchery terminal area)	829	-	1	28	2	1,725	2,585
District 9 (traditional)	231	110	43,887	226,011	10,385,221	241,120	10,896,580
District 10 (traditional)	206	2,509	19,125	57,819	7,050,390	141,252	7,271,301
District 12 (traditional)	319	1,697	62,668	113,748	8,950,484	683,346	9,812,262
Hidden Falls (hatchery terminal area)	3,446	1,046	13,081	11,738	1,479,866	2,842,059	4,351,236
District 13 (traditional)	186	376	31,135	9,421	2,066,523	426,922	2,534,563
Deep Inlet (hatchery terminal area)	39	3	887	3,370	20,249	395,917	420,465
District 14 (traditional)	26	123	10,536	45,209	1,439,497	50,800	1,546,191
Southern Subtotals							
Traditional	9,542	401	1,249,212	499,818	19,881,726	1,448,926	23,089,625
Hatchery Terminal Area	829	-	360	577	8,463	145,953	156,182
Annette Island	15	-	5,157	2,409	158,961	3,135	169,677
Subtotal	10,386	401	1,254,729	502,804	20,049,150	1,598,014	23,415,484
Northern Subtotals							
Traditional	968	4,815	167,351	452,208	29,892,115	1,543,440	32,060,897
Hatchery Terminal Area	3,485	1,049	13,968	15,108	1,500,115	3,237,976	4,771,701
Subtotal	4,453	5,864	181,319	467,316	31,392,230	4,781,416	36,832,598
Total Southeast							
Traditional	10,510	5,216	1,416,563	952,026	49,773,841	2,992,366	55,150,522
Hatchery Terminal Area	4,314	1,049	14,328	15,685	1,508,578	3,383,929	4,927,883
Annette Island	15	-	5,157	2,409	158,961	3,135	169,677
Total	14,839	6,265	1,436,048	970,120	51,441,380	6,379,430	60,248,082

[1] Chinook salmon ≥ 28."

[2] Chinook salmon ≤ 21."

Table 4. Northern Southeast Alaska annual commercial purse seine salmon catches, in numbers, by species, 1960 to 1994.

Year	Chinook[1]	Jacks[2]	Sockeye	Coho	Pink	Chum	Total
1960	1,377	-	193,185	40,578	1,208,645	344,005	1,787,790
1961	2,738	-	306,490	98,626	7,545,647	1,276,238	9,229,739
1962	3,308	-	190,704	44,844	450,906	779,813	1,469,575
1963	3,992	-	241,483	146,899	13,772,188	697,716	14,862,278
1964	6,155	-	259,808	179,568	7,184,778	615,968	8,246,277
1965	6,451	-	353,618	243,509	5,106,087	949,074	6,658,739
1966	6,071	-	273,071	170,354	4,720,620	2,277,117	7,447,233
1967	2,349	-	213,594	120,294	2,358,831	1,317,519	4,012,587
1968	4,665	-	336,407	208,564	9,729,290	1,167,207	11,446,133
1969	4,173	-	270,034	87,731	3,453,139	297,203	4,112,280
1970	3,686	-	236,663	165,940	4,972,826	1,408,347	6,787,462
1971	2,595	-	113,699	127,703	2,911,913	866,044	4,021,954
1972	5,998	-	157,942	155,628	3,026,945	1,394,570	4,741,083
1973	4,059	-	181,604	56,225	1,741,261	634,047	2,617,196
1974	1,559	-	66,858	27,415	514,119	440,342	1,050,293
1975	108	-	5,471	2,185	585,294	66,959	660,017
1976	12	-	19,126	1,744	80,775	55,005	156,662
1977	233	-	17,674	20,194	2,064,103	30,357	2,132,561
1978	501	-	36,641	9,101	2,398,505	39,990	2,484,738
1979	797	-	36,311	19,990	3,198,769	226,125	3,481,992
1980	512	-	29,879	12,378	902,071	415,511	1,360,351
1981	2,280	-	60,750	44,016	4,428,712	282,754	4,818,512
1982	3,643	-	79,970	135,333	10,689,058	162,036	11,070,040
1983	2,796	-	60,516	54,457	5,323,568	269,846	5,711,183
1984	1,808	-	53,308	48,703	4,159,670	1,473,603	5,737,092
1985	7,999	-	99,227	77,576	19,338,817	1,011,963	20,535,582
1986	752	633	18,592	17,786	933,601	947,510	1,918,874
1987	650	1,039	77,238	28,492	3,858,685	833,667	4,799,771
1988	621	520	13,323	24,970	1,301,041	653,007	1,993,482
1989	547	2,191	98,328	56,535	11,969,624	336,503	12,463,728
1990	490	1,217	38,502	43,384	4,082,182	603,299	4,769,074
1991	1,854	2,911	72,161	105,932	16,976,376	1,064,287	18,223,521
1992	795	1,979	108,343	162,953	12,568,844	1,948,819	14,791,733
1993	1,523	3,435	165,212	114,320	16,915,506	3,004,760	20,204,756
Average 1960 - 1993							
	2,562	1,741[3]	131,933	83,939	5,602,129	820,330	6,641,303
Preliminary 1994							
	4,453	5,864	181,319	467,316	31,392,230	4,781,416	36,832,598

[1] Chinook salmon ≥ 28."

[2] Chinook salmon ≤ 21."

[3] Average 1986 - 1993.

Table 5. Northern Southeast Alaska pink salmon spawning escapement index, by district and year, 1960 to 1994.

Year	109	110	111	112	113	114	115	Total
1960	116,507	258,417	339,325	192,005	365,565	128,931	19,901	1,420,651
1961	473,110	382,484	465,385	514,959	711,835	215,163	72,360	2,835,296
1962	477,778	425,495	290,287	194,470	349,166	196,235	23,490	1,956,921
1963	545,565	319,735	436,413	844,901	1,311,416	549,286	25,650	4,032,966
1964	705,460	497,550	400,373	470,200	532,286	125,771	10,800	2,742,440
1965	670,900	238,048	322,578	472,466	768,328	406,669	0	2,878,989
1966	750,891	549,500	513,337	642,936	529,276	109,546	2,700	3,098,186
1967	436,847	196,146	270,465	335,281	577,923	179,435	15,255	2,011,352
1968	708,606	966,116	476,213	546,877	310,460	155,089	47,250	3,210,611
1969	397,370	288,980	218,931	465,749	770,712	255,344	22,897	2,419,983
1970	472,550	522,020	448,846	518,715	379,789	164,774	54,170	2,560,864
1971	533,133	576,473	306,941	499,233	600,106	392,115	0	2,908,001
1972	451,761	690,421	594,141	553,541	345,027	193,944	0	2,828,835
1973	309,487	285,872	268,037	487,909	600,917	258,157	71,550	2,281,929
1974	291,744	272,527	429,787	321,228	441,701	123,090	0	1,880,077
1975	211,056	74,037	139,149	296,644	669,543	146,830	29,750	1,567,009
1976	223,739	163,536	107,967	231,489	520,796	125,810	27	1,373,364
1977	560,841	247,957	328,991	644,740	2,082,431	237,325	50,247	4,152,532
1978	447,360	413,769	181,865	819,664	908,571	194,070	108	2,965,407
1979	813,719	729,235	485,602	717,218	1,995,662	239,716	71,988	5,053,140
1980	460,143	397,892	319,117	550,499	610,970	227,954	82,270	2,648,845
1981	427,685	370,093	244,688	612,112	1,960,006	234,140	45,360	3,894,084
1982	757,824	590,506	451,872	738,340	1,139,190	195,932	49,601	3,923,265
1983	577,412	358,403	422,663	687,269	1,913,146	261,587	62,536	4,283,016
1984	732,250	409,358	465,771	479,698	1,605,190	213,129	70,365	3,975,761
1985	1,135,524	1,050,671	1,074,865	1,168,254	2,759,386	568,571	282,767	8,040,038
1986	738,965	270,377	245,369	659,601	767,532	170,350	3,810	2,856,004
1987	600,852	1,085,859	889,285	517,383	948,355	160,508	82,902	4,285,144
1988	624,615	469,130	326,043	641,769	576,384	195,269	59,130	2,892,340
1989	809,257	991,768	632,277	787,499	996,507	192,689	71,822	4,481,819
1990	596,405	1,058,618	369,370	607,486	870,923	187,760	119,702	3,810,264
1991	1,176,295	1,051,421	306,833	1,037,528	1,436,044	220,886	24,899	5,253,906
1992	987,099	1,094,130	583,169	1,077,513	1,278,763	191,384	73,265	5,285,323
1993	917,930	574,310	225,156	1,416,547	1,333,964	529,578	44,797	5,042,282
1994	1,356,885	1,282,369	1,258,145	1,804,349	2,431,261	488,574	106,380	8,727,963
GOAL	600,000	1,000,000	500,000	600,000	1,600,000	500,000	-	4,800,000

Table 6. Southern Southeast Alaska annual commercial purse seine salmon catches, in numbers, by species, 1960 to 1994.

Year	Chinook[1]	Jacks[2]	Sockeye	Coho	Pink	Chum	Total
1960	5,132	-	165,512	85,293	1,363,634	382,012	2,001,583
1961	1,396	-	112,462	147,898	3,390,697	895,828	4,548,281
1962	6,837	-	221,044	194,538	9,688,689	813,573	10,924,681
1963	2,667	-	181,150	169,592	4,417,456	488,544	5,259,409
1964	10,664	-	310,858	326,937	10,126,072	1,046,167	11,820,698
1965	8,541	-	318,397	313,496	4,955,516	236,497	5,832,447
1966	5,806	-	207,448	281,703	14,198,935	569,551	15,263,443
1967	6,705	-	387,034	68,671	448,952	227,540	1,138,902
1968	8,670	-	158,591	254,989	14,370,503	1,085,398	15,878,151
1969	2,557	-	68,183	22,225	859,263	35,476	987,704
1970	2,268	-	71,151	128,634	4,656,336	528,556	5,386,945
1971	2,204	-	49,124	198,561	5,593,734	630,355	6,473,978
1972	10,802	-	166,024	234,715	8,343,890	774,953	9,530,384
1973	4,692	-	167,075	73,368	3,868,258	585,505	4,698,898
1974	5,200	-	169,076	139,272	3,660,100	559,259	4,532,907
1975	1,948	-	56,407	68,016	2,825,644	314,348	3,266,363
1976	1,414	-	116,697	85,860	4,206,741	457,772	4,868,484
1977	5,010	-	311,722	140,325	9,536,328	311,965	10,305,350
1978	13,497	-	237,597	235,973	16,646,261	489,789	17,623,117
1979	9,282	-	361,137	156,603	5,801,291	215,561	6,543,874
1980	11,192	-	485,248	173,101	11,432,253	603,852	12,705,646
1981	7,988	-	379,487	194,486	12,085,306	238,995	12,906,262
1982	27,540	-	379,658	296,471	11,747,194	677,320	13,128,183
1983	10,785	-	721,203	305,830	29,327,600	312,820	30,678,238
1984	18,969	-	413,411	312,622	17,412,068	987,171	19,144,241
1985	15,121	-	621,560	345,060	28,380,859	849,676	30,212,276
1986	11,451	525	574,174	570,856	42,689,938	1,265,917	45,112,861
1987	3,860	748	234,002	102,966	3,200,959	419,124	3,961,659
1988	10,513	514	643,781	133,458	8,020,534	983,361	9,792,161
1989	12,621	2,270	738,704	276,353	41,297,685	754,369	43,082,002
1990	10,883	2,237	935,132	335,952	24,311,360	467,572	26,063,136
1991	9,764	2,674	984,097	305,308	42,165,011	1,067,338	44,534,192
1992	17,532	317	1,231,975	342,182	17,538,610	1,256,341	20,386,957
1993	6,854	510	1,543,125	362,794	37,235,729	1,610,970	40,759,982
Average 1960 to 1993	8,540	1,224[3]	403,595	217,180	13,405,983	651,279	14,686,865
Preliminary 1994	10,386	401	1,254,729	502,804	20,049,150	1,598,014	23,415,484

[1] Chinook salmon ≥ 28."

[2] Chinook salmon ≤ 21."

[3] Average 1986 - 1993.

Table 7. Southern Southeast Alaska pink salmon spawning escapement index, by district and year, 1960 to 1994 .

Year	101	102	103	105	106	107	108	Total
1960	726,020	210,776	928,350	156,136	69,119	239,301	36,000	2,365,702
1961	611,341	127,287	677,952	265,630	483,585	178,751	110,900	2,455,446
1962	1,220,747	355,825	1,273,828	468,526	518,150	421,000	59,400	4,317,476
1963	1,065,132	271,115	1,122,225	424,052	369,775	468,913	160,500	3,881,712
1964	1,273,469	532,704	1,253,950	547,965	663,449	453,203	118,703	4,843,443
1965	687,106	279,820	1,078,362	614,122	485,500	290,350	34,830	3,470,090
1966	1,496,930	616,668	1,315,405	537,150	647,696	495,020	0	5,108,869
1967	563,241	94,037	384,967	412,298	166,842	154,067	81,000	1,856,452
1968	1,837,225	544,322	1,094,890	499,324	406,259	388,769	92,693	4,881,082
1969	726,072	328,862	333,985	218,013	161,858	168,864	67,906	2,005,560
1970	1,508,615	264,761	1,439,322	229,459	248,866	348,733	73,860	4,147,270
1971	1,353,991	649,546	1,604,638	385,944	369,310	476,658	40,004	4,880,891
1972	1,651,100	354,146	915,956	283,570	229,440	442,248	113,834	3,990,294
1973	911,847	512,260	853,001	281,731	350,016	393,633	66,825	3,369,313
1974	1,293,850	480,440	1,155,955	201,088	201,353	325,146	39,825	3,700,857
1975	1,439,667	664,546	1,449,408	291,394	352,581	467,228	18,314	4,683,138
1976	1,523,782	706,470	1,556,397	154,703	663,544	685,745	15,797	5,306,438
1977	2,252,755	690,351	1,616,768	263,381	358,462	949,824	45,332	6,178,073
1978	2,157,453	569,293	1,685,581	292,617	289,082	439,422	21,063	5,464,911
1979	1,062,770	675,036	1,607,025	459,211	381,886	467,305	91,388	4,744,621
1980	2,360,089	686,073	2,506,575	147,830	156,533	358,830	26,569	6,242,499
1981	1,862,171	641,621	2,460,622	394,647	244,402	281,105	31,611	5,916,179
1982	2,199,570	582,615	2,098,555	256,100	341,520	457,980	69,674	6,014,577
1983	2,789,250	998,214	3,230,366	535,809	266,990	374,643	26,382	8,222,472
1984	3,685,157	956,239	3,334,059	266,360	311,923	409,202	28,196	9,001,794
1985	3,854,308	1,167,087	4,791,491	699,921	866,369	976,802	83,650	12,439,740
1986	4,528,205	1,761,475	5,841,107	676,983	820,020	590,321	40,798	14,378,909
1987	2,249,846	518,155	1,998,696	174,317	216,341	337,638	96,378	5,609,771
1988	1,558,852	573,143	1,506,894	171,101	250,399	300,444	65,484	4,426,317
1989	2,850,941	883,842	2,954,216	406,398	575,122	882,604	125,856	8,678,979
1990	2,171,659	1,107,557	2,362,241	397,298	519,436	431,244	113,805	7,103,240
1991	1,989,096	606,060	2,764,874	660,180	478,714	631,436	157,454	7,287,814
1992	3,108,745	951,259	1,909,209	168,650	236,157	525,059	89,099	7,089,507
1993	2,186,455	967,542	2,981,556	635,778	613,562	504,900	69,307	7,968,700
1994	1,995,457	841,566	2,500,865	477,388	669,684	544,889	73,790	7,103,639
Goal	2,000,000	600,000	1,700,000	500,000	600,000	600,000	-	6,000,000

Table 8. Southeast Alaska commercial drift gillnet fishing time by area and hours open per day, 1994.

Stat Week	Date	Day/	District or Section														Terminal Hatchery Area					
			1-A	1-B	1-F	6-A	6-B	6-C	6-D	8-A	8-B	11-B	11-C	15-A	15-B	15-C	Earl West	Nakat Inlet	Ohmer Creek	Boat Harbor	Deep Inlet	Wrangell Narrows
24	5-Jun	Sun	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6-Jun	Mon	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	-	-	-
	7-Jun	Tue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24	-	-	-
	8-Jun	Wed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	-	-	-
	9-Jun	Thu	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10-Jun	Fri	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11-Jun	Sat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	12-Jun	Sun	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	13-Jun	Mon	-	-	-	-	-	-	-	12	12	-	-	-	-	-	-	-	12	-	-	-
	14-Jun	Tue	-	-	-	-	-	-	-	12	12	-	-	-	-	-	-	-	24	-	-	-
	15-Jun	Wed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	-	-	-
	16-Jun	Thu	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	17-Jun	Fri	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	18-Jun	Sat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	19-Jun	Sun	-	12	-	12	12	12	12	12	12	12	-	12	-	12	12	-	-	12	-	-
	20-Jun	Mon	-	24	-	24	24	24	24	24	24	24	-	24	-	24	12	-	12	24	-	-
	21-Jun	Tue	-	24	-	12	12	12	12	12	12	24	-	12	-	12	-	-	24	12	-	-
	22-Jun	Wed	-	24	-	-	-	-	-	12	12	18	-	-	-	-	12	-	24	-	-	-
	23-Jun	Thu	-	12	-	-	-	-	-	24	24	24	-	-	-	-	12	-	24	-	-	-
	24-Jun	Fri	-	-	-	-	-	-	-	12	12	18	-	-	-	-	-	-	12	-	-	-
	25-Jun	Sat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	-	-	-	-	-
27	26-Jun	Sun	-	12	-	12	12	12	12	12	12	12	-	12	-	12	12	-	-	12	-	-
	27-Jun	Mon	-	24	-	24	24	24	24	24	24	24	-	24	-	24	-	-	12	24	-	-
	28-Jun	Tue	-	24	-	12	12	12	12	12	12	24	-	12	-	12	12	-	24	12	-	-
	29-Jun	Wed	-	12	-	-	-	-	-	12	12	18	-	-	-	12	12	-	12	12	-	-
	30-Jun	Thu	-	-	-	-	-	-	-	24	24	24	-	-	-	24	-	-	-	24	-	-
	1-Jul	Fri	-	-	-	-	-	-	-	12	12	18	-	-	-	12	12	12	-	12	-	-
	2-Jul	Sat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	12	-	-	-	-

- Continued -

Table 8. (page 2 of 6.)

Stat Week	Date	Day/	District or Section													Terminal Hatchery Area					
			1-A	1-B	1-F	6-A	6-B	6-C	6-D	8-A	8-B	11-B	11-C	15-A	15-B	15-C	Earl West	Nakat Inlet	Ohmer Creek	Boat Harbor	Deep Inlet	Wrangell Narrows
28	3-Jul	Sun	-	12	-	12	12	12	12	12	12	12	-	12	-	12	-	-	-	12	-	-
	4-Jul	Mon	-	24	-	24	24	24	24	24	24	24	-	24	-	24	12	12	-	24	-	-
	5-Jul	Tue	-	24	-	12	12	12	12	12	12	24	-	12	-	24	12	12	-	24	-	-
	6-Jul	Wed	-	12	-	-	-	-	-	12	12	24	-	-	-	24	-	-	-	24	-	-
	7-Jul	Thu	-	-	-	-	-	-	-	24	24	12	-	-	-	24	12	12	-	24	16	-
	8-Jul	Fri	-	-	-	-	-	-	-	24	24	-	-	-	-	-	12	12	-	24	16	-
	9-Jul	Sat	-	-	-	-	-	-	-	12	12	-	-	-	-	-	-	-	-	24	-	-
29	10-Jul	Sun	-	12	-	12	12	12	12	12	12	12	-	12	-	12	12	12	-	24	-	-
	11-Jul	Mon	-	24	-	24	24	24	24	24	24	24	-	24	-	24	12	12	-	24	-	-
	12-Jul	Tue	-	24	-	12	12	12	12	12	12	24	-	12	-	12	-	-	-	24	-	-
	13-Jul	Wed	-	12	-	-	-	-	-	18	18	24	-	-	-	-	12	12	-	24	-	-
	14-Jul	Thu	-	-	-	-	-	-	-	24	24	24	-	-	-	-	12	12	-	24	16	-
	15-Jul	Fri	-	-	-	-	-	-	-	24	24	12	-	-	-	-	-	-	-	24	16	-
	16-Jul	Sat	-	-	-	-	-	-	-	18	18	-	-	-	-	-	12	12	-	24	-	-
30	17-Jul	Sun	-	12	-	12	12	12	12	12	12	12	-	12	-	12	12	12	-	24	-	-
	18-Jul	Mon	-	24	-	24	24	24	24	24	24	24	-	24	-	24	-	-	-	24	-	-
	19-Jul	Tue	-	24	-	24	24	24	24	24	24	24	-	12	-	12	12	12	-	24	16	-
	20-Jul	Wed	-	24	-	12	12	12	12	12	12	24	-	-	-	-	12	12	-	24	-	-
	21-Jul	Thu	-	12	-	-	-	-	-	18	18	12	-	-	-	-	-	-	-	24	16	-
	22-Jul	Fri	-	-	-	-	-	-	-	24	24	-	-	-	-	-	12	12	-	24	16	-
	23-Jul	Sat	-	-	-	-	-	-	-	18	18	-	-	-	-	-	12	12	-	24	-	-
31	24-Jul	Sun	-	12	-	12	12	12	12	12	12	12	-	12	-	12	-	-	-	24	-	-
	25-Jul	Mon	-	24	-	24	24	24	24	24	24	24	-	24	-	24	12	12	-	24	-	-
	26-Jul	Tue	-	24	-	24	24	24	24	24	24	24	-	12	-	12	12	12	-	24	16	-
	27-Jul	Wed	-	24	-	12	12	12	12	12	12	24	-	-	-	-	-	-	-	24	-	-
	28-Jul	Thu	-	12	-	-	-	-	-	12	12	12	-	-	-	-	12	12	-	24	16	-
	29-Jul	Fri	-	-	-	-	-	-	-	12	12	-	-	-	-	-	12	12	-	24	16	-
	30-Jul	Sat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24	-	-

- Continued -

Table 8. (page 3 of 6.)

Stat Week	Date	Day/	District or Section													Terminal Hatchery Area					
			1-A	1-B	1-F	6-A	6-B	6-C	6-D	8-A	8-B	11-B	11-C	15-A	15-B	15-C	Earl West	Nakat Inlet	Ohmer Creek	Boat Harbor	Deep Inlet	Wrangell Narrows
32	31-Jul	Sun	-	12	-	12	12	12	-	12	12	12	12	12	-	12	12	12	-	24	-	-
	1-Aug	Mon	-	24	-	24	24	24	-	24	24	24	24	24	-	24	12	12	-	24	-	-
	2-Aug	Tue	-	24	-	24	24	24	-	24	24	24	24	24	-	12	-	-	-	24	-	-
	3-Aug	Wed	-	24	-	12	12	12	-	12	12	24	24	12	-	-	12	12	-	24	-	-
	4-Aug	Thu	-	24	-	-	-	-	-	-	-	12	24	-	-	-	12	12	-	24	16	-
	5-Aug	Fri	-	12	-	-	-	-	-	-	-	-	12	-	-	-	-	-	-	24	16	-
	6-Aug	Sat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	12	-	24	-	-
33	7-Aug	Sun	-	12	-	12	12	12	-	12	12	12	12	12	-	12	12	12	-	24	-	-
	8-Aug	Mon	-	24	-	24	24	24	-	24	24	24	24	24	-	24	-	-	-	24	-	-
	9-Aug	Tue	-	24	-	12	12	12	-	12	12	24	24	24	-	12	12	12	-	12	16	-
	10-Aug	Wed	-	24	-	-	-	-	-	-	-	12	24	12	-	-	12	12	-	-	-	-
	11-Aug	Thu	-	24	-	-	-	-	-	-	-	-	24	-	-	-	-	-	-	-	16	-
	12-Aug	Fri	-	12	-	-	-	-	-	-	-	-	12	-	-	-	12	12	-	-	16	-
	13-Aug	Sat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	12	-	-	-	-
34	14-Aug	Sun	-	12	-	12	12	12	-	12	12	12	12	12	-	12	-	-	-	-	-	-
	15-Aug	Mon	-	24	-	24	24	24	-	24	24	24	24	24	-	24	12	12	-	-	-	-
	16-Aug	Tue	-	24	-	12	12	12	-	12	12	24	24	24	-	12	12	12	-	-	16	-
	17-Aug	Wed	-	24	-	-	-	-	-	-	-	12	24	12	-	-	-	-	-	-	-	-
	18-Aug	Thu	-	12	-	-	-	-	-	-	-	-	24	-	-	-	12	12	-	-	16	-
	19-Aug	Fri	-	-	-	-	-	-	-	-	-	-	12	-	-	-	12	12	-	-	16	-
	20-Aug	Sat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
35	21-Aug	Sun	-	12	-	12	12	12	-	12	12	-	-	-	-	-	12	12	-	-	-	-
	22-Aug	Mon	-	24	-	24	24	24	-	24	24	12	-	12	-	12	12	12	-	-	-	15
	23-Aug	Tue	-	24	-	24	24	24	-	24	24	24	-	24	-	24	-	-	-	-	16	15
	24-Aug	Wed	-	24	-	24	24	24	-	24	24	24	-	24	-	12	12	12	-	-	-	-
	25-Aug	Thu	-	24	-	12	12	12	-	12	12	24	-	24	-	-	12	12	-	-	16	-
	26-Aug	Fri	-	12	-	-	-	-	-	-	-	12	-	12	-	-	-	-	-	-	16	-
	27-Aug	Sat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	12	-	-	-	-

- Continued -

Table 8. (page 4 of 6.)

Stat Week	Date	Day/	District or Section													Terminal Hatchery Area					
			1-A	1-B	1-F	6-A	6-B	6-C	6-D	8-A	8-B	11-B	11-C	15-A	15-B	15-C	Earl West	Nakat Inlet	Ohmer Creek	Boat Harbor	Deep Inlet	Wrangell Narrows
36	28-Aug	Sun	-	12	-	12	12	12	-	12	12	12	-	12	-	12	12	12	-	-	-	-
	29-Aug	Mon	-	24	-	24	24	24	-	24	24	24	-	24	-	24	-	-	-	-	-	15
	30-Aug	Tue	-	24	-	24	24	24	-	24	24	24	-	24	-	12	12	12	-	-	16	15
	31-Aug	Wed	-	24	-	24	24	24	-	24	24	12	-	12	-	-	12	12	-	-	-	-
	1-Sep	Thu	-	12	-	12	12	12	-	12	12	-	-	-	-	-	-	-	-	-	16	-
	2-Sep	Fri	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	12	-	-	16	-
	3-Sep	Sat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	12	-	-	-	-
37	4-Sep	Sun	-	12	-	12	12	12	-	12	12	12	-	12	-	12	-	-	-	-	-	-
	5-Sep	Mon	-	24	-	24	24	24	-	24	24	24	-	24	-	24	12	12	-	-	-	15
	6-Sep	Tue	-	24	-	24	24	24	-	24	24	24	-	24	-	24	12	12	-	-	-	15
	7-Sep	Wed	-	12	-	12	12	12	-	12	12	12	-	12	-	12	-	-	-	-	-	-
	8-Sep	Thu	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	12	-	-	16	-
	9-Sep	Fri	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	12	-	-	16	-
	10-Sep	Sat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
38	11-Sep	Sun	-	12	-	12	12	12	12	12	12	12	-	12	-	12	12	12	-	-	-	-
	12-Sep	Mon	-	24	-	24	24	24	24	24	24	24	-	24	-	24	12	12	-	-	-	-
	13-Sep	Tue	-	24	-	24	24	24	24	24	24	24	-	24	12	24	-	-	-	-	16	-
	14-Sep	Wed	-	12	-	12	12	12	12	12	12	24	-	12	12	12	12	12	-	-	-	-
	15-Sep	Thu	-	-	-	-	-	-	-	-	-	12	-	-	-	-	12	12	-	-	16	-
	16-Sep	Fri	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	-
	17-Sep	Sat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	12	-	-	-	-
39	18-Sep	Sun	-	12	-	12	12	12	12	12	12	12	-	12	12	12	12	12	-	-	-	-
	19-Sep	Mon	-	24	-	24	24	24	24	24	24	24	-	24	24	24	-	-	-	-	15	-
	20-Sep	Tue	-	24	-	24	24	24	24	24	24	24	-	24	24	24	12	12	-	-	15	-
	21-Sep	Wed	-	12	-	12	12	12	12	12	12	24	-	12	12	12	12	12	-	-	-	-
	22-Sep	Thu	-	-	-	-	-	-	-	-	-	12	-	-	-	-	-	-	-	-	15	-
	23-Sep	Fri	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	12	-	-	15	-
	24-Sep	Sat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	12	-	-	-	-

- Continued -

Table 8. (page 5 of 6.)

Stat Week	Date	Day/	District or Section														Terminal Hatchery Area					
			1-A	1-B	1-F	6-A	6-B	6-C	6-D	8-A	8-B	11-B	11-C	15-A	15-B	15-C	Earl West	Nakat Inlet	Ohmer Creek	Boat Harbor	Deep Inlet	Wrangell Narrows
40	25-Sep	Sun	-	12	-	12	12	12	12	12	12	12	-	12	12	12	-	-	-	-	-	-
	26-Sep	Mon	-	24	-	24	24	24	24	24	24	24	-	24	24	24	12	12	-	-	-	-
	27-Sep	Tue	-	12	-	24	24	24	24	24	24	24	-	24	24	24	12	12	-	-	-	-
	28-Sep	Wed	-	-	-	12	12	12	12	12	12	24	-	12	12	12	-	-	-	-	-	-
	29-Sep	Thu	-	-	-	-	-	-	-	-	-	12	-	-	-	-	12	12	-	-	-	-
	30-Sep	Fri	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	12	-	-	-	-
	1-Oct	Sat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
41	2-Oct	Sun	-	12	-	12	12	12	12	12	12	12	-	12	12	12	12	12	-	-	-	-
	3-Oct	Mon	-	24	-	24	24	24	24	24	24	24	-	24	24	24	12	12	-	-	-	-
	4-Oct	Tue	-	12	-	12	12	12	12	12	12	24	-	12	12	12	-	-	-	-	-	-
	5-Oct	Wed	-	-	-	-	-	-	-	-	-	24	-	-	-	-	12	12	-	-	-	-
	6-Oct	Thu	-	-	-	-	-	-	-	-	-	12	-	-	-	-	12	12	-	-	-	-
	7-Oct	Fri	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	8-Oct	Sat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	12	-	-	-	-
42	9-Oct	Sun	-	-	-	-	-	-	-	-	-	12	-	-	-	-	12	12	-	-	-	-
	10-Oct	Mon	-	-	-	-	-	-	-	-	-	24	-	-	-	-	-	-	-	-	-	-
	11-Oct	Tue	-	-	-	-	-	-	-	-	-	12	-	-	-	-	-	12	-	-	-	-
	12-Oct	Wed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	-	-	-	-
	13-Oct	Thu	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	14-Oct	Fri	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	-	-	-	-
	15-Oct	Sat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	-	-	-	-
43	16-Oct	Sun	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	17-Oct	Mon	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	-	-	-	-
	18-Oct	Tue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	-	-	-	-
	19-Oct	Wed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	20-Oct	Thu	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	-	-	-	-
	21-Oct	Fri	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	-	-	-	-
	22-Oct	Sat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Table 8. (page 6 of 6.)

Stat Week	Date	Day/	District or Section														Terminal Hatchery Area					
			1-A	1-B	1-F	6-A	6-B	6-C	6-D	8-A	8-B	11-B	11-C	15-A	15-B	15-C	Earl West	Nakat Inlet	Ohmer Creek	Boat Harbor	Deep Inlet	Wrangell Narrows
44	23-Oct	Sun	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	-	-	-	-
	24-Oct	Mon	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	-	-	-	-
	25-Oct	Tue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	26-Oct	Wed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	-	-	-	-
	27-Oct	Thu	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	-	-	-	-
	28-Oct	Fri	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	29-Oct	Sat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	-	-	-	-
45	30-Oct	Sun	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	-	-	-	-
	31-Oct	Mon	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1-Nov	Tue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2-Nov	Wed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3-Nov	Thu	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4-Nov	Fri	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	5-Nov	Sat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 9. Southeast Alaska commercial drift gillnet salmon catches by area, in numbers, by species, 1994.

Area	Chinook	Sockeye	Coho	Pink	Chum	Total
Tree Point (District 1)	957	100,377	47,014	263,648	490,170	902,166
Nakat Inlet (hatchery terminal area)	2	81	322	307	36,113	36,825
Annette Island	183	36,458	46,433	339,070	133,206	555,350
Prince of Wales (District 6)	754	211,048	267,831	179,994	176,018	835,645
Wrangell Narrows (hatchery terminal area)	-	28	4,830	397	195	5,450
Earl West Cove (hatchery terminal area)	6,979	209	2,898	228	33,771	44,085
Stikine (District 8)	1,996	97,224	44,891	35,405	27,658	207,174
Ohmer Creek (hatchery terminal area)	-	-	-	-	-	207,174
Taku/Snettisham (District 11)	5,045	105,861	188,501	401,525	214,039	914,971
Deep Inlet (hatchery terminal area)	20	203	1,043	1,026	159,913	162,205
Lynn Canal (District 15)	980	171,729	140,764	147,277	685,449	1,146,199
Subtotals						
Traditional	9,732	686,239	689,001	1,027,849	1,593,334	4,006,155
Hatchery Terminal Areas	7,001	521	9,093	1,958	229,992	248,565
Annette Island	183	36,458	46,433	339,070	133,206	555,350
Total	16,916	723,218	744,527	1,368,877	1,956,532	4,810,070

Table 10. Southeast Alaska annual commercial drift gillnet salmon catches, in numbers, by species, 1960 to 1994.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
1960	11,523	127,058	37,986	55,984	199,887	432,438
1961	9,440	169,724	52,743	282,997	251,900	766,804
1962	10,161	233,082	98,404	435,132	233,421	1,010,200
1963	6,427	194,420	112,776	653,826	265,251	1,232,700
1964	9,371	246,250	172,411	753,312	250,045	1,431,389
1965	11,892	279,349	166,452	698,339	269,986	1,426,018
1966	12,527	334,702	155,922	790,314	365,070	1,658,535
1967	16,464	274,038	134,029	205,683	250,050	880,264
1968	12,902	245,875	202,965	607,653	363,761	1,433,156
1969	15,178	348,298	65,053	379,423	209,510	1,017,462
1970	9,460	240,700	163,901	848,376	494,438	1,756,875
1971	15,718	328,774	159,143	654,434	435,737	1,593,806
1972	25,142	449,019	275,393	443,866	744,150	1,937,570
1973	24,471	532,164	124,349	652,692	592,982	1,926,658
1974	15,481	363,857	186,583	338,108	666,336	1,570,365
1975	9,082	108,334	102,321	350,440	297,655	867,832
1976	7,222	322,984	156,469	384,003	503,265	1,373,943
1977	5,600	550,360	183,702	1,500,378	373,516	2,613,556
1978	8,302	374,424	223,321	846,559	305,321	1,757,927
1979	13,827	488,166	83,050	968,580	412,830	1,966,453
1980	5,471	424,071	112,081	1,299,043	587,168	2,427,834
1981	6,528	464,418	119,595	1,478,952	294,596	2,364,089
1982	15,807	791,810	201,337	732,604	476,099	2,217,657
1983	4,904	608,588	218,219	1,422,316	534,083	2,788,110
1984	10,377	616,985	199,211	1,712,213	1,101,858	3,640,644
1985	10,703	881,176	332,920	2,239,002	1,209,953	4,673,754
1986	8,535	686,500	448,766	1,794,962	912,274	3,851,037
1987	8,957	784,214	189,171	1,582,860	834,266	3,399,468
1988	9,655	627,574	170,924	1,051,744	1,258,014	3,117,911
1989	9,982	927,190	255,690	3,592,886	595,556	5,381,304
1990	15,216	811,470	377,844	1,783,436	691,813	3,679,779
1991	19,394	754,022	600,051	1,120,157	788,969	3,282,593
1992	11,740	978,563	699,448	1,956,715	935,203	4,581,669
1993	18,280	1,098,126	445,877	1,543,766	1,466,411	4,572,460
Average 1960 to 1993	11,934	490,185	212,591	1,034,140	563,864	2,312,714
Preliminary 1994	16,916	723,218	744,527	1,368,877	1,956,532	4,810,070

Table 11. Southeast Alaska annual Portland Canal/Tree Point (District 1 driftnet salmon catches, in numbers, by species, 1960 to 1994.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
1960	1,214	14,281	4,312	19,823	98,971	138,601
1961	907	35,269	4,067	91,803	35,638	167,684
1962	1,498	41,178	12,110	156,302	36,596	247,684
1963	508	22,037	3,110	93,651	41,642	160,948
1964	1,098	47,070	15,707	162,476	79,156	305,507
1965	1,079	53,566	10,675	60,772	21,753	147,845
1966	642	66,063	9,362	275,634	32,818	384,519
1967	2,186	74,071	3,112	82,312	29,017	190,698
1968	589	67,095	17,032	271,972	96,305	452,993
1969	676	89,733	3,154	87,550	20,580	201,693
1970	340	52,765	16,425	516,105	68,097	653,732
1971	778	116,101	5,170	67,013	31,087	220,149
1972	1,296	134,533	35,695	178,387	156,767	506,678
1973	1,008	159,764	18,459	269,749	109,997	558,977
1974	776	113,299	21,327	166,637	81,770	383,809
1975	1,963	25,432	12,631	134,603	32,226	206,855
1976	1,816	118,647	17,574	224,451	39,437	401,925
1977	1,182	192,728	12,173	769,841	84,321	1,060,245
1978	2,591	153,409	47,797	531,879	116,731	852,407
1979	3,654	88,957	6,427	72,687	60,564	232,289
1980	1,531	109,383	19,329	675,424	153,702	959,369
1981	1,448	104,853	19,125	433,735	38,527	597,688
1982	3,532	190,833	28,015	349,227	84,966	656,573
1983	1,113	135,923	41,556	773,126	139,411	1,091,129
1984	1,494	88,390	35,384	720,706	227,817	1,073,791
1985	2,787	172,863	53,019	691,455	256,564	1,176,688
1986	1,267	145,657	63,073	906,424	286,616	1,403,037
1987	2,077	107,595	38,123	583,295	188,917	920,007
1988	2,036	116,240	17,206	231,476	549,179	916,137
1989	1,808	144,936	32,485	1,347,847	299,798	1,826,874
1990	1,710	85,690	42,893	580,555	174,179	885,027
1991	2,077	131,492	70,319	600,529	183,822	988,239
1992	1,059	244,649	40,001	581,208	282,075	1,148,992
1993	1,249	394,098	32,508	480,963	383,317	1,292,135
Average 1960 to 1993	1,500	112,900	23,805	387,930	133,011	659,145
Preliminary 1994	957	100,377	47,014	263,648	490,170	902,166

Table 12. Southeast Alaska annual Prince of Wales (District 6) commercial drift gillnet salmon catches, in numbers, by species, 1960 to 1994.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
1960	46	10,354	336	1,246	502	12,484
1961	416	20,614	14,934	124,236	64,479	224,679
1962	1,308	47,033	42,276	256,620	59,119	406,356
1963	1,560	80,767	52,103	514,596	90,103	739,129
1964	2,082	76,541	64,654	443,086	44,218	630,581
1965	1,802	87,749	75,728	625,848	27,658	818,785
1966	1,665	89,847	62,823	400,932	40,756	596,023
1967	1,318	86,385	17,670	91,609	26,370	223,352
1968	1,316	64,671	67,151	169,107	61,366	363,611
1969	877	70,318	10,280	197,073	10,903	289,451
1970	785	42,778	35,470	94,892	32,231	206,156
1971	1,336	53,202	48,085	527,975	37,680	668,278
1972	2,573	101,338	93,427	89,467	72,382	359,187
1973	1,931	71,995	38,447	303,621	87,729	503,723
1974	1,927	57,445	45,687	104,549	50,411	260,019
1975	2,587	32,051	30,962	203,015	23,968	292,583
1976	384	15,481	19,126	139,439	6,868	181,298
1977	671	67,023	8,401	419,107	13,300	508,502
1978	2,682	41,574	55,578	224,715	16,545	341,094
1979	2,720	66,373	28,083	648,212	35,507	780,895
1980	580	107,422	16,666	45,666	26,277	196,611
1981	1,565	182,001	22,614	437,573	34,296	678,049
1982	1,648	193,696	31,664	25,479	18,630	271,117
1983	567	48,842	62,442	208,290	20,144	340,285
1984	892	91,653	41,359	343,255	70,258	547,417
1985	1,697	264,987	91,142	584,953	69,673	1,012,452
1986	1,704	145,709	194,912	308,484	82,289	733,098
1987	853	136,437	37,151	243,710	43,020	461,171
1988	1,104	92,529	13,103	69,499	69,620	245,855
1989	1,544	192,734	92,386	1,101,194	67,351	1,455,209
1990	2,107	185,805	164,211	319,186	73,232	744,541
1991	2,066	143,112	197,803	132,739	123,730	599,450
1992	1,355	203,155	298,935	94,248	140,468	738,161
1993	992	205,955	231,038	537,954	134,601	1,110,540
Average 1960 to 1993	1,431	99,340	67,843	295,046	52,226	515,887
Preliminary 1994	754	211,048	267,831	179,994	176,018	835,645

