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KODIAK COMMERCIAL SALMON FISHERY  
MANAGEMENT ACTIVITIES, HARVEST STRATEGIES,  
HISTORICAL HARVEST, AND EFFORT DISTRIBUTION  
DURING JULY

By

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## INTRODUCTION

In March of 1993, the Alaska State Board of Fisheries accepted an agenda change request to discuss proposed regulation changes designed to reduce the Kodiak seine fleet's ability to harvest sockeye salmon bound for Cook Inlet during July. This agenda change request was submitted by the Kenai Peninsula Fishermens Association as a result of high bycatches of sockeye salmon during early to mid July 1992, in specific geographic locations.

The intent of this report is to explain and review the various harvest strategies which are in effect during July for the entire Kodiak Management Area (KMA)(Figure 1). In addition, this report will review historical harvests by species and effort levels (measured in terms of landings) by geographic area during the July 6 to July 25 time period. This time period was selected since July 6 marks the first general opening for Kodiak pink salmon fishery, while July 25 defines the start of the peak harvest period for pink salmon. This time period also coincides with the peak bycatch period of sockeye salmon. Prior to July 6, a majority of the KMA is closed to fishing.

When reviewing the tables and graphics provided in this report it is important to realize that due to the 1989 EXXON VALDEZ oil spill most of the KMA remained closed to commercial fishing for the entire season. Where average harvest information is used, 1989 is not included.

### *Kodiak's July Commercial Salmon Fisheries*

#### **Historical Background**

During July, fisheries occurring in most of the KMA are dependent on a pink salmon harvest strategy which sets the initial fishing periods based on the strength of the preseason pink salmon forecast (Figure 2; Table 1). Kodiak's fiord like bays provide for large closed water sanctuaries to protect pink salmon needed to meet escapement requirements. These large closed water sanctuaries allow for an orderly harvest of ocean bright pink salmon on the outer capes.

Pink salmon represent the most abundant species of salmon commercially harvested in the KMA (Figure 3; Table 2). With the overall collapse of the sockeye salmon fisheries in the early 1950's, pink salmon began to support the commercial fishery. Pink salmon continued to provide for most of Kodiak's "exvessel value" until the 1980's when the overall sockeye salmon production began to increase as a direct result of the intensive sockeye rebuilding programs initiated in 1971 (Figure 4; Table 3).

Year-to-year fluctuations in the numbers of pink salmon returning can be quite variable (Figure 5). In order to assist industry planning, a forecasting program was initiated in the mid 1960's using a preemergent fry index. Sampling major pink salmon systems for "overwinter" fry survival proved to be a reliable technique for predicting Kodiak pink salmon returns. This project evolved into the current day pink salmon forecasting program in which preemergent fry sampling is conducted annually on selected "index streams" (Table 4).

During the first decade of statehood (1960's), weekly fishing periods in July were set preseason and usually ran from Monday through Friday. As part of a major effort to start rebuilding Kodiak's depleted sockeye salmon stocks (Figure 6) in the early 1970's, the method of adjusting fishing time was changed from emergency order (E.O.) closures to emergency order openings. This new use of the emergency order process changed the actual regulatory announcement for fishing time from preseason to inseason.

Switching to emergency order openings was a monumental step in allowing for orderly inseason adjustments of fishing time based on observed run strength.

Coincidentally, there was a major drop in pink salmon production beginning in 1972 (Figure 5), due to severe cold winters combined with poor early marine survival conditions. For the next three years (1973-1975), fishing time in July was drastically reduced as part of a pink salmon rebuilding program.

Although the inseason announcement of fishing periods started in 1971, the length of the initial fishing periods were based on the preseason forecast. However, the date of the first general pink salmon opening was not fixed and varied between July 5 and July 10 from 1971 to 1977 (generally the first Monday after July 4). Due to the July 5 opening date in 1971 and the disastrous years of 1972-1975, problems with early pink salmon buildups near the stream mouths were not encountered until 1977.

In 1977, the initial fishing period for the general pink salmon season did not occur until July 10. With Kodiak's pink salmon production on the rebound, large quantities of pink salmon had built up inside closed water sanctuaries prior to the initial opening. In order to provide for harvest opportunities on surplus pink salmon, closed water sanctuaries were reduced. Overall, the quality of the fish harvested were poor. This type of unorderly startup of the pink salmon season, which had the large seine fleet jockeying for position on buildup sets of poor quality fish, lead to an earlier fixed opening date.

### **Current Pink Salmon Harvest Strategy**

In order to provide for an orderly start and improve the overall quality of the fish harvested, July 6 was selected as the initial date for the first general pink salmon opening in 1978. Although the length of time of the initial fishing periods continue to vary based on the preseason forecast, July 6 has remained the first day of the general pink salmon opening (Figure 7). The duration of each of the first three fishery periods remained consistent through 1987. Beginning in 1988, the initial fishing period for "even year" returns was limited to no more than 57 hours. This change reflected the differences in early production between "odd" and "even" years.

This type of harvest strategy has received excellent support from Kodiak's fishing industry. The fixed opening date (with preset fishing periods) provides for an orderly start of the pink salmon fishery with inseason adjustments of fishing time (either increase or decrease) occurring during peak abundance periods in late July and early August based on actual run strength. Due to a decline in fish prices in the mid 1980's, the overall quality of salmon harvested became more of a statewide concern. Kodiak's harvest strategy for pink salmon was used as an example of

the departments ability to prosecute a fishery on high quality fish while still ensuring escapement.

In order to evaluate inseason harvest rates, which in turn reflects a particular area's actual run strength, the Kodiak Area is divided up into 25 "tender reporting areas" (Table 5). These report areas are specific geographic locations structured around specific fisheries and harvest locations. Harvest data are collected daily from all fish buyers. These "initial harvest data" are a compilation of the previous days deliveries to each companies tenders or dock by each tender reporting area. Additional inseason data are collected and evaluated via aerial surveys of initial buildups and escapement levels of pink salmon combined with observations of traveling schools of fish.

Expected fishing periods are detailed preseason in an annually issued harvest strategy (Table 6). In general, adjustments in fishing periods are not made until after the third fishing period which occurs during the week ending July 25. On average (1970-93), 20% of the pink salmon harvest has been taken by the end of the third fishing period. By the end of July, approximately 40% of the pink salmon harvest has occurred (Figure 8; Table 7).

### *Management Plans in Effect in July*

Although initial fishing time in July for a major portion of the Kodiak Area is affected by the harvest strategy based on pink salmon forecasted run strength, other salmon species, predominantly chum and sockeye salmon, are also harvested during this time period. There are several regulatory management plans which address fisheries directed toward chum and sockeye salmon (Figure 9).

The *Cape Igvak Salmon Management Plan*, (5AAC 18.360) which begins in June and remains in effect until July 25, provides both allocative and biological guidelines for a directed fishery on sockeye salmon bound for Chignik. The *Westside Kodiak Management Plan* (5AAC 18.362) provides guidelines for early run sockeye and chum salmon fisheries through July 5 for all westside management units. In addition, this plan provides guidelines for directed sockeye salmon fisheries throughout July in the Southwest Kodiak District. In the Alitak Bay District, directed sockeye fisheries are provided for through July 15, under the *Alitak Bay District Management Plan* (5AAC 18.361). The *Eastside Afognak Management Plan* (5AAC 18.365) addresses a directed sockeye salmon fishery in the Southeast Afognak Section through July 5. During the time period July 6 through July 25 the *North Shelikof Strait Sockeye Salmon Management Plan* (5AAC 18.363) is in effect. This plan reduces directed fishing opportunities on migrating sockeye salmon through the use of sockeye salmon harvest caps which trigger "seaward zone" closures while still providing for harvest opportunities on local stocks in more nearshore waters. The *Spiridon Lake Sockeye Salmon Management Plan* (5AAC 18.366) is also in effect during July. This plan directs terminal fishing activities for a enhanced sockeye salmon run in Spiridon Bay.

While not in a specific regulatory plan, major restrictions resulted from board action in 1990 and again in 1993 which clarified that all waters seaward of the state territorial sea boundary (three

mile limit) are closed to salmon fishing. This action confined the Kodiak purse seine fleet's fishing activities to more traditional inshore waters and provided for a large closed water corridor in Shelikof Strait for migratory fish to pass through.

The *Eastside Kodiak Management Plan* (currently not in regulation) provides for directed sockeye fisheries in the Inner Ugak Bay Section through July 10 (Table 8). This plan details which species affect fishing time in specific management units over time and will be submitted as a regulatory plan during the next scheduled regulatory year for Kodiak.

Whenever possible, specific fisheries are coordinated to occur simultaneously, in order to provide for less concentrated fishing conditions which in turn lessen the potential for gear and allocative conflicts.

### **July Chum Salmon Harvest**

Chum salmon are harvested in directed fisheries as well as in pink salmon fisheries. The geography of many of the Alaska Peninsula bays do not allow for large closed water sanctuaries. In order to provide additional protection for specific chum salmon stocks in the Mainland District, initial fishing periods are limited to no more than 57 hours per week. To a limited degree chum salmon are also harvested during directed sockeye salmon fisheries in the Alitak District, Southwest Kodiak District, and in the Cape Igvak Section.

On average (1970-93), approximately 26% of the annual chum salmon harvest is taken from July 6 through July 25 (Figure 8; Table 7).

### **July Chinook and Coho Salmon Harvests**

There are no directed coho or chinook salmon fisheries in the KMA in July. Although directed coho salmon fisheries occur later in the season, directed chinook salmon fisheries do not occur in the KMA at any time during the year.

Any coho or chinook salmon which are harvested during July, are caught during fisheries directed toward pink, chum, or sockeye salmon. On average (1970-1993), 12% of the annual coho salmon harvest is taken during the time period July 6 through July 25 (Table 9). On average (1970-93), 38% of the annual chinook salmon harvest has been taken during the time period July 6 through July 25 (Table 9).

### **July Sockeye Harvest**

It is quite normal for sockeye salmon to be harvested in July as shown by the regulatory management plans in effect.

On average (1970-87), 27% of Kodiak's annual sockeye salmon harvest is taken during the time period July 6 through July 25 (Table 10; Figure 10). In recent years, major departures from this "July average sockeye salmon harvest" have occurred. In 1988 and again in 1992 approximately 50% of the annual sockeye salmon harvest for those years was taken during the July 6 to July 25 period. It should be noted that the increase in the July harvest percentage in

1988 and 1992 coincided with very strong sockeye salmon returns to Cook Inlet (Figure 11). In previous years, there have also been seasons where an unusually high percentage of the annual sockeye salmon harvest has occurred in July. In these years, the increase in the July sockeye salmon harvest percentage is due to the Cape Igvak fishery (Figure 12).

### **North Shelikof Strait Sockeye Salmon Management Plan**

The sockeye salmon harvest pattern which occurred in 1988 resulted in the adoption of the *North Shelikof Strait Sockeye Salmon Management Plan* in 1990 (Figure 13). In addition, the Board also stated its intent that all fishing activities be restricted to only those waters within the "three mile limit" even though state regulations defined Shelikof Strait as state waters. A portion of the *North Shelikof Strait Sockeye Salmon Management Plan* pertaining to the "seaward zone" of the Southwest Afognak Section was changed in 1993 to provide for a ½ mile "corridor" along the coast. This corridor, when in effect, eliminates vessels from being completely displaced from traditional fishing locations while providing increased protection for migrating sockeye salmon and retaining harvest opportunities on pink salmon.

### **Historical Harvest and Effort Information**

Sockeye harvest patterns which occurred in 1992 resulted in the agenda change request, to address Kodiak's July fisheries prior to the 1994 season. As mentioned in the introduction to this report, the proposed regulation changes which accompanied this agenda change request desire to implement new regulations which are intended to reduce the harvest of sockeye salmon bound to Cook Inlet spawning systems by Kodiak commercial salmon fishers.

Graphs and tables, provided as an aid in reviewing the basic management chronology by major harvest area (Figure 14) compared to the actual 1970-93 average harvest by species and week for the entire season, are located in Appendix A.

In Appendix B are graphs and tables depicting historical harvests by species for the time period July 6 through July 25 for the years 1970-93 for the 10 major geographical areas. Historical effort levels measured in landings, are also shown by year for the same time period.

Appendix C contains graphs and tables depicting historical harvest (1970-1993) and effort information during the July 6 to July 25 time period for the specific harvest areas presented in the agenda change request by the Kenai Peninsula Fishermens Association. These specific areas are: statistical areas 258-10 and 258-40, which are in the Sitkalidak Section (Figure 15) of the Eastside Kodiak District; the Halibut Bay Section (Figure 16) which is located in the Southwest Kodiak District; and the Katmai and Alinchak Sections (Figure 17) located in the Mainland District.

Appendix D contains graphs and tables depicting the coho and chinook salmon harvest (1990-1993) by major harvest area by three time periods: 6/1-7/5; 7/6-25; and 7/26-10/31. Also contained in Appendix D is a summary table of the *North Shelikof Strait Sockeye Salmon Management Plan*, graphs and tables showing the harvest by species, by year (1970-1993) for selected management units, graphs depicting the annual 1987-1993 harvest by species and major harvest area for the 6/1-7/5; 7/6-25; and 7/26-10/31 time periods.

Appendix E contains graphs which depict the comparison between the number of permits versus the number of landings for the 10 major harvest area during the time period July 6 through July 25.

While reviewing information presented in graphic formats, it is important to note the "scaling" used to show the number of fish harvested or effort levels when comparing one harvest location to another.

In summary, the information contained in this report provides actual harvest and effort summaries for Kodiak's July commercial salmon fisheries. These fisheries have occurred within the framework of the pink salmon harvest strategy and the various regulatory management plans in effect for the KMA.

Table 1. July management chronology by major salmon harvest area.

NORTH SHELIKOF SECTIONS	LOCAL SOCKEYE	LOCAL AND MIXED PINK AND CHUM.			
		NORTH SHELIKOF STRAIT SOCKEYE SALMON MGT. PLAN.			
S.W.AFOGNAK SECTION	E.R.KARLUK SOCKEYE	LOCAL AND MIXED PINK.			
		NORTH SHELIKOF STRAIT SOCKEYE SALMON MGT. PLAN.			
N.W.KODIAK DISTRICT	E.R.KARLUK SOCKEYE, LOCAL SOCKEYE,	PINK & CHUM		LOCAL SOCKEYE	
S.W.KODIAK DISTRICT	AYAKULIK SOCKEYE, KARLUK SOCKEYE	STURGEON CHUM		AYAKULIK SOCKEYE, L.R.KARLUK SOCKEYE	EVEN YEAR AYAKULIK & KARLUK PINK
ALITAK BAY DISTRICT	FRAZER SOCKEYE			PINK & CHUM & UPPER STATION SOCKEYE	
EASTSIDE KODIAK DISTRICT	LOCAL SOCKEYE	LOCAL AND MIXED PINK AND CHUM.			
N.E. KODIAK DISTRICT	CLOSED	LOCAL AND MIXED PINK AND CHUM.			
REMAINDER OF AFOGNAK	LOCAL SOCKEYE	LOCAL AND MIXED PINK AND CHUM.			
KATMAI/ALINCHAK SECTIONS	CLOSED	LOCAL AND MIXED PINK AND CHUM.			
IGVAK/WIDE BAY SECTIONS	CHIGNIK BOUND SOCKEYE				LOCAL & MIXED PINK & CHUM

7/1

7/6

7/15

7/25

7/30

Table 2. Kodiak Management Area salmon harvest by species, 1948-1993<sup>a</sup>.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
1948	1,401	1,260,465	32,364	5,968,487	330,795	7,593,512
1949	851	892,336	53,737	4,927,779	699,548	6,574,251
1950	2,127	920,885	40,653	5,304,701	685,109	6,953,475
1951	2,402	467,875	48,792	2,100,377	483,057	3,102,503
1952	1,081	603,677	51,567	4,576,726	1,243,227	6,476,278
1953	2,991	317,150	41,681	5,174,645	547,574	6,084,041
1954	942	325,157	66,430	8,439,231	1,250,833	10,082,593
1955	2,428	164,482	34,582	10,794,164	482,425	11,478,081
1956	1,123	271,249	52,844	3,318,841	705,047	4,349,104
1957	1,030	234,253	34,995	4,716,482	1,208,472	6,195,232
1958	1,942	288,014	20,555	4,038,938	930,698	5,280,147
1959	1,837	330,087	14,512	1,967,058	733,784	3,047,278
1960	1,238	362,525	54,308	6,737,817	1,300,386	8,456,274
1961	864	407,979	28,579	3,926,023	518,935	4,882,380
1962	1,095	784,664	54,583	14,113,851	794,727	15,748,920
1963	286	407,040	57,011	5,480,158	305,061	6,249,556
1964	1,306	498,488	35,535	12,044,341	1,134,163	13,713,833
1965	786	346,237	26,672	2,886,831	431,340	3,691,866
1966	599	631,646	67,700	10,755,582	762,766	12,218,293
1967	1,753	308,756	10,354	187,813	226,681	735,357
1968	1,936	760,393	56,629	8,768,122	750,428	10,337,508
1969	2,469	591,481	48,759	12,500,823	534,933	13,678,465
1970	1,089	917,047	66,424	12,036,598	919,972	13,941,130
1971	920	478,479	22,844	4,334,492	1,541,444	6,378,179
1972	1,300	222,800	16,588	2,478,737	1,163,772	3,883,197
1973	800	167,341	3,573	511,708	317,921	1,001,343
1974	545	418,761	13,631	2,647,196	249,294	3,329,427
1975	101	136,418	23,659	2,942,801	84,431	3,187,410
1976	700	641,500	23,700	11,078,000	740,500	12,484,400
1977	600	623,500	27,900	6,252,400	1,072,300	7,976,700
1978	3,228	1,071,782	48,795	15,004,065	814,345	16,942,215
1979	1,907	630,756	140,629	11,285,809	358,336	12,417,437
1980	600	651,000	140,000	17,291,000	1,076,000	19,158,600
1981	1,000	1,289,000	122,000	10,337,000	1,345,000	13,094,000
1982	1,000	1,205,000	344,000	8,076,000	1,266,000	10,892,000
1983	4,000	1,232,000	158,000	4,603,000	1,085,000	7,082,000
1984	5,000	1,951,000	230,000	10,884,000	649,000	13,719,000
1985	5,000	1,843,000	284,000	7,335,000	431,000	9,898,000
1986	4,000	3,155,000	168,000	11,504,000	1,126,000	15,957,000
1987	5,000	1,793,000	192,000	5,073,000	682,000	7,745,000
1988	22,000	2,696,000	300,000	14,556,000	1,426,000	19,000,000
1989	4,851	2,628,565	141,433	22,648,511	835,734	26,259,094
1990	18,806	5,248,404	293,819	5,983,812	577,743	12,122,584
1991	22,233	5,704,041	324,860	16,642,804	1,029,070	23,723,008
1992	24,299	4,167,705	280,084	3,310,501	679,484	8,462,073
1993	42,199	4,377,688	313,387	34,019,420	588,331	39,341,025
<b>Total</b>	<b>203,665</b>	<b>54,424,626</b>	<b>4,612,168</b>	<b>379,564,644</b>	<b>36,118,666</b>	<b>474,923,769</b>

Table 3. Exvessel values in dollars by salmon species, 1975-1993.

YEAR	CHINOOK	SOCKEYE	COHO	PINK	CHUM
75	836	388,555	108,071	4,240,025	179,565
76	6,958	2,636,564	102,515	14,552,488	1,826,022
77	13,512	3,661,365	159,595	9,959,805	5,076,047
78	43,180	7,713,210	378,732	19,254,365	2,963,584
79	33,685	4,836,232	1,068,034	15,688,443	1,463,696
80	9,475	2,814,265	720,496	19,691,404	4,173,758
81	30,350	8,403,460	796,355	17,575,866	5,888,365
82	15,625	6,432,027	2,389,854	6,120,582	3,858,698
83	40,145	6,146,376	695,042	3,833,780	2,688,079
84	97,661	11,411,174	1,811,065	10,739,311	1,886,142
85	136,074	10,760,252	1,986,232	6,221,026	1,327,343
86	73,725	26,342,926	966,832	8,631,348	2,741,828
87	69,552	19,604,648	1,357,790	7,788,380	2,275,289
88	429,365	41,900,619	3,284,487	43,818,589	14,378,886
90	243,267	41,903,813	1,802,779	6,416,863	2,229,109
91	195,336	26,862,765	1,272,601	6,545,245	2,142,784
92	347,817	34,334,081	1,375,402	1,860,508	1,971,038
93	251,518	17,954,967	1,052,308	12,769,226	880,795

Table 4. Preemergent pink salmon fry sampling results for the 1994 adult pink salmon return, Kodiak Management Area, 1993.

Stream	Digs	Dig Dates	Live Fry	Eggs	Dead Fry	Eggs	1993 Index LiveFry/M <sup>2</sup>	% Digs WithFry	1991 Index	1989 Index	Range of Development	H <sub>2</sub> O Temp.
Perenosa - Up	0		-	-	-	-	-	-	308.54	66.44		
Perenosa - Down	30	4/03/93	1,345	0	144	602	241.20	46.7	95.94	162.30	70 - 95	3.0°C
Perenosa (Total)	(30)		(1,345)	(0)	(144)	(602)	(241.20)	(46.7)	(180.98)	(123.96)		
Paramanoff	0		-	-	-	-	-	-	126.83	309.35		
Malina	40	4/03/93	1,011	7	283	2,856	135.98	70.0	345.75	206.50	40 - 95	2.5°C
Afognak	0		-	-	-	-	-	-	105.56	85.33		
Danger	40	4/01/93	1,327	0	4	708	178.49	45.0	173.51	437.80	30 - 95	2.0°C
Seal Bay (N)	(25)	4/10/93	(1,487)	(2)	(42)	(570)	(320.00)	(84.0)	(328.83)	(729.53)	40 - 95	3.5°C
L. Waterfall (N)	(0)	(-)	(-)	(-)	(-)	(-)	(-)	(328.8)	(754.28)			
<b>Afognak Total</b>	<b>110</b>		<b>3,683</b>	<b>7</b>	<b>431</b>	<b>4,166</b>	<b>180.13</b>	<b>54.6%</b>	<b>203.53</b>	<b>220.76</b>	<b>40 - 95%</b>	
Baumans	30	3/29/93	2,019	432	0	2,526	362.08	83.4	94.69	163.55	20 - 95	3.0°C
Terror	50	3/30/93	196	0	0	318	21.09	14.0	7.21	34.54	95	2.5°C
Uganik	60	3/18/93	428	0	0	3,085	38.38	41.7	18.29	14.52	80 - 90	2.5°C
Little	40	3/18/93	773	0	174	1,467	103.97	47.5	137.06	31.34	20 - 95	1.5°C
Red - Up	60	3/19/93	4,289	18	939	6,698	384.58	95.0	562.48	313.26	20 - 95	1.5°C
Red - Down	60	3/19/93	2,498	12	780	3,619	223.98	91.7	697.79	378.67	30 - 90	2.0°C
Red (Total)	(120)		(6,787)	(30)	(1,719)	(10,317)	(304.28)	(93.4)	(630.13)	(345.93)		
Zachar - Up	30	3/25/93	295	1	0	104	52.91	20.0	0.0	0.0	70 - 80	3.0°C
Zachar - Down	20	3/25/93	245	3	0	1,607	65.91	35.0	37.93	138.80	30 - 90	2.0°C
Zachar (Total)	(50)		(540)	(4)	(0)	(1,711)	(58.11)	(26.0)	(15.17)	(55.52)		
Uyak 202	60	3/24/93	2,240	0	234	1,044	200.85	48.4	63.13	63.22	40 - 95	2.0°C
Browns	60	3/25/93	3,240	0	270	3,238	290.52	60.0	79.36	52.19	40 - 90	0.5°C
Karluk	80	3/20/93	274	0	7	2,062	18.43	31.3	22.42	34.43	80 - 95	4.0°C
Sturgeon	40	3/20/93	149	0	0	44	20.04	5.0	35.72	0.0	70	3.0°C
<b>Westside Total</b>	<b>590</b>		<b>16,646</b>	<b>466</b>	<b>2,404</b>	<b>25,812</b>	<b>151.79</b>	<b>49.7%</b>	<b>176.66</b>	<b>111.54</b>	<b>20 - 95%</b>	
Deadman	60	3/24/93	2,562	0	23	309	229.73	45.0	19.64	149.83	20 - 90	3.5°C
Narrows	30	3/22/93	66	0	0	8	11.84	10.0	10.22	53.08	30 - 50	2.0°C
Dog Salmon	60	3/22/93	1,343	0	23	106	120.42	25.0	61.60	138.98	75 - 95	2.0°C
Humpy - Up	30	3/16/93	3,158	1	36	98	566.33	63.4	127.33	357.77	60 - 90	1.0°C
Humpy - Down	60	3/17/93	6,343	23	949	595	568.76	86.7	209.82	397.04	60 - 95	3.5°C
Humpy (Total)	(90)		(9,501)	(24)	(985)	(693)	(567.95)	(78.9)	(182.32)	(383.95)		
<b>Alitak Total</b>	<b>240</b>		<b>13,472</b>	<b>24</b>	<b>1,031</b>	<b>1,116</b>	<b>302.00</b>	<b>48.4%</b>	<b>89.96</b>	<b>223.09</b>	<b>20 - 95%</b>	
Kiliuda	40	3/14/93	708	0	12	458	95.26	40.0	42.37	26.09	40 - 90	3.0°C
Barling	40	4/02/93	1,010	0	3	2,112	135.85	45.0	88.23	65.18	40 - 95	2.5°C
Kaiugnak	50	3/17/93	3,372	1	97	2,704	362.83	70.0	472.36	426.91	40 - 90	3.5°C
Seven Rivers - Up	30	3/16/93	3,904	0	50	1,098	700.12	86.7	184.35	289.98	40 - 90	3.0°C
Seven Rivers - Down	60	3/16/93	8,756	0	510	5,150	785.12	95.0	320.56	401.62	20 - 90	2.5°C
Seven Rivers (Total)	(90)		(12,660)	(0)	(560)	(6,248)	(756.78)	(88.9)	(275.16)	(364.41)		
Miam	50	3/14/93	5	11	0	28	0.45	4.0	22.78	6.37	40 - 70	1.5°C
Saltery	50	3/09/93	155	3	2	398	16.68	22.0	9.04	11.41	65 - 95	3.0°C
Hurst	40	3/09/93	56	0	0	260	7.53	12.5	4.71	143.78	40 - 80	2.5°C
Sid Olds	50	3/03/93	1,672	25	23	427	179.91	64.0	51.43	157.74	20 - 99	2.0°C
American	60	3/04/93	1,176	0	0	258	105.45	20.0	12.73	66.44	20 - 95	4.0°C

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Table 4. (page 2 of 2)

Stream	Digs	Dig Dates	Live Fry	Eggs	Dead Fry	Eggs	1993 Index LiveFry/M <sup>2</sup>	% Digs WithFry	1991 Index	1989 Index	Range of Development	H <sub>2</sub> O Temp.
Sheratin	50	3/13/93	2,239	0	12	174	240.92	58.0	243.61	192.82	50 - 90	3.0°C
Buskin - Up	20	3/02/93	563	2	22	400	151.45	70.0	464.83	45.13	40 - 90	2.0°C
Buskin - Down	40	3/02/93	738	0	52	3,357	99.26	47.5	256.36	376.74	20 - 80	2.0°C
Buskin (Total)	(60)		(1,301)	(2)	(74)	(3,757)	(116.66)	(55.0)	(325.85)	(402.07)		
Monashka (N)	15	4/01/93	483	0	0	310	173.24	40.0	347.44	-	30 - 95	2.5°C
Beaver Pond (N)	40	3/13/93	808	0	0	565	108.68	25.0	38.06	191.39	60 - 90	4.5°C
Pillar (N)	0		-	-	-	-	-	-	196.69	-	-	-
<b>General Total</b>	<b>580</b>		<b>24,354</b>	<b>42</b>	<b>783</b>	<b>16,824</b>	<b>247.22</b>	<b>42.6%</b>	<b>167.93</b>	<b>223.28</b>	<b>20 - 99%</b>	
<b>KODIAK-AFOGNAK TOTAL</b>	<b>1520</b>		<b>58,155</b>	<b>539</b>	<b>4,649</b>	<b>47,918</b>	<b>205.84</b>	<b>49.1%</b>	<b>161.01</b>	<b>186.46</b>	<b>20 - 99%</b>	
Kukak	30	4/07/93	30	0	91	83	5.38	3.3	-	0	90 - 99	5.5°C
Missak	30	4/06/93	68	0	0	18	12.19	16.7	-	307.74	95 - 99	5.0°C
Kinak	40	4/07/93	424	0	5	269	57.03	40.0	-	21.79	40 - 90	4.0°C
Geographic	20	4/07/93	725	0	40	14	195.03	55.0	-	222.19	80 - 95	3.0°C
Dakavak	30	4/07/93	691	0	51	33	123.92	40.0	-	109.21	70 - 95	4.0°C
Kashvik	40	4/08/93	0	1	0	521	0	0.0	-	79.09	-	4.0°C
Alinchak	30	4/08/93	0	0	28	40	0	0.0	-	224.17	-	1.5°C
Portage	30	4/08/93	92	0	0	28	16.51	20.0	-	303.61	-	1.5°C
Oil	0		-	-	-	-	-	-	-	-	-	-
Jute	0		-	-	-	-	-	-	-	-	-	-
Kanatak	0		-	-	-	-	-	-	-	75.50	-	-
Big Creek	0		-	-	-	-	-	-	-	-	-	-
<b>Mainland Total</b>	<b>250</b>		<b>2,030</b>	<b>1</b>	<b>215</b>	<b>1,006</b>	<b>43.69</b>	<b>20.4%</b>	<b>-</b>	<b>138.43</b>	<b>40 - 99%</b>	

Temperature Data: March Mean Temp. = 35.3°F; Deviation from March Norm = +2.4°F. April Mean Temp. = 40.3°F; Deviation from April Norm = +2.8°F. (N) = Non-Index Streams, results not included in District totals.

Table 5. Tender pick-up area reporting form.

**KODIAK DAILY SALMON CATCH**

TENDER PICK-UP AREA															TOTAL
1) Northeast Kodiak Dist.															
2) Ugak Bay Sections															
3) Sitkalidak Section															
4) Two Headed/ 7-Rivers Sect.															
5) Humpy-Deadman Section															
6) Cape Alitak Section															
7) Moser/Olga Bay Section															
8) Ayakulik Sections															
9) Halibut Bay Section															
10) Sturgeon Section															
11) Karluk Sections															
12) Rocky Pt. to Cape Kuliuk															
13) Little River to C. Uganik															
14) Terror/Viekoda Bay Kupreanof															
15) Southwest Afognak Sect.															
16) Northwest Afognak Sect.															
17) Shuyak Island Section															
18) N.E. Afognak Perenosa Sect's															
19) Pillar Cape to Dolphin Point															
20) Kizhuyak/ Spruce Island															
21) Igvak Section															
22) Alinchak Katmai Sect's															
23) Dakavak Section															
24) Kukak Sections															
25) Hallo Bay/Big Rivers Sect's															
<b>TOTAL</b>															

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Table 6. Excerpt from harvest strategy-pink salmon fishing periods.

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## Pink Salmon

The total 1993 projected pink salmon harvest of 21.6 million fish, which includes Kitoi Bay Hatchery's projected contribution of 6.5 million pinks, represents a potential record high harvest. Overall, preemergent fry densities from the 1991 brood year were the highest on record for an odd year return. Mild spring weather conditions, combined with the overall high live fry densities, are the main factors which resulted in the 1993 pink salmon run being forecast at near record levels. It should be noted that during the previous three years (1990, 1991, 1992) pink salmon returned to Kodiak Area streams at less than forecasted levels. For the 1992 return, poor early marine conditions may have been the main factor for the less than expected return. In 1990 and 1991 there were very low adult average weights, which points to poor ocean rearing conditions. If similar marine conditions exist that may have affected the 1990 and 1991 returns, the 1993 pink salmon run may be less than projected. For planning purposes the actual harvest could approach the lower end of the forecast range of 15 million pink salmon, and may not exceed the point estimate of 21.6 million pink salmon.

The 1993 harvest strategy for pink salmon will emphasize the three management criteria identified in the introduction of this document.

In consideration of the forecasted strength of the 1993 pink return and the expected strong early production associated with odd year returns, **the 1993 pattern of fishing periods for those management units where pink salmon are the targeted management species is expected to vary in fishing time from 4-1/2 days per week up to 7 days per week from July 6 through approximately August 25.**

Listed below are projected fishing period scenarios which can be used for planning purposes by both ADF&G and industry. **Changes in these scenarios should be expected if significant deviations in the actual pink salmon return occurs.** Less fishing time should be expected in management units where chum salmon are the targeted management species.

***First Period: 4-1/2 days (105 hours) - 12:00 Noon July 6 through 9:00 P.M. July 10.*** In recent years this initial fishing period has varied between 2-1/2 to 4-1/2 days in duration. Due to the expected strong early production associated with an odd year return a longer initial fishing period is warranted. This period provides harvest data important for early run strength assessment for Area K's entire pink salmon run as well as for specific chum salmon stocks. No extensions in fishing time based on pink or chum salmon harvests would occur during this period. In consideration of the run out tides, closed waters will be increased in the Inner Uganik Bay Section beginning with this fishing period.

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**Second Period: 4-1/2 days (105 hours) - 12:00 Noon July 13 through 9:00 P.M. July 17.** This second period will help ensure that early run pink salmon stocks and several major chum salmon stocks are adequately harvested per the stated management goals, and that at least minimum escapements are ensured. Assessment of run strength for both species will emphasize harvest data. No extensions in fishing time based on pink or chum salmon harvests would occur during this period.

**Third Period: 4-1/2 days (105 hours) - 12:00 Noon July 20 through 9:00 P.M. July 24.** This third period will occur following a two day closure, to allow an influx of pink and chum salmon into terminal areas to enhance the build-up of potential escapement fish. This is the first fishing period when the combination of harvest and early escapement/build-up information will provide the initial indications of actual run strength for major pink salmon fisheries. While no extensions in fishing time are expected during this period, the assessment results of this period have commonly resulted in reduced fishing time during the fourth period for years of weaker than expected pink salmon returns.

**Fourth Period: 4-1/2 days (105 hours) - 12:00 Noon July 27 through 9:00 P.M. July 31.** This fourth period is a very critical period in that the peak harvest dates and a fairly accurate assessment of total run strength should be evident by period's end. Extensions in fishing time commonly occur off of this period during years when the pink and chum salmon returns are equal to or stronger than expected. The initial pink salmon opening for the Kitoi Bay Section should occur at the beginning of this fishing period.

**Fifth Period: 4-1/2 days (105 hours) - 12:00 Noon August 3 through 9:00 P.M. August 7.** This fifth period should yield the peak harvest date and should be the peak harvest period in 1993, provided normal run timing occurs. If preseason expectations appear valid, extensions in fishing time could occur in portions of the management area. This period commonly yields the first significant announcement of differential fishing time by management unit as heavy production areas are targeted for extensions, while moderate or lower production areas are not. Extensions in fishing time are not expected for management units located in the N.W. Kodiak District.

**Sixth Period: 4-1/2 days (105 hours) - 12:00 Noon August 10 through 9:00 P.M. August 14.** This sixth period should be the first postpeak period and is important from the standpoint that returns to major late production systems should be evident by period's end. Also this is a critical period for considering expansions in closed water sanctuaries to enhance escapement levels, and to make a final evaluation of run strength to determine if further reductions in fishing time are needed for the remaining periods to ensure adequate escapement; a strategy for "topping off" escapement for all systems stems from this period.

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Table 6. (page 3 of 3)

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***Seventh Period: 4-1/2 days (102 hours) - 12:00 Noon August 17 through 6:00 P.M. August 21.*** This seventh period is when a blended, multi-species management approach is needed for those sections where pink salmon were the targeted species for the previous six periods. Emphasis will still be on harvest of excess good quality pink salmon and on achieving at least minimum pink escapements where applicable. However major concern will be directed toward the run strength of late run sockeye and chum salmon.

***Eighth Period: 3-1/2 days (78 hours) - 12:00 Noon August 24 through 6:00 P.M. August 27.*** This eighth period will be primarily a cleanup period for most pink salmon stocks; all escapement requirements should be mostly assured and all excess pink salmon of acceptable quality should be available for harvest in near terminal areas where applicable. Again, this period will require a major emphasis on multi-species management; it is a critical management period for late run sockeye and chum salmon stocks as well as early run coho salmon stocks.

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Table 7. Average pink and chum harvest by day, Kodiak Management Area, 1970-1993.

Date	Average		Accum.		Percent	
	Pink	Chum	Pink	Chum	Pink	Chum
6/01	0	1	0	1	0	0
6/02	0	3	0	4	0	0
6/03	43	29	44	32	0	0
6/04	0	0	44	32	0	0
6/05	0	0	44	32	0	0
6/06	4	0	47	32	0	0
6/07	31	5	79	37	0	0
6/08	79	31	158	68	0	0
6/09	86	143	243	211	0	0
6/10	132	458	376	669	0	0
6/11	30	74	406	743	0	0
6/12	63	141	469	884	0	0
6/13	161	278	630	1,162	0	0
6/14	336	467	967	1,628	0	0
6/15	1,105	1,160	2,072	2,788	0	0
6/16	835	881	2,906	3,669	0	0
6/17	846	451	3,753	4,121	0	1
6/18	1,397	690	5,149	4,810	0	1
6/19	1,510	879	6,659	5,689	0	1
6/20	3,712	960	10,371	6,649	0	1
6/21	2,656	1,081	13,026	7,730	0	1
6/22	1,714	1,570	14,740	9,301	0	1
6/23	6,641	1,737	21,381	11,037	0	1
6/24	2,627	1,202	24,008	12,239	0	2
6/25	1,205	1,733	25,212	13,972	0	2
6/26	1,953	2,513	27,165	16,486	0	2
6/27	3,953	3,135	31,117	19,620	0	2
6/28	2,814	2,159	33,931	21,779	0	3
6/29	3,777	1,970	37,709	23,749	0	3
6/30	5,179	2,332	42,888	26,081	0	3
7/01	4,651	2,092	47,539	28,174	1	3
7/02	5,643	2,219	53,181	30,393	1	4
7/03	5,110	1,800	58,291	32,193	1	4
7/04	5,787	1,663	64,078	33,856	1	4
7/05	7,949	2,076	72,027	35,932	1	4
7/06	15,214	5,126	87,241	41,058	1	5
7/07	49,754	12,482	136,995	53,539	1	7
7/08	56,449	13,270	193,444	66,810	2	8
7/09	49,581	9,742	243,025	76,552	3	9
7/10	40,900	7,135	283,925	83,686	3	10
7/11	21,727	5,398	305,652	89,085	3	11
7/12	28,747	6,588	334,399	95,672	4	12
7/13	60,030	9,109	394,429	104,781	4	13
7/14	85,017	13,540	479,446	118,322	5	15
7/15	94,948	13,709	574,394	132,031	6	16
7/16	102,443	14,434	676,837	146,465	7	18
7/17	94,093	9,285	770,930	155,750	8	19
7/18	46,112	5,435	817,042	161,185	9	20
7/19	57,410	6,896	874,452	168,081	9	21
7/20	124,348	11,799	998,800	179,880	11	22

-Continued-

Table 7. (page 2 of 3)

Date	Average		Accum.		Percent	
	Pink	Chum	Pink	Chum	Pink	Chum
7/21	168,621	16,204	1,167,421	196,084	12	24
7/22	209,852	14,246	1,377,273	210,331	15	26
7/23	202,536	11,653	1,579,809	221,984	17	27
7/24	188,862	12,007	1,768,672	233,991	19	29
7/25	163,449	11,525	1,932,120	245,516	21	30
7/26	197,375	14,186	2,129,495	259,702	23	32
7/27	281,906	18,556	2,411,401	278,258	26	34
7/28	325,059	19,882	2,736,460	298,141	29	37
7/29	342,701	18,009	3,079,161	316,150	33	39
7/30	380,648	17,122	3,459,808	333,271	37	41
7/31	302,217	15,913	3,762,026	349,185	40	43
8/01	259,963	12,850	4,021,989	362,035	43	45
8/02	310,230	17,590	4,332,219	379,624	46	47
8/03	376,738	27,908	4,708,957	407,532	50	50
8/04	438,682	26,608	5,147,639	434,140	55	53
8/05	406,950	21,741	5,554,588	455,882	59	56
8/06	376,949	18,092	5,931,537	473,973	63	58
8/07	297,461	12,849	6,228,998	486,823	67	60
8/08	230,235	11,310	6,459,233	498,133	69	61
8/09	270,163	20,105	6,729,396	518,237	72	64
8/10	332,528	28,101	7,061,924	546,338	76	67
8/11	340,166	28,260	7,402,090	574,599	79	71
8/12	298,294	22,061	7,700,384	596,659	82	73
8/13	271,890	17,451	7,972,274	614,110	85	76
8/14	182,371	10,170	8,154,646	624,280	87	77
8/15	169,852	9,405	8,324,498	633,685	89	78
8/16	163,169	23,551	8,487,667	657,236	91	81
8/17	129,934	18,227	8,617,600	675,463	92	83
8/18	105,273	15,184	8,722,873	690,647	93	85
8/19	91,156	10,101	8,814,030	700,748	94	86
8/20	104,523	8,859	8,918,552	709,607	95	87
8/21	68,830	5,029	8,987,382	714,637	96	88
8/22	55,032	5,292	9,042,414	719,929	97	89
8/23	53,042	14,651	9,095,456	734,579	97	90
8/24	45,183	10,369	9,140,639	744,949	98	92
8/25	41,773	10,326	9,182,412	755,274	98	93
8/26	31,436	6,066	9,213,847	761,340	99	94
8/27	30,288	4,108	9,244,135	765,449	99	94
8/28	26,713	6,073	9,270,848	771,522	99	95
8/29	22,954	6,528	9,293,802	778,050	99	96
8/30	16,585	4,488	9,310,386	782,538	100	96
8/31	8,285	3,237	9,318,671	785,775	100	97
9/01	8,075	5,926	9,326,746	791,701	100	97
9/02	5,936	3,371	9,332,682	795,072	100	98
9/03	3,213	4,814	9,335,895	799,886	100	98
9/04	2,647	2,458	9,338,542	802,344	100	99
9/05	1,061	901	9,339,603	803,245	100	99
9/06	886	2,011	9,340,489	805,256	100	99
9/07	669	2,408	9,341,159	807,664	100	99
9/08	514	1,649	9,341,673	809,313	100	100

-Continued-

Table 7. (page 3 of 3)

Date	Average		Accum.		Percent	
	Pink	Chum	Pink	Chum	Pink	Chum
9/09	278	765	9,341,950	810,078	100	100
9/10	235	443	9,342,185	810,521	100	100
9/11	72	616	9,342,258	811,137	100	100
9/12	30	346	9,342,287	811,483	100	100
9/13	33	322	9,342,320	811,806	100	100
9/14	358	99	9,342,679	811,905	100	100
9/15	197	156	9,342,876	812,061	100	100
9/16	15	61	9,342,890	812,121	100	100
9/17	2	118	9,342,892	812,239	100	100
9/18	0	34	9,342,893	812,273	100	100
9/19	168	25	9,343,061	812,298	100	100
9/20	0	24	9,343,061	812,323	100	100
9/21	5	22	9,343,065	812,345	100	100
9/22	0	85	9,343,065	812,430	100	100
9/23	0	11	9,343,065	812,442	100	100
9/24	225	23	9,343,290	812,465	100	100
9/25	2	36	9,343,292	812,501	100	100
9/26	0	18	9,343,292	812,519	100	100
9/27	0	19	9,343,292	812,539	100	100
9/28	56	11	9,343,348	812,550	100	100
9/29	0	74	9,343,349	812,624	100	100
9/30	18	35	9,343,367	812,659	100	100
Total	9,343,367	812,659				

**Table 8. Management chronology by management unit for eastside salmon stocks, Kodiak Management Area.**

DATE		6/1	6/14	6/21	7/6	7/10	8/25	9/6	10/31
MANAGEMENT UNIT									
NORTHEAST KODIAK DISTRICT	Outer Chiniak Bay	CLOSED			LOCAL AND MIXED PINK		LOCAL PINK COHO	LOCAL COHO	
	Inner Chiniak Bay	CLOSED			LOCAL AND MIXED PINK AND CHUM		LOCAL PINK COHO	LOCAL COHO	
	Buskin River	CLOSED			LOCAL PINK BUSKIN SOCKEYE	LOCAL PINK AND CHUM	LOCAL PINK COHO, CHUM	LOCAL COHO	
	Monashka/Mill Bay	CLOSED			LOCAL AND MIXED PINK		LOCAL PINK COHO	LOCAL COHO	
EASTSIDE KODIAK DISTRICT	Seven Rivers	CLOSED	CLOSED	CLOSED	LOCAL AND MIXED PINK AND CHUM		LOCAL PINK COHO	LOCAL COHO	
	Two Headed	CLOSED	CLOSED	CLOSED	LOCAL AND MIXED PINK AND CHUM		LOCAL PINK COHO	LOCAL COHO	
	Sitkalidak	CLOSED	CLOSED	CLOSED	LOCAL AND MIXED PINK AND CHUM		LOCAL PINK, CHUM, COHO	LOCAL COHO	
	Outer Ugak Bay	CLOSED	CLOSED	PASAGSHAK SOCKEYE	LOCAL AND MIXED PINK AND CHUM		LOCAL PINK, CHUM, COHO	LATE CHUM COHO	
	Inner Ugak Bay	CLOSED	CLOSED	SALTARY SOCKEYE	LOCAL PINK & CHUM SALTARY SOCKEYE	LOCAL PINK AND CHUM	LOCAL PINK COHO	COHO	

Local and mixed sockeye 33 hour fishing period.

Table 9. Chinook and coho harvest percents July 6-25, 1970-1993.

Year	CHINOOK			COHO		
	7/6-7/25	PERCENTAGE	ALL SEASON	7/6-7/25	PERCENTAGE	ALL SEASON
70	542	49	1,089	14,522	22	66,421
71	384	42	920	467	2	22,844
72	703	54	1,300	3,438	21	16,587
73	652	82	800	991	28	3,573
74	235	43	545	688	5	13,631
75	33	33	101	849	4	23,659
76	443	58	766	3,095	13	23,714
77	113	19	585	2,078	7	27,920
78	1,513	47	3,228	2,934	6	48,795
79	1,137	60	1,907	20,260	14	140,629
80	156	30	529	4,135	3	139,154
81	278	20	1,418	4,148	3	121,544
82	251	21	1,214	3,529	1	344,823
83	2,115	55	3,839	12,243	8	157,612
84	1,583	34	4,657	14,391	6	229,524
85	806	16	4,970	6,479	2	284,166
86	1,221	28	4,381	21,952	13	168,690
87	2,050	44	4,613	11,895	6	192,433
88	9,662	43	22,374	26,714	9	303,298
89	33	31	106	14	1	2,599
90	6,858	36	18,806	40,554	14	293,819
91	9,754	44	22,234	73,036	22	324,860
92	5,927	24	24,299	64,536	23	280,085
93	16,415	39	42,199	108,348	35	313,467
AVG.	2,733	38	7,256	19,187	12	154,080

Table 10. Sockeye salmon harvest, by number and percent, in the Cape Igvak Section Kodiak Management Area, July 6 to 25, 1970 - 1993.

Year	Season Total	Sockeye Salmon Harvest					
		7/6-25 Only	7/6-25 Percent	7/6-25 Igvak Only	7/6-25 Igvak %	7/6-25 Rest of Area	7/6-25 Rest of Area
1970	917,045	163,327	18%	6,894	1%	156,433	17%
1971	478,479	100,708	21%	25,160	5%	75,548	16%
1972	222,408	152,320	68%	42,230	19%	110,090	49%
1973	167,341	63,027	38%	7,244	4%	55,783	33%
1974	418,761	119,043	28%	57,192	14%	61,851	15%
1975	136,418	69,234	51%	29,544	22%	39,690	29%
1976	641,484	232,532	36%	10,575	2%	221,957	35%
1977	623,468	333,493	53%	138,522	22%	194,971	31%
1978	1,071,782	293,776	27%	91,782	9%	201,994	19%
1979	630,756	188,317	30%	7,625	1%	180,692	29%
1980	651,394	209,862	32%	40	0%	209,822	32%
1981	1,288,949	241,499	19%	68,791	5%	172,708	13%
1982	1,203,787	263,415	22%	10,826	1%	252,589	21%
1983	1,231,989	550,086	45%	271,188	22%	278,898	23%
1984	1,950,439	504,267	26%	20,915	1%	483,352	25%
1985	1,842,731	232,578	13%	2,248	0%	230,330	12%
1986	3,188,046	830,325	26%	94,601	3%	735,724	23%
1987	1,794,224	527,617	29%	95,048	5%	432,569	24%
1988	2,698,637	1,279,103	47%	13,150	0%	1,265,953	47%
1990	5,248,404	1,271,797	24%	134,452	3%	1,137,345	22%
1991	5,704,152	1,724,594	30%	77,385	1%	1,647,209	29%
1992	4,167,877	2,013,272	48%	70,163	2%	1,943,109	47%
1993	4,377,771	1,393,681	32%	189,595	4%	1,204,086	28%

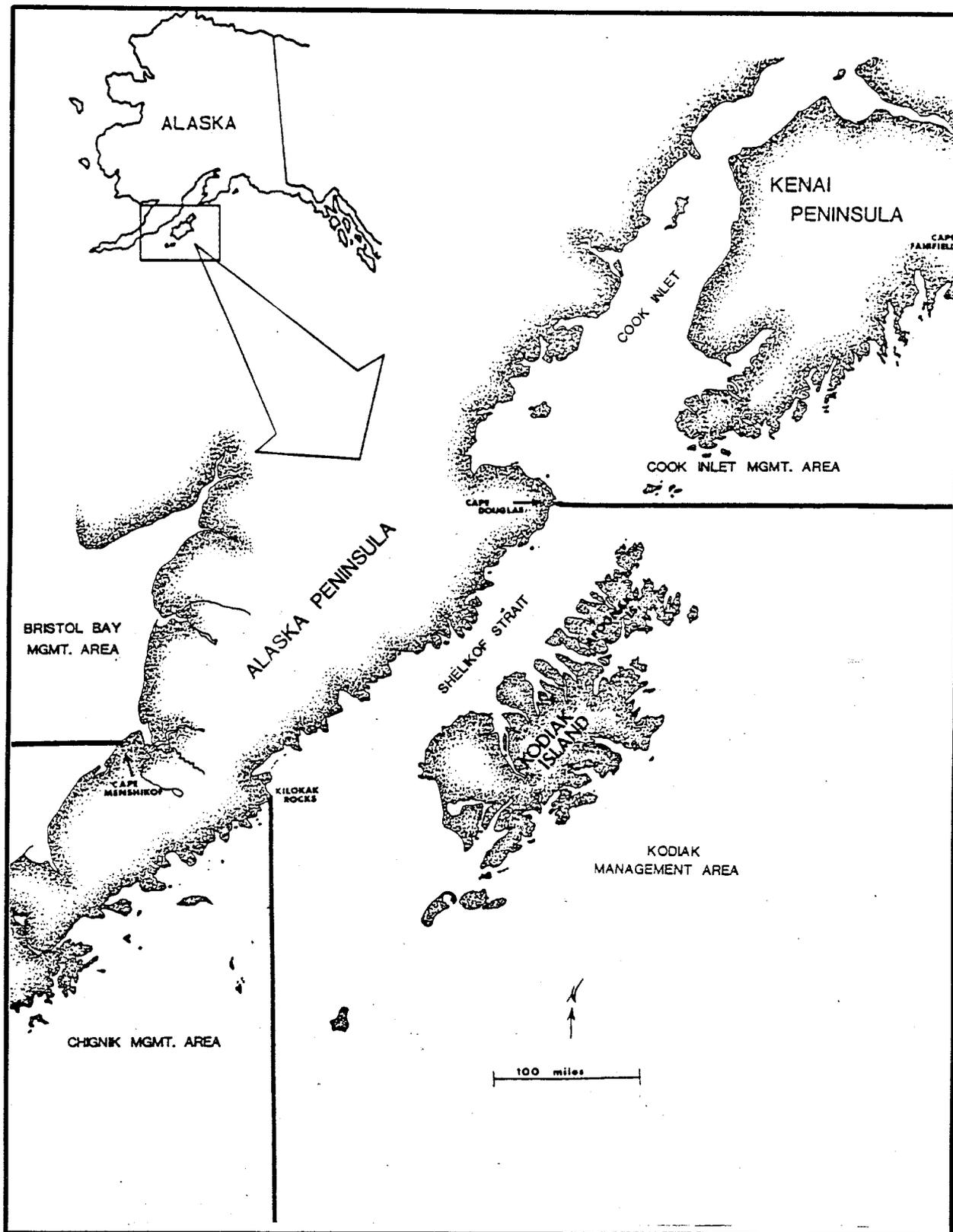


Figure 1. Map of the Kodiak Management Area.

