

2A95-39

REVIEW OF THE 1995 LOWER COOK INLET AREA  
COMMERCIAL AND PERSONAL USE SALMON FISHERIES

REPORT TO THE ALASKA BOARD OF FISHERIES



by

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**LOWER COOK INLET**  
**REPORT TO THE ALASKA BOARD OF FISHERIES**  
**1995**

**COMMERCIAL SALMON FISHERY**

**INTRODUCTION**

The Lower Cook Inlet (LCI) salmon management area is bounded on the north by the latitude of Anchor Point, on the south by the latitude of Cape Douglas, and on the east by the longitude of Cape Fairfield (Figure 8). The area is divided up into five districts: Southern, Kamishak Bay, Barren Islands, Outer, and Eastern. Commercial salmon fishing occurs in all but the Barren Islands District. Purse seining and set gillnetting are the only allowable gear types. Approximately 80 seine permits exist for LCI, but the areas where set gillnetting is permitted is extremely limited.

*NOTE: PROPOSALS #69 and #70 seek to amend commercial LCI seine fishing areas, seasons, and weekly fishing periods, while PROPOSAL #198 addresses salmon seine vessel registration in LCI.*

Pink salmon have historically provided the bulk of the commercial salmon harvests, while sockeye salmon have become the most valuable species due to a variety of lake stocking and enhancement projects throughout the management area. Enhancement now plays a dominant role in both sockeye and pink salmon production in LCI.

**1995 SEASON OVERVIEW**

The 1995 Lower Cook Inlet salmon harvest of 3.15 million fish (Tables 1 and 4) was the third highest on record, surpassed only by the 1981 catch of 3.7 million fish and the 1979 catch of 3.3 million. It also broke a five-year succession of economically disastrous seasons, yielding an

an exvessel value of approximately \$2.76 million, double that of the 1994 season (Table 2). Additionally, the overall harvest exceeded the preseason forecast by over 40 percent. The following table compares the actual catch by species to the preseason forecast and the long-term average:

SPECIES	PROJECTED HARVEST	ACTUAL HARVEST <sup>a</sup>	1975-1994 AVERAGE
Chinook	No forecast <sup>b</sup>	2,303	1,142
Sockeye	253,700	265,104	173,437
Coho	No forecast <sup>b</sup>	17,697	12,815
Pink	1,865,500	2,848,462	1,072,520
Chum	75,400	15,635	103,484
<b>TOTAL</b>	<b>2,194,600</b>	<b>3,149,201</b>	<b>1,363,398</b>

<sup>a</sup> Preliminary data.

<sup>b</sup> Enhanced returns intended for recreational fisheries.

Once again, LCI commercial salmon harvests relied heavily on the success of hatchery and enhanced fish production. Pink salmon production from Tutka Hatchery, now owned and operated by Cook Inlet Aquaculture Association (CIAA), far exceeded all expectations, with combined harvests comprising nearly 80 percent of all species landed. The overall return of pinks to Tutka Hatchery, estimated at 2.61 million fish, set a new record for the facility, exceeding the previous record of 1.08 million set in 1981. Over 80 percent of the sockeye salmon harvest in both numbers of fish and exvessel value was attributed to joint Alaska Department of Fish and Game (ADF&G)/CIAA lake stocking and fertilization projects at Leisure and Hazel Lakes in the Southern District, Kirschner and Bruin Lakes in the Kamishak Bay District, and Bear Lake in the Eastern District. However, as has been the case since hatchery programs were taken over by private non-profit agencies in LCI, a significant portion of salmon harvest was utilized as hatchery cost recovery to recoup expenses incurred by the various stocking and enhancement projects throughout the management area. Nearly 40 percent of the total salmon harvest was taken by CIAA (Table 3) to support the lake stocking programs and Tutka Hatchery operations, equating to about one-fourth of the exvessel value of the LCI salmon

fishery. Strong natural returns of pink salmon in Windy Bay of the Outer District and Bruin Bay in the Kamishak Bay District also helped to boost the all-species harvest to over 3 million fish.

One notable factor affecting the amount and distribution of seine effort, and ensuing harvest of salmon, in LCI during the past two seasons was the change in policies by major processors regarding tender service. Previously processors routinely stationed a tender (or tenders) in remote districts in anticipation of salmon harvests and subsequent deliveries, even when run strengths and catches were marginal. This practice was abandoned in 1994, however, which forced seiners to devise their own means to transport fish from these remote areas to a processing plant in Homer or elsewhere. Some fishermen, due to equipment limitations and the high cost of contracting out, were unable to fish in remote areas, while others retained the flexibility to fish these traditional areas because of on-board chilling equipment.