Table 13. Southeast Alaska annual Stikine River (District 8) commercial drift gillnet salmon catches, in numbers, by species, 1960 to 1994.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
1962	618	4,430	3,921	2,889	2,035	13,893
1963	1,431	9,979	11,612	10,198	11,024	44,244
1964	2,911	20,299	29,388	114,555	10,771	177,924
1965	3,106	21,419	8,301	4,729	2,480	40,035
1966	4,516	36,710	16,493	61,908	17,730	137,357
1967	6,372	29,226	6,747	4,713	5,955	53,013
1968	4,604	14,594	36,407	91,028	14,537	161,170
1969	5,021	19,209	5,790	11,877	2,311	44,208
1970	3,207	15,120	18,403	20,523	12,305	69,558
1971	3,717	18,143	14,876	21,806	4,665	63,207
1972	9,332	51,734	38,520	17,153	17,363	134,102
1973	9,254	21,387	5,837	6,585	6,680	49,743
1974	8,199	2,428	16,021	4,188	2,107	32,943
1975	1,534	-	-	-	1	1,535
1976	1,123	18	6,056	722	124	8,043
1977	1,443	48,374	14,405	16,253	4,233	84,708
1978	531	56	32,650	1,157	1,001	35,395
1979	91	2,158	234	13,478	1,064	17,025
1980	631	14,053	2,946	7,224	6,910	31,764
1981	283	8,833	1,403	1,466	3,594	15,579
1982	1,033	6,911	19,971	16,988	741	45,644
1983	47	178	15,369	4,171	675	20,440
1984	14	1,290	5,141	4,960	1,892	13,297
1985	20	1,060	1,926	5,325	1,892	10,223
1986	102	4,185	7,439	4,901	5,928	22,555
1987	201	1,620	1,015	3,331	949	7,116
1988	206	1,246	12	144	3,109	4,717
1989	310	10,083	4,261	27,640	3,375	45,669
1990	557	11,574	8,218	13,822	9,382	43,553
1991	1,504	22,275	15,864	10,935	11,402	61,980
1992	967	52,717	22,127	66,742	15,458	158,011
1993	1,628	76,874	14,307	39,661	22,504	154,974
Average 1960 to 1993	2,329	16,506	12,052	19,096	6,381	56,363
Preliminary 1994	1,996	97,224	44,891	35,405	27,658	207,174

Table 14. Southeast Alaska annual Taku/Snettisham (District 11) commercial drift gillnet salmon catches, in numbers, by species, 1960 to 1994.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
1960	8,810	42,819	22,374	33,155	41,852	149,010
1961	7,434	45,981	15,486	41,455	24,433	134,789
1962	5,931	36,745	15,661	17,280	20,635	96,252
1963	2,652	24,119	10,855	21,692	20,114	79,432
1964	2,509	34,140	29,315	26,593	12,853	105,410
1965	4,170	27,569	32,667	2,768	11,533	78,707
1966	4,829	33,925	26,065	23,833	35,133	123,785
1967	5,417	17,735	40,391	12,372	22,834	98,749
1968	4,904	19,501	39,103	67,365	21,890	152,763
1969	6,986	41,169	10,802	73,927	15,049	147,933
1970	3,357	50,922	44,960	197,017	110,390	406,646
1971	6,958	66,181	41,830	31,484	91,145	237,598
1972	10,955	80,404	49,780	144,339	147,957	433,435
1973	9,799	85,317	35,453	58,186	109,245	298,000
1974	2,908	38,670	38,667	57,731	86,687	224,663
1975	2,182	32,513	1,185	9,567	2,678	48,125
1976	1,757	61,749	41,729	14,962	81,803	202,000
1977	1,068	70,097	54,917	88,578	61,102	275,762
1978	1,926	55,398	31,944	51,385	36,254	176,907
1979	3,701	122,148	16,194	152,836	61,197	356,076
1980	2,251	123,451	41,677	296,572	192,647	656,598
1981	1,721	49,942	26,711	254,856	76,438	409,668
1982	3,057	83,625	29,072	109,297	37,608	262,659
1983	888	31,821	21,455	66,239	15,264	135,667
1984	1,773	77,233	33,836	145,971	86,741	345,554
1985	2,636	88,077	55,597	311,248	106,720	564,278
1986	2,584	73,061	30,512	16,568	58,792	181,517
1987	2,076	75,212	35,219	363,439	121,660	597,606
1988	1,779	38,923	44,881	157,831	139,578	382,992
1989	1,811	74,019	51,812	180,597	36,977	345,216
1990	3,480	126,884	67,530	153,036	145,799	496,729
1991	3,217	109,877	126,436	74,183	161,175	474,888
1992	2,341	135,411	172,662	314,445	112,527	737,386
1993	6,748	171,556	65,536	17,081	166,480	427,401
Average 1960 to 1993	3,959	66,065	41,245	105,526	72,741	289,535
Preliminary 1994	5,045	105,861	188,501	401,525	214,039	914,971

Table 15. Southeast Alaska annual Lynn Canal (District 15) commercial drift gillnet salmon catches, in numbers, by species, 1960 to 1994.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
1960	1,453	59,604	10,964	1,760	58,562	132,343
1961	683	67,860	18,256	25,503	127,350	239,652
1962	806	103,696	24,436	2,041	115,036	246,015
1963	276	57,518	35,096	13,689	102,368	208,947
1964	771	68,200	33,347	6,602	103,047	211,967
1965	1,735	89,046	39,081	4,222	206,562	340,646
1966	868	108,087	40,794	6,008	235,172	390,929
1967	1,171	66,621	66,109	14,677	165,874	314,452
1968	1,489	80,004	43,262	7,803	169,615	302,173
1969	1,618	127,869	35,027	8,996	160,667	334,177
1970	1,771	79,115	48,643	19,839	271,415	420,783
1971	2,929	75,147	49,182	6,156	271,160	404,574
1972	986	81,010	57,971	14,520	349,681	504,168
1973	2,479	193,701	26,153	14,551	279,331	516,215
1974	1,671	152,015	64,881	5,003	445,361	668,931
1975	816	18,338	57,543	3,255	238,782	318,734
1976	2,142	127,089	71,984	4,429	375,033	580,677
1977	1,214	160,079	91,426	130,860	201,634	585,213
1978	536	108,480	53,165	3,811	118,428	284,420
1979	3,572	192,974	27,015	28,763	242,832	495,156
1980	440	53,987	28,898	82,343	168,853	334,521
1981	1,300	93,195	44,650	137,270	117,375	393,790
1982	5,945	273,882	72,370	69,050	306,644	727,891
1983	2,119	369,830	69,510	157,546	341,145	940,150
1984	6,099	334,582	68,215	78,000	642,238	1,129,134
1985	3,260	303,241	98,290	239,080	698,810	1,342,681
1986	2,772	289,905	82,121	38,115	381,382	794,295
1987	3,223	415,881	53,630	165,748	392,938	1,031,420
1988	1,257	351,876	81,537	208,423	377,768	1,020,861
1989	1,989	471,934	50,307	110,436	123,671	758,337
1990	670	357,418	63,070	101,035	210,532	732,725
1991	745	307,811	128,365	5,472	210,189	652,582
1992	610	286,035	108,753	351,562	245,247	992,207
1993	741	173,113	59,952	11,336	306,566	551,708
Average 1960 to 1993	1,769	179,387	56,000	61,115	257,684	555,955
Preliminary 1994	980	171,729	140,764	147,277	685,449	1,146,199

Table 16. Southeast Alaska region private hatchery cost recovery catches in numbers, by species, 1975 to 1994.

Year	Chinook[1]	Jacks[2]	Sockeye	Coho	Pink	Chum	Total
1975	-	-	-	2,700	-	-	2,700
1977	-	-	-	-	92,459	-	92,459
1979	-	-	-	5,893	29,555	-	35,448
1981	-	-	1	5,003	132,744	1	137,749
1982	-	-	1	12,150	7,346	773	20,270
1983	-	-	1	4,220	120,688	18,269	143,178
1984	937	-	7	26,836	171,356	453,204	652,340
1985	2,658	-	18	33,145	470,949	130,363	637,133
1986	1,093	-	6	72,810	47,461	157,155	278,525
1987	2,371	5	1,121	50,455	994,190	594,436	1,642,578
1988	9,642	1	90	7,631	115,761	514,054	647,179
1989	19,602	102	724	19,162	247,752	193,428	480,770
1990	26,340	298	75	125,762	923,643	376,499	1,452,617
1991	28,136	-	1,459	285,872	1,112,852	373,764	1,802,083
1992	16,695	28	2,108	268,913	2,111,411	695,451	3,094,606
1993	23,209	-	7,545	106,476	293,603	1,254,663	1,685,496
Average 1975 to 1993	8,168	27	822	64,189	429,486	297,629	800,321
Preliminary 1994	17,967	70	3,322	188,760	3,831,458	1,710,851	5,752,428

[1] Chinook salmon ≥ 28."

[2] Chinook salmon ≤ 21."

Table 17. Southeast Alaska private hatchery cost recovery salmon catches, by species, 1994.

District	Permit Holder[1]	Area	Chinook[2]	Jacks[3]	Sockeye	Coho	Pink	Chum	Total
1	SSRAA	Herring Bay	-	-	-	14	-	-	14
	SSRAA	Nakat Inlet	-	-	-	1	-	1,942	1,943
	SSRAA	Neets Bay	2,217	-	18	17,975	1	936,929	957,140
	SSRAA	Shrimp Bay	-	-	1,528	-	-	1,484	3,012
6	AAI	Burnett Inlet	-	-	2	17	32,988	2	33,009
7	AAI	Anita Bay	-	-	5	20	129,318	9	129,352
9	KAKE	Kake	-	-	-	-	56,205	2,333	58,538
	KAKE	Keku Island	-	-	-	-	21,092	6,724	27,816
	AKI	Port Armstrong	351	-	18	33	938,304	16	938,722
	NSRAA	Patterson Bay	24	11	7	110,152	5,304	98	115,596
11	DIPAC	Amalga Harbor	59	59	735	551	19,275	120,208	140,887
	DIPAC	Gastineau Channel	569	-	-	38,642	2,513,079	54,916	2,607,206
	SNETT	Gilbert Bay	-	-	425	138	8,942	72	9,577
12	NSRAA	Hidden Falls	3,564	-	446	19,053	19,429	251,385	293,877
13	NSRAA	Bear Cove	11,024	-	1	2,098	197	182,186	195,506
	NSRAA	Deep Inlet	159	-	137	66	50	152,547	152,959
	SJC	Sheldon Jackson	-	-	-	-	87,274	-	87,274
		Total	17,967	70	3,322	188,760	3,831,458	1,710,851	5,752,428

[1] SSRAA: Southern Southeast Regional Aquaculture Association.
AAI: Alaska Aquaculture, Inc.
KAKE: Kake Nonprofit Fishery Corporation.
AKI: Armstrong-Keta, Inc.
NSRAA: Northern Southeast Regional Aquaculture Association.
DIPAC: Douglas Island Pink and Chum, Inc.
SNETT: Snettisham Hatchery (State Owned).
SJC: Sheldon Jackson College.

[2] Chinook salmon ≥ 28."

[3] Chinook salmon ≤ 21."

Table 18. Canadian commercial and food fisheries salmon catches in the Stikine River, 1972 to 1994.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
1972	0	4,373	0	0	0	4,373
1973	200	3,670	0	0	0	3,870
1974	100	3,500	0	0	0	3,600
1975	1,202	2,252	50	0	0	3,504
1976	1,160	3,644	13	0	0	4,817
1977	162	6,310	0	0	0	6,472
1978	500	5,000	0	0	0	5,500
1979	1,625	13,534	10,720	1,994	424	28,297
1980	2,231	20,919	6,769	756	771	31,446
1981	1,404	27,017	2,867	3,857	1,128	36,273
1982	2,387	20,540	15,944	1,842	722	41,435
1983	2,063	21,120	6,173	1,120	304	30,780
1984	702	5,327	1	62	0	6,092
1985	1,296	25,464	2,175	2,356	536	31,827
1986	2,911	17,434	2,280	107	307	23,039
1987	2,645	9,615	5,731	646	459	19,096
1988	2,804	15,291	2,117	418	733	21,363
1989	2,958	20,032	6,098	825	674	30,587
1990	3,209	18,024	4,037	496	499	26,265
1991	2,171	22,763	2,648	394	208	28,184
1992	2,079	26,284	1,855	122	231	30,571
1993[1]	2,111	47,197	2,616	29	395	52,348
Average 1972 - 1993	1,633	15,423	3,277	683	336	21,352
Average 1984 - 1993	2,289	20,743	2,956	546	404	26,937
Preliminary 1994[2]	2,140	51,944	3,368	90	173	57,715

[1] 1993 catch includes 1,752 sockeye salmon taken in a terminal fishery at Tahltan Lake according to stipulations of an "Excess Salmon to Spawning Requirements License"(ESSR) issued by the Canadian Department of Fisheries and Oceans.

[2] 1994 catch includes 6,852 sockeye salmon taken in the ESSR fishery.

Table 19. Canadian commercial and food fisheries salmon catches in the Taku River, 1979 to 1994.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
1979	97	13,578	6,006	13,661	15,474	48,816
1980	310	22,602	6,405	26,821	18,516	74,654
1981	159	10,922	3,607	10,771	5,591	31,050
1982	54	3,144	51	202	3	3,454
1983	565	17,056	8,390	1,874	1,760	29,645
1984	515	27,292	5,372	6,964	2,492	42,635
1985	354	14,411	1,792	3,373	136	20,066
1986	362	14,939	1,833	58	110	17,302
1987	233	13,650	5,712	6,250	2,270	28,115
1988	768	12,259	3,221	1,030	733	18,011
1989	1,040	18,598	3,022	695	42	23,397
1990	1,386	21,289	3,213	378	12	26,278
1991	1,609	25,217	3,435	296	2	30,559
1992	1,713	29,824	4,264	0	7	35,808
1993	1,815	33,357	3,041	16	15	38,244
Average 1979 - 1993	732	18,543	3,958	4,826	3,144	31,202
Average 1984 - 1993	980	21,084	3,491	1,906	582	28,042
Preliminary 1994	2,419	29,001	14,693	172	18	46,303

Table 20. Annette Island Reserve annual commercial trap salmon catches in numbers, by species, 1960 to 1994.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
1960	0	1,753	2,387	45,409	3,796	53,345
1961	0	9,949	5,740	157,046	8,648	181,383
1962	0	7,489	3,975	579,917	6,911	598,292
1963	0	4,166	1,646	86,836	2,204	94,852
1964	0	11,029	6,796	351,493	11,597	380,915
1965	0	3,345	2,256	33,626	246	39,473
1966	0	44,815	15,975	576,020	7,065	643,875
1967	0	3,144	368	6,925	321	10,758
1968	122	3,972	1,663	242,024	3,184	250,965
1969	0	970	400	29,238	258	30,866
1970	0	2,926	2,499	101,883	1,387	108,695
1971	0	0	0	0	0	0
1972	135	8,139	4,688	415,242	4,518	432,722
1973	25	1,118	324	41,692	226	43,385
1974	15	2,615	1,006	109,053	375	113,064
1975	3	621	562	108,217	1,108	110,511
1976	45	5,010	1,223	435,801	2,838	444,917
1977	51	14,309	1,374	293,504	2,617	311,855
1978	135	6,071	4,371	702,157	1,344	714,078
1979	250	15,478	3,684	189,580	1,260	210,252
1980	139	6,098	1,789	449,292	1,013	458,331
1981	86	10,618	1,647	194,206	1,199	207,756
1982	553	24,412	4,576	517,637	913	548,091
1983	194	4,545	6,270	802,700	1,776	815,485
1984	182	16,474	5,595	649,458	6,284	677,993
1985	366	10,903	3,540	522,679	1,563	539,051
1986	0	3,068	1,410	458,860	1,788	465,126
1987	0	6,099	754	85,041	1,333	93,227
1988	94	2,051	87	34,312	383	36,927
1989	328	2,730	477	496,262	482	500,279
1990	443	7,914	1,288	452,225	798	462,668
1991	70	709	318	93,935	303	95,335
1992	36	1,258	142	67,951	520	69,907
1993	36	4,202	610	329,476	1,313	335,637
Average 1960 to 1993	99	7,294	2,631	284,109	2,340	296,471
Preliminary 1994[1]	0	0	0	0	0	0

[1] There was no reported harvest for trap gear in 1994.

Table 21. Annette Island Reserve annual commercial drift gillnet salmon catch in numbers, by species, 1977 to 1994.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
1977	22	12,059	768	75,739	8,926	97,514
1978	36	15,507	2,187	33,612	16,362	67,704
1979	89	15,556	1,726	52,604	11,666	81,641
1980	38	15,775	2,565	191,814	38,779	248,971
1981	211	25,594	5,092	214,052	24,366	269,315
1982	569	42,847	6,665	162,049	27,281	239,411
1983	170	21,994	7,887	212,944	17,444	260,439
1984	39	23,707	8,240	404,360	71,610	507,956
1985	292	50,891	23,227	406,497	75,678	556,585
1986	98	27,939	52,834	512,504	96,755	690,130
1987	527	47,469	24,033	223,337	86,782	382,148
1988	579	26,555	7,138	364,426	115,380	514,078
1989	369	33,194	21,266	823,081	52,717	930,627
1990	524	43,979	26,764	615,560	75,372	762,199
1991	801	39,353	55,804	296,036	76,844	468,838
1992	455	56,494	54,289	548,384	90,027	749,649
1993	269	76,054	28,199	456,313	65,223	626,058
Average 1977 to 1993	299	33,822	19,334	329,018	55,954	438,427
Preliminary 1994	183	36,458	46,433	339,070	133,206	555,350

Table 22. Annette Island Reserve annual commercial purse seine salmon catch in numbers, by species, 1963 to 1994.

Year	Chinook[1]	Jacks[2]	Sockeye	Coho	Pink	Chum	Total
1963	0	0	28	42	1,309	78	1,457
1964	0	0	416	164	5,204	704	6,488
1965	0	0	14	24	257	2	297
1966	3	0	495	169	12,660	243	13,570
1967	0	0	26	6	24	2	58
1968	0	0	147	283	16,320	1,049	17,799
1969	0	0	0	0	0	0	0
1970	0	0	21	0	1,024	0	1,045
1971	0	0	0	0	0	0	0
1972	14	0	39	18	1,459	772	2,302
1973	0	0	0	0	0	0	0
1974	0	0	0	0	0	0	0
1975	0	0	1	8	183	198	390
1976	0	0	12	131	620	972	1,735
1977	1	0	1,430	9,984	205,834	3,665	220,914
1978	26	0	2,041	2,113	499,675	7,899	511,754
1979	0	0	311	239	66,050	3,511	70,111
1980	3	0	1,861	909	464,336	17,272	484,381
1981	4	0	1,316	1,100	245,151	4,747	252,318
1982	18	0	2,430	3,104	422,196	12,635	440,383
1983	3	0	5,939	3,341	1,001,650	5,017	1,015,950
1984	15	0	9,559	11,288	502,465	27,055	550,382
1985	47	0	6,073	3,911	488,423	9,128	507,582
1986	19	0	5,046	20,309	851,282	13,938	890,594
1987	5	0	618	9,204	28,584	17,991	56,402
1988	1	4	2,373	1,431	491,507	11,503	506,819
1989	73	0	14,542	2,127	1,231,281	12,216	1,260,239
1990	34	0	7,732	6,863	478,392	8,349	501,370
1991	56	0	5,091	5,513	543,412	4,972	559,044
1992	315	0	3,417	16,736	338,375	11,727	370,570
1993	30	0	14,807	3,868	735,899	8,953	763,557
Average 1963 to 1993							
	22	0	2,767	3,270	278,502	5,917	290,478
Preliminary 1994							
	15	0	5,157	2,409	158,961	3,135	169,677

[1] Chinook salmon ≥ 28."

[2] Chinook salmon ≤ 21."

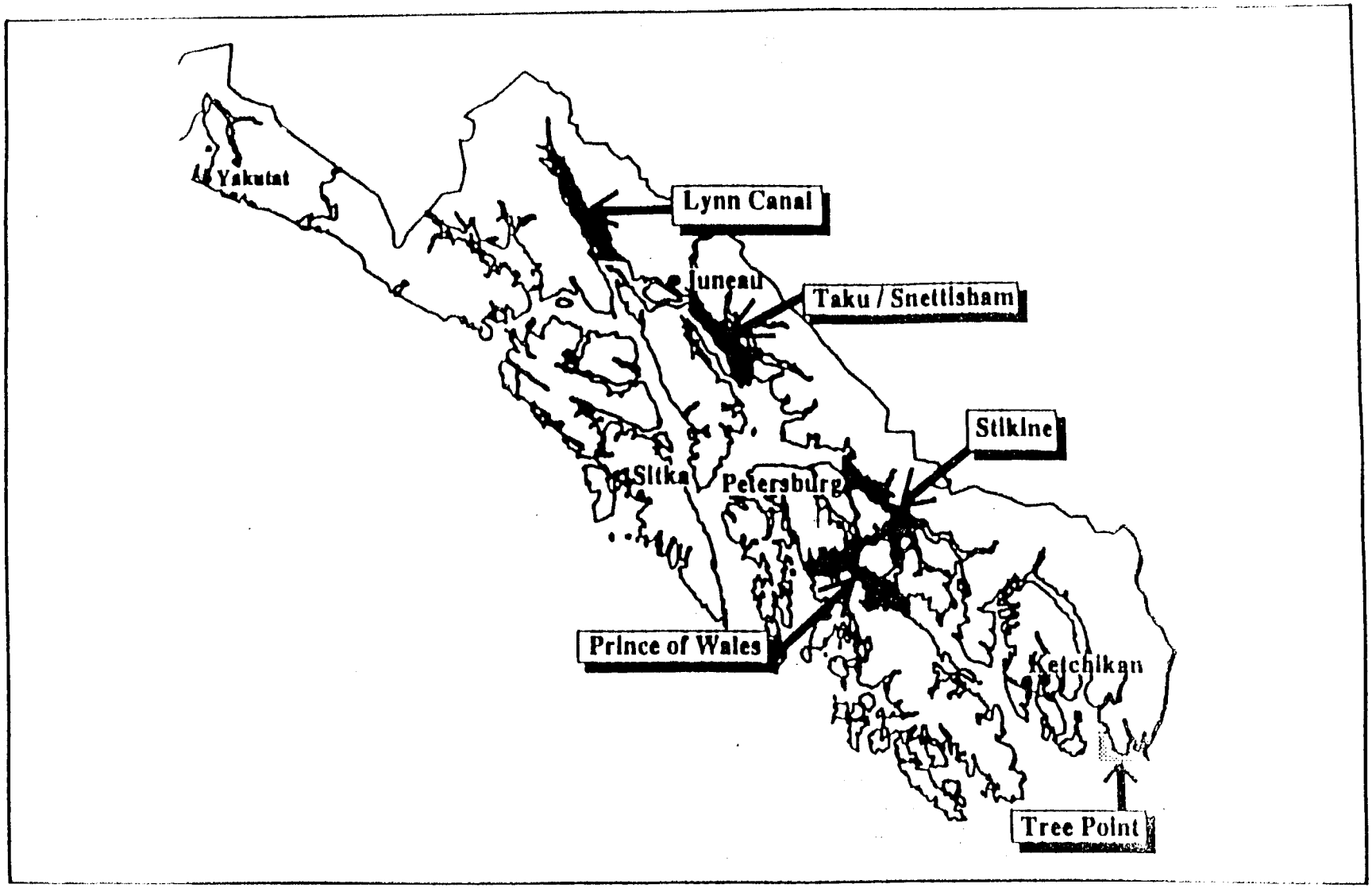

Figure 1. General drift gillnet fishing areas in Southeast Alaska.

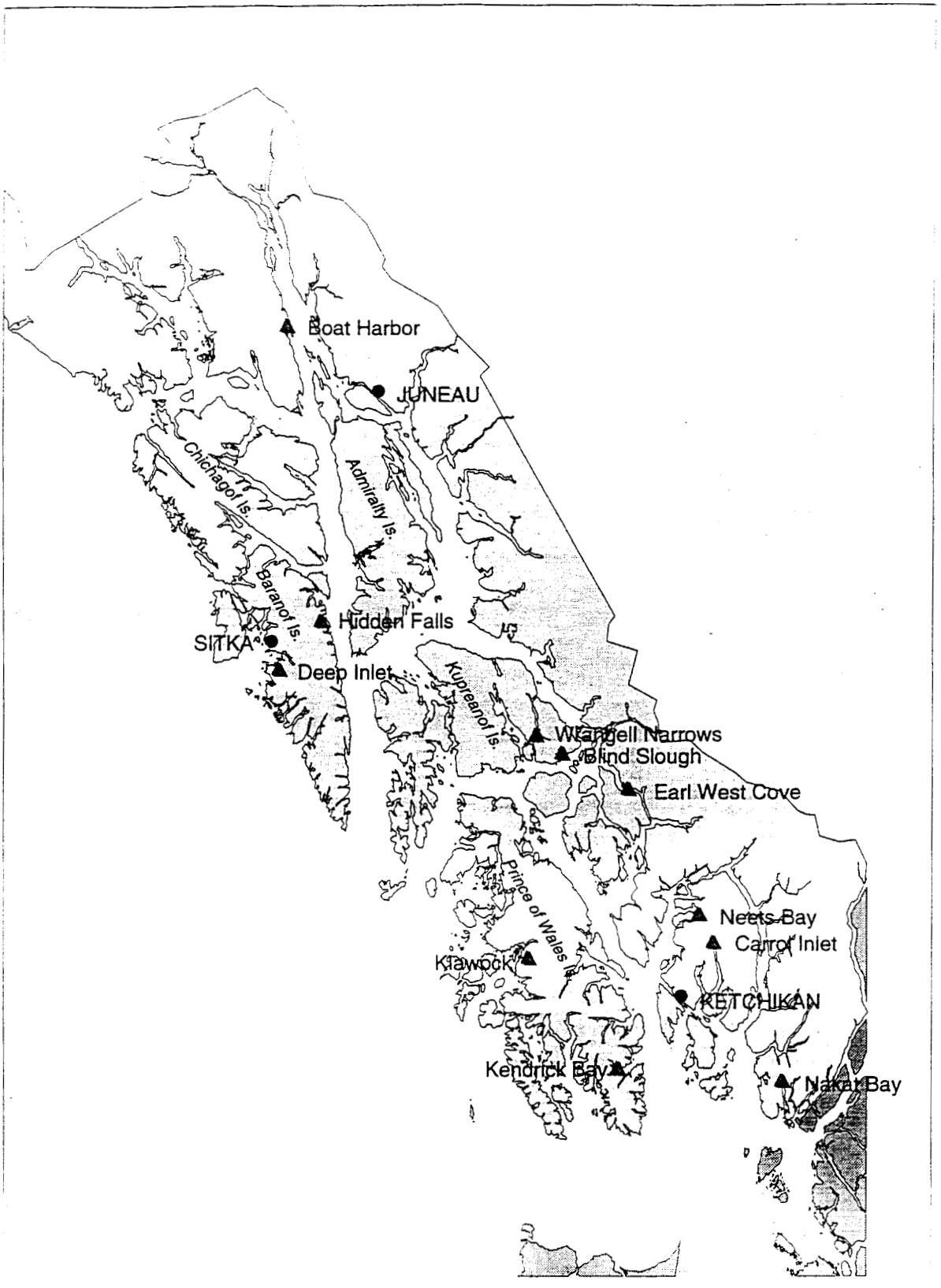

Figure 2. Common property terminal harvest areas.

SECTION 3

YAKUTAT AREA SALMON FISERIES, 1994

SUMMARY OF THE 1994 YAKUTAT AREA

SALMON FISHERIES

By

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ABSTRACT

The 1994 Yakutat set gillnet fishery produced a cumulative catch of 570,521 salmon which was 73% above the average since 1960. It was the third highest catch recorded for the Yakutat area since 1941. It was worth about $3,330,000 to the 151 active permit holders. The catch included 206,751 sockeye, 343,751 coho, 3,897 chinook, 4,216 chum, and 12,324 pink salmon. Sockeye harvests ranged from below average in the Situk-Ahrnklin, East, Lost, and Yakutat Bay fisheries, to above average in the Alsek and Manby Shore streams. The 1994 sockeye harvest of 206,533 was 17% below the recent 10-year-average, but was 31% above the historical average since 1960. The Situk-Ahrnklin, with a catch of 55,809, and the East River, with a catch of 99,848, together produced 75% of the area sockeye harvest. Sockeye escapements were average to above average throughout the Yakutat area. Coho harvests for the Kaliakh River and the Manby Shore streams were below average, while catches for all other systems were well above average. The Situk-Ahrnklin fishery was the area's top producer with a catch of 216,066; the highest harvest on record. The area's total coho salmon harvest of 343,751 was also the highest on record, and was 88% above the recent 10-year-average. Coho escapements were above average for most systems. The area's chinook harvest was 208% above the recent 10-year-average. The Situk-Ahrnklin catch of 2,655 was 331% above average and accounted for 68% of the total chinook harvest. The pink salmon harvest of 12,324 fish and the chum salmon harvest of 4,216 fish were well below average. Most of the pink salmon (10,454 fish) were caught in the Situk-Ahrnklin fishery incidental to the sockeye harvest. The East River contribution of 3,661 chum salmon accounted for 87% of the Yakutat area chum salmon harvest.

INTRODUCTION/OVERVIEW

Yakutat Area Set Gillnet - 1994

The Yakutat set gillnet fishery (Figure 1) produced a cumulative catch of 570,721 salmon, which was 20% above the recent 10-year-average (Tables 1 and 2). Sockeye salmon made up 36% of this year's harvest, while coho salmon accounted for 60%. Catches of pink and chum salmon were below average. The chinook salmon harvest of 3,897 was 208% above the recent 10-year-average. The non-sale of chinook salmon from the Situk-Ahrnklin Inlet and Lost River fisheries was rescinded during the second week of the season. The average setnet income of $22,065 was 14% below the previous 10-year-average (Table 3).

Sockeye Salmon

The sockeye harvest of 206,533 was 17% below the recent 10-year-average, but was above the historical average since 1960 (Table 2). The Situk-Ahrnklin Inlet catch of 56,007 was 46% below the recent 5-year-average of 104,000 sockeye. It was slightly above the historical average since 1960 of 54,500 sockeye. The Situk-Ahrnklin Inlet accounted for 26% of the total Yakutat area harvest. The return-per-spawner (R/S) was approximately 1.7:1. A total of 72,472 sockeye salmon passed through the Situk River Weir, exceeding the escapement goal. The East River sockeye salmon catch of 99,848 was 27% below the recent 5-year-average. The recent average contains four of the five highest catches on record for the East, and this year's catch is well above the historical average since 1960. The East River accounted for 48% of the area harvest. The R/S from a parent-year escapement of 42,000 was approximately 3.1:1.

The Alsek River catch of 19,639 was 13% above the recent 5-year-average and was the third highest in the past ten years. The Klukshu Weir sockeye count of 15,038 was 17% below average for the years the weir has been in operation (1976-1994). The Alsek abundance model predicted higher catch and escapement levels. The Yakutat Bay harvest of 14,524 was 50% below the recent 5-year-average, but was slightly above the historical average since 1960. The combined Manby Shore fisheries catch of 10,413 was 34% below average.

Coho Salmon

The coho harvest of 343,751 was the highest catch on record for the Yakutat area, and was 88% above the recent 10-year-average (Table 2). The Situk-Ahrnklin Inlet with a catch of 217,129, and the Tsiu River, with a catch of 64,043, were the peak producers. The Situk-Ahrnklin fishery alone accounted for 63% of the Yakutat area harvest. The two rivers together, recorded 82% of the total harvest. The Kaliakh River and the Manby Shore streams recorded below average coho catches, while catches from all other areas, including the Alsek, East, and Dangerous Rivers, and Yakutat Bay were above average. All areas, with the

exception of the Alsek River and the remainders of the Yakutat and Yakataga districts, remained open to fishing 7-days per week for the last half of the coho season. Escapement counts ranged from average to above average, and included record high counts in the Situk and Tsiu Rivers. All streams from Cape Yakataga to one-half mile west of the Yahtse, including Jetty Creek and Big River, remained closed to commercial fishing in 1994. Big River escapement counts remained below average all season. The final escapement count in Jetty Creek was above average, but coho were not seen there until the end of the season.

1994 marked the second year in a row of drought conditions throughout the season. Though not quite as dry as 1993, precipitation was well below average through early September, and many small streams and tributaries were dry by early June. The drought did not appear to affect adult salmon migrations, but there may have been a considerable mortality on rearing coho in the small streams and tributaries. Ophir Creek, a local indicator of water conditions, was dry by early June. Some protection was afforded to both sockeye and coho salmon in Ophir Creek by two reservoir ponds dug in 1989 specifically for that purpose. This kind of protection was not available in most other systems, and many juveniles were probably lost.

Chinook Salmon

The chinook salmon harvest of 3,897 was 208% above the recent 10-year-average, and was the highest catch since 1980 (Table 2). During the second week of the season the department projected that the Situk River escapement goal would be exceeded, and chinook salmon non-sale for the Situk-Ahrnklin Inlet and Lost Rivers was rescinded on June 23. The chinook harvest of 2,656 from the Situk-Ahrnklin fishery was the highest catch ever recorded, and was 331% above the recent average. The final weir count of 1,312 large chinook exceeded the upper range of the escapement goal. The Yakutat Bay catch of 218 was 18% below average.

The Alsek River harvest of 805 was 295% above the recent 5-year-average. Catches were affected by the earlier opening date, as most of the harvest was recorded during the first 4-weeks of the season. Indications were that a high percentage of the Alsek harvest consisted of two-ocean jacks. The Klukshu Weir escapement of 3,679 was the second highest count in the history of the weir (1976-1994). The harvest of 37 chinook salmon in the East River was slightly above the recent 5-year-average of 31.

Pink Salmon

The pink salmon harvest of 12,324 was 59% below the recent 10-year average (Table 2). The Situk-Ahrnklin Inlet catch of 10,454 accounted for 85% of the Yakutat area harvest. A peak escapement count of 11,000 in Humpback Creek was within the range of the escapement goal, but there was little economic incentive to target pink salmon, and no harvest was recorded from this area. Approximately 79,000 pinks were counted through the Situk Weir. Yakutat Bay, with a catch of 1,741 pink salmon, accounted for most of the remainder of the harvest for the Yakutat area.

Chum Salmon

The chum salmon production was also poor. The area harvest of 4,216 was 70% below the recent 10-year-average (Table 2). The East River was the major chum salmon producer, but the catch of 3,661 was 40% below the recent 5-year-average. The East accounted for 87% of the total harvest. Chum escapement was observed in the East River, but chum there are mixed with both coho and sockeye salmon, and no separate counts were made.

Yakutat Area Troll - 1994

The 1994 troll season in the Yakutat area opened on July 1. Trolling for chinook salmon was not open during the month of June. Chinook harvest was allowed during two periods this summer, from July 1-7, from August 29 through September 2. The chinook harvest was below average while the coho harvest was the highest on record. Overall effort was well above average, with 186 vessels (41 hand troll and 145 power troll) reporting harvest from the Yakutat districts (Tables 4, 5, and 6).

A chronology of the Yakutat trolling season is as follows: the winter troll season, for chinook salmon only, closed on April 14, with a catch for the calendar year of 92 recorded from Yakutat Bay. Yakutat Bay is the only area open to trolling during the winter. Trolling reopened at 12:01 a.m. on July 1 for all species of salmon except coho. This period closed at 11:59 p.m. on July 7. The non-sale of chinook in the Situk-Ahrnklin and Lost River fisheries was rescinded in June, and the state waters in the area of the mouth of the Situk-Ahrnklin Inlet were not closed to trolling during this opening. Following the closure to the retention of chinook, trollers were allowed to continue the general summer season for all species but chinook immediately after offloading chinook. Due to the strength of the coho return, no allocation or conservation closure occurred in 1994. By regulation, a two day closure, from August 27-28 went into effect prior to reopening to the retention of chinook. Chinook were allowed to be retained from August 29, through September 2. On August 7, specific Yakutat restrictions established by the Board of Fisheries in 1984 went into effect. These restrictions closed state waters off the mouths of the Situk-Ahrnklin Inlet and Lost River to trolling for the season, and made weekly troll time in other state waters of Yakutat (from approximately Grand Plateau Glacier to Sitkagi Bluffs) the same as weekly setnet time on the Situk-Ahrnklin fishery through September 20; normally the last day of the summer troll season (Figure 2). With record coho returns throughout Southeast Alaska and Yakutat, the summer troll season was extended from September 20 through September 30. All the Yakutat restrictions remained in effect through the end of the season on September 30.

The chinook salmon troll catch of 4,572 was 43% below the recent 10-year-average (Table 6). Catches were evenly distributed over the open periods for chinook. The peak effort week of 26 hand and 105 power trollers occurred during Statistical Week 36. Trolling accounted for 54% of the chinook harvested in Yakutat (Table 7).

The troll coho catch of 416,664 was the highest catch in the past ten years, and was 208% above the 10-year-average. Trolling accounted for 55% of the coho harvested in Yakutat. Coho returns were strong to both Southeast Alaska and Yakutat. The power troll effort of 145 vessels was 38% above the recent 10-year-average of 105, and was the highest effort in the past 10-years. The peak effort week of 131 trollers (26 hand and 105 power trollers) occurred during the last week of August. The total effort of 186 vessels was 31% above the recent 10-year-average. Trolling was concentrated in state and federal waters off the Yakutat forelands and in Yakutat Bay. Effort in the waters of the Yakataga District was very light with only one vessel fishing district 191. The approximate ex-vessel value of troll caught chinook and coho salmon caught in the Yakutat area was $3,733,534 (Table 8).

SALMON - YAKUTAT DISTRICT

Alsek River

The Alsek River sockeye harvest of 19,634 was 12% above the recent 5-year-average, and was the third highest catch in the past ten years. The 1989 parent-year index escapement of approximately 23,500 sockeye through the Klukshu Weir produced a catch of 19,634 sockeye and a Klukshu River escapement of 15,038 (Tables 9 and 10). The catch was slightly below the 1993 catch of 20,043. The weir count of 15,038 was 17% below the average of 18,950 for the years in which the weir has been operated.

Based on the 1989 escapement of 3,073 early run sockeye, the early return was expected to be above average. The 1989 late escapement of 20,469 indicated a below average return for late run sockeye. The Alsek was opened to commercial fishing on the first Monday in June. This marked the first time since 1987 that the Alsek was opened on the date specified by regulation. The initial opening was limited to one 12-hour period in order to evaluate the effectiveness of chinook conservation measures. Fishery performance during the initial opening indicated that the early segment of the sockeye return was strong, and that chinook interception was within the guideline established for the period. Fishing time was extended to 24-hours during the initial opening. Catch per unit of effort (CPUE) was slightly below average during the second and third weeks of the season, and fishing time was maintained at one day during this time. As fishery performance improved, fishing time was increased to two days for 1- week, and to 3-days for the next 3-weeks of the season. Both the Alsek model and the CPUE figures continued to indicate a strong return, and effort levels decreased because of the East River sockeye return. The Alsek was extended to 4-days for the remainder of the sockeye season.

The adjustments to the weekly fishing periods relied heavily on fishery performance data, and the decision of whether or not to extend any given period was often based on catch and CPUE figures gathered inseason during that particular period. Parent year escapement information and the model projections were also factors in determining the weekly fishing periods. The Alsek model tends to get more accurate with time

and is of limited use for management purposes early in the season. The parent-year escapement figures indicated the late return would be below average in 1994. From the fourth through the eighth week of the season, catch and escapement were well above average, and the model predicted above average escapement. The decision not to extend fishing time beyond 3-days per week during this period was made with the parent-year figures in mind. Fishing time was eventually added as both fishery performance and the model continued to show an above average return.

Catch and CPUE figures were again affected by the additional effort that was directed toward the Alsek stocks during closed periods on the East River through the first full week of July. The Alsek River openings of two and three days coincided with one day openings for the East River. Many setnetters fished the first 24-hours on the East River before switching over to the Alsek fishery to take advantage of the extra fishing time. Indications of good catches and CPUE during the first 24-hours in the Alsek became attenuated as East River fishers moved into marginal or less productive sets on the Alsek. Effort levels for the Alsek remained high through the early part of the season, with a peak effort of 28 setnetters recorded during the first full week of July. East River fishing time was increased during the second week of July, and effort levels for the Alsek remained low for the remainder of the season.

The Alsek model was again used as a tool for in-season management. The model underestimated the final catch by 13%, and overestimated the Klukshu River escapement by 34%. Various factors affect the accuracy of the model. It does not differentiate between early and late run sockeye. This means that if early returns are strong, the model will continue to predict strong returns even if, as in 1994, the parent-year escapement figures indicate weaker late returns. The model, at present, does not take into account returns to Village Creek. Finally, the model depends on an accurate prediction of future effort levels. The model must be viewed as just one more piece of the management puzzle.