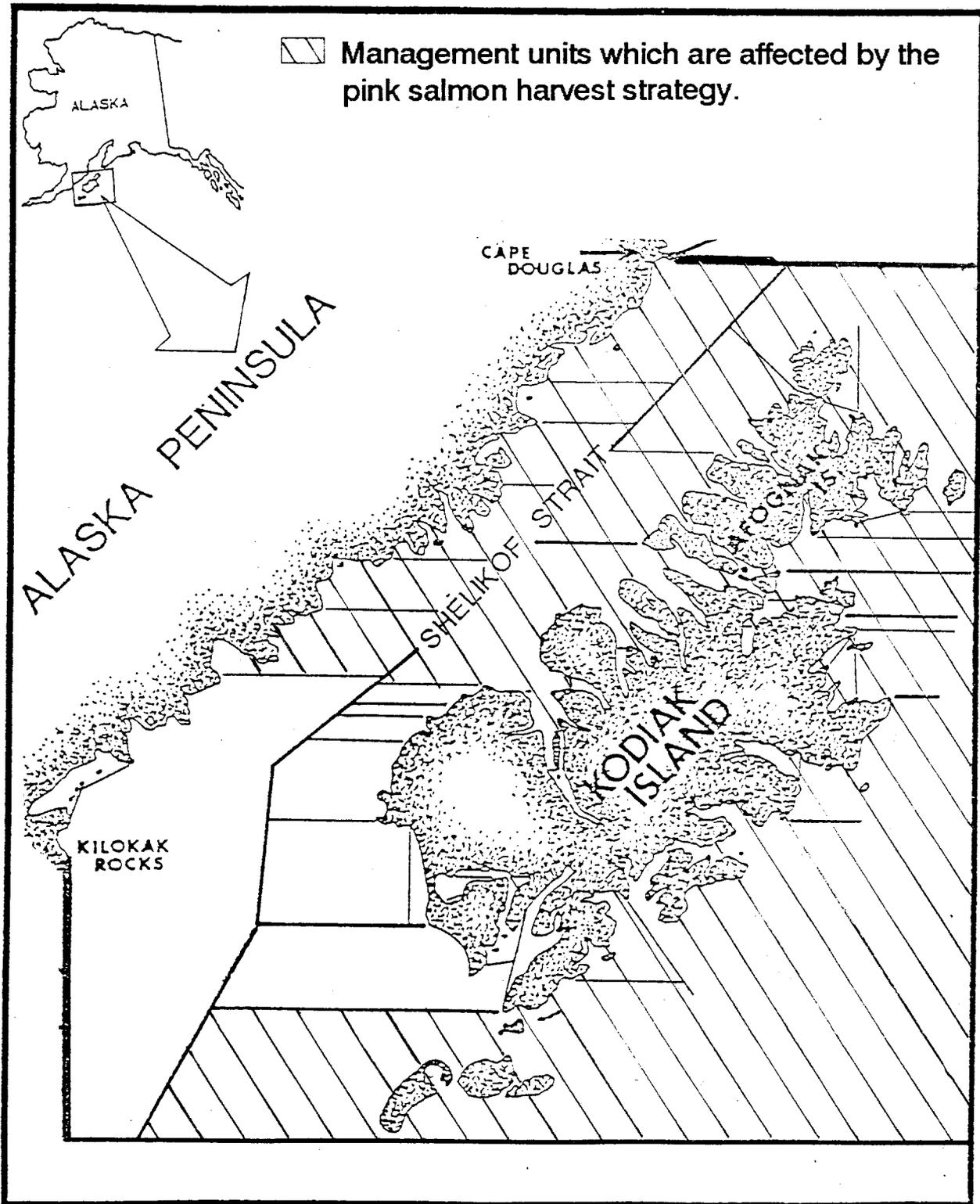


Figure 2. Map of Kodiak Area management units affected by pink salmon harvest strategy.

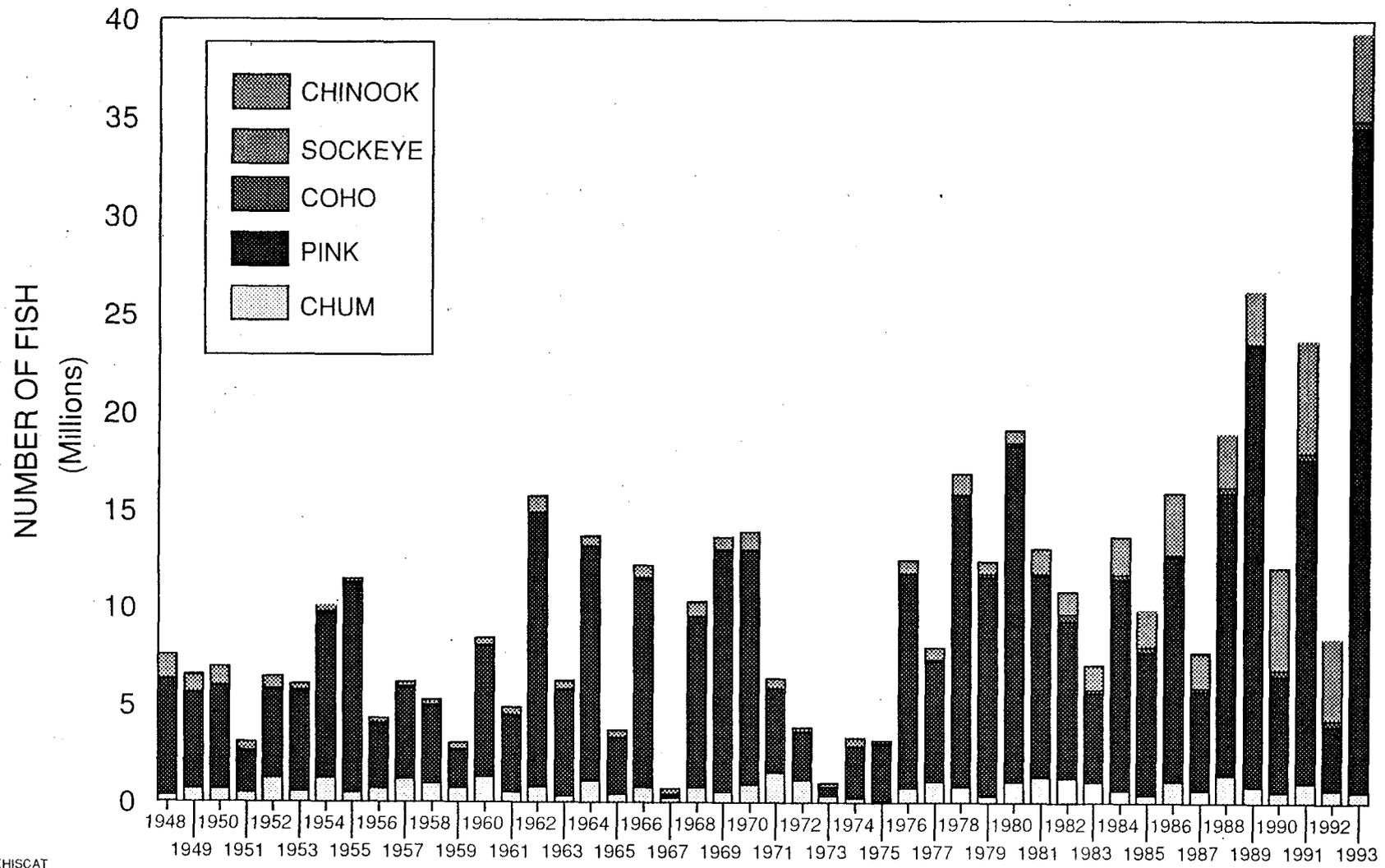
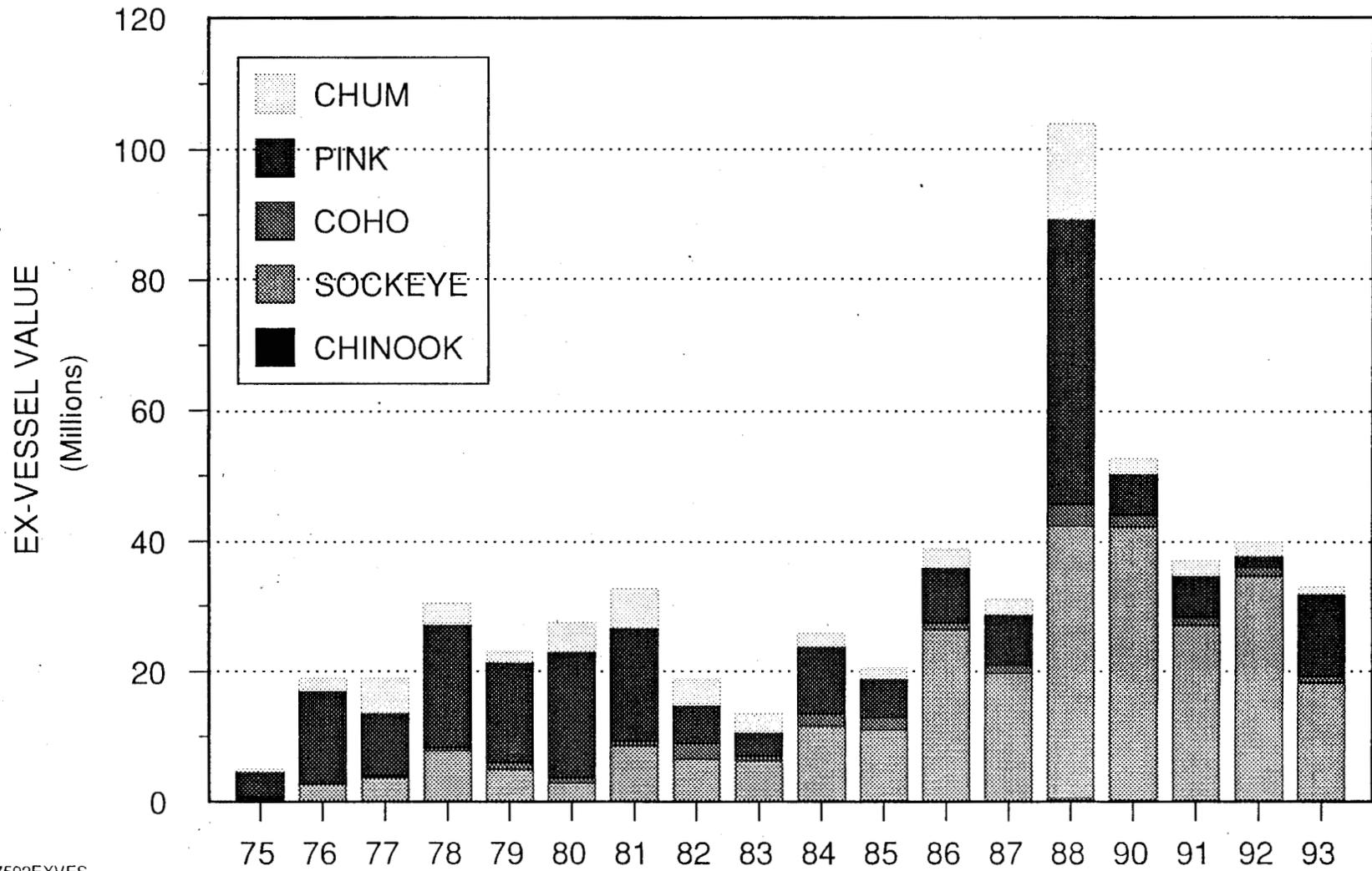


Figure 3. Annual harvest by species, 1948-1993.



5A-7592EXVES

Figure 4. Ex-vessel value by species, 1975-1993.

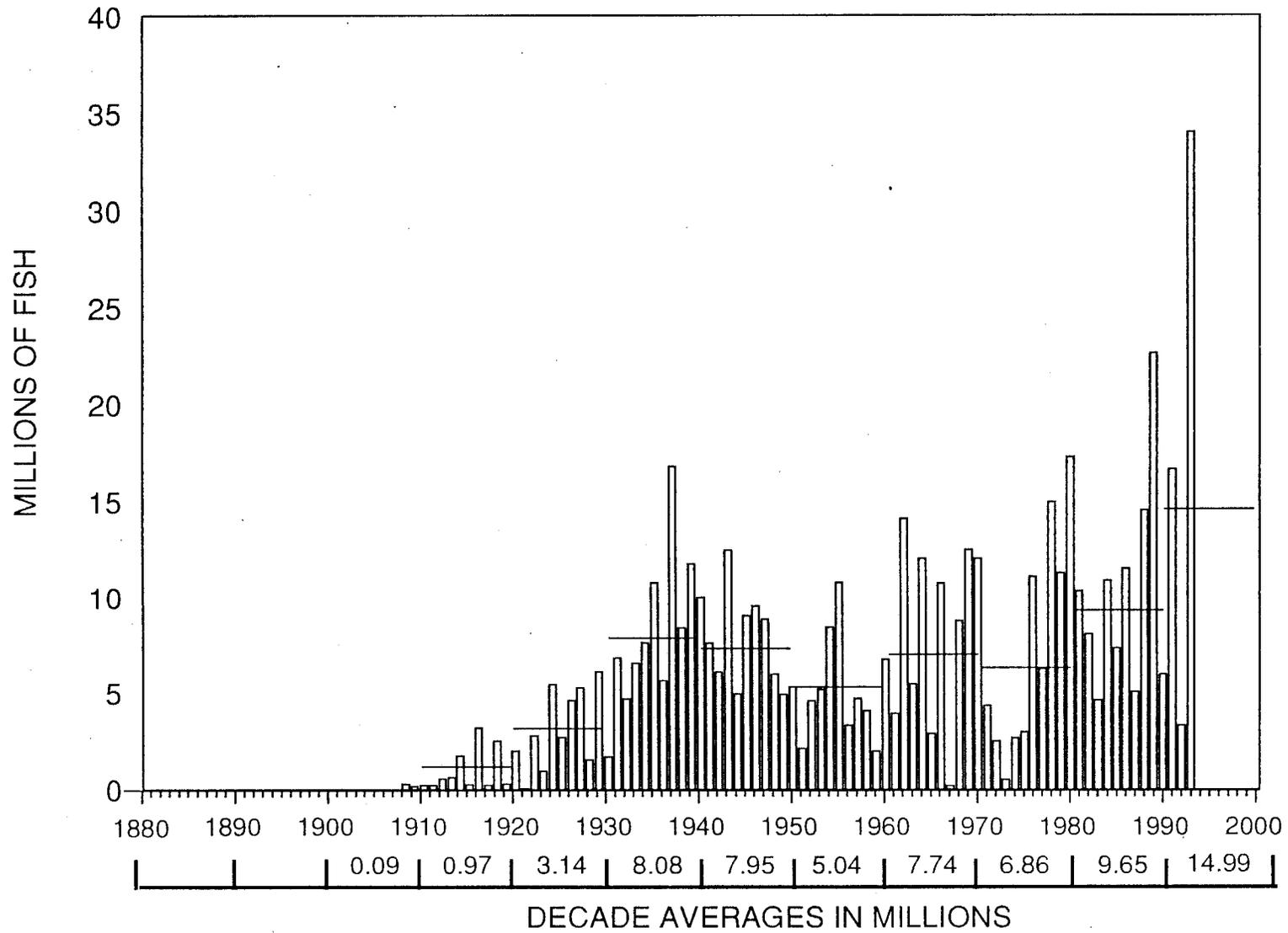


Figure 5. Kodiak historical pink salmon harvest, 1901-1993.

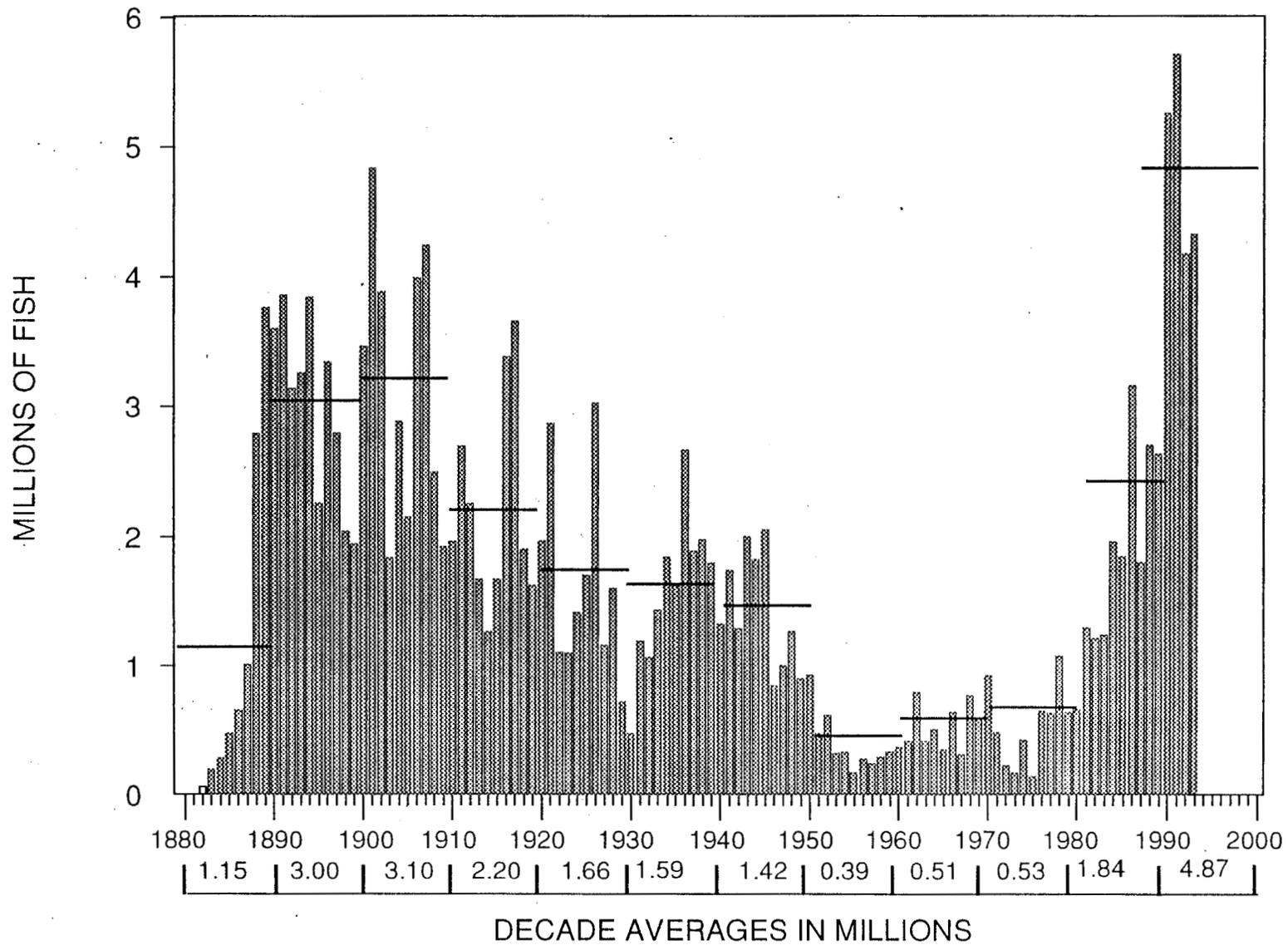


Figure 6. Kodiak historical sockeye salmon harvest, 1882-1993.

**KODIAK MANAGEMENT AREA**  
**COMMERCIAL SALMON FISHING TIME VS. PRESEASON PINK FORECAST**  
**MANAGED FOR PINK SALMON (JULY 6-25)**  
**1978-1993**

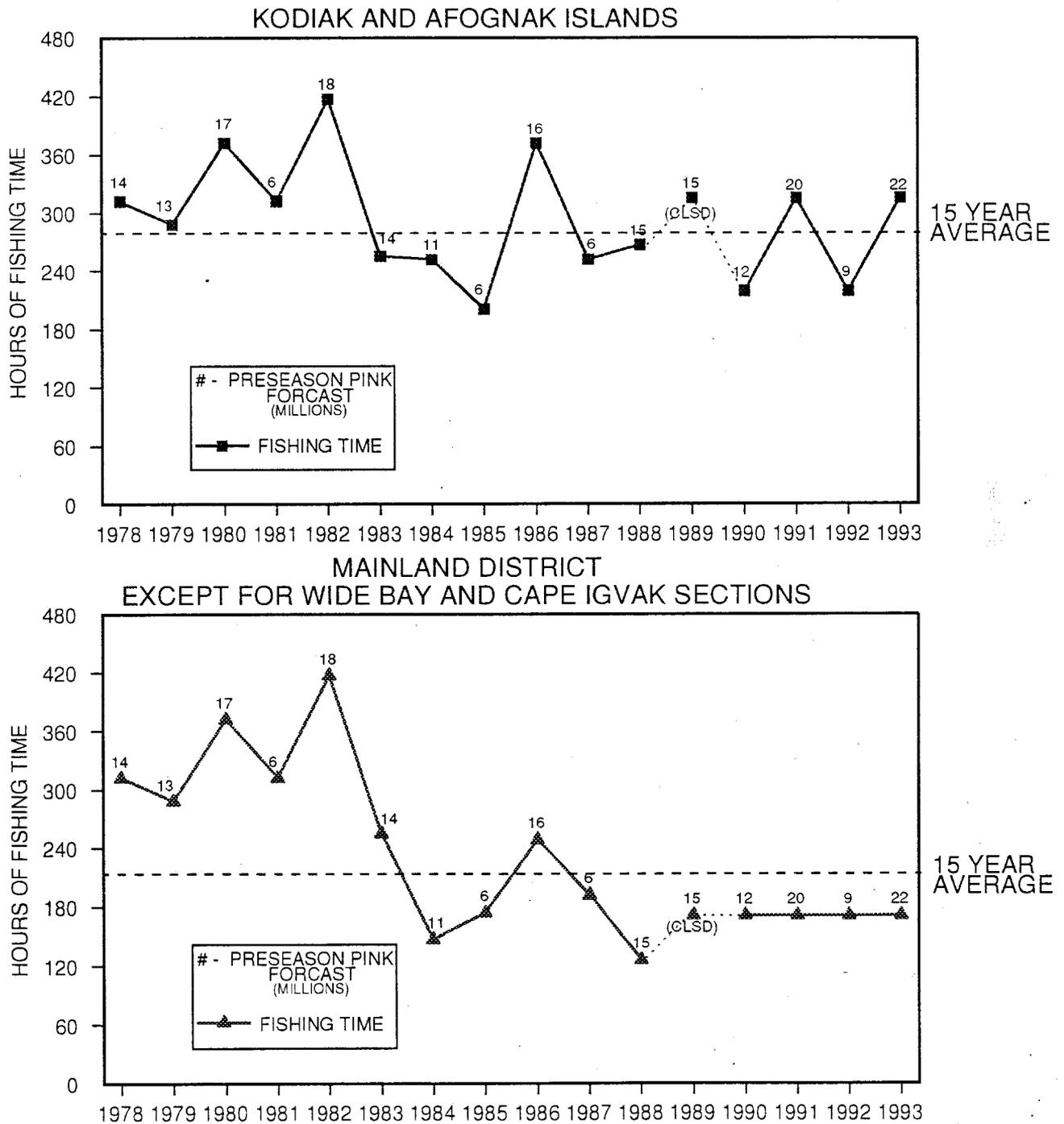
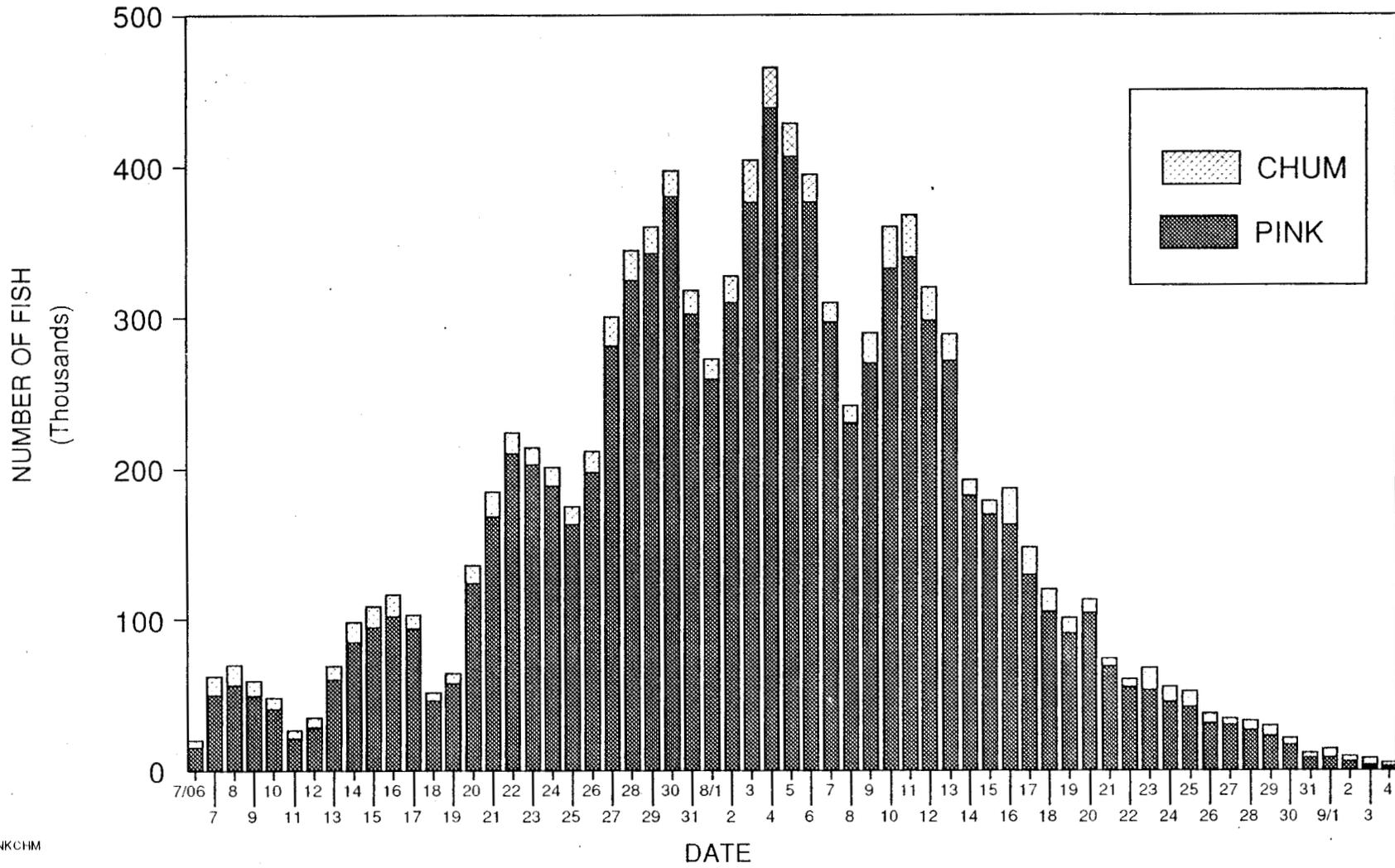


Figure 7. Initial fishing time by year, 1978-1993.



J4-PNKCHM

Figure 8. Average pink and chum salmon harvest by day, 1970-1993.

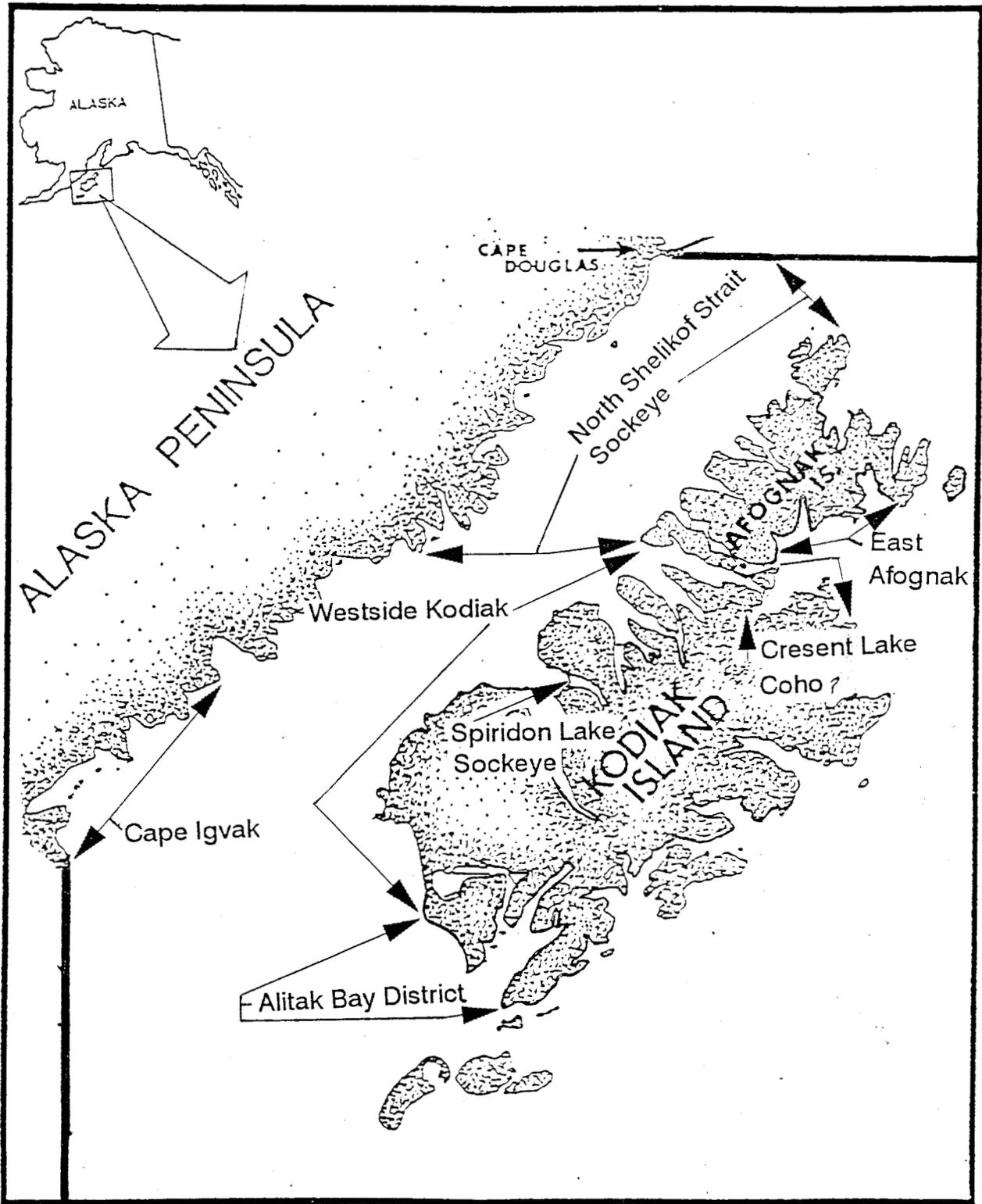
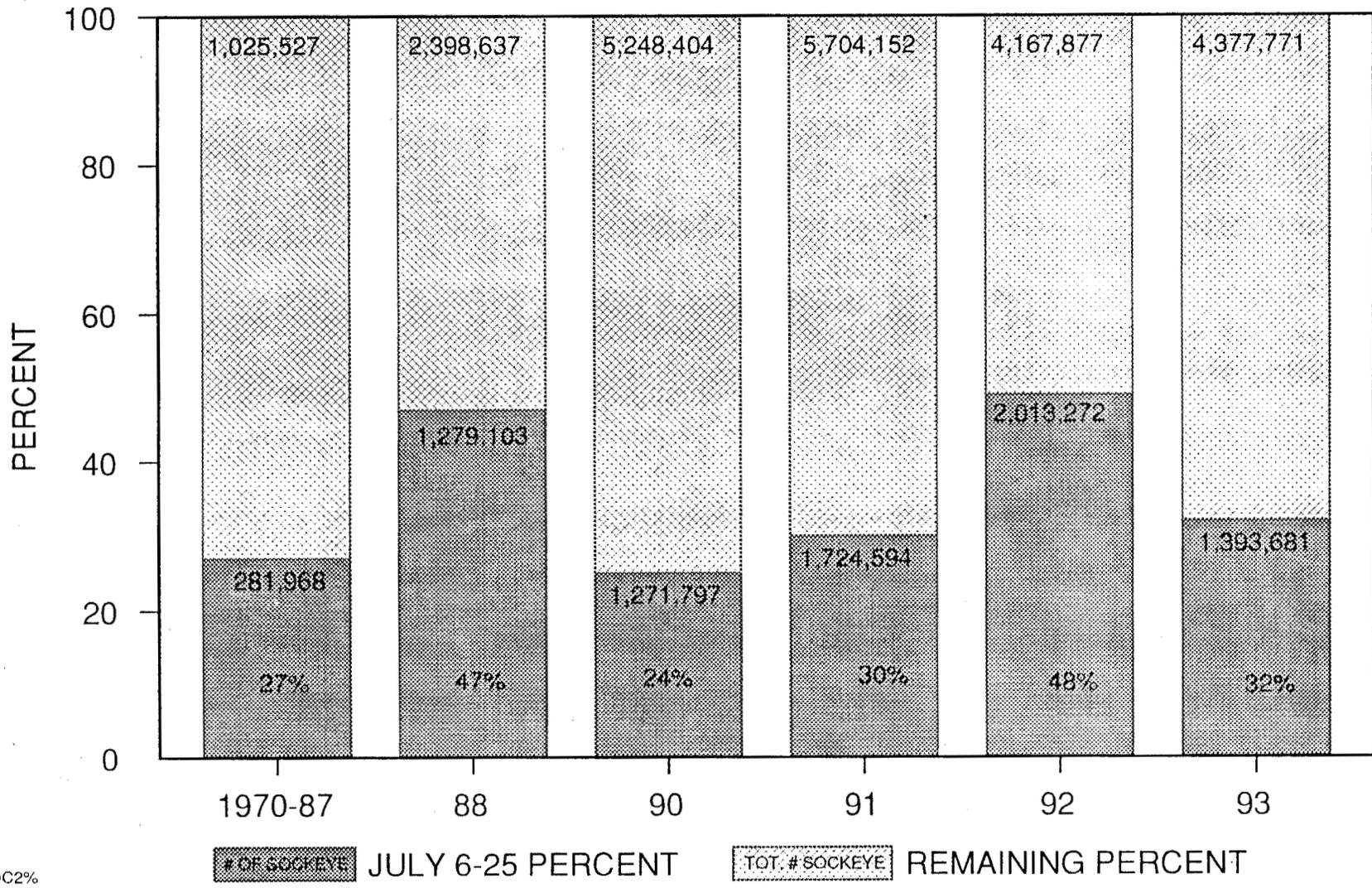


Figure 9. Map of regulatory management plans for the KMA.



6-SOC2%

Figure 10. Percent of annual sockeye salmon harvest which occurs - July 6 through July 25, 1970-1993.

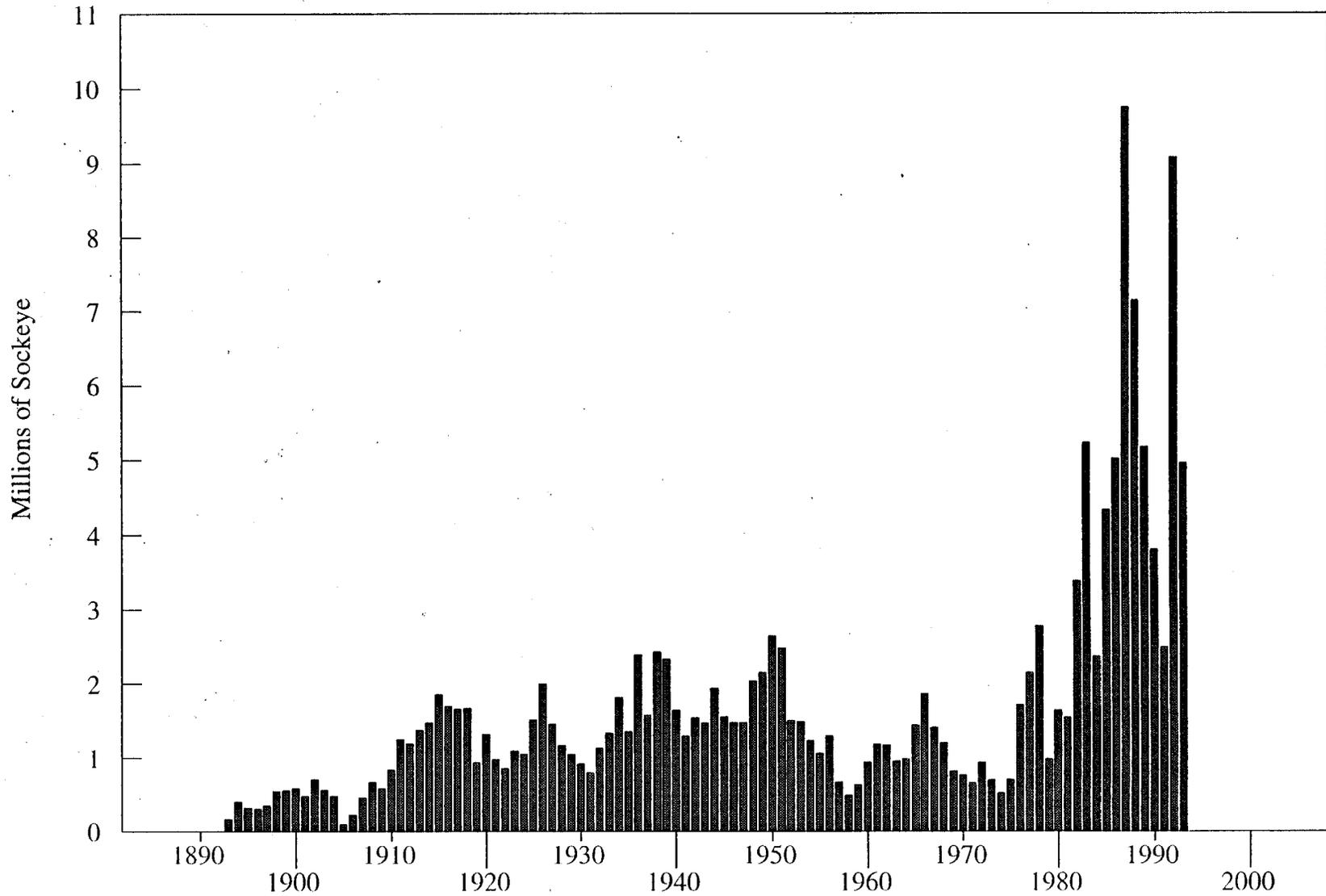
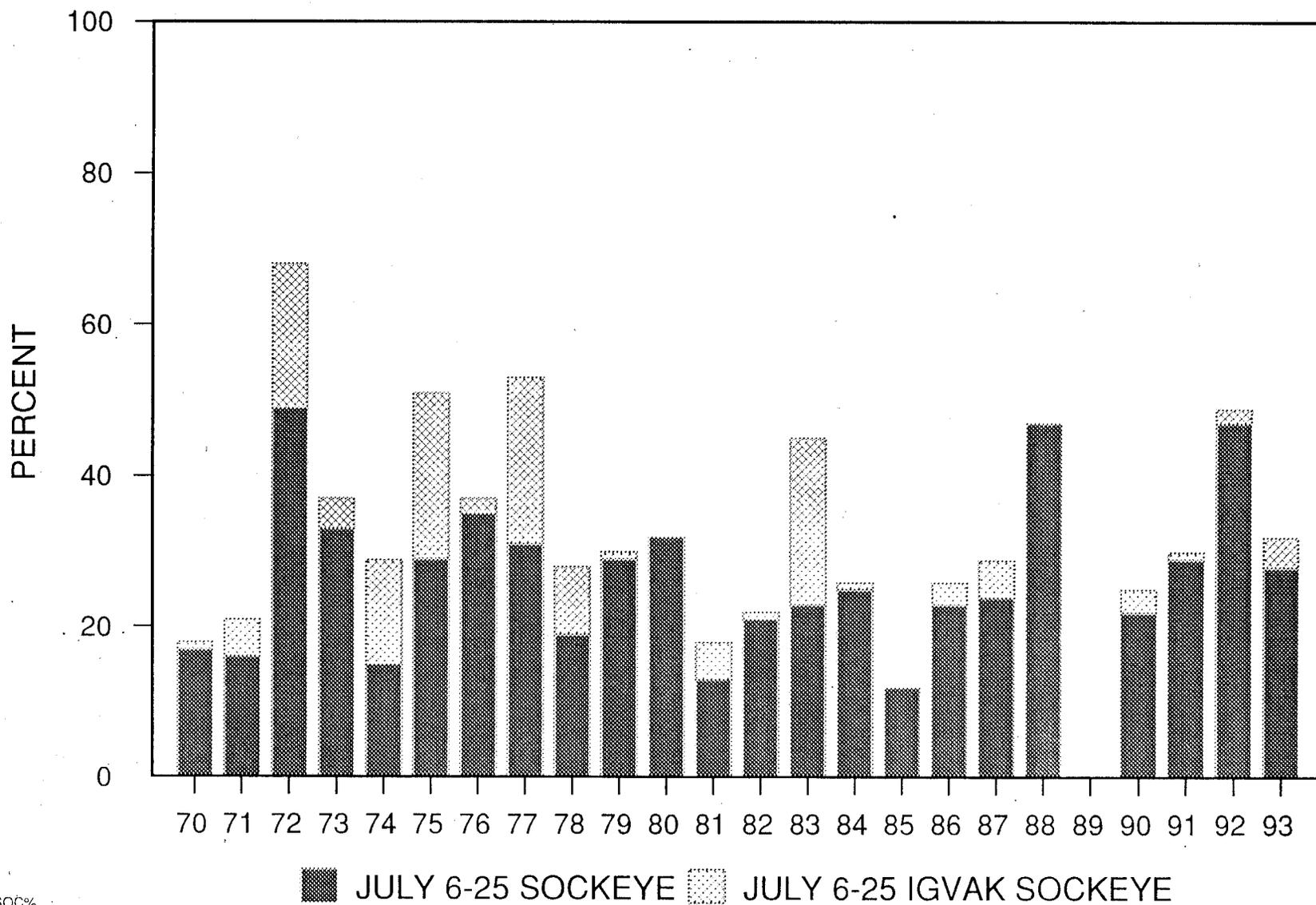


Figure 11. Combined Upper and Lower Cook Inlet sockeye salmon commercial harvest, 1893 to 1993.



6-SOC%

Figure 12. July sockeye salmon harvest in percent, taken in the Cape Igvak fishery, July 6-July 25, 1970-1993.

**\*\* NORTH SHELIKOF STRAITS SOCKEYE SALMON MANAGEMENT PLAN \*\***

- \* Effective time period: July 6 - July 25.
- \* Management units affected by this plan:
- North Shelikof Management Unit:
  - N.W. Alognak Section
  - Shuyak Section
  - Big River Section
  - Halo Bay Section
  - Outer Kukak Bay Section
  - Inner Kukak Bay Section
  - Dakavak Bay Section
- S.W. Alognak Management Unit:
  - S.W. Alognak Section

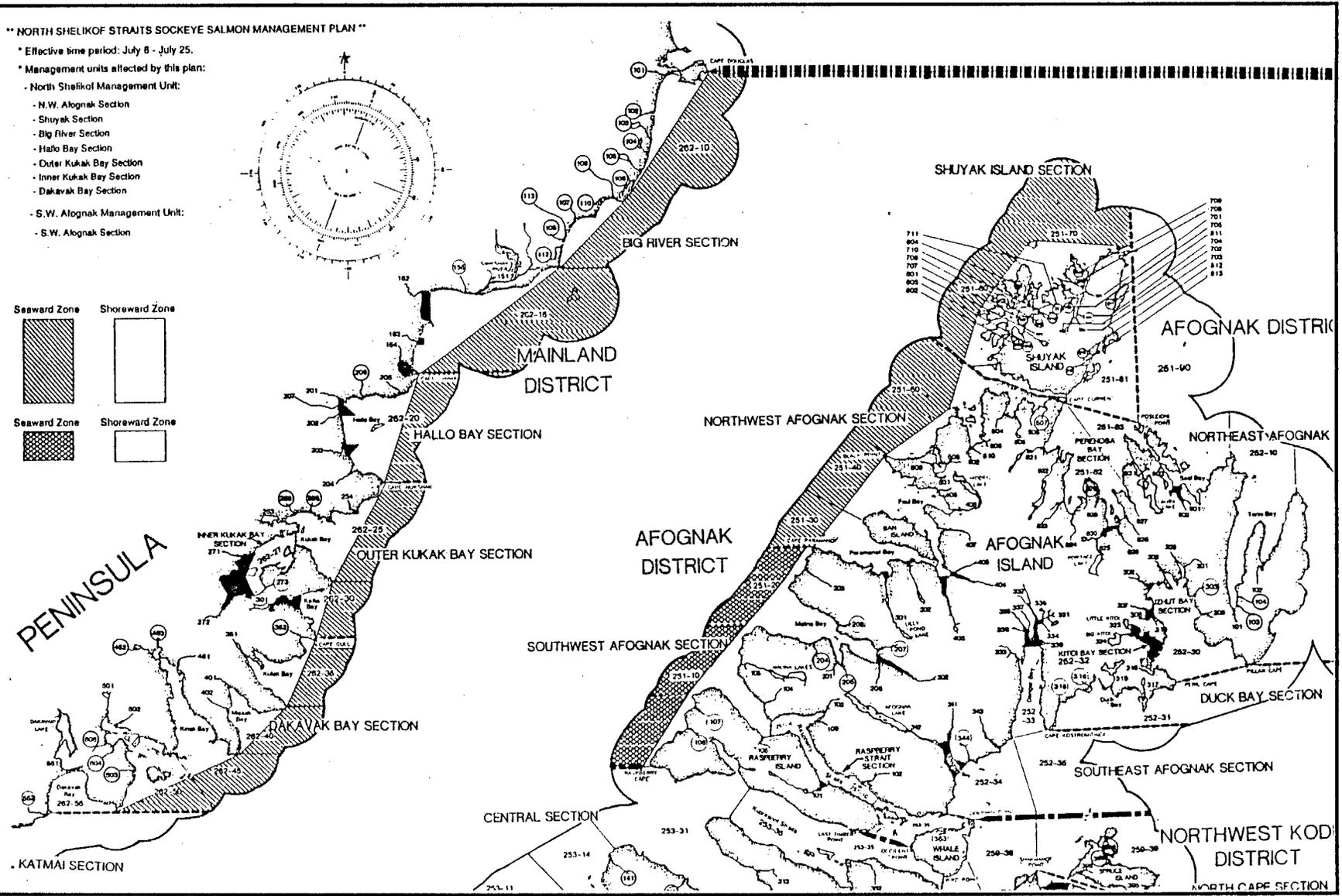
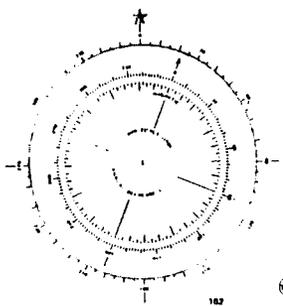
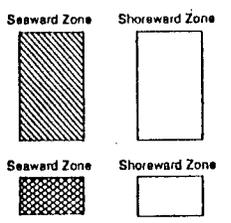


Figure 13. Map of North Shelikof Strait sockeye salmon fishery.

# KODIAK COMMERCIAL SALMON FISHERIES MAJOR HARVEST AREAS

AREA 1 - North Shelikof Sections

AREA 2 - SW Afognak Section

AREA 3 - NW Kodiak District

AREA 4 - SW Kodiak District

AREA 5 - Alitak Bay District

AREA 6 - Eastside Kodiak District

AREA 7 - NE Kodiak District

AREA 8 - Remaining Afognak Sections

AREA 9 - Katmai & Alinchak Sections

AREA 10 - Igvak & Wide Bay Sections

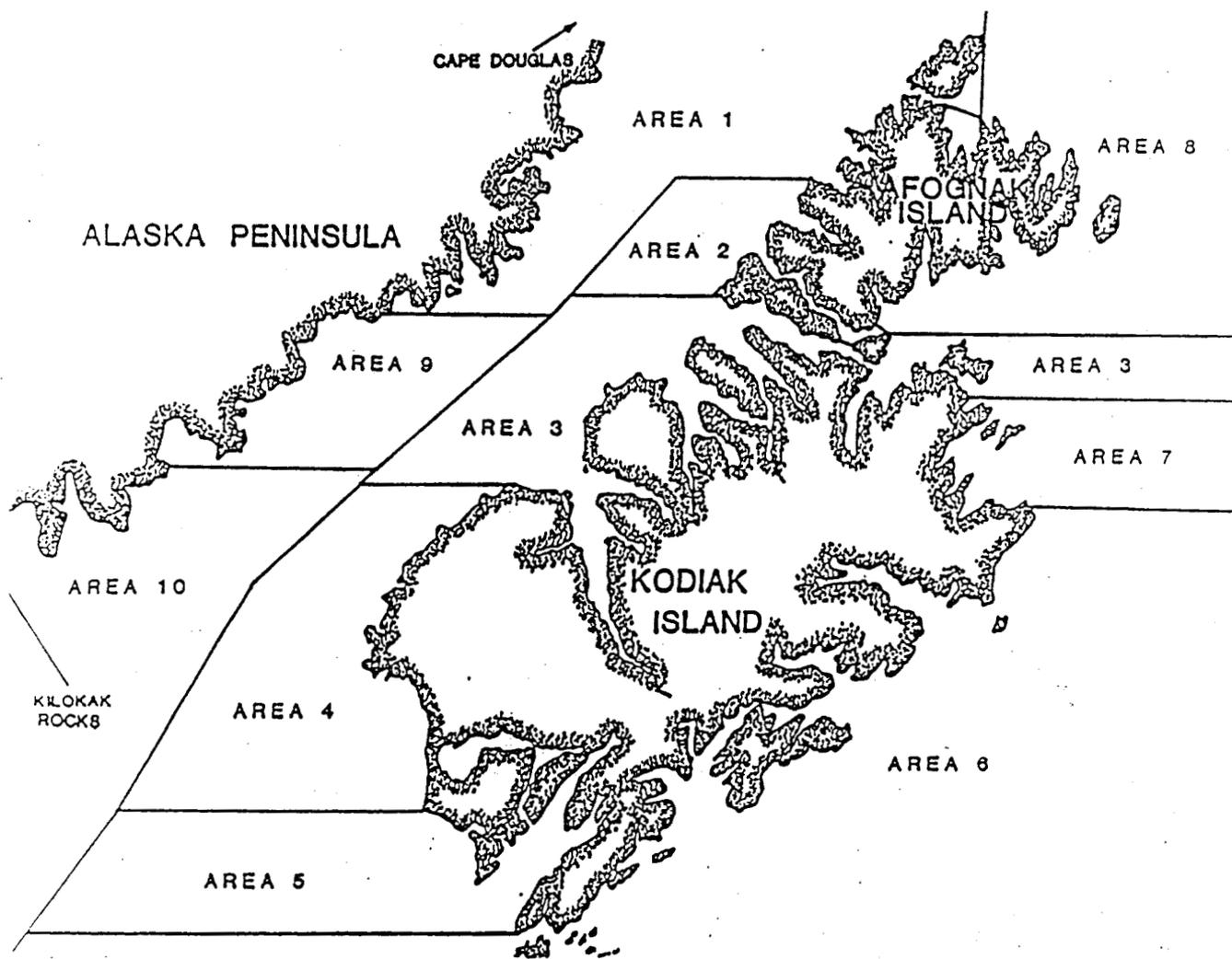


Figure 14. Map of the 10 major salmon harvest areas.



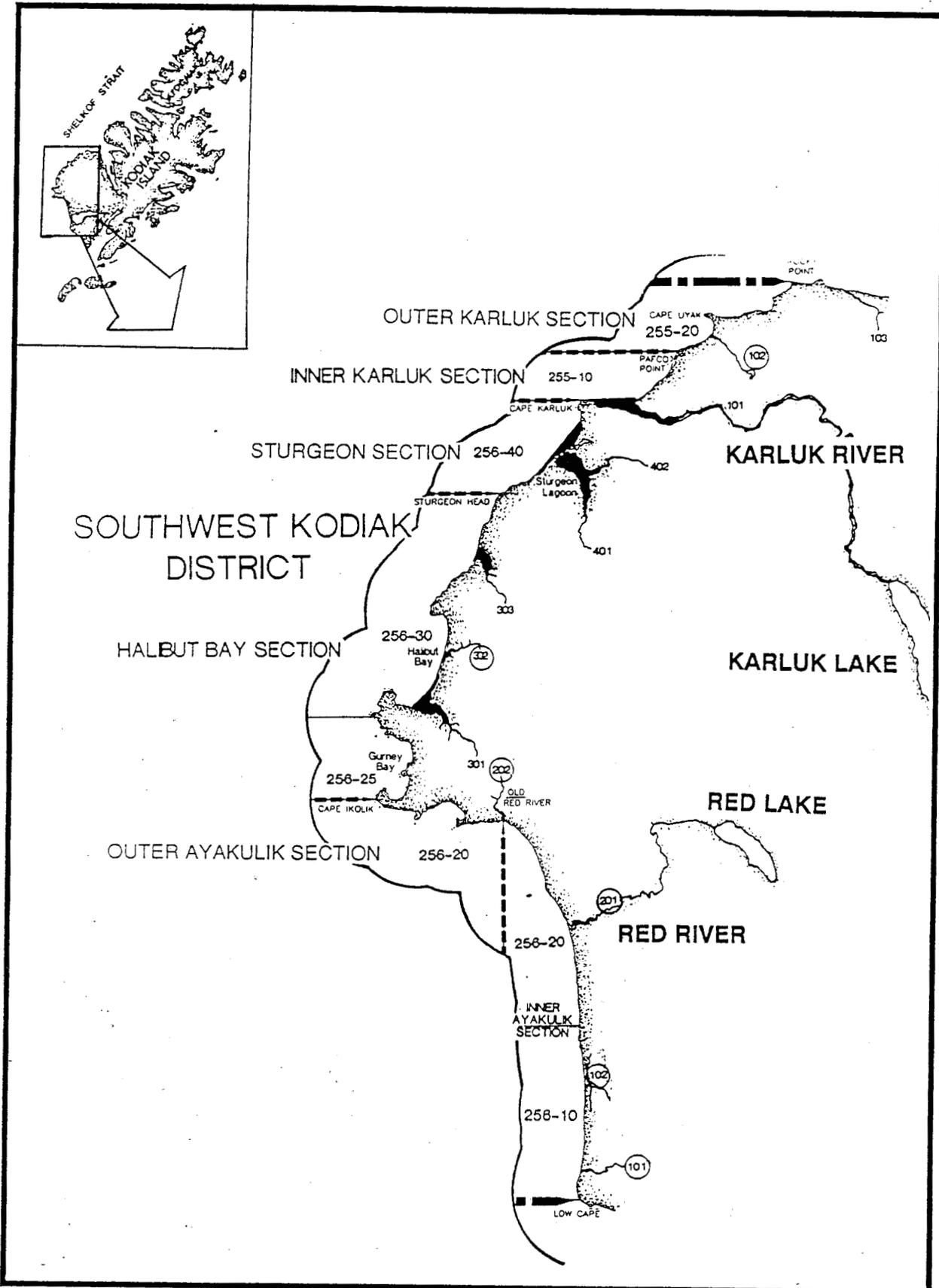


Figure 16. Map of Halibut Bay Section.