## SUMMARY BY SPECIES

### Chinook Salmon

The 1995 harvest of chinook salmon, not normally a commercially important species in Lower Cook Inlet, was the highest catch on record at 2,303 fish, surpassing the previous record of 2,198 fish harvested in 1993 (Figure 1, Table 4) and double the long-term average. Virtually all of the catch came from the Southern District (Table 5) and can be attributed primarily to enhanced production at Halibut Cove Lagoon and Seldovia Bay. Set gillnetters accounted for 90 percent of the Southern District chinook catch, with purse seiners taking the remaining 10 percent.

### Sockeye Salmon

The 1995 LCI sockeye salmon harvest of 265,100 fish (Figure 2, Table 4) was the fifth highest during the last twenty years, exceeding the preseason forecast by almost 5 percent. Despite accounting for less than 10 percent of the LCI salmon harvest in numbers of fish, sockeyes

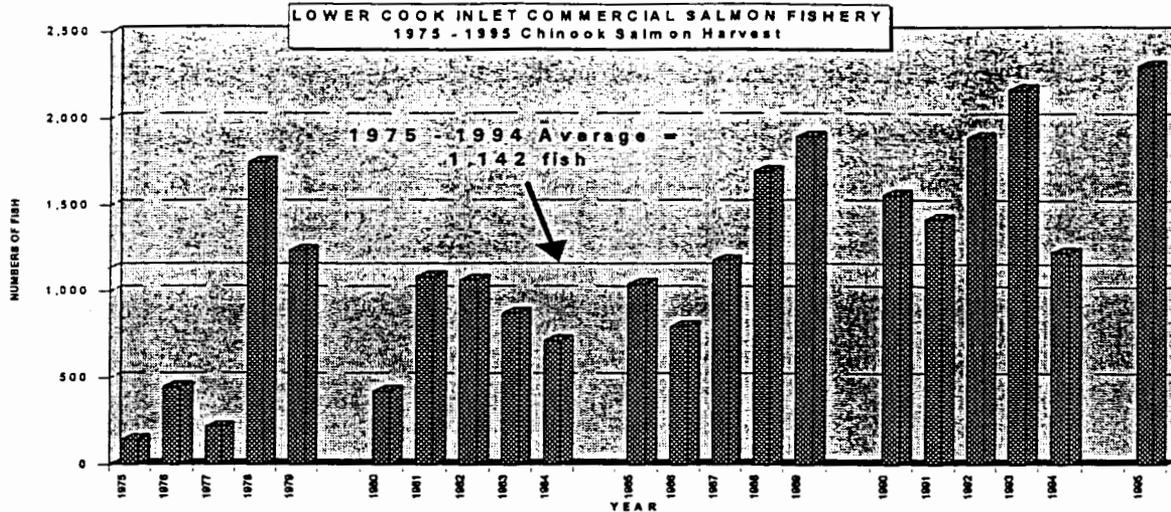


Figure 1. Historical commercial harvests of chinook salmon, Lower Cook Inlet, 1975 - 1995.

provided 50 percent of the exvessel value of the entire salmon fishery during 1995 (Tables 2 and 3). Harvests of enhanced runs of sockeye salmon returning to Leisure and Hazel Lakes in the Southern District, at a combined total of 145,100 fish, provided over half of the LCI sockeye total and were approximately 32 percent greater than the preseason combined forecast of 110,000 fish to both systems. In the Kamishak Bay District, enhanced returns to Kirschner and Bruin Lakes produced a harvest of 33,600 fish, nearly achieving the combined preseason forecast of 36,500 fish. However, it must be noted that approximately 5,000 sockeyes from the Bruin Lake