The final sockeye escapement count through the Klukshu Weir was 15,038. Effective escapement through the weir is figured by deducting the Indian food fishery harvest above the weir from the total weir count. A preliminary total of 1,146 sockeye salmon were harvested in the food fishery, leaving an effective escapement of 13,892 sockeye. The escapement counts for the Tanis River were below average. A survey of Basin Creek on September 30 revealed 250 sockeye, well below average, but this survey followed an extended period of inclement weather and flooding, and may have been too late for a peak count. Actual spawning numbers were probably higher. The Village Creek count of 3,960 sockeye was below average.

The Klukshu Weir sockeye salmon escapement counts have been divided into early and late return segments. The cutoff date between the two segments is August 15. The 1989 parent-year early run escapement was 3,073 sockeye. An adjustment of approximately 5-weeks to allow for travel time from the fishery area to the weir showed that the 1994 early run was composed of a catch of 10,786 (55% of the total harvest), and a weir count of 3,247. The 1989 late return escapement of 20,469 produced a 1994 catch of 8,848 and a weir count of 11,791 sockeye. These figures do not take into account contributions made by other Alsek systems. The Klukshu River contribution has been estimated at 37% to 60%, and probably varies from year to year. A total drainage enumeration has not been possible, and contribution percentages for other systems have not been estimated. Early return contributions of U.S. stocks are unknown. Basin Creek is flown infrequently, and escapement is usually not seen until late in the season. Tanis River stocks

also show up late in the season, but any interception of Tanis stocks occurs in the intertidal area, and most of the commercial effort is too far upstream to have much effect on Tanis fish.

Historically, a set gillnet fishery targeting on chinook salmon was conducted during May and early June. Due to depressed runs, the directed fishery has been closed since 1962, and chinook are now harvested only incidentally during the sockeye fishery in early June. The 1994 early June periods were limited in time in order to reduce the impact on chinook. Commercial fishermen were encouraged to reduce the harvest of chinook by staying on their gear and releasing live fish. This voluntary program has been used with some success in the past on the Situk River under similar circumstances. Alsek fishers were told that reducing the harvest of chinook could help afford more fishing time in the future on early season sockeye returns. As in recent years, gillnet mesh size was restricted to a maximum of six inches through July 1.

The chinook salmon harvest of 805 was 295% above the recent 5-year-average and was average for the years 1960 to 1993. A total of 510 chinook, or 63% of all chinook harvested, were caught during the first two weeks of the season. A total of 482 of these chinook were sampled for coded wire tags, and the remaining 18 were viewed. 204 chinook were scale sampled during this time. Of the 510 chinook sold, 90 were large spawners (> 711 mm) and 420 were primarily two-ocean jacks (<711 mm), with a few one-ocean fish. Fisher interviews, conducted while the fishery was in progress, indicated that large spawners could be released without harm to the fish, while the jacks, being comparable to sockeye in size, gilled and were killed in the nets. The weight average for all 805 chinook harvested was 9.18 pounds, indicating that a high percentage of all fish sold were two-ocean fish. The Klukshu weir count of 3,727 chinook was 50% above the average for the years the weir has been operated, and was the second highest count in the history of the weir (1976-1994). A food and sport fish harvest of 99 chinook above the weir, left an effective escapement of 3,628 chinook.

The coho salmon harvest of 4,182 was 18% above the recent 5-year-average. As a reflection of the area-wide strong coho return, fishing times were maintained at 4-days per week for the first 3-weeks of the season. Fishery performance remained good and fishing time was increased to 5.5-days for the first and second full weeks of September. Fishery performance remained below average from that time on, and fishing time was curtailed to 4-days for the last 3-weeks of the season. A survey on September 30 revealed below average escapement in local creeks, and the Alsek was closed for the season on October 7. The river was not fished during the last week of the season. The preliminary Klukshu Weir count of 1,232 coho was below average, however; the weir is usually removed prior to the completion of the coho return. Coho escapement counts for the Tanis River and Cabin Creek were below average. The chum salmon catch of 32 was 91% below average.

Range markers were used to delineate the commercial surf fishing area on the east side of the river mouth. No markers were placed on the west side due to surf action there. Markers used to close the mouths of Williams, Gines, and Emile Creeks may have been removed by flood conditions, and may need to be replaced in 1995.

East River

The East River sockeye salmon harvest of 99,848 was 27% below the recent 5-year-average (Table 11). The recent average contains four of the six years that the East has recorded a catch of over 100,000 sockeye, and this year's harvest was the seventh highest on record. The fishery remained on extended fishing time during the peak of the sockeye season. The peak week count of 66 fishers during the second week of August was slightly below the recent 5-year-average. A peak weekly catch of 30,230 fish was recorded during the first week of August. The chinook harvest of 37 was 19% above the recent 5-year-average.

The commercial fishery opened on June 27. Fishing time of 1-day per week was maintained for the first two weeks of the season because of inadequate escapement. A survey on July 11, revealed that escapement was ahead of schedule, and fishing time was increased to 3-days during the second and third weeks of July. The escapement continued to build steadily and the weekly fishing periods were increased to 4-days for 1-week, and to 5-days per week for the 2-peak weeks of the season. Escapement continued to build, but more slowly, and fishing time returned to 4-days per week during the third week of August. With sockeye escapement exceeding the lower end of the escapement goal, and with indications of a strong coho run, fishing time remained at 4-days per week for the remainder of the sockeye season.

As is usual for the East River fishery, catch and effort were divided between the three user groups by fishing location: inriver, surf, and ocean (Table 12). The inriver setnetters caught approximately 59% of the harvest, while the remaining 41% was split equally between surf and ocean fishers. As they did in 1993, weather conditions favored the ocean fishers in 1994, and 20% of the catch was taken in the ocean area. The ocean area was fished for 4-weeks during the sockeye return. The ocean nets were most effective during the first 2-weeks of August, the peak of the return. The ocean nets accounted for approximately 29% of the catch during the first week of August, and approximately 42% during the second week. The surf nets were most effective during the last week of July, when they caught 35% of the catch, and the third week of August, when they caught 33%. The peak weekly catch of 30,320 sockeye was recorded during the first week of August. During this period, inriver fishers accounted for 56%, surf fishers accounted for 14%, and ocean fishers accounted for 29% of the harvest.

The Doame River sockeye escapement counts were above average. Early June survey flights reveal fish below the confluence of the Doame and East Rivers. It is generally assumed that these are Doame sockeye, and this assumption is generally confirmed on later survey flights. A survey flight on June 26, revealed the peak escapement count of 2,900 sockeye in the Doame. The East River escapement remained ahead of schedule until mid-August, but built slowly from that point on. An aerial survey on August 29 revealed a peak escapement count of 32,400 (Table 13). This count fell within the established escapement goal range of 25,000 to 35,000 sockeye. A more formal spawner/recruit analysis on East River sockeye should be finished by the spring of 1995. Early indications from this analysis suggest that the high end of the escapement goal may be in the range of 45,000 to 50,000 sockeye. The R/S in the East River was approximately 3.1:1, slightly below the average R/S of approximately 4.0:1 (Table 14). The 1994 return of 131,848 fish came from a parent-year escapement of approximately 42,000.

A peak count of 14 setnetters fished the surf area during the last week of July. This compares to the peak count of 39 that fished the surf area 1993. With the exception of the three or four nets in the immediate vicinity of the mouth, all of the gear in the surf area consisted of pulley systems. The majority of these pulley systems were located to the west of the river mouth for a distance of approximately one mile. No markers were placed on either side of the mouth to delineate the pulley-free zone of 100 yards, and no pulley systems were observed within the 100 yard limit.

The East River coho salmon catch of 18,736 was 110% above the recent 5-year-average, and was the third highest catch on record. All three of these record harvests have been recorded since 1988. Effort remained high during the early part of the run as sockeye were still being targeted. The peak count of 25 fishers during the last week of August was average. Effort levels dropped to 24 and then 14 during the first two weeks of September. A total of 12,860 coho, or 69% of the harvest, were caught during those 2-weeks. Fishing time was maintained at 4-days during the early part of the run so as to not overharvest sockeye salmon. On September 7, during the 4-day opening for that week, fishing time was extended until further notice, and the East remained open to commercial fishing until the season closed on October 15. The river was open, but not fished during two of the last 3-weeks of the season. A peak escapement count of approximately 6,000 coho (mixed with chum) was recorded in the East River on September 30. A survey that same day revealed 4,700 coho in the Doame River, and this count was above average. The September 30 survey flight represented the lone window in an extended period of inclement weather. Coho surveys conducted prior to, and subsequent to that date were flooded out.

The chum salmon catch of 3,661 was 40% below the recent 5-year-average of 6,151. The East fishery is the major chum producer in Yakutat, and this catch accounted for 87% of the Yakutat area harvest. As chum salmon were mixed with sockeye and coho salmon, no separate escapement counts were made.

Akwe River

The Akwe River was fished by fewer than three setnetters in 1994, and all catch records are confidential. Effort levels on the Akwe have steadily declined from the peak effort of 16 permits recorded in 1989. This marked the first year since 1947 that fewer than three permits fished the river. The Akwe opened on June 27. Fishing time was maintained at 1.5 days per week for the first 4-weeks of the season. Fishing time was then increased to 3-days per week for the next 5-weeks of the season. The coho return was strong, and, like many other systems in Yakutat, the Akwe remained open to commercial fishing from September 7, through the end of the fishing season on October 15.

Aerial surveys of the Akwe River in recent years have been of little value in determining escapement due to the turbidity of the river. Aerial surveys conducted on the Akwe in 1994 are summarized in Table 15. A foot survey of the upper river was not conducted in 1994.

Markers were placed on the Akwe River one-half mile upstream of the mid-tide level to reduce the problem of fishing mixed stocks of Italio and Akwe fish in the common mouth area. Some straying of all species occurs, and it is likely that some New Italio River-bound salmon are intercepted in the Akwe River fishery.

Italio River

The New Italio River was not opened to commercial fishing in 1994. The Middle Italio and Old Italio Rivers were opened on September 19, and remained open to commercial fishing until the season closed on October 15. Fewer than three permits fished the two systems, and all catch records are confidential.

Sockeye escapement counts, while still well below historical levels, continued to show improvement over the counts of recent years (Table 16). The peak escapement count of 2,425 for the New Italio was recorded on August 10. The same survey revealed only 125 sockeye in Italio Lake. The lake was flown three times between July 25 and August 14, but no more than 125 sockeye were seen. Eight-hundred sockeye were seen in Italio Lake in 1993, a year in which water levels were even lower than this year, so it is unlikely that reduced flows over Italio Falls affected the migration. It is possible that a partial blockage has occurred in the fish passage over the falls.

Inclement weather and subsequent flooding prevailed for most of the coho season, severely hampering coho surveys. The one exception was the September 30 survey. 1,600 coho were seen in the New Italio and 2,100 were seen in the Old Italio. The Middle Italio was not surveyed due to high wind conditions in the area. Due to the strength of the run and the flood conditions, escapement to all three systems was judged to be above average. Upstream markers were used in both the Old and Middle Italio Rivers to delineate closed water areas.

Dangerous River

The Dangerous River was opened to commercial fishing on June 13. Fishing time remained at 2.5 days through the end of the sockeye season. The river was not fished during the first 4-weeks of the season. The harvest of 3,107 sockeye salmon was 162% above the recent 5-year-average (Table 17). Fall fishing time remained at 3-days through Statistical Week 36. From Statistical Week 37 through the end of the season on October 14, the weekly fishing period was 4-days. The Dangerous River was not fished during the last two weeks of the season. The coho harvest of 302 was 14% below the recent 5-year-average. A total of seven permit holders fished the Dangerous River in 1994, and this level of effort was well above average. Escapement surveys are limited due to the glacial nature of the river. No surveys were conducted of the upper river. Coho surveys of the clear water tributaries just east of the delta were flooded out.

Situk-Ahrnklin Inlet

The Situk-Ahrnklin Inlet fishery in 1994 recorded record catches of chinook and coho salmon, and below average catches of sockeye, pink, and chum salmon (Table 18). Sockeye catches, while below the recent average, were slightly above the historical average. This year, the Situk-Ahrnklin fishery alone generated 51% of the Yakutat area setnet income (Table 19). The fishery ex-vessel value of about $1,687,000 was 92% above the average since 1975. An ex-vessel value of over $1,000,000 occurred for the eighth year in a row (Table 20). Commercial fishers were allowed to retain and sell part of their chinook harvest for the fourth year in a row. The sockeye harvest of 56,007 was 46% below the recent 5-year-average. It was the first time in 4-years that the Situk recorded a catch of under 100,000 sockeye. The Situk-Ahrnklin sockeye catch accounted for 27% of the area harvest and was exceeded only by the East River harvest. The coho harvest of 217,129 was the highest catch on record and was 144% above average. The Situk-Ahrnklin coho harvest accounted for 63% of the area's total catch. The pink salmon catch of 10,454 was 43% below average. Sockeye escapement exceeded the escapement goal by approximately 17,000 fish. The pink escapement through the Situk Weir was above average. The peak coho escapement count was the highest ever recorded.

For the seventh year in a row the Situk Weir was placed in the lower river and used for inseason management of the sockeye and chinook fisheries (Table 21). Excellent weather combined with low water levels prevailed for most of the season, and the weir was maintained without problems through August 5.

Chinook Salmon

A comprehensive management plan for Situk River chinook salmon has been in effect since 1991. The plan mandated various chinook salmon conservation measures based on an ascending scale of projected escapement through the Situk Weir. A projected level of 750 large 3-ocean spawners through the weir is necessary before commercial fishers would be allowed to retain and sell the fish. Prior to the making of the projection, a chinook salmon non-sale policy was implemented for the initial opening on June 14, and remained in effect until June 23. All setnetters were asked to work their gear frequently, and to release live chinook. Setnetters were allowed to retain dead fish for their own use, and were required to report the dead fish on fish tickets. More than 750 large, 3-ocean fish were projected through the weir at this time, and the non-sale of chinook salmon was rescinded effective 6:00 a.m., June 23. The chinook return remained strong, and the non-sale policy was not reinstated. The total reported personal use harvest during periods of non-sale was 51 large (>711 mm) and 15 small (<711 mm) chinook. Approximately 10% of the large chinook that passed through the weir were net-marked. This compares to 11% in 1992, another year in which non-sale was rescinded after just two weeks of the season. The spawning success of netted and released fish is still unknown.

The chinook harvest of 2,656 was the highest catch on record for the Situk, exceeding the previous high catch of 2,160 set in 1956. The chinook harvest was 331% above the previous 5-year-average, but this average contains two years in which non-sale remained in effect for the entire season. The final weir count

of 4,332 was the highest weir count on record, and consisted of 1,312 large spawners, 1,461 two-ocean jacks, and 1,559 one-ocean jacks. The effective escapement of 1,212 large spawners exceeded the upper end of the escapement goal range by about 460 fish. The effective escapement was calculated by adding approximately 100 spawners below the weir to the weir count after it was removed and deducting an estimated sport fish harvest of 200 large spawners above the weir. Records of the sport harvest above the weir were incomplete, and the actual harvest may be slightly higher. The spawning success rate of hooked and released fish is still unknown.

Sockeye Salmon

The southeast end of the Situk-Ahrnklin Inlet was opened by emergency order on June 13, for a 24-hour period. Regulatory markers were placed in both Divide Slough and in the estuary approximately 2-miles east of the western tip of Black Sand Island. A total of 34 setnetters fished in the open area and harvested 1,496 fish. This marked the fourth year in a row of early openings in the Ahrnklin, or eastern end of the estuary. The opening in 1991 was for 2.5-days with a recorded catch of 11,468 sockeye. The 1992, 1993, and 1994 openings were maintained at one 24-hour period. The average catch for this three-year period has been 1,442 sockeye. Ahrnklin River escapement counts were below average this year. An aerial survey on July 11 revealed the peak escapement count of 1,500.

The entire Situk-Ahrnklin Inlet opened to commercial fishing on June 20. Escapement counts were more than adequate at this time, and fishing time was immediately extended to 3.5-days for the first 2-weeks of the season. Fishing time was increased to 4.5 days for the next 2-weeks and to 5.5-days during the third week in July. On July 17, allowable gear was increased from one to two nets, neither of which could exceed 20 fathoms, and this gear increase remained in effect until August 13. On July 29, fishing time was extended until further notice, and the Situk fishery remained open to commercial fishing until August 13. Fishing time was returned to the normal fall fishing time of 3-days during the fourth week of August.

For the past 6-years, fishing time and allowable gear have been adjusted in an effort to keep escapement levels down to the goal of 40,000 to 55,000 sockeye. This year allowable gear was increased in an attempt to make up for a lack of effort. A peak count of 59 permits fished the Situk for sockeye during the third week of the season, and this effort level was well below average. Even with the increase in fishing time and allowable gear, indications were that the fishery was not as efficient as it had been in the previous 5-years. During the period 1988 to 1993 the removal rate, or the percentage of the sockeye migration intercepted by the nets, has ranged from a low of 53% in 1988 to a high of 61% in 1993. The 1994 removal rate was 44%, well below the average of the previous 5-years. Further evidence of the relative inefficiency of the nets was found through an examination of the daily weir counts. A daily escapement of over 3,000 sockeye was recorded on four different occasions, and all four were recorded during the middle of the week, with the fishery in progress. These counts indicate some net avoidance on the part of the sockeye.

A total of 72,472 sockeye salmon passed through the Situk Weir prior to its removal on August 5. This exceeded the upper end of the escapement goal by approximately 17,000 fish. The total return was calculated by adding inriver catch, escapement, and subsistence catch to half of the catches of the

interceptive fisheries, (Yakutat Bay, Manby Shore, and the Lost River) and deducting the Ahrnklin River sockeye catch from the total. The 1994 return of approximately 144,200, came primarily from the 1989 escapement of 84,383, yielding a return-per-spawner (R/S) of 1.7:1. The previous 10-year-average R/S is 2.2:1.

Emigrant steelhead were monitored at the weir during the sockeye season. A total of 7,853 steelhead were counted down through the weir. 6,813, or 87% of the steelhead counted, passed through the weir prior to the initial 1-day opening in the Ahrnklin end of the estuary. 7,539 steelhead, or 96% of all counted, passed down by the June 20 opening for the entire estuary. Interception of steelhead in the commercial fishery totaled approximately 52 fish through August 27. Another 53 steelhead were harvested during the fall coho fishery.

Coho Salmon

The coho harvest of 217,129 was the highest on record, surpassing the 1941 harvest of approximately 197,000. It was the third year in a row with a harvest of over 130,000. 133,982 coho, or 62% of the harvest, were harvested during the last week of August and the first week of September. Effort remained above average for most of the season with a peak count of 90 setnetters fishing the first full week of September. This was the highest effort for coho on record. Effort remained above average through the end of the season.

Fishing time was set at 3-days for the first week of the season. Catches and escapement counts indicated the strong return, and on September 2, the Situk was extended until further notice. The Situk remained open to commercial fishing from September 2, until the end of the season on October 15. A float trip on September 13 revealed a peak escapement count of 21,960. This was the highest count ever recorded in the Situk River. Final escapement was estimated to be well above average. Inclement weather and flooding characterized the coho season, and escapement counts were not obtained for the Old Situk or for the Ahrklin\Antlen system. Approximately 250 coho were seen in Chet's Creek, a clear water tributary of the Ahrnklin that passes under Forest Highway 10 at the 18 mile marker. These fish were seen in the immediate vicinity of the culvert.

Pink and Chum Salmon

The pink salmon harvest of 10,454 was 43% below the recent 5-year-average and accounted for 85% of all pinks caught in the Yakutat area. A total of 79,055 pink salmon were counted through the Situk Weir before it was removed. The chum salmon harvest of 264 was 39% below the recent 5-year-average.

Lost River

The Lost River was opened on June 20. The catch of 1,178 sockeye salmon was 64% below the recent 5-year-average (Table 23). Effort levels were below average during the sockeye season, and the river was not fished during the third week of July. The initial opening was maintained at 2.5 days. As time was added to the Situk-Ahrnklin fishery, time was also added to the Lost fishery, and the river was open to 3.5-days for the second week of the season, and to 4.5-days for the next 3-weeks of the season. Fishing time was then reduced to 3.5-days for the last week of the sockeye season to assist the Lost River escapement. Three pulley systems were used in the surf area within the one-half mile radius at the mouth of the river in 1993; pulley systems were not used in the Lost River this year. Documenting escapement early in the season has proven difficult as sockeye do not show in the upper stretches of Tawah Creek until mid-August. Sockeye escapement counts were well above the average for recent years (Table 24). A float of Tawah Creek from REL Bridge to the confluence with the Lost River on August 11 recorded 3,300 sockeye. The City and Borough of Yakutat conducted a foot survey of Ophir Creek on October 31 as part of an on-going rehabilitation project for the creek. The survey was conducted by Craig Swanson, a former Technician for the department. This survey revealed 3,452 sockeye, both live and dead, in Ophir Creek.

Chinook non-sale for the Situk-Ahrnklin Inlet and Lost River fisheries was rescinded on June 23, and 31 chinook were harvested in the Lost River. This harvest was 106% above the recent 5-year-average of 15. The chinook harvest was a reflection of the strong chinook return to the Situk River.

The coho salmon catch of 7,565 was 12% above the recent 5-year-average and was the seventh highest catch since 1964. Fishing time was extended as the season progressed, and the Lost River remained open to commercial fishing 7-days a week for the last 5-weeks of the season. Six setnetters fished during the first full week of September, a peak effort for the year. A peak escapement count of 6,000 was recorded on September 26, during a float count of Tawah Creek. The survey conducted for the City and Borough of Yakutat on October 31, revealed 5,565 live and dead coho in Ophir Creek. Escapement for the Lost River drainage was above average.

Yakutat Bay

The Yakutat Bay sockeye catch of 14,524 was 50% below the recent 5-year-average (Table 25). The recent average contains some of the highest recorded harvests for the Bay, and this year's catch was slightly above the long term historical average. The southern half of Yakutat Bay opened on June 13, and fishing time was maintained at 2.5 days for the first 2-weeks of the season. As the Situk sockeye return developed, fishing time for the Bay was extended to 3.5 days during the second week of the season, and to 4.5 days for the next 3-weeks. The Bay was not extended beyond 4.5 days in any week to afford some protection to stocks bound for other systems. Fishing time was reduced to 3.5 days for the final week of the sockeye season.

Catches remained fairly steady for the first four weeks of the season. 9,291 sockeye, or 64% of the total harvest, were caught during that time. The peak weekly catch of approximately 3,100 fish was recorded during the sixth week of the season. The peak effort level of 24-fishers was recorded during the first week of July. This level of effort was 35% below the recent 5-year-average. Chinook salmon are harvested incidental to the sockeye fishery. The total chinook harvest of 211 was 18% below the recent 5-year-average.

The coho salmon catch of 6,728 was 27% above the recent 5-year-average, and was the highest catch since 1955. The recent average contains strong coho catches for the Bay, and this year's catch was more than double the 1960 to 1993 average. Fishing time was set at 3-days for the first 5-weeks of the season, On September 1, Yakutat Bay was extended until further notice, and the Bay remained open to commercial fishing through the end of the season on October 15. A peak count of eight setnetters fished the Bay for coho during the first full week of September.

Pink salmon returns to Humpback Creek were not strong, and Humpback Creek was not fished for pinks in 1994. A peak escapement count of 11,000 was recorded on September 2 (Table 26). This count slightly exceeded the escapement goal of 10,000. The Yakutat Bay pink salmon harvest of 1,741 was 68% below the recent 5-year-average. There has been little economic incentive to harvest pink salmon by set gillnet in recent years, and pink salmon harvested in Yakutat Bay have been caught incidental to sockeye salmon.

Manby Fisheries

The combined Manby Shore fisheries sockeye harvest of 10,413 was 34% below the previous 5-year-average (Table 27). The coho catch of 5,472 was 36% below the 5-year-average. Sockeye catches from the Manby Shore Ocean fishery totaled 8,720 and accounted for 84% of the catch (Table 28). The Manby Shore stream fisheries accounted for 99% of the coho harvest. Catches for individual streams were not compiled separately prior to 1986.

The Manby Shore Ocean fishery opened on June 20; the inside fisheries on June 27. The initial opening for the ocean fishery was maintained at 2.5 days. As fishing time increased for the Situk-Ahrnklin Inlet fishery, fishing time was also added to the Manby Shore Ocean fishery. Fishing time was extended to 3.5 days during the second week of the season, and to 4.5 days for the next 3-weeks of the season. The ocean fishery was not fished after the second week of July. A peak count of 22 setnetters fished during the first week of July. This effort level was 57% above average. Sudden Stream remained on the normal fishing time of 2.5 days throughout the sockeye season and contributed small catches to the Manby area sockeye harvest. Manby Stream, normally fished only during coho season, was fished for sockeye in 1994 and also contributed small catches to the harvest. The ocean area and Sudden Stream were fished for 4-weeks of the season, while Manby Stream was fished for only 1-week. A peak week harvest in the ocean fishery of 4,837 was recorded during the third week of the season and accounted for 55% of the harvest.

Sudden Stream and Esker Creek were fished for coho salmon in 1994 (Tables 29 and 30). Manby Stream was not fished for coho this year. Geological changes caused by the recent movement of the Malaspina Glacier, combined with low water levels, prevented Spoon River from exiting to the ocean for most of the season. Flood conditions in late September finally forced an exit through the beach, allowing some escapement, but no commercial effort was recorded for Spoon River. Esker Creek accounted for 87% of the coho harvest from these systems. The Manby streams remained on 3-days fishing time for the first three weeks of the season. Fishing time was extended to 4-days during the first full week of September. The Manby streams were opened until further notice on September 13, and remained open until the season was closed on October 15. Sudden Stream was not fished during the last 3-weeks of the season, and Esker Creek was not fished during the last 2-weeks of the season. Escapement counts are limited due to the glacial nature of most of the Manby area streams. The peak count of 1,500 in Esker Creek was above average. The peak escapement count of 4,000 in Manby Stream was also above average. 150 coho were seen in Spoon River after it broke through to the ocean (Table 31).

Yana River to Icy Bay

Fewer than three setnetters fished the Yana River, and all catch records are confidential. The Yahtse River was not fished in 1994. Jetty Creek was not open to commercial fishing in 1994. The Yana River was open to 3-days fishing time for the first 3-weeks of the season. Fishing time was increased to 4-days during the first full week of September. On September 13, the Yana was opened until further notice and remained open until the end of the season on October 15.

Coho escapement counts for Jetty Creek were above average, but the peak count of 4,000 was not seen until September 30. Earlier counts were well below average, and the river was not opened (Table 32). The peak count of 1,000 in the Yana River was average, but this count was recorded on two different occasions, September 13 and September 30, and escapement was estimated to be above average. The peak count of 600 in the Yahtse River was average, to slightly above average.

SALMON - YAKATAGA DISTRICT

The Yakataga District, including the Kaliakh River, opened on June 15. The Tsiu River remained closed until coho season, to protect the relatively small sockeye population in that system. All waters between Cape Yakataga and a point one-half mile west of the Yahtse, including the Big River, remained closed for the year. No effort was recorded for the district during the sockeye season. Coho salmon catches for the Tsiu River were the second highest on record, and would have been much higher had it not been for market and logistics problems. Coho catches for the Kaliakh River were below average. The ocean waters of the remainder of the district were not fished in 1994. The total Yakataga District harvest was 71,654, or 21% of

the catch for the Yakutat area (Table 33). The Kiklukh River, locally referred to as Eight Mile Creek, and the Tashalich River were not fished by commercial setnetters in 1994.

Inclement weather and subsequent flooding, affected escapement surveys for the Yakataga District after September 8. The Kulthieth River, the main spawning tributary for the Kaliakh River, was surveyed twice, once on September 6, and again on September 30. The peak spawning escapements for the Yakataga District were documented on the September 30 survey, and no surveys were done in the District after that date. The Big River was surveyed from Yakutat and from the Tsiu in 1994. Escapement counts for the Big River are documented in Table 32. The peak coho escapement count of 450 was below average.

Kaliakh River

The Kaliakh River was opened initially for coho salmon on August 1, with the commencement of fall fishing time. The Kaliakh was not fished until the third week of August. The coho catch of 7,611 was 19% below the recent 5-year-average. (Table 34). A peak count of nine setnetters fished the river during the last week of August. This level of effort was 10% below average. Three setnetter fished the Kaliakh River exclusively, all others fished the Tsiu River, and switched to the Kaliakh fishery during closed periods on the Tsiu River. Area buying operations were centered on the ocean spit west of the Tsiu River which required the transport of Kaliakh fish to, and across, the Tsiu River. Kaliakh fish were moved by truck to the Tsiu River and were transported across it by skiff.

Beginning with the first Monday in August, the Kaliakh River was open to the normal fishing time of 3-days per week through September 3. Effort remained low, while fishery performance data indicated strength in the return. On September 7, fishing time was increased to 4-days for that week. On September 9, fishing time was extended until further notice, and the Kaliakh remained open to commercial fishing through the end of the season on October 15. A peak week catch of 4,986 was recorded during the last week of August and accounted for 58% of the total catch.

The Kaliakh coho harvest was severely impacted by market conditions and by the logistics of getting fish to the market. Kaliakh fishers were put on a quota system each week by the buyers on the Tsiu River. Even with the river open 7-days per week, actual fishing time was limited to one or two days per week. The nets would go into the water only as fish were cleaned up on the beach at the Tsiu and the planes there were available to haul fish. By mid-September the situation had deteriorated to the point that it became economically unfeasible to fish the Kaliakh. No effort was recorded on the Kaliakh after September 17.

Two escapement surveys were conducted for the Kaliakh River in 1994 (Table 35). A flight on September 6, revealed 1,200 coho in the Kulthieth River, the main spawning tributary for the Kaliakh. The entire length of the Kaliakh was also flown on this survey. Due to the glacial nature of the river, no hard count was possible. Coho were seen finning, jumping, and boiling the water continuously along the entire length of the river. The final survey on September 30, revealed 5,200 coho in the Kulthieth. Two small, clear tributaries, Odor Creek and Hope Creek, located just east of the Kultheith, were also surveyed. 200 coho

were seen in Odor Creek, and 600 coho were seen in Hope Creek. Final escapement was estimated to be above average.

Tsiu River

The Tsiu River coho catch of 64,043 was the third highest catch on record. The previous 5-year-average contains the record harvest of 92,000 set in 1992; the 1994 catch was 13% above average for that period of time (Table 36). The collapse of the market and the subsequent logistics problems associated with getting fish to a new, more remote market, severely limited the harvest after September 17. Indications are, that given ideal conditions, the 1992 record harvest could have been bettered in 1994. The Tsiu fishery accounted for 89% of the Yakataga District harvest. This catch was second only to that of the Situk-Ahrnklin harvest. The river remained closed, as in past years, during the sockeye season to protect the small sockeye population.

The Tsiu River opened on August 22. Fishing time remained at two days for the first week of the season. Fishing time was extended to 3-days for the next 2-weeks of the season. With a dramatic decrease in effort following the market collapse, and continued indications of a strong coho return, the Tsiu was opened to commercial fishing until further notice on September 13. The fishery remained open through the end of the season on October 15. A peak effort of 25 setnetters fished the river during the last week of August. The effort level was slightly above the recent 5-year-average of 24. 53,498 coho salmon, or 84% of the total catch, were harvested during the first 3-weeks of the season. No more than seven permits fished the Tsiu after September 17. The river was not fished during the last two weeks of the season.

A flight on September 30, revealed a peak escapement count of 51,000 coho, virtually matching the highest escapement count on record, 52,000 recorded in 1985 (Table 37). Of these, approximately 7,000 appeared to be headed for the Tsiu River spawning area, 39,000 were observed in the Tsiu lagoon heading for the Tsivat River, and 5,000 were seen in the Tsivat itself. Inclement weather conditions through the end of October prevented any further surveys in the Yakataga District.

Four pulley systems were used in the Tsiu fishery throughout the season. The ocean area outside the one-half mile perimeter, designated as part of the remainder of the district, was not fished in 1994. A marker was placed on the beach one-half mile to the east of the river mouth to delineate the half mile perimeter. The Tsivat overflow channel, which joins the Tsiu River approximately 300 yards upstream from the terminus, remained dry during the early part of the season. It was not fished later in the season when it did have flow. The subsistence period for the Tsiu River was changed by emergency order to a 12-hour period on Sundays to avoid any conflict with possible commercial openings on Saturdays.

Fish buying and flying activity again centered on the spit on the west side of the Tsiu. The spit can accommodate the DC-3 and C-46 aircraft which were used to haul fish this year. The use of the west side as a staging area does mean that all Kaliakh fish and some Tsiu fish must be moved across the Tsiu River. All Kaliakh fish and most Tsiu fish were transported by skiff, but some setnetters also used 4-wheelers with

trailers. Recognizing that this ATV crossing of an anadromous fish stream would likely continue, the department in 1994 issued a blanket permit for the river to be crossed in one specific location. The ford was located approximately 200 yards upstream of the inriver regulatory markers. This marks the shallowest spot on the river, and the stream bed is characterized by shifting sand. There is no spawning gravel in the vicinity, and no spawning has ever been observed there. Siltation is minimal, as the sand immediately sinks back to the bottom after ATV passage. The use of this ford by ATVs did not appear to impede the spawning immigration.

YAKUTAT AREA SUBSISTENCE AND PERSONAL USE - 1994

In 1994, 128 subsistence permits were issued for the Yakutat area (Table 38). This was down slightly from the 129 permits issued in 1993. No personal use permits were issued for the Yakutat area in 1994. 123, or 96% of the permits issued in 1994, have been returned.

The area-wide subsistence catch of 745 chinook salmon was 84% above average, and was the highest harvest on record (Table 41). Approximately 50% of the chinook harvest came from the Situk-Ahrnklin Inlet, while Yakutat Bay contributed 37%. The Alsek River contributed approximately 9% of the harvest, while small catches in the Akwe River made up the balance. A total of approximately 67 chinook salmon were taken by commercial fishers in the Situk-Ahrnklin commercial fishery during the period of chinook salmon non-sale.

The area-wide subsistence catch of 4,777 sockeye salmon was 33% above average. The Situk-Ahrnklin Inlet accounted for 75% of the sockeye harvest and 60% of the coho harvest. The area-wide coho harvest of 2,259 was 47% above average.

YAKUTAT AREA SHELLFISH - 1994

Dungeness Crab

Dungeness crab is the major shellfish species harvested in the Yakutat area. The 1994 harvest of Dungeness crab was about 777,688 lbs. This was slightly above the 1993 harvest of approximately 766,000 lbs, but was well below the 1992 harvest of approximately 2,800,000 lbs. A total of 38 vessels (13 local, 25 non-local) participated in the fishery. The average price was about $1.20/lb for an ex-vessel value of approximately $933,226.

Tanner Crab

A total of eight boats (7 local, 1 non-local) fished Tanner crab in 1994. The harvest was 375,126 lbs. The average price was $1.75/lb, for an ex-vessel value of approximately $646,471.

King Crab

Fewer than three vessels fished king crab in the 1993-1994 season, and all catch information is confidential.

Shrimp

A preliminary total of 45 landings were made by seven boats that pot-fished shrimp in 1994. The harvest was 2,558 lbs. As fewer than three vessels trawled for shrimp in 1994, these catches are confidential.

Scallops

Two open periods were established for scallops in 1994, with an allowable harvest of 125,000 lbs. each fishing period. The first period was from January 1 through February 18. A total of eleven vessels fished during this period. The second period was from July 1, through noon, July 12. A total of five vessels fished the second period. The total harvest was approximately 236,830 lbs. An average price of $5.70/lb resulted in an ex-vessel value of approximately $1,361,773. Only one opening, in January, is scheduled for 1995, with the quota set to remain at 250,000 lbs.

1994 HALIBUT

The 1994 halibut season consisted of one 24-hour period and one 48-hour period (noon to noon): June 6-7 and September 12-14. A trip limit was in effect for the second opening. The total catch of 718,886 lbs was 40% above the 1993 harvest of 514,832 lbs. An average price of $1.85/lb resulted in an ex-vessel value of approximately $1,329,939.

1994 BLACKCOD (SABLEFISH)

The Eastern Gulf of Alaska regulatory area for blackcod includes the Southeast, East Yakutat, and West Yakutat management areas, and extends roughly from Dixon Entrance to Valdez. Yakutat is located between the East and West Yakutat management areas. All three areas opened on May 18, and again on September 12. A total of 4,110,895 lbs were harvested in the Yakutat District. This total includes poundage landed outside the community of Yakutat. The average price was $2.00/lb, for a total ex-vessel value of approximately $8,221,790. Note that for all previous Yakutat seasonal summaries, blackcod poundage was for landings in Yakutat only.

Table 1. Harvest of salmon in the Yakutat area set gillnet fishery by fishing period, 1994

Week	Ending Date	Chinook	Sockeye	Coho	Pink	Chum	Total
24	6/11	316	1,034	0	0	0	1,350
25	6/18	235	3,824	15	1	41	2,775
26	6/25	299	8,442	28	3	26	8,745
27	7/02	1,044	11,470	72	14	53	12,653
28	7/09	971	21,059	83	33	30	22,176
29	7/16	579	20,322	324	218	32	21,475
30	7/23	270	18,913	1,186	1,177	43	21,589
31	7/30	86	29,303	311	4,127	102	33,929
32	8/06	10	37,531	705	3,977	282	42,505
33	8/13	5	20,619	773	1,964	171	23,532
34	8/20	78	14,420	7,292	763	339	22,892
35	8/27	2	9,025	36,337	19	461	45,844
36	9/03	1	7,812	113,104	2	1,571	122,490
37	9/10	0	1,985	97,866	26	791	100,668
38	9/17	1	687	46,268	0	224	47,180
39	9/24	0	79	14,325	0	49	14,453
40	10/1	0	8	22,889	0	0	22,897
41	10/8	0	0	1,511	0	1	1,512
42	10/15	0	0	662	0	0	662
Totals		3,897	206,533	343,751	12,324	4,216	570,721

Table 2. Ten year comparison of Yakutat area setnet effort and salmon harvest.

Year	Effort	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
1984	137	944	102,274	182,720	19,387	31,838	337,163	284
1985	149	1,146	236,582	202,166	16,070	12,399	468,363	338
1986	153	1,341	151,672	91,284	7,183	16,635	268,115	359
1987	155	1,766	258,884	126,103	12,690	14,744	414,187	442
1988	160	894	162,188	205,866	120,205	29,247	518,400	466
1989	164	810	329,563	176,847	59,319	16,238	582,777	517
1990	161	664	344,461	148,890	30,839	5,813	530,667	517
1991	162	1,750	229,854	166,380	3,051	2,979	404,014	544
1992	165	2,025	313,840	290,343	18,467	7,690	632,295	529
1993	158	1,310	345,997	237,549	9,909	4,065	598,830	462
Ave.	156	1,265	247,532	182,815	29,712	14,165	475,481	445
1994	151	3,897	206,533	343,751	12,324	4,216	570,721	704
*Deviation								
1994	-3%	+208%	-17%	+88%	-59%	-70%	+20%	+58%

* Deviation from 10-year-average.

Table 3. Total average earnings from commercial fishing, excluding shellfish, Yakutat area, 1975-1994.

Year	Total Finfish Income [1]	Total Salmon Troll Income	Total Salmon Setnet Income	No. of Active Setnet Permits	Aver. Earning Per Setnet Permit	Previous 10 Year Aver. Setnet Income	Total Setnet-Troll Salmon Income
1975	$ 737,270 [2]	$ 29,185 [3]	$ 708,085	104	$ 6,809	-	$ 737,270
1976	1,252,865 [2]	33,082 [3]	1,219,783	125	9,758	-	1,252,865
1977	2,155,718 [2]	89,108 [3]	2,066,610	130	15,897	-	2,155,718
1978	3,066,121 [2]	396,330	2,669,791	151	17,681	-	3,066,121
1979	3,317,191	70,016	3,168,975	166	17,762	-	3,238,991
1980	2,090,752 [2]	161,000	1,929,752	150	12,059	-	2,090,752
1981	2,428,949 [2]	101,820	2,327,129	152	15,310	-	2,428,949
1982	2,908,629	672,490	2,084,139	149	13,988	-	2,756,629
1983	1,553,472	82,313	1,273,159	131	9,719	-	1,355,472
1984	3,128,096 [4]	560,307	2,375,789	137	17,341	-	2,936,096
1985	4,268,029 [4]	879,932	3,010,579	149	20,205	$13,632	3,890,511
1986	6,019,829	988,055	1,981,807	153	12,953	14,972	2,969,862
1987	9,767,778	1,180,928	5,077,589	155	32,759	15,292	6,258,517
1988	19,026,072	1,601,344	8,944,228	160	55,901	16,978	10,545,572
1989	11,220,922	1,214,305	4,174,510	164	25,454	20,800	5,388,815
1990	10,691,082	1,203,003	4,493,681	161	27,911	21,569	5,696,684
1991	7,665,394	530,387	2,248,558	162	13,880	23,155	2,778,945
1992	10,747,823	1,424,650	5,238,058	165	31,746	23,011	6,662,708
1993	10,221,615	2,257,141	2,916,782	158	18,461	24,787	5,173,923
1994	16,617,114[5]	3,733,534	3,331,851	151	22,065	25,661	7,065,385

[1] Through 1985, data includes salmon setnet, salmon hand and power troll, and halibut. Starting in 1986, data also includes blackcod.
[2] Excludes halibut, thus is salmon only (no blackcod harvest before 1984).
[3] Hand troll only; no power troll data, or no power trolling done.
[4] Excludes blackcod landings of 178,000 lbs in 1984 and 52,000 lbs in 1985, by non-local boats.
[5] Includes blackcod landings to ports other than Yakutat.