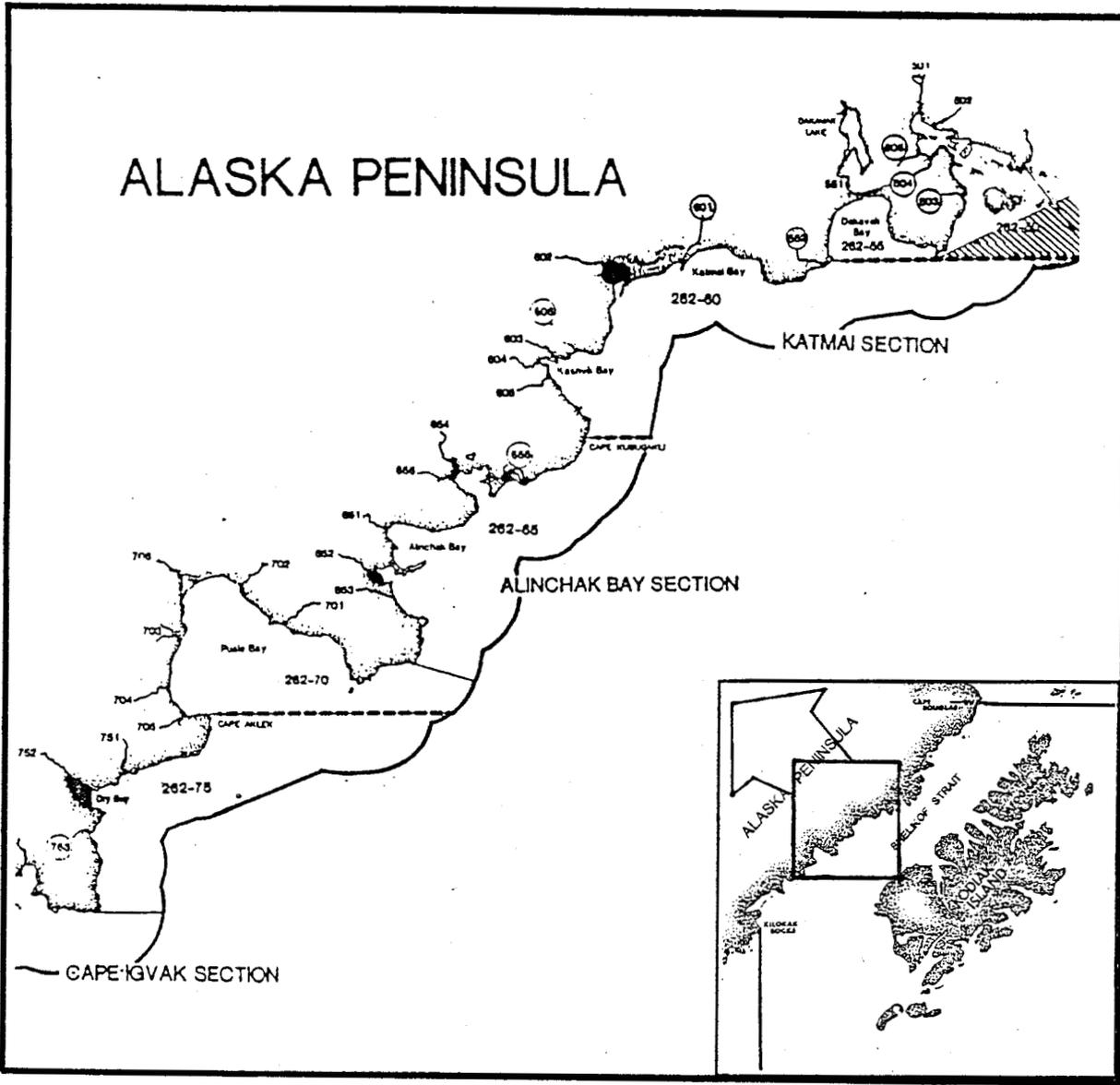


Figure 17. Map of Alinchak and Katmai Bay Sections.

**APPENDIX**

# KODIAK COMMERCIAL SALMON FISHERIES MAJOR HARVEST AREAS

AREA 1 - North Shelikof Sections

AREA 2 - SW Afognak Section

AREA 3 - NW Kodiak District

AREA 4 - SW Kodiak District

AREA 5 - Alitak Bay District

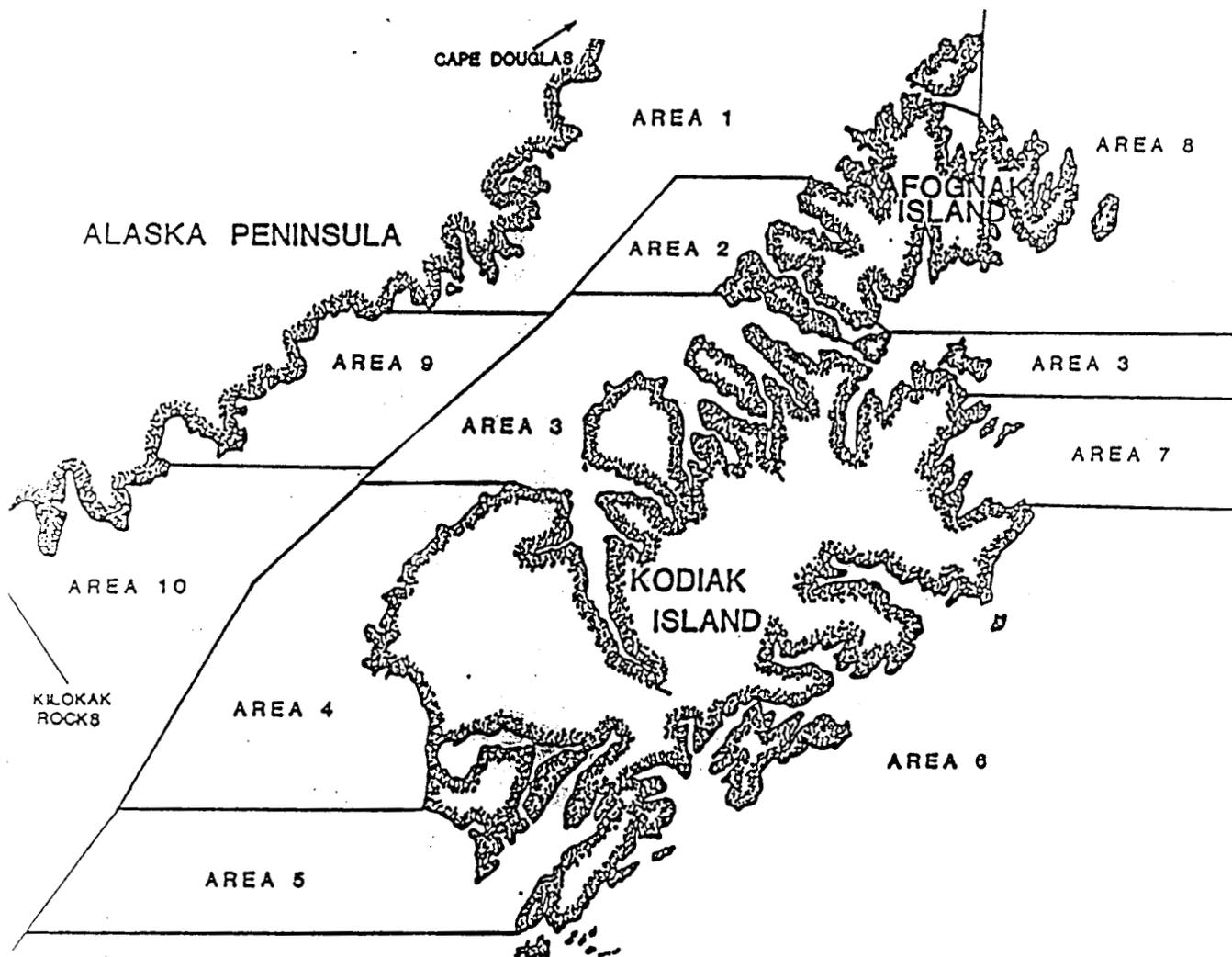
AREA 6 - Eastside Kodiak District

AREA 7 - NE Kodiak District

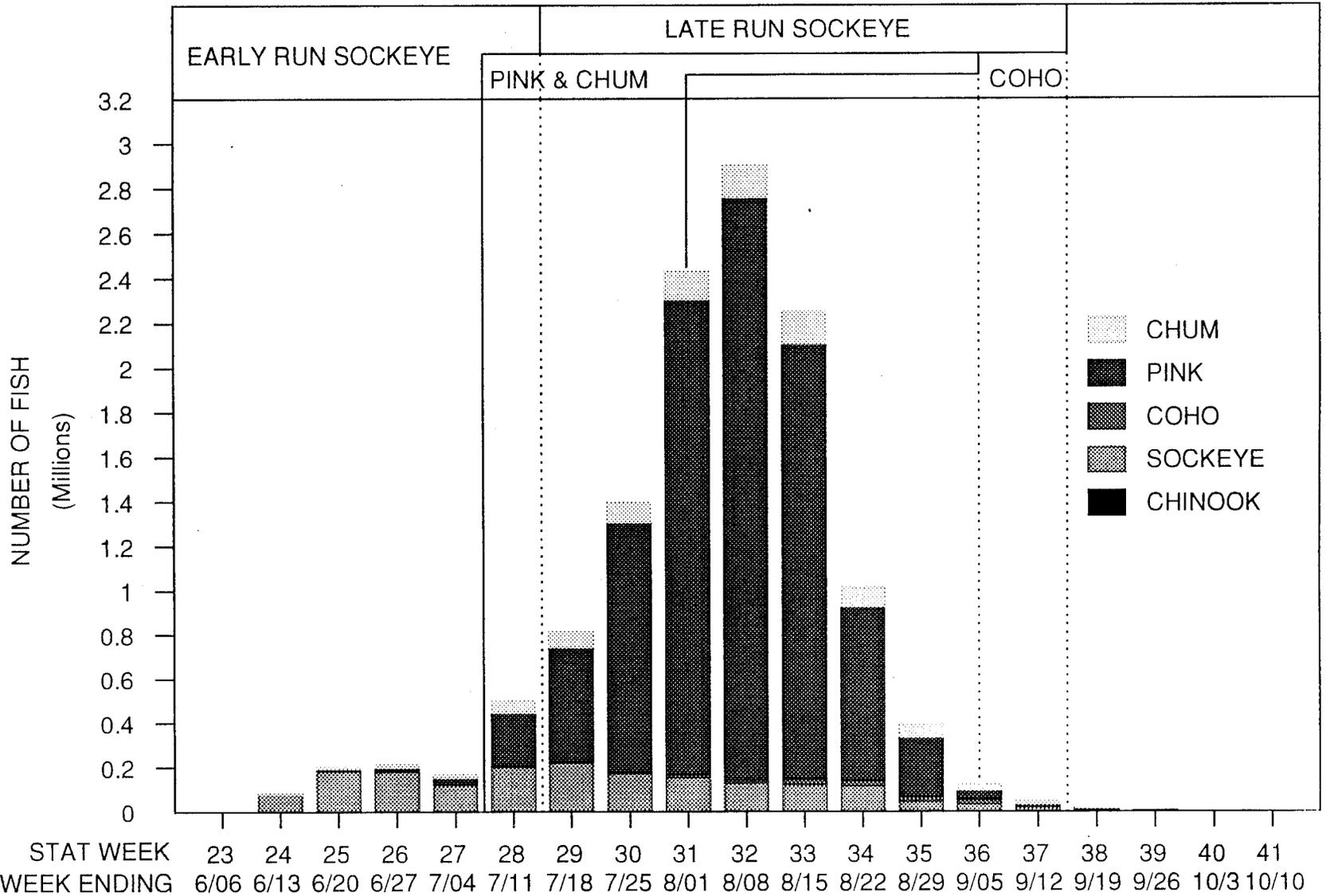
AREA 8 - Remaining Afognak Sections

AREA 9 - Katmai & Alinchak Sections

AREA 10 - Igvak & Wide Bay Sections



Appendix A.1. Map of 10 major harvest areas.



K10-KODAVG

Appendix A.2. Management chronology for the Kodiak Management Area's average harvest by week and species, 1970-1993.

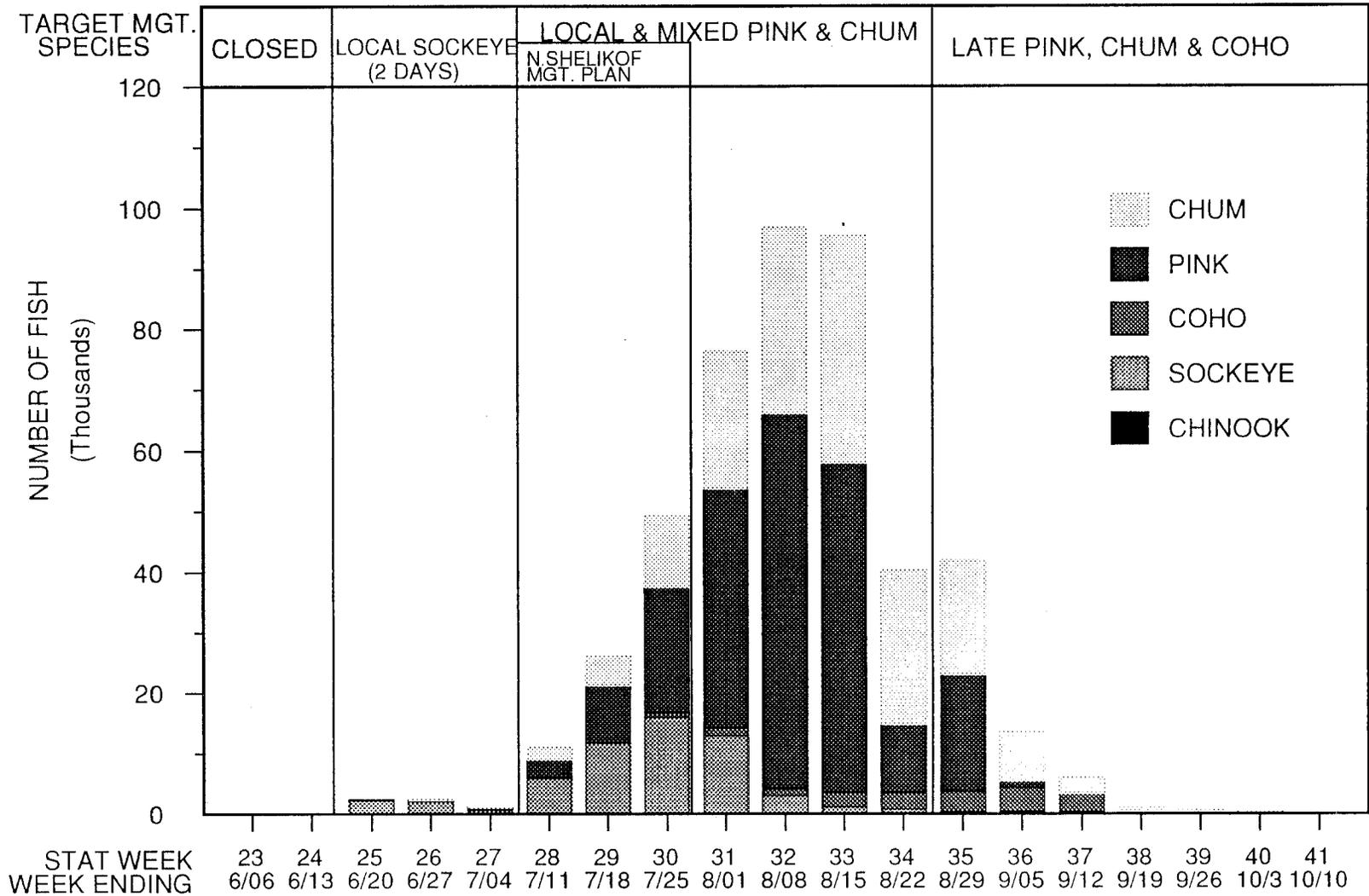
Appendix A.2. (page 2 of 2)

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KODIAK MANAGEMENT AREA  
 CATCH BY STAT WEEK (AREAS USED- 25110-26299)  
 70-93 AVERAGE

CATCH WEEK	CHINOOK	SOCKEYE	COHO	PINK	CHUM
23	1	258	0	47	32
24	579	82218	122	583	1129
25	915	185074	72	9746	5517
26	721	181413	92	20865	13490
27	481	123668	246	33321	14565
28	1056	200152	3283	244745	55662
29	1013	218364	6785	519256	73024
30	706	170076	9207	1129408	86380
31	619	154493	11775	2143510	120921
32	478	129623	13628	2618198	144509
33	388	123181	21238	1964354	142147
34	142	116137	21971	789844	86284
35	71	46530	20436	271224	57570
36	42	32532	21493	46552	25787
37	28	21323	14304	2684	8238
38	12	9727	5132	773	816
39	3	2443	3335	232	221
40	0	477	898	75	140
41	0	6	68	0	0
Total	7256	1797696	154085	9795417	836433

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K10-NSHELAVG

Appendix A.3. Management chronology for the North Shelikof Section's average harvest by week and species, 1970-1993.

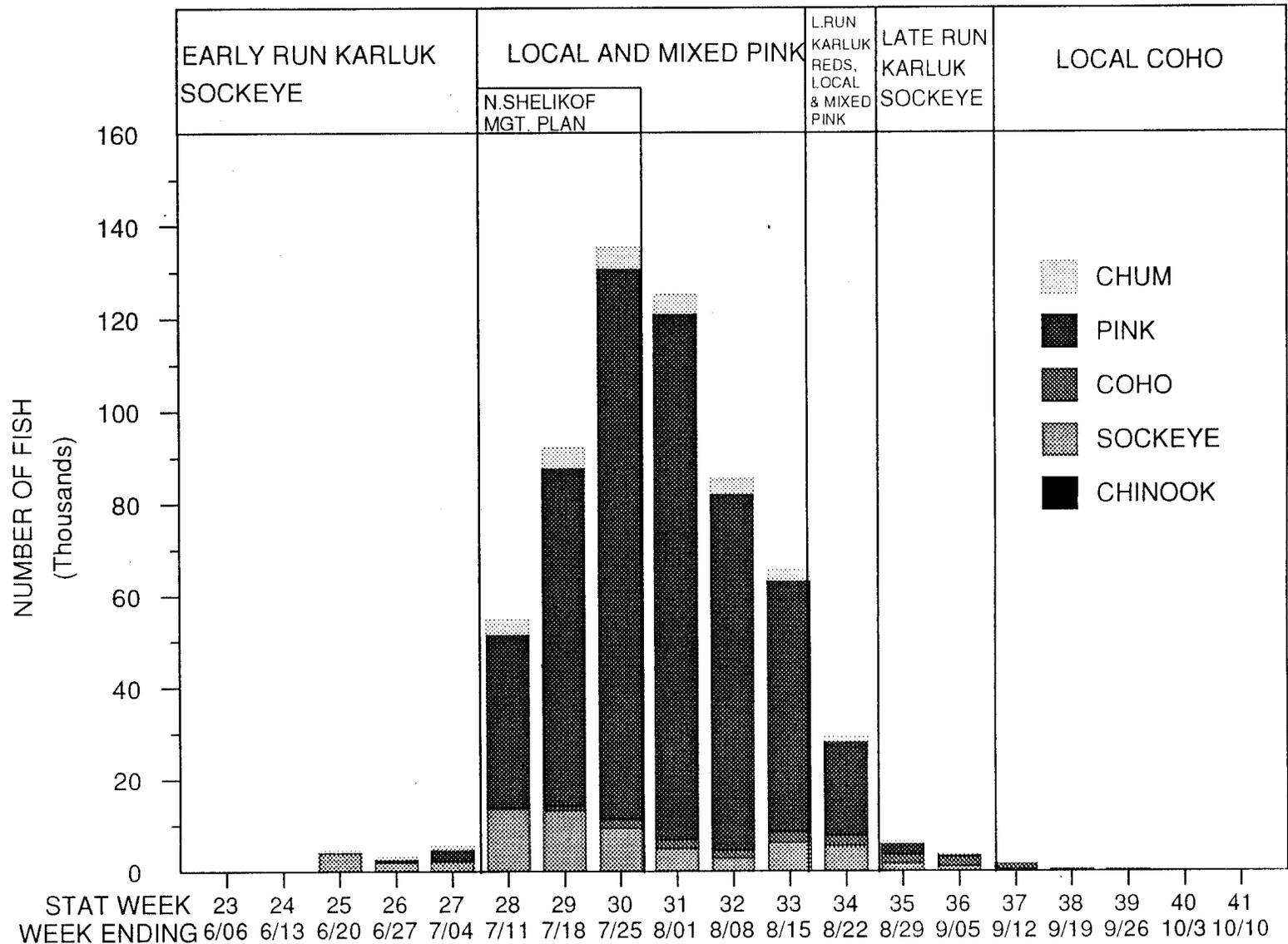
Appendix A.3. (page 2 of 2)

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NORTH SHELIKOF SECTION  
 CATCH BY STAT WEEK (AREAS USED- 26210-26255,  
 25130-25181)  
 70-93 AVERAGE

CATCH WEEK	CHINOOK	SOCKEYE	COHO	PINK	CHUM
23	0	5	0	0	0
24	1	120	3	2	12
25	1	2260	0	43	10
26	13	2120	0	164	81
27	3	642	10	428	37
28	58	5857	42	3061	1914
29	202	11514	122	9480	4794
30	194	15709	705	20956	11838
31	60	12844	1352	39569	22450
32	22	2917	1085	62156	30626
33	6	1120	2418	54472	37337
34	2	768	2715	11342	25392
35	0	186	3462	19440	18878
36	0	402	3920	1202	7900
37	0	243	3196	18	2540
38	0	11	570	7	379
39	0	0	478	0	33
40	0	13	263	0	19
41	0	0	35	0	0
<b>Total</b>	<b>563</b>	<b>56731</b>	<b>20375</b>	<b>222341</b>	<b>164241</b>

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K10-SWAFGAVG

Appendix A.4. Management chronology for the Southwest Afognak Section's average harvest by week and species, 1970-1993.

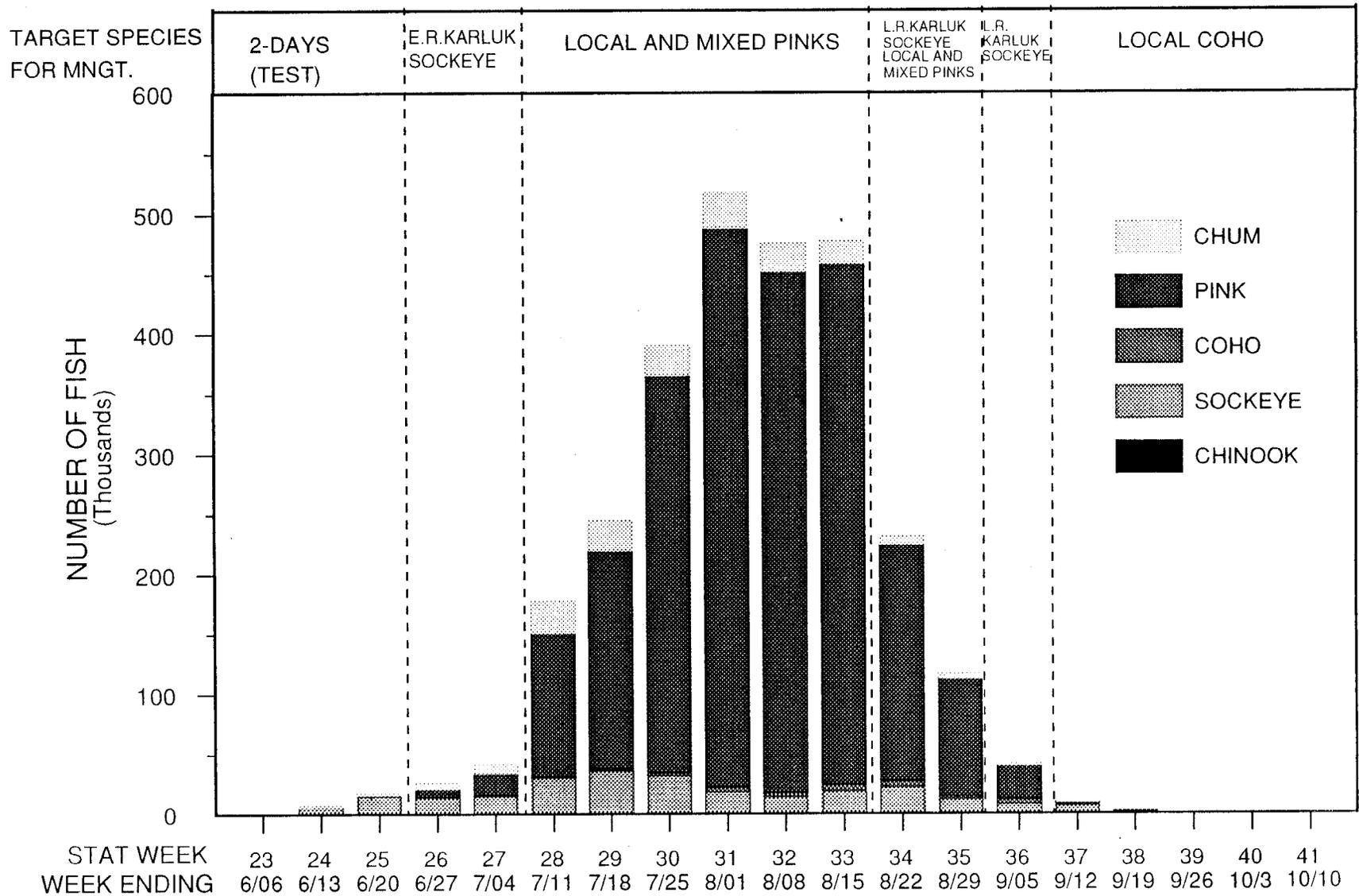
Appendix A.4. (page 2 of 2)

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SOUTHWEST AFOGNAK SECTION  
 CATCH BY STAT WEEK (AREAS USED- 25110 & 25120)  
 70-93 AVERAGE

CATCH WEEK	CHINOOK	SOCKEYE	COHO	PINK	CHUM
23	0	0	0	0	0
24	7	24	0	1	4
25	65	4056	4	270	279
26	80	1865	1	923	353
27	59	2092	7	2777	455
28	84	13431	330	38094	2995
29	64	13151	851	73979	3930
30	129	9312	1785	119896	4318
31	127	4776	1902	114502	3795
32	60	2721	1801	77705	3014
33	39	6143	2238	55145	2084
34	15	5447	2181	20912	697
35	6	1625	1938	2682	120
36	3	1006	2038	641	32
37	1	368	1108	14	6
38	1	155	197	1	1
39	0	36	175	0	8
40	0	0	55	0	0
41	0	0	2	0	0
Total	502	40145	8578	261220	12157

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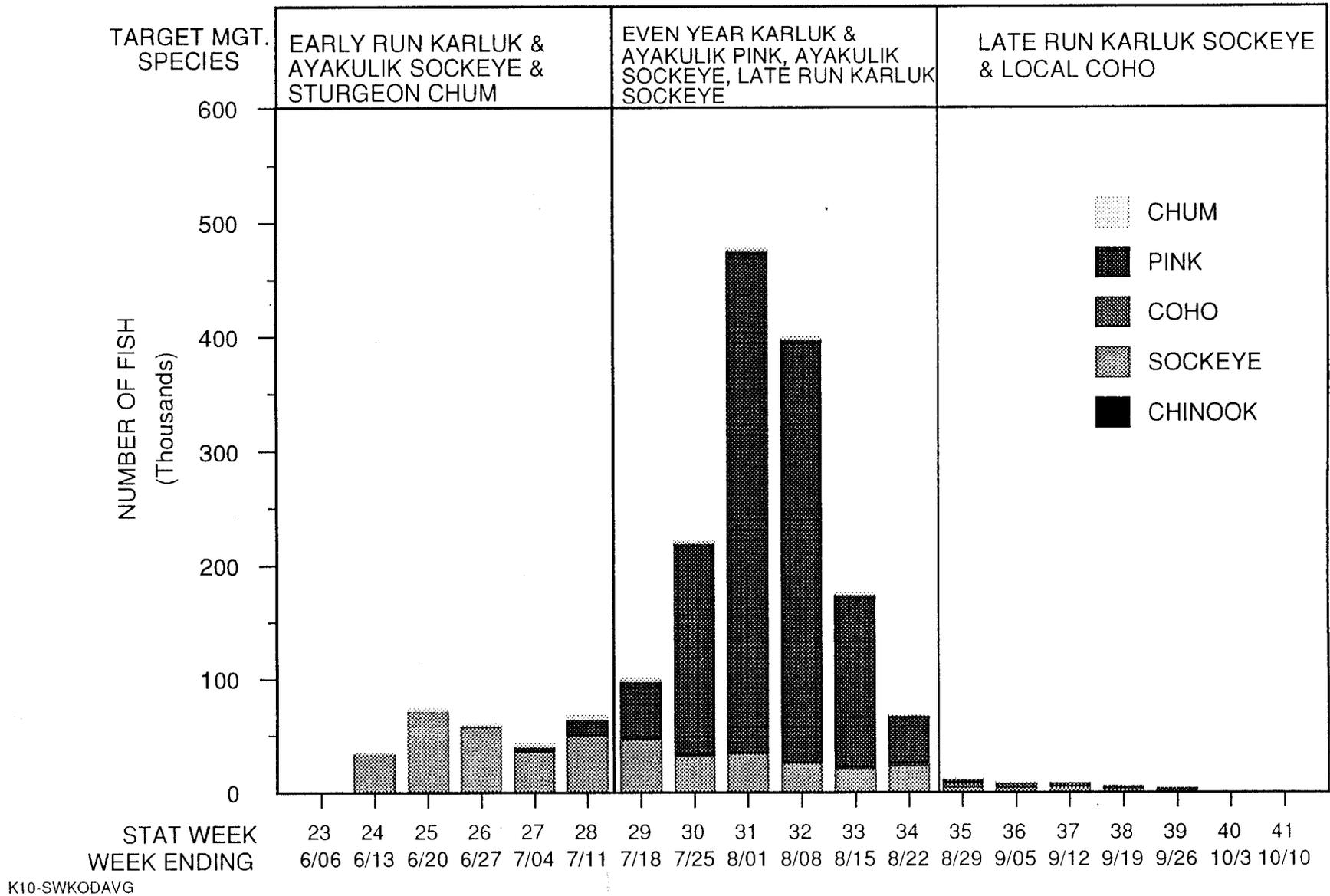


3-NWKOD

Appendix A.5. Management chronology for the Northwest Kodiak District's average harvest by week and species, 1970-1993.

## HISTORICAL AVERAGE HARVEST BY STATISTICAL WEEK NORTHWEST KODIAK DISTRICT (1970-93)

WEEK	ENDING	CHINOOK	SOCKEYE	COHO	PINK	CHUM
23	6/06	0	31	0	0	0
24	6/13	57	6,992	5	122	310
25	6/20	97	14,854	5	1,739	1,052
26	6/27	130	13,903	19	7,669	4,540
27	7/04	133	14,901	136	19,685	7,300
28	7/11	165	30,381	527	120,401	26,388
29	7/18	149	35,949	1,372	183,238	23,698
30	7/25	142	32,116	2,140	331,246	24,736
31	8/01	169	18,206	3,392	467,038	28,597
32	8/08	162	13,955	3,400	434,274	23,703
33	8/15	138	18,965	5,265	434,452	18,432
34	8/22	61	22,144	4,667	197,672	6,885
35	8/29	25	11,973	2,881	98,289	3,191
36	9/05	18	7,922	3,791	29,028	913
37	9/12	12	7,217	2,120	790	143
38	9/19	5	2,071	413	8	24
39	9/26	1	274	97	225	7
40	10/3	0	53	59	0	0
41	10/10	0	0	16	0	0



Appendix A.6. Management chronology for the Southwest Kodiak District's average harvest by week and species, 1970-1993.

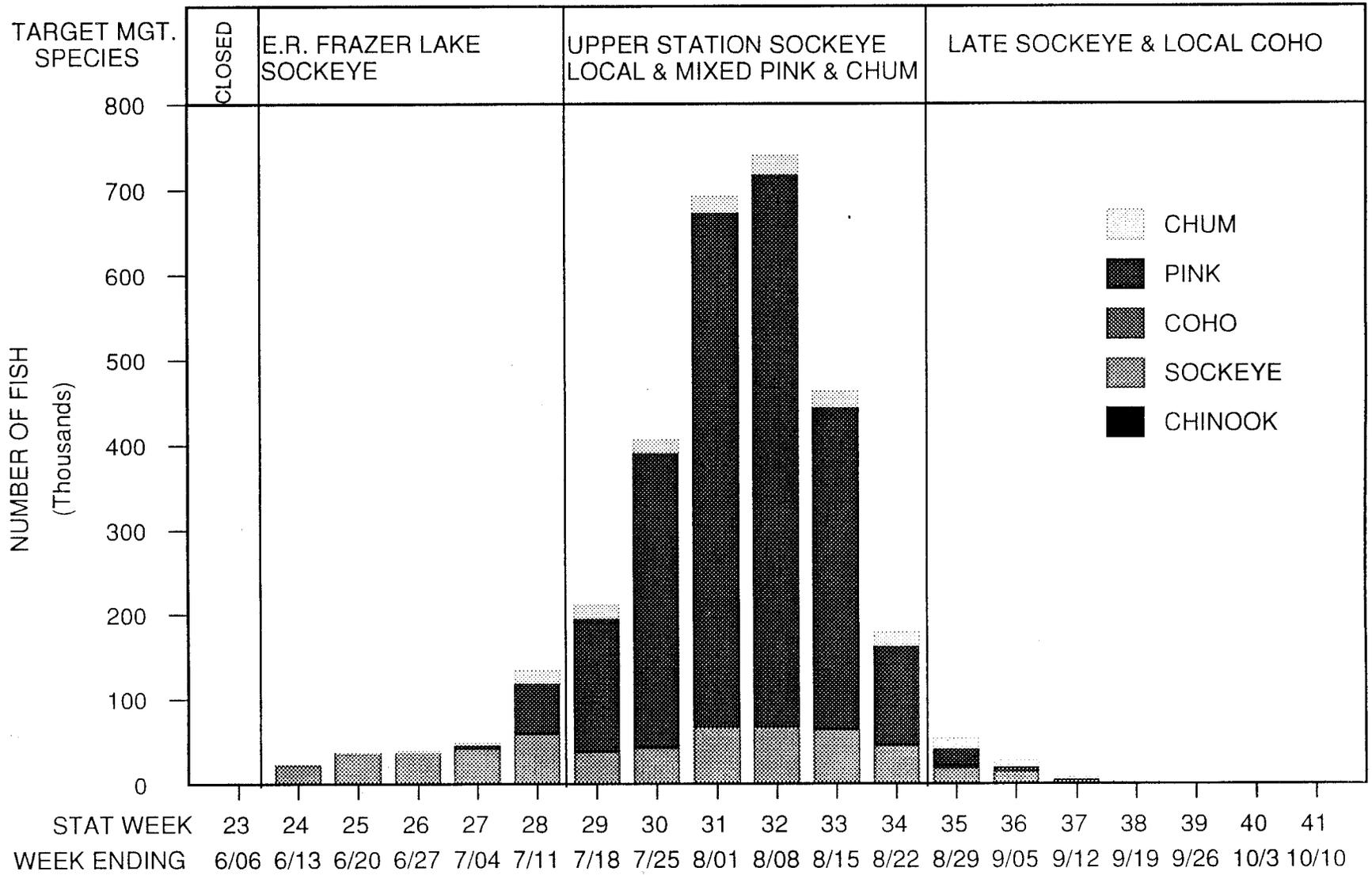
Appendix A.6. (page 2 of 2)

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SOUTHWEST KODIAK DISTRICT  
 CATCH BY STAT WEEK (AREAS USED- 25510,25520,  
 25610-25640)  
 70-93 AVERAGE

CATCH WEEK	CHINOOK	SOCKEYE	COHO	PINK	CHUM
23	1	93	0	0	1
24	404	34489	112	35	272
25	564	71656	34	499	1433
26	347	57657	6	1338	1886
27	193	36242	13	4702	1992
28	119	49753	84	14920	3343
29	66	46703	269	51673	2424
30	43	32333	475	187062	1554
31	51	34287	929	440261	2630
32	47	25626	978	371308	1794
33	25	21097	1796	151525	935
34	15	23439	2179	42574	404
35	6	4398	3850	4252	129
36	8	4277	3731	1276	108
37	7	5633	2300	100	39
38	2	3709	1971	3	42
39	1	1616	2209	0	46
40	0	394	144	0	20
41	0	0	0	0	0
Total	1899	453403	21082	1271528	19052

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Appendix A.7. Management chronology for the Alitak Bay District's average harvest by week and species, 1970-1993.

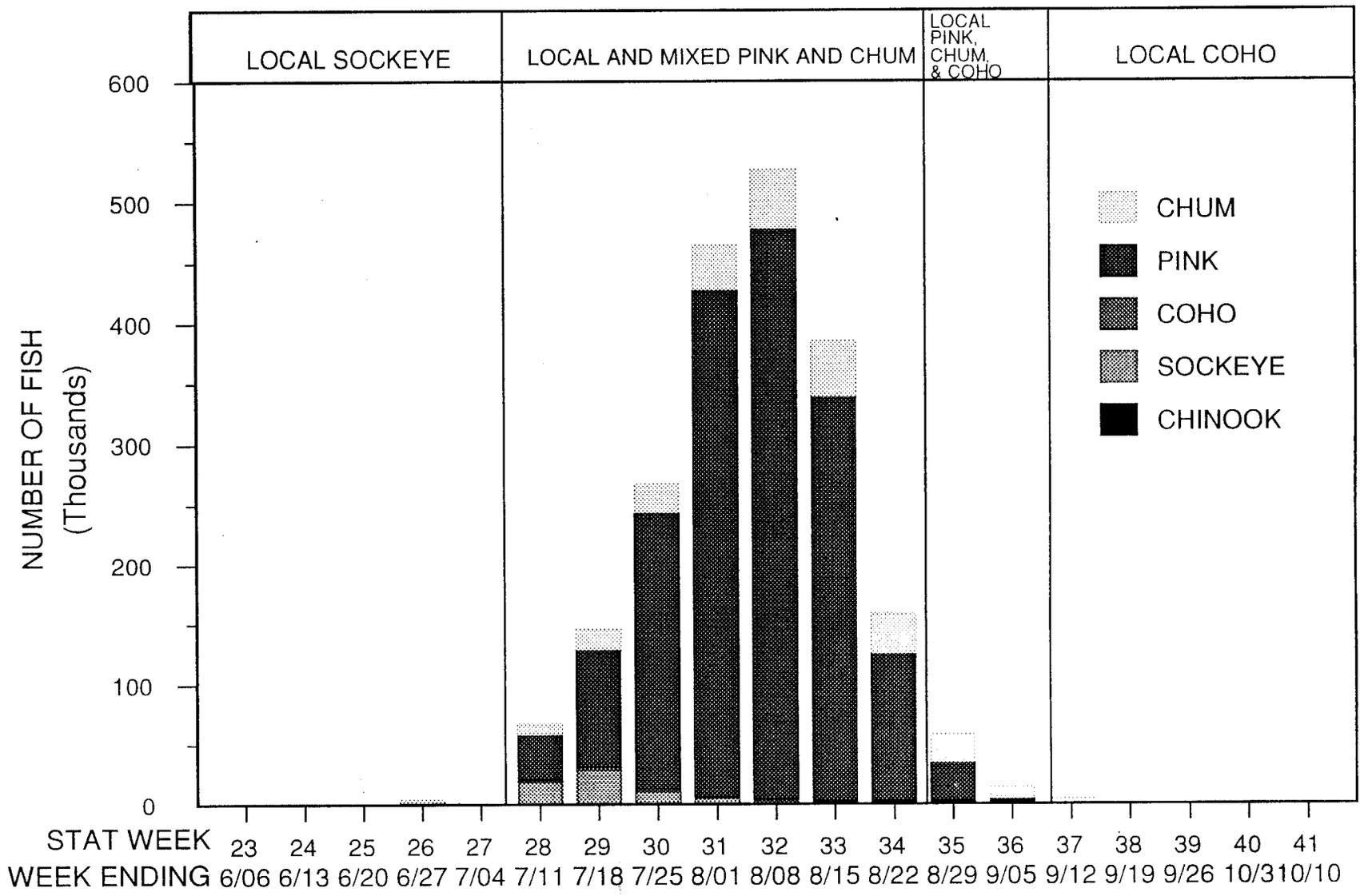
Appendix A.7. (page 2 of 2)

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ALITAK DISTRICT  
 CATCH BY STAT WEEK (AREAS USED- 25710-25770)  
 70-93 AVERAGE

CATCH WEEK	CHINOOK	SOCKEYE	COHO	PINK	CHUM
23	0	28	0	0	0
24	43	22192	1	7	98
25	41	35925	1	202	463
26	31	38078	2	315	758
27	19	41689	26	4914	2336
28	46	58491	95	61482	12517
29	22	37231	133	158693	14520
30	21	41700	302	349857	13765
31	45	67335	627	606611	17791
32	24	67063	933	650610	21102
33	10	63792	1790	379593	16736
34	4	44017	2506	116794	14644
35	4	18087	2908	21157	11657
36	1	14685	3787	3293	5495
37	1	4535	1828	735	2077
38	0	1323	504	2	246
39	0	114	26	0	17
40	0	0	104	0	0
41	0	0	0	0	0
Total	312	556284	15573	1187475	71443

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K10-ESKODAVG

Appendix A.8. Management chronology for the Eastside Kodiak District's average harvest by week and species, 1970-1993.

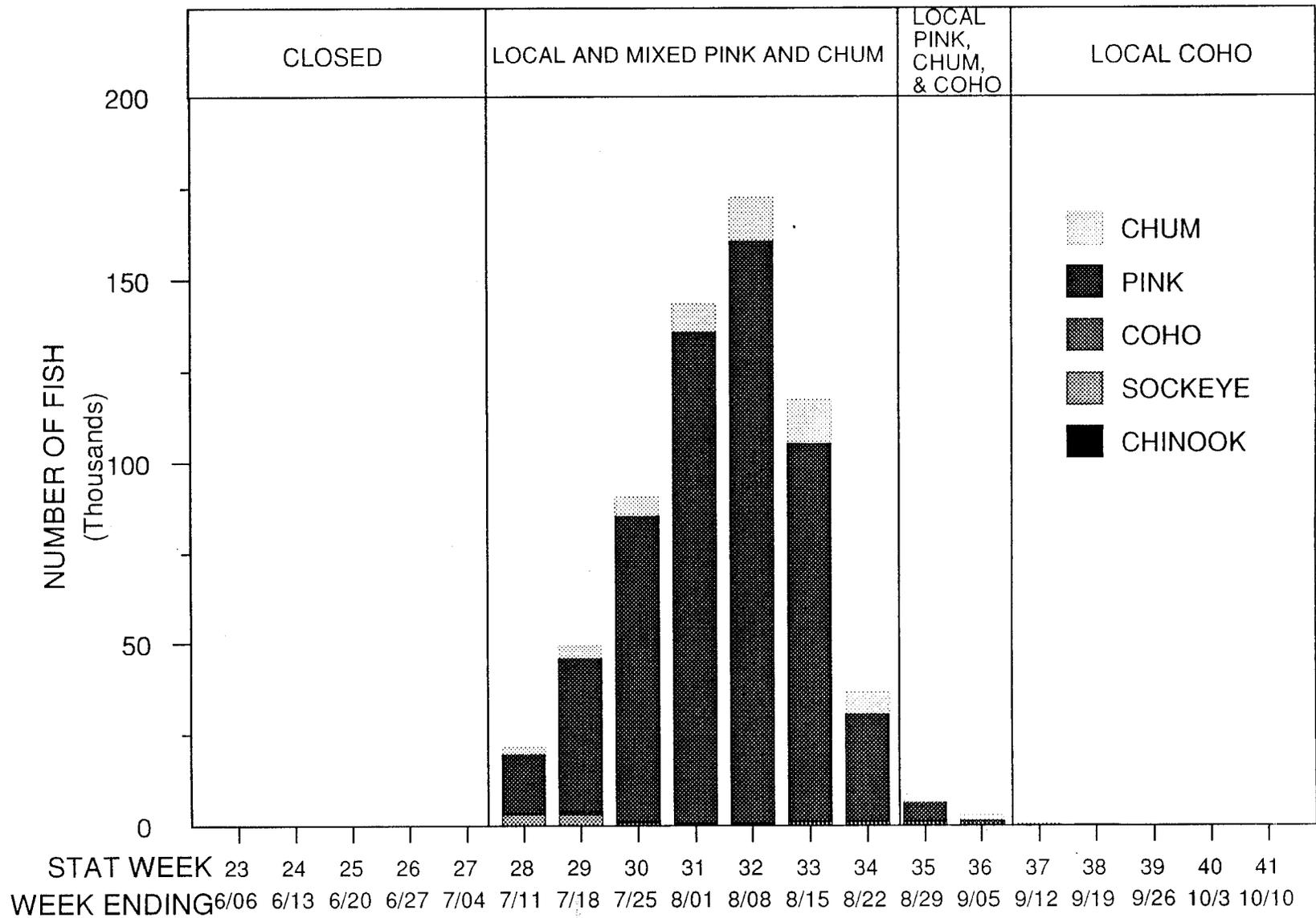
Appendix A.8. (page 2 of 2)

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EASTSIDE KODIAK DISTRICT  
 CATCH BY STAT WEEK (AREAS USED- 225940-25942, 25810-2  
 70-93 AVERAGE

CATCH WEEK	CHINOOK	SOCKEYE	COHO	PINK	CHUM
23	0	0	0	0	0
24	0	0	0	25	2
25	3	730	2	18	96
26	22	3569	6	394	543
27	2	935	0	855	162
28	349	18478	1817	38734	8240
29	232	28323	2431	98754	15990
30	142	10573	2265	231545	23171
31	79	4409	1220	422516	36463
32	79	2640	1429	474731	47544
33	44	1329	1530	336685	45305
34	11	778	1707	123536	32263
35	4	673	1459	33094	22837
36	2	13	1599	3711	9184
37	0	8	1167	80	2774
38	0	2	302	0	41
39	0	0	105	0	30
40	0	5	147	19	76
41	0	0	0	0	0
Total	970	72466	17185	1764695	244723

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K10-NEKODAVG

Appendix A.9. Management chronology for the Northeast Kodiak District's average harvest by week and species, 1970-1993.

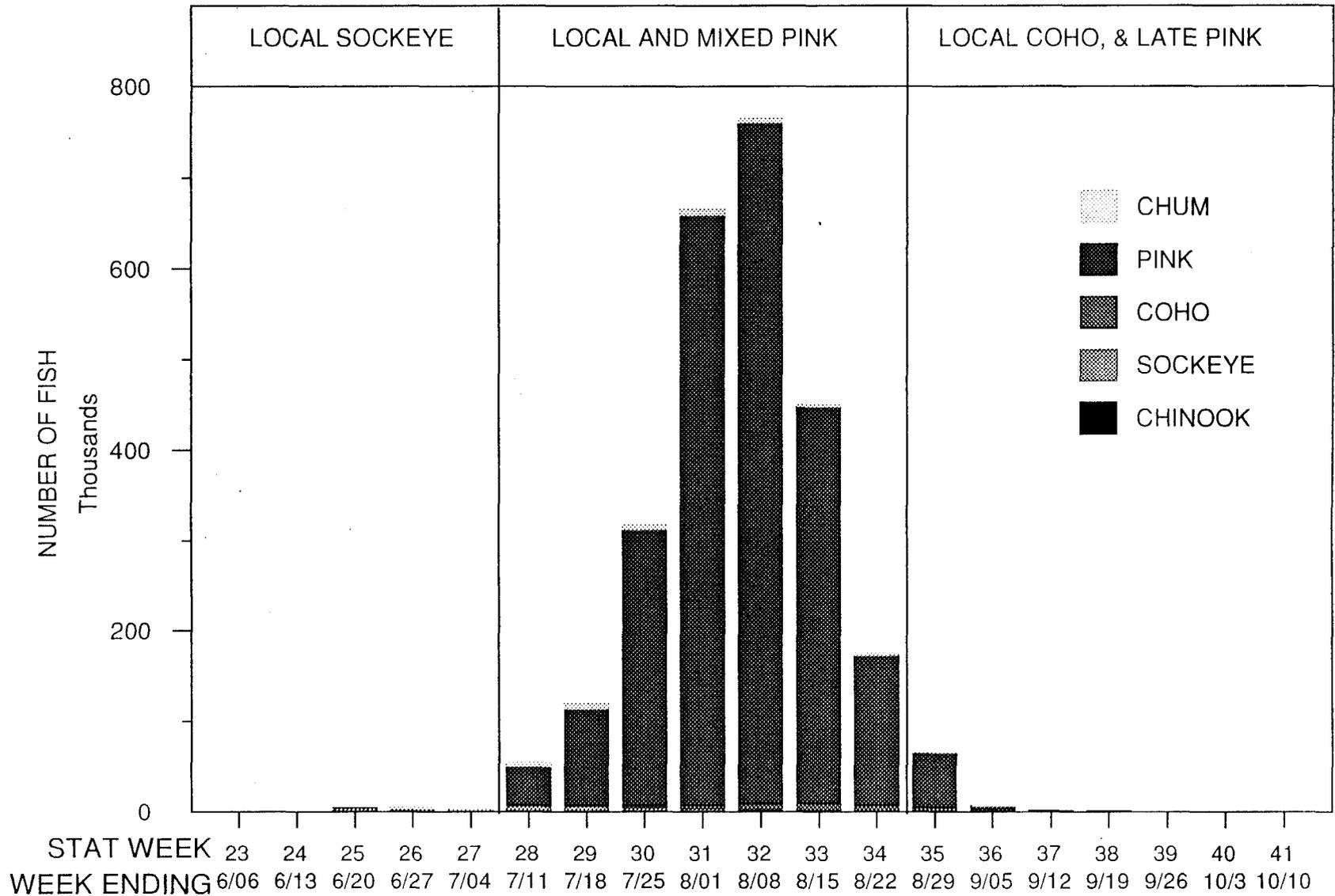
Appendix A.9. (page 2 of 2)

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NORTHEAST KODIAK DISTRICT  
 CATCH BY STAT WEEK (AREAS USED- 25910-25925)  
 70-93 AVERAGE

CATCH WEEK	CHINOOK	SOCKEYE	COHO	PINK	CHUM
23	0	0	0	43	28
24	0	5	0	0	0
25	0	24	0	3	0
26	0	11	0	0	0
27	0	3	0	31	8
28	38	3095	470	16458	1675
29	36	3053	633	42627	2988
30	28	642	264	84974	4506
31	26	338	188	135721	7299
32	14	175	562	160334	11550
33	7	102	1018	104614	11482
34	2	21	1215	29781	5522
35	1	7	1231	5583	1921
36	0	4	1348	577	888
37	0	3	754	62	38
38	0	10	371	6	10
39	0	0	70	0	12
40	0	1	7	0	0
41	0	2	4	0	0
Total	82	3994	4311	292207	24203

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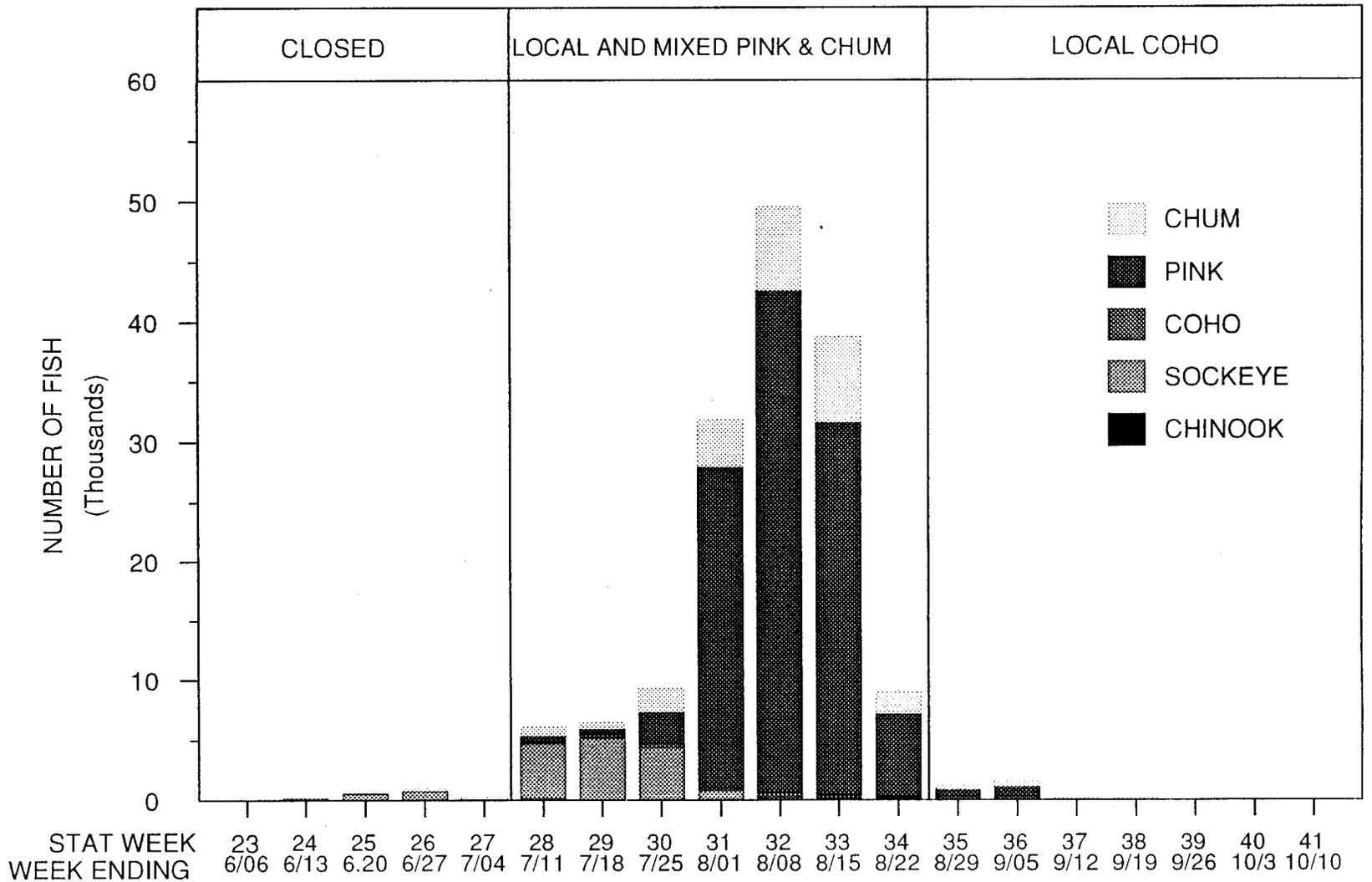
K10-RAFGAVG

Appendix A.10. Management chronology for the remaining Afognak Section's average harvest by week and species, 1970-1993.