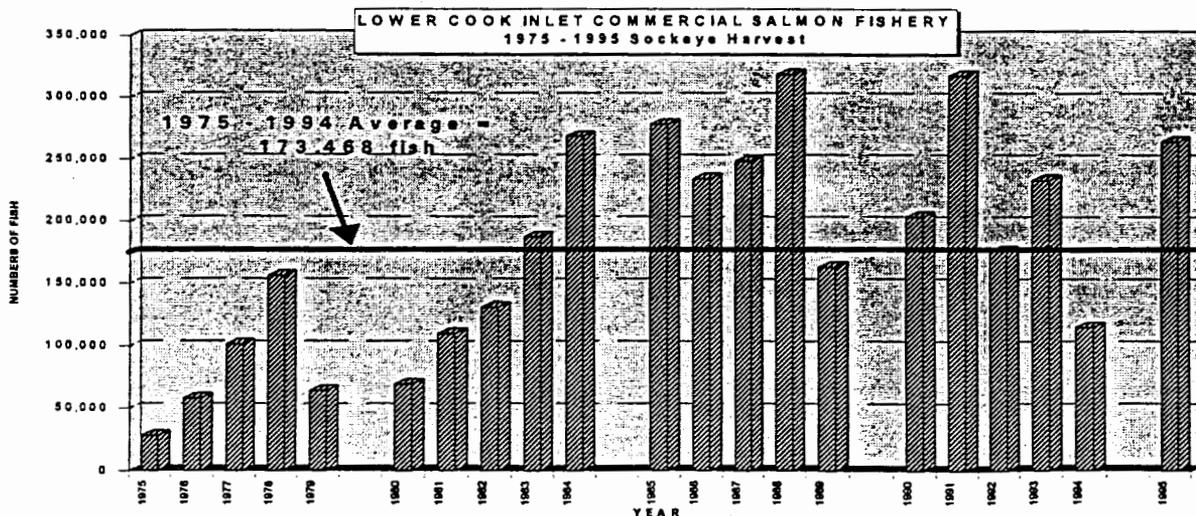


Figure 2. Historical commercial harvests of sockeye salmon, Lower Cook Inlet, 1975 - 1995.

return escaped the fishery and entered Bruin Lake Creek as escapement, but these fish were prevented from reaching Bruin Lake by a set of barrier falls in the creek. At Chenik Lake in the Kamishak Bay District, site of another ongoing sockeye stocking/fertilization project, no fishing was allowed since the return was expected to be poor. An outbreak of a naturally occurring viral disease known as Infectious Hematopoietic Necrosis (IHN), commonly affecting juvenile salmon and trout, has caused increased mortality to young salmon over the past several years in Chenik Lake, and subsequent adult returns to the system have been weak. At Bear Lake in Resurrection Bay of the Eastern District, a forecasted return of 10,000 sockeyes was far surpassed by an actual return of nearly 45,000 fish.

Natural returns of sockeye salmon to LCI systems were considered good, with all systems achieving escapement goals. In the Outer District, both Delight and Desire Lakes attained their respective escapement goals of 10,000 sockeyes each in the same year for the first time since 1987, with a small harvestable surplus taken by the seine fleet at Desire Lake (Table 6). At Mikfik Lake in the Kamishak Bay District, only limited effort on the return occurred during the season and virtually the entire run entered the system as escapement. At English Bay Lakes in the Southern District, the sockeye return achieved the upper end of the desired escapement range for only the second time in the last 20 years while still providing a small harvestable surplus to both subsistence and commercial set gillnetters in the Port Graham Subdistrict. The strong return to this system can be attributed to the success of an ongoing rehabilitation project originally initiated by ADF&G in the late 1980's and presently being undertaken by Chugach Regional Resources Commission in conjunction with the village of Nanwalek.

### Coho Salmon

The commercial harvest of 17,697 coho salmon in 1995 represented the highest LCI total for this species since 1991 and the fourth highest over the last twenty years (Figure 3, Table 4). The harvest was greatest in the Kamishak Bay District (Table 7), followed in order by the Southern,

Eastern, and Outer Districts, but catches in the Eastern District were primarily from the Seward Silver Salmon Derby and CIAA cost recovery at Bear Lake.