Table 4. Harvest of chinook salmon in the Yakutat area troll fishery by fishing period, 1994

Week	Ending Date	Hand Boats	Hand Catch	Power Boats	Power Catch	Total Boats	Total Catch
1-16	4/16	4	87	1	2	5	89
27	7/02	5	49	6	1,332	11	1,381
28	7/09	14	130	9	1,149	23	1,279
29-35	8/27	Not	Open				
36	9/03	26	27	105	1,787	132	1,814
37-41	10/8	Not	Open				
Totals		41	293	145	4,270	186	4,572

Table 5. Harvest of coho salmon in the Yakutat area troll fishery by fishing period, 1994.

Week	Ending Date	Hand Boats	Hand Catch	Power Boats	Power Catch	Total Boats	Total Catch
27	7/02	5	4	6	823	11	827
28	7/09	14	201	9	759	23	960
29	7/16	13	1,888	6	6,984	19	8,872
30	7/23	12	2,826	5	2,059	17	4,885
31	7/30	17	2,974	7	3,348	24	6,322
32	8/06	29	5,177	16	18,080	45	23,257
33	8/13	28	5,005	31	44,614	59	49,619
34	8/20	29	6,126	42	52,258	71	58,384
35	8/27	29	4,696	79	103,495	108	108,191
36	9/03	26	6,839	105	96,416	131	103,255
37	9/10	28	5,271	52	33,320	80	38,591
38	9/17	7	292	18	9,598	25	9,890
39	9/24	*	*	*	*	*	*
40	10/1	0	0	*	*	*	*
Totals		41	41,310	145	375,354	186	416,664

* Fewer than three permits, all catch figures are confidential.

Table 6. Harvest comparison of chinook and coho salmon in the Yakutat area troll fishery, 1984-1994.

Year	Chinook	Coho	Total	Hand	Power	Total
1984	8,512	78,523	87,035	40	87	127
1985	8,963	199,115	208,078	58	139	197
1986	9,973	155,487	165,460	38	137	175
1987	7,552	83,257	90,809	38	126	164
1988	5,696	54,451	60,147	37	79	116
1989	5,532	134,033	139,565	34	83	117
1990	9,956	133,719	143,675	39	137	176
1991	7,277	54,807	62,084	26	62	88
1992	2,117	189,213	191,330	29	102	131
1993	15,194	270,355	285,589	29	96	125
Ave.	8,077	135,296	143,377	37	105	142
1994	4,572	416,664	421,236	41	145	186
*Deviation						
1994	-43%	+208%	+218%	+11%	+38%	+31%

* Deviation from 10-year-average.

Table 7. Harvest of salmon in the Yakutat area setnet fishery by fishing area, 1994

Area	Chinook	Sockeye	Coho	Pink	Chum	Total
Alsek	805	19,639	4,182	0	32	24,658
East	37	99,848	18,736	36	3,661	122,318
Akwe	*	*	*	*	*	*
Italio	*	*	*	*	*	*
Old Italio	*	*	*	*	*	*
Dangerous	5	3,107	302	1	4	3,419
Situk	2,656	56,007	217,129	10,454	264	286,510
Lost	31	1,178	7,565	81	3	8,858
Yakutat Bay	211	14,524	6,728	1,741	179	23,383
Manby Shore	94	8,720	41	2	8	8,865
Manby Stream	0	775	0	0	3	778
Spoon	Not Fished					
Sudden	0	915	687	0	1	1,603
Esker	0	3	4,744	0	0	4,747
Yahtse	Not Fished					
Yana	*	*	*	*	*	*
Jetty Creek	Closed					
Big River	Closed					
Kaliakh	0	0	7,611	0	2	7,613
Tsiu	0	9	64,043	0	0	64,052
Tashalich	Not fished					
Kiklukh	Not fished					
Yakataga District	Not Fished					
Totals	3,897	206,533	343,751	12,324	4,216	570,721
Troll	4,559		416,664			421,223
Catch	8,456	206,533	760,415	12,324	4,216	991,944

*Fewer than 3 permits, all catch figures are confidential.

Table 8. Ex-vessel dollar value of Yakutat fisheries to fishermen, 1994.[1]

	Salmon		
Species	Setnet	Troll (Hand)	Troll (Power)
Chinook	$ 38,812	$ 8,118	$ 113,336
Sockeye	1,186,775		
Coho	2,090,379	364,033	3,248,047
Pink	8,538		
Chum	7,346		
Total	3,331,851	372,151	3,361,383

Total Salmon	$7,065,385
Total Blackcod[2]	$8,221,790
Total Halibut	1,329,939
Total Tanner	646,471
Total Dungeness	933,226
Total Scallops	1,361,773
Total Finfish Income	$16,617,114
Total Shellfish Income	2,941,470
Total Fishing Income	19,558,584

[1] Figures used to calculate values: Setnet (chinook, 46,762 lbs @ $.83/lb; sockeye, 1,249,237 lbs @ $.95/lb; coho, 3,483,965 lbs @ $.60/lb; pink, 53,364 lbs @ $.16/lb; chum, 33,395 lbs @ $.22/lb); Troll (chinook, 71,443 lbs @ $1.70/lb; coho, 3,344,519 lbs @ $1.08/lb). Halibut, 718,886 lbs @ $1.85/lb; Blackcod, 4,110,895 lbs @ $2.00/lb; Dungeness crab, 777,688 lbs @ $1.20/lb; Scallops, 236,830 lbs @ $5.75/lb; Tanner crab, 375,126 lbs @ $1.75/lb.

[2] Includes poundage delivered to ports other than Yakutat.

Table 9. Harvest of salmon in the Alsek River set gillnet fishery by fishing period, 1994 and 5-year catch comparison.

Week	Ending Date	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
24	6/11	23	316	1,034	0	0	0	1,350	1.0
25	6/18	27	194	1,073	0	0	0	1,267	1.0
26	6/25	26	62	886	0	0	0	948	1.0
27	7/02	26	76	3,138	0	0	1	3,215	2.0
28	7/09	28	12	4,655	0	0	0	4,667	3.0
29	7/16	11	45	1,833	1	0	0	1,879	3.0
30	7/23	7	1	2,377	0	0	1	2,379	3.0
31	7/30	6	21	1,171	1	0	4	1,197	4.0
32-34	8/20	6	77	3,192	61	0	7	3,337	12.0
35-36	9/03	6	0	211	277	0	5	493	8.0
37	9/10	5	0	51	914	0	4	969	5.5
38	9/17	5	1	13	1,268	0	1	1,283	5.5
39	9/24	7	0	5	1,312	0	9	1,326	4.0
40	10/1	3	0	0	348	0	0	348	4.0
41	10/8	Not	Fished						4.0
Totals		28	805	19,639	4,182	0	32	24,658	61.0

5-Year Comparison

Year	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
1989	28	240	13,513	5,833	3	1,029	20,618	38.0
1990	25	78	16,852	1,437	0	495	18,862	38.0
1991	21	103	17,552	5.956	0	103	23,704	49.0
1992	26	301	19,310	3,310	1	136	23,058	46.0
1993	30	300	20,043	1,215	0	49	21,607	31.0
Ave.	26	204	17,454	3,550	1	362	21,570	41.0
1994	28	805	19,639	4,182	0	32	24,658	61.0
*Deviation								
1994	+4%	+295%	+13%	+18%	-100%	-91%	+14%	+49%

* Deviation from 5-year-average.

Table 10. Alsek River and Klukshu River Weir escapement, 1994.

Date	Area	Sockeye	Coho	Remarks
7/25	Tanis # 1	50		None seen in Tanis # 2
7/30	Tanis # 1	225		None seen in Tanis # 2
8/14	Tanis # 1	600		None seen in Tanis # 2
8/24	Tanis # 1	260		
8/24	Tanis # 2	130		
9/30	Cabin Creek		360	
9/30	Basin Creek	250		Survey followed flood conditions
9/30	Tanis # 1		390	
9/30	Tanis # 2		225	

Klukshu Weir[1]

Chinook	Sockeye	Coho	Total
3,727	15,038	1,232	19,997

[1] A food and sport fishery harvest of 99 chinook and 1,146 sockeye above the weir, deducted from the weir counts, leaves an effective escapement of 3,628 chinook and 13,892 sockeye. The weir was removed prior to the end of the coho run.

Table 11. Harvest of salmon in the East River set gillnet fishery by fishing period, 1994, and 5-year catch comparison.

Week	Ending Date	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
27	7/02	23	5	61	0	0	1	67	1.0
28	7/09	23	7	368	0	0	0	375	1.0
29	7/16	25	14	4,549	4	0	3	4,570	3.0
30	7/23	29	3	3,928	2	0	13	3,946	3.0
31	7/30	48	7	17,365	96	0	37	17,505	4.0
32	8/06	63	0	30,230	167	11	173	30,581	5.0
33	8/13	66	1	16,694	152	18	138	17,002	5.0
34	8/20	45	0	10,704	418	5	291	22,122	4.0
35	8/27	25	0	7,483	1,795	2	429	9,709	4.0
36	9/03	24	0	6,447	7,140	0	1,552	15,139	4.0
37	9/10	14	0	1,660	5,720	0	769	8,149	5.5
38	9/17	11	0	303	2,712	0	220	3,235	7.0
39+42	10/15	6	0	56	531	0	35	622	13.5
40-41		Not	Fished						14.0
Totals		66	37	99,848	18,736	36	3,661	122,318	74.0

5-Year Comparison

Year	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
1989	92	43	145,516	7,287	678	13,724	167,248	43.0
1990	103	45	161,378	7,482	352	4,578	174,015	36.0
1991	79	49	45,334	3,857	2	2,196	51,438	30.0
1992	62	7	144,300	21,550	6	6,838	172,701	44.0
1993	84	13	189,207	4,529	25	3,423	197,197	48.0
Ave.	84	31	137,147	8,941	213	6,151	152,520	40.2
1994	66	37	99,848	18,736	36	3,661	122,318	74.0
*Deviation								
1994	-21%	+19%	-27%	+110%	-83%	-40%	-20%	+84%

* Deviation from 5-year-average.

Table 12. Harvest of sockeye salmon in the inriver, surf, and ocean East River fisheries, 1994.

Week	Ending Date	Area	Sockeye Catch	% Sockeye Catch
30	7/23	Inriver	3,073	78.2
		Surf	855	21.8
		Ocean	Not Fished	
31	7/30	Inriver	8,896	51.2
		Surf	6,080	35.0
		Ocean	2,389	13.8
32	8/06	Inriver	17,062	56.4
		Surf	4,287	14.2
		Ocean	8,881	29.4
33	8/13	Inriver	6,585	39.4
		Surf	3,122	18.7
		Ocean	6,987	41.9
34	8/20	Inriver	4,944	46.2
		Surf	3,505	32.7
		Ocean	2,255	21.1
Totals [1]		Inriver	58,552	58.6
		Surf	20,784	20.8
		Ocean	20,512	20.6

[1] Totals include catches from weeks not listed in this table.

Table 13. East River escapement, 1994.

Date	Sockeye	Coho	Remarks
6/04	500		None seen in Doame River
6/07	2,000		
6/12	2,300		400 in Doame River
6/19	800		Survey incomplete due to weather
6/22	400		Very poor visibility
6/26	700		2,900 in Doame River
6/28	700		
7/04	1,200		
7/06	700		Very poor visibility
7/11	5,500		250 below markers
7/12	5,200		
7/14	1,600		Doame River survey
7/20	6,100		400 below markers
7/25	10,500		
7/27	11,850		300 below markers
7/30	20,000		5,500 below markers
8/03	21,250		
8/08	28,000		
8/10	27,340		
8/14	24,000		Wind on water, poor visibility
8/24	29,700		
8/29	32,400		
9/06	32,400		
9/07	32,000		6,000 mixed coho and chum
9/30		4,000	4,700 coho in Doame River

Table 14. East River return-per-spawner since 1975.

Year	Total Return	Parent-Year Escapement	Return Per Spawner	Rank
1976	79,816	10,000	7.98	1
1993	234,207	30,000	7.81	2
1982	177,785	25,000	7.11	3
1985	245,851	35,000	7.02	4
1992	187,300	38,000	4.93	5
1983	147,204	30,000	4.91	6
1990	203,378	44,000	4.62	7
1977	61,309	15,000	4.08	8
1984	68,023	18,000	3.78	9
1975	44,530	12,000	3.71	10
1979	81,262	22,000	3.69	11
1988	99,483	29,000	3.43	12
1994	131,848	42,000	3.14	13
1989	175,516	60,000	2.93	14
1987	167,723	65,000	2.58	15
1991	75,334	34,000	2.22	16
1981	82,365	40,000	2.06	17
1978	56,003	35,000	1.60	18
1986	120,355	80,000	1.50	19
1980	66,530	50,000	1.33	20

Average return-per-spawner since 1975: 4.02:1

Table 15. Akwe River escapement, 1994.

Date	Sockeye	Chinook	Coho	Remarks
6/04		1		Poor visibility
6/07		12		Poor visibility
6/13		12		
6/19				None seen
6/26				None seen
6/28				200 seen intertidal
7/04				None seen
9/07			3,300	

Table 16. Italio River and Italio Lake escapement, 1994.

Date	Area	Sockeye	Coho	Pink	Remarks
6/12	New Italio	50			Intertidal
6/26	New Italio	550			
7/04	New Italio	900			
7/06	New Italio	450			Plus 900 intertidal
7/11	New Italio				225 intertidal
7/12	New Italio	2,000			
7/25	New Italio	1,890			Poor visibility
7/25	Italio Lake	40			Poor visibility
8/03	New Italio	2,300			Plus 150 intertidal
8/10	New Italio	2,425			
8/10	Italio Lake	125			
8/14	Italio Lake				None seen
9/30	New Italio		1,600		
9/30	Old Italio		2,100		
9/30	Middle Italio				High winds, no survey

Table 17. Harvest of salmon in the Dangerous River set gillnet fishery, 1994, and 5-year catch comparison.

Week	Ending Date	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
26-29	7/16	Not	fished						10.0
25+30	7/23	3	2	164	0	0	0	164	5.0
31-32	8/06	5	1	804	0	0	0	805	5.5
33	8/13	3	1	589	0	0	0	590	3.0
34	8/20	3	0	856	0	0	1	857	3.0
35-36	9/03	4	1	689	20	1	3	714	6.0
37-40	10/1	3	0	5	282	0	0	0	16.0
41-42	10/15	Not	Fished						9.0
Totals		7	5	3,107	302	1	4	2,419	57.5

5-Year Comparison

Year	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
1989/90	5	0	1,832	875	2	7	2,716	95.0
1991/92	4	104	2,444	23	1	1	2,573	96.5
1993	5	6	1,655	869	13	8	2,551	50.5
Ave.	3	22	1,186	353	3	3	1,568	48.4
1994	7	5	3,107	302	1	4	2,419	57.5
*Deviation								
1994	+133%	-77%	+162%	-14%	-77%	+33%	+54%	+18%

* Deviation from 5-year-average.

Table 18. Harvest of salmon in the Situk-Ahrnklin Inlet set gillnet fishery, 1994, and 5-year catch comparison.

Week	Ending Date	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
25	6/18	34	2	1,496	0	1	0	1,499	1.0
26	6/25	53	142	4,896	22	2	2	5,064	3.5
27	7/02	59	855	4,456	44	5	8	5,368	3.5
28	7/09	57	866	6,626	45	12	9	7,558	4.5
29	7/16	54	475	10,144	61	174	2	10,856	4.5
30	7/23	53	248	8,990	71	436	13	9,758	5.5
31	7/30	44	53	8,729	104	3,636	22	12,544	6.75
32	8/06	29	10	5,025	505	3,719	101	9,360	7.0
33	8/13	17	2	1,696	580	1,723	24	4,025	6.5
34	8/20	32	1	1,814	6,334	703	31	8,883	3.0
35	8/27	63	1	640	21,302	15	20	21,978	3.5
36	9/03	76	1	1,088	68,930	2	18	70,039	7.0
37	9/10	90	0	79	65,052	26	11	65,168	7.0
38	9/17	78	0	321	32,334	0	2	32,657	7.0
39	9/25	50	0	1	6,949	0	0	6,950	7.0
40	10/1	51	0	6	12,935	0	0	12,941	7.0
41	10/8	16	0	0	1,279	0	1	1,280	7.0
42	10/15	11	0	0	582	0	0	582	6.5
Totals		90	2,656	56,007	217,129	10,454	264	286,510	97.75

5-Year Comparison

Year	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
1989	94	1	99,945	39,318	42,974	883	183,071	73.75
1990	60	0	90,735	45,075	23,895	283	159,988	74.08
1991	87	786	120,074	89,434	2,534	186	213,014	72.0
1992	96	1,504	105,154	133,957	13,552	389	254,556	74.75
1993	78	789	104,024	136,910	8,757	433	250,938	69.0
Ave.	83	616	103,986	88,939	18,342	435	212,313	72.7
1994	90	2,656	56,007	217,129	10,454	264	286,510	97.75
*Deviation								
1994	+8%	+331%	-46%	+144%	-43%	-39%	+35%	+35%

* Deviation from 5-year-average.

Table 19. Ex-vessel value of Situk-Ahrnklin set gillnet fishery, 1975 -1994.

Year	Yakutat Setnet Income	Situk Setnet Income	Percent Value of Situk
1975	$ 713,860	$ 256,760	36%
1976	1,214,550	485,680	40%
1977	2,065,055	890,630	43%
1978	3,066,120	767,690	25%
1979	3,239,000	715,280	22%
1980	2,090,750	419,070	20%
1981	2,333,300	612,050	26%
1982	2,084,140	372,000	18%
1983	1,355,470	205,750	15%
1984	2,375,790	575,120	24%
1985	3,010,580	524,560	17%
1986	1,981,807	180,677	9%
1987	5,077,589	1,248,984	25%
1988	8,944,228	2,601,441	29%
1989	4,174,510	1,244,788	30%
1990	4,493,681	1,189,260	26%
1991	2,248,558	1,183,752	53%
1992	5,236,718	2,063,143	39%
1993	2,916,782	1,192,148	41%
Ave.	3,085,394	880,462	28%
1994	3,331,851	1,686,803	51%
*Deviation			
1994	+8%	+92%	+82%

* Deviation from average.

Table 20. Dollar value of salmon harvest in the Situk-Ahrnklin set gillnet fishery, 1975-1994.[1]

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
1975	$ 7,000	$ 128,000	$ 114,560	$ 7,000	$ 4	$ 256,760
1976	24,000	345,300	108,000	8,300	80	485,680
1977	21,000	588,560	255,530	25,230	310	890,630
1978	10,000	333,150	417,270	7,140	126	767,690
1979	29,560	430,350	223,950	31,200	220	715,280
1980	22,540	155,130	218,190	23,100	106	419,070
1981	25,000	237,710	308,270	40,440	625	612,050
1982	5,610	170,940	191,240	3,800	410	372,000
1983	4,830	101,000	96,300	3,300	315	205,750
1984	12,310	50,740	498,530	10,640	2,400	575,120
1985	11,330	122,770	385,000	4,750	710	524,560
1986	3,276	59,771	116,648	688	294	180,677
1987	23,908	755,662	454,035	9,682	5,394	1,248,984
1988	10,350	1,018,060	1,522,176	40,223	10,632	2,601,441
1989	No Sale	899,505	283,090	58,445	3,748	1,244,788
1990	No Sale	816,615	352,937	18,638	1,070	1,189,260
1991	12,071	651,684	518,138	1,399	460	1,183,752
1992	29,404	929,241	1,093,096	9,816	1,586	2,063,143
1993	11,553	503,262	669,648	6,479	1,206	1,192,148
1994	27,336	309,766	1,342,174	7,102	425	1,686,803

[1] (Average price/lb) x (average lb/fish) x (total fish delivered)

Table 21. Situk Weir escapement counts, 1994.

Chinook [1]	Sockeye	Coho	Pink	Chum	Total
4,332	72,472	4	79,055	3	155,866

[1] Includes 1,312 large, 1,461 two ocean, 1,559 one ocean fish.

Table 22. Situk-Ahrnklin escapement surveys, 1994.

Date	Area	Sockeye	Pink	Coho	Remarks
6/10	Situk River	650			11 chinook, weir to landing
6/13	Situk River	325			12 chinook, weir to landing
6/19	Situk River	1,100			Intertidal
6/26	Situk River	700			Intertidal
6/26	Ahrnklin/Antlen Rivers				Poor visibility, none seen
6/28	Situk River	500			Intertidal
7/04	Situk River				Intertidal, poor visibility
7/04	Ahrnklin/Antlen Rivers				Poor visibility, jumpers seen
7/11	Situk River	2,900			Intertidal
7/11	Ahrnklin/Antlen Rivers	1,500			At confluence
7/14	Ahrnklin/Antlen Rivers	1,115			Boat and foot survey at confluence
7/30	Situk River	4,500			Mt. Lake to Nine Mile Bridge
8/25	Situk River			4,580	Nine Mile Bridge to landing
8/31	Situk River			12,180	Nine Mile Bridge to landing
9/13	Situk River			21,960	Nine Mile Bridge to landing
10/9	Chet's Creek			250	Ahrnklin trib. at 18 mile, FH 10

Table 23. Harvest of salmon in the Lost River set gillnet fishery by fishing period, 1994, and 5-year catch comparison.

Week	Ending Date	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
26-29	7/16	4	31	884	0	12	2	929	15.0
30	7/23	Not	Fished						4.5
31-34	8/20	3	0	224	249	69	0	542	13.5
35-36	9/03	3	0	51	1,280	0	1	1,332	7.0
37	9/10	6	0	15	3,320	0	0	3,335	5.5
38	9/17	4	0	3	792	0	0	795	7.0
39	9/24	4	0	1	707	0	0	708	7.0
40	10/1	4	0	0	1,217	0	0	1,217	7.0
41-42	10/15	Not	Fished						13.5
Totals		6	31	1,178	7,565	81	3	8,858	80.0

5-Year Comparison

Year	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
1989	4	15	3,090	5,737	816	20	9,678	56.5
1990	4	0	3,093	4,922	218	5	8,238	58.5
1991	5	21	2,789	3,621	7	3	6,441	54.5
1992	5	20	3,170	10,244	33	1	13,468	59.5
1993	6	17	3,999	9,310	47	17	13,390	59.0
Ave.	5	15	3,228	6,767	224	9	10,243	57.6
1994	6	31	1,178	7,565	81	3	8,858	80.0
*Deviation								
1994	+20%	+106%	-64%	+12%	-64%	-67%	-14%	+39%

* Deviation from 5-year-average.

Table 24. Lost River escapement, 1994.

Date	Area	Sockeye	Coho	Remarks
7/25	Tawah Creek	875		
8/03	Tawah Creek	125		Poor visibility
8/08	Tawah Creek	200		Under REL Bridge
8/10	Tawah Creek	350		Poor visibility
8/11	Tawah Creek	3,300		REL bridge to Lost River
9/13	Tawah Creek	1,660	4,640	REL Bridge to Lost River
9/26	Tawah Creek		6,000	Summit Lake to REL Bridge
10/31	Ophir Creek	3,452	5,565	Private survey[1]
11/1	Ophir Creek	521	352	Private survey[2]

[1] Survey conducted for City of Yakutat by Craig Swanson, former ADF&G Technician, during Ophir Creek rehabilitation project.
[2] City of Yakutat survey, fish seen in small tributary 600 meters upstream from the mouth of Ophir Creek.

Table 25. Harvest of salmon in the Yakutat Bay set gillnet fishery by fishing period, 1994, and 5-year catch comparison.

Week	Ending Date	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
25	6/18	22	37	1,238	15	0	41	1,331	2.5
26	6/25	21	53	2,287	6	1	24	2,371	2.5
27	7/02	21	26	2,415	26	9	40	2,516	3.5
28	7/09	24	47	3,351	31	20	12	3,463	4.5
29	7/16	14	27	630	226	30	16	929	4.5
30	7/23	21	17	3,109	1,113	740	16	4,995	4.5
31	7/30	11	4	725	108	465	9	1,311	3.5
32	8/06	3	0	63	11	198	0	272	3.0
33-34	8/20	3	0	275	56	277	8	616	6.0
35	8/28	6	0	94	332	1	1	428	3.0
36	9/03	3	0	106	1,147	0	1	1,254	5.5
37	9/10	8	0	176	2,096	0	5	2,277	7.0
38-42	10/15	7	0	55	1,561	0	6	1,622	34.5
40-41		Not	Fished						
Totals		24	211	14,524	6,728	1,741	179	23,383	84.5

5-Year Comparison

Year	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
1989	47	297	24,528	4,712	14,299	309	44,145	69.0
1990	42	304	41,858	5,472	6,178	359	54,171	62.75
1991	38	392	28,581	5,296	506	397	35,172	57.5
1992	32	147	31,706	6,567	4,866	236	43,522	58.5
1993	25	148	19,176	4,398	1,054	72	24,848	61.5
Ave.	37	258	29,170	5,289	5,381	275	40,372	61.9
1994	24	211	14,524	6,728	1,741	179	23,383	84.5
*Deviation								
1994	-35%	-18%	-50%	+27%	-68%	-35%	-42%	+37%

* Deviation from 5-year-average.

Table 26. Yakutat Bay area escapement, 1994.

Date	Area	Pink	Remarks
7/30	Humpback Creek	3,000	Intertidal
9/02	Humpback Creek	11,000	Intertidal

Table 27. Harvest of salmon in the Manby Shore Ocean and Streams set gillnet fisheries by fishing periods, 1994, and 5-year catch comparison.

Week	Ending Date	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
26	6/25	7	42	166	0	0	0	208	2.5
27	7/02	5	27	1,238	2	0	0	1,267	3.5
28	7/09	12	16	5,612	7	0	7	5,642	4.5
29	7/16	22	9	2,479	32	2	5	2,527	4.5
30-31	7/30	3	0	549	1	0	0	550	5.0
32-33	8/13	3	0	364	2	0	0	366	6.0
34-36	9/03	Not	Fished						9.0
37	9/10	5	0	2	1,164	0	1	1,168	4.0
38-39	9/24	5	0	3	4,264	0	0	4,267	12.5
40-42	10/15	Not	Fished						20.5
Totals		22	94	10,413	5,472	2	13	15,994	72.0

5-Year Comparison

Year	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
1989	25	33	33,078	7,150	47	6	40,304	51.5
1990	18	44	25,666	16,295	3	41	42,049	54.5
1991	9	30	10,971	5,609	0	26	16,636	50.5
1992	16	5	4,983	8,112	7	5	13,112	51.0
1993	6	6	3,873	5,349	3	22	9,253	54.0
Ave.	15	24	15,714	8,503	12	20	24,270	52.3
1994	22	94	10,413	5,472	2	13	15,994	72.0
*Deviation								
1994	+47%	+292%	-34%	-36%	-83%	-35%	-34%	+38%

* Deviation from 5-year-average.

Table 28. Harvest of salmon in the Manby Shore Ocean set gillnet fishery by fishing period, 1994, and 5-year catch comparison.

Week	Ending Date	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
26	6/25	7	42	166	0	0	0	208	2.5
27	7/02	5	27	1,238	2	0	0	1,267	3.5
28	7/09	8	16	4,837	7	0	4	4,864	4.5
29	7/16	22	9	2,479	32	2	5	2,527	4.5
30	7/23	Not	Fished						4.5
Totals		22	94	8,720	41	2	9	8,866	19.5

5-Year Comparison

Year	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days[1]
1989	21	23	30,370	8	22	2	30,425	24.0
1990	17	44	20,465	65	3	33	20,610	27.5
1991	9	30	8,413	24	0	26	8,493	21.0
1992	16	5	4,526	2	7	4	4,544	21.0
1993	6	6	3,634	266	3	22	3,931	20.5
Ave.	14	22	13,482	73	7	17	13,601	22.8
1994	22	94	8,720	41	2	9	8,866	19.5
*Deviation								
1994	+57%	+327%	-35%	-44%	-71%	-47%	-35%	-14%

* Deviation from 5-year-average.

[1] Days open to fishing are through Statistical Week 30.

Table 29. Harvest of salmon in the Manby Stream set gillnet fishery, 1994, and 5-year catch comparison.

Year	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days*/
1989	7	0	8	2,627	25	3	2,663	17.0
1990	3	0	1	4,783	0	0	4,784	18.0
1991	3	0	0	2,313	0	0	2,313	18.0
1992	4	0	122	3,795	0	1	3,918	18.0
1993	Not	Fished						18.0
Ave.	3	0	25	2,704	5	1	2,736	17.8
1994	4	0	775	0	0	3	778	25.5
*Deviation								
1994	+33%		+3,000%	-100%	-100%	+200%	-72%	+43%

* Deviation from 5-year-average.

Table 30. Harvest of salmon in the combined Esker Creek, Spoon River, and Sudden Stream set gillnet fisheries, 1994, and 5-year catch comparison.

Year	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days[1]
1989	4	0	13	4,263	0	1	4,277	17.0
1990	4	0	10	11,393	0	0	11,403	19.0
1991	5	0	0	3,272	0	0	3,272	19.0
1992	5	0	335	4,315	0	0	4,650	18.0
1993	5	0	239	5,083	0	0	5,322	19.0
Ave.	5	0	119	5,665	0	0	5,784	18.4
1994	8	0	918	5,431	0	1	6,350	25.5
*Deviation								
1994	+60%		+671%	-4%		+100%	+10%	+39%

* Deviation from 5-year-average.

[1]Days open to fishing for Statistical Weeks 34-39.

Table 31. Manby streams escapement, 1994.

Date	Area	Coho	Remarks
8/21	Manby Stream		None seen
9/02	Manby Stream	20	Poor visibility
9/02	Sudden Stream	21	Poor visibility
9/02	Esker Creek	80	
9/13	Esker Creek	1,500	Poor visibility
9/13	Manby Stream		None seen
9/30	Manby Stream	4,000	
9/30	Spoon River	150	

Table 32. Yana River to Icy Bay escapement, 1994.

Date	Area	Coho	Remarks
8/21	Yana River		None seen
8/21	Jetty Creek		None seen
8/21	Yahtse River		None seen
9/02	Yahtse River		None seen
9/02	Yana River		None seen
9/02	Jetty Creek	50	
9/02	Big River	450	
9/02	Riou Creek	260	
9/08	Jetty Creek	150	
9/08	Big River		None seen
9/13	Yana River	1,000	Finning seen in glacial water
9/13	Yahtse River	600	Poor visibility
9/30	Big River	200	
9/30	Jetty Creek	4,000	
9/30	Yana River	1,000	
9/30	Yahtse River	400	

Table 33. Harvest comparison of coho salmon in the Yakutat and Yakataga Districts, 1984-1994.

Year	Yakutat District	Yakataga District	Total	% Yakataga
1984	118,279	64,441	182,720	35%
1985	114,924	87,242	202,166	43%
1986	61,258	30,026	91,284	33%
1987	73,807	52,296	126,103	41%
1988	136,634	69,232	205,866	34%
1989	92,970	83,877	176,847	47%
1990	100,088	48,802	148,890	33%
1991	123,519	42,861	166,380	25%
1992	193,148	97,195	290,343	33%
1993	171,425	66,124	237,549	28%
Ave.	118,605	64,210	182,814	35%
1994	272,907	71,654	343,751	21%
*Deviation				
1994	+130%	+12%	+88%	-40%

* Deviation from 10-year-average.

Table 34. Harvest of salmon in the Kaliakh River set gillnet fishery by fishing period, 1994, and 5-year catch comparison.

Week	Ending Date	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
25-34	8/20	Not	fished						24.0
35	8/27	3	0	0	1,215	0	2	1,217	3.0
36	9/03	9	0	0	4,986	0	0	4,986	3.0
37	9/10	3	0	0	1,000	0	0	1,000	5.63
38	9/17	3	0	0	410	0	0	410	7.0
39-42	10/15	Not	Fished						27.5
Totals		9	0	0	7,611	0	2	7,613	70.13

5-Year Comparison

Year	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days[1]
1989	11	0	0	16,858	0	0	16,858	25.35
1990	18	0	7	13,775	0	3	13,785	20.0
1991	7	0	0	4,379	0	0	4,379	25.0
1992	6	0	0	4,138	0	0	4,138	25.0
1993	8	0	0	7,980	0	1	7,981	25.0
Ave.	10	0	1	9,426	0	1	9,428	24.1
1994	9	0	0	7,611	0	2	7,613	46.13
*Deviation								
1994	-10%		-100%	-19%		+100%	-19%	+91%

* Deviation from 5-year-average.

[1] For 5-year comparison, days are for coho season only.

Table 35. Kaliakh River coho salmon, 1994.

Date	Area	Coho	Remarks
9/06	Kulthieth River	1,200	Finning and jumping in Kaliakh
9/30	Kulthieth River	5,200	600 seen in Hope Creek

Table 36. Harvest of salmon in the Tsiu River set gillnet fishery by fishing period, 1994, and 5-year catch comparison.

Week	Ending Date	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
35	8/27	23	0	3	11,088	0	0	11,091	2.0
36	9/03	25	0	6	29,264	0	0	29,270	3.0
37	9/10	17	0	0	13,146	0	0	13,146	3.0
38	9/17	7	0	0	2,176	0	0	2,176	5.63
39	9/24	5	0	0	1,845	0	0	1,845	7.0
40	10/1	5	0	0	6,524	0	0	6,524	7.0
41-42	10/15	Not	Fished						13.5
Totals		25	0	9	64,043	0	0	64,052	41.13

5-Year Comparison

Year	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
1989	24	0	41	62,939	2	0	62,982	18.75
1990	29	0	31	33,785	2	0	33,818	10.0
1991	23	0	0	38,195	0	1	38,196	21.1
1992	23	0	57	92,343	0	1	92,401	25.0
1993	22	1	20	56,736	0	0	56,757	20.0
Ave.	24	0	30	56,800	1	0	56,831	19.0
1994	25	0	9	64,043	0	0	64,052	41.13
*Deviation								
1994	+4%		-70%	+13%	-100%		+13%	+116%

* Deviation from 5-year-average.

Table 37. Tsiu and Tsivat Rivers coho salmon escapement, 1994.

Date	Below markers/Tsiu	Above markers/Tsiu	Tsivat	Remarks
8/21	3,500	1,500		Poor visibility
8/25	2,250	1,500		Poor visibility
8/31		4,500		Survey above markers
9/04	4,600	7,800		
9/06	5,000	13,000	300	250 sockeye in Tsivat
9/13	3,900	12,500		Poor visibility
9/30	4,000	46,000	5,000	Most bound for Tsivat

Table 38. Yakutat subsistence salmon harvest, 1994.

Location[1]	Chinook	Sockeye	Coho	Pink	Chum	Other	Total
Alsek (6)	60	47	20	0	0	0	127
East (3)	0	335	0	0	0	0	335
Akwe (3)	23	62	0	0	0	0	85
Yakutat Bay (25)	260	202	48	0	90	0	600
Situk (76)	308	3,418	1,312	2	12	0	5,052
Tsiu (1)	0	0	30	0	0	0	30
Ophir (0)	0	0	0	0	0	0	0
Ankau (1)	0	0	100	30	0	0	130
Lost (2)	5	25	7	0	0	0	37
Tawah Creek (2)	0	0	77	0	0	0	77
Ahrnklin (5)	44	185	245	0	0	0	474
Esker (1)	0	0	250	0	0	0	250
Yana (1)	0	0	80	0	0	0	80
Italio (0)	0	0	0	0	0	0	0
Sudden (2)	0	282	0	0	0	0	282
Totals	700	4,586	2,169	32	102	0	7,589

Number of permits issued	128	
Number of permits returned	123	96%
Number of permittees that fished	96	
Number of permittees that did not fish	27	

[1] Number in parenthesis shows number of permits reporting harvest from that area. Some permits reported catch from more than one area.

Table 39. Yakutat historical subsistence salmon harvest, 1980-1994[1].

	Chinook			Sockeye			Coho			Other
Year	A[2]	B[3]	C[4]	A	B	C	A	B	C	
1980	284	?	?	961	?	?	982	?	?	
1981	167	?	?	952	?	?	1,701	?	?	
1982	198	?	?	1,645	?	?	2,180	?	?	
1983	188	?	?	1,175	?	?	360	?	?	
1984	233	56%	416	890	56%	1,598	572	56%	1,021	
1985	230	52%	442	1,003	52%	1,929	59	7%	843	
1986	301	88%	342	2,357	88%	2,678	586	89%	658	92 pinks
1987	372	92%	404	3,598	92%	3,911	883	80%	1,104	
1988	196	90%	218	2,119	90%	2,354	1,293	92%	1,405	99 pinks; 64 chums
1989	284	79%	359	3,537	79%	4,477	894	79%	1,131	220 pinks; 49 chums
1990	355	75%	473	3,152	75%	4,202	784	75%	1,045	1 pink; 16 chums
1991	375	99%	379	4,030	99%	4,071	2,222	99%	2,244	32 chums
1992	549	99%	553	5,469	99%	5,513	3,645	99%	3,674	37 pinks; 12 chum
1993	449	100%	449	5,073	100%	5,073	2,263	100%	2,263	1 chum
Ave.	299		404	2,569		3,580	1,316		1,538	
1994	700	96%	745	4,586	96%	4,777	2,169	96%	2,259	
*Deviation										
1994			+84%			+33%			+47%	

*Deviation from 9-year-average.

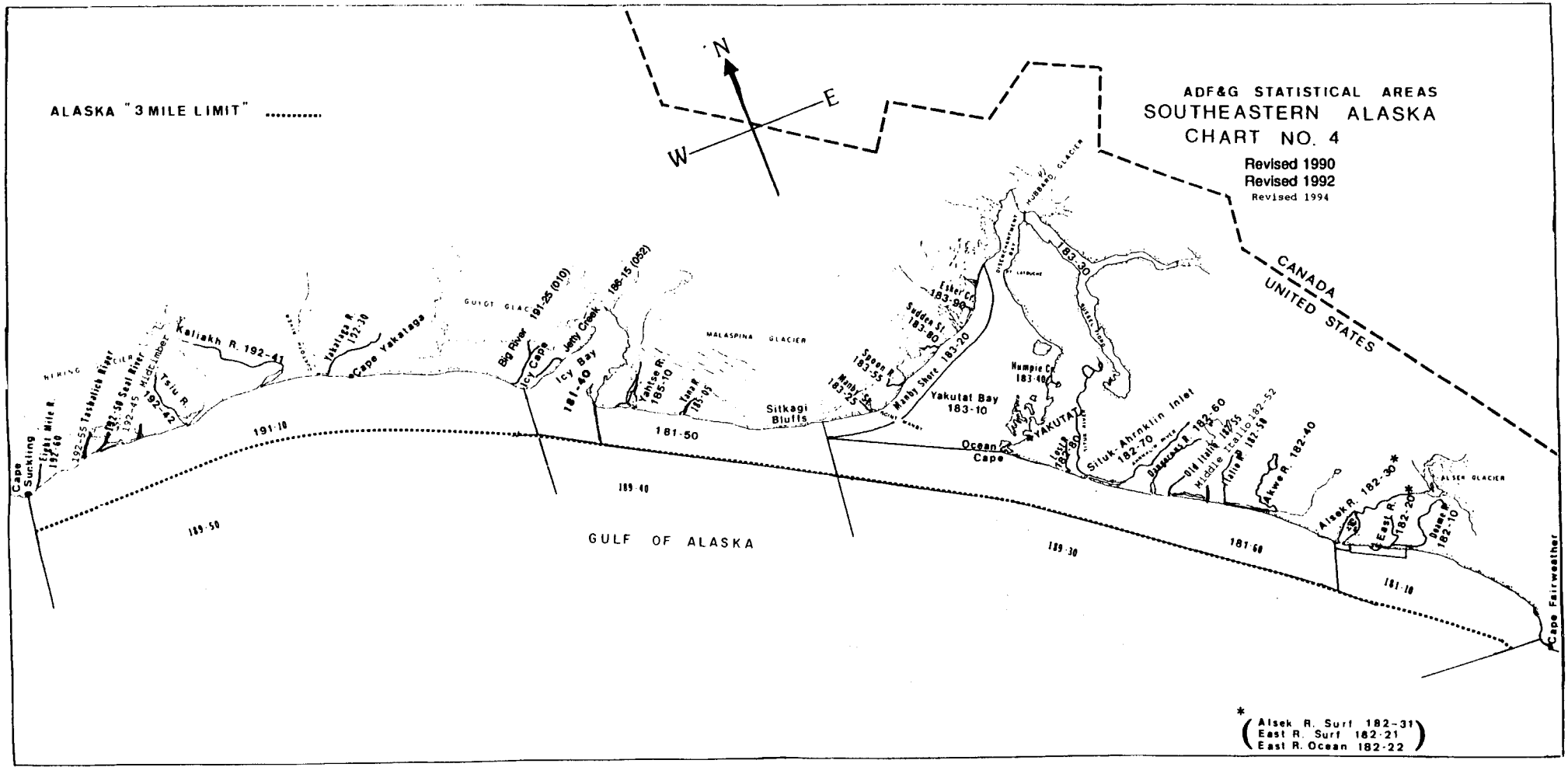
[1]Data available only for years starting in 1980.