Appendix A.10. (page 2 of 2)

REMAINING AFOGNAK SECTIONS  
 CATCH BY STAT WEEK (AREAS USED- 25182-25190,  
 25210-25235)  
 70-93 AVERAGE

CATCH WEEK	CHINOOK	SOCKEYE	COHO	PINK	CHUM
23	0	28	0	0	3
24	2	260	0	1	5
25	7	4824	0	133	43
26	12	3478	4	456	601
27	9	1611	37	1104	115
28	59	6721	963	43299	3846
29	39	6193	1338	107039	4416
30	29	4777	1803	306217	5200
31	31	3452	3417	652810	5590
32	22	2604	5924	752263	3967
33	8	1537	7843	438856	1830
34	2	371	6834	166457	1424
35	0	63	4897	61078	1048
36	0	20	3616	3778	130
37	0	2	1379	284	22
38	0	0	412	709	0
39	0	0	59	0	0
40	0	0	118	56	0
41	0	0	11	0	0
Total	142	24695	19782	1274473	15333



K10-KATAVG

Appendix A.11. Management chronology for the Katmai and Alinchak Section's average harvest by week and species, 1970-1993.

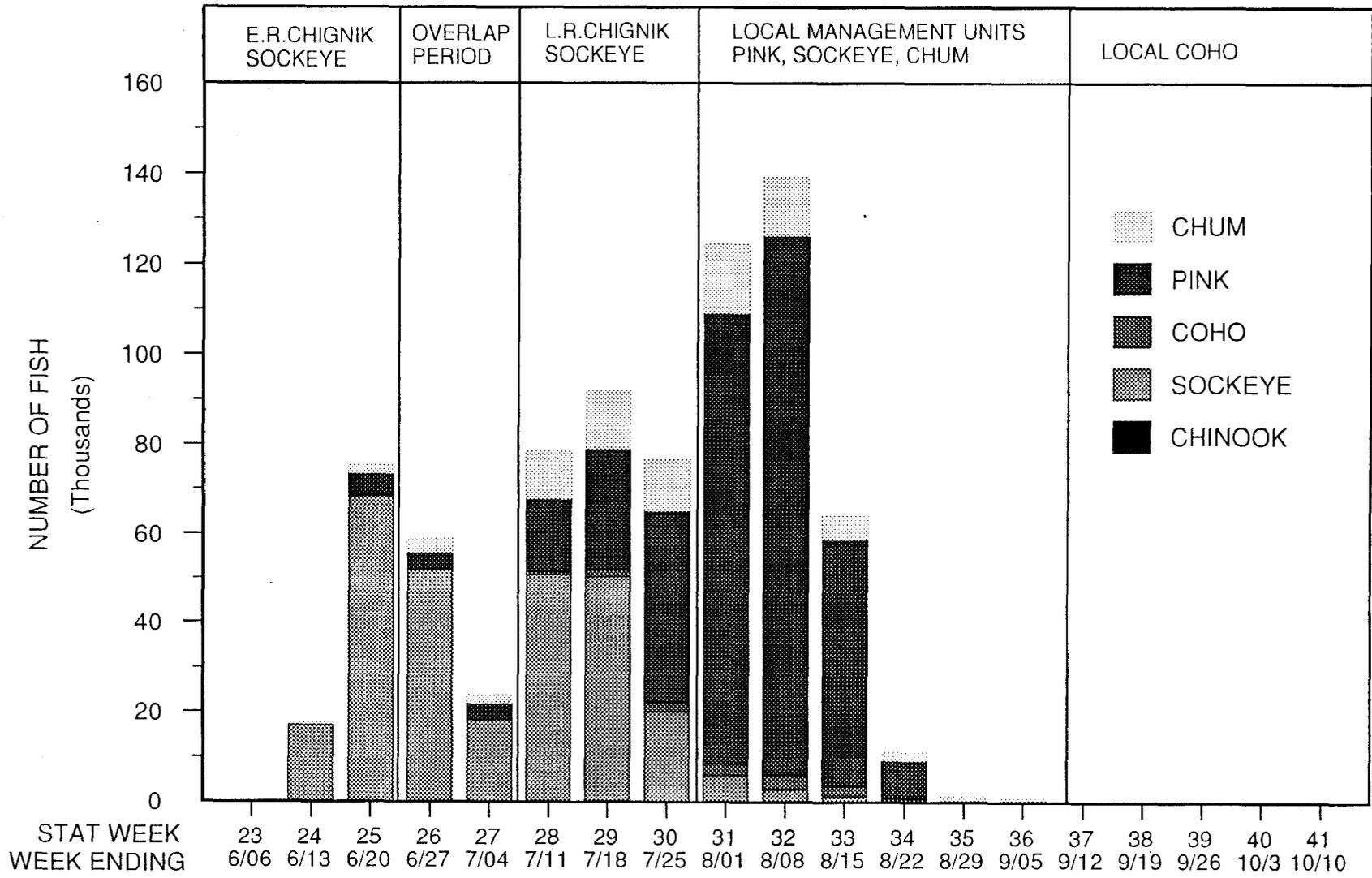
Appendix A.11. (page 2 of 2)

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KATMAI/ALINCHAK SECTIONS  
 CATCH BY STAT WEEK (AREAS USED- 26260-26270)  
 70-93 AVERAGE

CATCH WEEK	CHINOOK	SOCKEYE	COHO	PINK	CHUM
23	0	0	0	0	0
24	0	146	0	1	1
25	1	509	0	30	4
26	1	745	0	113	45
27	0	114	0	62	23
28	74	4673	42	645	694
29	24	5154	325	560	476
30	19	4350	362	2707	1881
31	10	788	226	27020	3821
32	8	222	347	42143	6816
33	2	142	234	31306	7087
34	0	82	132	7084	1661
35	0	5	334	627	229
36	0	5	298	896	391
37	0	0	34	0	14
38	0	0	36	0	9
39	0	0	0	0	0
40	0	0	3	0	0
41	0	0	0	0	0
<b>Total</b>	<b>102</b>	<b>10845</b>	<b>1219</b>	<b>113193</b>	<b>23152</b>

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K10-IGVAKAVG

Appendix A.12. Management chronology for the Cape Igvak/Wide Bay Section's average harvest by week and species, 1970-1993.

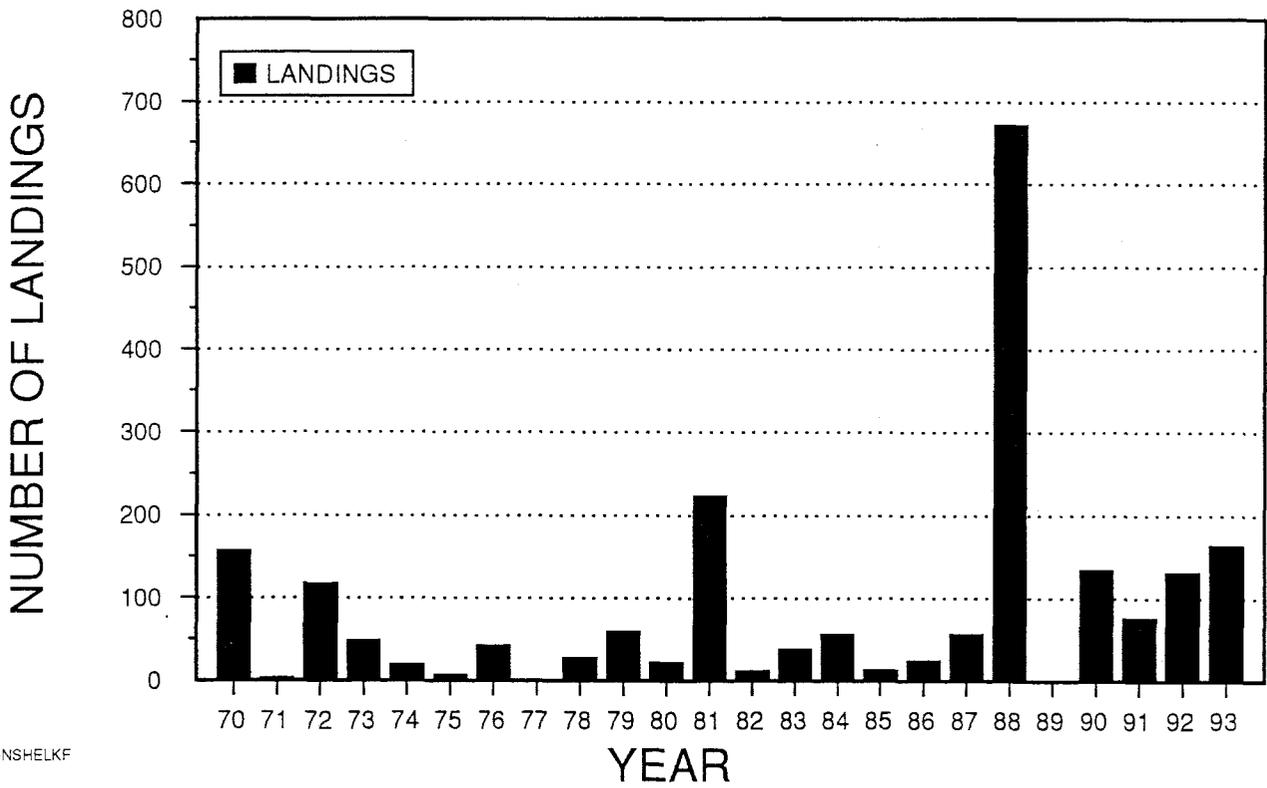
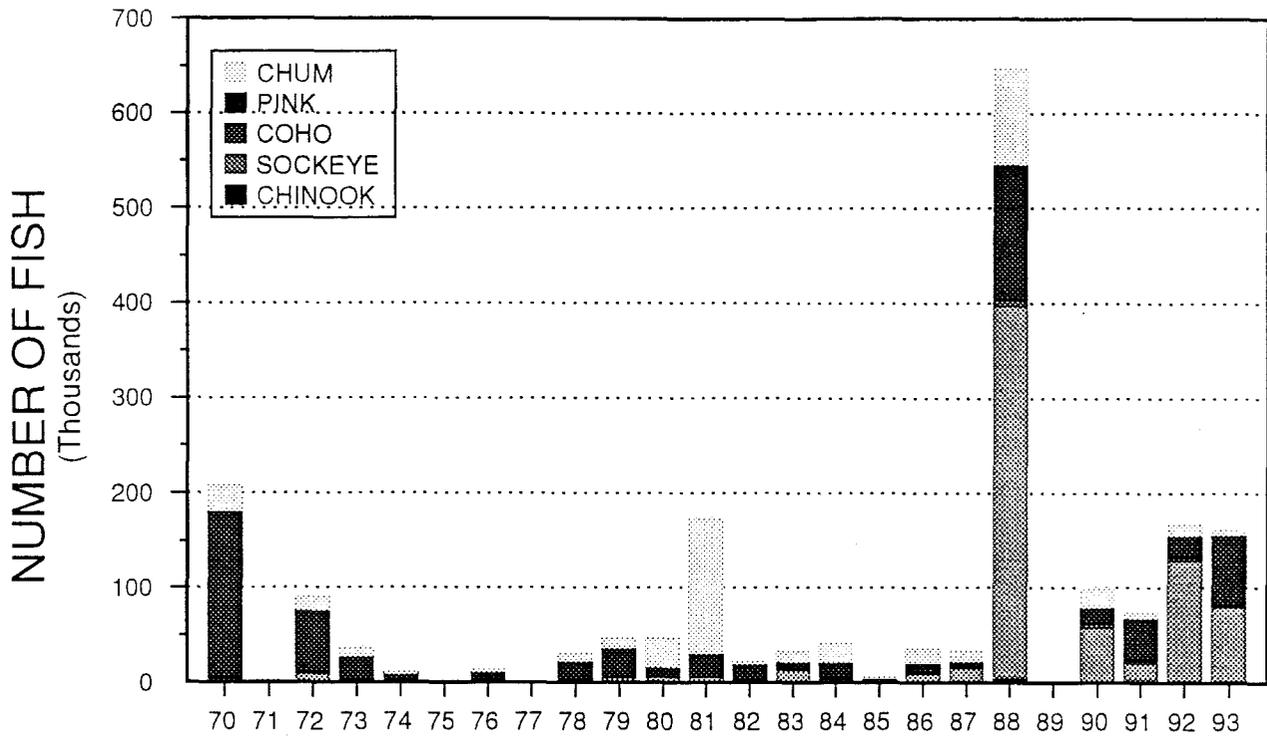
Appendix A.12. (page 2 of 2)

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IGVAK/WIDE BAY SECTIONS  
 CATCH BY STAT WEEK (AREAS USED- 26275-26295)  
 70-93 AVERAGE

CATCH WEEK	CHINOOK	SOCKEYE	COHO	PINK	CHUM
23	0	12	0	4	0
24	34	17127	0	382	301
25	104	68393	26	5273	1662
26	40	51930	51	3986	2841
27	15	18301	1	3894	1734
28	343	50564	768	16322	10428
29	285	50175	1517	27257	12544
30	113	20046	1913	43406	11257
31	104	5913	2572	100880	14957
32	130	2764	3103	120501	12882
33	82	1294	2211	55503	5222
34	5	212	631	8713	1499
35	0	2	172	598	583
36	0	1	204	575	360
37	0	0	60	3	151
38	0	5	7	0	0
39	0	0	0	0	0
40	0	0	0	0	0
41	0	0	0	0	0
Total	784	229356	6704	203055	42965

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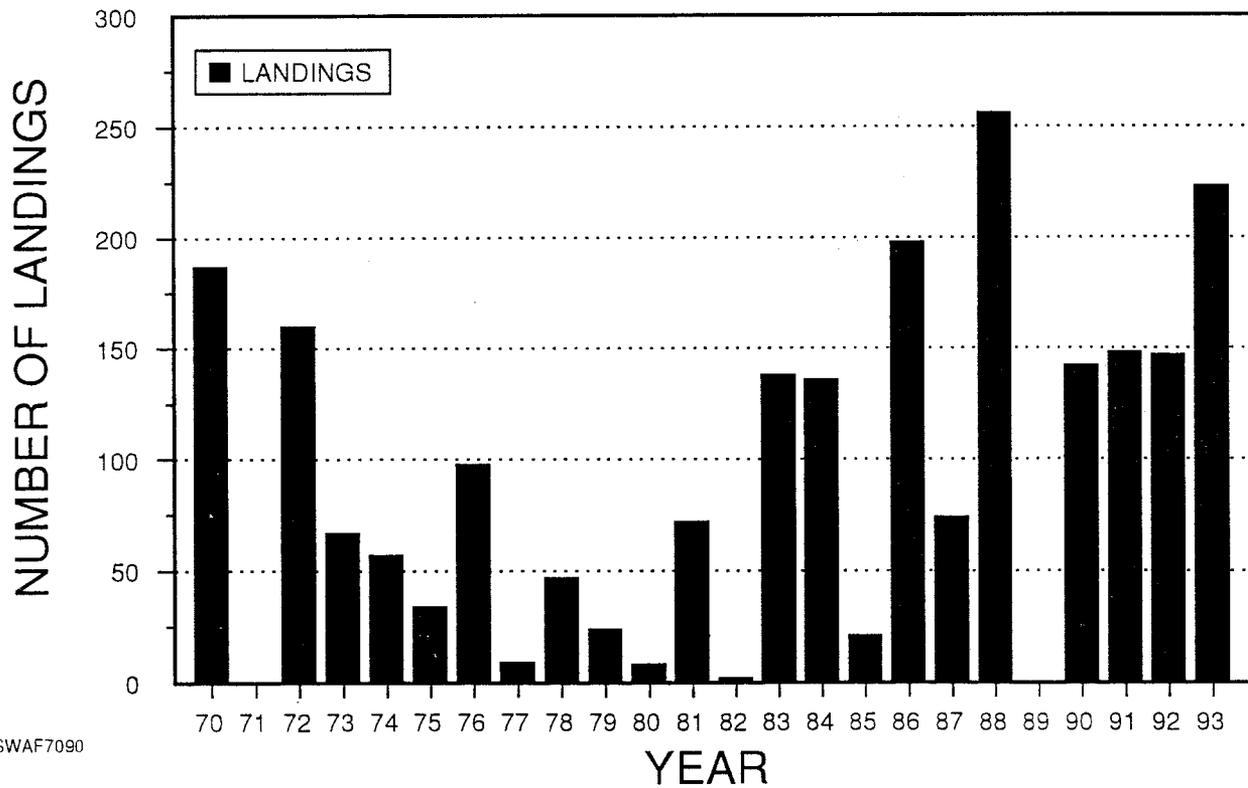
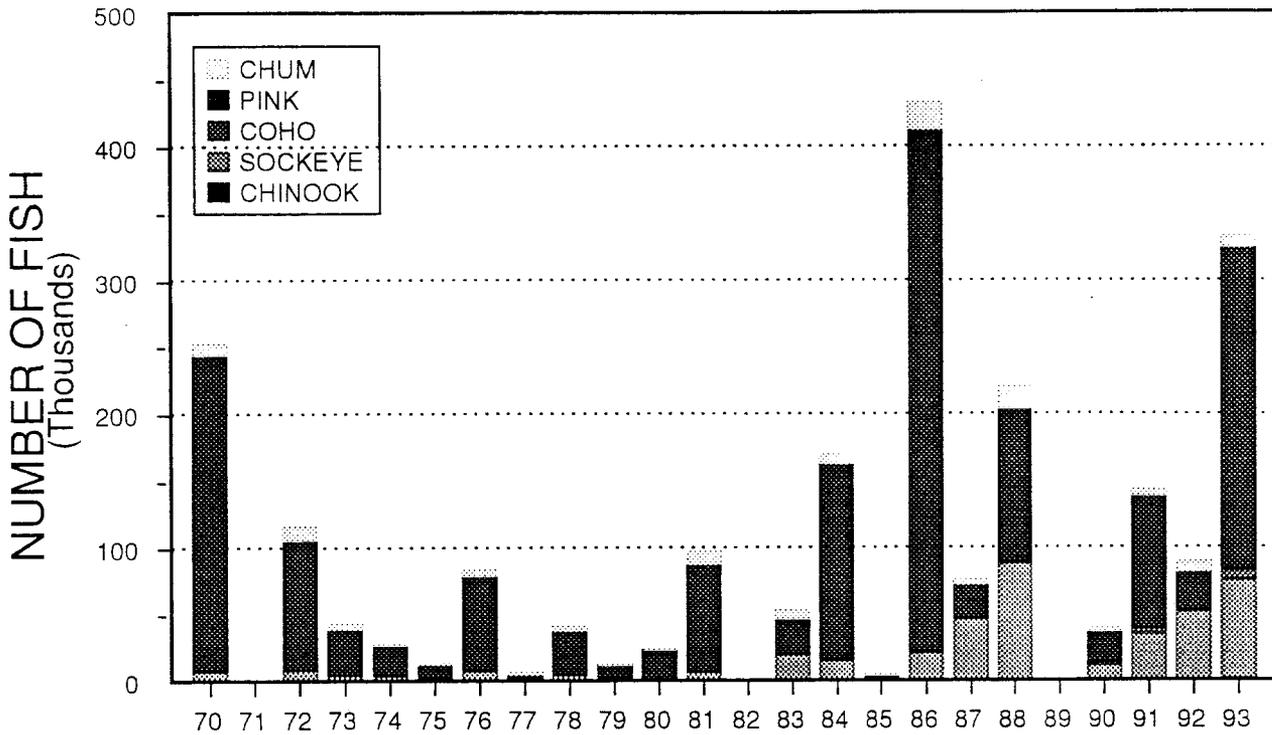


J4-NSHELKF

Appendix B.1. North Shelikof Sections harvest and landings by species, by year July 6-25, 1970-1993.

Appendix B.1. (page 2 of 2)

	LANDINGS	CHINOOK	SOCKEYE	COHO	PINK	CHUM
70	157	8	2,883	892	177,260	25,354
71	3	0	1,449	1	54	2
72	117	58	8,782	375	67,596	12,738
73	48	11	909	20	27,419	8,475
74	19	0	2,357	36	7,657	338
75	7	0	264	1	1,046	230
76	42	11	894	39	11,399	261
77	0	0	0	0	0	0
78	27	3	1,580	3	22,159	6,624
79	59	16	5,238	22	32,228	8,634
80	22	2	6,122	4	10,625	29,661
81	223	7	6,087	80	25,473	141,572
82	12	1	2,420	2	18,493	1,165
83	38	22	13,513	57	9,271	8,749
84	56	21	3,601	59	18,991	18,574
85	13	4	3,892	40	1,432	1,050
86	24	48	9,252	269	11,879	13,405
87	56	281	15,563	376	7,878	8,839
88	671	5,198	391,917	5,922	144,123	101,147
89	0	0	0	0	0	0
90	134	139	57,714	3,911	18,607	19,412
91	76	2,467	18,807	2,707	44,835	3,792
92	131	945	128,109	3,049	23,883	11,675
93	164	1,216	78,415	1,954	75,635	4,247

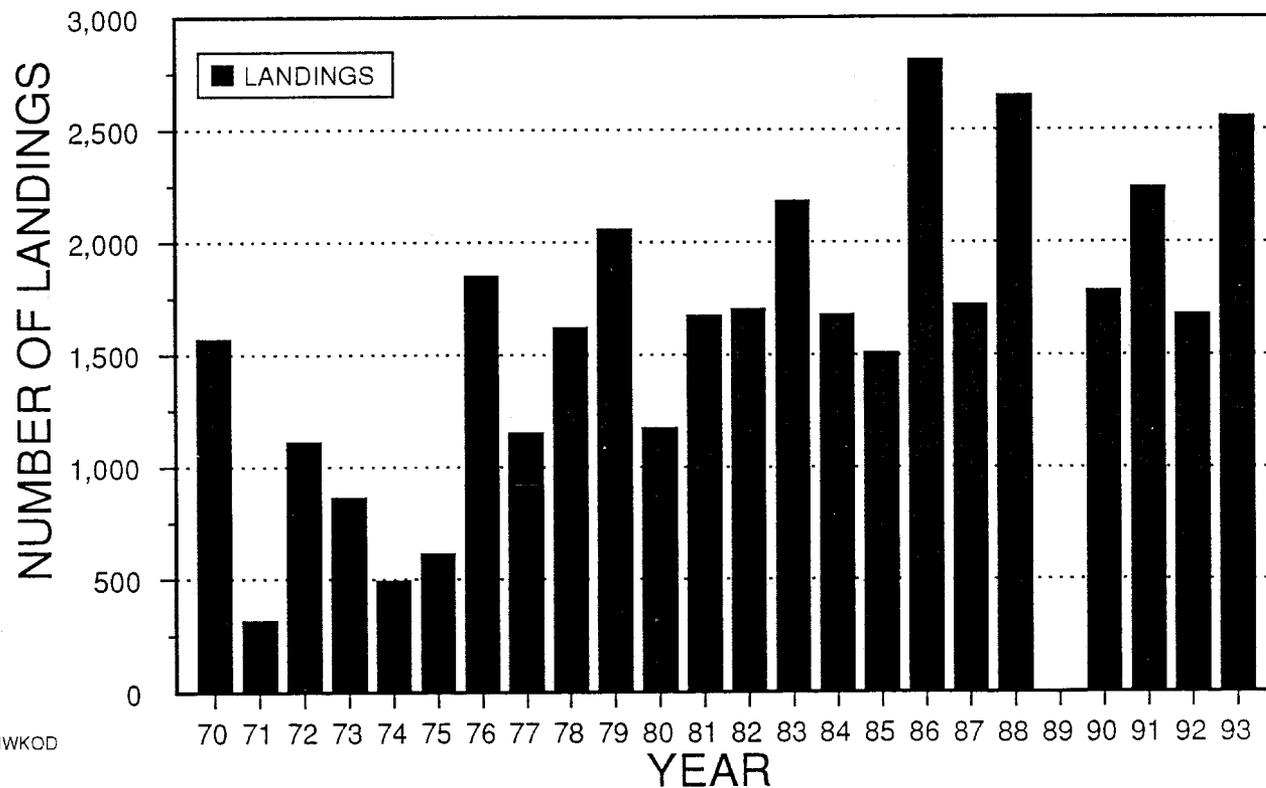
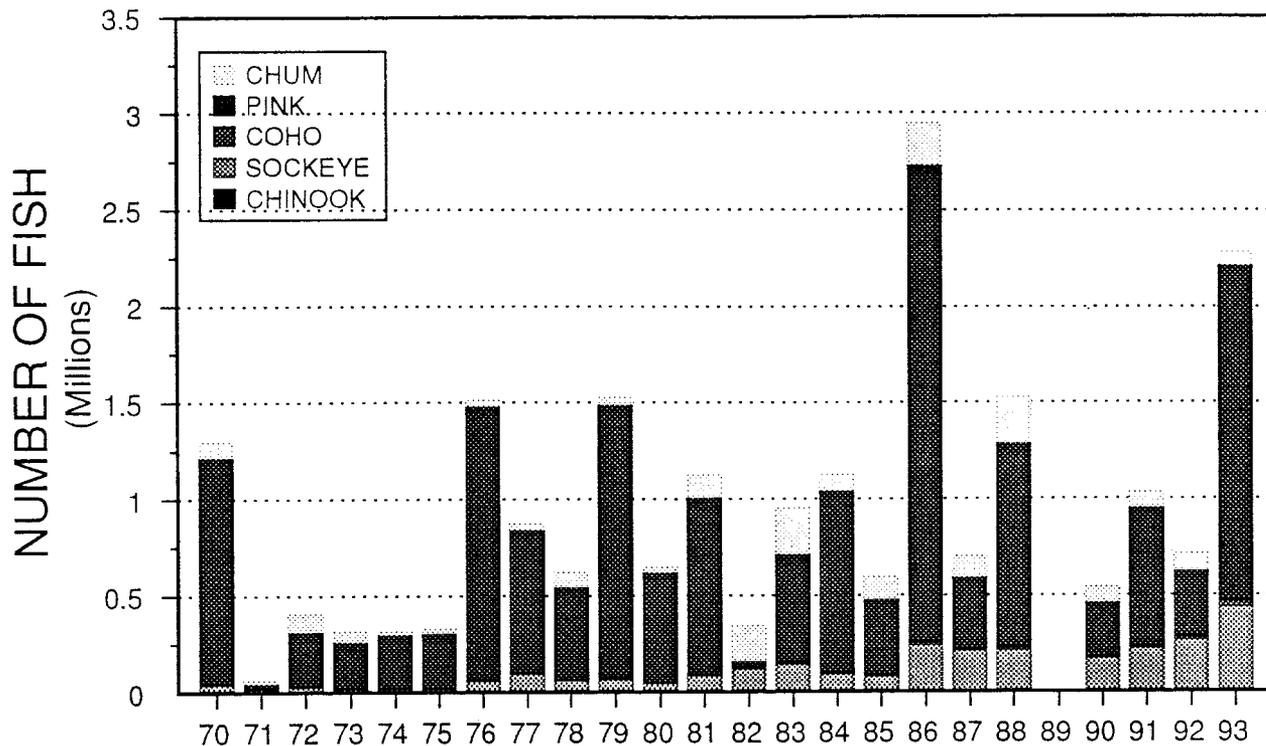


2-SWAF7090

Appendix B.2. Southwest Afognak Section harvest and landings by species, by year July 6-25, 1970-1993.

## SOUTHWEST AFOGNAK SECTION JULY 6-25, 1970-93

	LANDINGS	CHINOOK	SOCKEYE	COHO	PINK	CHUM
70	187	79	6,829	1,023	236,493	7,427
71	0	0	0	0	0	0
72	160	68	8,204	189	97,425	9,795
73	67	11	4,292	74	35,023	3,563
74	57	25	3,746	32	23,718	791
75	34	3	2,405	15	9,772	856
76	98	33	7,297	135	71,749	3,914
77	9	1	730	50	4,571	437
78	47	3	4,172	45	33,946	2,436
79	24	10	1,435	371	10,102	299
80	8	1	286	3	22,906	347
81	72	13	6,036	62	81,696	8,493
82	2	3	241	1	147	13
83	138	48	18,961	692	26,553	6,225
84	136	63	14,111	1,346	147,616	5,717
85	21	16	1,740	16	2,329	370
86	198	82	20,680	1,088	390,770	19,229
87	74	12	45,869	427	25,972	3,973
88	256	338	87,209	1,350	114,980	15,929
89	0	0	0	0	0	0
90	142	156	10,706	1,930	24,390	2,262
91	148	309	34,183	3,586	100,680	4,043
92	147	304	50,576	605	30,018	6,826
93	223	858	74,005	7,100	242,923	7,419

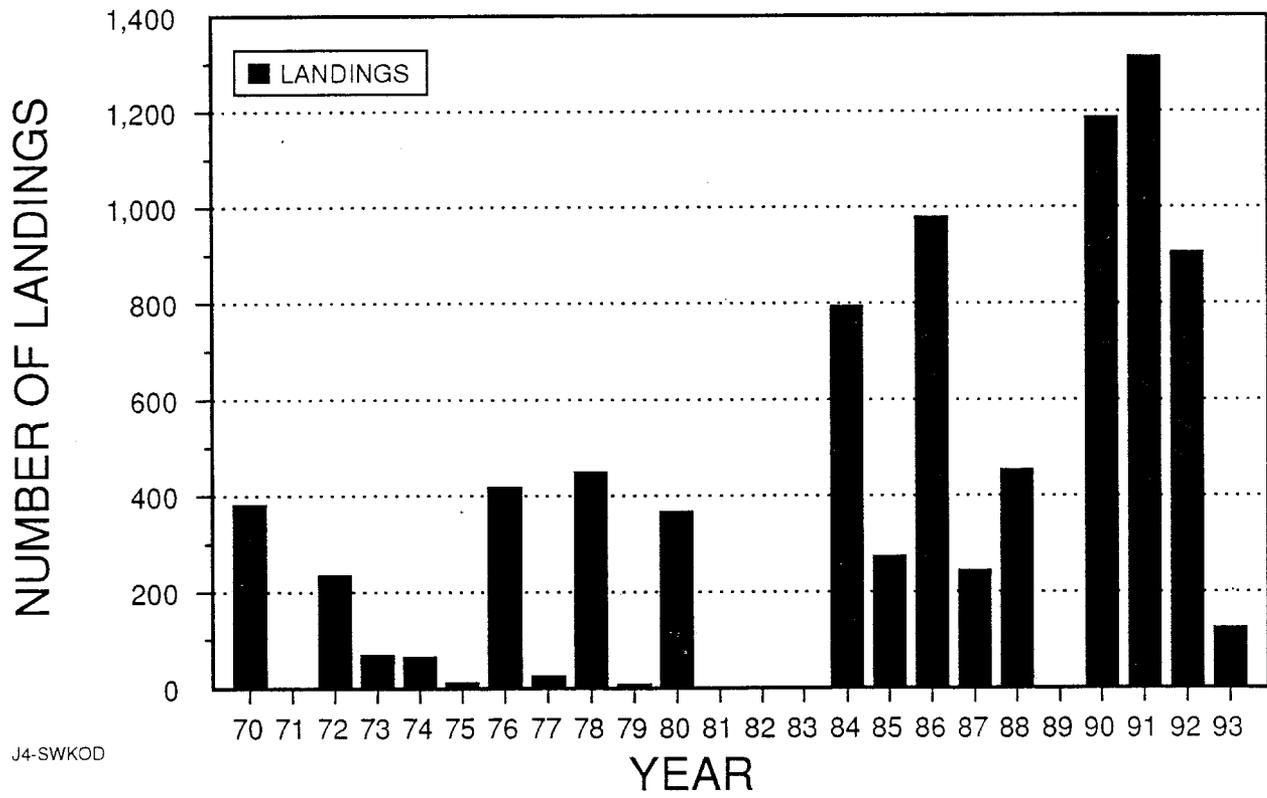
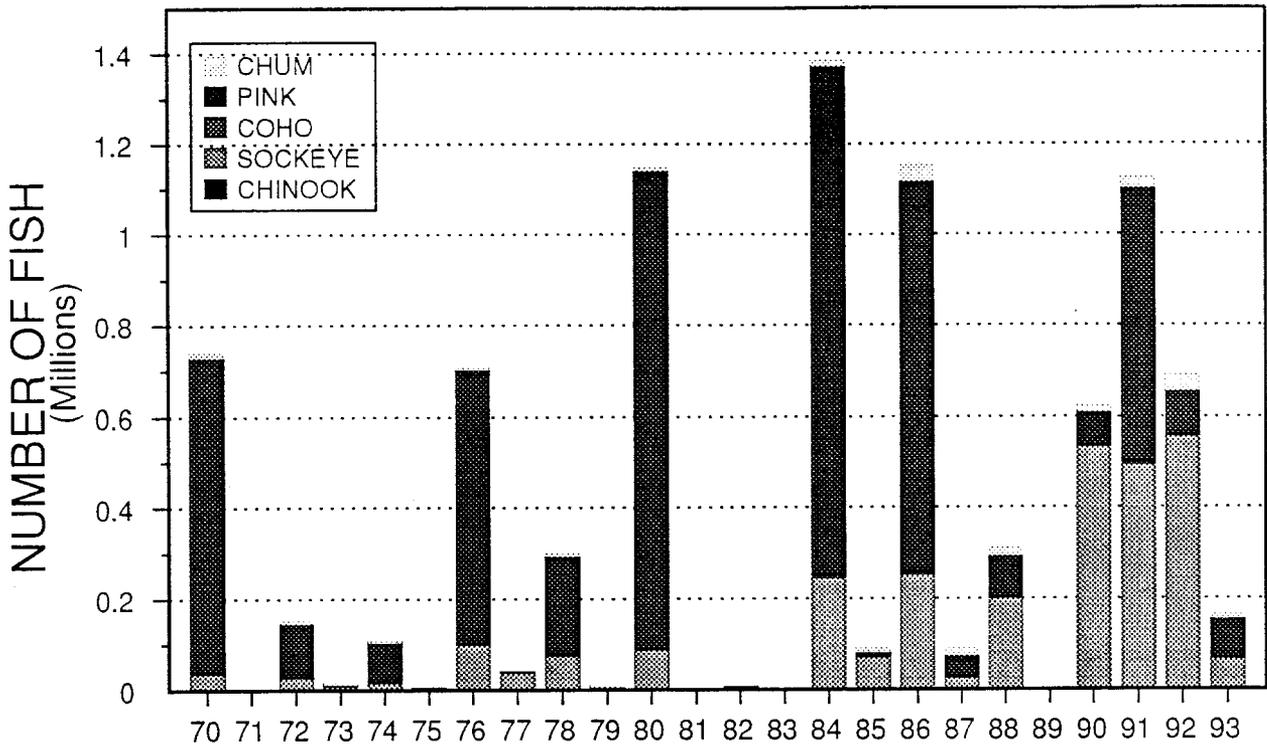


J4-NWKOD

Appendix B.3. Northwest Kodiak District harvest and landings by species, by year July 6-25, 1970-1993.

NORTHWEST KODIAK DISTRICT JULY 6-25, 1970-93

	LANDINGS	CHINOOK	SOCKEYE	COHO	PINK	CHUM
70	1,567	204	45,282	2,708	1,177,889	72,779
71	319	52	20,354	94	33,342	11,767
72	1,112	266	29,600	572	288,356	86,735
73	865	53	22,768	428	248,999	45,499
74	494	26	23,118	190	285,158	12,030
75	614	17	22,103	240	293,334	10,401
76	1,850	103	61,129	434	1,425,732	24,544
77	1,153	49	97,853	698	750,545	27,114
78	1,619	272	65,036	696	489,125	67,360
79	2,058	307	64,205	8,042	1,424,445	29,104
80	1,176	98	48,284	2,800	576,427	20,842
81	1,673	140	90,278	1,103	925,560	113,942
82	1,703	161	122,632	3,292	42,765	178,478
83	2,185	969	142,765	5,122	573,882	231,227
84	1,677	899	91,552	5,779	952,519	73,176
85	1,508	550	80,850	2,337	403,232	107,722
86	2,813	291	242,332	9,967	2,483,879	207,839
87	1,721	251	213,973	4,206	382,018	99,731
88	2,652	1,542	216,579	8,667	1,070,377	228,796
89	3	0	9	0	1,002	34
90	1,783	1,492	173,052	6,472	288,422	75,102
91	2,244	1,069	222,657	11,707	727,246	72,323
92	1,679	975	271,344	8,416	352,549	82,419
93	2,559	2,224	438,423	25,967	1,753,763	64,072

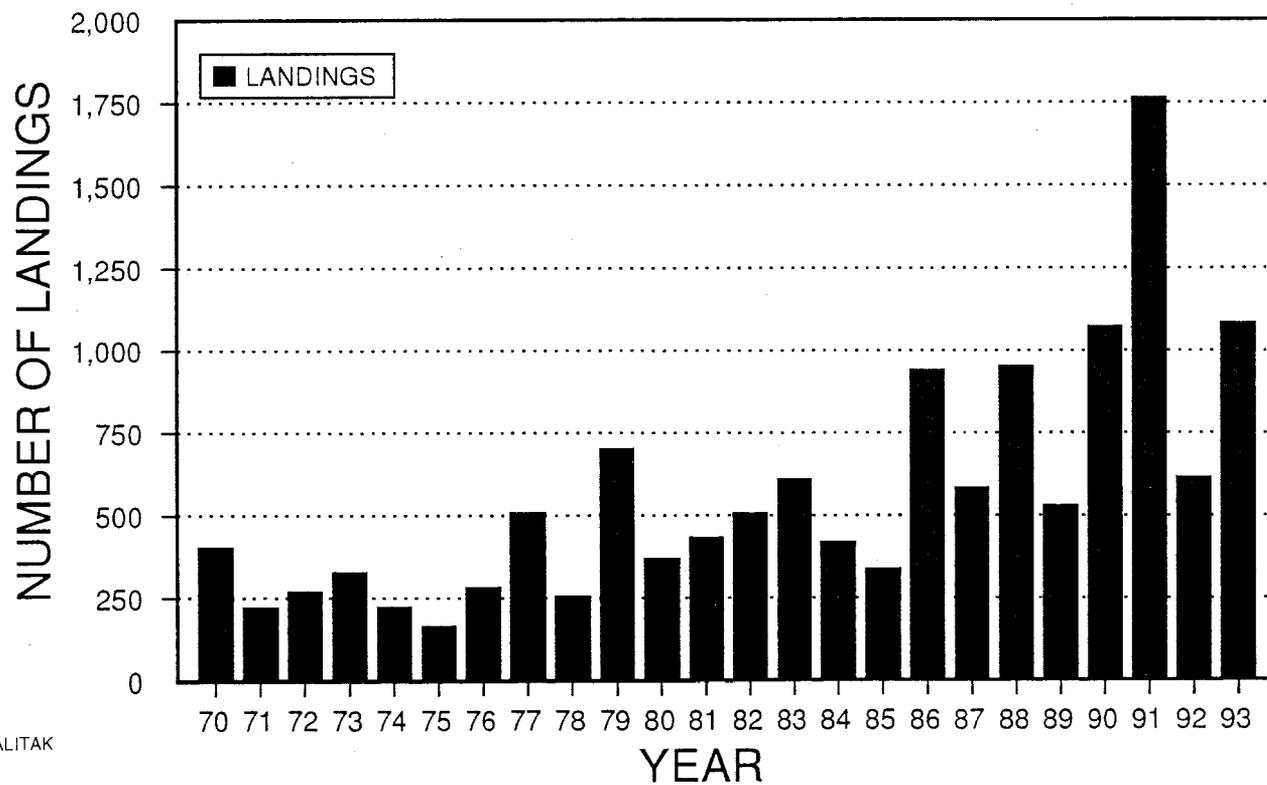
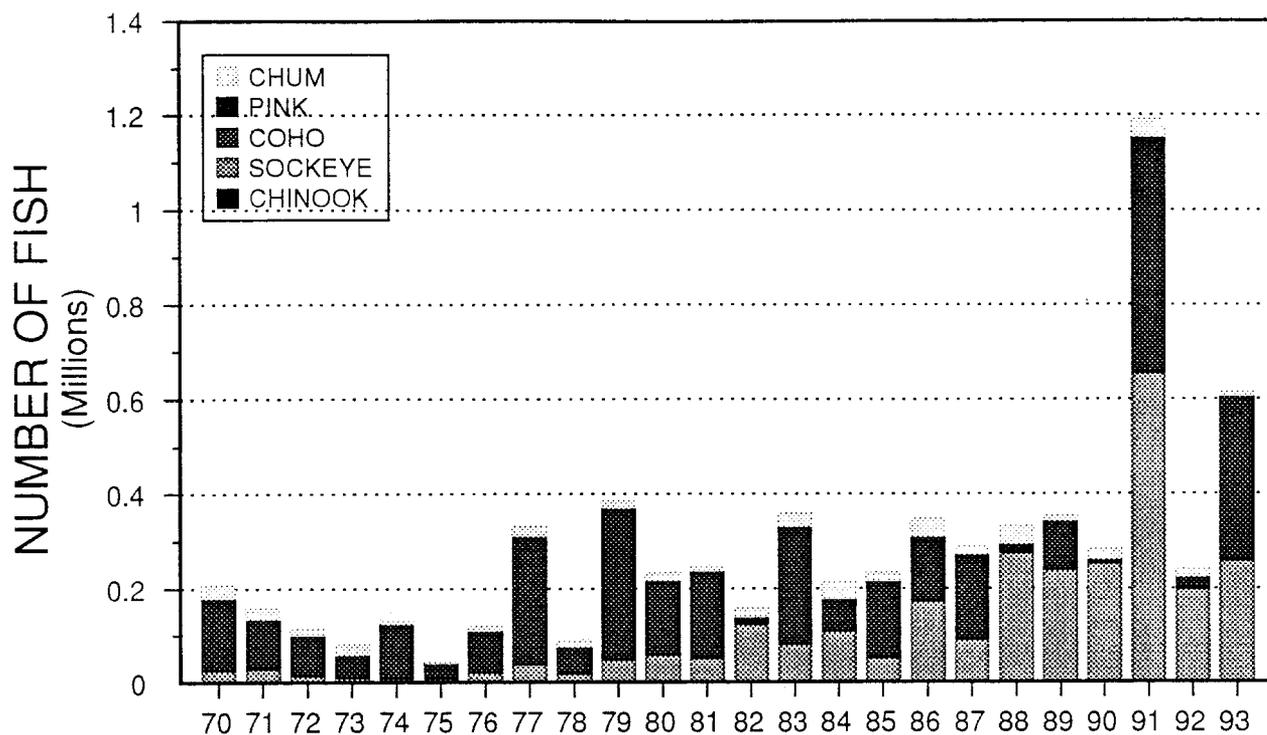


J4-SWKOD

Appendix B.4. Southwest Kodiak District harvest and landings by species, by year July 6-25, 1970-1993.

SOUTHWEST KODIAK DISTRICT JULY 6-25, 1970-93

	LANDINGS	CHINOOK	SOCKEYE	COHO	PINK	CHUM
70	381	20	36,581	729	695,037	5,736
71	0	0	0	0	0	0
72	235	38	29,779	49	119,364	4,125
73	68	8	9,849	2	3,239	335
74	64	4	16,729	20	90,426	419
75	12	2	1,370	7	2,049	66
76	417	32	100,572	73	604,217	2,650
77	24	2	39,663	0	304	1
78	449	644	74,683	61	221,698	3,505
79	8	0	1,404	52	6,771	318
80	366	12	88,087	267	1,055,108	4,228
81	0	0	0	0	0	0
82	1	0	67	0	4,940	0
83	0	0	0	0	0	0
84	793	241	246,684	4,718	1,121,334	8,935
85	273	37	71,584	408	13,214	4,214
86	979	331	253,070	4,534	862,299	34,863
87	244	212	26,036	247	50,974	10,646
88	453	390	200,189	302	96,648	12,550
89	0	0	0	0	0	0
90	1,188	687	533,566	1,414	74,739	11,712
91	1,314	1,392	493,918	4,588	604,424	19,985
92	906	433	556,365	905	99,888	34,580
93	123	404	66,566	518	90,208	5,033

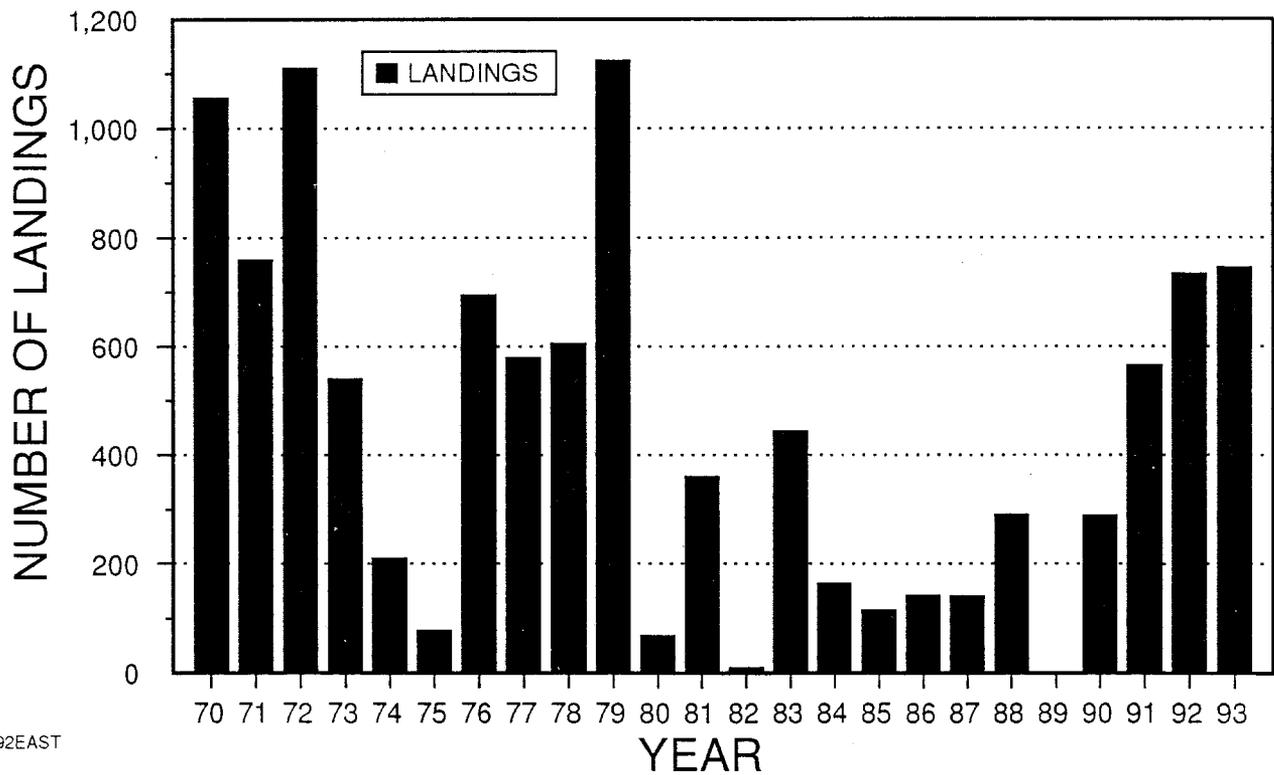
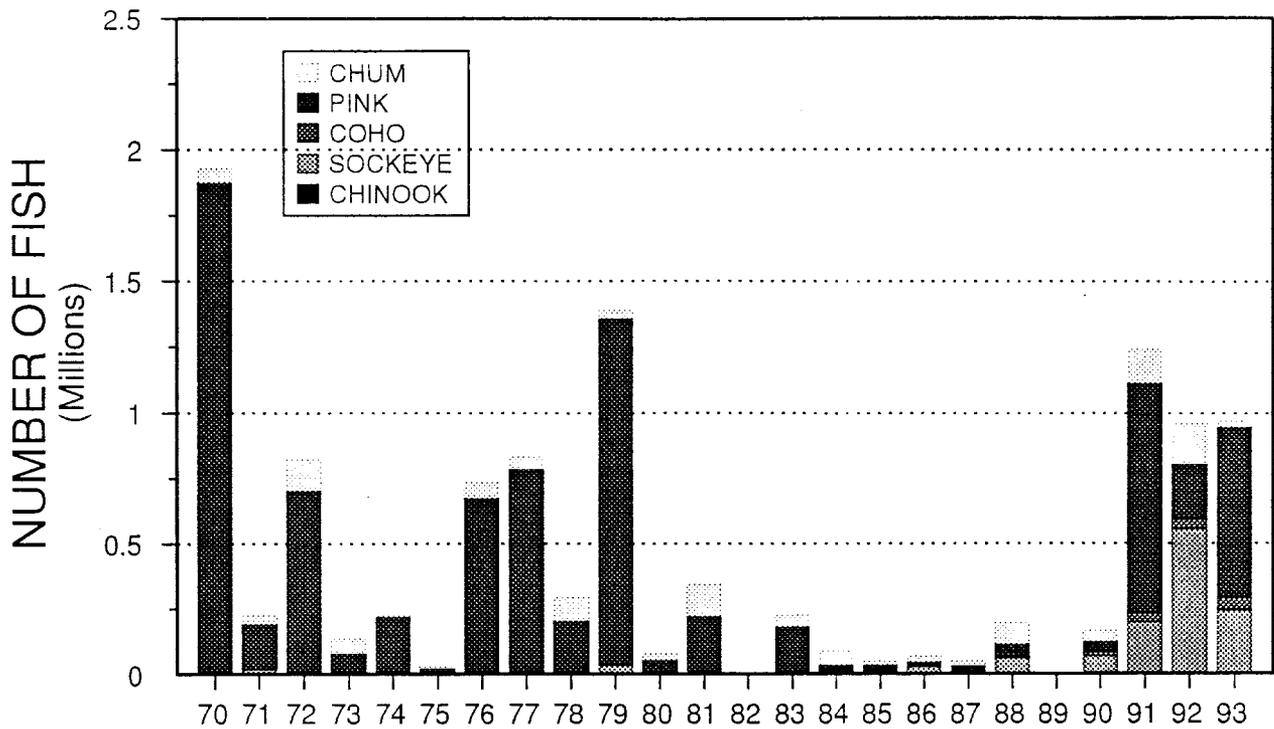


J4-ALITAK

Appendix B.5. Alitak Bay District harvest and landings by species, by year July 6-25, 1970-1993.