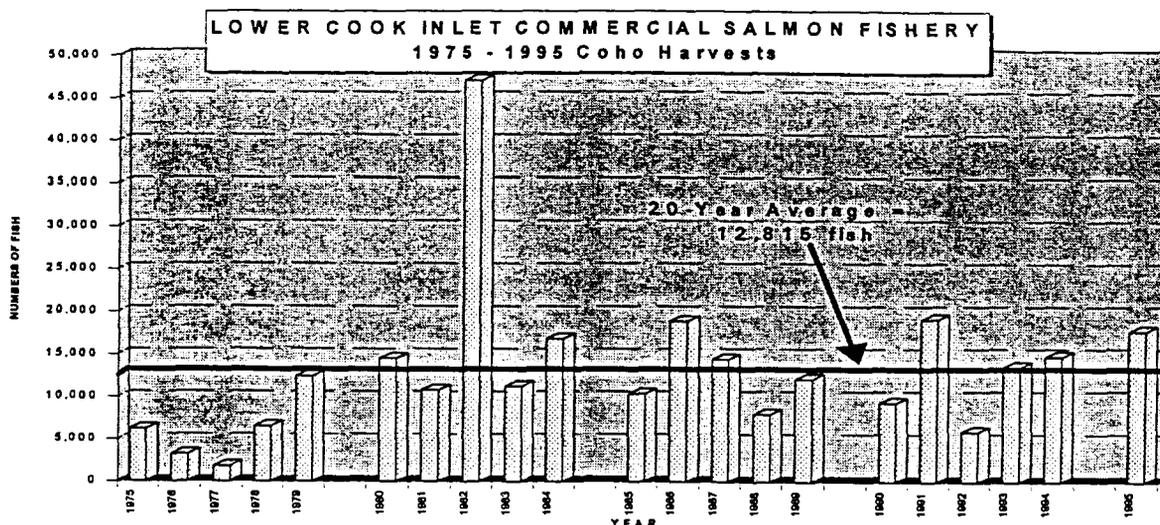


Figure 3. Historical commercial harvests of coho salmon, Lower Cook Inlet, 1975 - 1995.

Coho run assessment in LCI is limited, with commercial, sport, and personal use harvests providing the best indicators of run strength, and the returns during 1995 were considered strong. Despite the relative strength of the returns, low prices and the lack of remote tender service discouraged the majority of the seine fleet from targeting on this species late in the season. No aerial surveys were flown specifically for coho salmon due to the heavy rainfall experienced throughout the management area in late August and early September.

### Pink Salmon

Returns of pink salmon, the dominant species in numbers of commercially harvested fish in LCI, topped even the most optimistic expectations in 1995, with an overall harvest of 2.85 million fish (Figure 4, Table 4). This number is over two and one-half times the 20-year average and represents the third highest catch on record, with only the 1981 and 1979 catches of 3.28 and 2.99 million pinks, respectively, being greater. Approximately 87 percent (2.475 million pinks) of the total was taken in the Southern District (Table 8), the bulk of which came as a

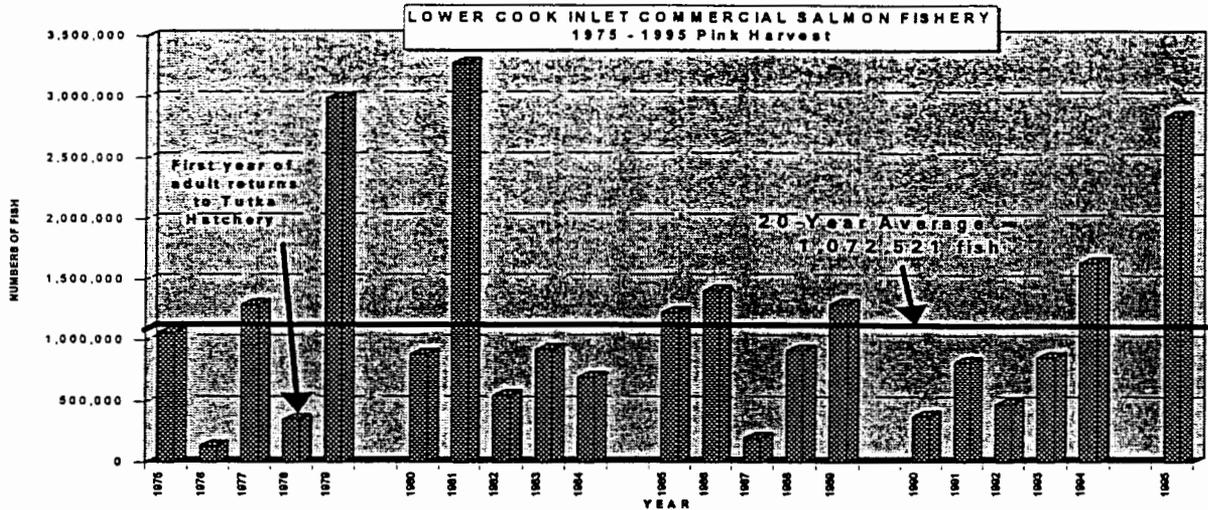


Figure 4. Historical commercial harvests of pink salmon, Lower Cook Inlet, 1975 - 1995.

direct result of Tutka Hatchery production. However, half (1.213 million pinks) of the Southern District total was utilized for Tutka Hatchery cost recovery. The estimated hatchery return, including escapement, brood stock, and commercially harvested fish, was 2.61 million pinks, a new record for the facility and about 70 percent greater than the preseason projection of 1.525 million fish.