[2]A=Actual recorded harvest.

[3]B=Percent of permits returned.

[4]C=Extrapolated total harvest estimate; (i.e. C = A divided by B).

Figure 1. Yakutat area map - Area D.



1994 Yakutat Area Troll Closures

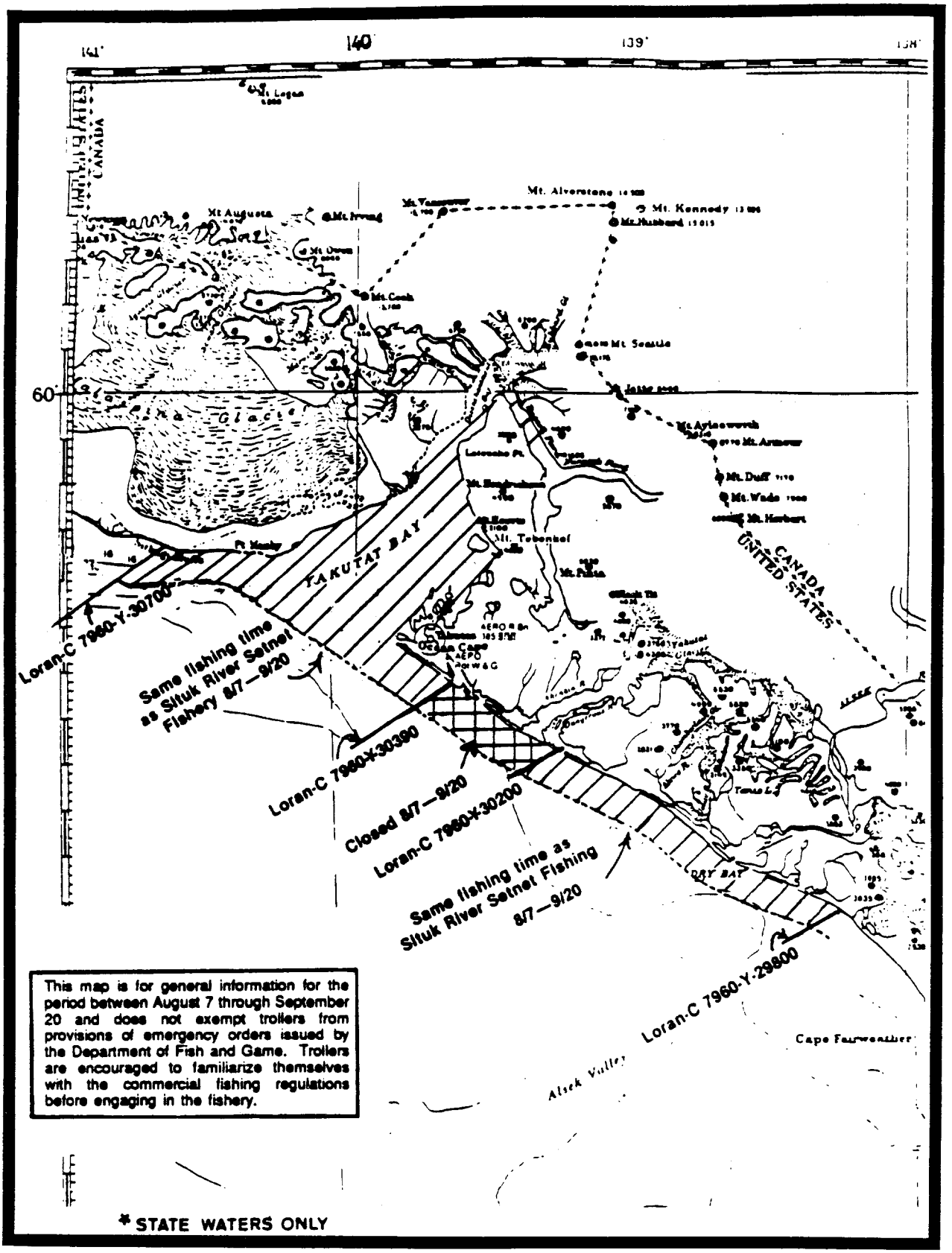


Figure 2. Yakutat area troll closures.

SECTION 4

SOUTHEAST ALASKA/YAKUTAT SALMON TROLL FISHERIES, 1994

REPORT TO THE BOARD OF FISHERIES

SOUTHEAST ALASKA-YAKUTAT SALMON TROLL FISHERIES, 1994

By

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Commercial Fisheries Management and Development Division
Juneau, Alaska

January 1996

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ACKNOWLEDGEMENTS

Dave Gaudet was the Troll Management Biologists for Southeast Alaska. Pattie Skannes assisted with aerial surveys, compiling Fisheries Performance Data, report writing, and public relations. Glen Oliver, Red Weller, Cathy Robinson, Demarie Wood, Craig Farrington, Cleo Klemzak, and Iris Frank assisted with the collection of fisheries performance data. Phyllis Kluting edited and entered fish tickets. Phil Doherty, Scott Walker, Don House, Bryan Lynch, and William Bergman assisted with aerial surveys.

ABSTRACT

A preliminary total of 4,942,700 salmon of all species were caught in the 1994 Southeast Alaska troll fishery. The catch included 186,200 chinook, 3,461,700 coho, 942,700 pink, 330,400 chum, and 21,800 sockeye salmon; landed by 810 power troll and 553 hand troll permits. Of this, 541,700 salmon (11%) were taken by hand troll gear and 4,401,00 salmon (89%) by power troll gear. The harvest of chinook salmon was the third smallest, and the coho harvest the largest, since statehood. The Alaskan chinook hatchery contribution to the troll fishery was 12,200 fish (7%). A total of 503,500 coho salmon produced by Alaskan hatcheries were harvested by the troll fleet, which accounted for 15% of the total troll coho catch. Chinook escapements for most Southeast Alaska rivers were generally at or below established goals. Chinook escapements to the Stikine and Taku Rivers remained strong. Coho escapements were generally strong and well distributed.

INTRODUCTION

This report describes the troll fishery management actions taken by the Alaska Department of Fish and Game (department) and reports preliminary salmon catches by the troll fleet for the 1994 Southeast Alaska troll season. Data on stock status, escapement, and hatchery contribution of species important to the troll fishery are presented along with a discussion of current fishery management problems.

DESCRIPTION OF THE TROLL FISHERY

The commercial troll fishery in Southeast Alaska and Yakutat (Region 1) occurs in State of Alaska waters and in the Federal Exclusive Economic Zone (EEZ) east of the longitude of Cape Suckling (Figure 1). The EEZ waters are those more than three miles west of the coastline. All other waters of Alaska are closed to commercial trolling.

The commercial troll fishery primarily harvests chinook and coho salmon. Other species of salmon harvested by trollers are considered incidental, although targeting of pink and chum salmon has increased in recent years. Historically, the troll fishery harvested about 90% of the chinook salmon taken in all Southeast Alaska commercial fisheries combined. Since 1980, the percentage of the total chinook harvest taken by the troll fishery has declined due to all-gear catch ceilings and allocation objectives specified by the Alaska Board of Fisheries (BOF). Historically, the troll fleet harvested 50-75% of the coho salmon taken in Southeast Alaska commercial fisheries. Since 1989, the troll fleet has been managed so as to harvest, on average, 61% of the commercial coho commercial catch. Pink and chum salmon were targeted primarily in the Cross Sound experimental fishery, and chum salmon were targeted in the approach to Deep Inlet release site in Sitka Sound. The troll fleet also harvests halibut, lingcod and rockfish, which are limited by time, area, and size restrictions.

Commercial trolling for chinook salmon occurs during two seasons. The winter troll season occurs from October 1 through April 14, and is conducted primarily in inside waters. The summer season occurs from April 15 through September 30, and is divided into three fisheries: 1) experimental fishery; 2) terminal fishery; and 3) general summer fishery. The experimental fisheries are intended to increase the harvest of Alaskan hatchery-produced chinook salmon, and occur near the hatchery release areas or along migration paths of hatchery-returning fish. Terminal fisheries target specific Alaskan hatchery stocks, and occur in waters in immediate proximity to hatchery release sites. The general summer fishery is the traditional troll fishery that has occurred in Southeast Alaska waters since the late 1800s, and targets a multitude of chinook salmon stocks. A fourth fishery, the hatchery access fishery, was eliminated by the Alaska Board of Fisheries in 1994, in order to provide more fishing opportunity during the general summer troll season.

A quota on the number of non-Alaskan hatchery chinook salmon is set yearly under the US/Canada Pacific Salmon Treaty (PST), with time and area openings set by the department in accordance with the BOF. In

addition, since 1993 the State has had to obtain an "Incidental Take Statement" (IST) from the National Marine Fisheries Service (NMFS). This statement allows for the incidental taking of the Snake River fall chinook salmon (SRFC), which is listed as "Threatened" under the Endangered Species Act (ESA). The troll season for coho salmon runs from June 15 through September 30, with no seasonal restrictions for other species of salmon.

The commercial troll fleet is comprised of two types of gear: hand troll and power troll. Vessels using hand troll gear are limited to two lines on hand-operated gurdies or four sport fishing poles. Although more permits are available compared with power troll gear, hand trollers take a smaller portion of the catch. Vessels using power troll gear are generally larger than those using hand troll gear and are limited to four lines on power operated gurdies, except within the EEZ north of the latitude of Cape Spencer, where six lines may be used.

STOCK DESCRIPTION AND STATUS

Chinook Salmon Stocks

Native chinook salmon stocks occur throughout Southeast Alaska and Yakutat, primarily in the large mainland rivers and their tributaries. In total, 34 rivers in the region are known to produce runs of chinook salmon. The most important are the Alsek, Taku, Stikine, Chilkat, and the Behm Canal Rivers (Unuk, Chickamin, Blossom and Keta Rivers). The three major systems - the Alsek, Taku, and Stikine rivers - are also "transboundary" rivers, originating in Canada and flowing through Alaska to the sea. Portions of the Unuk, Chickamin, and Chilkat Rivers are also in Canada. Shared ownership and coordinated management of the transboundary stocks are addressed by the Pacific Salmon Commission (PSC) under the terms of the PST.

Southeast Alaska chinook salmon stocks are all "spring type," entering spawning streams during spring and early summer months. Fry emerge the following spring, and most remain in freshwater rearing areas for at least 1-year before migrating seaward the following spring. For most Southeast Alaska origin chinook, ocean residency may last 2, 3, or 4 years. Several age classes of mature spawners and immature chinook salmon are harvested by trollers during the fishing season.

Current information indicates that the majority of chinook salmon harvested in the Southeast Alaska troll fishery are produced from spawning streams and hatcheries in the Pacific Northwest and Canada. This information is based on age structure analysis, coded wire tagging studies, and general productivity considerations. Management of intermingling chinook salmon stocks is coordinated through the PSC.

Historical Catches of Chinook Salmon

Chinook salmon catches in Southeast Alaska are currently lower than historical levels (Figure 2). Annual commercial all-gear catches during the past 10-years have averaged about 231,000 chinook salmon. This has been primarily due to a harvest ceiling imposed by the North Pacific Fishery Management Council (NPFMC) and the BOF through 1985, the BOF and PST through 1992, and by the BOF and NMFS in 1993 and 1994. This is considerably lower than harvest levels between 1920 and 1950, when catches averaged 540,000 fish. The harvest ceiling was implemented both as part of a 15-year rebuilding program for Southeast Alaska chinook stocks, and as part of coastwide conservation actions taken for depressed non-Alaskan chinook stocks that contribute to the Southeast Alaska fisheries. The decline in abundance was primarily the result of coastwide over-fishing of natural chinook stocks and the loss of freshwater spawning and rearing habitat. Although an abundance of chinook stocks harvested by the Southeast Alaska fisheries has generally increased since the rebuilding program began in 1981, some stocks remained depressed. In the Pacific Northwest particularly, the construction of dams on the Columbia River has drastically reduced salmon production, leading to a NMFS imposed Southeast Alaska harvest limit for all gears of 240,000 chinook salmon in 1994 to protect the threatened SRFC run.

Coho Salmon Stocks

Coho salmon occur in more than 2,000 streams in Southeast Alaska. Most coho streams are small, with the number of spawners typically ranging from several up to 1,000 fish. Because of the number of these systems, they collectively contribute a substantial portion of overall production. Lake systems are also important, and typically produce returns between 1,000 and 8,000 fish. Large populations occur in the Taku, Chilkat, Berners, Stikine, Unuk, and Chickamin Rivers and in most Yakutat systems. Spawning takes place during the fall and early winter months. Most coho salmon rear in freshwater for two years, and virtually all spend no more than one winter in the ocean before returning. The majority are 4-year-old fish and are caught in the year of spawning. Coho harvested by Southeast Alaska trollers are primarily of Alaska origin.

Historical Catches of Coho Salmon

The highest average decade all-gear catch of coho salmon occurred during the 1940s (Figure 3). A decline in average catch occurred during the next three decades, with a low decade average of 1,000,000 fish in the 1970s. During the 1980s, the average all-gear commercial coho salmon catch was 1,900,000 fish. This nearly equaled the decade high of 2,000,000 yearly average of the 1940s. Since 1990, the average coho catch has exceeded 3,000,000 fish. This increase likely resulted from unusually mild winters and better spawning escapement levels under more conservative management regimes implemented in 1980. Increased

catches were also attributed to more intensive fishing in highly mixed stock areas, increased targeting during chinook non-retention periods, and contributions from hatchery production.

SUMMARY OF 1994 SEASON

A total of 4,942,700 salmon of all species were harvested by the troll fleet (Table 1). Hand troll vessels harvested 541,700 fish, and power troll vessels harvested 4,401,000 fish (Tables 2 and 3). This overall record catch, the highest since statehood, was due to a record catch of coho salmon and strong catches of pink and chum salmon.

Fishing Effort

In 1994, the Alaska Commercial Fisheries Entry Commission (CFEC) issued 1,079 power troll permits and 1,357 hand troll permits. Preliminary estimates indicated that 810 power troll gear units and 553 hand troll gear units were actually fished (Table 4). Hand troll permit holders accounted for about 11.0% of the 1994 chinook troll catch and about 13.0% of the coho troll catch.

The number of power troll permits fished has remained relatively stable since 1977, with effort ranging from 750 in 1977, to a high of 857 in 1989. When limited entry was imminent for the hand troll fishery in the late 1970s, the number of hand troll permits doubled from approximately 1,100 actively fished permits in 1975 to a high of 2,624 permits in 1978. Due to this increased effort, the CFEC initiated a selective limited entry regime for the hand troll fishery in 1980. This plan provided for a portion (1,346 permits) of the 2,150 limited entry hand troll permits issued to be non-transferable. Hand troll effort has slowly reduced as participants have left the fishery.

Chinook Salmon Fishery

The 1994 troll chinook fishery was managed to: 1) comply with provisions of the PST regarding chinook catch ceilings and minimization of incidental mortalities, 2) continue the Southeast Alaska natural chinook rebuilding program, 3) harvest a total of 180,400 treaty chinook salmon, and 4) provide maximum harvest of Alaska hatchery-produced chinook salmon.

Since implementation of the PST, troll chinook catches had remained relatively stable until 1990, when an additional quota increase of 39,000 chinook salmon over previous years, and a record Alaska hatchery add-on combined to produce a harvest of 287,400 fish (Figure 4). In 1992, the troll fishery was required to make up a cumulative all-gear overage from previous years, resulting in the lowest chinook harvest ever (Table 5).

The chinook Annex of the PST expired following the 1992 season, and the PST negotiations ended without an agreement for chinook salmon in both 1993 and 1994. Consequently, the NMFS North West Region entered into consultation with the NPFMC over management of Southeast Alaska chinook salmon fisheries, specifically to reduce impact on the SRFC. The department submitted biological assessments of the Southeast chinook salmon fishery and its effect upon the SRFC. The department found that the Southeast Alaska fisheries impact upon the SRFC was insignificant. The NMFS rejected this assessment and required a reduction in the number of chinook salmon harvested. The department responded with further assessments of the fisheries impact that were intended to minimize the impacts required by NMFS. Following the consultation, the NMFS issued a Biological Opinion that limited the total all-gear catch of chinook salmon to 240,000 treaty fish.

Consequently, the 1994 chinook salmon all-gear fishery was managed for a ceiling of 240,000 fish. In addition, although no annex was formally signed, the fishery was managed to comply with previous PST protocol as follows: the base catch was calculated by subtracting the "add-on" (Alaskan hatchery produced chinook minus pre-Treaty production and a risk factor), and (2) a management range of ± 7.5% for accumulation of overages and underages beginning in 1987. The all-gear catch (hatchery cost recovery not included) was approximately 262,500 chinook salmon. The commercial catch was 221,900 fish (84.5%), and the recreational harvest 40,600 fish (15.5%, Table 6). A hatchery harvest of 37,800 fish was calculated (31,000 fish add-on). The total commercial harvest of chinook salmon included a troll harvest of 186,200 fish, a purse seine harvest of 14,800 fish greater than 5 lbs, a drift gillnet harvest of 16,700 fish, a set gillnet harvest of 3,900 fish, and a commercial all-gear catch of 230 fish in the Annette Island Reserve.

Winter Season

The 1994 winter troll season began October 11, 1993, and continued through April 14, 1994. The open area during the 1993-1994 winter season was restricted to those areas of Southeast Alaska lying east of the surfline (except in Sitka Sound where the line was modified to follow LORAN lines), portions of District 16 north of Cape Spencer, and the waters of Yakutat Bay. All outer coastal areas, including the EEZ, were closed during the winter fishery. The new BOF management plan adopted in January 1994, changed the open area boundaries for the winter fishery in order to slow the winter season harvest rate of chinook salmon.

Approximately 56,400 (30%) of the 1994 troll chinook catch was harvested during the 1993-1994 winter season (Table 7, Figure 5). This catch, the fourth largest winter catch on record, was included in the all-gear catch ceiling. In 1994, the BOF adopted a catch ceiling of 45,000 chinook salmon for the winter troll season, which will be in place beginning with the 1995 winter fishery.

Experimental Fisheries

In 1994, experimental troll fisheries were conducted a minimum of two days per week in twelve near-terminal hatchery areas (Figure 6). Some fisheries started in late May, and all were open by the second

week in June. The purpose of all (except the Cross Sound fishery, which is designed to take chum and pink salmon) was to increase the take of Alaska-origin hatchery chinook salmon. These areas were adjacent to the Little Port Walter Hatchery (NMFS), Whitman Lake Hatchery, and Carroll Inlet release site (Southern Southeast Regional Aquaculture Association, SSRAA), Crystal Lake Hatchery (ADF&G), Earl West Cove Release Site (SSRAA/ADF&G), and Medvejie Hatchery (Northern Southeast Aquaculture Association, NSRAA). Fishing time was increased in areas showing high Alaska hatchery catch percentages.

Between 57-314 boats participated each week in the 1994 experimental fisheries, and harvested 11,267 chinook salmon (Table 8). The highest catches were in the Silver Bay area, followed by the Cape Fanshaw area. Catches were highest in Statistical Week 26, followed by week 25. Approximately 204 chinook salmon were harvested in the chum and pink salmon experimental troll fishery in the Cross Sound area (District 114).

Terminal Fisheries

Terminal fishery areas contributed only 100 chinook salmon to the overall chinook troll catch in 1994 (Table 8).

Hatchery Access Fisheries

In January 1994, the BOF eliminated the hatchery access fishery to provide more fishing opportunity for chinook salmon during the general summer troll season.

General Summer Season

The general summer season troll harvest target was determined by subtracting the base catches in the winter and June troll fisheries. Five percent of this total was added for the expected Alaska hatchery contribution.

Since 1984, the catch and Alaskan hatchery add-on have been monitored inseason by the department's fisheries performance data program (FPD). This consists of confidential interviews with trollers to obtain detailed catch per unit effort (CPUE, in numbers of fish per fishing day) data and an inspection of troll catches for coded wire tags (CWT). CWTs are shipped expeditiously to the tag lab in Juneau and the data is returned to management within 2-weeks of landing. Total catch is estimated by combining vessel counts obtained during weekly overflights with the CPUE obtained from the interviews.

In 1994, a relatively low number of chinook salmon remained under the quota (approx. 124,000 fish) after the winter and experimental fisheries, and a high abundance of chinook salmon was expected. Therefore, the troll fishery was open for a set period of 7-days (July 1-7), with a resulting harvest of 98,200 chinook salmon (14,000 fish per day) (Table 9, Figure 7). With 25,800 chinook salmon remaining under the quota, another 5-days of chinook fishing were allowed from August 29-September 2. The total numbers of days

open for chinook retention in 1994 was 12 (Table 10, Figure 8) Because at least seventy percent of the remaining quota for the general summer season was harvested during the initial opening, areas of high chinook salmon abundance (described in 5AAC 33.312(c)(1)-(5), Figure 9) were closed to slow down the harvest rate as prescribed by the management plan adopted by the BOF for 1994. The catch during the second opening was 20,200 chinook salmon (5,000 fish per day). With less than 5,000 fish remaining on the 1994 quota, another chinook salmon opening was not warranted, and chinook non-retention remained in effect until the closure of the summer troll season on September 30.

Chinook salmon non-retention (CNR) was implemented for a total of 80 days in 1994, from July 8 through August 28 (52 days), and from September 3 through September 30 (28 days, Table 10, Figure 8). Areas of high chinook salmon abundance were again closed to all fishing during CNR periods to reduce hook and release mortality (Figure 9).

Coinciding with the decrease in chinook retention (CR) periods has been a decrease in troll effort (Table 10). Effort declined from 76,750 boat days in 1981 to 6,400 boat days in 1994. Conversely, effort during CNR periods has increased from 3,500 boat days in 1981 to 35,700 boat days in 1994. Effort data was derived from dockside interviews of trolling vessels in conjunction with catch and effort data from troll fish tickets. This data will be published as an ADF&G Regional Information Report in 1995 (John K. Carlile, ADF&G, personal communication).

Coho Salmon Fishery

General regulatory dates for the troll coho salmon season are June 15 through September 20, with an extension through September 30, if warranted by coho abundance that is surplus to escapement requirements. The major portion of the coho catch normally occurs from mid-July through early September. Coho troll catches generally peak between late July and mid-August, while catches in inside gillnet fisheries peak approximately one month later. Migrations into spawning streams generally peak in late September (Figure 10).

Southeast Alaska coho fisheries are managed on assessed inseason run strength and are regulated to achieve conservation objectives and allocation policies established by the BOF. There are no harvest ceilings for Southeast Alaska coho fisheries.

Retention of coho salmon began by regulation on June 15, during chinook experimental and terminal fishery openings. Catches of coho by week are shown in Figure 11 and Table 11.

During the 1970s, troll effort and coho catch increased in the outer coastal areas (Figure 12). Beginning in 1980, the BOF provided for fishing closures to maintain historical allocation balance to inside fisheries and to ensure adequate escapements. The 1994 coho salmon management plan provided for a 7-day closure for conservation in late July if an assessment of run strength indicated a total all-gear harvest of less than 1,120,000 fish (80% of the 1980 to 1988 average catch). Furthermore, a 10-day closure could occur if

escapements to inside areas were projected to be inadequate, or if the proportional share of coho harvest by the troll fishery was larger than that of inside gillnet and recreational fisheries compared to average 1971-80 levels.

An assessment completed on July 22 indicated a projected total commercial harvest well above the 1.12 million fish guideline, and no closure of the troll fishery was necessary for conservation. In early August, an assessment indicated that only a limited closure of 5-days was required for allocation. Immediately following a news release of the closure, NMFS notified the department that it was reinitiating consultation on the chinook harvest. The department then canceled the troll closure until the matter could be settled. An assessment following this, indicated that the abundance of coho salmon continued to build, and that no closure was necessary for coho salmon conservation. A 2-day closure was announced for late August in order to restart the chinook salmon fishery. Finally, the coho salmon season was extended for 10-days, and closed on September 30.

The 1994 troll coho salmon harvest of 3,461,700 fish (preliminary) was the highest since the fishery began 100 years ago, and follows the previous record harvest of 2,395,000 fish in 1993 (Figure 13). Since 1989, the troll share of the commercial coho harvest has averaged 64% (Table 12).

Other Species

A total of 21,800 sockeye, 942,700 pink, and 330,400 chum salmon were harvested during the 1994 troll season (Table 1). These catches of sockeye, chum, and pink ranked 4th, 2nd, and 2nd, respectively, since statehood. Catches in the experimental fishery 1994 totaled 122,400 pink, 18,900 chum, 1,500 sockeye and 1,700 coho salmon (Table 8).

EEZ Catches

In 1994, approximately 5.9% (10,300 fish) of the chinook catch and 7.4% (254,900 fish) of the coho catch by the troll fishery was reported taken outside of State waters, in the Exclusive Economic Zone (EEZ). The EEZ is composed of Districts 150, 152, 154, 156, 157 and 189. In addition, 1,600 sockeye, 2,700 pink and 1,400 chum salmon were taken in the EEZ.

ALASKA HATCHERY PRODUCTION

State, federal and private hatcheries produce both chinook and coho salmon that are caught by the troll fleet. Hatchery-produced chinook salmon began appearing in significant numbers in troll catches in 1980, when

State, federal and private hatcheries produce both chinook and coho salmon that are caught by the troll fleet. Hatchery-produced chinook salmon began appearing in significant numbers in troll catches in 1980, when an estimated 5,900 fish where harvested. Alaskan hatchery contributions increased through 1991, when they contributed 36,500 chinook salmon to the troll catch and comprised 14% of the total chinook harvest (Table 13, Figure 14). Since 1993, the Alaska hatchery contribution to the chinook troll harvest has declined to an estimated 25,000 fish in 1992, 17,800 fish in 1993, and 12,200 fish in 1994. Alaskan hatcheries contributed 2,000 (3%) chinook salmon to the 1993-1994 winter fishery. A total of 4,900 (44% of the total) Alaskan hatchery-produced chinook salmon were caught in the 1994 experimental fishery. In the general summer fishery, a total of 5,300 (5%) chinook salmon were contributed by Alaskan hatcheries. The hatchery access fishery was canceled in 1994 to comply with the Incidental Take Statement (ITS).

Hatchery-produced coho salmon were first documented in the troll catch in 1980. Total and proportional contributions increased annually until 1986, when 286,200 hatchery-produced coho salmon contributed 13% of the total troll coho salmon catch. Hatchery contribution declined during 1987-1989, but increased again to a record high 1994. The proportional contribution of hatchery stocks has been greatest when wild stocks were abundant, and lowest when wild stocks were weak. Hatcheries contributed an estimated 516,900 coho salmon (15%) to the total troll catch in 1994, with Alaska hatcheries producing 97% (503,500 fish) of the total coho salmon hatchery-produced harvest (Table 14, Figure 15).

ESCAPEMENTS

Chinook Salmon Escapements

The department began a 15-year chinook salmon rebuilding program in 1981. 1994 is the next to the last year of this program. During this period, the department continued to estimate the escapement on 11 indicator systems. These escapements were measured against goals established prior to 1985. In general, these goals were set as the largest escapement seen prior to 1981. As a part of the rebuilding program, the department also conducted code wire tagging studies, improved escapement estimation methods and sampled age and sex data in the escapement in order to collect data that would, when included with escapement data, allow the use of Spawner Recruit analytical methods to set Maximum Sustained Yield (MSY) escapement goals.

Since the program was established, MSY escapement goals have been established for 5 of the 11 systems (Situk, and the Behm Canal systems: Unuk, Chickamin, Blossom, and Keta). Establishment of Spawner Recruit MSY goals indicated that the Unuk and Keta were within the ranges of desired escapement prior to the rebuilding program, while the Blossom and Chickamin were below desired escapements. Over the last 10-years, of the 5 systems with evaluated escapement goals, the Situk has consistently been above the lower range in all years (Table 16). In Behm Canal, escapements to the Unuk and the Keta have consistently been above the lower range (8 out of 10-years in the Unuk and 9 out of 10 in the Keta), and

and 3-years on the Chickamin, but have been above the point estimate in the Chickamin in 6 out of the last 10-years and on the Blossom, 5 out of the last 10-years.

Escapement numbers in all of these streams has increased during the rebuilding period (since 1980). The department expects that the goals for these will be developed soon. Reliable data for the Chilkat has only been collected since 1991. Alternative methods for establishing a goal for this system are being investigated.

Coho Salmon Escapements

Escapement Assessment

Only a very small percentage of the coho salmon escapements in Southeast Alaska are enumerated or surveyed because of the extremely scattered distribution of stocks and difficult conditions for observation of spawners during the fall months. In 1994, weirs were operated on only three lake systems, while foot or aerial surveys were conducted on another 68 streams. An adult tagging program was used to estimate the escapement of coho salmon to the Taku and Berners rivers.

Variations in environmental conditions and run timing can cause serious problems in obtaining ground and aerial surveys that reflect actual spawner abundance. High water events appear to trigger spawning but also adversely affect stream visibility and, therefore, make it difficult or impossible to accurately count fish. Once spawning occurs, stream life is typically very short and post-spawners are quickly removed by predators or flushed downstream by high water. Survey counts are usually higher when fall weather is dry and fish continue to accumulate in streams before spawning occurs. Low peak counts are often associated with seasons when numerous protracted freshets occur in October that bring fish to the spawning areas and then flush out the post-spawners, while at the same time severely limiting survey opportunities. Improved precision can be obtained by conducting multiple surveys throughout the fall. This is feasible for some systems such as those for the Juneau roadside streams, but is more difficult and expensive for remote streams such as the major coho producing systems in southern Southeast Alaska.

Escapement

Fishery harvest, CPUE, and hatchery contributions indicated that the 1994 wild coho salmon return was the largest on record. Total run estimates for four indicator stocks showed the same magnitude of increase compared with recent years (Figure 17). Abundance was well distributed throughout the region. Escapements were well above goal for all four systems (Table 16) and appeared to be strong in surveyed systems throughout the region.

Inriver runs and escapements in the Yakutat area were overall, extremely strong. The set gillnet harvest set an all-time record of 343,800 fish despite only limited effort on some of the more remote systems. The

record total harvest of 217,100 fish in the Situk River set gillnet fishery was six times the 1960-1993 average harvest of 36,500 fish. The escapement goal was exceeded by the end of August, and the fishery was opened on a continuous basis for the remainder of the season. A total of 64,135 fish were caught in the other of the two largest producing systems, the Tsiu River. However, effort was very limited due to market problems and the peak escapement count of 51,000 fish in the Tsiu greatly exceeded the goal range of 10,000 to 29,000 spawners.

In the northern inside area, a record harvest of 188,500 coho salmon was taken in the Taku-Snettisham gillnet fishery while an additional 14,500 fish were harvested in the Canadian Taku River fishery. Despite liberal gill net openings and high harvests, the escapement estimate of 117,600 fish (excluding inriver catch) above the border on the Taku River was second only to the 1991 estimate of 127,500. The Berners River in Lynn Canal produced a peak escapement count of 15,900 spawners, which was a record for the fifth consecutive year. The new record escapement occurred despite a record gillnet harvest of 140,800 fish in District 115, and fall fishery openings in Berners Bay for the first time since the early 1960s. Escapements to Juneau roadside systems were also very strong. The total escapement count of 1,253 fish to Auke Creek was the highest since the weir was installed in 1980, and was 46% above the 1980-1993 average of 700 fish.

Surveys in Sitka Sound and the weir count at Ford Arm Lake on west Chichagof Island indicated very strong escapements on the outer coast of northern southeast. The Ford Arm weir count of 3,200 spawners was lower than 1992 and 1993 escapements of 3,800 and 4,200 fish, respectively, but was 22% above the 1982-1993 average.

Limited surveys in the Petersburg area indicated strong escapements to central southeast streams, including the Stikine River.

Survey index streams in the Ketchikan area had the largest overall escapement since intensive surveys were first initiated in 1987. The 1994 combined count of 10,500 fish in District 101 streams was 53% above the 1987-1993 average of 6,600 fish.

COHO SALMON HARVEST RATES

Coded wire tagging studies conducted since the early 1980s have provided annual harvest rate estimates for four coho salmon stocks. These stocks include; Auke Creek near Juneau, the Berners River in lower Lynn Canal, Ford Arm Lake on the outer coast north of Sitka, and Hugh Smith Lake on the mainland southeast of Ketchikan. Fish are tagged in these systems and their contribution to the fisheries is estimated through the department's catch sampling and coded wire tag processing programs. Weirs are operated on the three lake systems where escapements are enumerated and sampled for tags. The Berners River escapement is intensively surveyed and sampled. Escapement estimates for the Berners River are conservative since a lower river weir is not employed; therefore, resulting harvest rate estimates are likely biased upward.

Harvest rate estimates by the troll fishery and all fisheries combined are available since 1982 (Table 17; Figures 18 and 19). Total harvest rates on all stocks increased in 1994, as expected, given the extremely large return and liberal fishing season. All-gear harvest rate estimates for all four stocks during 1982-1993 averaged 60.6%, while the preliminary estimate for 1994 was 72.5%. The Alaska troll fishery accounted for only a quarter of the increase from the average, with a mean 1994 troll harvest rate on the four stocks of 45.2%, compared with the historical average of 41.9%. In addition to no mid-season coho closure in the troll fishery, fall gillnet fisheries throughout the region were allowed very liberal fishing time. Furthermore, the purse seine fishery harvested a large share, compared with recent years, because of intensive fishing on an exceptionally strong pink salmon return in northern Southeast Alaska.

CURRENT FISHERY MANAGEMENT AND STOCK ASSESSMENT ISSUES

The troll fishery has undergone many changes since 1979. During the 1970s, effort increased in the troll fishery as more vessels moved to outer coastal and offshore areas. The shift in effort had resulted in more of the harvest occurring earlier in the season as it increased the amount of time which coho stocks were available to troll gear. It also resulted in decreased abundance to the inside fisheries. Beginning in 1980, a closure was implemented to ensure the movement of coho salmon into inside areas for escapement and to ensure catch sharing for the inside fisheries. This closure occurred each year from 1980-1993, for 8-10 days. Due to the record run of coho salmon and the balance of harvest allocation among gear groups, no closure occurred in 1994. A 2-day closure of all commercial trolling did occur immediately prior to the second general summer chinook opening, as stipulated by the BOF in 1994.

For chinook salmon, directed closures of the general summer troll fishery began in 1980, when trolling for all species was closed for the last 10-days of September. In 1981, as a result of an intensive assessment of Southeast Alaska chinook escapements and production, a program to provide for conservation of these stocks was proposed. As a result, the BOF adopted a 15-year rebuilding program. This has resulted in spring closures of the troll fishery when the availability of mature Alaska spawning fish is high. These closures were complimented by accompanying reductions in the overall level of harvest. Catch ceilings were used so that savings made early in the season would not merely be offset by harvest of immature fish later in the season. Since 1981, the troll fishery has been closed from April 15 through May 14, with progressively longer delays up to July 1 in 1988.

In addition to the 1981 Alaska chinook salmon rebuilding program, a rebuilding program for Pacific coastwide stocks began under the PST in 1985. As a result of both of these programs, the abundance of chinook salmon in Southeast Alaska waters has increased, resulting in some additional problems. First, while the abundance increased, the number of days required to harvest the troll fleet's portion of chinook salmon decreased. Second, the increased portion of the troll harvest taken in the winter fishery, especially in 1992 and 1993 (the two largest on record), has resulted in decreased numbers of chinook fishing days in the general summer fishery. As a result, the number of chinook non-retention days has increased, thereby increasing incidental mortality (i.e., the number of fish that die from being hooked and released). The BOF

dealt with this in 1994 and set a winter troll season catch cap of 45,000 chinook salmon. The BOF also split the general summer season into two parts, with a goal of harvesting 70% of the yearly remaining quota beginning July 1 with all of the traditional grounds open, and the remaining 30% with areas of high chinook salmon abundance closed.

The length of the chinook salmon season also impacts the troll harvest rate on coho salmon. When the number of chinook fishing days is short, the troll fleet targets primarily on coho salmon. The department began a CWT tagging program in the late 1970s and monitored harvest rates for four coho indicator stocks. After a review of historical fishery trends along the Pacific coast and limited population studies, the department concluded that the average level of exploitation since that time (61%) is likely to be sustainable by mixed coastal coho stocks. However, more intensive sustained mixed-stock exploitation at average rates between 75% to 80% has apparently led to a serious long-term decline in British Columbia's Georgia Strait coho stocks based on trends in both catch and escapement. Current data from throughout the Pacific coast suggests that an optimum continuous harvest rate for mixed coastal coho stocks is in the range of 65% to 70%. As a management guideline, the average harvest rate on coho stocks caught primarily in highly mixed-stock fisheries was limited to an average total harvest rate of no greater than 70%. In 1994, the department developed escapement goals for four streams in Southeast Alaska and six in the Yakutat area. A comparison of past escapements with these goals shows that for the most part these goals have been met. In fact, in 1992 and 1994, all stocks in the Southeast Alaska area were above the upper end of the goal. In 1994, this occurred despite there being no closure and a 10-day extension until September 30. The department will be working to refine, to the extent possible, methods to keep the escapements within the desired levels of optimum sustained yield.

Finally, beginning in 1993 and continuing through 1994, the troll fishery underwent restrictions mandated by the NMFS to reduce impacts on the SRFC, which is listed as threatened under the Federal Endangered Species Act. Other stocks, including the Columbia River mid-river summer chinook, have also been petitioned for listing. At this time, it is unclear what future impacts will occur as a result of these listings.

Table 1. Southeast Alaska annual commercial troll salmon catches, in numbers by species, by calendar year from 1960 to 1978, from Jan. 1 to Sept. 30 1979, and by season (Oct. 1 - Sept. 30) for 1979-1980 to 1993-1994.[1]

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
1960	282,404	939	396,211	25,563	2,453	707,570
1961	204,289	1,264	399,932	19,303	2,679	627,467
1962	173,597	1,181	643,740	75,083	2,676	896,277
1963	243,679	2,014	693,050	106,939	6,230	1,051,912
1964	329,461	1,004	730,766	124,566	2,576	1,188,373
1965	258,902	1,872	695,887	81,127	6,359	1,044,147
1966	282,083	679	528,621	63,623	5,203	880,209
1967	274,678	157	443,677	57,372	7,051	782,935
1968	304,455	574	779,500	126,271	2,791	1,213,591
1969	290,168	444	388,443	83,727	1,708	764,490
1970	304,602	477	267,647	70,072	3,235	646,033
1971	311,439	929	391,279	104,557	7,602	815,806
1972	242,282	1,060	791,941	166,771	11,634	1,213,688
1973	307,806	1,222	540,125	134,586	10,460	994,199
1974	322,101	2,603	845,109	263,083	13,818	1,446,714
1975	287,342	1,098	214,170	76,882	2,784	582,276
1976	231,239	1,266	524,762	193,786	4,251	955,304
1977	271,735	5,701	506,845	281,244	11,617	1,077,142
1978	375,433	2,804	1,100,902	617,633	26,193	2,122,965
1979	334,317	7,018	918,845	629,144	24,661	1,913,985
1980	303,874	2,921	696,391	266,885	12,048	1,282,119
1981	248,791	7,476	860,792	579,524	8,680	1,705,263
1982	242,315	2,365	1,316,119	503,578	5,700	2,070,077
1983	269,790	8,018	1,276,363	498,245	20,309	2,072,725
1984	235,699	9,559	1,132,644	572,578	28,052	1,978,532
1985	216,086	7,817	1,599,773	968,151	52,908	2,844,735
1986	237,557	6,891	2,128,442	181,912	51,392	2,606,194
1987	242,667	9,727	1,041,170	487,069	12,840	1,793,473
1988	231,366	9,304	500,288	520,123	88,390	1,349,471
1989	235,943	20,199	1,415,511	1,771,472	68,994	3,512,119
1990	287,931	9,173	1,831,680	772,477	62,812	2,964,073
1991	264,044	9,887	1,719,764	426,707	28,463	2,448,865
1992	183,991	22,829	1,929,160	673,855	85,013	2,894,848
1993	226,829	25,342	2,395,060	903,242	525,779	4,076,252
1994	186,199	21,761	3,461,665	942,747	330,376	4,942,748
Average 1960 - 1994						
	264,146	5,931	1,003,036	381,997	43,935	1,699,045

[1] Includes Annette Island troll catches.