ALITAK DISTRICT JULY 6-25, 1970-93

	LANDINGS	CHINOOK	SOCKEYE	COHO	PINK	CHUM
70	403	0	26,503	188	155,157	25,406
71	220	14	28,971	93	107,728	22,899
72	269	9	15,208	272	87,234	12,690
73	327	4	10,239	111	49,868	19,085
74	222	13	8,742	14	116,684	6,838
75	165	0	9,178	21	33,373	1,167
76	281	8	21,181	44	91,506	8,610
77	509	10	39,306	197	273,767	18,994
78	253	19	18,477	7	58,659	12,296
79	703	63	48,991	429	323,533	10,793
80	368	8	57,518	272	161,008	13,716
81	432	2	50,398	273	187,377	9,317
82	506	14	124,044	47	17,399	17,677
83	608	74	80,914	955	250,200	26,173
84	419	72	108,116	662	70,670	34,423
85	336	45	51,369	683	164,810	14,691
86	939	78	172,616	1,922	136,525	39,433
87	583	39	90,752	313	183,140	15,981
88	951	122	274,237	330	21,059	37,394
89	529	33	238,199	14	107,668	8,065
90	1,071	137	252,162	426	10,049	19,353
91	1,764	414	652,681	1,435	499,521	38,944
92	615	152	196,514	845	28,344	15,106
93	1,083	596	255,881	2,791	348,596	7,713

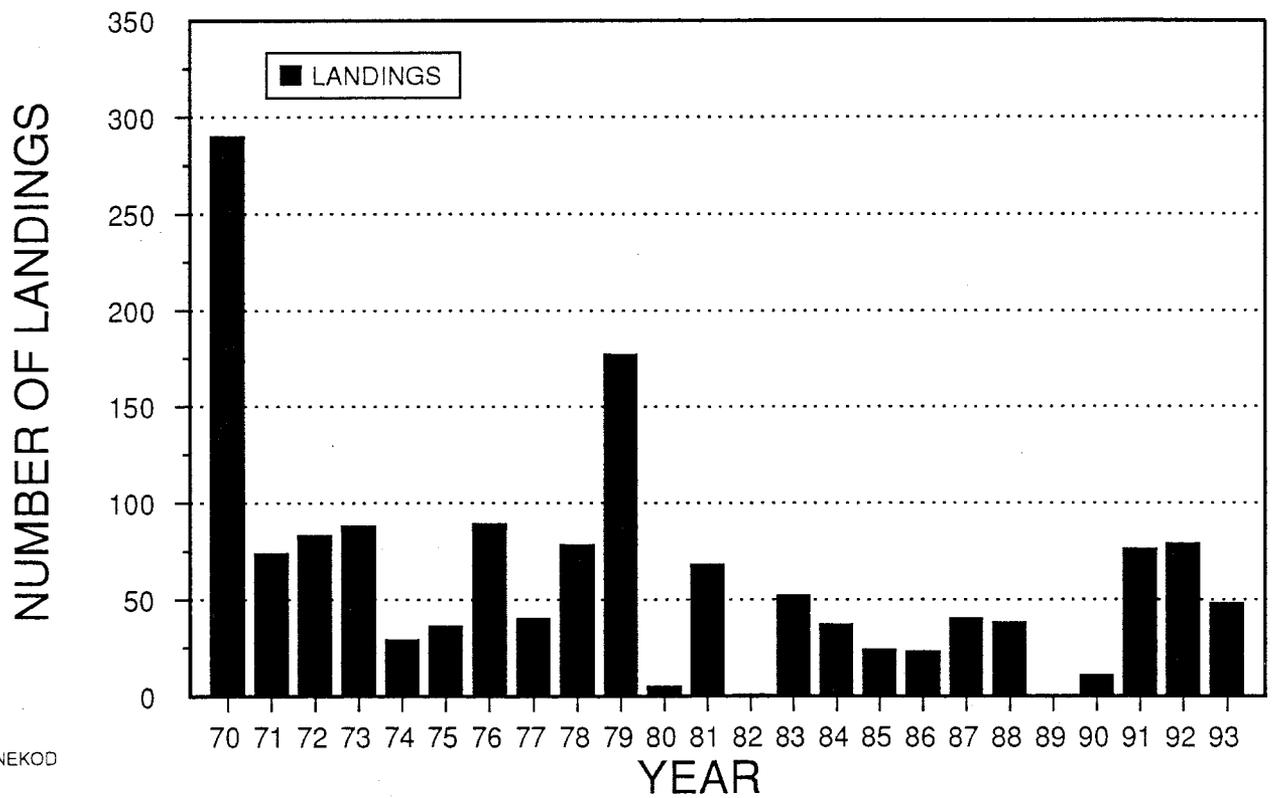
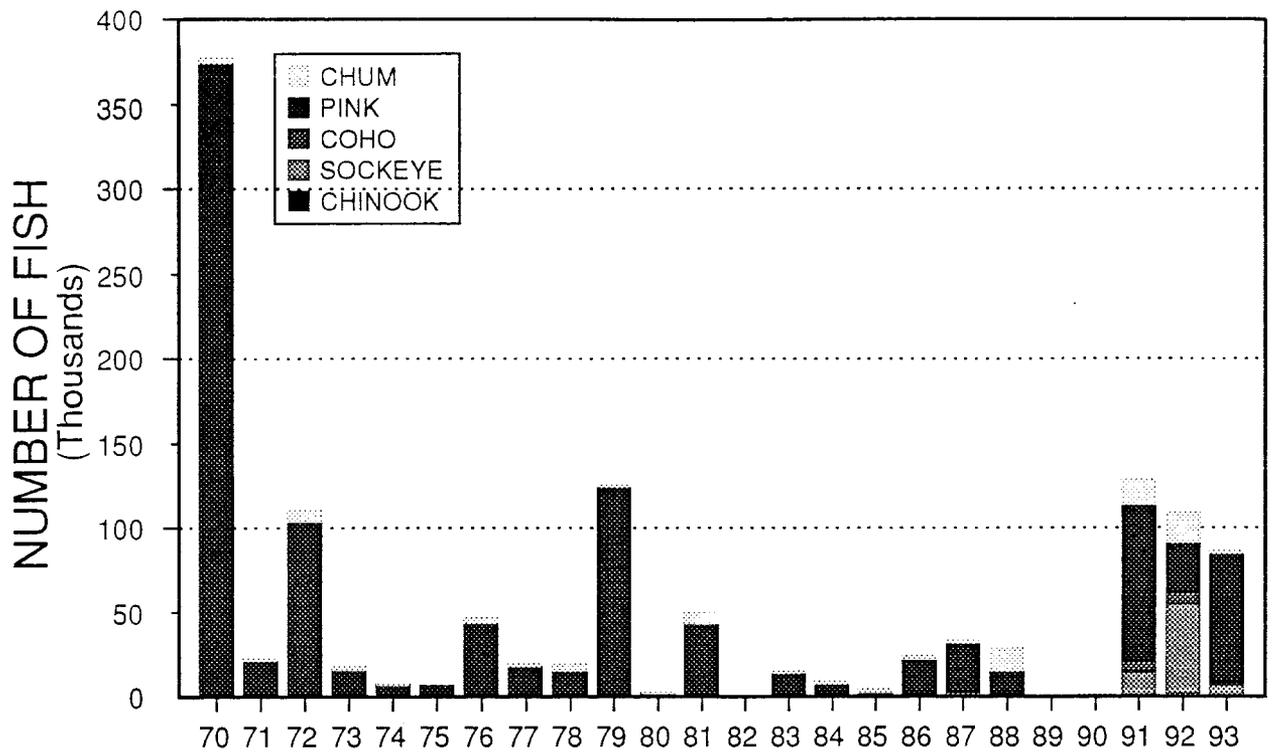


J4-7092EAST

Appendix B.6. Eastside Kodiak District harvest and landings by species, by year July 6-25, 1970-1993.

EASTSIDE KODIAK DISTRICT JULY 6-25, 1970-93

	LANDINGS	CHINOOK	SOCKEYE	COHO	PINK	CHUM
70	1,056	73	11,444	537	1,866,875	47,339
71	758	277	20,596	227	179,126	25,593
72	1,110	169	8,811	887	700,962	109,780
73	540	466	3,182	239	84,553	44,301
74	210	68	3,530	40	222,101	4,406
75	78	2	1,329	2	27,884	705
76	694	120	10,208	691	669,943	52,072
77	579	16	4,092	202	786,591	40,091
78	605	115	9,315	51	201,634	82,929
79	1,124	676	35,727	3,451	1,322,468	24,302
80	68	5	1,198	20	58,110	19,230
81	361	43	7,746	1,382	220,392	114,543
82	10	7	1,314	105	476	3,040
83	444	210	10,047	577	176,793	42,464
84	165	196	14,687	146	24,861	51,450
85	115	71	12,137	275	28,922	10,914
86	142	178	30,184	278	23,208	14,508
87	141	302	11,198	361	26,175	9,822
88	291	1,413	62,625	5,856	51,896	77,601
89	0	0	0	0	0	0
90	290	1,414	68,693	14,212	47,308	32,507
91	565	2,817	196,917	31,700	886,789	120,056
92	733	1,565	555,240	36,919	217,791	145,512
93	745	6,429	236,578	51,505	659,028	16,416

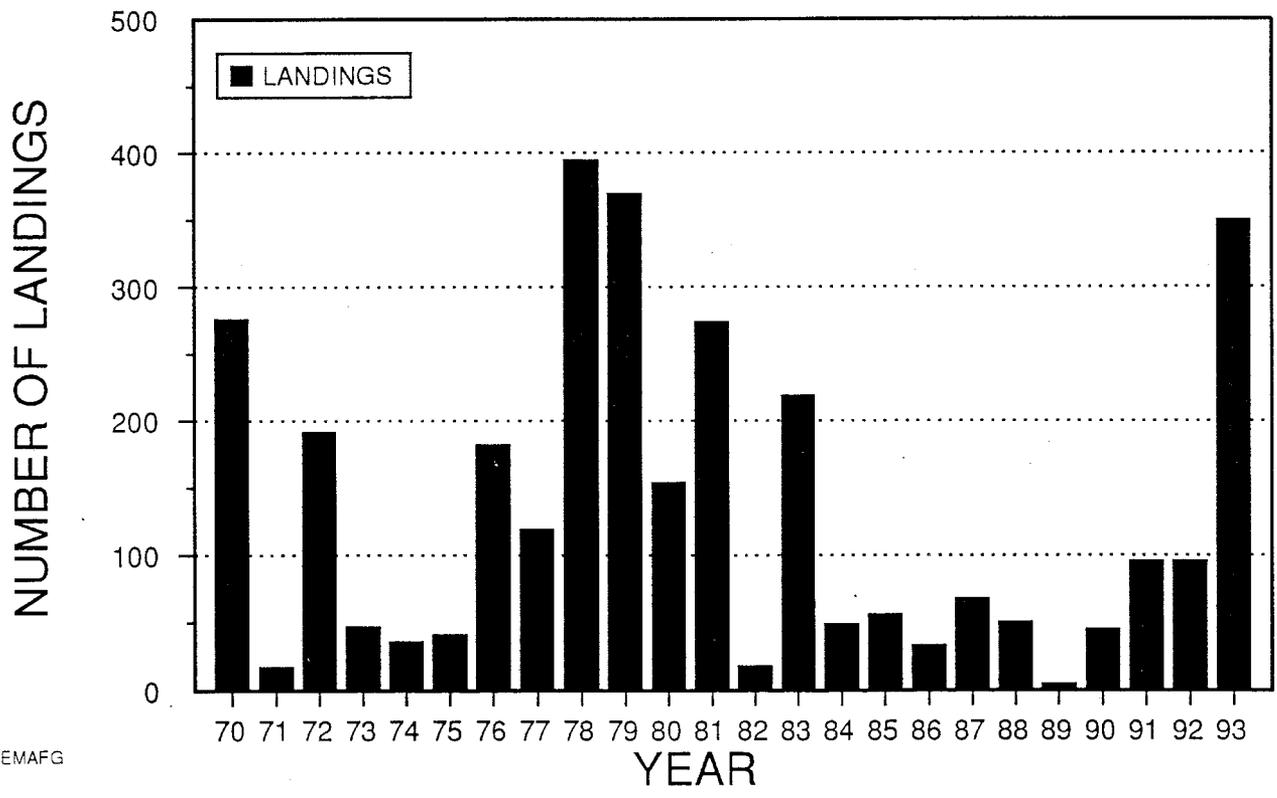
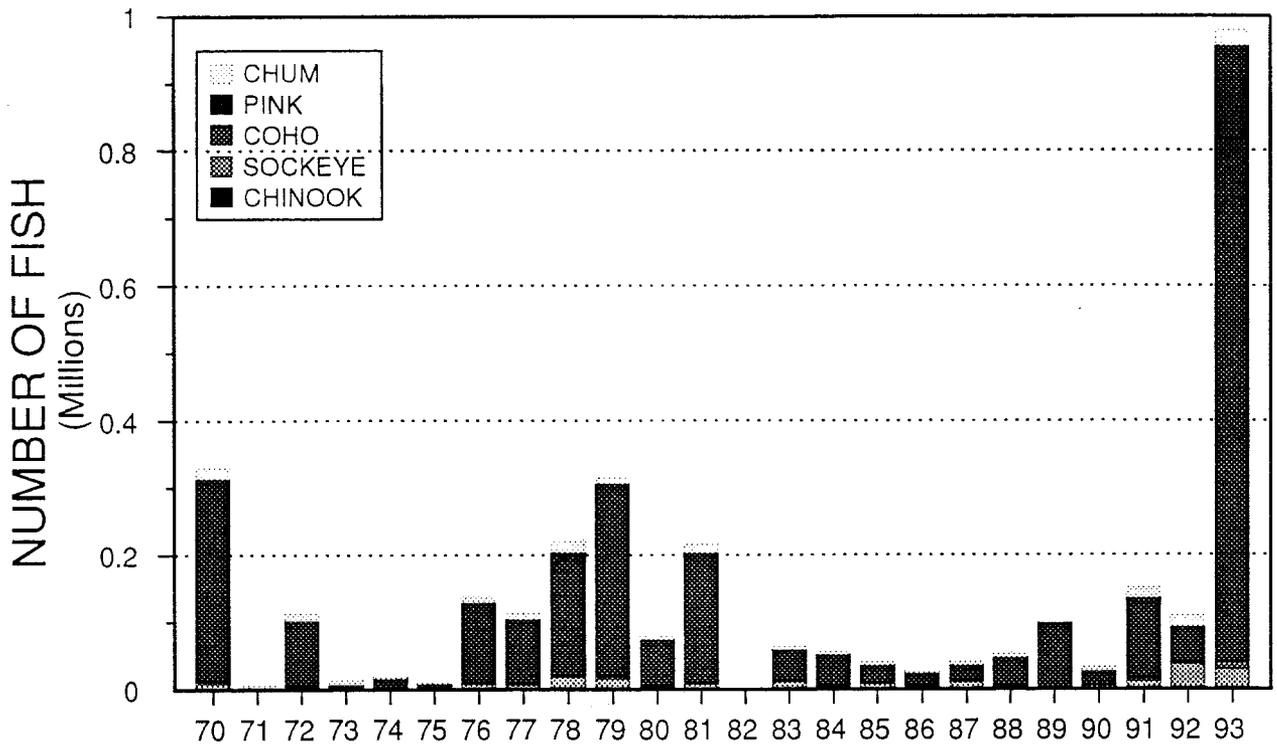


J4-NEKOD

Appendix B.7. Northeast Kodiak District harvest and landings by species, by year July 6-25, 1970-1993.

NORTHEAST KODIAK DISTRICT JULY 6-25, 1970-93

	LANDINGS	CHINOOK	SOCKEYE	COHO	PINK	CHUM
70	290	65	311	122	373,742	2,776
71	74	6	231	4	21,708	518
72	83	38	426	325	103,522	6,479
73	88	19	213	5	16,211	1,423
74	29	9	307	0	6,890	118
75	36	1	237	1	6,052	31
76	89	74	51	3	43,939	2,481
77	40	0	5	1	18,335	1,043
78	78	253	217	59	15,194	3,406
79	177	34	384	317	124,339	874
80	5	15	0	0	2,177	125
81	68	22	196	23	43,307	6,836
82	1	0	39	0	0	0
83	52	75	888	33	13,306	861
84	37	7	1,169	38	6,138	1,339
85	24	4	345	6	2,376	1,878
86	23	0	1,606	12	20,789	1,093
87	40	13	2,596	309	29,272	1,090
88	38	48	263	29	15,094	12,566
89	0	0	0	0	0	0
90	11	3	5	0	892	642
91	76	228	14,273	6,332	93,066	15,023
92	79	149	49,835	6,325	27,622	15,910
93	48	37	6,636	1,414	76,646	1,721

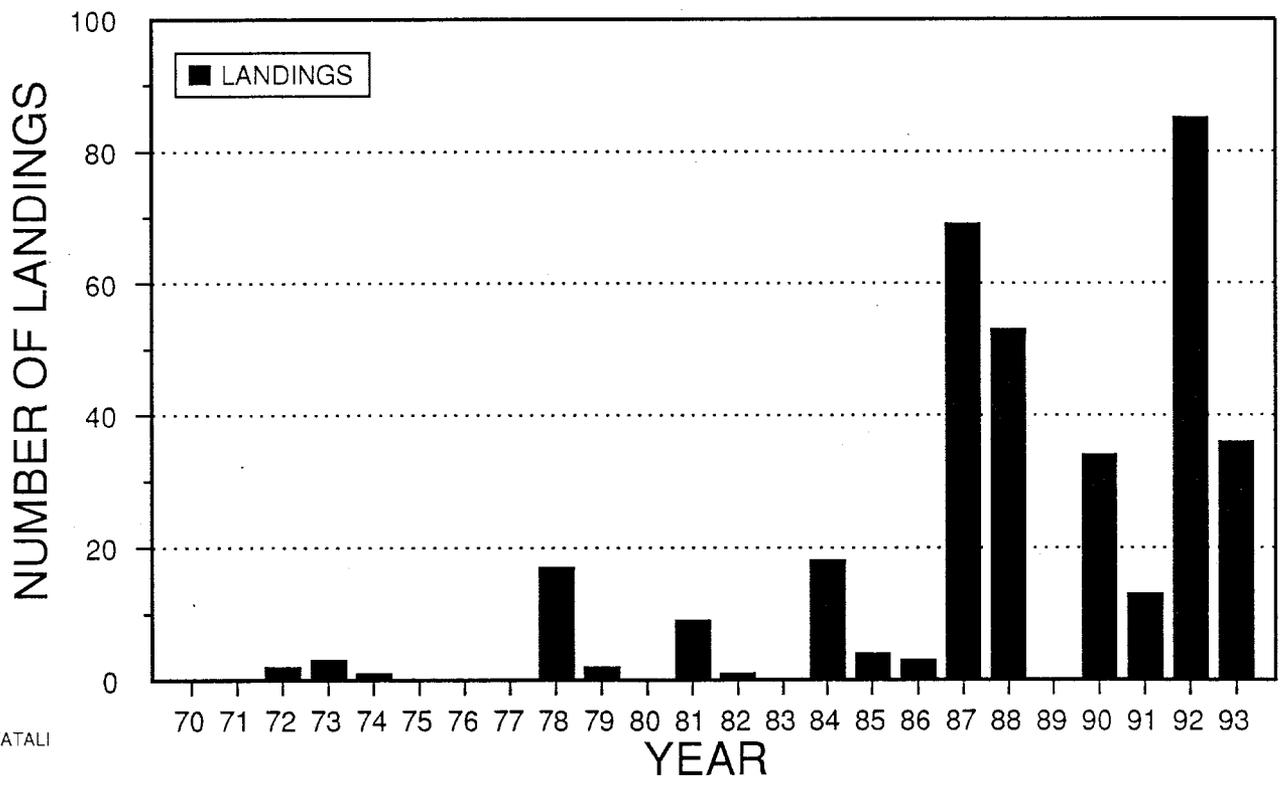
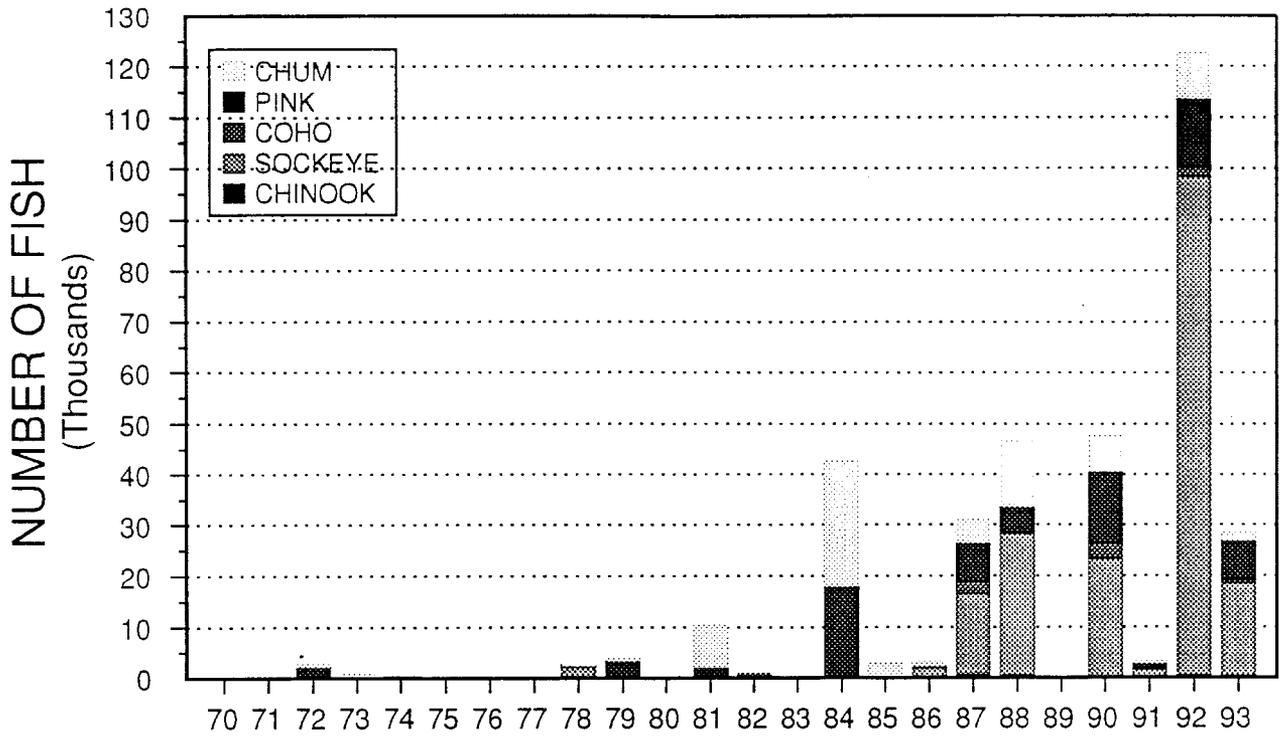


J4-REMAFG

Appendix B.8. Remaining Afognak Sections harvest and landings by species, by year July 6-25, 1970-1993.

REMAINING AFOGNAK SECTION JULY 6-25, 1970-93

	LANDINGS	CHINOOK	SOCKEYE	COHO	PINK	CHUM
70	276	15	10,186	2,969	303,670	14,417
71	17	3	1,947	3	4,221	1,252
72	192	40	4,279	537	100,281	6,588
73	47	1	1,613	55	8,509	2,737
74	36	1	2,427	27	15,761	196
75	41	6	2,332	259	8,528	1,187
76	182	45	8,831	746	122,040	5,893
77	119	5	7,445	188	99,690	5,305
78	395	170	17,958	1,617	186,824	14,939
79	370	16	16,178	4,066	288,674	6,951
80	154	14	5,326	457	70,153	2,931
81	274	10	8,697	920	196,829	10,364
82	18	21	1,026	58	404	118
83	219	273	11,789	661	48,059	4,515
84	49	5	3,377	523	51,279	2,616
85	56	22	8,355	1,840	28,413	2,421
86	33	5	3,891	204	21,547	1,053
87	68	14	10,812	2,250	25,023	2,440
88	50	11	5,373	853	43,917	3,613
89	5	0	0	0	97,065	0
90	45	49	5,933	459	22,880	2,968
91	96	121	12,203	3,152	122,479	12,104
92	96	391	36,816	4,126	53,153	14,586
93	350	455	29,291	10,923	917,197	20,739

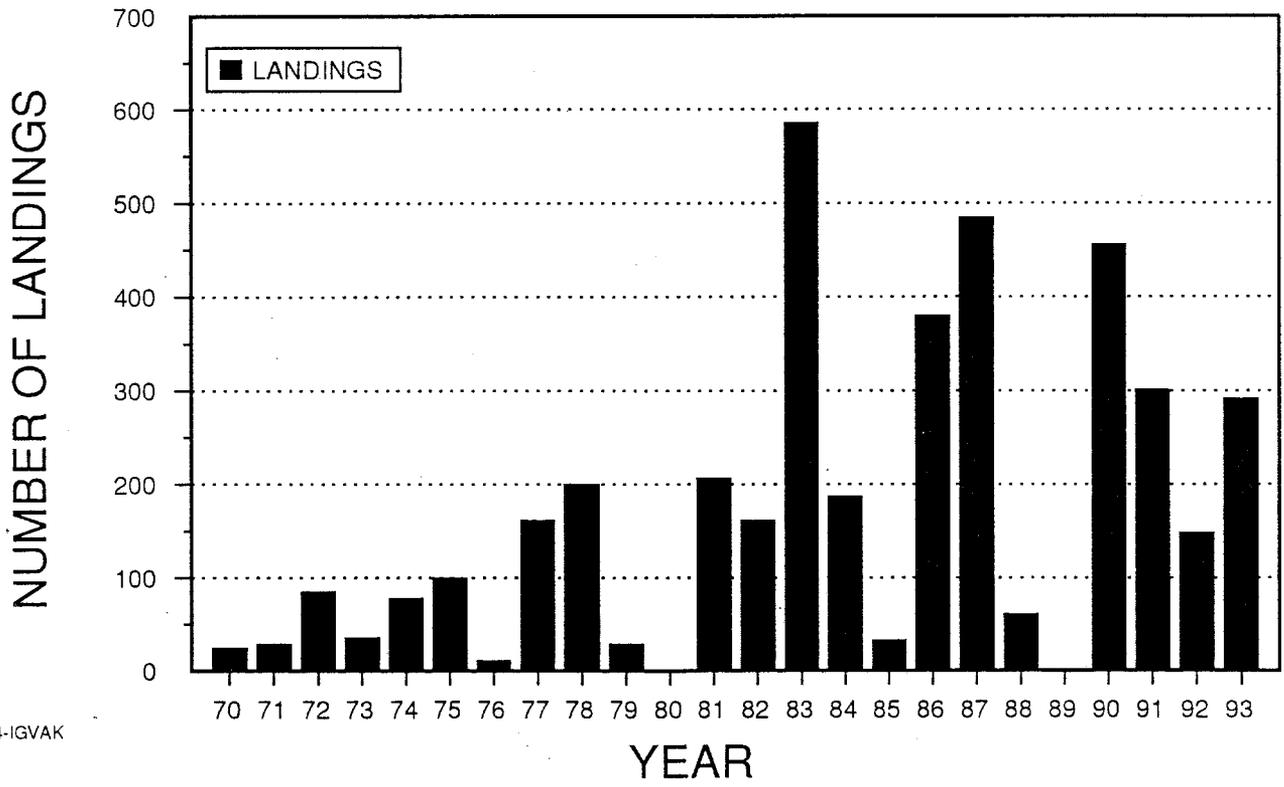
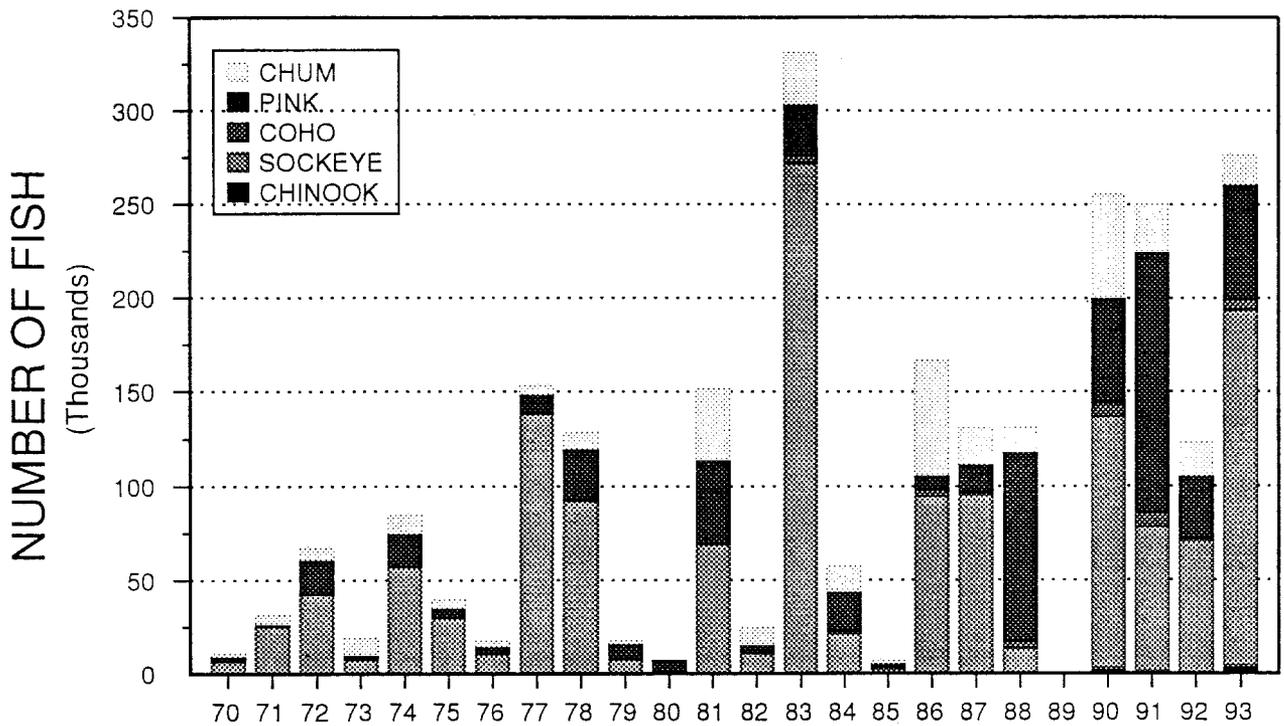


J4-KATALI

Appendix B.9. Katmai and Alinchak Sections harvest and landings by species, by year July 6-25, 1970-1993.

KATMAI & ALINCHAK SECTIONS JULY 6-25, 1970-93

	LANDINGS	CHINOOK	SOCKEYE	COHO	PINK	CHUM
70	0	0	0	0	0	0
71	0	0	0	0	0	0
72	2	0	0	0	2,429	212
73	3	1	265	0	427	158
74	1	0	301	0	0	0
75	0	0	0	0	0	0
76	0	0	0	0	0	0
77	0	0	0	0	0	0
78	17	1	2,419	0	102	61
79	2	0	1	0	3,671	148
80	0	0	0	0	0	0
81	9	0	354	0	1,900	7,937
82	1	0	806	0	0	0
83	0	0	0	0	0	0
84	18	1	55	0	18,239	24,218
85	4	1	16	4	451	2,311
86	3	18	2,093	40	329	638
87	69	745	15,824	2,423	7,689	4,486
88	53	385	27,936	118	5,417	12,667
89	0	0	0	0	0	0
90	34	106	23,276	3,266	14,071	7,076
91	13	76	1,570	22	1,369	102
92	85	440	98,051	1,676	13,775	8,792
93	36	278	18,291	563	7,945	1,289



J4-IGVAK

Appendix B.10. Cape Igvak/Wide Bay Sections harvest and landings by species, by year July 6-25, 1970-1993.

KODIAK MANEGEMNT AREA  
 IGVAK WIDE BAY SECTIONS  
 JULY 6-25, 1970-93

	LANDINGS	CHINOOK	SOCKEYE	COHO	PINK	CHUM
70	24	0	6,894	0	3,017	940
71	28	22	25,160	12	1,649	4,731
72	84	1	42,230	0	19,201	5,781
73	35	65	7,244	17	3,085	8,225
74	77	15	57,192	318	17,910	9,618
75	99	1	29,544	95	5,835	3,690
76	10	0	10,575	19	4,405	1,911
77	161	25	138,522	5	10,556	4,505
78	199	27	91,782	71	28,309	8,562
79	28	0	7,625	365	8,712	1,156
80	1	0	40	0	6,800	18
81	206	39	68,791	96	45,735	36,841
82	161	44	10,826	24	5,074	8,369
83	585	444	271,188	4,144	28,218	26,758
84	187	78	20,915	1,120	22,121	13,049
85	32	56	2,248	868	2,778	1,020
86	379	190	94,601	3,638	7,862	60,523
87	484	181	95,048	983	15,915	18,453
88	60	215	13,150	3,287	101,997	12,455
89	0	0	0	0	0	0
90	455	2,556	134,452	6,789	56,813	54,547
91	300	861	77,385	7,807	139,228	25,309
92	148	573	70,163	1,654	33,745	17,143
93	291	3,918	189,595	5,613	62,212	15,285

**PROPOSAL - 528** - 5 AAC 18.3XX. COMPREHENSIVE KODIAK AREA SOCKEYE SALMON MANAGEMENT PLAN and 5 AAC 18.363. NORTH SHELIKOF STRAIT SOCKEYE SALMON MANAGEMENT PLAN.

The board accepted an agenda change request from Kenai Peninsula Fisherman's Association (KPFA) during the March 1993 meeting. In part, KPFA requested the board to consider the Kodiak Area catch of sockeye during the month of July as related to interception of sockeye salmon bound for Upper Cook Inlet Area. As one option, the request suggests that a comprehensive Kodiak Management Area Plan may be needed to address this sockeye salmon issue.

**EDITOR'S NOTE:** This agenda request was taken up at the March 1993 meeting and is scheduled for the March 1994 meeting in Anchorage. Copies of the KPFA request is available upon written request.

**PROBLEM:**

**WHAT WILL HAPPEN IF NOTHING IS DONE?**

**WHO IS LIKELY TO BENEFIT?**

**WHO IS LIKELY TO SUFFER?**

**OTHER SOLUTIONS CONSIDERED?**

**PROPOSED BY:** Kenai Peninsula Fishermen's Association (HQ-93-F502)

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Appendix C.2. Kenai Peninsula Fishermans Assocaiton (KPFA) proposed regulation changes submitted to the Alaska Board of Fisheries.

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ALASKA BOARD OF FISHERIES REGULATION PROPOSAL FORM  
Box 3-2000, Juneau Alaska 99802-2000

Please answer all questions to the best of your ability. All the answers will be printed in the proposal packets along with the proposer's name. (Addresses and phone numbers will not be published) Use separate forms for each proposal.

---

1. Areas Affected  
Fisheries Affected (check one)    Subsistence\_\_\_    Personal Use\_\_\_    Sport\_\_\_    Commercial\_\_\_

---

2. Alaska Administrative Code Number 5 AAC 18.XXX    Regulation Book Page No. \_\_\_\_\_

Kodiak Area Management Plan

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3. What is the problem you would like the board to address?

The continued rapid expansion and development of the intercept fishery which targets Cook Inlet sockeye and other non-local salmon stocks.

---

4. What will happen if this problem is not solved?

Without this regulation the Department has no emergency order authority to limit the Kodiak intercept fishery unless the intercept fishery itself would jeopardize Cook Inlet stocks. (State of Alaska, Department of Law Memo, April 7, 1989. File No. 663-89-0465.) Kodiak seiners will continue to target Cook Inlet bound sockeye salmon at the expense of Cook Inlet fishermen and stocks. A conservation problem could develop in which Cook Inlet users will bear the burden of the unregulated Kodiak intercept fishery if this fishery continues uncontrolled.

---

5. What solution do you prefer? In other words, if the Board adopted your solution, what would the new regulation say?

Title 18.XXX Kodiak Area Management Plan

The purpose of this management plan is to provide direction to the Department in the management of the seine fishery during the July 1 - 25 period when Cook Inlet bound sockeye salmon are migrating through the Kodiak Management Area. It is the intent of the Board to allow fisheries throughout the management area to be conducted on Kodiak Area salmon stocks while minimizing the harvest of Cook Inlet sockeye salmon stocks. The Board recognizes that some incidental catch of Cook Inlet sockeye and other stocks has and will occur in this area while the seine fishery is managed for Kodiak area salmon stocks. The Board intends however, to prevent a repetition of the non-traditional harvest pattern which has developed since 1986. Therefore, the Board establishes the following direction to the Department for management of salmon stocks during the July 1 - 25 period.

(1) When predominantly local Kodiak area stocks are present within any management district emergency orders will be given consistent with the management for that district.

(2) When predominantly Cook Inlet sockeye or other non-local stocks are present within any management district the Department shall use emergency order authority to minimize the interception of these stocks.

(3) The Department shall attempt to minimize the interception of Cook Inlet sockeye and other non-local stocks during the July 1 - 25 period by any or all of the following means:

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-Continued-

(A) Restrict fishing time: Regularly scheduled fishing time will be curtailed and emergency orders extending fishing time will not be given when it is apparent to the Department that based on fish size, age composition, harvest patterns, or other information available that the predominant salmon stocks harvested within any district or section of the Kodiak Management Area are of non-local origin.

(B) Restrict fishing area: The Department shall restrict the seine fishery in any district or section of the management area from fishing seaward of lines drawn from headland to headland when predominantly Cook Inlet sockeye and other non-local stocks are present in offshore waters. Lines drawn closing offshore areas will be based on the Kodiak staffs knowledge of the fishery that takes place in the area and the best information available at the time.

(C) Restrict fishing gear.

(4) In addition to the above in-season management actions the following areas are closed to seine fishing to protect migrating Cook Inlet sockeye salmon and other non-local stocks during the July 6 - 25 period:

(A) The Halibut Bay section of the Southwest Kodiak District;

(B) The outer statistical areas 258-10 and 258-40 of the Sitkalidak Section of the Eastside Kodiak District; and

(C) The Katmai and Alinchak Bay Sections of the Mainland District.

(5) The board intends to minimize the interception of Cook Inlet sockeye salmon in the Kodiak Management Area to not exceed 5% of the total Cook Inlet sockeye salmon return. An annual post season analysis will be conducted to determine if the goal of the Board is met.

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6. Solutions to difficult problems benefit some people and hurt others:

(A) Who is likely to benefit if your solution is adopted?

Cook Inlet commercial, sport, personal use, and subsistence fishermen will benefit. The State of Alaska, through improved salmon stock management will also benefit.

(B) Who is likely to suffer if your solution is adopted?

Kodiak seine fishermen will lose the opportunity to harvest Cook Inlet sockeye and other non-local stocks.

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7. List any other solutions you considered and why you rejected them.

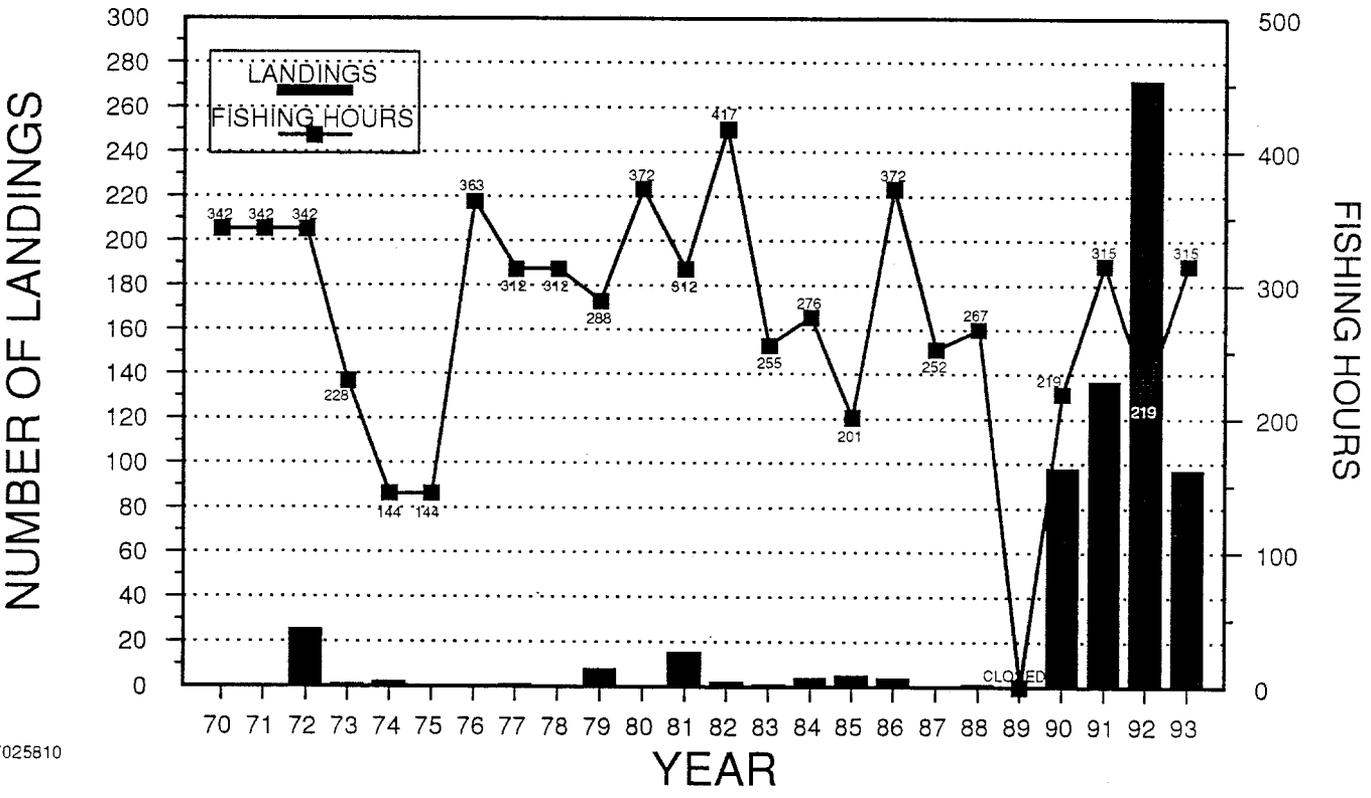
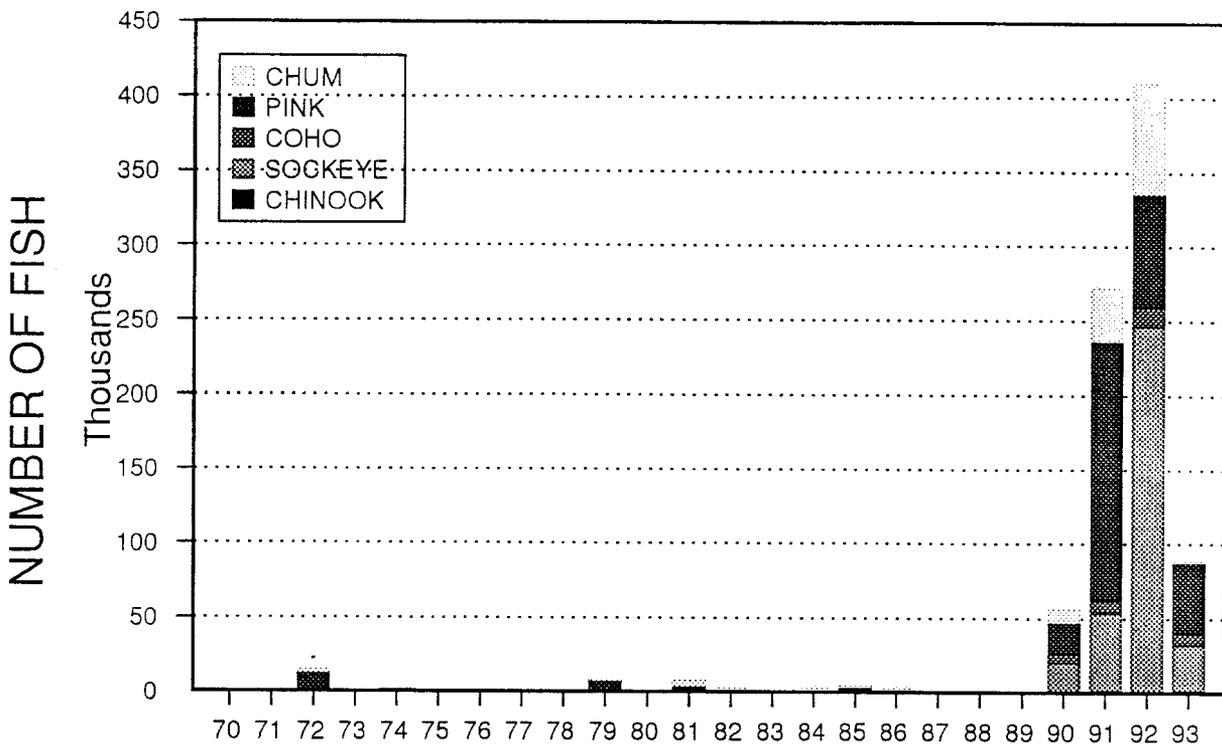
We considered closure of other sections of the management area during July 1 - 25 intercept period, however, this is not necessary if managers are required to target local stocks and minimize the harvest of non local stocks.

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Submitted by: Kenai Peninsula Fishermen's Association Address: 34824 K Beach Road Suite E

City and State: Soldotna, Alaska 99669 Zip Code 99669 Phone: (907) 262-2492

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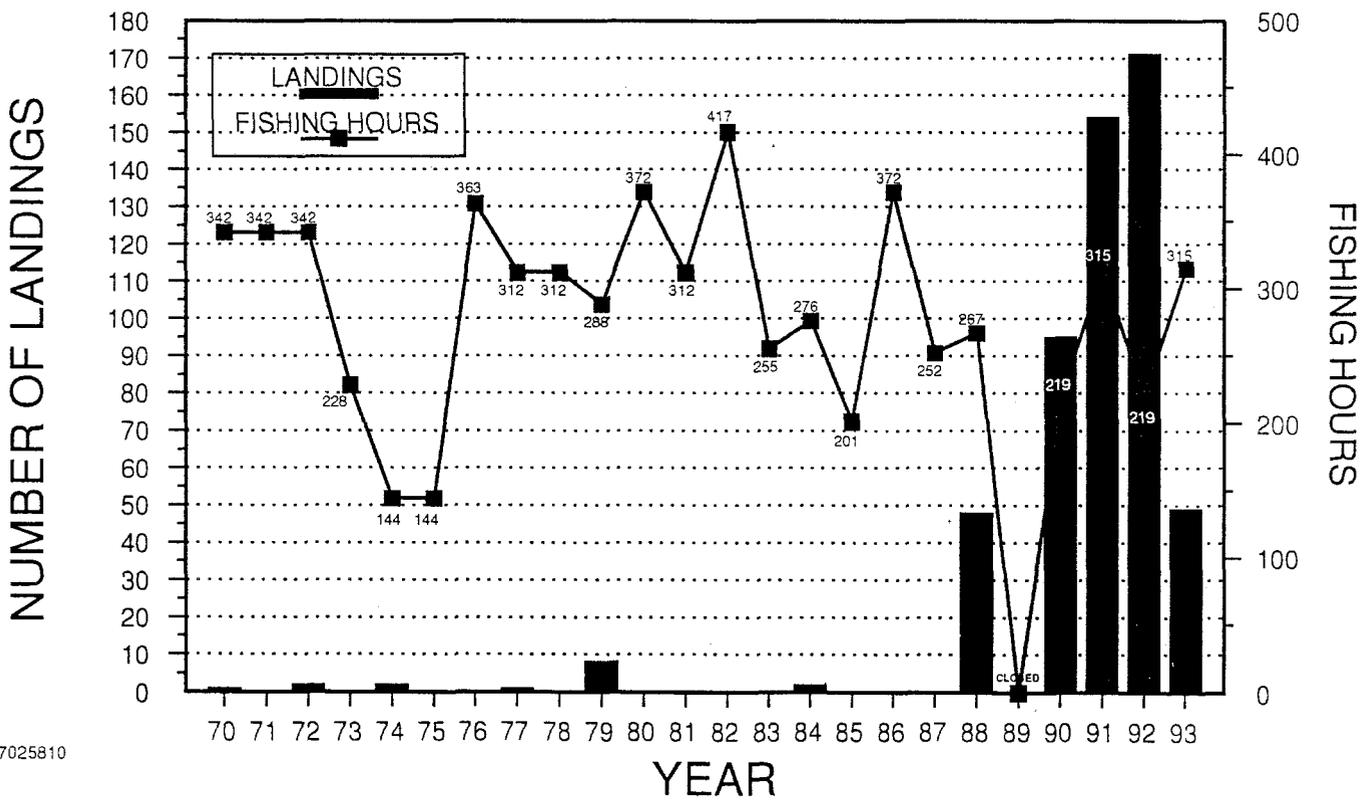
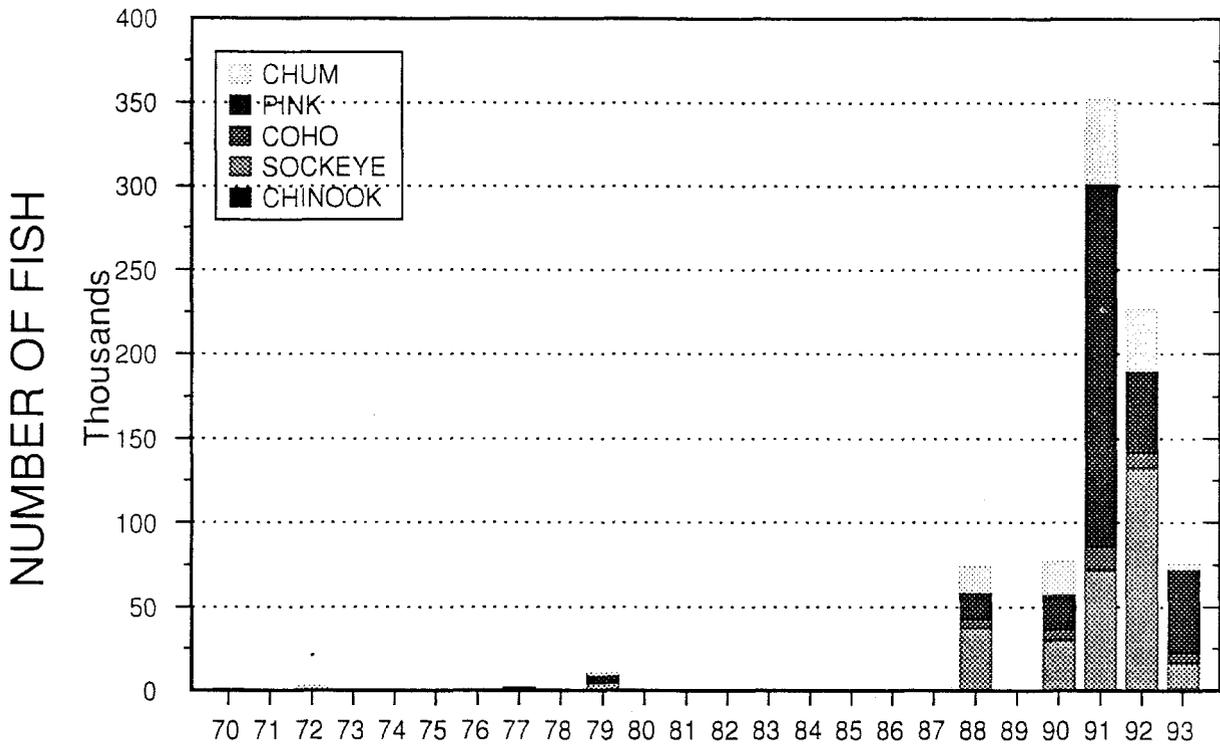


K93-7025810

Appendix C.3. Statistical reporting area 258-10 fishing time, harvest by species and landings, by year July 6-25, 1970-1993.

STAT AREA 258-10 JULY 6-25, 1970-93

	LANDINGS	CHINOOK	SOCKEYE	COHO	PINK	CHUM
70	0	0	0	0	0	0
71	0	0	0	0	0	0
72	25	0	30	27	13,238	2,281
73	1	0	1	0	19	12
74	2	0	59	3	1,418	20
75	0	0	0	0	0	0
76	0	0	0	0	0	0
77	1	0	0	0	595	22
78	0	0	0	0	0	0
79	8	0	153	30	7,960	179
80	0	0	0	0	0	0
81	15	0	59	630	4,065	3,039
82	2	2	718	8	249	1,435
83	1	1	0	0	172	9
84	4	6	203	0	1,013	2,048
85	5	13	2,402	26	1,678	1,125
86	4	0	160	20	2,518	465
87	0	0	0	0	0	0
88	1	0	50	20	45	85
89	0	0	0	0	0	0
90	98	277	20,209	6,446	21,362	8,067
91	137	1,200	52,572	8,259	175,171	35,464
92	272	541	246,220	13,229	76,572	73,137
93	97	1,089	31,356	7,392	48,763	1,354

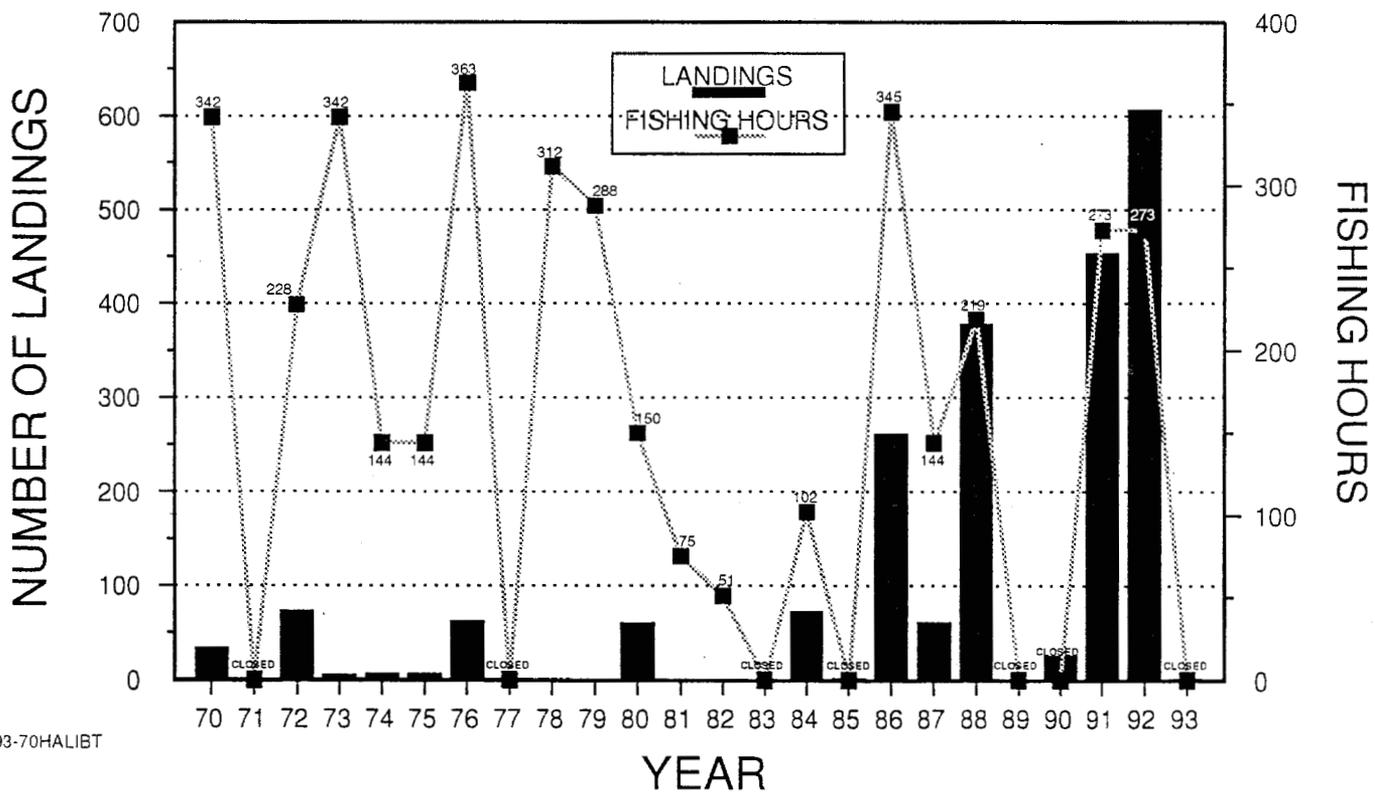
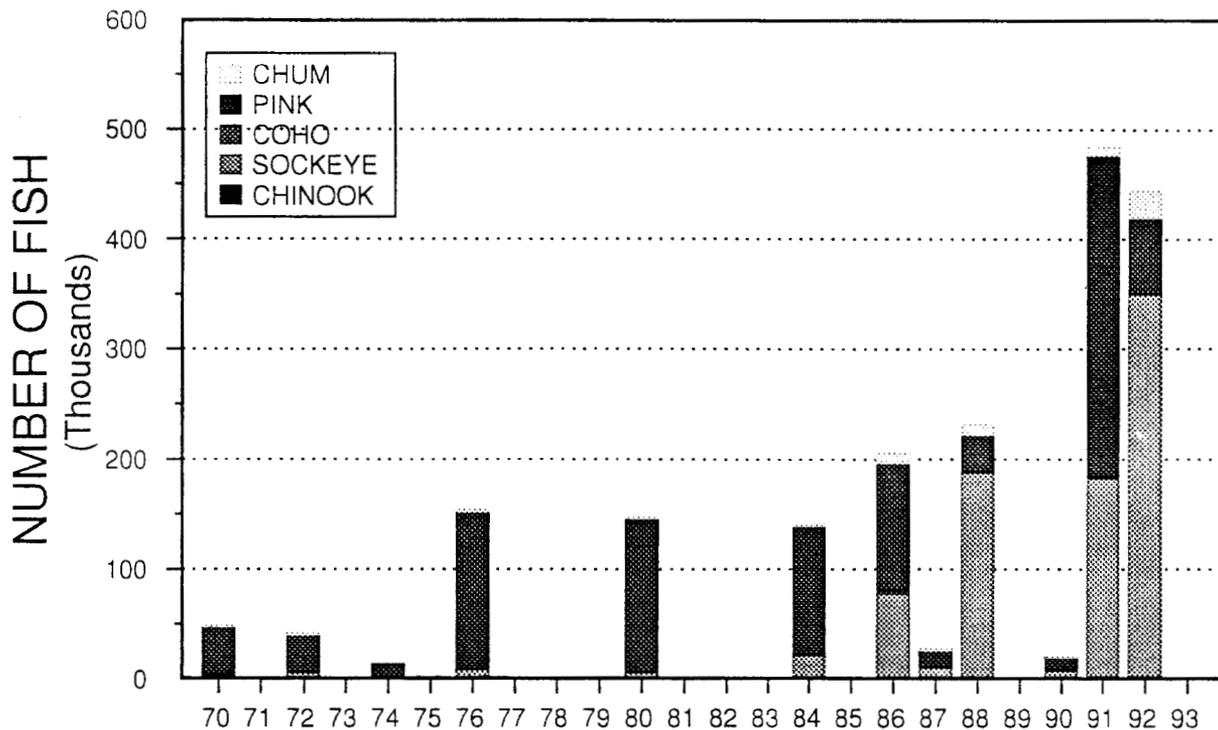


K93-7025810

Appendix C.4. Statistical reporting area 258-40 fishing time, harvest by species and landings, by year July 6-25, 1970-1993.

STAT AREA 258-40 JULY 6-25, 1970-93

	LANDINGS	CHINOOK	SOCKEYE	COHO	PINK	CHUM
70	1	0	107	0	783	15
71	0	0	0	0	0	0
72	2	0	0	0	2,174	210
73	0	0	0	0	0	0
74	2	0	259	0	2	0
75	0	0	0	0	0	0
76	0	0	0	0	0	0
77	1	0	0	0	1,800	25
78	0	0	0	0	0	0
79	8	3	4,724	16	5,223	146
80	0	0	0	0	0	0
81	0	0	0	0	0	0
82	0	0	0	0	0	0
83	0	0	0	0	0	0
84	2	0	493	0	4	1
85	0	0	0	0	0	0
86	0	0	0	0	0	0
87	0	0	0	0	0	0
88	48	36	37,613	5,131	16,953	14,216
89	0	0	0	0	0	0
90	95	588	29,658	6,807	21,455	19,023
91	154	851	71,240	13,833	216,497	50,122
92	171	110	132,700	9,432	48,460	35,752
93	49	1,139	15,747	6,042	50,575	2,044

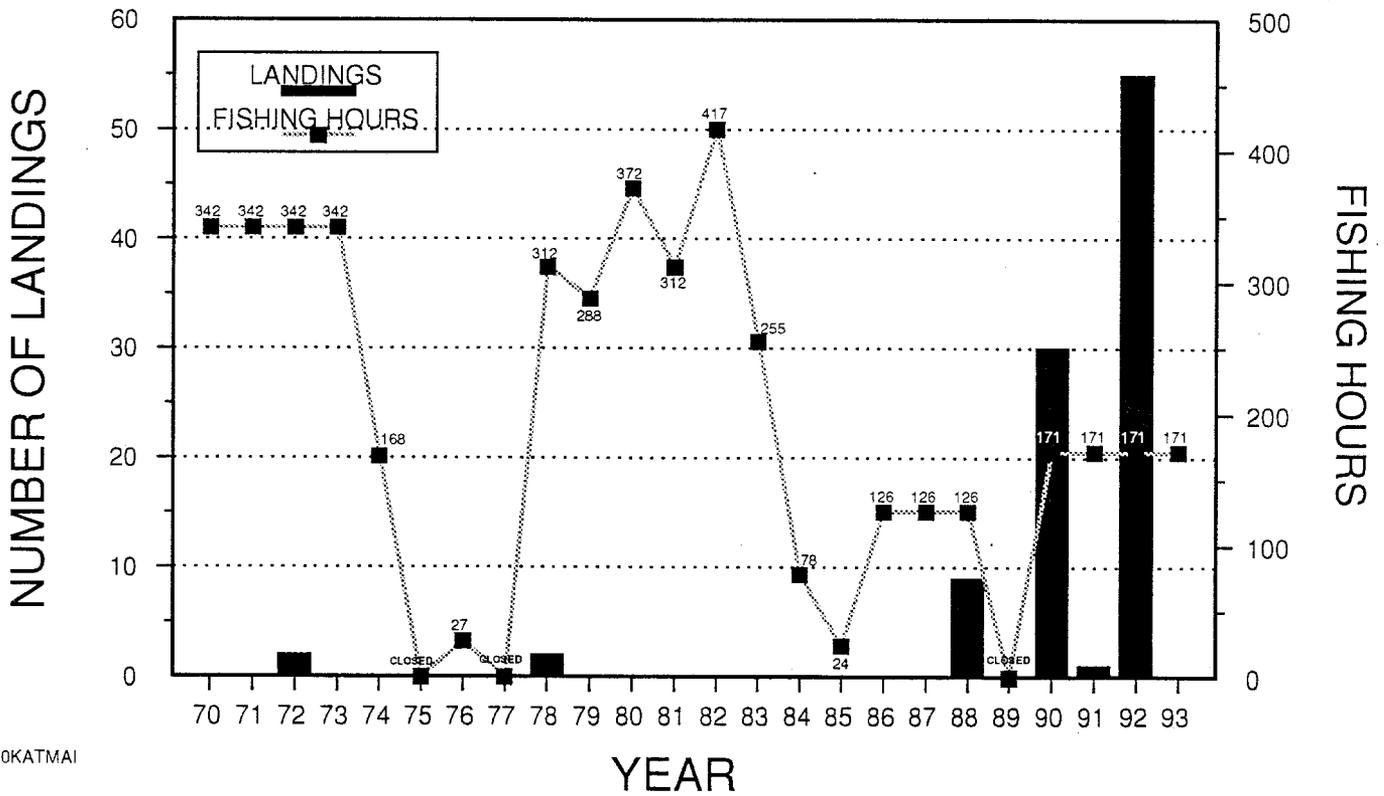
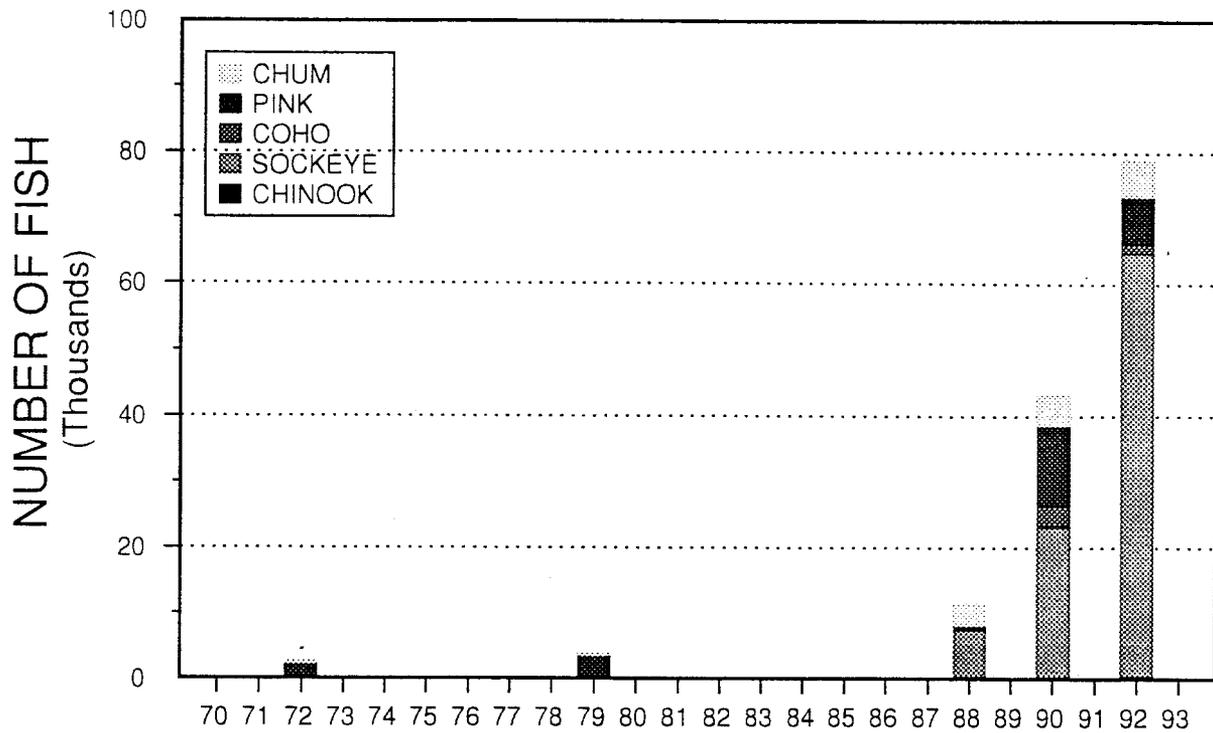


K93-70HALIBT

Appendix C.5. Halibut Bay Section fishing time, harvest by species and landings, by year July 6-25, 1970-1993.

## HALIBUT BAY SECTION JULY 6-25, 1970-93

	LANDINGS	CHINOOK	SOCKEYE	COHO	PINK	CHUM
70	33	1	3,185	256	45,206	704
71	0	0	0	0	0	0
72	73	11	5,812	25	35,053	1,065
73	5	0	240	0	197	37
74	6	0	1,166	0	12,514	23
75	6	1	698	0	1,132	4
76	62	6	8,815	12	144,169	847
77	0	0	0	0	0	0
78	0	0	0	0	0	0
79	0	0	0	0	0	0
80	60	1	6,098	87	140,806	524
81	0	0	0	0	0	0
82	0	0	0	0	0	0
83	0	0	0	0	0	0
84	72	27	21,889	363	117,697	1,091
85	2	0	820	6	128	2
86	261	92	77,894	2,482	117,205	7,565
87	61	12	10,487	116	16,611	1,394
88	378	355	187,230	265	34,962	9,627
89	0	0	0	0	0	0
90	25	9	7,740	223	12,494	251
91	453	508	182,063	2,726	292,170	7,481
92	606	279	349,691	490	70,406	23,538
93	1	0	11	0	525	6

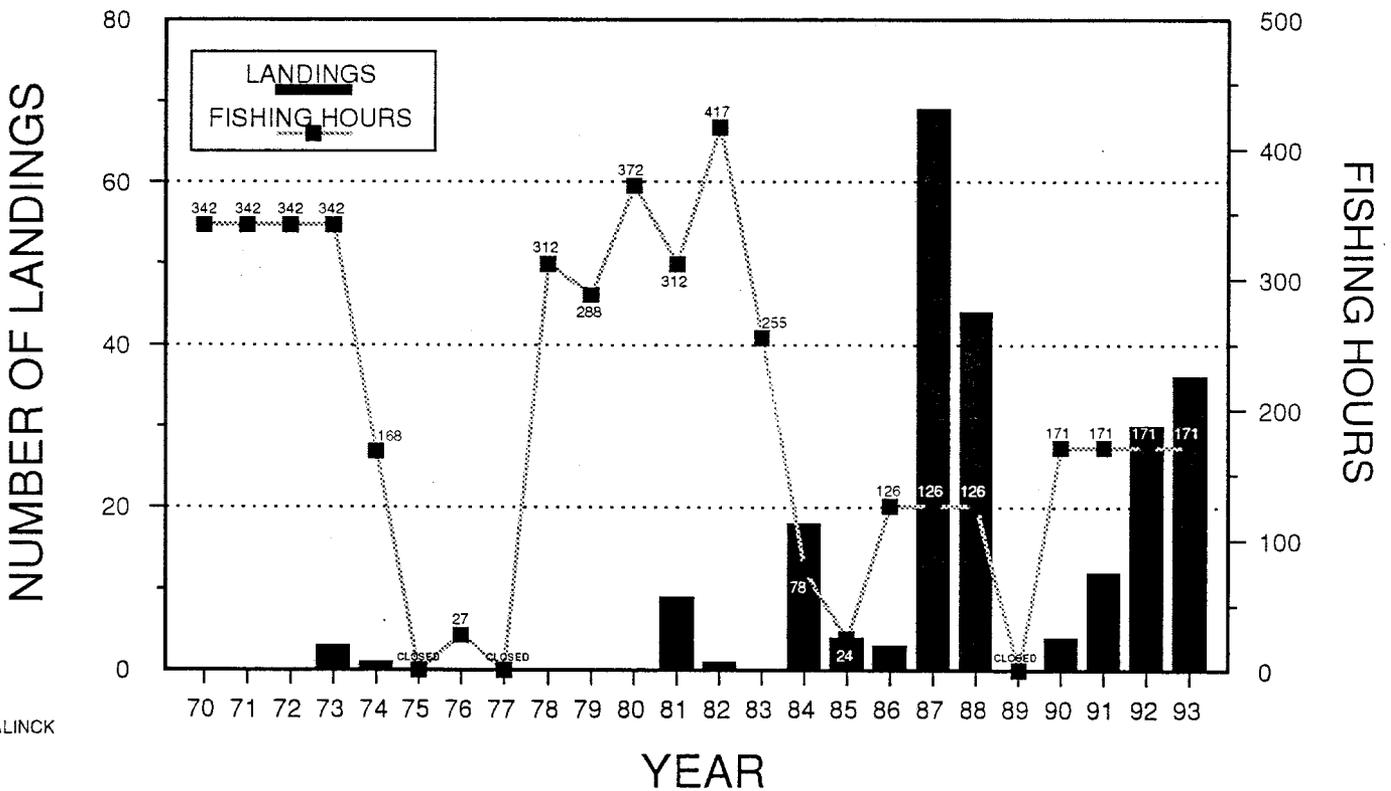
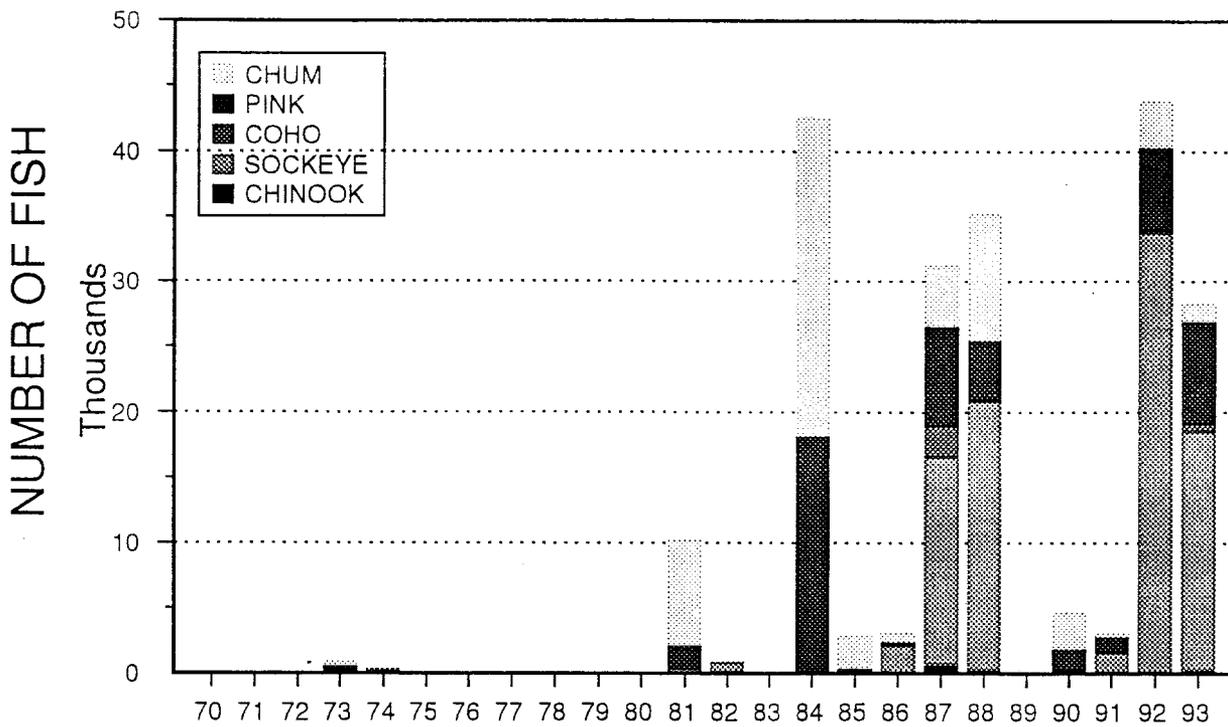


K93-70KATMAI

Appendix C.6. Katmai Section fishing time, harvest by species and landings, by year July 6-25, 1970-1993.

### KATMAI SECTION - JULY 6-25, 1970-93

	LANDINGS	CHINOOK	SOCKEYE	COHO	PINK	CHUM
70						
71						
72	2				2,429	212
73						
74						
75						
76						
77						
78						
79	2		1		3,671	148
80						
81						
82						
83						
84						
85						
86						
87						
88	9	115	7,395	19	731	3,120
89						
90	30	106	23,096	3,266	12,234	4,472
91	1	34	46	0	34	1
92	55	401	64,401	1,457	7,272	5,416
93						



K93-70ALINCK

Appendix C.7. Alinchak Section fishing time, harvest by species and landings, by year July 6-25, 1970-1993.

## ALINCHAK SECTION JULY 6-25, 1970-93

	LANDINGS	CHINOOK	SOCKEYE	COHO	PINK	CHUM
70	0	0	0	0	0	0
71	0	0	0	0	0	0
72	0	0	0	0	0	0
73	3	1	265	0	427	158
74	1	0	301	0	0	0
75	0	0	0	0	0	0
76	0	0	0	0	0	0
77	0	0	0	0	0	0
78	0	0	0	0	0	0
79	0	0	0	0	0	0
80	0	0	0	0	0	0
81	9	0	354	0	1,900	7,937
82	1	0	806	0	0	0
83	0	0	0	0	0	0
84	18	1	55	0	18,239	24,218
85	4	1	16	4	451	2,311
86	3	18	2,093	40	329	638
87	69	745	15,824	2,423	7,689	4,486
88	44	270	20,541	99	4,686	9,547
89	0	0	0	0	0	0
90	4	0	180	0	1,837	2,604
91	12	42	1,524	22	1,335	101
92	30	39	33,650	219	6,503	3,376
93	36	278	18,291	563	7,945	1,289

Appendix D.1. North Shelikof Strait sockeye salmon management plan summary.

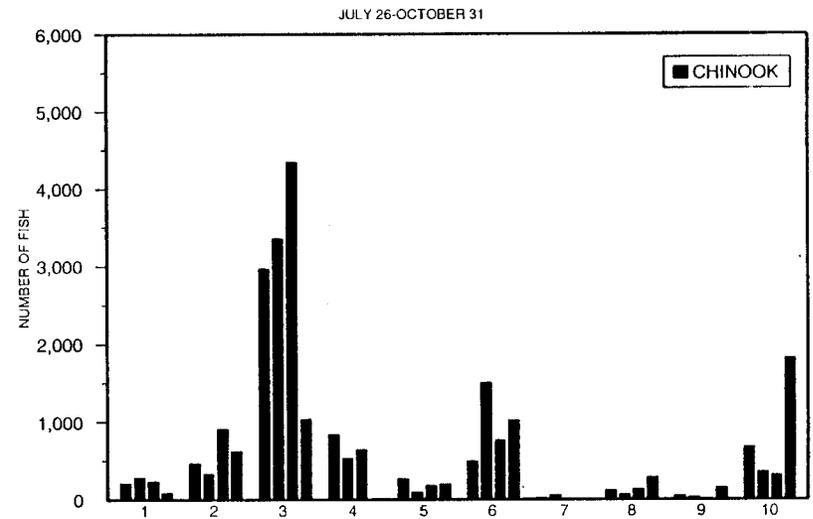
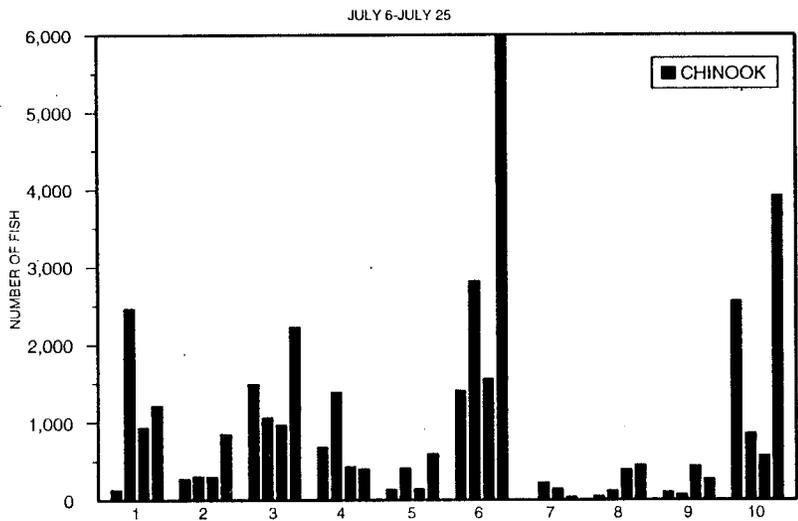
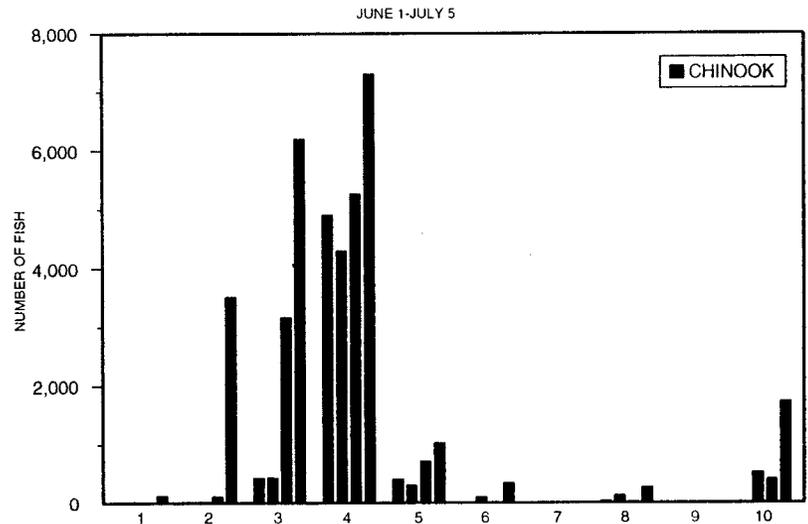
North Shelikof Units (15,000 Sockeye Harvest Cap) <sup>a/</sup>											
YEAR	Total Number of Days Open to Fishing / Number of Days Seaward Zone Closed		Date and Time of Zone Closure	Sockeye Salmon Harvest at Time of Zone Closure	Number of Vessels	Total Harvest By Species July 6 through July 25					Upper Cook Inlet Sockeye Harvest
	MAINLAND	N. AFOGNAK				CHINOOK	SOCKEYE	COHO	PINK	CHUM	
1990	7.1 / 2.4	9.1 / 4.4	7/15 9 PM	36,800	69	140	57,700	3,900	18,600	19,400	3.6 MILLION
1991	7.1 / 0	13.1 / 0	No Zone Closure	N/A	42	2,500	18,800	2,700	44,800	3,800	2.2 MILLION
1992	7.1 / 5.1	9.1 / 7.1	7/8 1 PM	13,500	77	900	128,100	3,000	23,900	11,700	8.9 MILLION
1993	7.1 / 4.7	13.8 / 8.9	7/10 5 PM	15,220	89	1,220	78,420	1,950	75,640	4,250	4.7 MILLION

a/ In 1988, from 7/6 - 7/25, with 6.9 days open to fishing 392,000 sockeye were harvested in the "North Shelikof Units". In Upper Cook Inlet 6,800,000 sockeye were harvested.

Southwest Afognak Section (50,000 Sockeye Harvest Cap) <sup>b/</sup>											
YEAR	Total Number of Days Open to Fishing / Number of Days Seaward Zone Closed		Date and Time of Zone Closure	Sockeye Salmon Harvest at Time of Zone Closure	Number of Vessels	Total Harvest By Species July 6 through July 25					Upper Cook Inlet Sockeye Harvest
	MAINLAND	N. AFOGNAK				CHINOOK	SOCKEYE	COHO	PINK	CHUM	
1990	9.1 / 0		No Zone Closure	N/A	64	300	22,900	3,600	53,800	6,000	3.6 MILLION
1991	13.1 / 0		No Zone Closure	N/A	55	300	34,200	3,600	100,700	4,000	2.2 MILLION
1992	9.1 / 4.7		7/14 1 PM	48,200	84	300	50,600	600	30,000	6,800	8.9 MILLION
1993	13.1 / 7.7		7/14 1 PM	45,900	87	845	73,160	7,020	240,710	7,320	4.7 MILLION

b/ In 1988, from 7/6 - 7/25, with 11.1 days open to fishing 86,000 sockeye were harvested in the "North Shelikof Units". In Upper Cook Inlet 6,800,000 sockeye were harvested.

AREA 1 .. N. SHELIKOF SECTIONS  
 AREA 2 .. S.W. AFOGNAK SECT.  
 AREA 3 .. N.W. KODIAK DIST.  
 AREA 4 .. S.W. KODIAK DIST.  
 AREA 5 .. ALITAK DISTRICT  
 AREA 6 .. EASTSIDE KODIAK DIST.  
 AREA 7 .. N.E. KODIAK DIST.  
 AREA 8 .. REMAINING AFOG. DIST.  
 AREA 9 .. KATMAI/ALINCHAK DIST.  
 AREA 10 .. IGVAK/WIDE B. DIST.



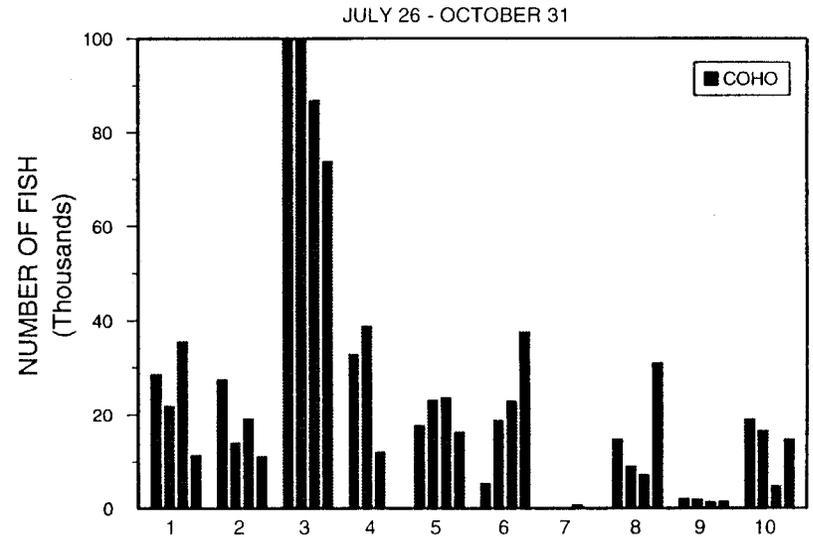
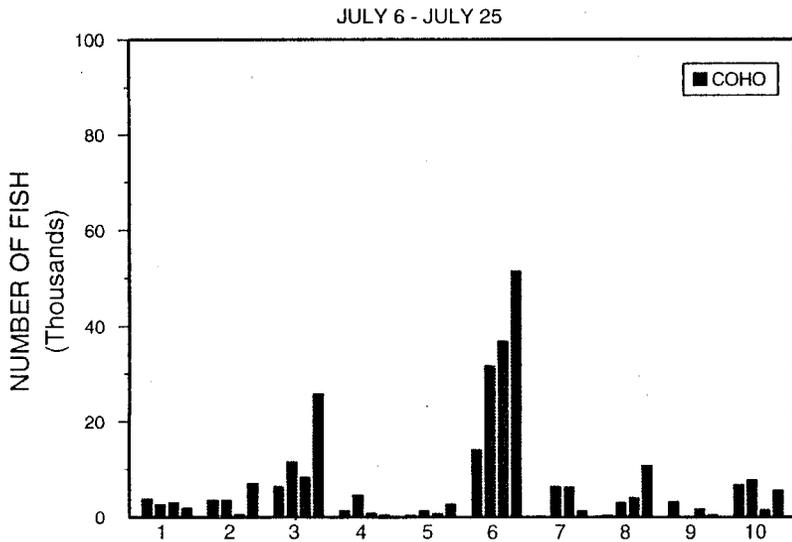
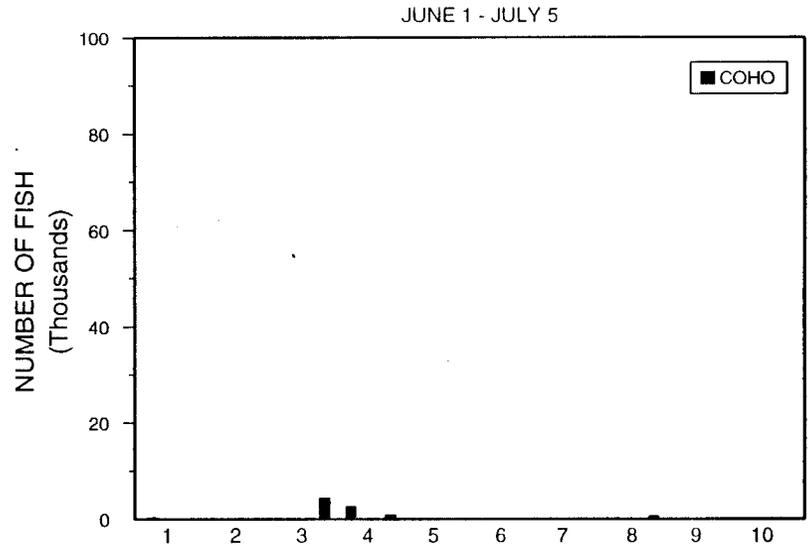
5B-9092CHNK

Appendix D.2. Chinook salmon harvest by major harvest locations, by selected time periods, 1990-1993.

# 1990-93 COMMERCIAL CHINOOK & COHO HARVEST

AREA		CHINOOK			COHO		
		6/1-7/5	7/6-7/25	7/26-10/31	6/1-7/5	7/6-7/25	7/26-10/31
N.SHELIKOF SECTIONS	90	13	139	213	365	3,911	28,620
	91	0	2,467	283	0	2,707	21,923
	92	6	945	237	0	3,065	35,632
	93	127	1,216	90	0	1,954	11,505
S.W.AFOGNAK SECTION	90	5	277	468	0	3,605	27,490
	91	24	309	340	0	3,586	14,085
	92	117	304	917	40	605	19,211
	93	3,523	858	621	280	7,100	11,208
N.W.KODIAK DISTRICT	90	427	1,490	2,978	12	6,472	101,904
	91	435	1,068	3,361	18	11,707	106,930
	92	3,175	975	4,341	308	8,415	86,996
	93	6,204	2,224	1,036	4,462	25,967	73,985
S.W.KODIAK DISTRICT	90	4,913	687	843	2,717	1,414	32,861
	91	4,315	1,392	535	30	4,588	38,908
	92	5,277	433	645	56	905	12,200
	93	7,312	404	7	946	518	31
ALITAK BAY DISTRICT	90	402	137	268	50	426	17,700
	91	311	414	96	24	1,435	23,142
	92	720	152	184	20	845	23,683
	93	1,032	596	200	90	2,791	16,390
EASTSIDE KODIAK DISTRICT	90	20	1,414	496	0	14,212	5,390
	91	109	2,817	1,502	0	31,700	18,829
	92	22	1,565	773	3	36,919	23,016
	93	342	6,429	1,024	252	51,505	37,682
N.E.KODIAK DISTRICT	90	0	3	24	0	0	100
	91	0	228	55	0	6,332	175
	92	0	149	10	0	6,325	790
	93	0	37	8	0	1,414	219
REMAINING AFOGNAK DISTRICT	90	37	49	123	0	459	14,871
	91	136	121	69	7	3,152	9,046
	92	25	391	139	0	4,126	7,227
	93	266	455	289	741	10,923	30,920
KATMAI/ALINCHAK SECTIONS	90	0	106	47	0	3,266	2,088
	91	5	76	27	0	22	1,933
	92	0	440	10	0	1,676	1,405
	93	0	278	155	0	563	1,519
IGVAK/WIDE BAY SECTIONS	90	0	2,556	671	0	6,789	19,097
	91	516	861	361	77	7,807	16,697
	92	401	573	319	5	1,654	4,957
	93	1,731	3,918	1,817	59	5,613	14,830

AREA 1 .. N. SHELIKOF SECTIONS  
 AREA 2 .. S.W. AFOGNAK SECT.  
 AREA 3 .. N.W. KODIAK DIST.  
 AREA 4 .. S.W. KODIAK DIST.  
 AREA 5 .. ALITAK DISTRICT  
 AREA 6 .. EASTSIDE KODIAK DIST.  
 AREA 7 .. N.E. KODIAK DIST.  
 AREA 8 .. REMAINING AFOG. DIST.  
 AREA 9 .. KATMAI/ALINCHAK DIST.  
 AREA 10 .. IGVAK/WIDE B. DIST.

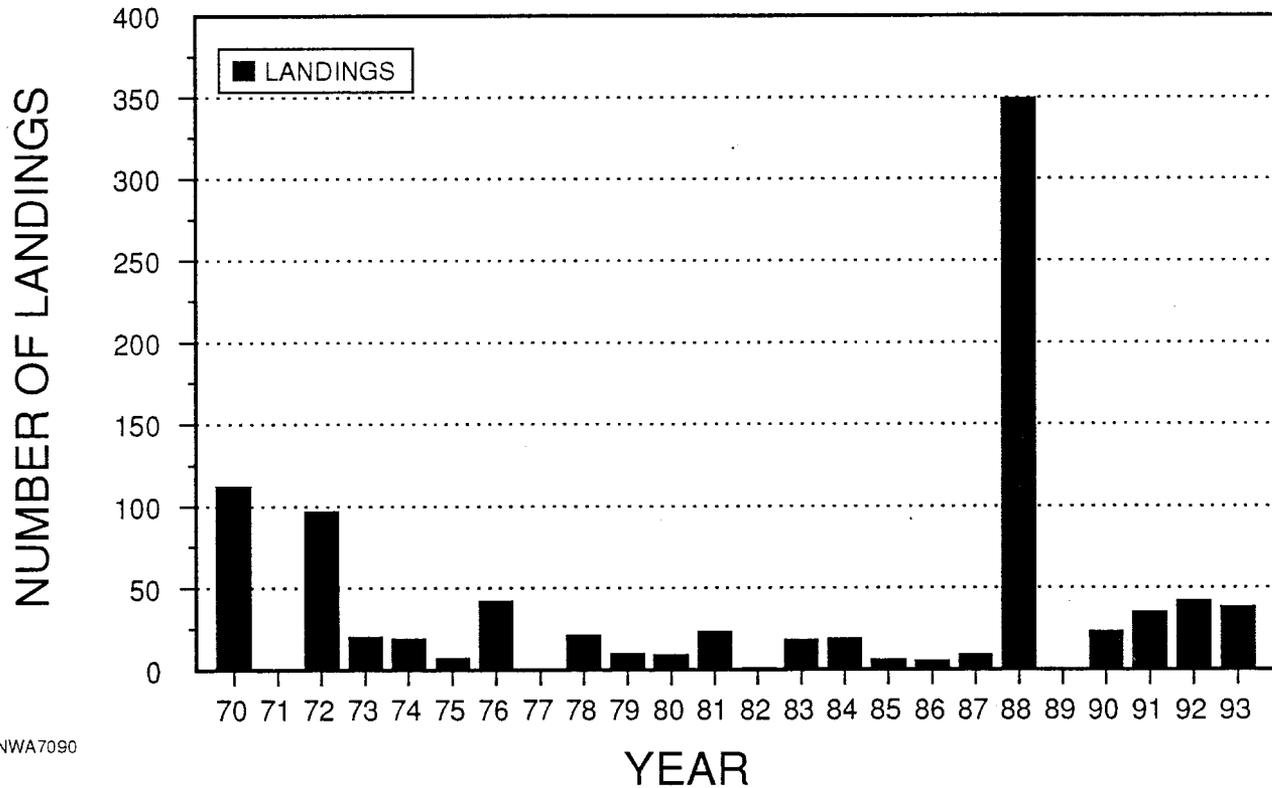
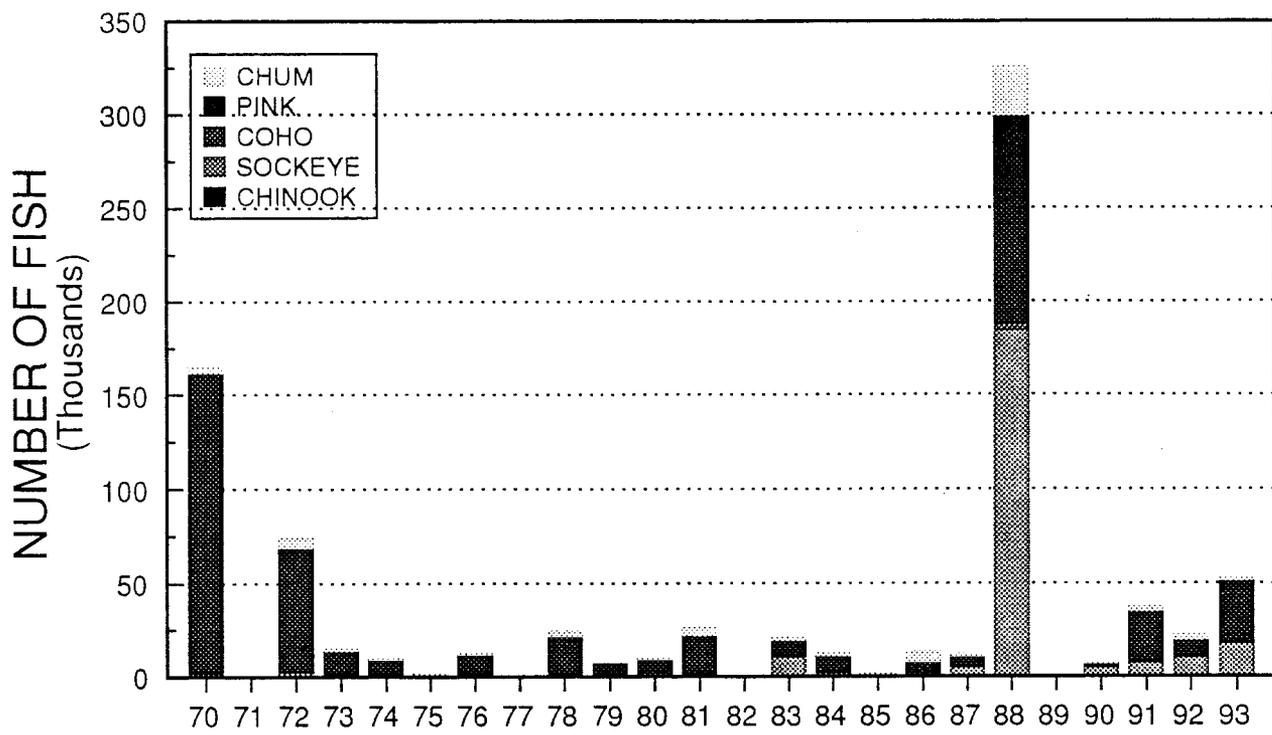


5b-9092COHO

Appendix D.3. Coho salmon harvest by major harvest locations, by selected time periods, 1990-1993.

## 1990-93 COMMERCIAL CHINOOK &amp; COHO HARVEST

AREA		CHINOOK			COHO		
		6/1-7/5	7/6-7/25	7/26-10/31	6/1-7/5	7/6-7/25	7/26-10/31
N.SHELIKOF SECTIONS	90	13	139	213	365	3,911	28,620
	91	0	2,467	283	0	2,707	21,923
	92	6	945	237	0	3,065	35,632
	93	127	1,216	90	0	1,954	11,505
S.W.AFOGNAK SECTION	90	5	277	468	0	3,605	27,490
	91	24	309	340	0	3,586	14,085
	92	117	304	917	40	605	19,211
	93	3,523	858	621	280	7,100	11,208
N.W.KODIAK DISTRICT	90	427	1,490	2,978	12	6,472	101,904
	91	435	1,068	3,361	18	11,707	106,930
	92	3,175	975	4,341	308	8,415	86,996
	93	6,204	2,224	1,036	4,462	25,967	73,985
S.W.KODIAK DISTRICT	90	4,913	687	843	2,717	1,414	32,861
	91	4,315	1,392	535	30	4,588	38,908
	92	5,277	433	645	56	905	12,200
	93	7,312	404	7	946	518	31
ALITAK BAY DISTRICT	90	402	137	268	50	426	17,700
	91	311	414	96	24	1,435	23,142
	92	720	152	184	20	845	23,683
	93	1,032	596	200	90	2,791	16,390
EASTSIDE KODIAK DISTRICT	90	20	1,414	496	0	14,212	5,390
	91	109	2,817	1,502	0	31,700	18,829
	92	22	1,565	773	3	36,919	23,016
	93	342	6,429	1,024	252	51,505	37,682
N.E.KODIAK DISTRICT	90	0	3	24	0	0	100
	91	0	228	55	0	6,332	175
	92	0	149	10	0	6,325	790
	93	0	37	8	0	1,414	219
REMAINING AFOGNAK DISTRICT	90	37	49	123	0	459	14,871
	91	136	121	69	7	3,152	9,046
	92	25	391	139	0	4,126	7,227
	93	266	455	289	741	10,923	30,920
KATMAI/ALINCHAK SECTIONS	90	0	106	47	0	3,266	2,088
	91	5	76	27	0	22	1,933
	92	0	440	10	0	1,676	1,405
	93	0	278	155	0	563	1,519
IGVAK/WIDE BAY SECTIONS	90	0	2,556	671	0	6,789	19,097
	91	516	861	361	77	7,807	16,697
	92	401	573	319	5	1,654	4,957
	93	1,731	3,918	1,817	59	5,613	14,830

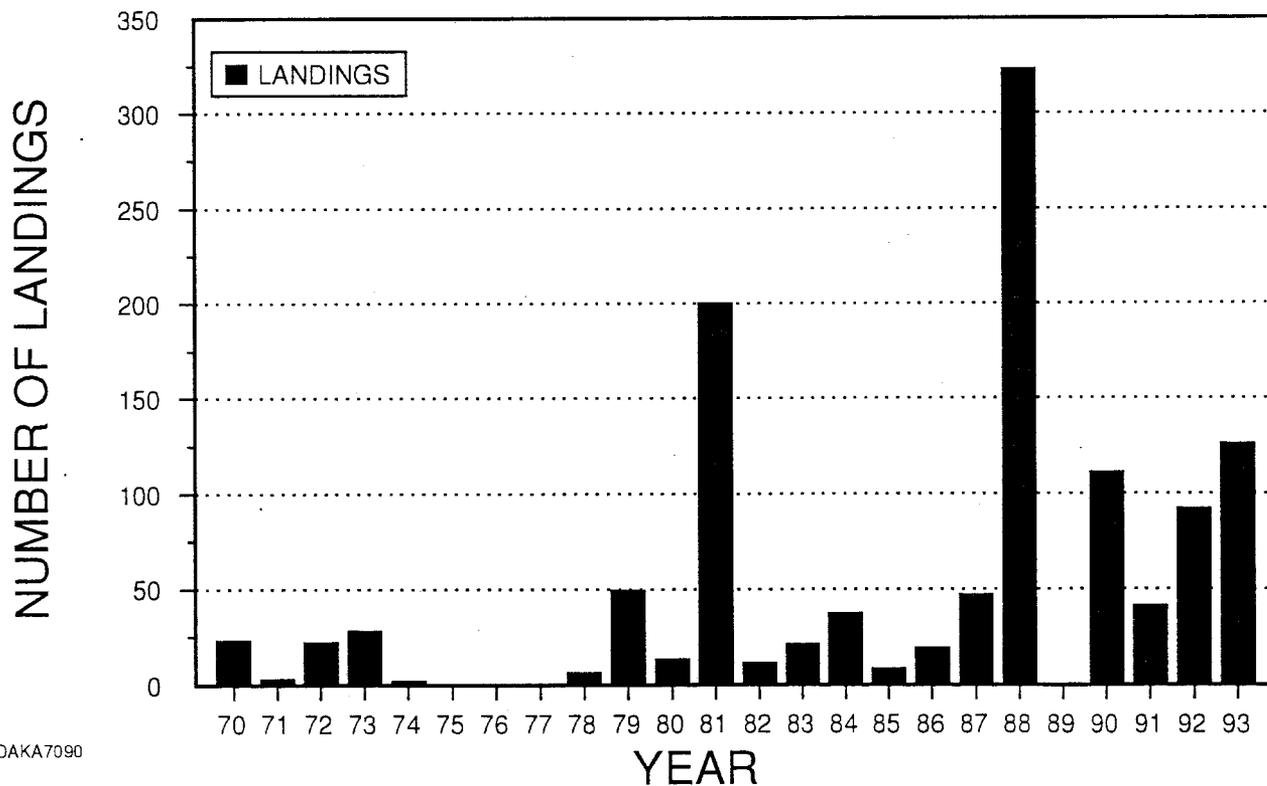
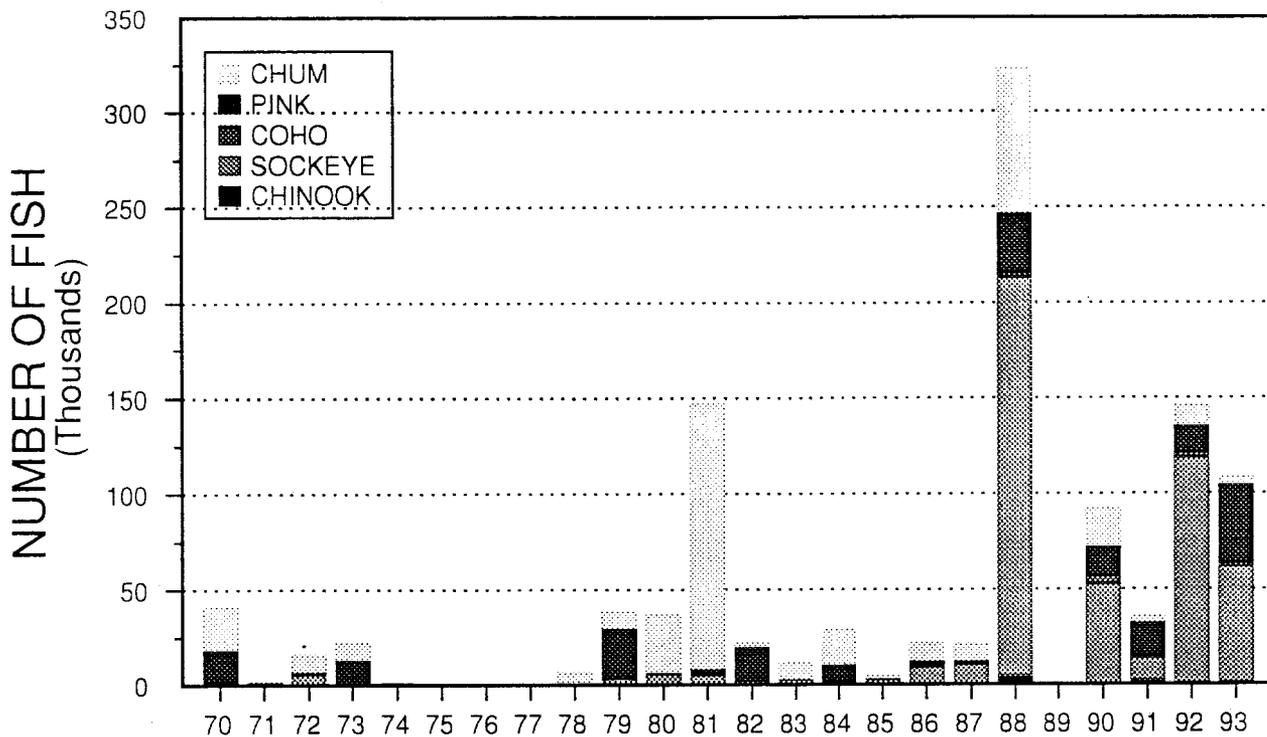


2-NWA7090

Appendix D.4. Northwest Afognak and Shuyak Island Sections harvest and landings by species, by year July 6-25, 1970-1993.