Table 2. Southeast Alaska annual commercial hand troll salmon catches, in numbers by species, by calendar year for 1975 to 1978, from Jan. 1 to Sept. 30 for 1979, and by season (Oct 1 - Sept.30) for 1979-1980 to 1993-1994.[12]

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
1975	27,995	96	40,922	28,853	541	98,407
1976	26,294	516	88,733	44,054	2,061	161,658
1977	33,176	1,740	155,813	116,776	4,143	311,648
1978	54,383	1,155	378,927	243,469	9,573	687,507
1979	57,494	2,448	244,815	281,711	7,926	594,394
1980	52,025	1,257	179,122	111,548	4,532	348,484
1981	33,892	2,171	181,422	173,517	2,582	393,584
1982	36,677	513	260,747	132,135	1,187	431,259
1983	38,635	1,574	235,685	136,656	2,777	415,327
1984	34,287	1,982	178,407	151,231	4,894	370,801
1985	33,129	1,697	260,583	256,243	9,859	561,511
1986	29,718	811	339,531	40,098	6,695	416,853
1987	29,217	2,131	183,222	135,109	3,016	352,695
1988	33,292	1,861	92,282	147,772	14,530	289,737
1989	28,781	2,441	220,254	301,431	6,578	559,485
1990	39,785	1,245	273,527	154,817	6,490	475,864
1991	40,905	1,077	239,074	72,305	3,857	357,218
1992	25,796	1,903	249,519	95,485	6,023	378,726
1993	24,042	1,668	315,539	101,696	34,505	477,450
1994	14,895	1,878	435,947	56,958	32,061	541,739
Average 1975 - 1994	34,721	1,508	227,704	139,093	8,192	411,217

[1] Includes Annette Island troll catches.

[2] Prior to 1975, hand and power troll catches were not reported separately.

Table 3. Southeast Alaska annual commercial power troll salmon catches, in numbers by species, by calendar year for 1975 to 1978, from Jan. 1 to Sept. 30 for 1979, and by season (Oct. 1 - Sept. 30) for 1979-1980 to 1993-1994.[12]

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
1975	259,347	1,002	173,248	48,029	2,243	483,869
1976	204,945	750	436,029	149,732	2,190	793,646
1977	238,559	3,961	351,032	164,468	7,474	765,494
1978	321,050	1,649	721,975	374,164	16,620	1,435,458
1979	276,823	4,570	674,030	347,419	16,735	1,319,577
1980	251,849	1,664	517,269	155,223	7,516	933,521
1981	214,899	5,305	679,370	405,799	6,098	1,311,471
1982	205,638	1,852	1,055,372	371,419	4,513	1,638,794
1983	231,155	6,444	1,040,678	361,588	17,532	1,657,397
1984	201,412	7,577	954,237	419,768	23,158	1,606,152
1985	182,957	6,120	1,339,190	711,892	43,049	2,283,208
1986	207,839	6,080	1,788,911	141,769	44,697	2,189,296
1987	213,450	7,596	857,948	351,953	9,824	1,440,771
1988	198,074	7,443	408,006	372,323	73,860	1,059,706
1989	207,162	17,758	1,195,257	1,470,037	62,416	2,952,630
1990	248,146	7,928	1,558,153	617,142	56,322	2,487,691
1991	223,139	8,810	1,480,690	354,401	24,606	2,091,646
1992	158,195	20,926	1,679,641	578,369	78,990	2,516,121
1993	202,787	23,674	2,079,521	801,524	491,274	3,598,780
1994	171,304	19,883	3,025,718	885,789	298,315	4,401,009
Average 1975 - 1994	220,937	8,050	1,100,814	454,140	64,372	1,848,312

[1] Includes Annette Island troll catches.
[2] Prior to 1975, hand and power troll catches were not reported separately.

Table 4. The number of hand and power troll permits fished in the Southeast Alaska commercial troll fishery by calendar year from 1977 to 1978, from Jan. 1 to Sept. for 1979, and by season (Oct. 1 - Sept. 30) for 1979-1980 to 1993-1994.[1]

Year	Hand Troll	Power Troll
1977	1,836	750
1978	2,624	816
1979	2,195	813
1980	1,714	848
1981	1,172	797
1982	1,185	819
1983	1,016	820
1984	875	799
1985	931	840
1986	821	834
1987	777	833
1988	802	847
1989	728	857
1990	713	842
1991	704	856
1992	661	849
1993	606	843
1994	553	810

[1] 1994 permit numbers are preliminary.

Table 5. Annual Southeast Alaska commercial and recreational chinook salmon harvests and Alaska hatchery contributions, in thousands of fish, 1965-1994.

	----- Commercial Fisheries -----					Alaska	Total
Year	Troll[1]	Net[2]	Subtotal	Recreational Fisheries[3]	Total[4]	Hatchery Harvest	Less AK Hatchery
1965	309	28	337	13	350		
1966	282	26	308	13	321		
1967	275	26	301	13	314		
1968	304	27	331	14	345		
1969	290	24	314	14	328		
Ave. 1965-69	292	26	318	13	332		
1970	305	18	323	14	337		
1971	311	23	334	15	349		
1972	242	44	286	15	301		
1973	308	36	344	16	360		
1974	322	24	346	17	363		
Ave. 1970-74	298	29	327	15	342		
1975	287	13	300	17	317		
1976	231	10	241	17	258		
1977	272	13	285	17	302		
1978	375	25	400	17	417		
1979	338	28	366	17	383		
Ave. 1975-79	301	18	318	17	335		
1980	304	20	324	20	344	7	337
1981	249	19	268	21	289	2	287
1982	242	48	290	26	316	1	315
1983	270	19	290	22	312	2	310
1984	236	32	268	22	290	5	285
Ave. 1980-84	260	28	288	22	310	3	307
1985	216	35	252	25	276	14	263
1986	238	22	260	23	283	18	265
1987	243	15	258	24	282	24	258
1988	231	21	253	26	279	30	249
1989	236	24	260	31	291	34	257
Ave. 1985-89	233	23	257	26	282	24	258
1990	288	27	315	51	367	62	305
1991	264	32	295	60	355	70	285
1992	184	31	215	44	260	45	215
1993	226	28	254	49	304	39	271
1994	186	35	221	40	270	38	232
Ave. 1990-94	230	31	260	49	311	51	262

[1] Troll catches prior to 1980 are reported by calendar year. From 1981-1990, catches are for the catch accounting year, Oct. 1 to Sept. 30.

[2] Purse seine chinook catches reported under net fisheries for 1986-91 do not include chinook less than five pounds reported on fish tickets.

[3] Estimates of recreational catches for 1965-76 based on 1977-80 average catch per capita data. Recreational catches for 1977 to 1993 based on statewide postal harvest surveys. The recreational harvest for 1994 is based on preliminary creel survey data, pending compilation of statewide postal harvest surveys.

[4] Total reported catches do not include approximately 200 to 400 chinook harvested annually by native food fisheries in several rivers.

Table 6. Estimated harvest and Alaskan hatchery add-on of chinook salmon by commercial and recreational fisheries in Southeast Alaska, 1994.

Fishery	Total Catch	Common Property Catch	Alaska Hatchery Total Contribution: General Fisheries	Terminal	Subtotal	Add-on	Base Catch
Seine[1]	14,824	10,510	1,548	4,314	5,862	4,808	10,016
Gillnet	16,733	9,732	4,576	7,001	11,577	9,495	7,238
Setnet	3,897	3,897	2	0	2	2	3,895
Total Net	35,454	24,139	6,126	11,315	17,441	14,305	21,149
Annette Island Catches							
Seine	15	15	0	0	0	0	15
Gillnet	183	183	217	0	217	178	5
Troll	32	0	0	0	0	0	0
Trap	0	0	0	0	0	0	0
Total Annette Is.	230	198	217	0	217	178	20
Winter Troll Fishery							
Oct. 1 - Dec. 31	35,193		990	0	990	812	34,381
Jan. 1 - Apr. 14	21,175		967	0	967	793	20,382
Total Winter	56,368		1,957	0	1,957	1,605	54,763
June Troll Fishery							
Experimental	11,267		4,938	0	4,938	4,050	7,217
Hatchery	0		0	0	0	0	0
Access							
Terminal	100		0	100	100	82	18
Total June	11,367		4,938	100	5,038	4,132	7,235
Summer Troll Fishery							
July 1-7	98,208		4,244	0	4,244	3,481	94,727
Aug. 29 - Sept. 3.	20,224		1,100	0	1,100	902	19,322
Total Summer	118,432		5,344	0	5,344	4,383	114,049
Totals							
Total Net	35,454						
Annette Island	230		25	0	25	21	209
Total Troll	186,167		12,264	100	12,364	10,141	176,026
Sport Fishery[2]	40,630		6,989	780	7,769	6,372	34,258
Grand Totals	262,481		25,596	12,195	37,791	30,996	231,485
		Alaska Hatchery Add-on			30,996		
		Risk Factor			1,795		

[1] Seine catches do not include chinook salmon weighing less than 5 pounds.
[2] Sport fishery totals preliminary pending results of statewide harvest survey.

Table 7. Southeast Alaska winter troll fishery vessel landings, chinook salmon catches[1], and comparison with total season chinook catches, 1980-1994.

	EARLY WINTER[2] POWER TROLL			LATE WINTER[3] POWER TROLL			EARLY WINTER HAND TROLL			LATE WINTER HAND TROLL			TOTALS		
Year	Number Chinook	Vessel Landings	Chinook per land	Number Chinook	Vessel Landings	Chinook per land	Number Chinook	Vessel Landings	Chinook per land	Number Chinook	Vessel Landings	Chinook per land	Winter Total	Percent	Annual Total
1980	2,577	171	15.1	2,486	133	18.7	1,425	357	4.0	1,210	292	4.1	7,698	2.5	303,732
1981	1,000	78	12.8	5,938	409	14.5	737	201	3.7	1,804	417	4.3	9,479	3.8	248,618
1982	3,156	217	14.5	6,083	511	11.9	1,709	318	5.4	1,500	309	4.9	12,448	5.1	242,236
1983	9,698	581	16.7	15,525	1,011	15.4	2,819	345	8.2	3,014	504	6.0	31,056	11.5	269,717
1984	11,792	825	14.3	14,780	1,393	10.6	2,431	392	6.2	2,983	620	4.8	31,986	13.6	235,444
1985	11,631	628	18.5	6,219	636	9.8	2,604	388	6.7	1,869	504	3.7	22,323	10.3	215,975
1986	13,338	746	17.9	4,934	540	9.1	3,390	454	7.5	1,203	290	4.1	22,865	9.6	237,548
1987	15,146	871	17.4	8,850	715	12.4	3,404	532	6.4	1,225	279	4.4	28,625	11.8	242,667
1988	38,243	1,568	24.4	13,488	1,299	10.4	6,531	1,058	6.2	2,076	477	4.4	60,338	26.1	231,313
1989	20,630	1,598	12.9	8,009	973	8.2	3,796	756	5.0	1,863	429	4.3	34,298	14.5	235,938
1990	15,089	754	20.0	12,975	1,020	12.7	2,525	373	6.8	2,537	456	5.6	33,126	11.5	287,897
1991	17,711	752	23.6	20,314	1,505	13.5	2,209	342	6.5	2,405	530	4.5	42,639	16.2	263,888
1992	24,793	1,376	18.0	39,790	2,071	19.2	3,484	576	6.0	3,783	607	6.2	71,850	39.1	183,990
1993	18,579	983	18.9	38,603	1,890	20.4	1,696	227	7.5	3,846	476	8.1	62,724	27.7	226,832
1994	33,462	983	34.0	19,806	1,277	15.5	1,731	149	11.6	1,369	221	6.2	56,368	30.3	186,199

[1] Catches are by troll accounting year (Oct. 1 - Sept. 30).

[2] Early winter troll = Oct.1 - Dec. 31.

[3] Late winter troll = Jan. 1 - April 14.

Table 8. The number of salmon harvested and permits fished in the 1994 experimental and terminal troll fisheries.

Experimental Areas	Dates	Days	Week	Permits	Chinook	Sockeye	Coho	Pink	Chum	Total
Gravina Island	05/31- 06/01	2	23	4	10	0	0	0	0	10
101-29	06/06- 06/07	2	24	4	39	1	0	2	5	47
	06/13- 06/14	2	25	15	111	2	9	34	77	233
	06/20- 06/21	2	26	29	138	1	130	106	200	575
	06/27- 06/28	2	27	7	17	0	18	114	21	170
Mountain Pt.	05/23- 05/24	2	22	3	22	0	0	0	0	22
101-45	05/31- 06/01	2	23	6	46	0	0	0	0	46
	06/06- 06/07	2	24	11	63	0	0	0	3	66
	06/13- 06/14	2	25	5	29	0	0	0	9	38
	06/20- 06/21	2	26	7	22	0	6	2	21	51
	06/27- 06/28	2	27	0	0	0	0	0	0	0
Ship Is. Shore	05/31- 06/01	2	23	0	0	0	0	0	0	0
102-80	06/06- 06/07	2	24	0	0	0	0	0	0	0
	06/13- 06/14	2	25	Less than 3 permits						
	06/20- 06/21	2	26	0	0	0	0	0	0	0
	06/27- 06/28	2	27	0	0	0	0	0	0	0
Steamer Pt.	05/31- 06/01	2	23	5	25	0	0	0	0	25
106-30	06/06- 06/08	3	24	5	38	0	0	0	0	38
	06/13- 06/15	3	25	9	140	0	4	0	0	144
	06/20- 06/21	2	26	14	103	0	25	4	0	132
	06/27- 06/28	2	27	4	18	0	4	0	0	22
Snow Passage	05/31- 06/01	2	23	0	0	0	0	0	0	0
106-41	06/06- 06/07	2	24	0	0	0	0	0	0	0
	06/13- 06/14	2	25	Less than 3 permits						
	06/20- 06/21	2	26	0	0	0	0	0	0	0
	06/27- 06/28	2	27	3	6	0	1	0	0	7
Baht Harbor	05/31- 06/01	2	23	Less than 3 permits						
108-30	06/06- 06/07	2	25	0	0	0	0	0	0	0
	06/13- 06/14	2	26	Less than 3 permits						
	06/20- 06/21	2	27	5	92	0	11	0	0	103
	06/27- 06/28	2	28	Less than 3 permits						
Little Port	05/31- 06/01	2	24	0	0	0	0	0	0	0
Walter	06/06- 06/07	2	25	0	0	0	0	0	0	0
109-10	06/13- 06/14	2	26	5	8	0	0	0	0	8
	06/20- 06/21	2	27	7	89	1	9	0	0	99
	06/27- 06/28	2	28	0	0	0	0	0	0	0

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Table 8. (Page 2 of 4.)

Experimental Areas	Dates	Days	Week	Permits	Chinook	Sockeye	Coho	Pink	Chum	Total
Beacon Pt.	05/31- 06/01	2	23	6	101	0	0	0	0	101
110-13	06/06- 06/08	3	24	6	62	0	0	0	1	63
	06/13- 06/15	3	25	12	136	0	0	0	1	137
	06/20- 06/21	2	26	13	130	0	0	47	2	179
	06/27- 06/28	2	27	7	62	1	1	11	0	75
Big Creek	05/23- 05/24	2	22	9	40	0	0	0	0	40
110-16	05/31- 06/01	2	23	3	38	0	0	0	0	38
	06/06- 06/08	3	24	7	145	0	0	0	0	145
	06/13- 06/15	3	25	12	251	1	2	1	3	258
	06/20- 06/21	2	26	7	119	1	0	34	1	155
	06/27- 06/28	2	27	5	72	0	24	7	1	104
Cape Fanshaw	05/31- 06/01	2	23	10	144	0	0	0	0	144
110-31	06/06- 06/07	2	24	Less than 3 permits						
	06/13- 06/15	3	25	8	152	0	0	0	0	152
	06/20- 06/21	2	26	10	170	0	3	13	1	187
	06/27- 06/28	2	27	4	103	0	13	0	2	118
Silver Bay	05/23- 05/24	2	22	45	432	0	0	0	0	432
113-35	05/31- 06/02	3	23	56	962	0	0	0	0	962
	06/06- 06/10	5	24	61	1,369	0	0	0	6	1,375
	06/13- 06/17	5	25	101	1,879	1	8	1	38	1,927
	06/20- 06/24	5	26	128	2,380	3	19	38	156	2,596
	06/27- 06/28	2	27	69	1,219	2	20	7	150	1,398
Cross Sound	06/13- 06/15	3	25	51	32	262	112	18,705	3,555	22,666
114-21	06/20- 06/22	3	26	96	100	647	412	48,475	7,018	56,652
	06/27- 06/29	3	27	94	72	597	865	54,764	7,595	63,893
Experimental Fishery			22	57	494	0	0	0	0	494
Totals by Week			23	91	1,327	0	0	0	0	1,327
			24	96	1,737	1	0	2	15	1,755
			25	218	2,782	266	135	18,743	3,683	25,609
			26	314	3,262	652	606	48,719	7,399	60,638
			27	202	1,665	601	955	54,903	7,769	65,893
		1994	**Total:**	978	11,267	1,520	1,696	122,367	18,866	155,716

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Table 8. (Page 3 of 4.)

Terminal Areas	Dates	Days	Week	Permits	Chinook	Sockeye	Coho	Pink	Chum	Total
Nakat Inlet	07/01- 07/02	2	27	0	0	0	0	0	0	0
101-10	07/03- 07/09	7	28	0	0	0	0	0	0	0
	07/10- 07/16	7	29	0	0	0	0	0	0	0
	07/17- 07/23	7	30	0	0	0	0	0	0	0
	07/24- 07/30	7	31	0	0	0	0	0	0	0
	07/31- 08/06	7	32	0	0	0	0	0	0	0
	08/07- 08/12	6	33	0	0	0	0	0	0	0
	08/14- 08/20	7	34	0	0	0	0	0	0	0
	08/21- 08/27	6	35	0	0	0	0	0	0	0
	08/28- 09/03	7	36	0	0	0	0	0	0	0
	09/04- 09/10	7	37	0	0	0	0	0	0	0
	09/11- 09/17	7	38	0	0	0	0	0	0	0
	09/18- 09/24	7	39	0	0	0	0	0	0	0
	09/25- 10/01	7	40	0	0	0	0	0	0	0
	10/02- 10/08	7	41	0	0	0	0	0	0	0
	10/09- 10/10	2	42	0	0	0	0	0	0	0
Carroll Inlet	05/18- 05/21	4	21	0	0	0	0	0	0	0
101-46	05/22- 05/28	7	22	Less than 3 permits						
	05/29- 06/04	7	23	4	4	0	0	0	0	4
	06/05- 06/11	7	24	4	3	0	0	0	0	3
	06/12- 06/18	7	25	4	3	0	0	0	3	6
	06/19- 06/25	7	26	3	2	0	0	0	0	2
	06/26- 07/02	7	27	Less than 3 permits						
	07/03- 07/09	7	28	0	0	0	0	0	0	0
	07/10- 07/16	7	29	0	0	0	0	0	0	0
	07/17- 07/23	7	30	0	0	0	0	0	0	0
	07/24- 07/30	7	31	0	0	0	0	0	0	0
	07/31- 08/06	7	32	0	0	0	0	0	0	0
	08/07- 08/12	6	33	0	0	0	0	0	0	0
	08/14- 08/20	7	34	0	0	0	0	0	0	0
	08/21- 08/26	6	35	0	0	0	0	0	0	0
	08/28- 09/03	7	36	0	0	0	0	0	0	0
	09/04- 09/10	7	37	0	0	0	0	0	0	0
	09/04- 09/10	7	37	0	0	0	0	0	0	0
	09/18- 09/24	7	39	0	0	0	0	0	0	0
	09/25- 09/30	6	40	0	0	0	0	0	0	0
Earl West Cove	06/15- 06/18	4	25	Less than 3 permits						
107-45	06/19- 06/25	7	26	0	0	0	0	0	0	0
	06/26- 07/02	7	27	0	0	0	0	0	0	0
	07/03- 07/09	7	28	0	0	0	0	0	0	0
	07/10- 07/16	7	29	0	0	0	0	0	0	0
	07/17- 07/23	7	30	Less than 3 permits						
	07/24- 07/30	7	31	0	0	0	0	0	0	0

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Table 8. (Page 4 of 4.)

Terminal Areas	Dates	Days	Week	Permits	Chinook	Sockeye	Coho	Pink	Chum	Total
Earl West Cove	07/31- 08/06	7	32	0	0	0	0	0	0	0
107-45 (cont.)	08/07- 08/12	6	33	0	0	0	0	0	0	0
	08/14- 08/20	7	34	0	0	0	0	0	0	0
	08/21- 08/26	6	35	0	0	0	0	0	0	0
	08/29- 09/03	7	36	0	0	0	0	0	0	0
	09/04- 09/10	7	37	0	0	0	0	0	0	0
	09/11- 09/17	7	38	0	0	0	0	0	0	0
	09/18- 09/24	7	39	0	0	0	0	0	0	0
	09/25- 09/30	7	40	0	0	0	0	0	0	0
	10/02- 10/08	7	41	0	0	0	0	0	0	0
	10/09- 10/10	2	42	0	0	0	0	0	0	0
Deep Inlet	07/04- 07/06	3	28	0	0	0	0	0	0	0
113-38	07/09- 07/09	1	28			Less than 3 permits				
	07/11- 07/13	3	29			Less than 3 permits				
	07/16- 07/16	1	29	0	0	0	0	0	0	0
	07/18- 07/18	1	30	0	0	0	0	0	0	0
	07/23- 07/23	1	30	0	0	0	0	0	0	0
	07/25- 07/25	1	31	0	0	0	0	0	0	0
	07/30- 07/30	1	31	0	0	0	0	0	0	0
	08/01- 08/03	3	32	0	0	0	0	0	0	0
	08/06- 08/06	1	32	0	0	0	0	0	0	0
	08/08- 08/08	1	33	0	0	0	0	0	0	0
Terminal Fishery			22			Less than 3 permits				
Totals by Week			23	4	22	0	0	0	0	22
			24	4	7	0	0	0	0	7
			25	7	41	0	0	0	8	49
			26	3	12	0	0	0	0	12
			27	1		Less than 3 permits				
			28	2		Less than 3 permits				
			29	1		Less than 3 permits				
			30	1		Less than 3 permits				
		1994 Total:		25	100	0	2	1	654	757

Table 9. Chinook salmon catch per fleet day (rounded to nearest hundred) and average cumulative catch per vessel, up to the top producing 400 troll permits fished during the first 5 days of fishing in July in the Southeast Alaska troll fishery during the general summer season, April 15-Sept. 30, from 1984-1994.[1]

Year	Fishing Period	Number of Days	Chinook Catch	Fish Per Fleet Day	Average Cum. Catch per Vessel[2]
1984	JUN 5-30	26	130,000	5,000	
	JUL 11-29	19	77,000	4,100	55.6
	COMBINED	45	207,000	4,600	
1985	JUN 3-12	10	66,000	6,600	
	JUL 1-22	22	114,000	5,200	40.1
	COMBINED	32	180,000	5,600	
1986	JUN 20 - JUL 15	26	155,000	6,000	52.4
1987	JUN 20 - JUL 12	23	209,000	9,100	67.3
1988	JUL 1-12	12	162,000	13,500	86.8
1989	JUL 1-13	13	167,000	12,800	97.2
1990	JUL 1-22	22	200,000	9,100	85.9
	AUG 23-24	2	12,000	5,900	
	COMBINED	24	212,000	8,800	
1991	JULY 1-8 (noon)	7.5	154,000	20,500	129.2
1992	JULY 1-4 (noon)	3.5	66,000	19,000	115.8
	AUG 23	1	7,000	7,000	
	COMBINED	4.5	73,000	16,200	
1993	JULY 1-6	6	101,000	17,000	92.7
	AUG 21-25	5	25,000	5,000	
	SEPT 12-20	9	19,000	2,000	
	COMBINED	20	144,000	7,200	
1994	JULY 1-7	7	98,000	14,000	87.3
	AUG 29 - SEPT 2	5	20,000	4,000	
	COMBINED	12	118,000	9,800	

[1] From 1986 to 1992, limited troll openings were allowed periodically in June in a number of near-terminal hatchery areas and/or inside fishing districts to access Alaska hatchery chinook salmon. Beginning in 1986, openings harvest coded "Experimental Fishery" (harvest code 13) were allowed in specific inside water areas to harvest chinook salmon returning to Alaska hatcheries. Beginning in 1989, in addition to the "Experimental Fishery" areas, other areas, termed "Hatchery Access" areas were identified for further exploration of harvest areas for Alaska hatchery chinook salmon. A separate harvest code for these "Hatchery Access" areas, however, was not established, and catches from these areas were simply lumped in with the "Traditional Fisheries" (code 11) harvest. In addition to the "Hatchery Access" and "Experimental Fishery" areas, "Terminal" (code 13) harvests occur in bays in the immediate vicinity of hatcheries, and target individual hatchery stocks.

[2] Average cumulative catch was calculated as the mean of the cumulative catch of chinook salmon landed the first 5-days of fishing in July by up to the top catching 400 permits each year, except for 1992, where only 4-days were fished in July. This cumulative catch formulation best predicts the overall Chinook Technical Committee (CTC) abundance index from 1979 to 1991 (R2=0.85). This cumulative catch information has also been presented as an average catch per day (i.e., the cumulative catch/5-days) in Pacific Salmon Treaty documents and ADFG publications.

Table 10. Number of days, effort (boat days), and dates the Southeast Alaska troll fishery was open [chinook retention (CR)], closed to chinook salmon fishing [(chinook non-retention (CNR)], and closed to all species (all) during the general summer season, April 15 - Sept. 30, from 1978 - 1994.

			Open Periods				Closed Periods			
Year	Days[1] Open	Days Closed	Dates Open	CR Days	CR Effort in Boat Days[2] (summer total)	Closed Periods	Number of Days	CNR Days	CNR Effort in Boat Days[2] (summer total)
1978	169	0	Apr 15- Sep-30	169		None		0	
1979	169	0	Apr 15- Sep-30	169		None		0	
1980	149	20	Apr 15- Jul-14	91		Jul-15- Jul-24	10 (all)	0	
			Jul-25- Sep-20	58		Sep-21- Sep-30	10 (all)		
1981	101	69	May 15- Jun-25	42		Apr-15- May-14	30 (all)		
			July 5- Aug-06	36		Jun-26- Jul-04	9 (all)		
			Aug 20- Sep-03	15		Aug-10- Aug-19	10 (all)		
			Sep-13- Sep-20	8	76,751	Sep-04- Sep-12	9		
						Sep-21- Sep-30	10 (all)	9	3,526
1982	65	104	May 15- Jun-06	23		Apr-15- May-14	30 (all)		
			Jun-17- Jul-28	42	53,370	Jun-07- Jun-16	10 (all)		
						Jul-29- Aug-07	10 (all)		
						Aug-08- Sep-20	44		
						Sep-21- Sep-30	10 (all)	44	32,727
1983	60	109	May 15- Jun-08	25		Apr-15- May-14	30 (all)		
			July 1- Aug-04	35	48,740	Jun-09- Jun-30	22 (all)		
						Aug-05- Aug-14	10 (all)		
						Aug-15- Sep-20	37		
						Sep-21- Sep-30	10 (all)	37	18,398

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Table 10. (Page 2 of 4.)

Year	Days[1] Open	Days Closed	Open Periods: Dates Open		CR Days	CR Effort in Boat Days[2] (summer total)	Closed Periods	Number of Days	CNR Days	CNR Effort in Boat Days[2] (summer total)
1984	45	124	June 5-	Jun-30	26		Apr-15- Jun-04	51 (all)		
			Jul-11-	Jul-29	19	33,639	Jul-01- Jul-10	10 (all)		
							Jul-30- Aug-14	16		
							Aug-15- Aug-24	10 (all)		
							Aug-25- Sep-20	27		
							Sep-21- Sep-30	10 (all)	43	29,583
1985	33.6	135.4	June 3-	Jun-12	10		Apr-15- Jun-02	49 (all)		
			July 1-	Jul-22	22		Jun-13- Jun-30	18 (all)		
			Aug 25-	Aug 26[3]	1.6	30,934	Jul-23- Aug-14	23		
							Aug-15- Aug-24	10 (all)		
							Aug-26- Sep-20	25.4		
							Sep-21- Sep-30	10 (all)	48.4	35,508
1986	41	128	Jun-20-	Jul-15	26		Apr-15- Jun-19	66 (all)		
			Aug 21-	Aug-26	6		Jul-16- Aug-10	26		
			Sept 1-	Sep-09	9	26,493	Aug-11- Aug-20	10 (all)		
							Aug-27- Aug-31	5		
							Sep-10- Sep-20	11		
							Sep-21- Sep-30	10 (all)	42	37,267
1987	23	146	Jun-20-	Jul-12	23	19,080	Apr-15- Jun-19	66 (all)		
							Jul-13- Aug-02	21		
							Aug-03- Aug-12	10 (all)		
							Aug-13- Sep-20	39		
							Sep-21- Sep-30	10 (all)	60	37,218

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Table 10. (Page 3 of 4.)

Year	Days[1] Open	Days Closed	Open Periods: Dates Open		CR Days	CR Effort in Boat Days[2] (summer total)	Closed Periods	Number of Days	CNR Days	CNR Effort in Boat Days[2] (summer total)
1988	12	157	July 1-	Jul-12	12	9,511	Apr-15- Jun-30	77 (all)		
							Jul-13- Jul-25	13		
							Jul-26- Aug-04	10 (all)		
							Aug-05- Aug-14	10		
							Aug-15- Aug-24	10 (all)		
							Aug-25- Aug-31	7		
							Sep-01- Sep-03	3 (all)		
							Sep-04- Sep-20	17		
							Sep-21- Sep-30	10 (all)	47	27,345
1989[4]	13	156	July 1-	Jul-13	13	9,584	Apr-15- Jun-30	77 (all)		
							Jul-14- Aug-13	31		
							Aug-14- Aug-23	10 (all)		
							Aug-24- Sep-20	28		
							Sep-21- Sep-30	10 (all)	59	38,429
1990[4]	24	145	July 1-	Jul-22	22		Apr-15- Jun-30	77 (all)		
			Aug 23-	Aug-24	2	17,170	Jul-23- Aug-12	21		
							Aug-13- Aug-22	10 (all)		
							Aug-25- Sep-20	27		
							Sep-21- Sep-30	10 (all)	48	29,526
1991[4]	7.5	161.5	July 1-	Jul-08	7.5	4,717	Apr-15- Jun-30	77 (all)		
							Jul-08- Aug-15	38.5		
							Aug-16- Aug-24	10 (all)		
							Aug-25- Sep-20	26		
							Sep-21- Sep-30	10 (all)	64.5	32,578

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Table 10. (Page 4 of 4.)

Year	Days[1] Open	Days Closed	Open Periods: Dates Open		CR Days	CR Effort in Boat Days[2] (summer total)	Closed Periods	Number of Days	CNR Days	CNR Effort in Boat Days[2] (summer total)
1992[4]	4.5	164.5	July 1-	Jul-04	3.5		Apr-15- Jun-30	77 (all)		
			Aug-23-	Aug-24	1	2,881	Jul-04- Aug-12	37.5		
							Aug-13- Aug-22	10 (all)		
							Aug-24- Sep-20	28		
							Sep-21- Sep-30	10 (all)	63.5	36,306
1993[4]	20	149	Jul-01-	Jul-06	6		Apr-15- Jun-30	77 (all)		
			Aug-21-	Aug-25	5		Jul-07- Jul-11	5 (all)		
			Sept. 11	Sep-20	9	7,634	Jul-12- Aug-12	32		
							Aug-13- Aug-20	8 (all)		
							Aug-26- Sep-11	17		
							Sep-21- Sep-30	10 (all)	49	35,157
1994[4]	12		Jul-01-	Jul-07	8		Apr-15- Jun-30	77 (all)		
			Aug-29-	Sep-02	5	6,448	Jul-08- Aug-28	52		
							Sep-03- Sep-30	28	80	35,700

[1] Number of days the major portion of Southeast Alaska was open to chinook salmon fishing.

[2] Boat days estimated from dockside, inseason interviews with troll fishers, and actual landings from fish tickets tabulated postseason.

[3] Trolling was open to all species for 39-hours, 12:01 am August 25 to 3:00 pm August 26.

[4] Hatchery access fisheries were conducted for 6-days each year in June, except in 1991, when only 4.5-days were open.

Table 11. Commercial troll fishery catches by week and species; 1994 troll accounting year (Oct. 1 1993 to Sept. 30, 1994).[1]

Year	Week	Chinook	Sockeye	Coho	Pink	Chum
1993	42	2,364	0	0	0	2
1993	43	375	0	0	0	0
1993	44	5,586	0	0	0	0
1993	45	6,776	0	0	0	0
1993	46	2,726	0	0	0	0
1993	47	603	0	0	0	0
1993	48	1,897	0	0	0	0
1993	49	8,644	0	0	0	0
1993	50	5,612	0	0	0	0
1993	51	349	0	0	0	0
1993	52	75	0	0	0	0
1993	53	186	0	0	0	0
1994	1	0	0	0	0	0
1994	2	93	0	0	0	0
1994	3	25	0	0	0	0
1994	4	280	0	0	0	0
1994	5	359	0	0	0	0
1994	6	517	0	0	0	0
1994	7	470	0	0	0	0
1994	8	179	0	0	0	0
1994	9	85	0	0	0	0
1994	10	45	0	0	0	0
1994	11	207	0	0	0	0
1994	12	775	0	0	0	0
1994	13	1,840	0	0	0	0
1994	14	4,351	0	0	0	0
1994	15	8,239	0	0	1	1
1994	16	3,710	0	0	0	0
1994	19	4	0	0	0	0
1994	20	3	0	0	0	0
1994	21	3	0	0	0	0
1994	22	497	0	0	0	0
1994	23	1,355	0	0	0	0
1994	24	1,744	1		2	15
1994	25	2,830	266	135	18,743	3,691
1994	26	3,283	652	606	48,719	7,399
1994	27	37,530	1,139	37,480	72,860	11,886

-Continued-

Table 11. (Page 2 of 2.)

Year	Week	Chinook	Sockeye	Coho	Pink	Chum
1994	28	62,344	2,140	122,509	98,184	18,347
1994	29	0	3,247	313,954	107,941	29,828
1994	30	14	2,336	353,632	109,755	52,044
1994	31	0	2,659	434,215	173,073	68,641
1994	32	0	2,373	461,159	147,044	72,033
1994	33	0	2,045	428,898	113,804	43,121
1994	34	0	2,060	386,326	41,735	18,490
1994	35	0	948	364,515	9,094	3,146
1994	36	20,224	1,448	340,731	1,587	1,122
1994	37	0	328	145,743	170	427
1994	38	0	100	51,905	30	139
1994	39	0	17	16,600	5	37
1994	40	0	2	3,257		7
	TOTAL:	186,199	21,761	3,461,665	942,747	330,376

[1] Includes Annette Island catches.

Table 12. Catch and percent of commercial harvest by gear type of coho salmon harvested in Southeast Alaska, 1989-1994.

	--Commercial Troll--		---Purse Seine---		----Drift Gillnet----		----- Set Gillnet-----		Total	
Year	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1989	1,415,511	65	332,193	15	237,597	11	176,804	8	2,162,105	100
1990	1,831,681	68	373,963	14	356,238	13	148,820	5	2,710,702	100
1991	1,719,667	60	409,500	14	549,707	19	166,172	6	2,845,046	100
1992	1,929,158	57	493,742	15	647,840	19	290,288	9	3,361,028	100
1993	2,395,060	67	485,788	14	432,015	12	237,390	7	3,550,253	100
1994	3,461,665	63	983,396	18	707,187	13	343,843	6	5,496,091	100
1989-94 Average:										
	2,125,457	64	513,097	15	488,431	15	227,220	7	3,354,204	100

Table 13. Contribution, in numbers and percent, of chinook salmon produced by Alaskan and other hatcheries, in the winter, experimental, terminal, hatchery access, and general summer troll fisheries, 1989-1994.

Year	Total Catch [1]	Alaskan Hatcheries Number	Alaskan Hatcheries Percent	Other Hatcheries Number	Other Hatcheries Percent	Total Hatcheries Number	Total Hatcheries Percent
Winter							
1989	34,300	4,915	14	7,039	21	11,749	34
1990	33,130	4,433	13	9,845	30	14,278	43
1991	42,600	10,246	24	13,399	31	23,505	55
1992	71,800	6,977	10	28,875	40	35,851	50
1993	62,700	3,862	6	25,598	41	29,450	47
1994	56,400	1,957	3	19,498	35	21,455	38
Experimental							
1989	2,500	854	34	39	2	893	36
1990	7,100	4,250	60	[2]		4,425	62
1991	14,000	6,159	44	1,903	14	8,461	60
1992	11,200	5,378	48	2,663	24	8,041	72
1993	15,800	6,574	42	2,001	13	8,101	51
1994	11,300	4,922	44	2,292	20	7,214	64
Terminal							
1989	1,100	1,100	100				
1990	16	0	0				
1991	6,000	4,882	81				
1992	4,100	3,588	88				
1993	2,800	2,433	87				
1994	100	15	15				
Hatchery Access							
1989	31,200	4,575	15	8,310	27	12,885	41
1990	34,900	6,653	19	12,700	36	19,232	55
1991	46,500	8,577	18	10,812	23	19,943	43
1992	23,800	6,625	28	8,590	36	15,217	64
1993			-no fishery in 1993-				
1994			-no fishery in 1994-				
General Summer							
1989	167,000	5,225	3	30,268	18	35,493	21
1990	212,000	14,281	7	70,908	33	85,097	40
1991	154,000	6,606	4	54,131	35	59,070	38
1992	72,600	2,460	3	30,823	42	33,282	46
1993	145,100	4,931	3	37,361	26	42,237	29
1994	118,400	5,341	5	28,033	24	33,374	28
Total[3]							
1989	236,100	16,669	7	45,656	19	62,120	26
1990	287,146	29,617	10	93,453	33	123,048	43
1991	263,100	36,470	14	80,245	30	116,979	44
1992	183,500	25,028	14	70,951	39	96,509	53
1993	226,400	17,800	8	64,960	29	82,637	37
1994	186,200	12,235	7	53,724	29	65,959	35

[1] Does not include Annette Island catches.

[2] 1990 hatchery access total for other hatchery production includes experimental fishery.

[3] Totals may not agree with other totals due to rounding.

Table 14. Total Southeast Alaska troll coho salmon catch and estimated wild and hatchery contributions, 1960-1994.[1]

Year	Number of Fish					
	Total Catch	Wild Contribution	Alaska Hatchery	Other Hatchery	Total Hatchery	Percent Hatchery[2]
1960	396,211	396,211	0	0	0	0
1961	399,932	399,932	0	0	0	0
1962	643,740	643,740	0	0	0	0
1963	693,050	693,050	0	0	0	0
1964	730,766	730,766	0	0	0	0
1965	695,887	695,887	0	0	0	0
1966	528,621	528,621	0	0	0	0
1967	443,677	443,677	0	0	0	0
1968	779,500	779,500	0	0	0	0
1969	388,443	388,459	0	0	0	0
1970	267,635	267,647	0	0	0	0
1971	391,279	391,279	0	0	0	0
1972	791,941	791,947	0	0	0	0
1973	540,105	540,125	0	0	0	0
1974	845,109	844,748	0	0	0	0
1975	214,170	214,170	0	0	0	0
1976	524,762	524,762	0	0	0	0
1977	506,845	506,887	0	0	0	0
1978	1,100,902	1,100,902	0	0	0	0
1979	918,845	918,845	0	0	0	0
1980	696,391	704,297	2,876	187	3,063	0
1981	860,836	846,088	15,918	171	16,089	2
1982	1,316,013	1,285,969	35,400	177	35,577	3
1983	1,275,788	1,227,242	51,709	567	52,276	4
1984	1,132,637	1,062,327	68,594	1,015	69,609	6
1985	1,598,981	1,499,661	106,111	181	106,292	7
1986	2,127,922	1,850,004	268,215	7,940	276,155	13
1987	1,041,175	950,757	87,074	3,344	90,418	9
1988	500,489	472,334	25,885	1,600	27,485	6
1989	1,415,511	1,295,033	116,519	3,959	120,478	9
1990	1,831,681	1,540,772	278,830	11,913	290,743	16
1991	1,719,667	1,336,815	366,850	16,002	382,852	22
1992	1,929,158	1,509,161	402,475	17,522	419,997	22
1993	2,395,060	2,002,184	379,331	13,545	392,876	16
1994	3,461,665	2,944,802	503,532	13,331	516,863	15
60-69 Avg.	569,983	569,984	0	0	0	0
70-79 Avg.	610,159	610,131	0	0	0	0
80-89 Avg.	1,196,574	1,119,371	77,830	1,914	79,744	6
90-94 Avg.	2,267,446	1,866,747	386,204	14,463	400,666	18

[1] 1994 data is preliminary.

[2] Hatchery contribution estimates are unavailable before 1980. Because hatchery production was very low, all catch during 1960-1979 was assumed to be from wild stocks.