N.W.AFOGNAK & SHUYAK SECTIONS COMBINED  
 JULY 6-25, 1970-93

	LANDINGS	CHINOOK	SOCKEYE	COHO	PINK	CHUM
70	112	8	1,745	889	159,367	3,112
71	0	0	0	0	0	0
72	97	59	2,987	237	65,925	4,692
73	20	11	679	19	13,703	421
74	19	0	1,742	36	7,657	338
75	7	0	264	1	1,046	230
76	42	11	894	39	11,399	261
77	0	0	0	0	0	0
78	21	2	1,415	2	20,452	2,137
79	10	1	1,940	18	5,134	43
80	9	2	152	4	9,540	256
81	23	0	1,179	64	21,103	3,886
82	1	0	370	2	55	28
83	18	18	10,719	53	8,806	972
84	19	8	2,204	24	9,196	1,257
85	6	0	1,116	13	429	143
86	5	0	121	4	8,061	5,009
87	9	1	5,344	280	5,222	841
88	349	344	184,031	3,454	112,002	25,917
89	0	0	0	0	0	0
90	23	10	5,157	47	2,153	238
91	35	88	7,203	1,115	27,133	1,156
92	42	21	10,193	188	9,679	2,602
93	38	35	17,874	265	33,596	1,089

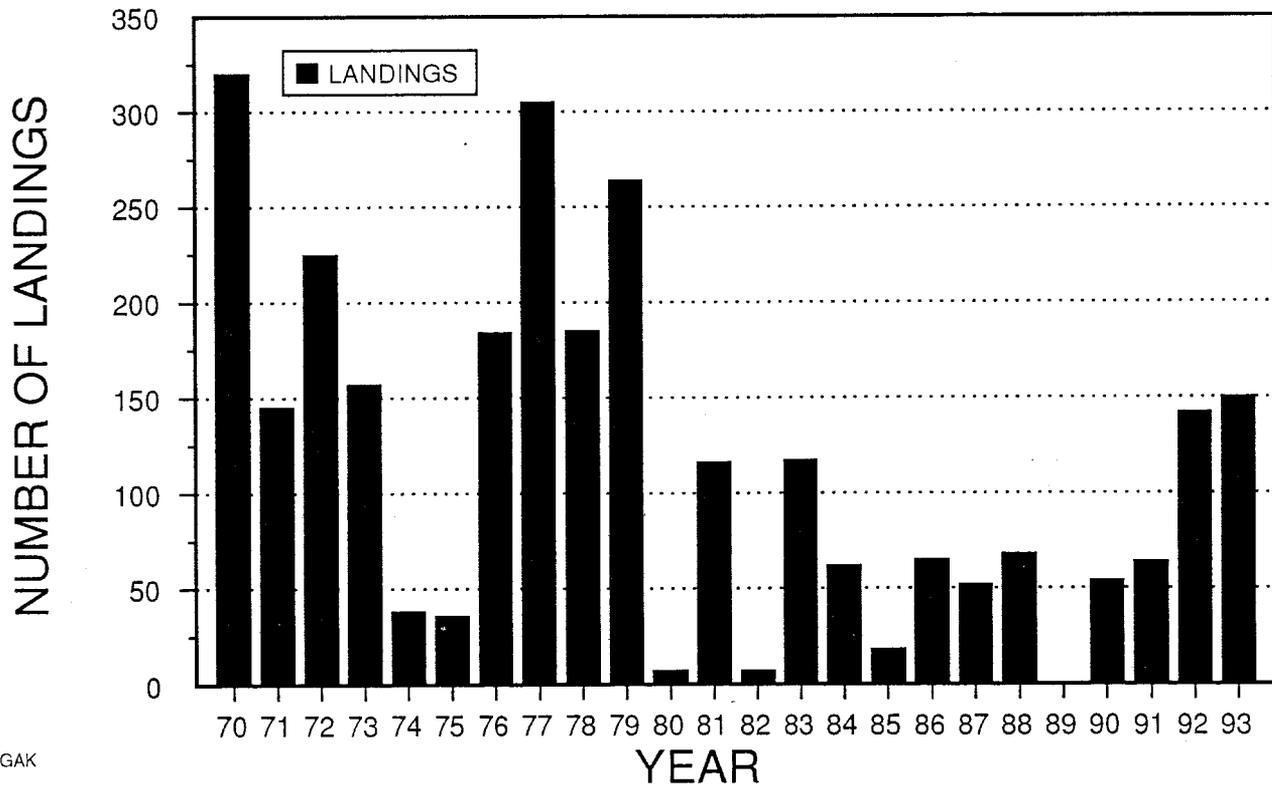
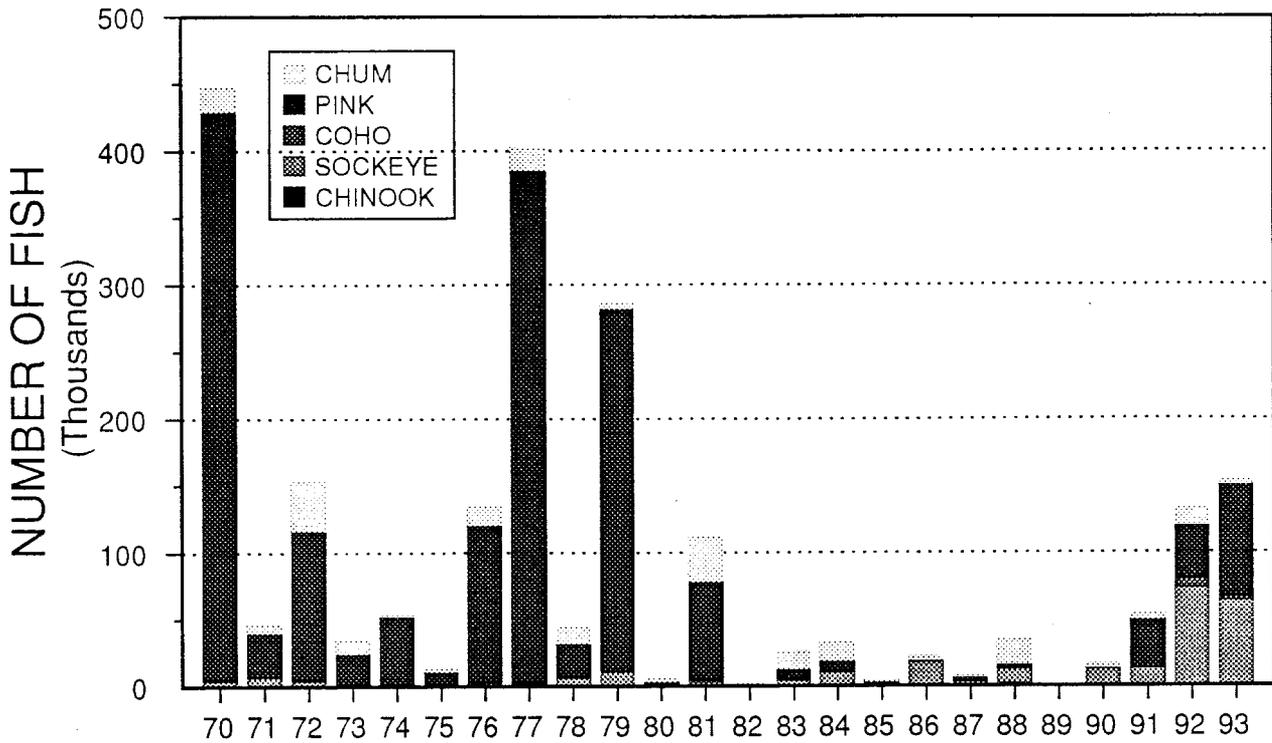


2-DAKA7090

Appendix D.5. Dakavak, Inner and Outer Kukak, Hallo Bay, and Big River Sections combined harvest and landings by species, by year July 6-25, 1970-1993.

DAKAVAK, IN. & OUT. KUKAK, HALLO BAY, BIG RIVER SECTION COMBINED  
 JULY 6-25, 1970-93

	LANDINGS	CHINOOK	SOCKEYE	COHO	PINK	CHUM
70	23	0	1,172	3	17,893	22,242
71	3	0	1,449	1	54	2
72	22	0	5,798	142	1,924	8,054
73	28	0	230	1	13,716	8,054
74	2	0	615	0	0	0
75	0	0	0	0	0	0
76	0	0	0	0	0	0
77	0	0	0	0	0	0
78	6	1	165	1	1,707	4,487
79	49	15	3,298	4	27,094	8,591
80	13	0	5,970	0	1,085	29,405
81	200	7	4,908	16	4,370	137,686
82	11	1	2,050	0	18,438	1,137
83	21	4	2,815	6	738	7,781
84	37	13	1,397	35	9,795	17,317
85	8	4	2,818	29	1,031	908
86	19	48	9,131	265	3,818	8,396
87	47	280	10,219	96	2,656	7,998
88	323	4,854	207,888	2,468	32,371	75,371
89	0	0	0	0	0	0
90	111	129	52,557	3,864	16,454	19,174
91	41	2,376	11,604	1,592	17,702	2,636
92	92	924	118,175	2,877	14,626	9,407
93	126	1,181	60,541	1,689	42,039	3,158

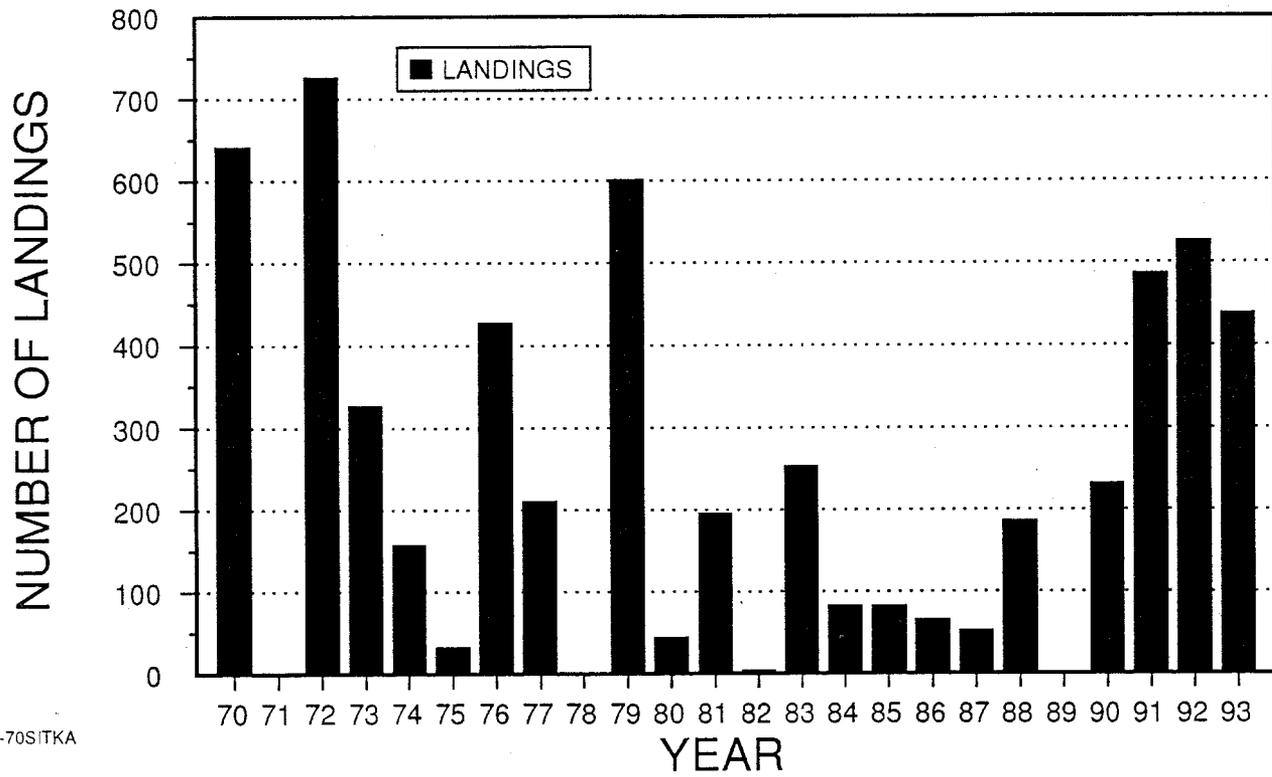
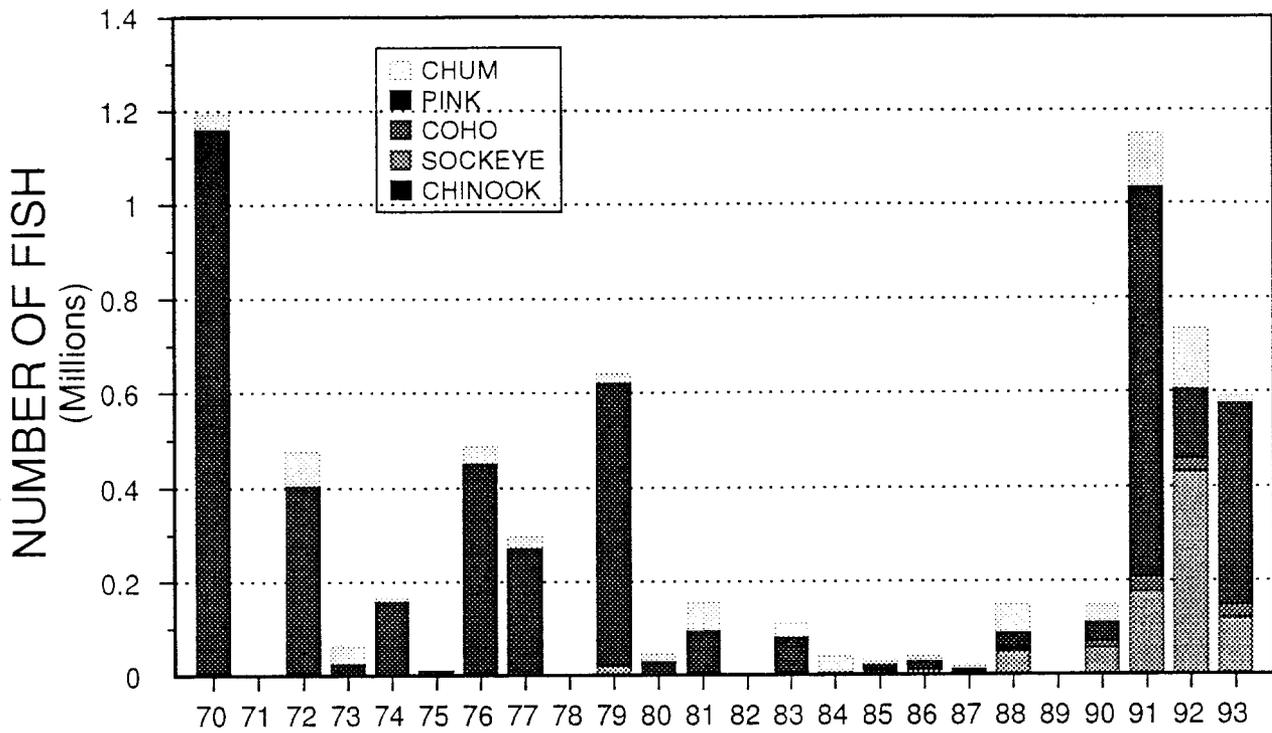


J4-UGAK

Appendix D.6. Inner and Outer Ugak Sections harvest and landings by species, by year July 6-25, 1970-1993.

## INNER &amp; OUTER UGAK SECTIONS JULY 6-25, 1970-93

	LANDINGS	CHINOOK	SOCKEYE	COHO	PINK	CHUM
70	320	36	4,165	78	425,872	17,095
71	145	17	7,305	19	33,951	4,423
72	225	48	4,373	191	112,440	35,490
73	157	209	1,254	27	24,176	8,544
74	38	1	1,478	0	51,855	1,090
75	36	1	291	1	11,697	536
76	184	34	2,690	19	118,944	12,688
77	305	6	2,109	40	383,887	15,556
78	185	21	6,095	0	26,724	10,888
79	264	24	10,978	263	271,776	3,397
80	7	0	130	0	4,270	1,889
81	116	7	3,548	741	75,020	31,558
82	7	5	596	0	27	1,515
83	117	129	4,137	23	9,027	12,111
84	62	181	10,395	107	9,091	12,573
85	18	28	1,378	18	2,152	504
86	65	154	18,321	9	1,430	1,876
87	52	192	3,338	3	3,506	754
88	68	1,215	12,147	8	3,740	16,443
89	0	0	0	0	0	0
90	54	365	12,535	0	1,113	1,902
91	64	236	13,022	384	36,797	3,415
92	142	562	73,044	6,366	40,461	12,360
93	150	909	63,029	3,443	83,638	2,233

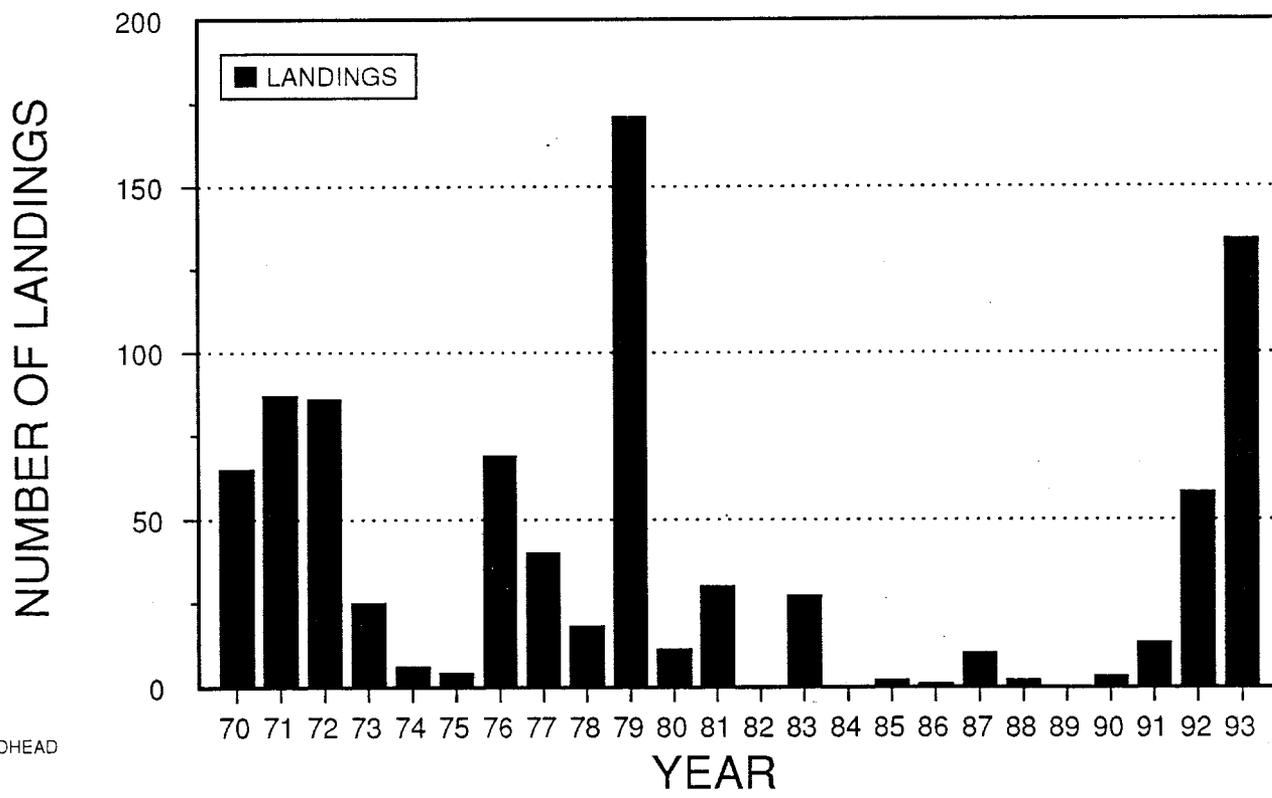
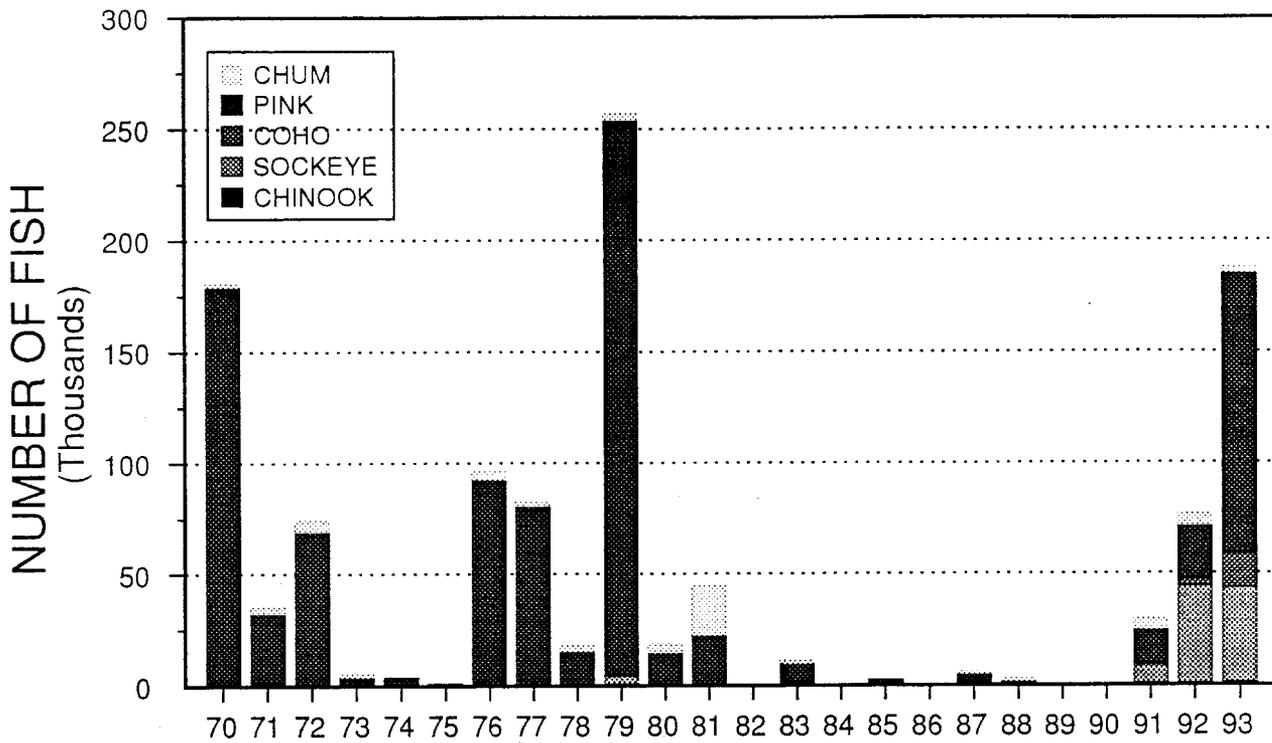


K93-70SITKA

Appendix D.7. Sitkalidak Section harvest and landings by species, by year July 6-25, 1970-1993.

SITKALIDAK SECTION JULY 6-25, 1970-93

	LANDINGS	CHINOOK	SOCKEYE	COHO	PINK	CHUM
70	641	31	6,883	404	1,156,913	27,720
71	0	0	0	0	0	0
72	726	99	3,741	660	404,003	67,371
73	326	253	1,415	199	27,312	33,483
74	157	65	1,450	36	160,692	3,208
75	32	1	420	1	9,318	164
76	427	59	6,520	625	448,283	32,140
77	210	8	1,241	73	272,948	21,862
78	0	0	0	0	0	0
79	601	181	19,437	2,689	601,604	17,522
80	44	5	771	10	32,594	11,865
81	195	20	3,460	639	94,353	54,178
82	3	2	718	105	449	1,525
83	252	54	3,618	523	80,164	26,163
84	82	15	1,851	39	7,970	28,641
85	82	43	7,711	256	18,604	4,338
86	65	24	11,643	269	20,969	6,571
87	52	63	5,759	266	9,775	3,212
88	186	196	49,165	5,816	37,811	55,139
89	0	0	0	0	0	0
90	231	1,048	54,871	13,980	45,860	30,015
91	486	2,535	174,666	30,406	830,884	112,466
92	526	812	429,642	27,456	151,741	125,274
93	438	4,133	114,387	29,589	432,137	8,806

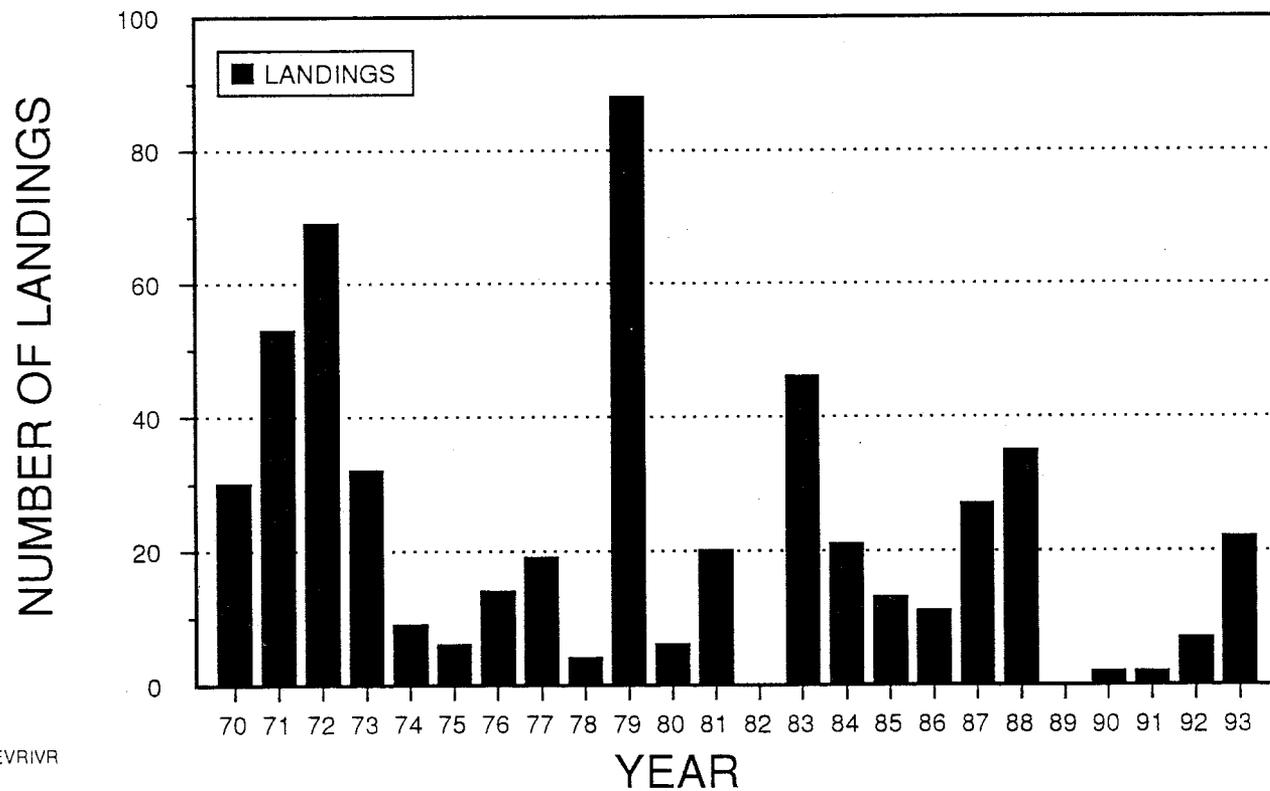
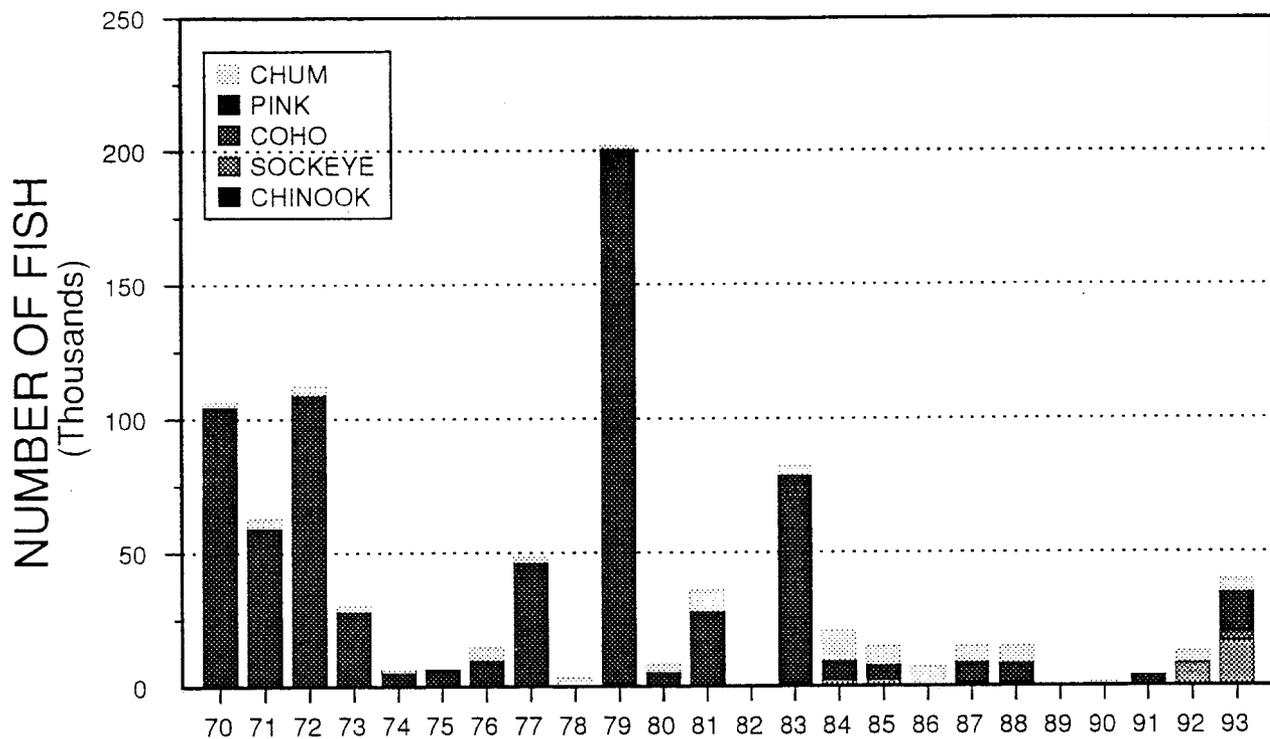


J4-TWOHEAD

Appendix D.8. Two Headed Sections harvest and landings by species, by year July 6-25, 1970-1993.

## TWO-HEADED SECTION JULY 6-25, 1970-93

	LANDINGS	CHINOOK	SOCKEYE	COHO	PINK	CHUM
70	65	6	194	43	179,264	1,042
71	87	51	1,379	65	31,306	2,051
72	86	21	190	30	69,459	4,280
73	25	4	235	9	4,387	1,191
74	6	2	52	4	3,900	45
75	4	0	4	0	1,058	0
76	69	26	928	46	92,062	3,412
77	40	2	694	87	80,585	1,522
78	18	1	119	1	15,852	1,877
79	171	471	4,046	483	249,229	2,706
80	11	0	295	10	15,122	3,124
81	30	14	398	1	22,755	21,667
82	0	0	0	0	0	0
83	27	22	1,113	14	9,274	1,012
84	0	0	0	0	0	0
85	2	0	429	0	1,929	44
86	1	0	21	0	44	33
87	10	47	1,267	92	4,019	576
88	2	2	596	22	1,824	347
89	0	0	0	0	0	0
90	3	1	316	232	335	379
91	13	46	8,655	910	15,938	4,175
92	58	179	44,178	2,866	24,876	4,597
93	134	1,209	42,330	15,266	126,999	1,639

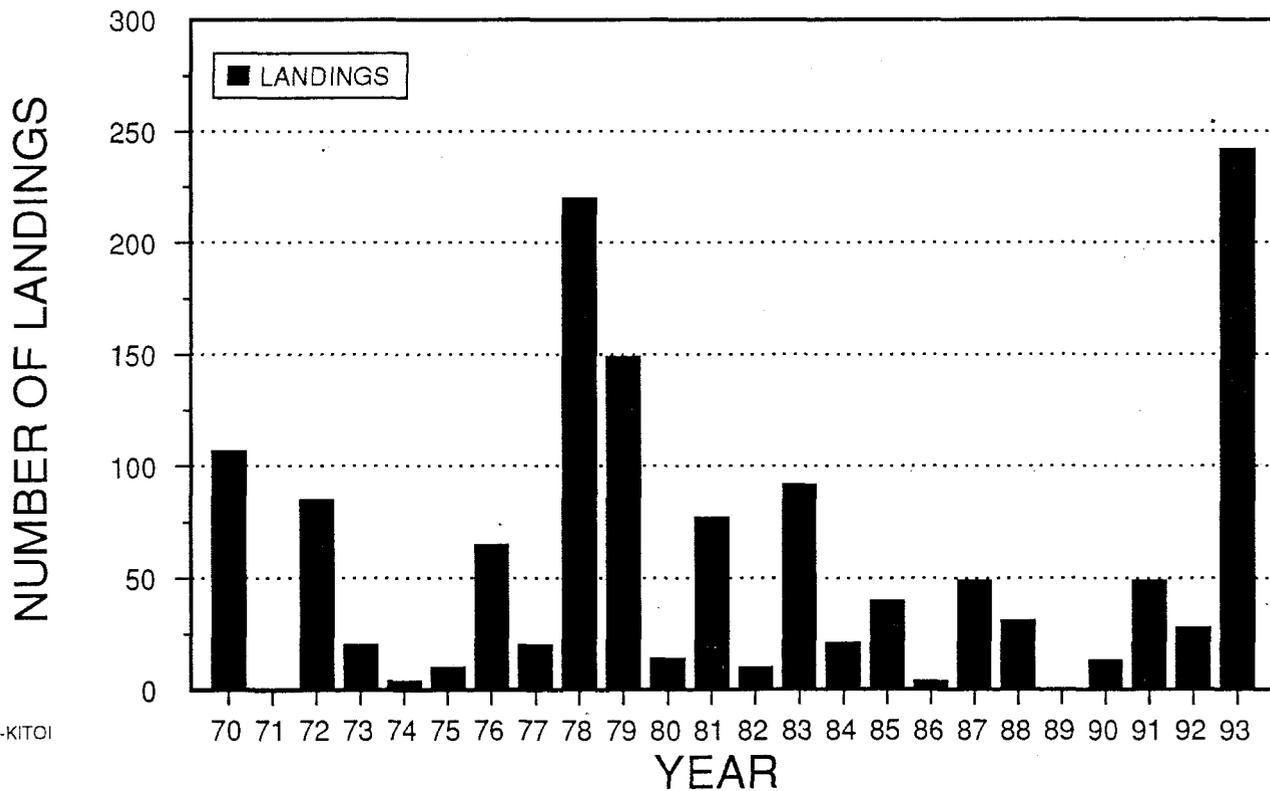
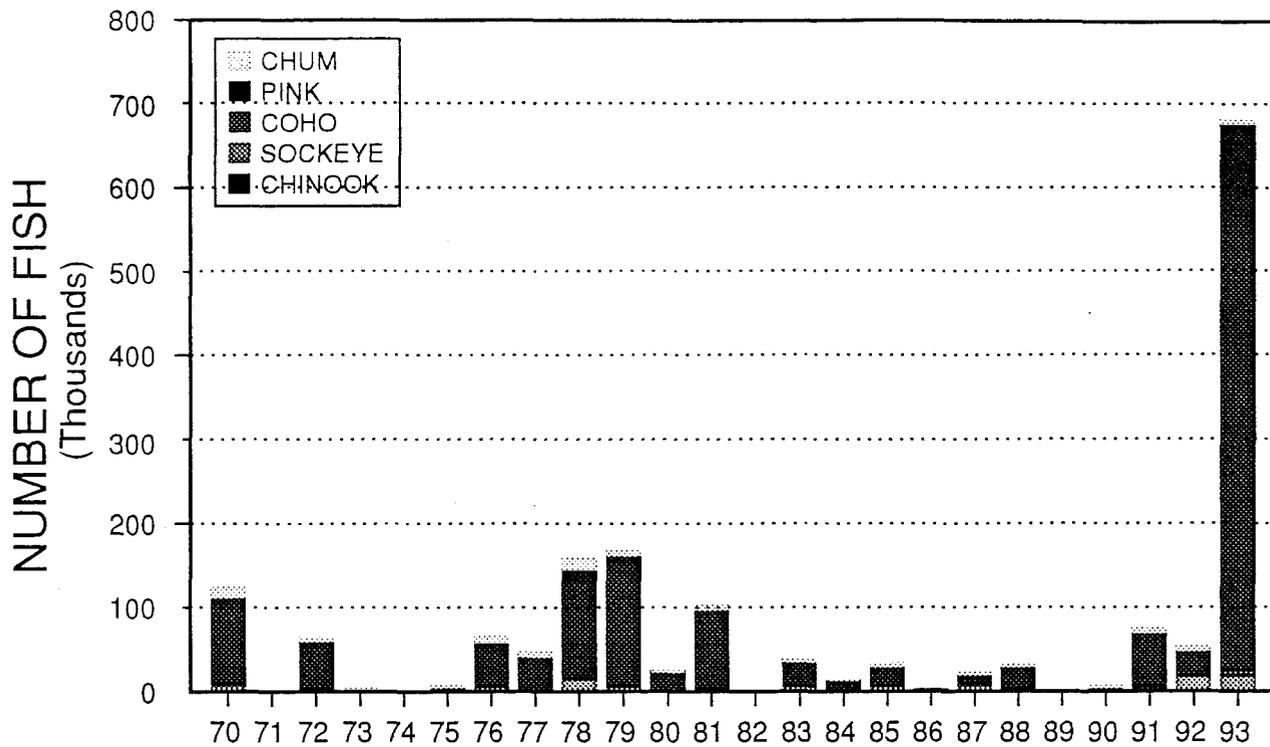


J4-SEVRIVR

Appendix D.9. Seven River Section harvest and landings by species, by year July 6-25, 1970-1993.

SEVEN RIVER SECTION JULY 6-25, 1970-93

	LANDINGS	CHINOOK	SOCKEYE	COHO	PINK	CHUM
70	30	0	202	12	104,826	1,482
71	53	0	385	3	59,389	2,888
72	69	1	506	6	109,035	2,535
73	32	0	278	4	28,678	1,083
74	9	0	550	0	5,654	63
75	6	0	614	0	5,811	5
76	14	1	70	1	10,654	3,832
77	19	0	48	1	47,129	1,082
78	4	0	248	0	176	2,921
79	88	0	1,266	16	199,859	677
80	6	0	2	0	6,124	2,352
81	20	2	340	1	28,264	7,140
82	0	0	0	0	0	0
83	46	3	1,179	12	78,072	3,166
84	21	0	2,441	0	7,800	10,236
85	13	0	2,619	1	6,237	6,028
86	11	0	199	0	765	6,028
87	27	0	834	0	8,875	5,280
88	35	0	717	10	8,521	5,672
89	0	0	0	0	0	0
90	2	0	971	0	0	211
91	2	0	574	0	3,170	0
92	7	12	8,376	231	713	3,281
93	22	162	16,538	3,165	15,804	3,738

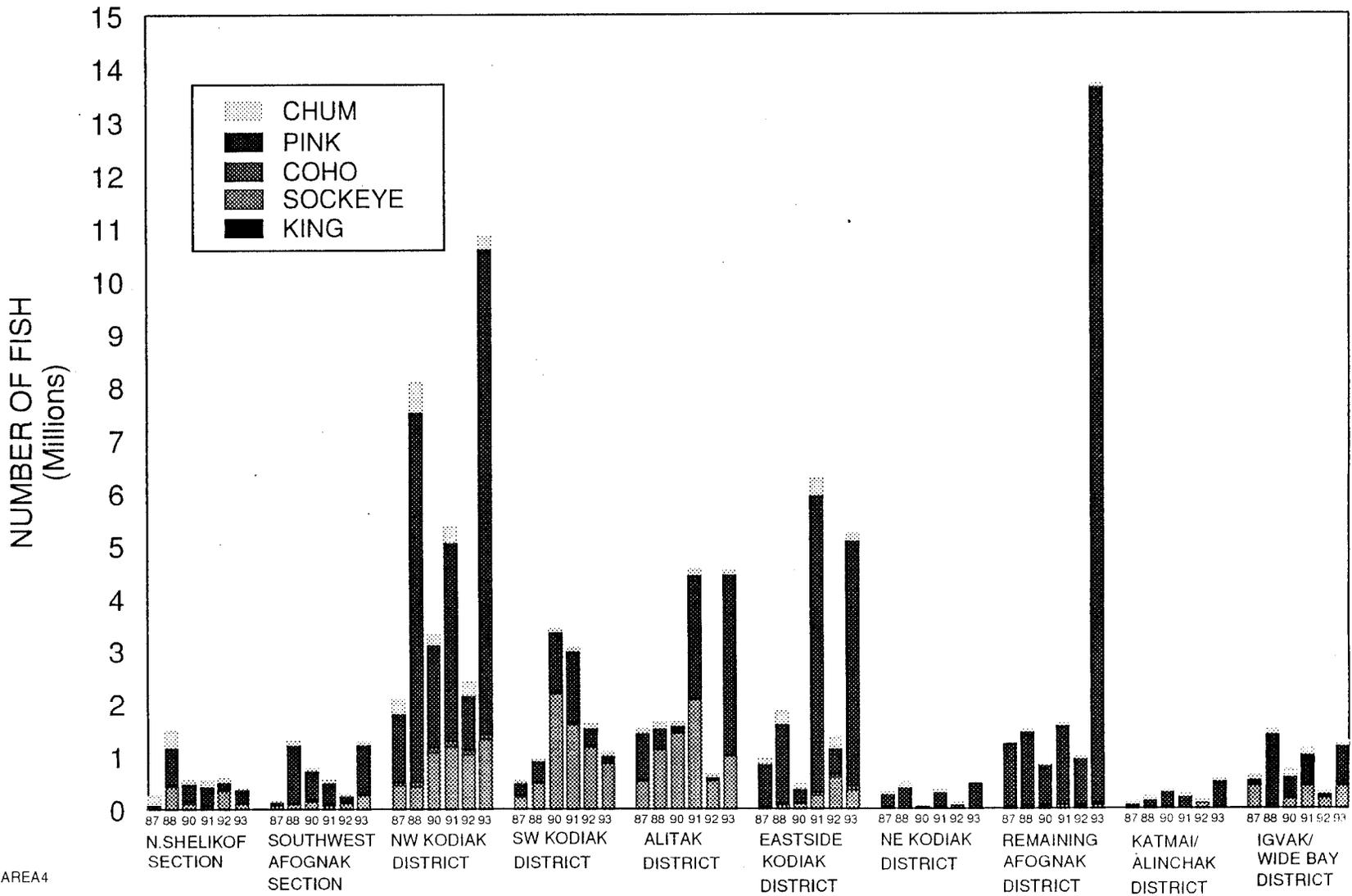


J4-KITOI

Appendix D.10. Duck Bay, Izhut Bay, and Kitoi Bay Sections harvest and landings by species, by year July 6-25, 1970-1993.

DUCK BAY, IZHUT BAY, & KITOI BAY SECTIONS COMBINED 7/06-25, 1970-93

	LANDINGS	CHINOOK	SOCKEYE	COHO	PINK	CHUM
70	107	11	7,133	2,399	103,095	10,934
71	0	0	0	0	0	0
72	85	33	2,755	380	57,483	3,774
73	20	1	457	47	3,240	673
74	4	0	258	8	631	15
75	10	6	1,223	255	4,715	1,074
76	65	40	5,154	720	53,783	4,765
77	20	0	1,343	128	41,106	4,183
78	220	132	13,484	1,488	131,008	12,412
79	149	5	5,081	2,030	155,721	4,138
80	14	3	223	225	24,071	611
81	77	5	2,988	819	95,123	3,971
82	10	21	495	46	339	94
83	92	58	6,201	384	29,670	1,268
84	21	2	1,587	325	11,613	484
85	40	14	5,919	1,452	23,776	1,828
86	4	0	237	3	2,157	61
87	49	3	7,038	1,665	11,780	1,558
88	31	5	3,288	544	26,968	1,299
89	0	0	0	0	0	0
90	13	16	978	184	3,933	958
91	49	16	3,504	1,578	65,909	4,755
92	28	169	17,814	1,922	29,481	3,742
93	242	167	18,708	6,262	652,591	4,043



8-10AREA4

Appendix D.11. Kodiak Area harvest by species, by 10 major harvest locations, 1987-1993.

Appendix D.11. (page 2 of 3)

KODIAK MANAGEMENT AREA  
1987-1993 COMMERCIAL HARVEST BY SPECIES  
JUNE 1 - OCTOBER 31

		CHINOOK	SOCKEYE	COHO	PINK	CHUM
N. SHELIKOF	87	294	35,170	24,299	42,081	152,136
	88	6,555	424,129	23,777	727,537	291,964
	90	365	104,717	32,896	359,820	60,942
	91	2,750	35,048	24,630	391,435	80,724
	92	1,188	353,920	38,697	140,430	60,452
	93	1,433	104,706	13,459	274,205	8,395
S. W. AFOGNAK	87	74	75,246	2,834	72,036	7,507
	88	1,721	96,559	26,841	1,124,863	44,747
	90	750	146,143	31,095	562,861	18,755
	91	673	72,477	17,671	425,497	28,848
	92	2,392	114,512	19,856	137,026	17,214
	93	5,002	259,174	18,588	966,379	34,672
N. W. KODIAK	87	765	454,406	45,211	1,329,254	228,761
	88	6,212	418,130	95,000	7,030,100	536,454
	90	4,895	1,067,482	108,388	1,950,628	167,766
	91	4,864	1,177,450	118,655	3,787,647	283,582
	92	8,491	1,019,958	95,719	1,043,228	225,898
	93	9,464	1,314,951	104,414	9,202,930	219,003
S. W. KODIAK	87	1,428	224,277	37,021	241,954	25,321
	88	3,915	484,202	19,274	419,515	28,745
	90	6,443	2,169,726	36,992	1,160,789	32,355
	91	6,242	1,592,807	43,526	1,375,838	33,763
	92	6,355	1,172,149	13,161	357,908	59,592
	93	6,553	852,415	1,495	174,771	46,896
ALITAK	87	105	515,484	17,960	916,883	59,727
	88	624	1,124,073	30,001	385,735	93,401
	90	807	1,436,299	18,176	144,927	50,306
	91	821	2,064,116	24,601	2,373,521	83,017
	92	1,056	526,273	24,548	59,273	34,599
	93	1,828	1,000,169	19,271	3,465,503	53,639
EASTSIDE KOD	87	418	18,025	18,557	817,847	90,606
	88	1,643	75,570	20,494	1,525,787	216,093
	90	1,930	95,061	19,602	270,214	86,743
	91	4,428	255,664	50,529	5,650,427	306,857
	92	2,360	584,127	59,938	523,578	184,350
	93	7,795	348,841	89,439	4,666,493	107,900
N. E. KODIAK	87	19	3,754	13,585	276,657	29,413
	88	135	731	4,129	419,245	71,680
	90	27	514	100	31,440	5,683
	91	283	14,405	6,507	296,438	27,217
	92	159	53,307	7,115	35,787	17,226
	93	45	6,836	1,633	448,882	2,994

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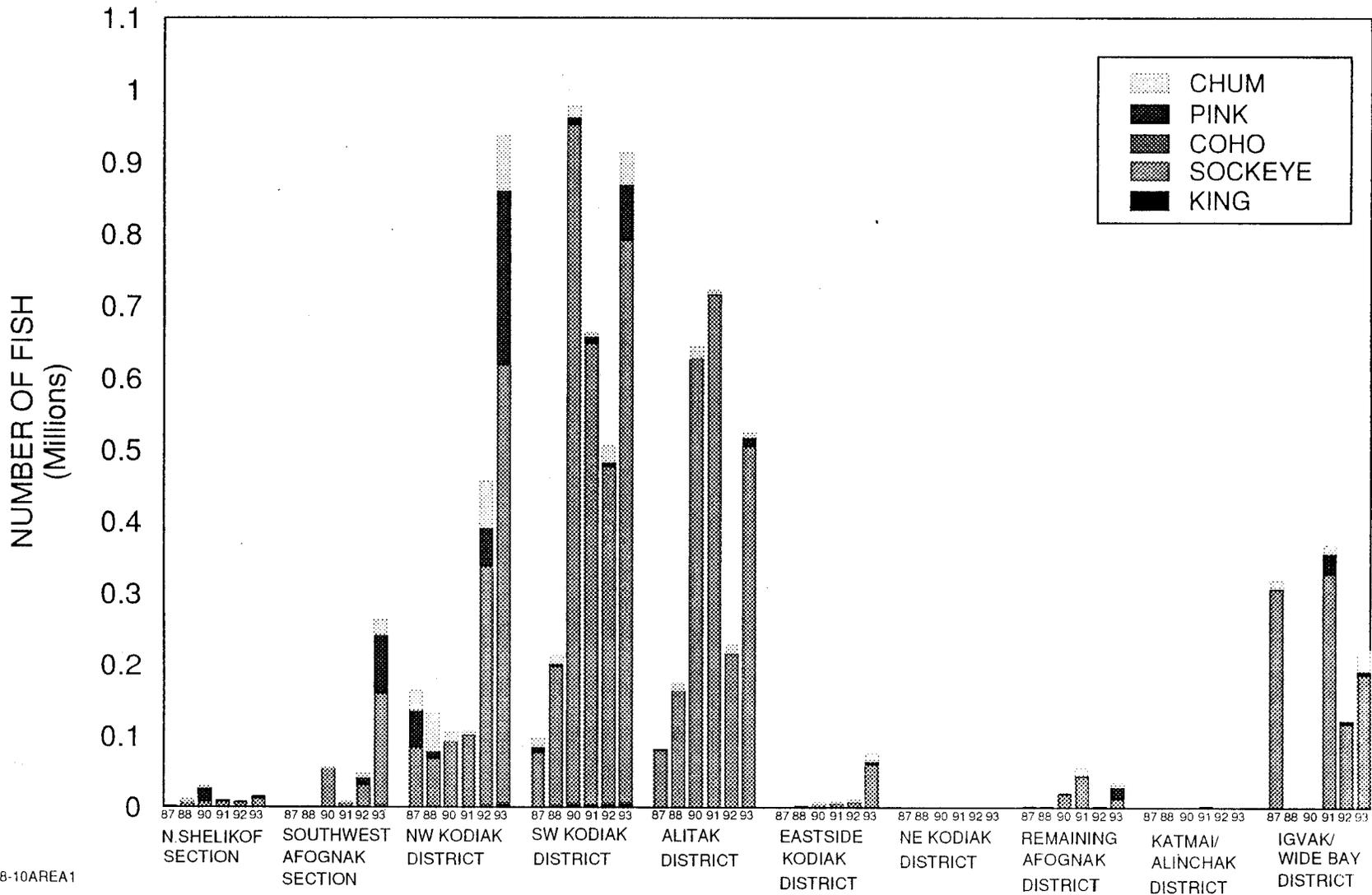
Appendix D.11. (page 3 of 3)

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KODIAK MANAGEMENT AREA  
 1987-1993 COMMERCIAL HARVEST BY SPECIES  
 JUNE 1 - OCTOBER 31

		CHINOOK	SOCKEYE	COHO	PINK	CHUM
REM AFOGNAK	87	72	20,929	17,303	1,179,174	7,767
	88	111	12,054	40,502	1,424,828	11,659
	90	209	35,840	15,330	780,175	11,027
	91	326	60,559	12,205	1,518,839	41,713
	92	555	45,590	11,353	904,240	21,367
	93	1,010	56,574	42,584	13,543,151	36,014
KATMAI/ALIN	87	746	16,250	5,160	84,452	21,739
	88	402	28,588	940	154,140	50,188
	90	153	26,981	5,354	307,070	31,112
	91	108	4,495	1,955	243,983	34,386
	92	450	104,877	3,081	21,552	18,509
	93	433	23,089	2,082	518,118	11,615
IGVAK/W.BAY	87	691	429,278	10,610	114,689	59,005
	88	1,056	34,601	42,340	1,347,288	81,479
	90	3,227	165,641	25,886	415,888	113,054
	91	1,738	427,063	24,581	579,216	108,964
	92	1,293	192,992	6,616	87,479	40,277
	93	7,466	412,186	20,502	758,988	67,203

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Appendix D.12. Kodiak Area harvest by species, by 10 major harvest locations, June 1 - July 5, 1987-1993.

Appendix D.12. (page 2 of 3)

KODIAK MANAGEMENT AREA  
 1987-1993 COMMERCIAL HARVEST BY SPECIES  
 JUNE 1-JULY 5

		CHINOOK	SOCKEYE	COHO	PINK	CHUM
N. SHELIKOF	87	1	1,480	0	0	4
	88	196	8,385	3	71	1,747
	90	13	8,649	365	19,551	388
	91	0	8,306	0	514	61
	92	6	7,189	0	3	75
	93	127	12,931	0	971	369
S. W. AFOGNAK	87	0	105	0	0	7
	88	201	286	0	30	238
	90	5	55,333	0	239	686
	91	24	8,411	0	270	312
	92	1,171	29,523	40	11,888	4,587
	93	3,523	156,503	280	82,449	19,890
N. W. KODIAK	87	397	84,121	77	52,854	26,220
	88	1,650	66,604	115	11,789	51,304
	90	427	91,536	12	1,210	10,648
	91	435	100,797	18	1,214	4,048
	92	3,175	335,539	308	53,332	63,651
	93	6,204	612,492	4,462	238,890	74,875
S. W. KODIAK	87	942	76,261	23	9,118	10,319
	88	3,344	194,510	12	4,432	11,786
	90	4,913	946,431	2,717	8,846	14,410
	91	4,315	643,987	30	10,929	3,569
	92	5,277	472,154	56	6,812	20,403
	93	7,312	784,408	946	77,313	41,543
ALITAK	87	13	80,208	2	199	185
	88	320	165,404	27	127	7,841
	90	402	627,580	50	313	14,301
	91	311	715,284	24	2,979	3,165
	92	720	215,896	20	788	11,167
	93	1,032	504,732	90	12,538	4,893
EASTSIDE KOD	87	0	23	0	0	3
	88	43	1,942	5	40	215
	90	20	5,532	0	555	1,076
	91	109	7,112	0	390	606
	92	22	8,658	3	653	2,924
	93	342	59,972	252	5,212	10,098
N. E. KODIAK	87	0	0	0	0	0
	88	1	0	0	13	191
	90	0	0	0	0	0
	91	0	0	0	0	0
	92	0	0	0	0	0
	93	0	0	0	0	0

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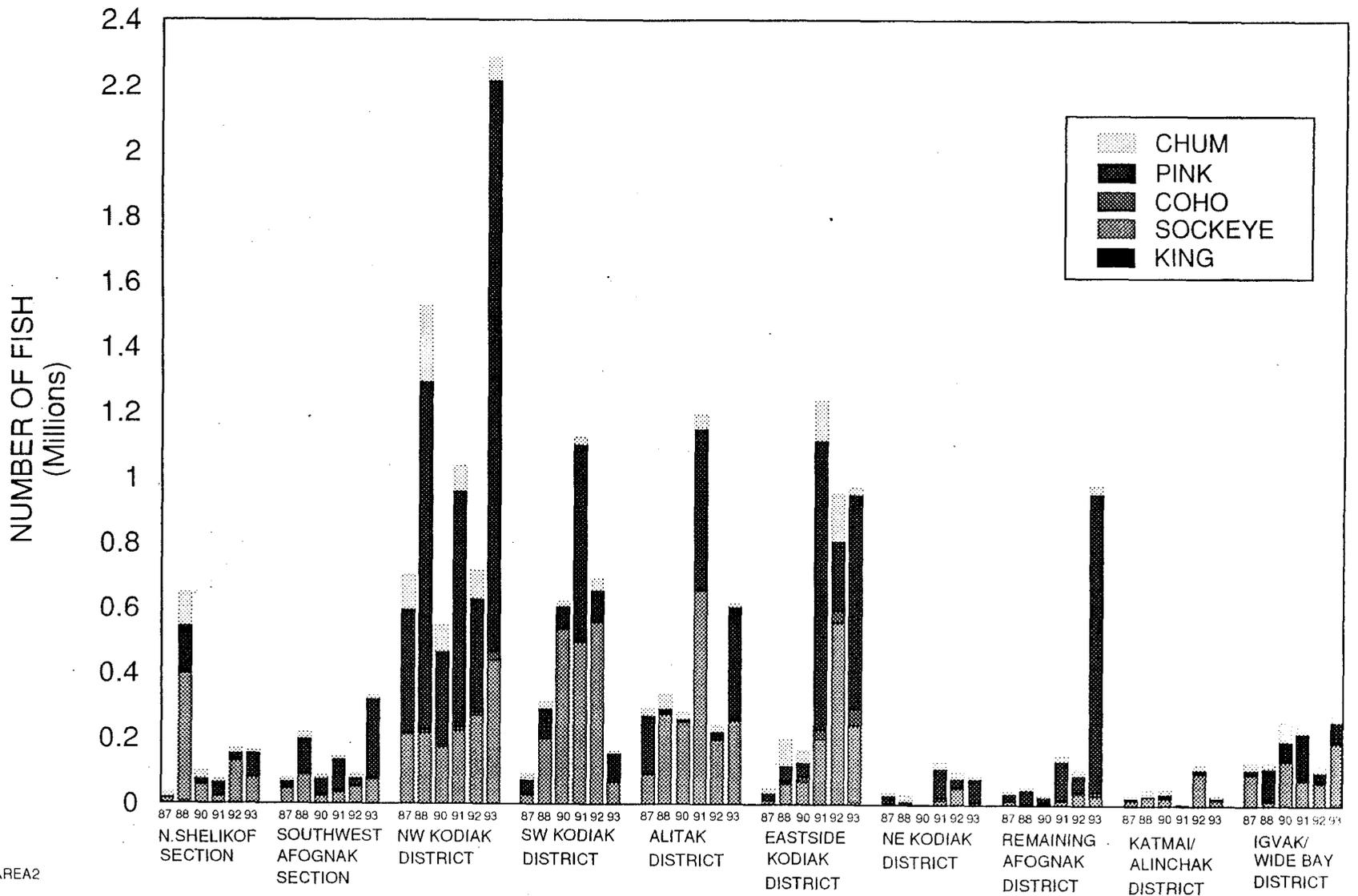
Appendix D.12. (page 3 of 3)

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KODIAK MANAGEMENT AREA  
 1987-1993 COMMERCIAL HARVEST BY SPECIES  
 JUNE 1 - OCTOBER 31

	CHINOOK	SOCKEYE	COHO	PINK	CHUM	
REM AFOGNAK	87	20	1,479	0	0	1
	88	7	1,222	0	67	171
	90	37	19,153	0	86	336
	91	136	43,485	7	3,017	9,649
	92	25	1,157	0	101	87
	93	266	12,364	741	17,900	4,618
KATMAI/ALIN	87	0	229	0	0	0
	88	0	0	0	0	0
	90	0	0	0	0	0
	91	5	1,993	0	43	12
	92	0	0	0	0	0
	93	0	0	0	0	0
IGVAK/W.BAY	87	276	305,968	29	3,015	10,387
	88	0	0	0	0	0
	90	0	0	0	0	0
	91	516	327,859	77	30,111	8,811
	92	401	117,880	5	6,235	4,850
	93	1,731	185,474	59	6,150	26,924

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8-10AREA2

Appendix D.13. Kodiak Area harvest by species, by 10 major harvest locations, July 6-25, 1987-1993.

Appendix D.13. (page 2 of 3)

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KODIAK MANAGEMENT AREA  
 1987-1993 COMMERCIAL HARVEST BY SPECIES  
 JULY 6-JULY 25

		CHINOOK	SOCKEYE	COHO	PINK	CHUM
N. SHELIKOF	87	281	15,563	376	7,878	8,839
	88	5,198	391,917	5,922	144,123	101,147
	90	139	57,714	3,911	18,607	19,412
	91	2,467	18,807	2,707	44,835	3,792
	92	945	128,109	3,049	23,883	11,675
	93	1,216	78,415	1,954	75,635	4,247
S. W. AFOGNAK	87	12	45,869	427	25,972	3,973
	88	338	87,209	1,350	114,980	15,929
	90	277	22,944	3,605	53,752	6,036
	91	309	34,183	3,586	100,680	4,043
	92	304	50,576	605	30,018	6,826
	93	858	74,005	7,100	242,923	7,419
N. W. KODIAK	87	251	213,973	4,206	382,018	99,731
	88	1,542	216,579	8,667	1,070,377	228,796
	90	1,492	173,052	6,472	288,422	75,102
	91	1,069	222,657	11,707	727,246	72,323
	92	975	271,344	8,416	352,549	82,419
	93	2,224	438,423	25,967	1,753,763	64,072
S. W. KODIAK	87	212	26,036	247	50,974	10,646
	88	390	200,189	302	96,648	12,550
	90	687	533,566	1,414	74,739	11,712
	91	1,392	493,918	4,588	604,424	19,985
	92	433	556,365	905	99,888	34,580
	93	404	66,566	518	90,208	5,033
ALITAK	87	39	90,752	313	183,140	15,981
	88	122	274,237	330	21,059	37,394
	90	137	252,162	426	10,049	19,353
	91	414	652,681	1,435	499,521	38,944
	92	152	196,514	845	28,344	15,106
	93	596	255,881	2,791	348,596	7,713
EASTSIDE KOD	87	302	11,198	361	26,175	9,822
	88	1,413	62,625	5,856	51,896	77,601
	90	1,414	68,693	14,212	47,308	32,507
	91	2,817	196,917	31,700	886,789	120,056
	92	1,565	555,240	36,919	217,791	145,512
	93	6,429	236,578	51,505	659,028	16,416
N. E. KODIAK	87	13	2,596	309	29,272	1,090
	88	48	263	29	15,094	12,566
	90	3	5	0	892	642
	91	228	14,273	6,332	93,066	15,023
	92	149	49,835	6,325	27,622	15,910
	93	37	6,636	1,414	76,646	1,721

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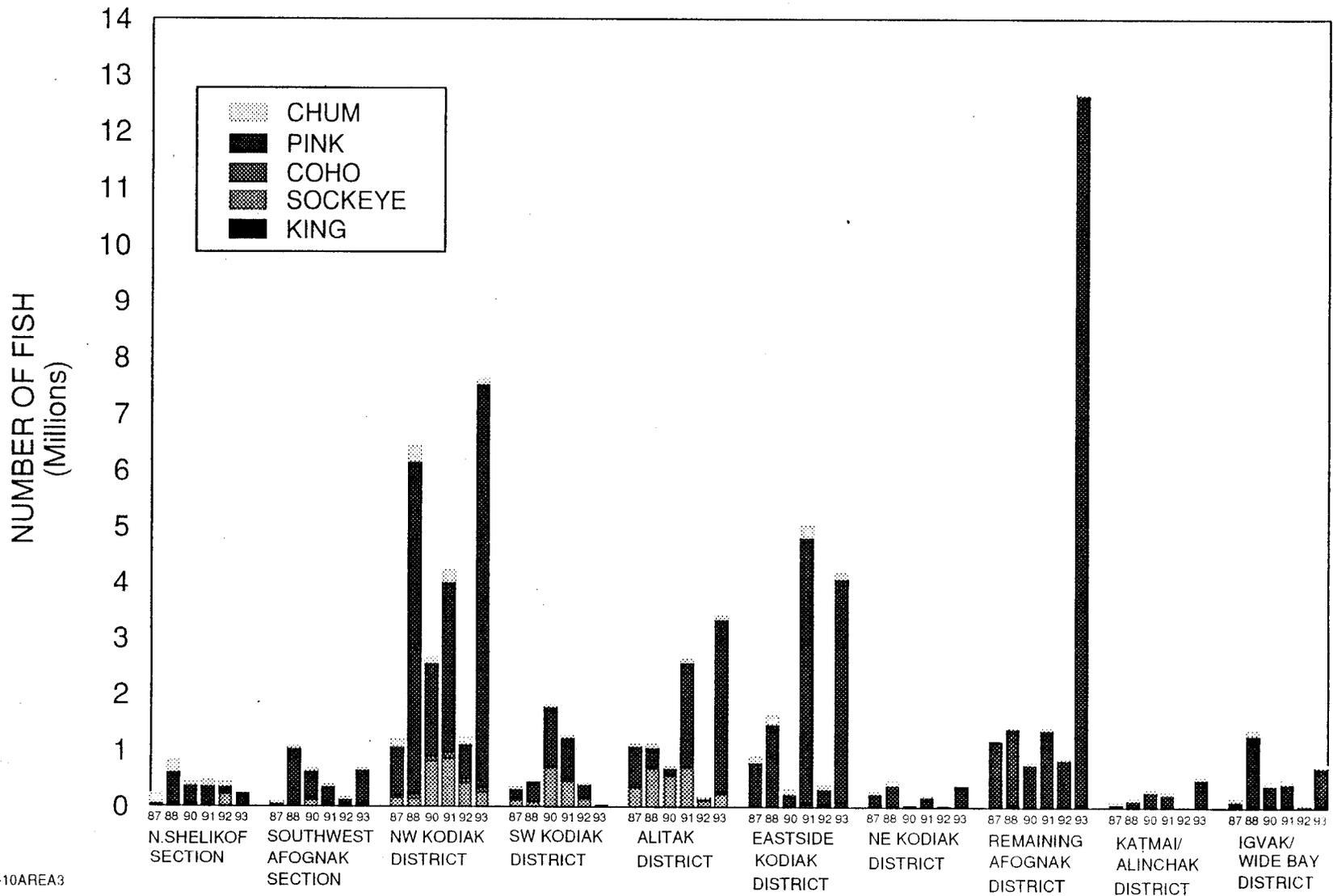
Appendix D.13. (page 3 of 3)

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KODIAK MANAGEMENT AREA  
 1987-1993 COMMERCIAL HARVEST BY SPECIES  
 JULY 6-JULY 25

		CHINOOK	SOCKEYE	COHO	PINK	CHUM
REM AFOGNAK	87	14	10,812	2,250	25,023	2,440
	88	11	5,373	853	43,917	3,613
	90	49	5,933	459	22,880	2,968
	91	121	12,203	3,152	122,479	12,104
	92	391	36,816	4,126	53,153	14,586
	93	455	29,291	10,923	917,197	20,739
KATMAI/ALIN	87	745	15,824	2,423	7,689	4,486
	88	385	27,936	118	5,417	12,667
	90	106	23,276	3,266	14,071	7,076
	91	76	1,570	22	1,369	102
	92	440	98,051	1,676	13,775	8,792
	93	278	18,291	563	7,945	1,289
IGVAK/W.BAY	87	181	95,048	983	15,915	18,453
	88	215	13,150	3,287	101,997	12,455
	90	2,556	134,452	6,789	56,813	54,547
	91	861	77,385	7,807	139,228	25,309
	92	573	70,163	1,654	33,745	17,143
	93	3,918	189,595	5,613	62,212	15,285

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B-10AREA3

Appendix D.14. Kodiak Area harvest by species, by 10 major harvest locations, July 26 - October 31, 1987-1993.

Appendix D.14. (page 2 of 3)

KODIAK MANAGEMENT AREA  
 1987-1993 COMMERCIAL HARVEST BY SPECIES  
 JULY 26 - OCTOBER 31

		CHINOOK	SOCKEYE	COHO	PINK	CHUM
N. SHELIKOF	87	12	18,127	23,923	34,203	143,293
	88	1,161	23,825	17,852	583,093	188,929
	90	213	38,354	28,620	321,662	41,142
	91	283	7,935	21,923	346,086	76,871
	92	237	218,363	35,632	116,122	48,368
	93	90	13,360	11,505	197,599	3,779
S. W. AFOGNAK	87	62	29,272	2,407	46,064	3,527
	88	1,182	9,064	25,491	1,009,853	28,580
	90	468	117,666	27,490	508,870	12,033
	91	340	29,883	14,085	324,547	24,493
	92	917	34,413	19,211	95,120	5,801
	93	621	28,666	11,208	641,007	7,363
N. W. KODIAK	87	117	157,287	40,928	894,382	102,810
	88	3,020	134,951	86,218	5,947,934	256,354
	90	2,978	802,894	101,904	1,660,996	82,016
	91	3,361	854,064	106,930	3,059,187	207,211
	92	4,341	413,247	86,996	637,490	79,903
	93	1,036	264,036	73,985	7,210,277	80,056
S. W. KODIAK	87	274	121,980	36,751	181,862	4,356
	88	181	89,503	18,960	318,435	4,409
	90	843	689,729	32,861	1,077,204	6,233
	91	535	454,902	38,908	760,485	10,209
	92	645	143,630	12,200	251,208	4,609
	93	7	271	31	26,169	320
ALITAK	87	53	344,524	17,645	733,544	43,561
	88	182	684,805	29,644	364,549	48,166
	90	268	556,550	17,700	134,565	16,652
	91	96	696,099	23,142	1,871,021	40,908
	92	184	113,857	23,683	30,141	8,326
	93	200	239,501	16,390	3,104,369	41,033
EASTSIDE KOD	87	116	6,804	18,196	791,672	80,781
	88	187	11,003	14,633	1,473,851	138,277
	90	496	20,836	5,390	222,351	53,160
	91	1,502	51,635	18,829	4,763,248	186,195
	92	773	20,229	23,016	305,134	35,914
	93	1,024	52,291	37,682	4,002,253	81,386
N. E. KODIAK	87	6	1,158	13,276	247,385	28,323
	88	86	468	4,100	404,138	58,923
	90	24	509	100	30,548	5,041
	91	55	132	175	203,372	12,194
	92	10	3,472	790	8,165	1,316
	93	8	200	219	372,236	1,273

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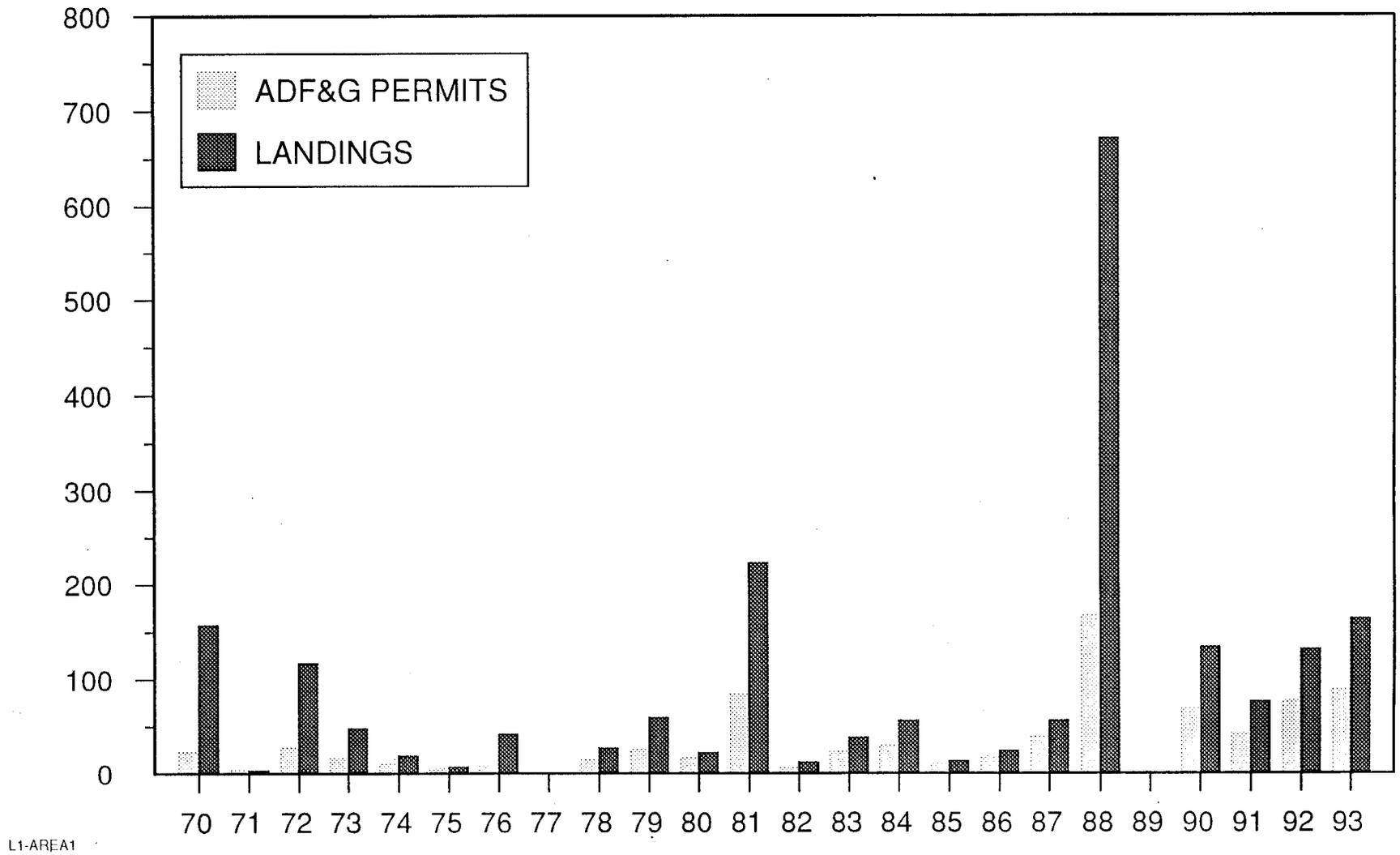
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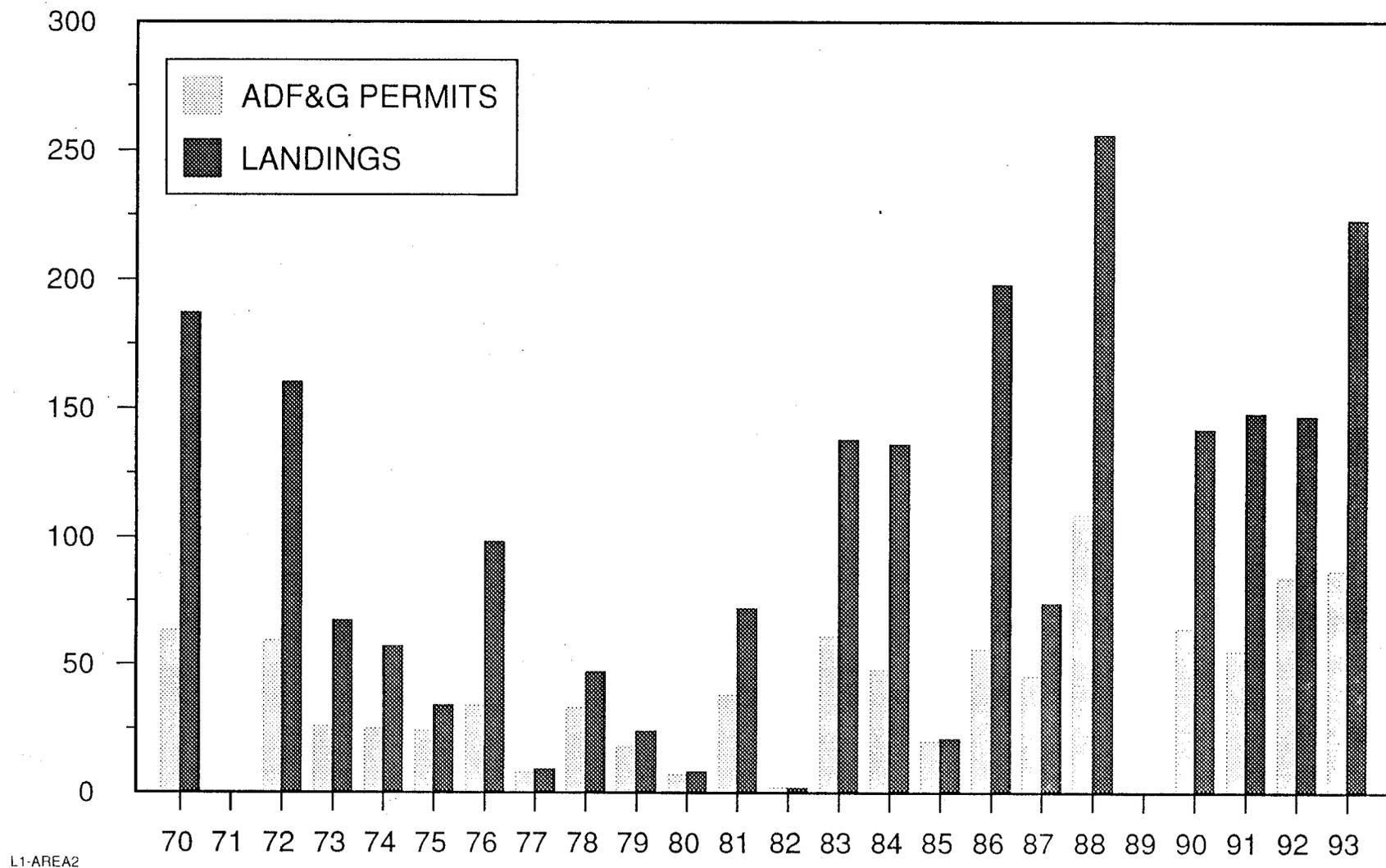
KODIAK MANAGEMENT AREA  
 1987-1993 COMMERCIAL HARVEST BY SPECIES  
 JULY 26 - OCTOBER 31

	CHINOOK	SOCKEYE	COHO	PINK	CHUM	
REM AFOGNAK	87	38	8,638	15,053	1,154,151	5,326
	88	93	5,459	39,649	1,380,844	7,875
	90	123	10,754	14,871	757,209	7,723
	91	69	4,871	9,046	1,393,343	19,960
	92	139	7,617	7,227	850,986	6,694
	93	289	14,919	30,920	12,608,054	10,657
KATMAI/ALIN	87	1	197	2,737	76,763	17,253
	88	17	652	822	148,723	37,521
	90	47	3,705	2,088	292,999	24,036
	91	27	932	1,933	242,571	34,272
	92	10	6,826	1,405	7,777	9,717
	93	155	4,798	1,519	510,173	10,326
IGVAK/W.BAY	87	234	28,262	9,598	95,759	30,165
	88	841	21,451	39,053	1,245,291	69,024
	90	671	31,189	19,097	359,075	58,507
	91	361	21,819	16,697	409,877	74,844
	92	319	4,949	4,957	47,499	18,284
	93	1,817	37,117	14,830	690,626	24,994

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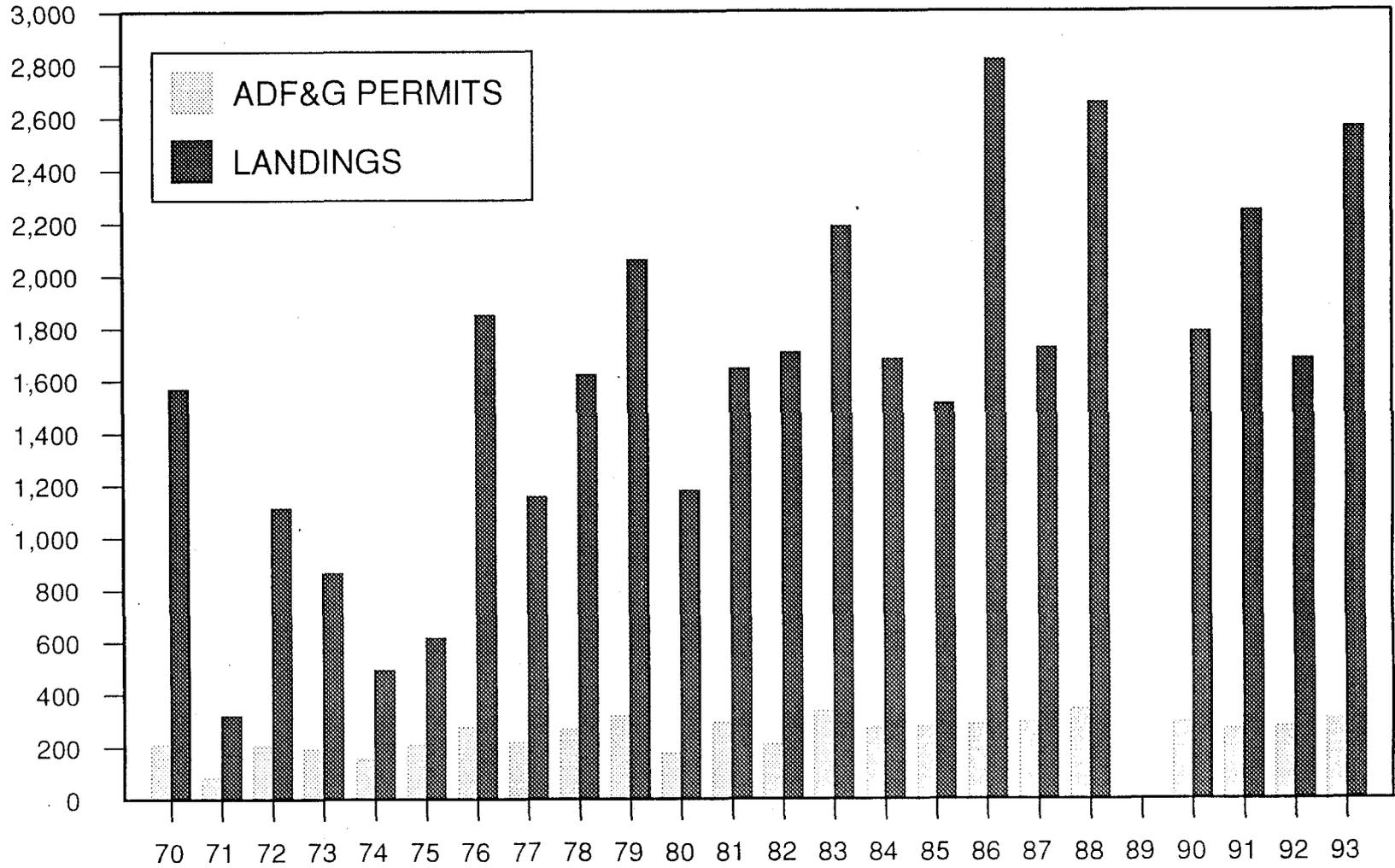


Appendix E.1. North Shelikof Sections permits and landings by year July 6-25, 1970-1993.



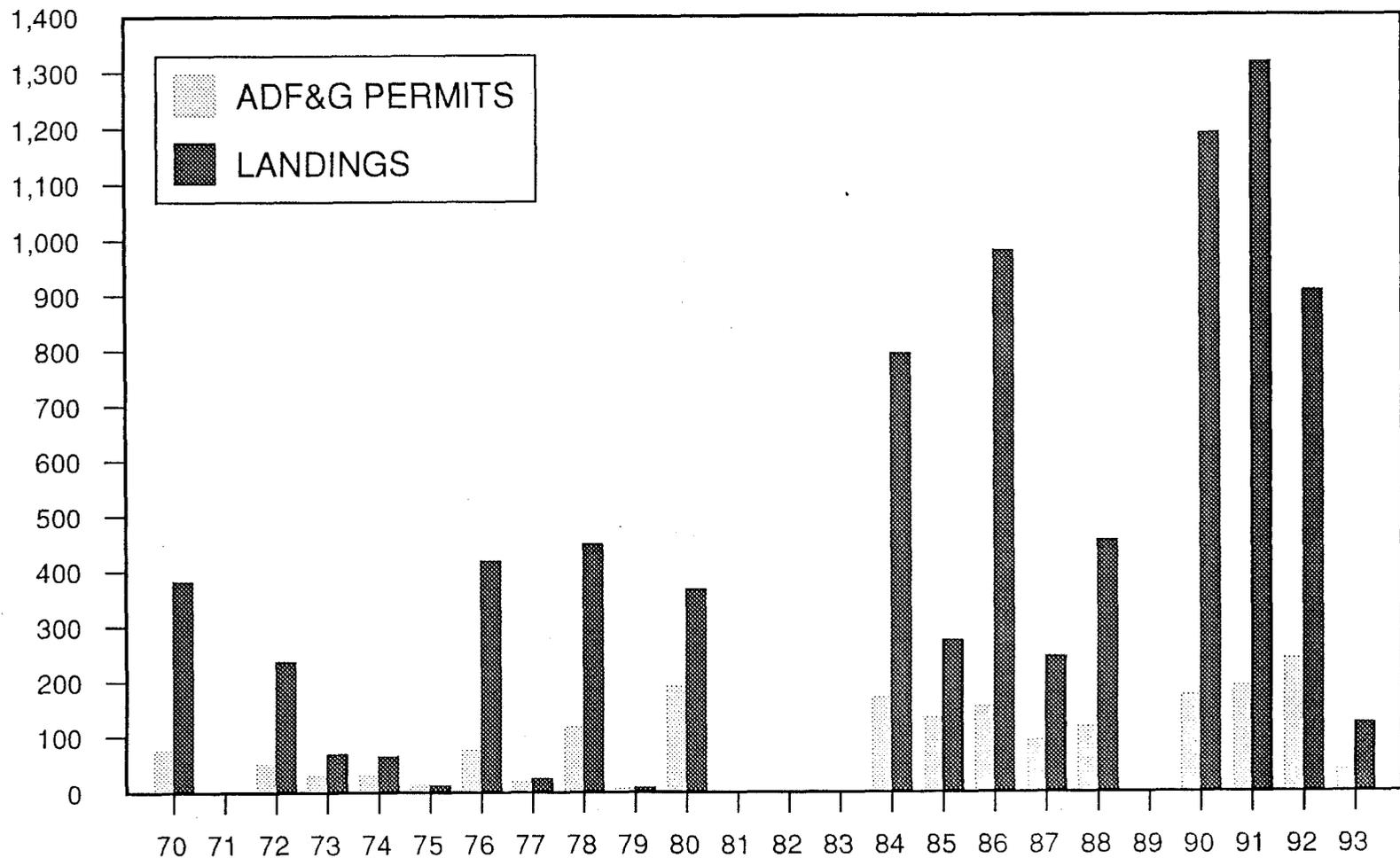
L1-AREA2

Appendix E.2. Southwest Afognak Section permits and landings by year  
July 6-25, 1970-1993.



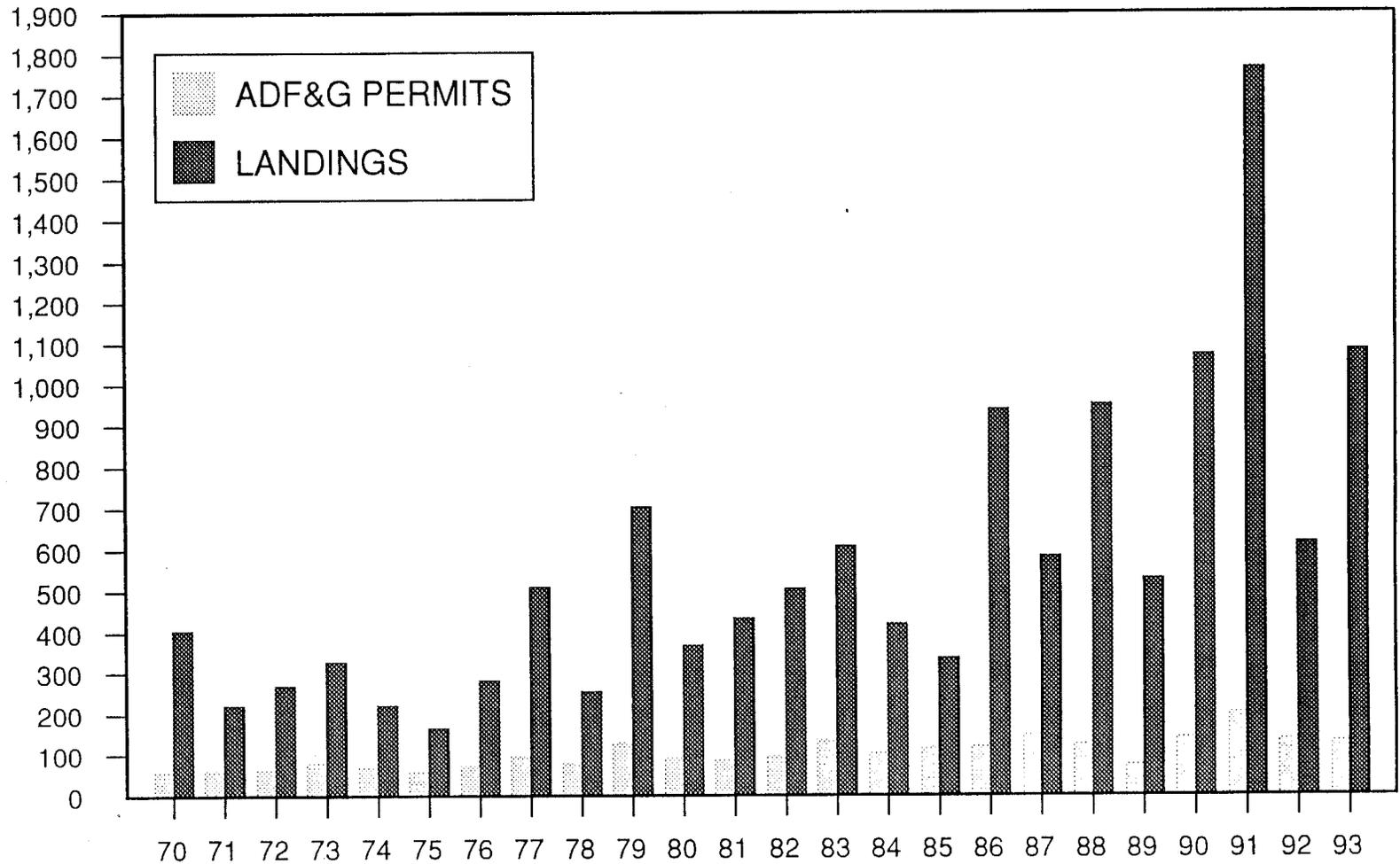
L1-AREA3

Appendix E.3. Northwest Kodiak District permits and landings by year  
July 6-25, 1970-1993.



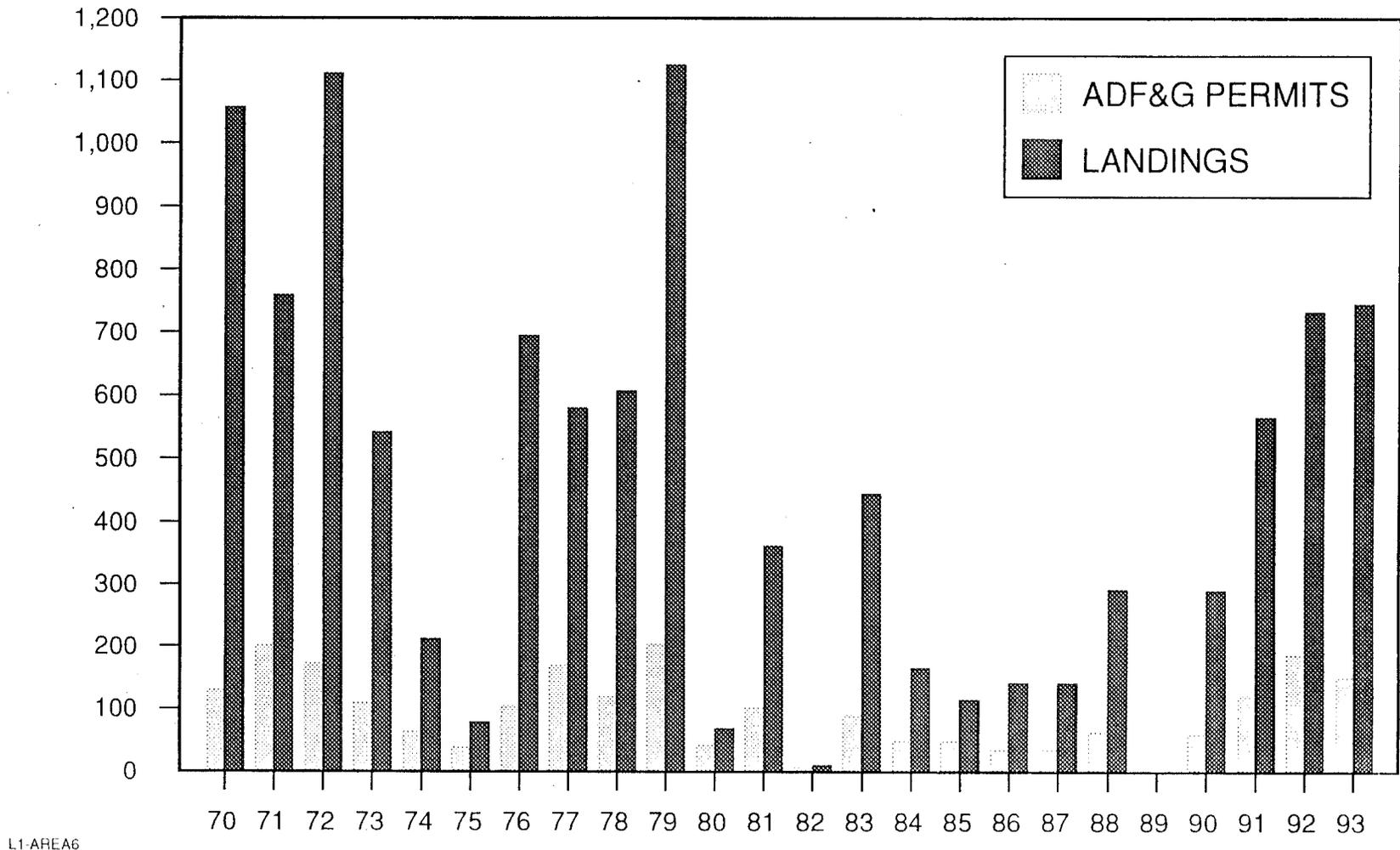
L1-AREA4

Appendix E.4. Southwest Kodiak District permits and landings by year  
July 6-25, 1970-1993.



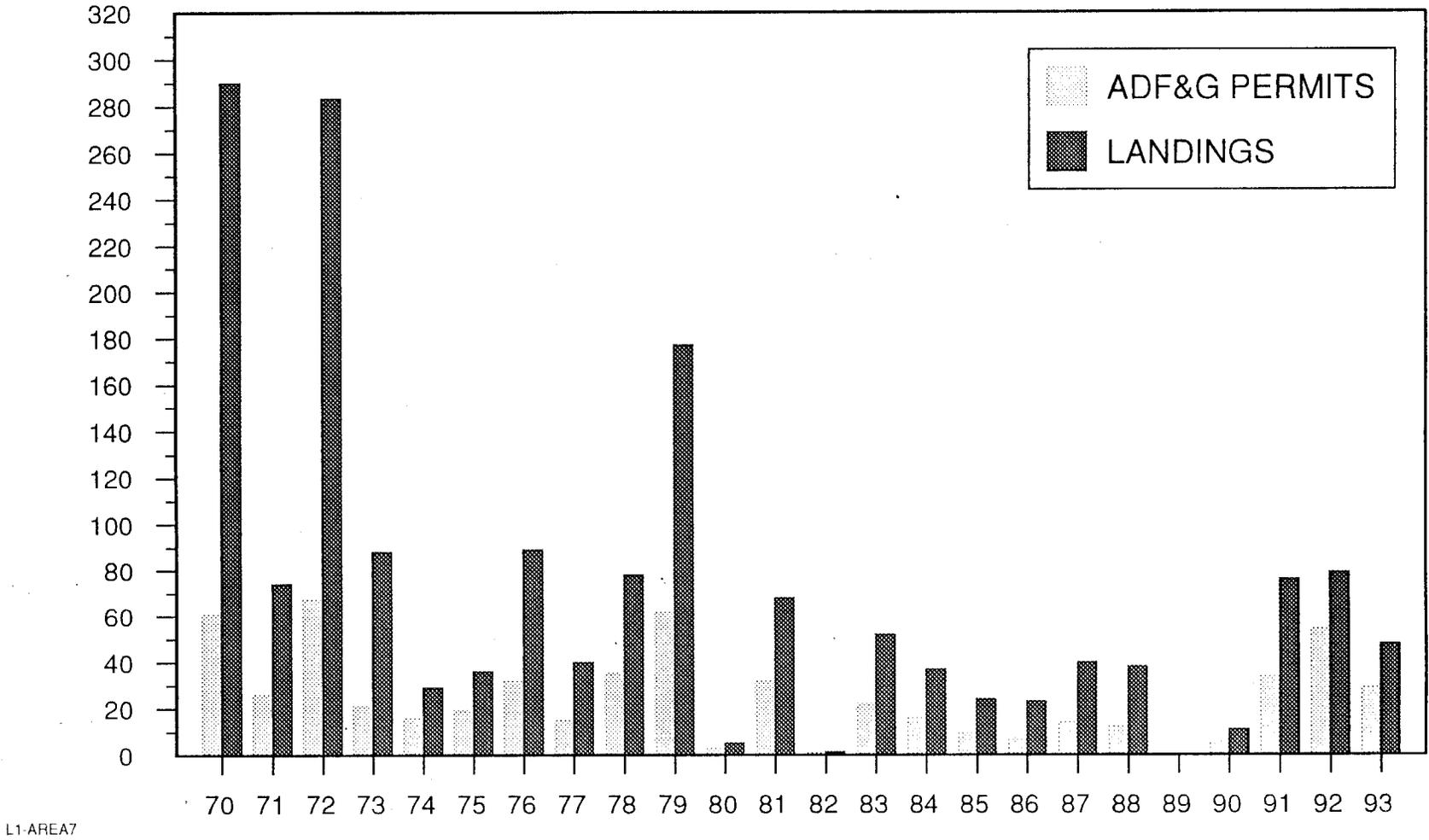
L1-AREA5

Appendix E.5. Alitak Bay District permits and landings by year July 6-25, 1970-1993.



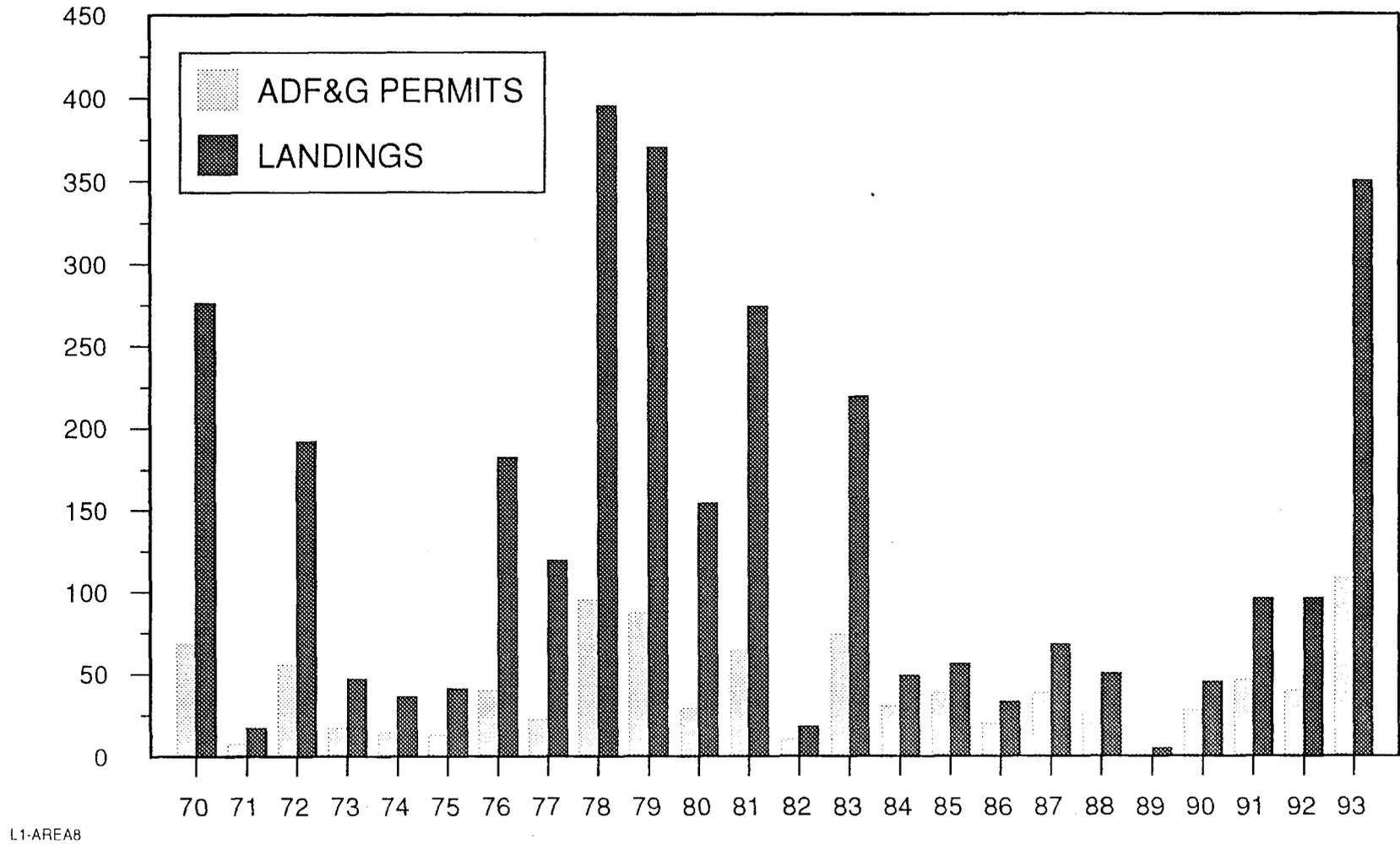
L1-AREA6

Appendix E.6. Eastside Kodiak District permits and landings by year July 6-25, 1970-1993.

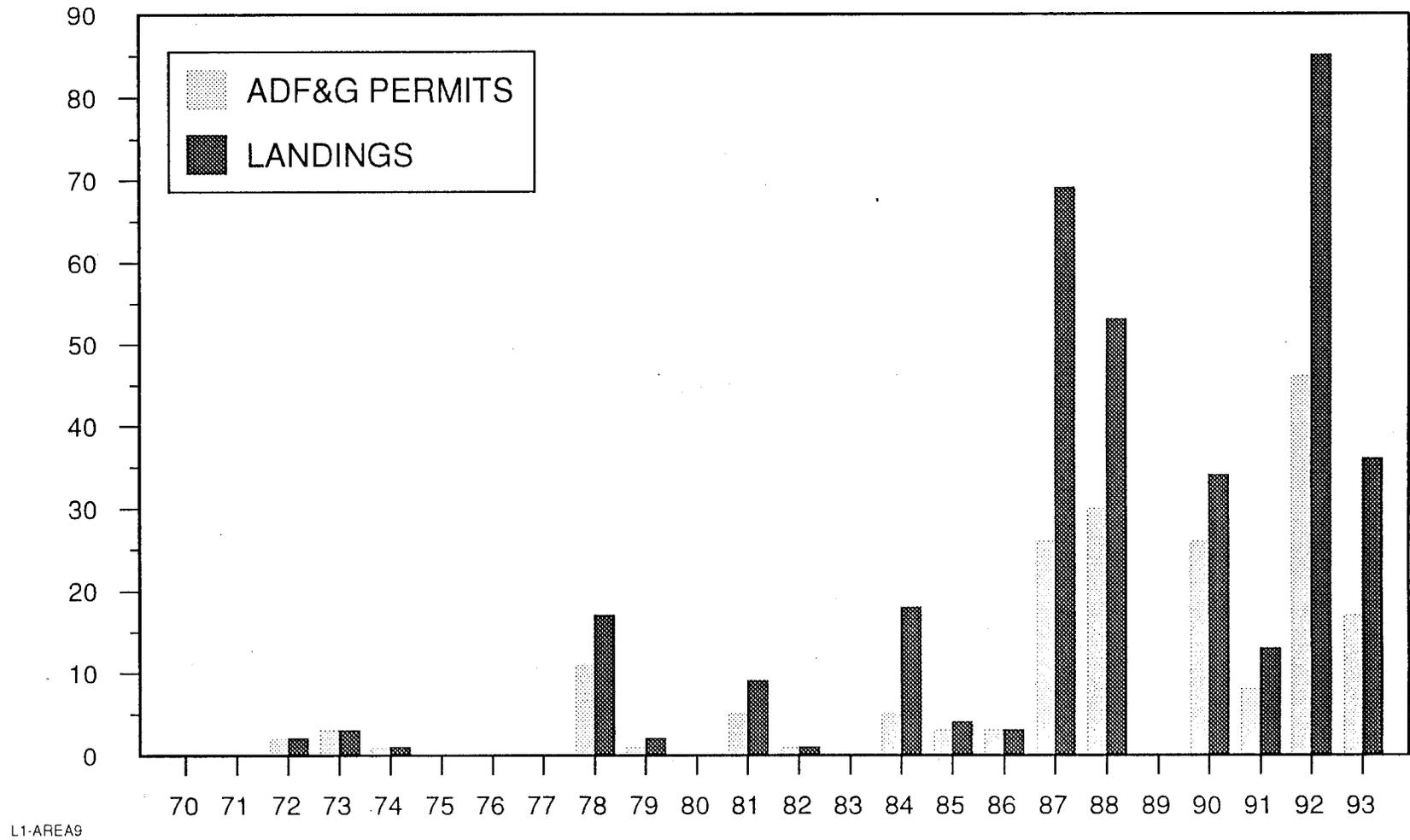


L1-AREA7

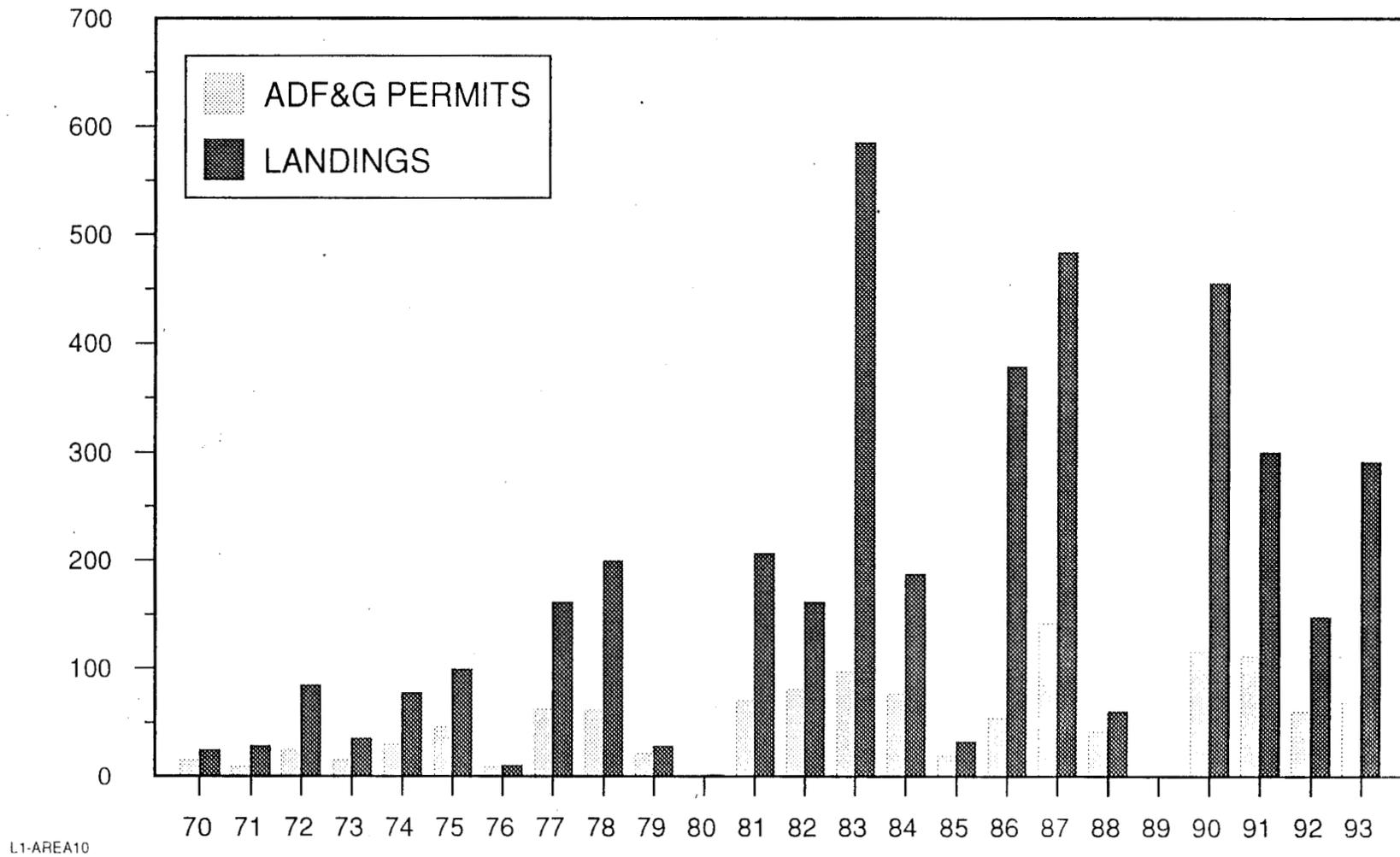
Appendix E.7. Northeast Kodiak District permits and landings by year  
July 6-25, 1970-1993.



Appendix E.8. Remaining Afognak Sections permits and landings by year  
July 6-25, 1970-1993.



Appendix E.9. Katmai and Alinchak Sections permits and landings by year  
July 6-25, 1970-1993.



Appendix E.10. Cape Igvak/Wide Bay Sections permits and landings by year  
July 6-25, 1970-1993.

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