Table 15. Preliminary estimates of total escapements of chinook salmon to escapement indicator systems and to Southeast Alaska and transboundary (T) rivers, 1975-1994.[1]

	MAJOR SYSTEMS				MEDIUM SYSTEMS										MINOR SYSTEMS			
Year	Alsek	Taku	Stikine[2]	Major	Situk	Chilkat	Andrew[3]	Unuk	Chick-	Blos-	Keta	Behm	Medium	Medium	King	Minor[4]	Minor	Total All
	(T)	(T)	(T)	Subtotal				(T)	amin(T)	som		Subtotal	Unsurv.	Subtotal	Salmon	Unsurv.	Subtotal	Systems
1975	4,214	5,854 [5]	5,800	15,868	1,510		416	1,469	592	234	325	2,620	2,273	6,819	53	1,113	1,166	23,853
1976	1,672	12,729	3,300	17,701	1,433		404	1,469	251	109	134	1,963	1,900	5,700	81	1,701	1,782	25,183
1977	4,363	15,259	6,600	26,222	1,732		456	1,558	581	179	368	2,686	2,437	7,311	168	3,528	3,696	37,229
1978	4,050	9,168	5,200	18,418	814		388	1,770	493	229	627	3,119	2,161	6,482	71	1,491	1,562	26,462
1979	6,101	11,353	9,328	26,782	1,400		327	922	382	86	682	2,072	1,900	5,699	89	1,869	1,958	34,439
1980	3,770	20,275	17,096	41,141	905		282	1,626	712	142	307	2,787	1,987	5,961	88	1,848	1,936	49,038
Avg.	4,028	12,440	7,887	24,355	1,299		379	1,469	502	163	407	2,541	2,110	6,329	92	1,925	2,017	32,701
1981	2,837	25,856	26,672	55,365	702		536	1,170	614	254	526	2,564	1,901	5,703	113	2,373	2,486	63,554
1982	3,078	12,810	22,640	38,528	434		672	2,162	914	552	1,206	4,834	2,970	8,910	286	6,006	6,292	53,730
1983	3,352	5,621	4,752	13,725	592		366	1,800	958	942	1,315	5,015	2,987	8,960	245	5,145	5,390	28,075
1984	2,038	10,748	10,352	23,138	1,726		389	2,939	1,763	813	976	6,491	4,303	12,909	250	5,250	5,500	41,547
1985	1,853	19,580	12,456	33,889	1,521		510	1,894	1,530	1,134	998	5,556	3,794	11,381	171	3,591	3,762	49,032
Avg.	2,632	14,923	15,374	32,929	995		495	1,993	1,156	739	1,004	4,892	3,191	9,572	213	4,473	4,686	47,187
1986	3,966 [6]	20,231	11,564	35,761	2,067		1,131	3,402	2,792	2,045	1,104	9,343	6,271	18,812	245	5,145	5,390	59,963
1987	3,598	15,530	19,132	38,260	1,884		1,261	3,157	1,560	2,158	1,229	8,104	5,625	16,874	193	4,053	4,246	59,380
1988	2,891	23,334	29,168	55,393	885		760	2,794	1,258	614	920	5,586	3,616	10,847	206	4,326	4,532	70,772
1989	3,399	25,481	18,860	47,740	652		848	1,838	1,494	550	1,848	5,730	3,615	10,845	238	4,998	5,236	63,821
1990	2,722	32,622	17,568	52,912	700		1,062	946	902	411	970	3,229	2,496	7,487	168	3,528	3,696	64,095
Avg.	3,315	23,440	19,258	46,013	1,238		1,012	2,427	1,601	1,156	1,214	6,398	4,324	12,973	210	4,410	4,620	63,606
1991	3,165	27,318	18,024	48,507	875	5,897	640	1,048	779	382	435	2,644	2,873	12,929	134	2,814	2,948	64,384
1992	1,950	30,142	26,508	58,600	1,400	5,287	1,245	1,400	554	240	347	2,541	2,992	13,465	117	2,457	2,574	74,639
1993	4,811	36,208	45,796	86,815	790	4,472	1,696	1,709	622	485	579	3,395	2,958	13,311	280	5,880	6,160	106,286
1994	5,532	26,804	25,800	58,136	1,241	6,319	915	1,138	621	258	490	2,507	3,138	14,120	224	4,704	4,928	77,184
Avg.	3,865	30,118	29,032	63,015	1,077	5,494	1,124	1,324	644	341	463	2,772	2,990	13,456	189	3,964	4,153	80,623
1994 change from 1993																		
No.	721	9,404	19,996	28,679	451	1,847	781	571	1	227	89	888	180	809	56	1,176	1,232	29,102
Pct.	15%	26%	44%	33%	57%	41%	46%	33%	0%	47%	15%	26%	6%	6%	20%	20%	20%	27%
Goals	7,300	36,515	21,200	65,015	600 [7]	2,000	750	1,400 [8]	840 [9]	480 [10]	480 [11]	3,200	1,871	8,421	250	5,250	5,500	78,936
Average Percent of Goal																		
75-80	55%	34%	37%	37%	217%		51%	105%	60%	34%	85%	79%	113%	75%	37%	37%	37%	41%
81-85	36%	41%	73%	51%	166%		66%	142%	138%	154%	209%	153%	171%	114%	85%	85%	85%	60%
86-90	45%	64%	91%	71%	206%		135%	173%	191%	241%	253%	200%	231%	154%	84%	84%	84%	81%
91-94	53%	82%	137%	97%	179%		150%	95%	77%	71%	96%	87%	160%	160%	76%	76%	76%	102%

[1] Index escapements are expanded for surveys counting rates and unsurveyed tributaries. Using 1993 revised expansions.

[2] Prior to Little Tahltan weir in 1985, Stikine estimate is 8-times aerial survey.

[3] Using CTC calculations of Alsek Escapement: Escapement = (weir count/0.64)-sport and Indian Food Fishery (IFF) harvest.

[4] Andrew Creek revised to include North Fork counts, egg takes excluded, weir counts not expanded.

[5] Situk escapement goal revised downward from 2,100 to 600 in 1991.

[6] Chilkat excluded from medium goals.

[7] Taku counts expanded for missing tributaries when all six not surveyed.

[8] Unuk escapement goal revised downward from 2,880 to 1,400 in 1994.

[9] Chickamin escapement goal revised downward from 1,440 to 840 in 1994.

[10] Blossom escapement goal revised downward from 1,280 to 480 in 1994.

[11] Keta escapement goal revised downward from 800 to 480 in 1994.

Table 16. Escapement estimates for four Southeast Alaska coho salmon indicator stocks, 1980-1994. Years when no escapement assessment occurred are indicated by "N/A."

Year	Auke Creek	Berners River	Ford Arm Lake	Hugh Smith Lake
1980	698	N/A	N/A	N/A
1981	647	N/A	N/A	N/A
1982	447	7,505	2,662	2,144
1983	694	9,840	1,944	1,490
1984	651	N/A	N/A	1,408
1985	942	6,169	2,324	903
1986	453	1,752	1,546	1,783
1987	668	3,260	1,694	1,118
1988	756	2,724	3,028	513
1989	502	7,509	2,177	433
1990	697	11,050	2,190	870
1991	804	11,530	2,761	1,826
1992	1,020	15,300	3,847	1,426
1993	859	15,670	4,202	830
1980-93 Average:	703	6,594	2,027	1,053
1994	1,253	15,920	3,151	1,679
Escapement Goal Ranges:	200-500	4,000 - 9,200	1,300 - 2,900	500 - 1,100

Table 17. Overall coho salmon harvest rates by indicator stock for the Southeast Alaska troll fishery and all fisheries combined, 1982-1994.

Year	Auke Creek	Berners River[1]	Ford Arm Lake	Hugh Smith Lake	Average
Alaska Troll Fishery:					
1982	20.1	41.6	41.3	45.6	37.2
1983	32.6	50.4	54.3	35.4	43.2
1984	32.3	[2]	[2]	31.4	38.4
1985	35.2	44.8	51.2	36.0	41.8
1986	43.0	55.1	60.9	35.4	48.6
1987	37.2	51.3	45.1	28.0	40.4
1988	25.4	39.6	47.9	26.7	34.9
1989	49.6	53.4	61.5	50.0	53.6
1990	43.1	43.6	56.5	39.4	45.7
1991	15.0	18.2	53.3	36.7	30.8
1992	31.7	33.5	56.4	37.9	39.9
1993	38.4	39.0	61.8	52.9	48.0
1982-1993 Average	33.6	42.8	53.7	38.0	41.9
1994 Prelim.	36.8	37.1	61.0	45.8	45.2
All Fisheries:					
1982	40.9	75.7	43.6	64.8	56.3
1983	43.8	71.1	69.1	61.5	61.4
1984	43.4	[2]	[2]	64.9	59.7
1985	44.2	74.5	51.2	62.6	58.1
1986	53.1	92.9	62.4	60.1	67.1
1987	43.2	76.8	47.5	52.3	55.0
1988	36.5	81.8	49.2	66.5	58.5
1989	55.9	61.9	64.5	82.1	66.1
1990	52.6	67.3	58.5	81.1	64.8
1991	29.8	67.2	54.2	68.1	54.8
1992	45.0	66.6	58.7	70.8	60.3
1993	45.9	68.4	66.9	80.6	65.5
1982-1993 Average	44.5	73.1	56.9	68.0	60.6
1994 Prelim.	56.9	78.4	72.5	82.1	72.5

[1] Estimated harvest rates for the Berners River stock are probably biased upward because the escapement estimate is made from intensive ground and helicopter surveys of the drainage, instead of total weir counts.

[2] The Berners Rivers and Ford Arm Lake stocks were not coded wire tagged in 1984; therefore, the average was weighted. The sum of estimates for the Auke and Hugh Smith Lake stocks in 1984 was divided by their average proportional contribution to the sum of estimates for all four systems during 1982-83 and 1985-89. That number was then divided by the total number of stocks (4) to get a weighted average for 1984 that is more comparable with other years than a simple average.

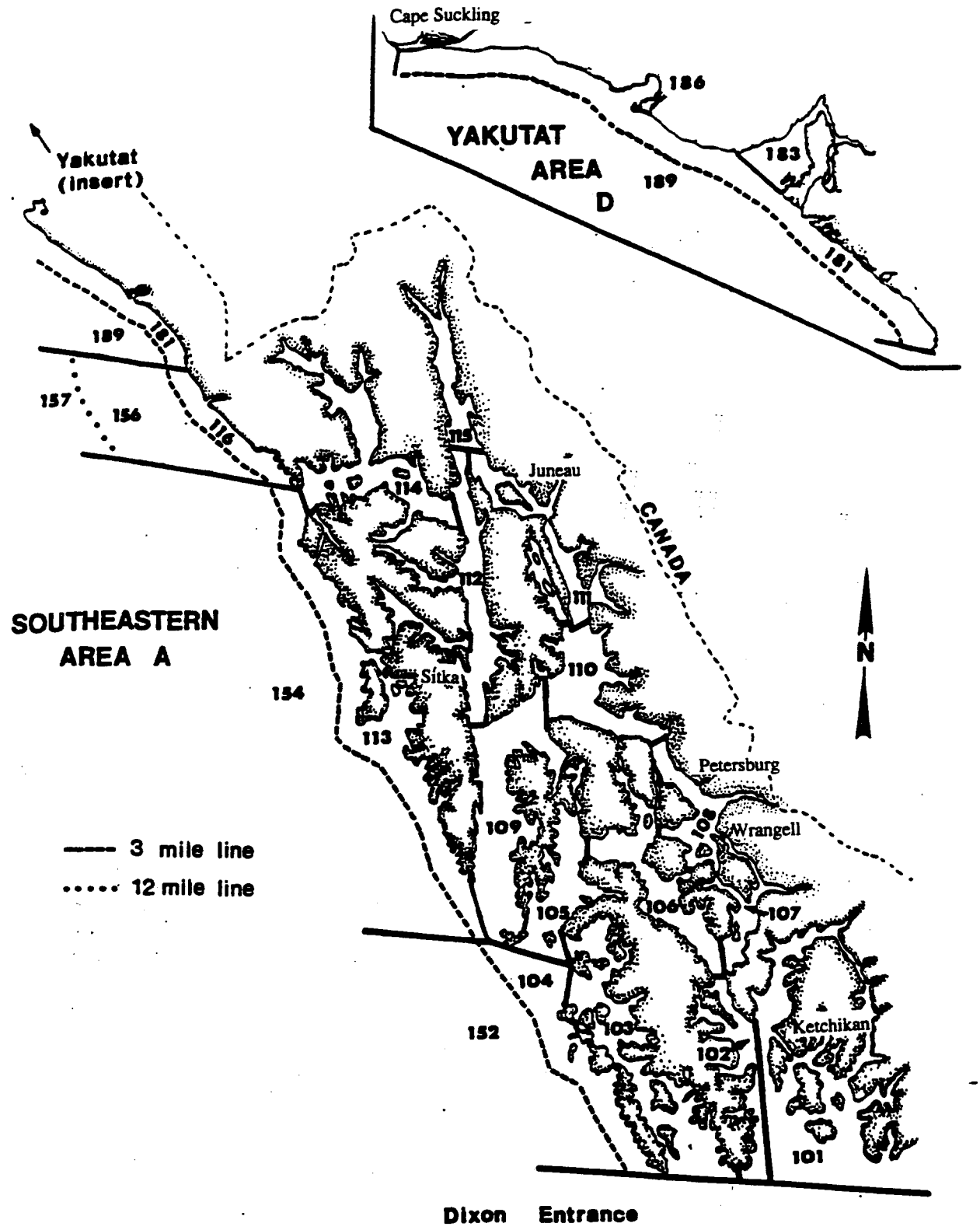

Figure 1. Commercial trolling statistical areas in Southeast Alaska.

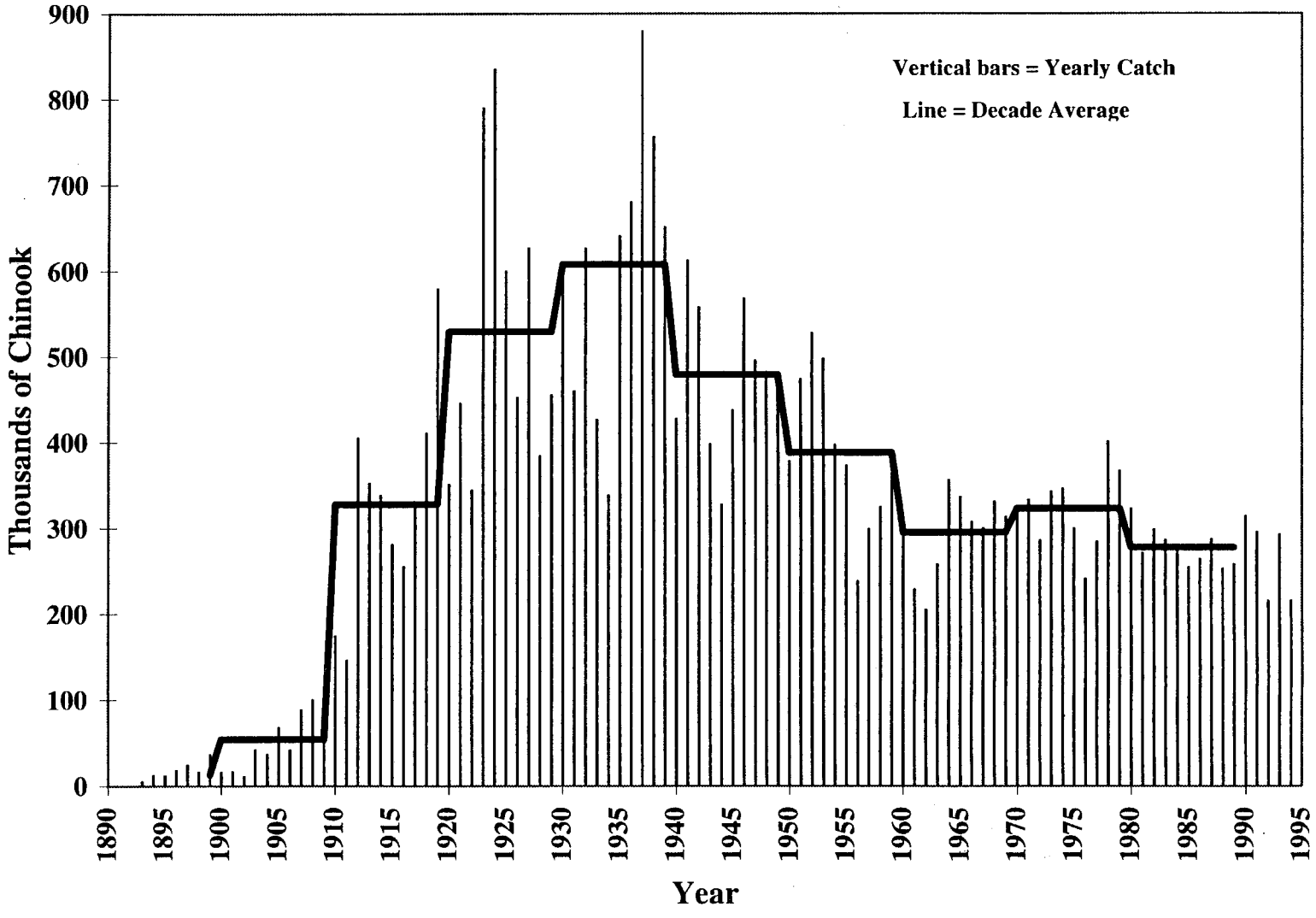

Figure 2. Commercial all-gear catches of chinook salmon in common property fisheries, 1893-1994.

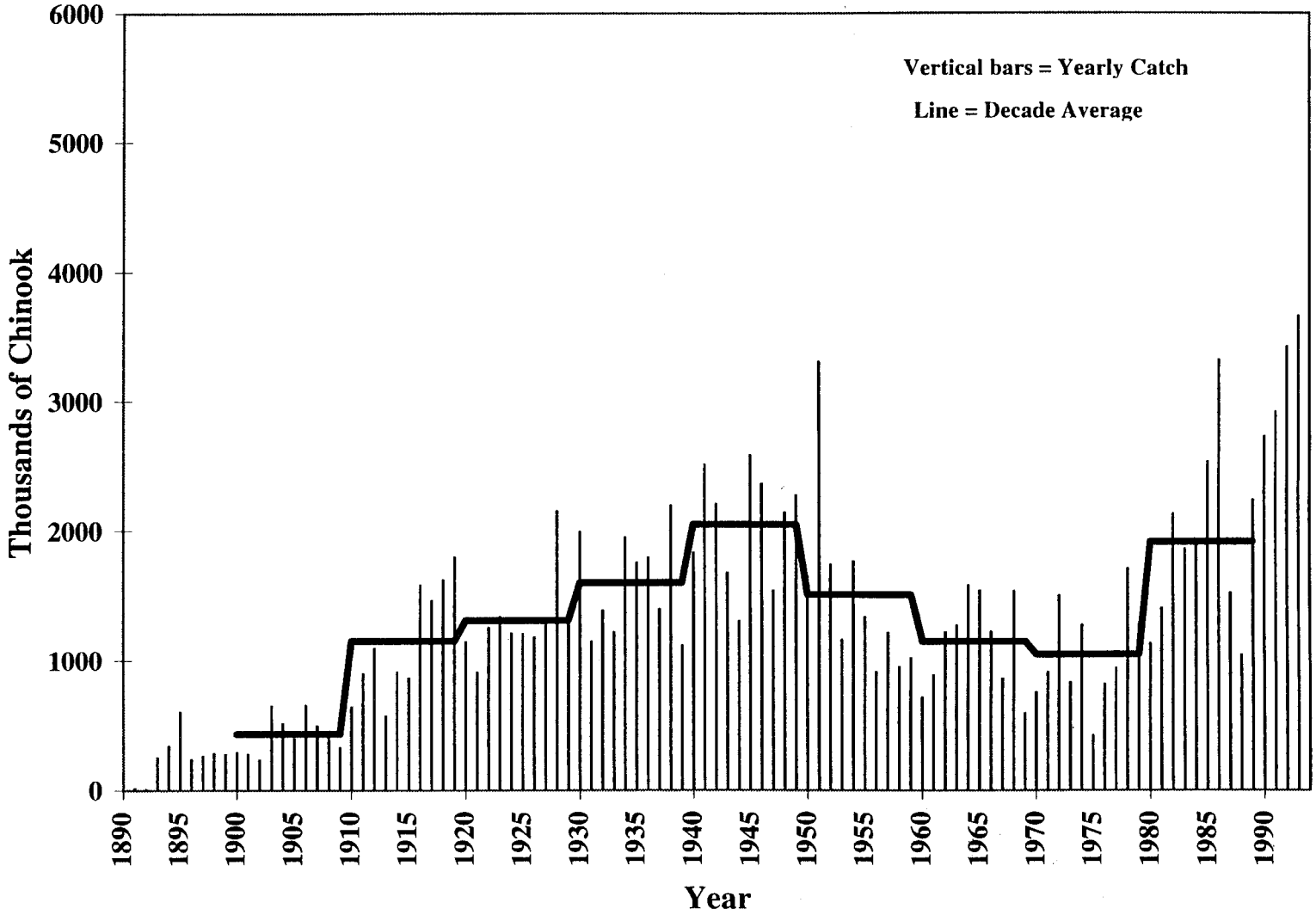

Figure 3. Commercial all-gear catches of coho salmon in common property fisheries, 1891-1994.

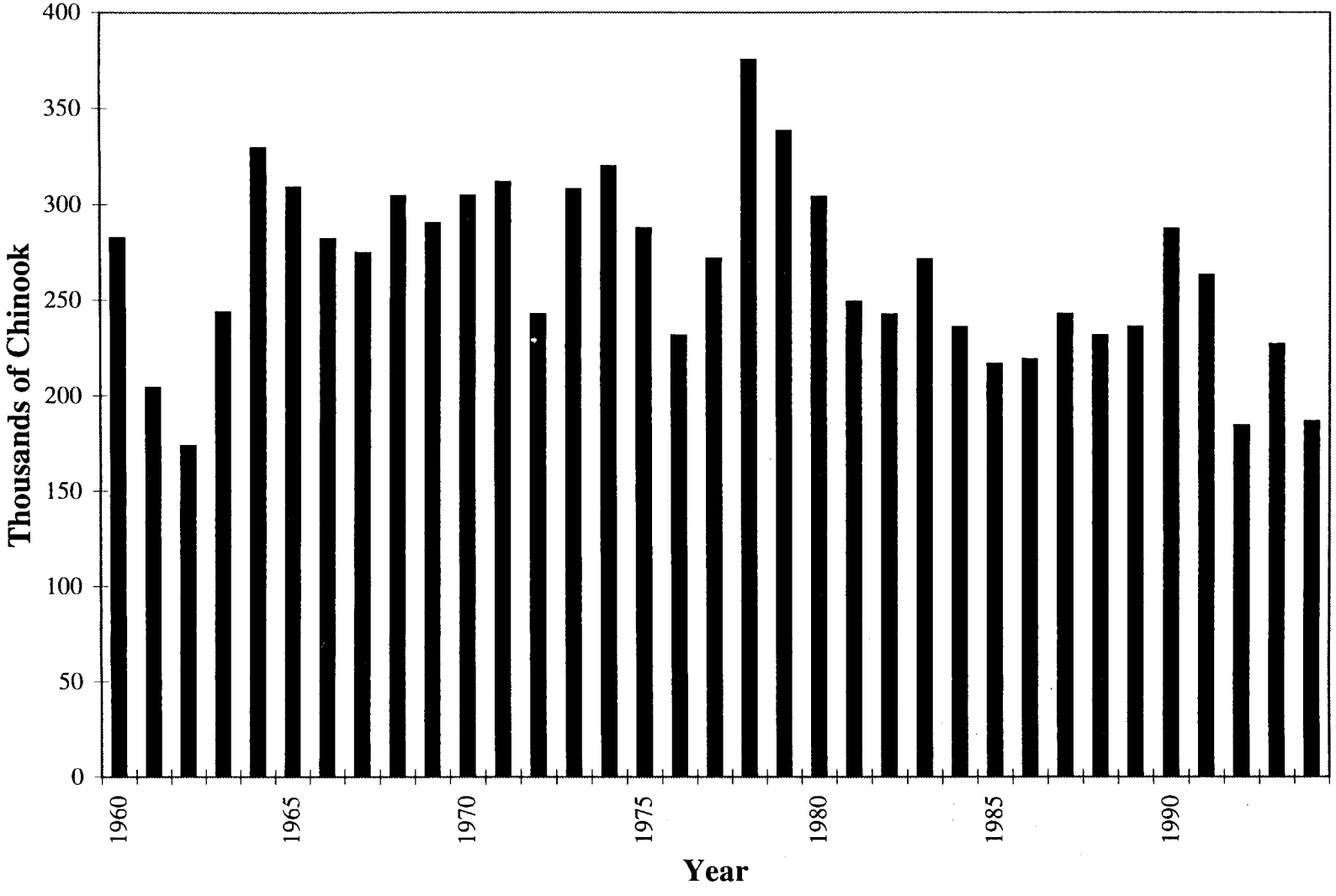

Figure 4. Chinook catches in the Southeast Alaska troll fishery, 1960-1994.

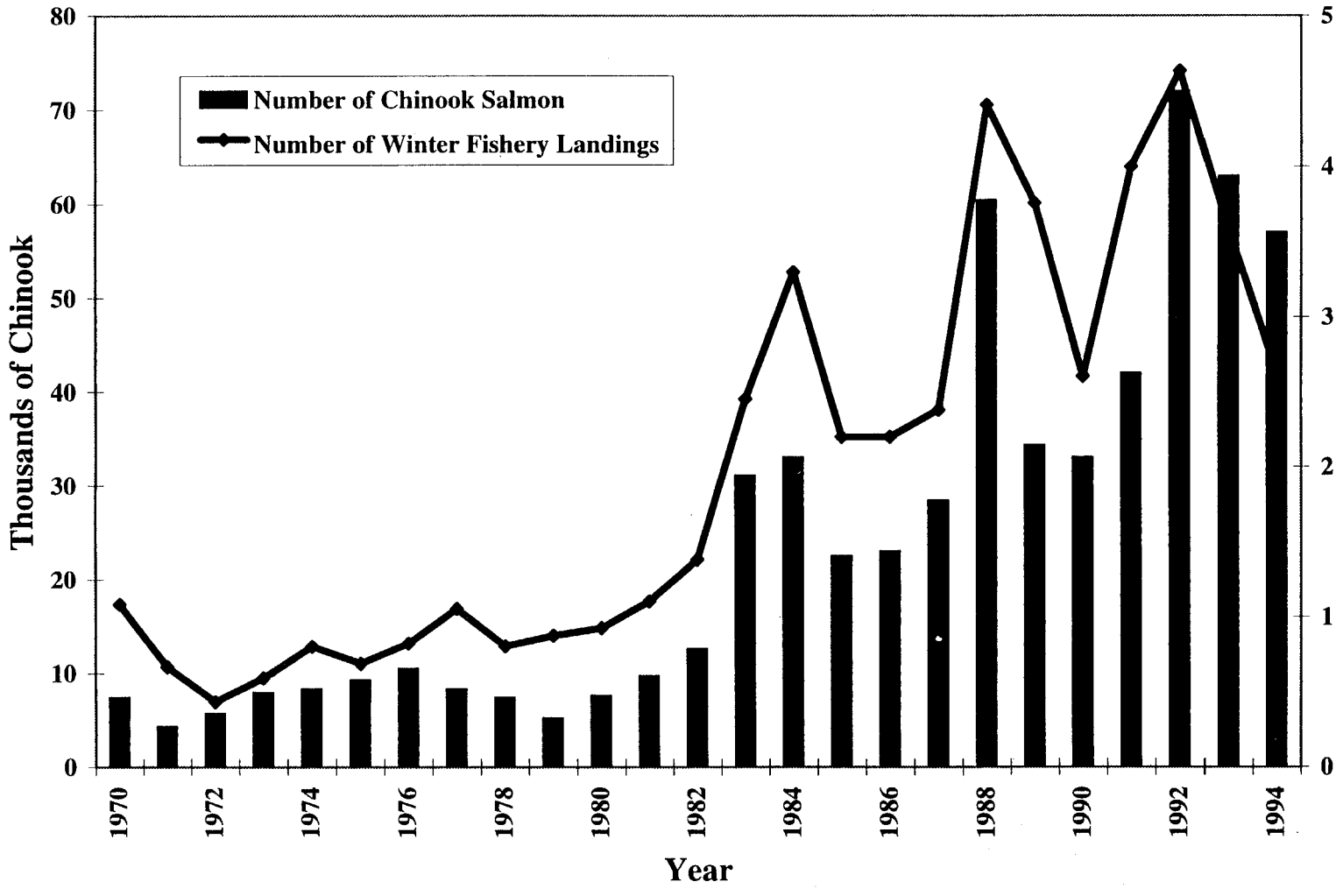

Figure 5. Chinook catches and number of landings in the Southeast Alaska winter troll fishery, 1970-1994.

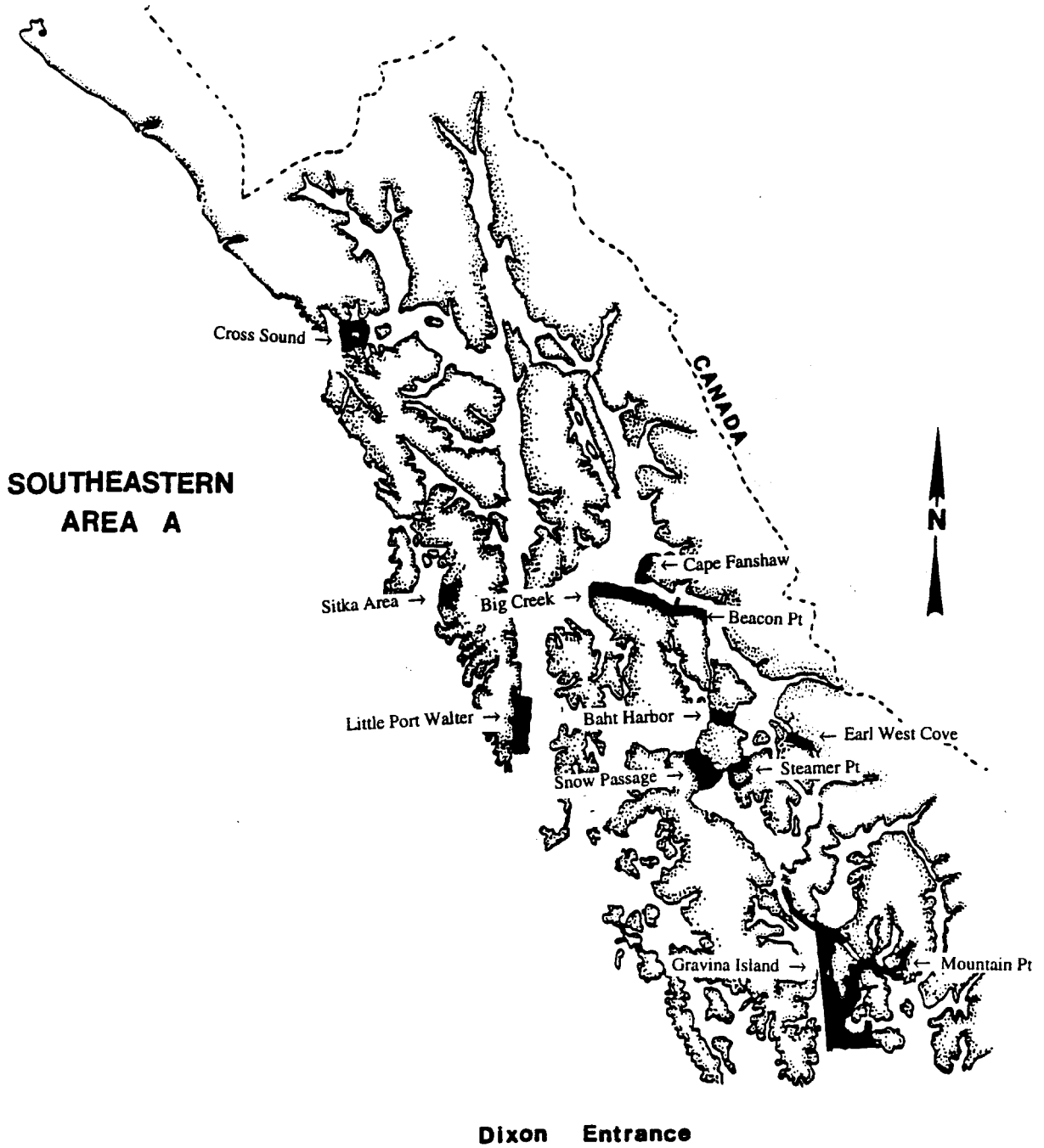

Figure 6. Experimental troll fishery areas (shaded waters with accompanying fishery name) in Southeast Alaska.

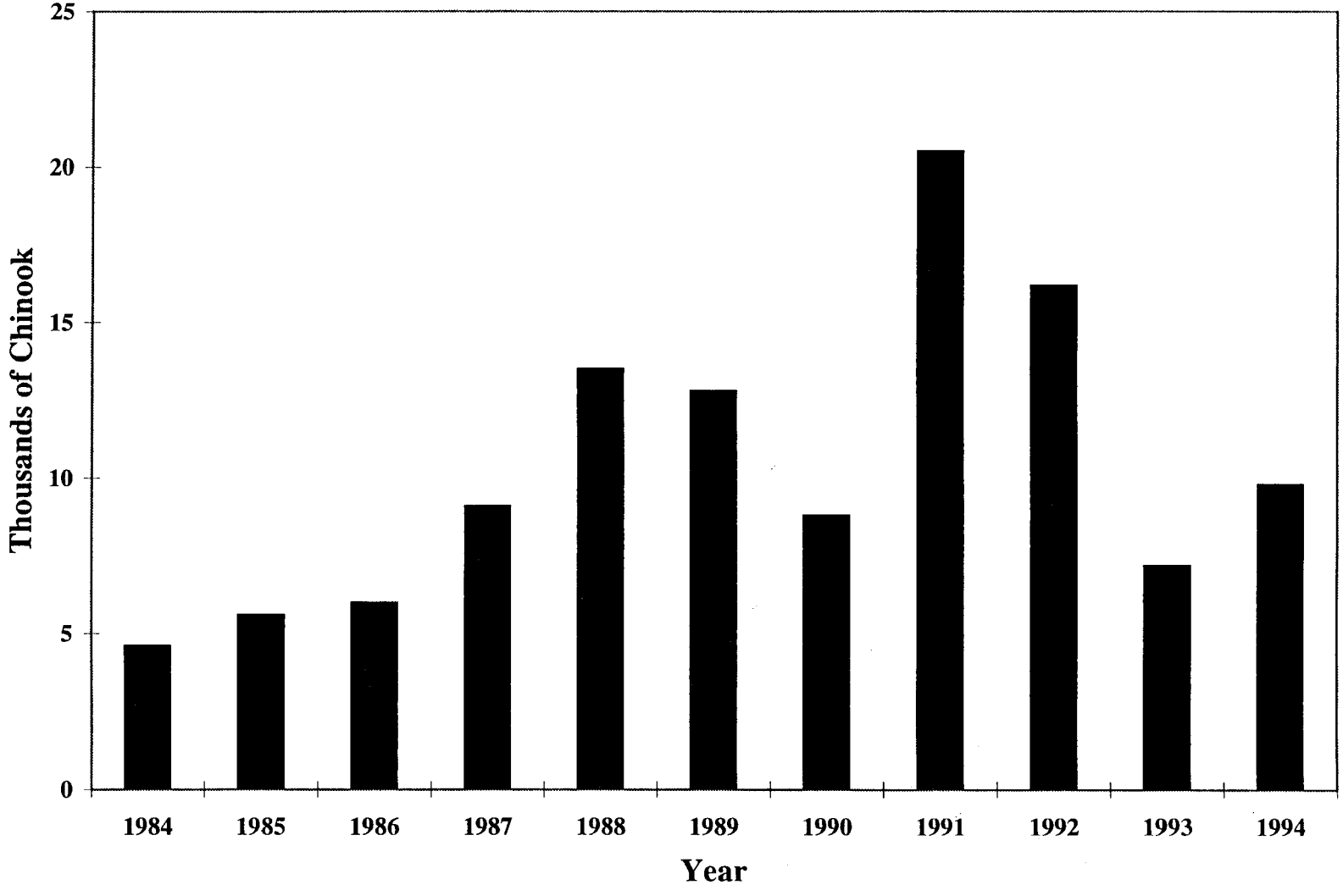

Figure 7. The number of chinook salmon caught by the Southeast Alaska troll fleet per day in June and July, 1984-1994.

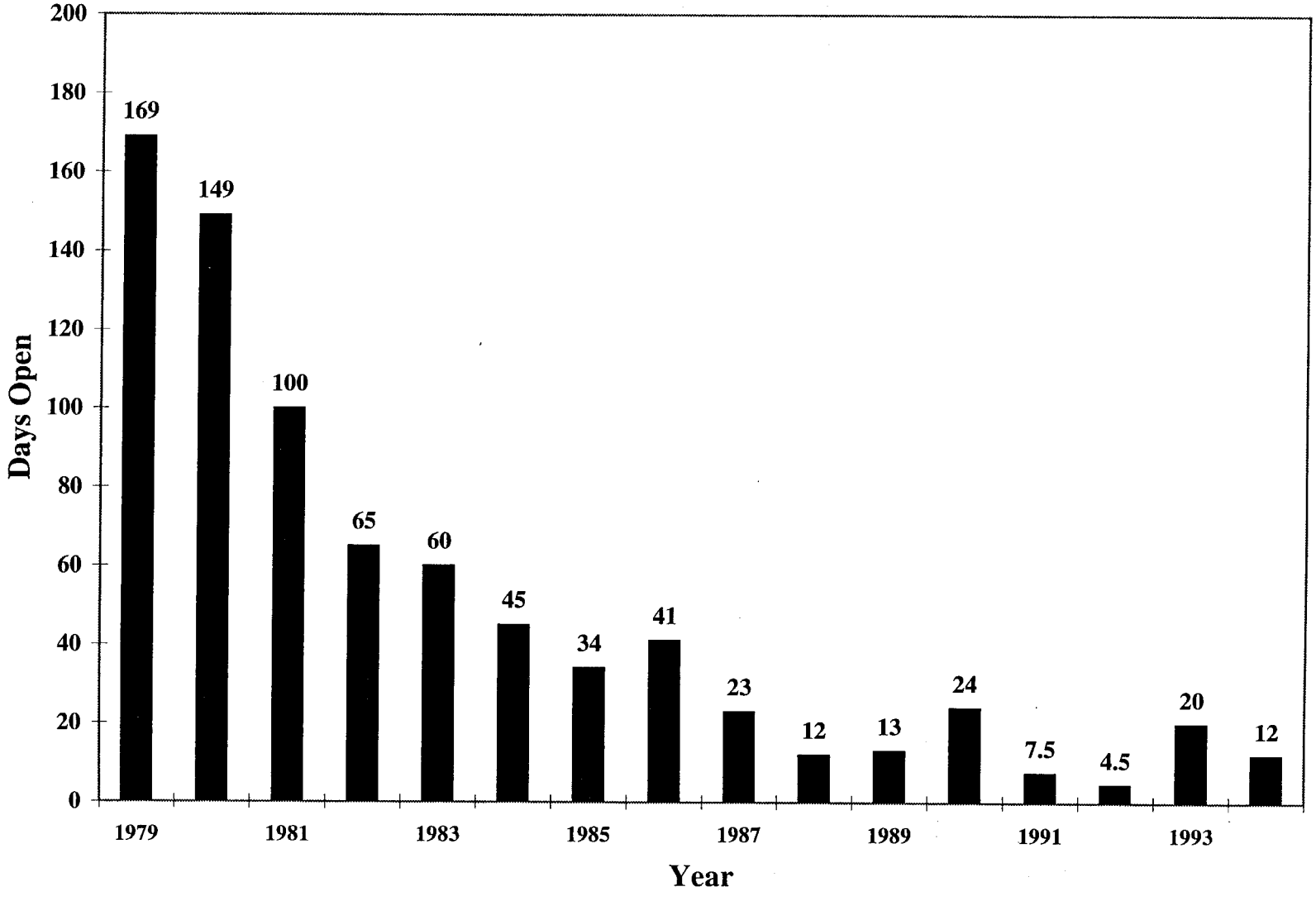

Figure 8. Number of days the Southeast Alaska general summer troll fishery has been open for chinook salmon, 1979-1994.

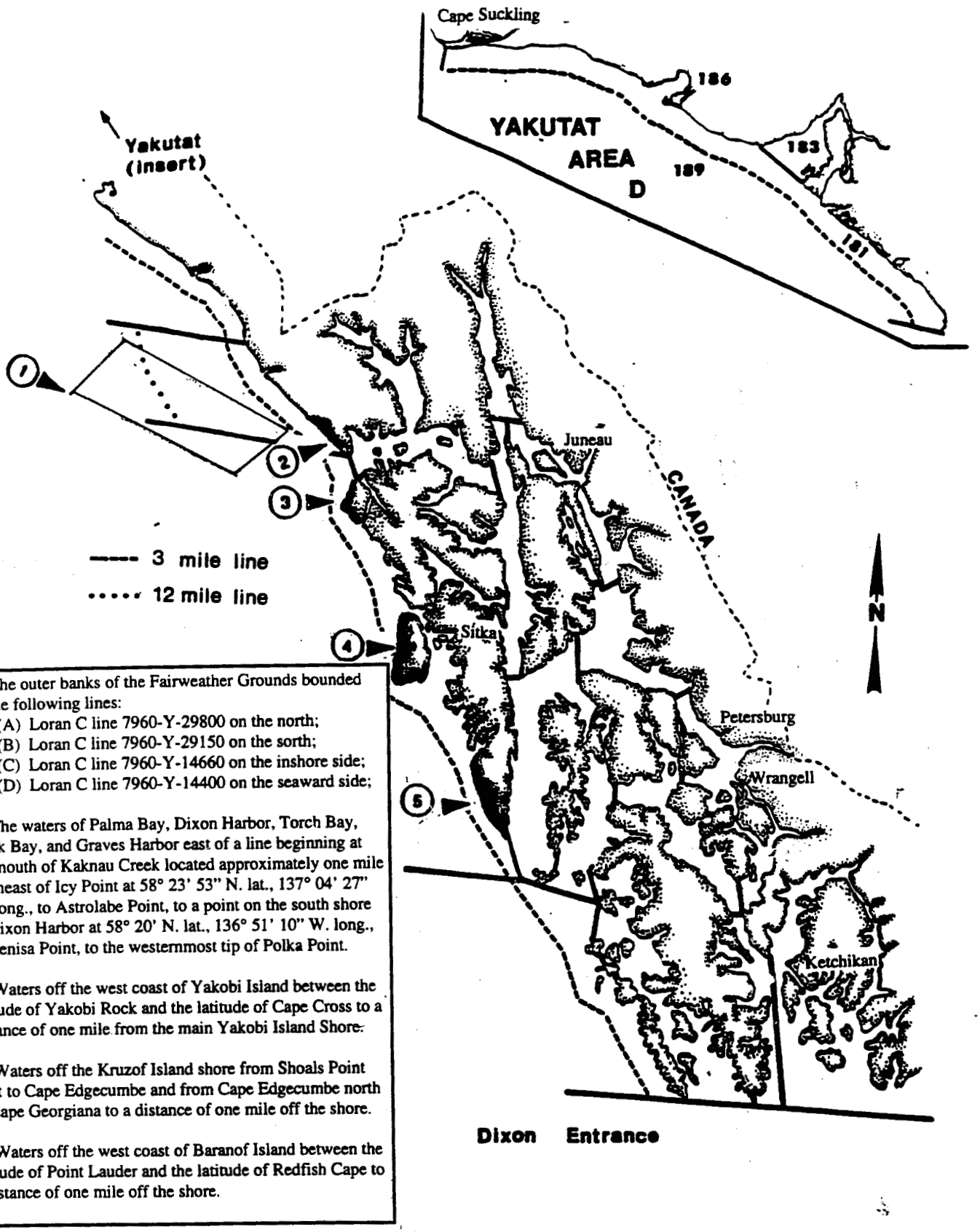

Figure 9. Southeast Alaska areas closed to trolling for all species during chinook non-retention periods.

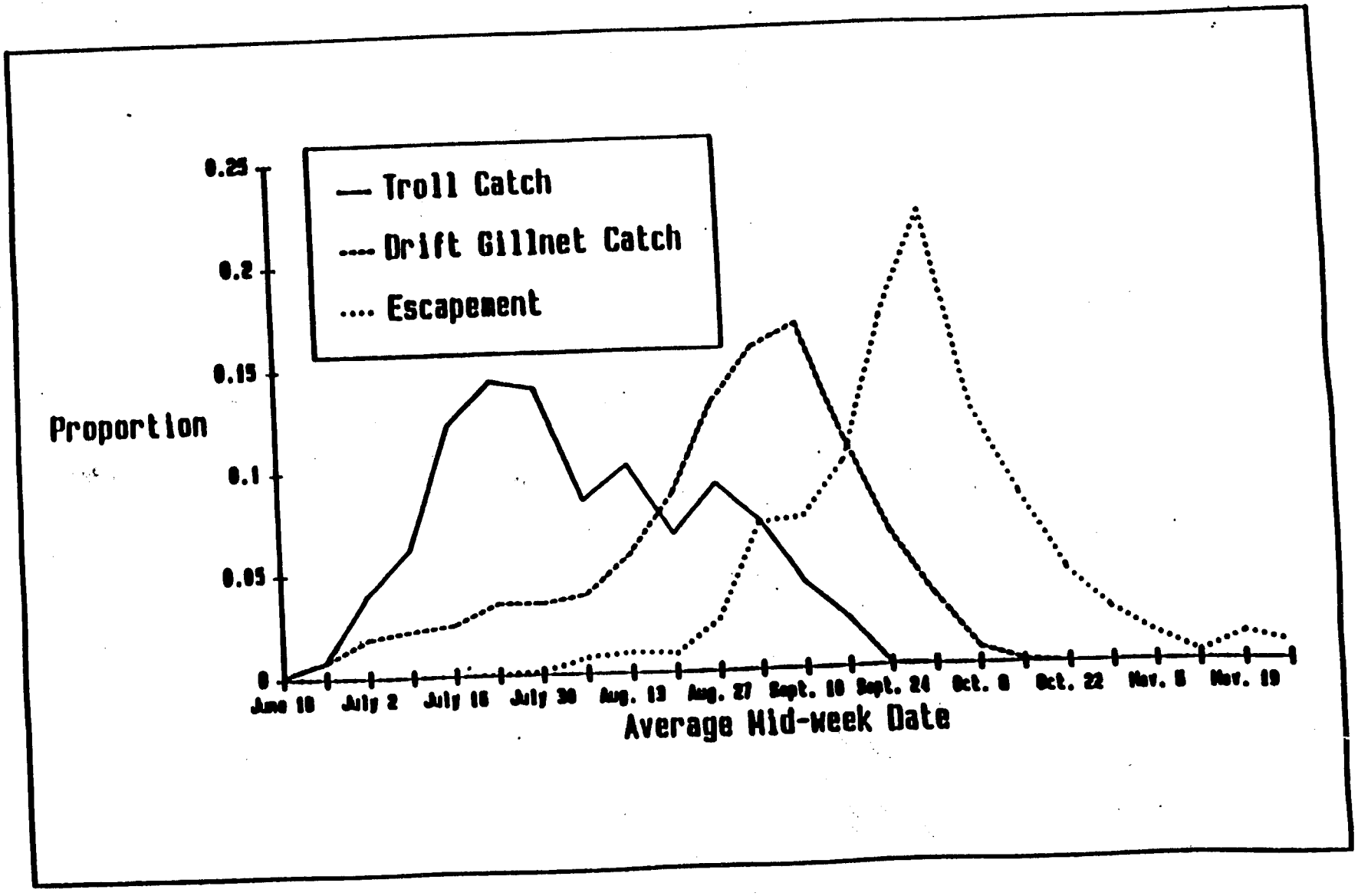

Figure 10. Average timing distribution of coho salmon in the Southeast Alaska troll and drift gillnet fisheries and at selected weir sites, 1982-1985.

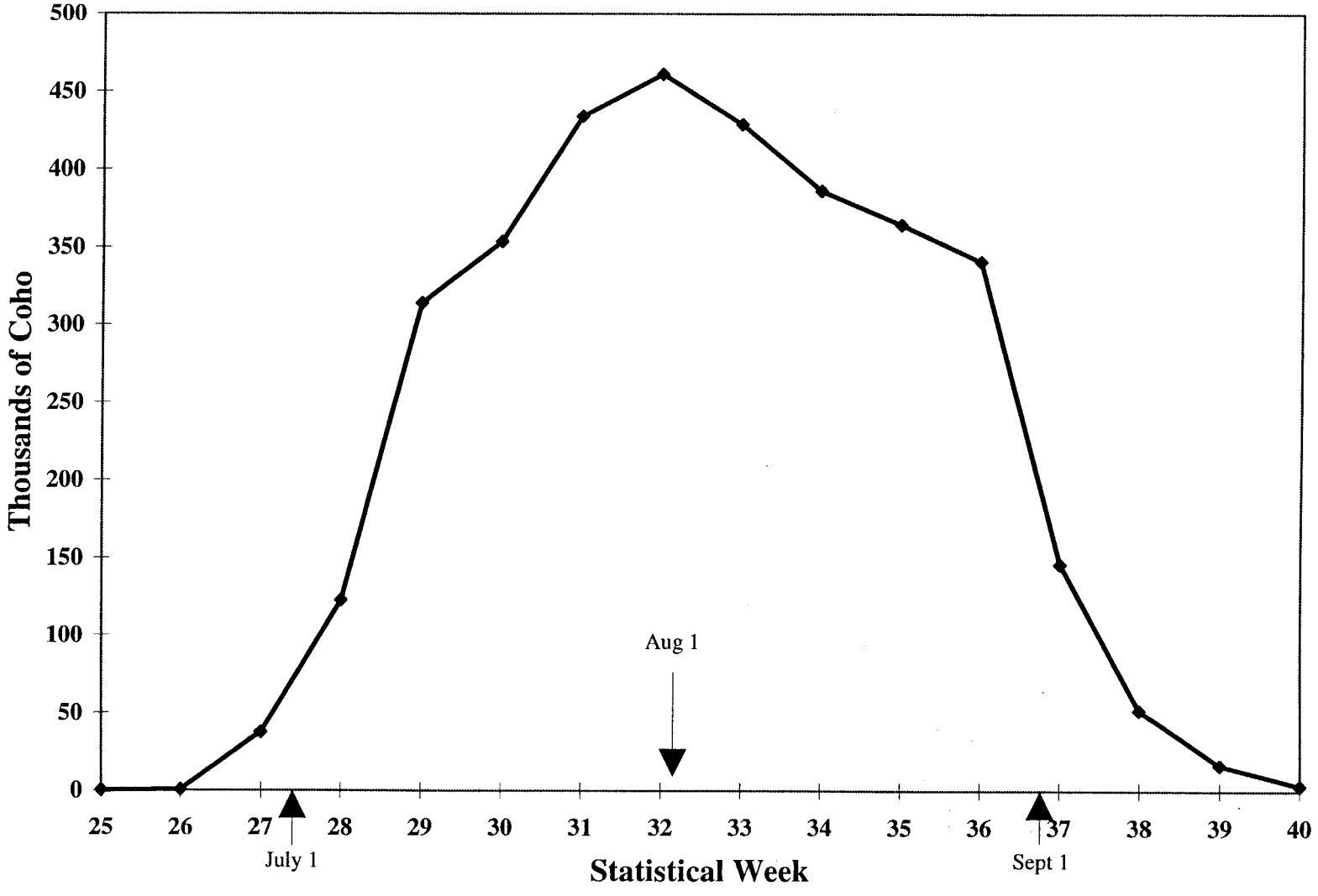

Figure 11. Southeast Alaska troll fishery coho catch by week, 1994.

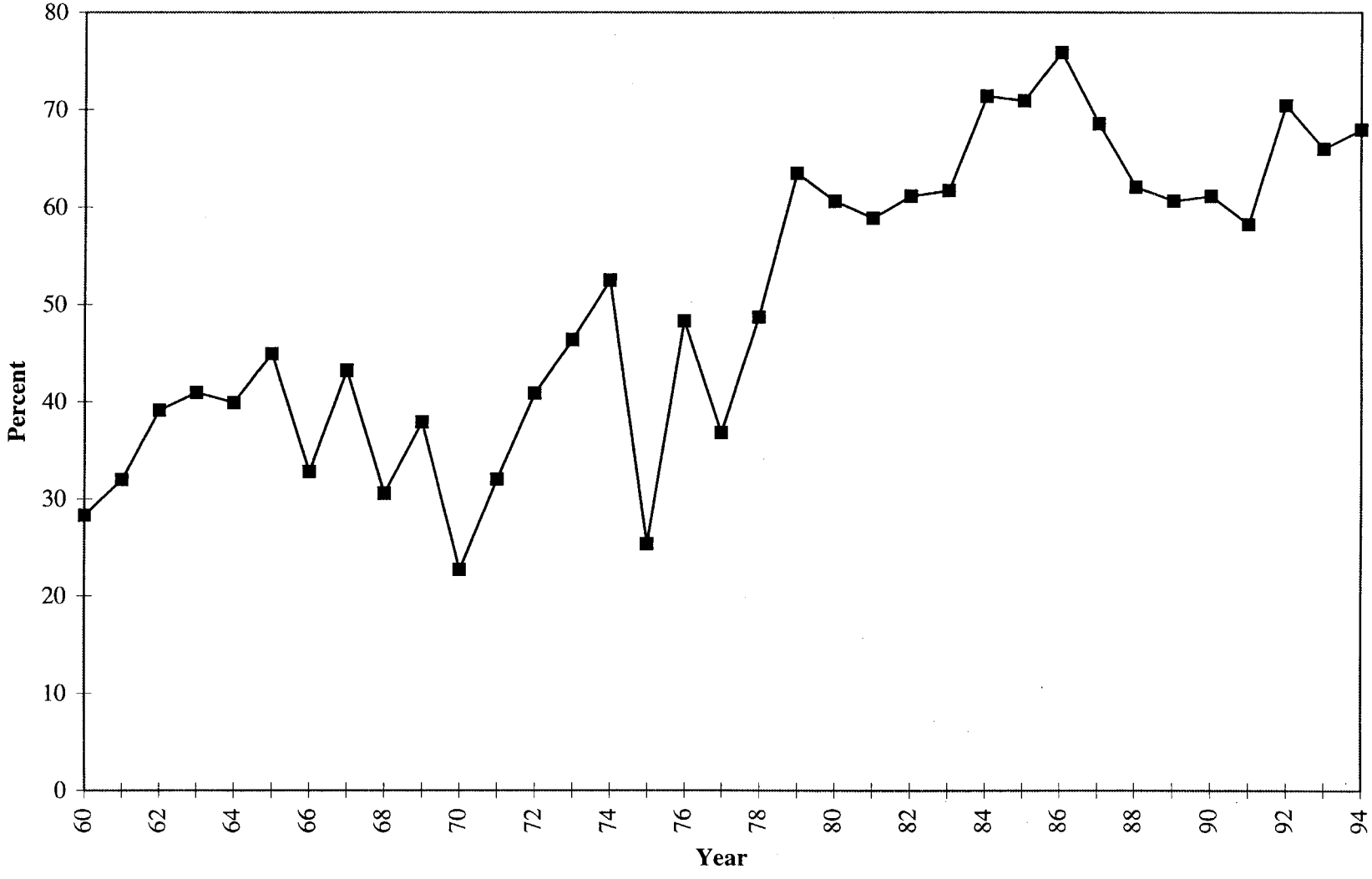

Figure 12. Percent of the Southeast Alaska troll coho salmon catch harvested in outside districts, 1969-1994.

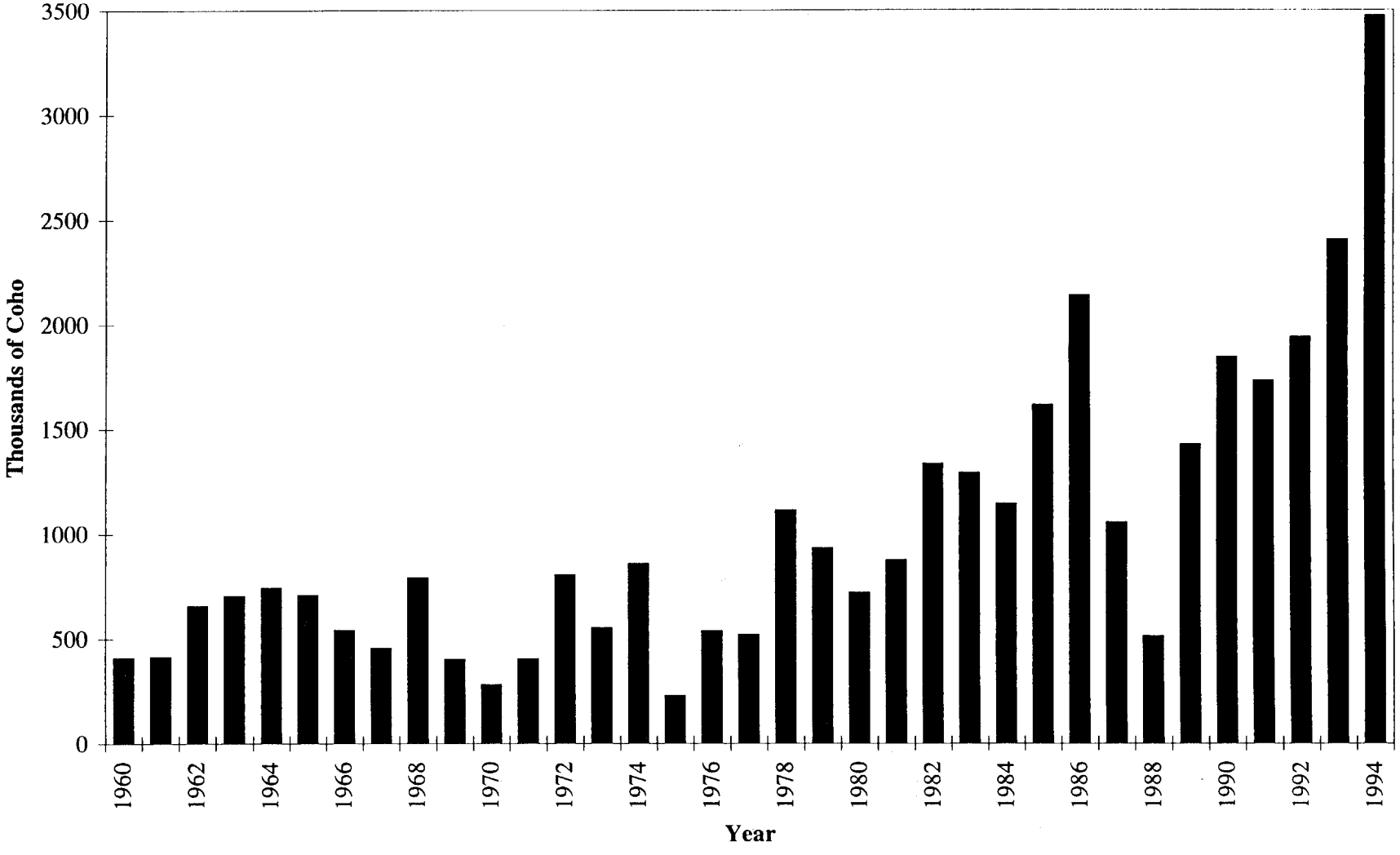

Figure 13. Southeast Alaska troll fishery coho salmon catches, 1960 - 1994.

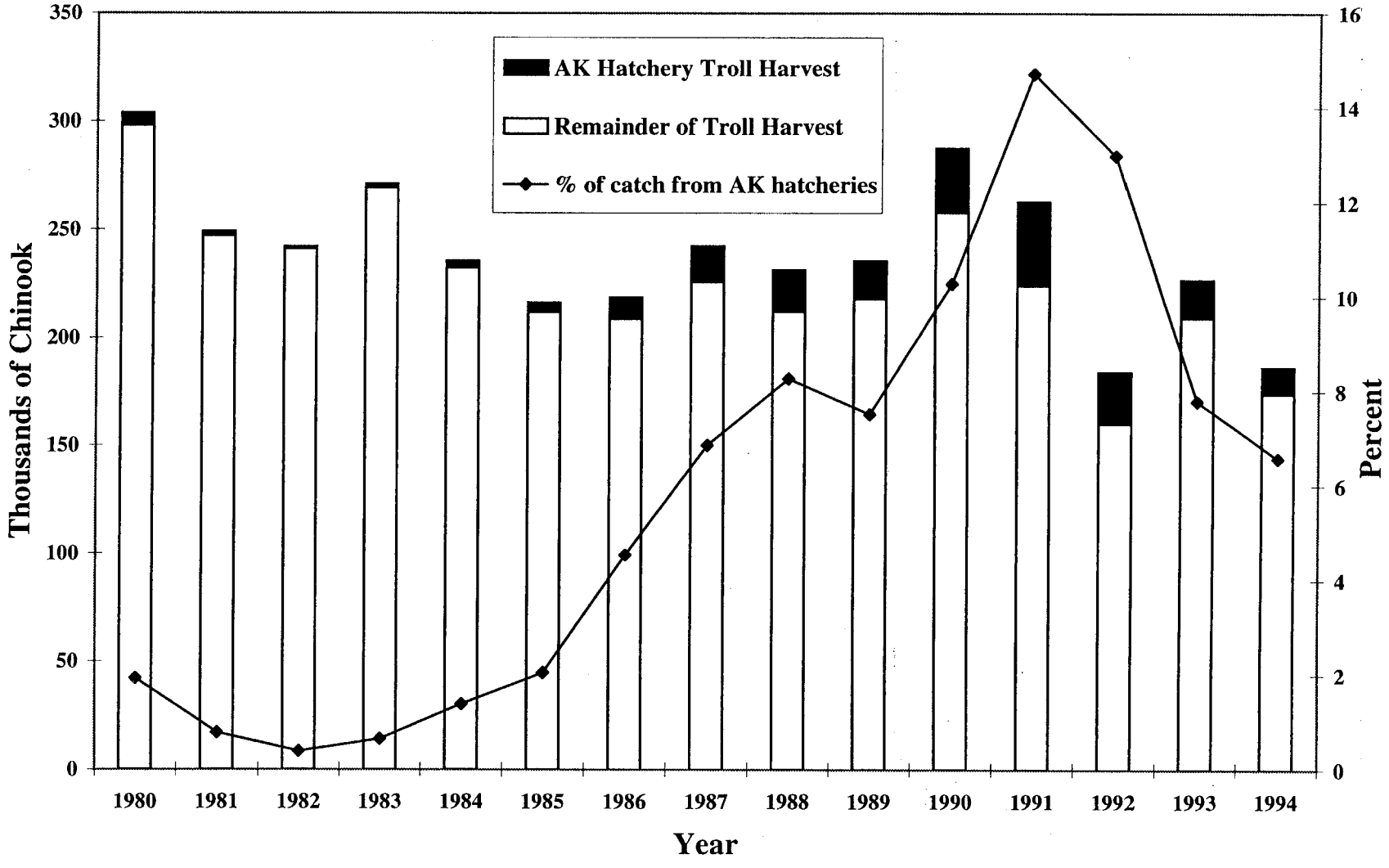

Figure 14. Alaska hatchery chinook contributions to the Southeast Alaska troll fishery, 1980-1994.

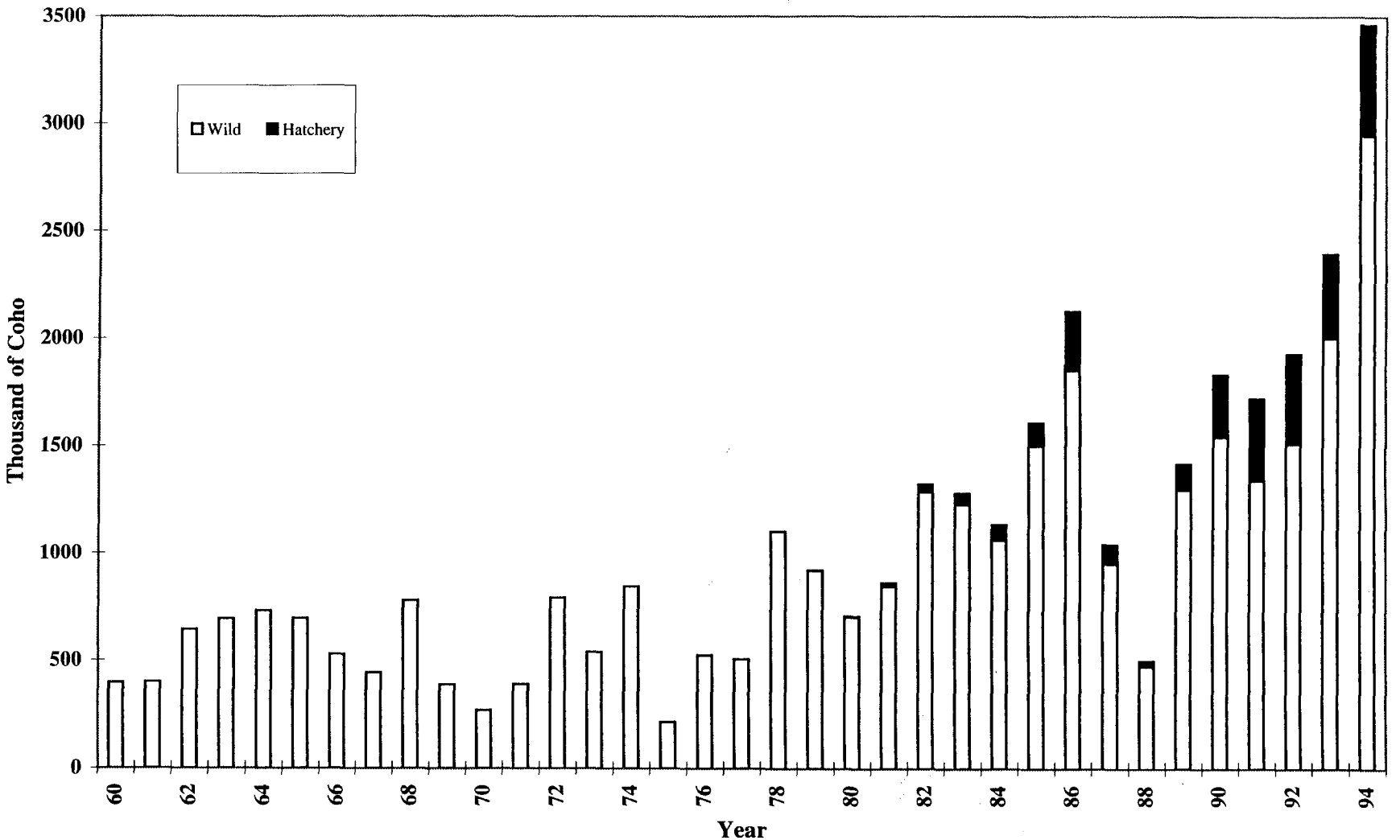

Figure 15. Total hatchery coho contributions to the Southeast Alaska troll fishery, 1980-1994.

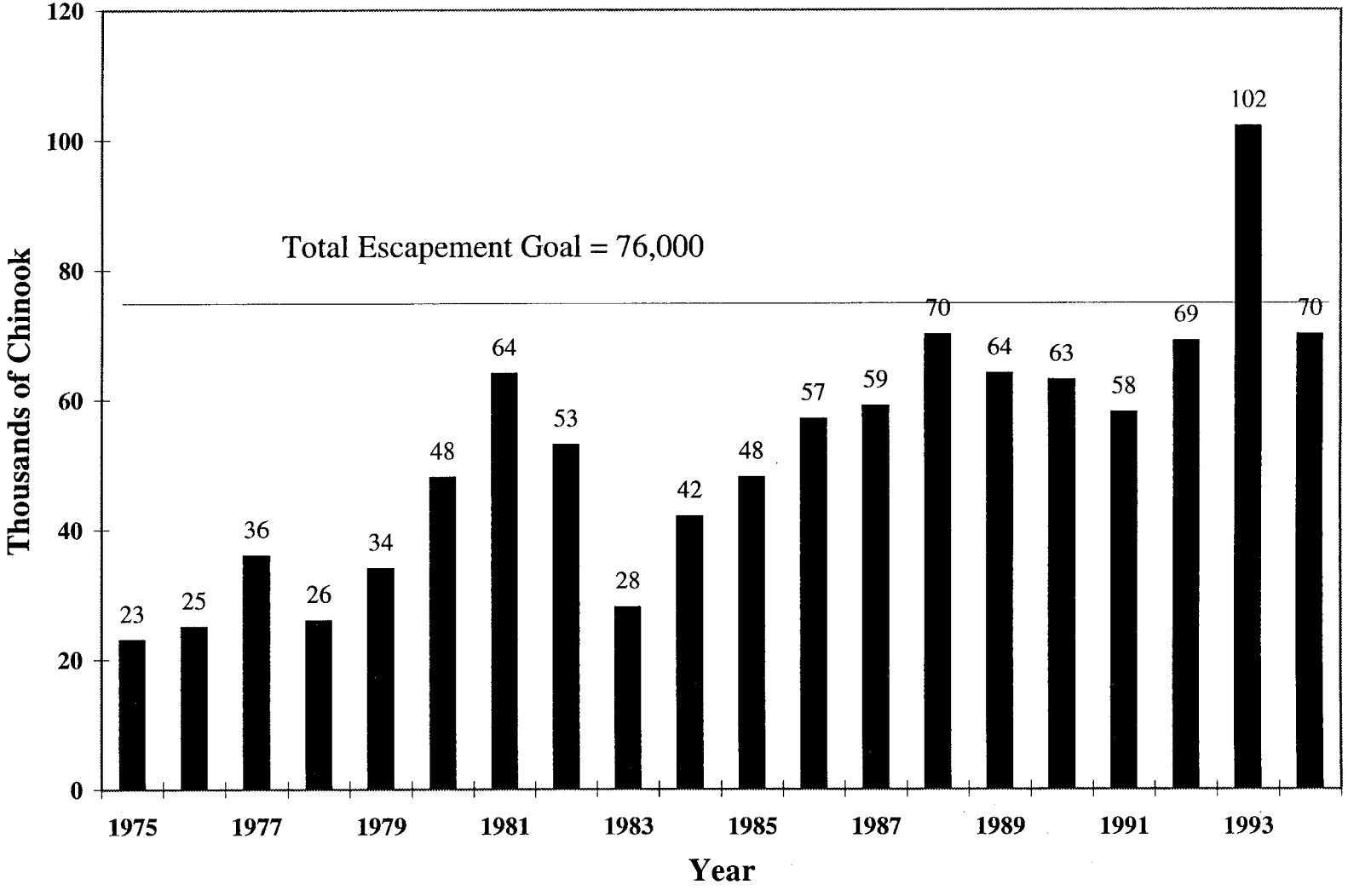

Figure 16. Estimated total natural chinook salmon escapements to Southeast Alaska and transboundary rivers, age 1.3 or older, 1975-1994.

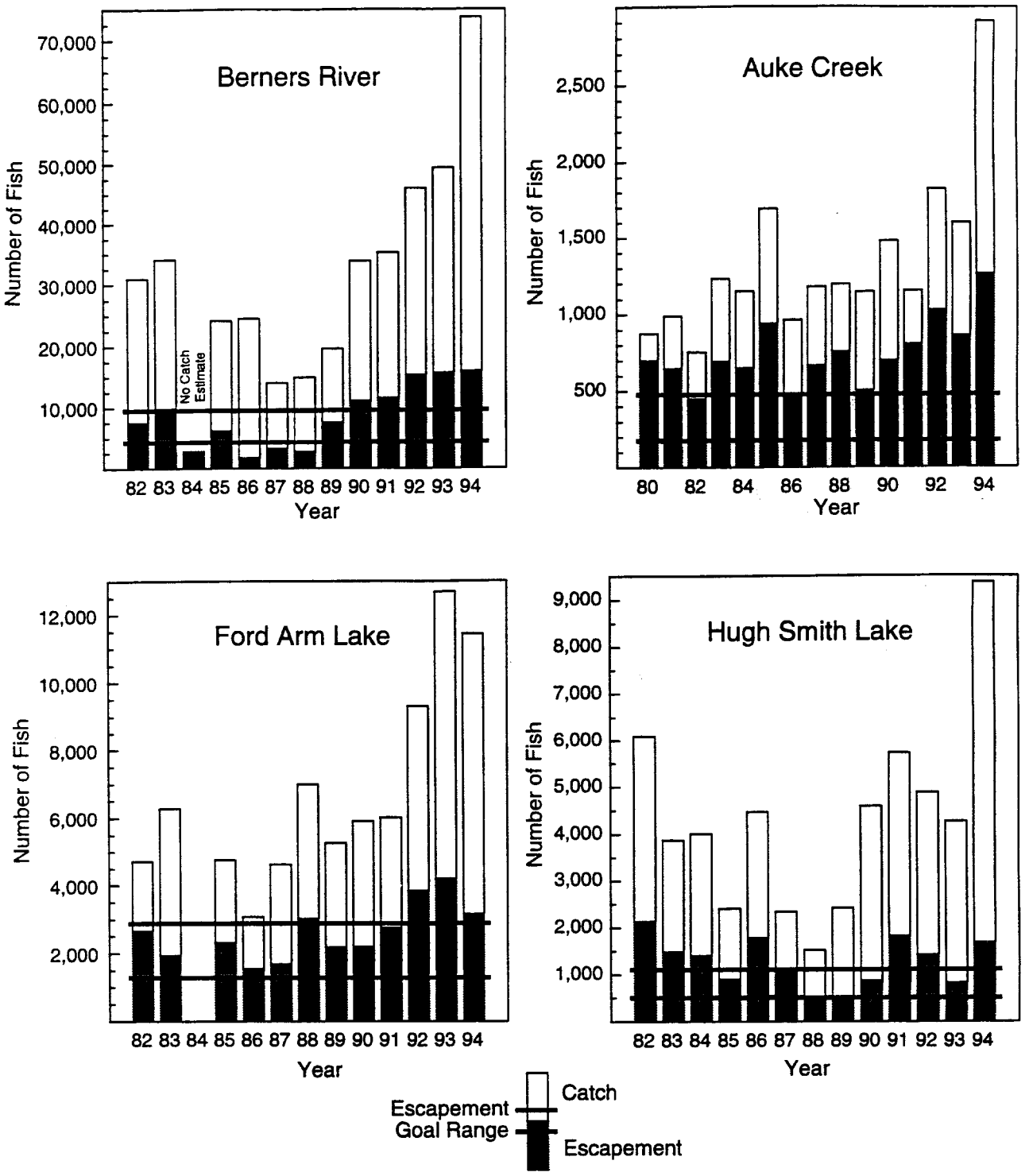

Figure 17. Total run size, catch, escapement and escapement goal range for four coho salmon indicator stocks in Southeast Alaska.

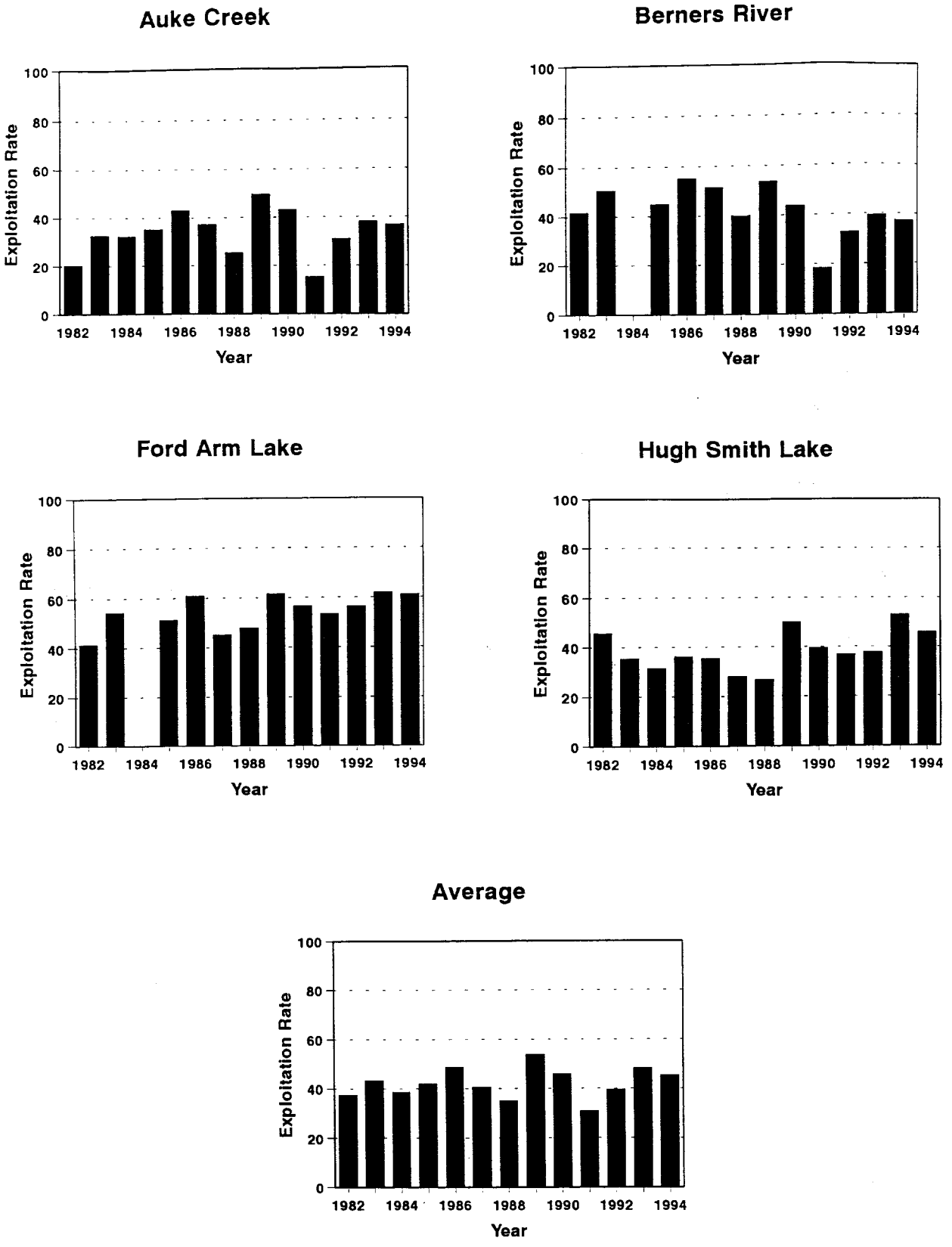

Figure 18. Estimated exploitation rates by the Alaska troll fishery for four coded wire tagged wild Southeast Alaska coho salmon stocks, 1982-1994.

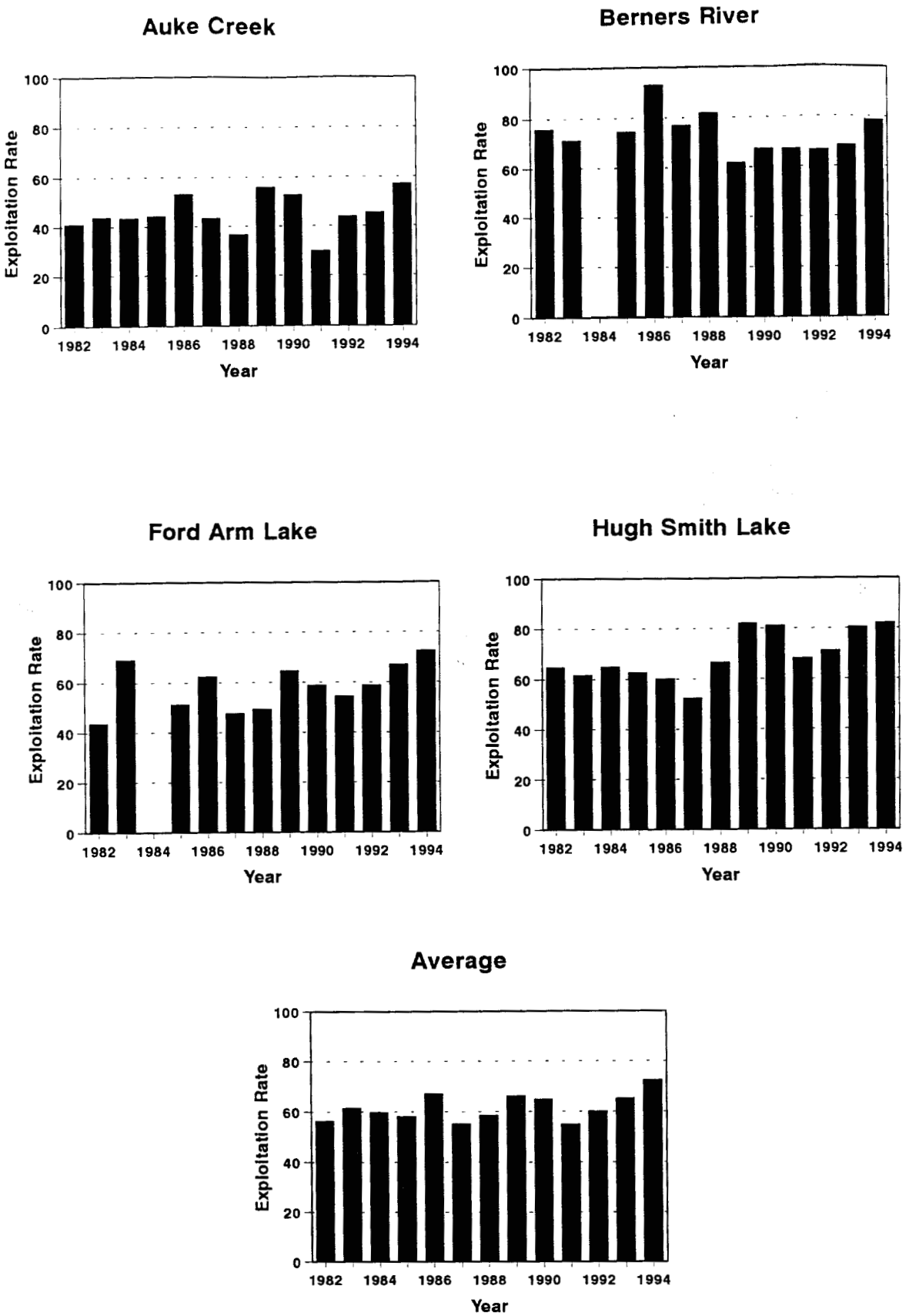

Figure 19. Estimated exploitation rates by the all gears for four coded wire tagged wild Southeast Alaska coho salmon stocks, 1982-1994.