The Outer District produced the greatest contribution of naturally produced pinks in LCI, with a total harvest of 192,000 fish (Table 8). However, unlike most years when the Port Dick area normally provides the bulk of the harvests, the majority of the catch came from Windy Bay Subdistrict, while Port Dick saw no effort due to returns far below projections. East Nuka, Port Chatham, and, for the first time in many seasons, Rocky River Subdistricts also added to the Outer District harvests in 1995. In the Kamishak Bay District, Bruin Bay Subdistrict experienced a strong return of pinks and produced the preponderance of the district's harvest. Pink salmon escapements in all districts of Lower Cook Inlet were generally good as most primary systems approached or achieved escapement goals. Notable exceptions were streams in Port Dick of the Outer District, where returns were far below forecast, and Port Graham River in the Southern District.

## Chum Salmon

The 1995 commercial chum salmon harvest of 15,600 fish was the seventh successive below-average season in Lower Cook Inlet, representing only about 15 percent of the 20-year average (Figure 5, Table 4). The low numbers were somewhat anticipated based on the recent years' trend of weak returns, and as a result conservative fishing schedules were anticipated in an effort to secure adequate escapements and reverse the declines in chum salmon numbers. The conservative strategy was hardly necessary, however, as low prices coupled with the lack of tender service in remote districts discouraged the fleet from targeting this species. As a result, a

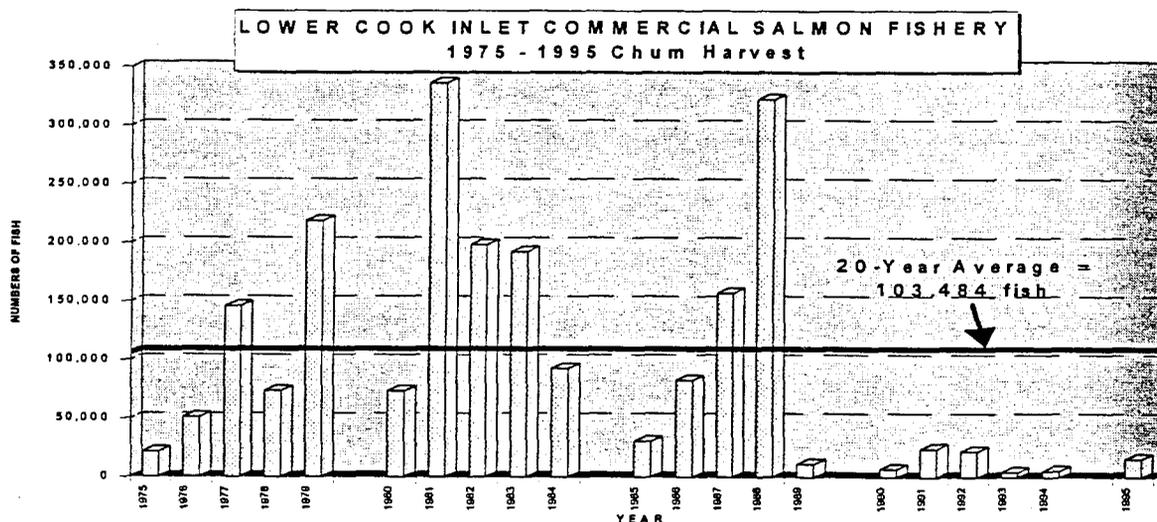


Figure 5. Historical commercial harvests of chum salmon, Lower Cook Inlet, 1975 - 1995.

number of systems, particularly those in northern Kamishak Bay, achieved their minimum escapement goals. One major system, McNeil River in the Kamishak Bay District, failed to attain the lower end of its escapement goal range of 20,000 to 40,000 fish for the sixth straight year (Table 9).

## SET GILLNET FISHERY

An Area H set gillnet permit allows fishing in both Upper and Lower Cook Inlet, but only five beaches in Lower Cook Inlet, all located along the south shore of Kachemak Bay in the Southern

District (Figure 9), where commercial set gillnets may be used. The limited area provides only enough productive fishing sites to accommodate approximately 25 set gillnet permits.

*NOTE: Although referring to subsistence salmon gillnet fishing, PROPOSAL #519 seeks to create a subsistence fishery in the vicinity of Seldovia Bay, an area where commercial gillnet fishing is currently allowed to take place during the salmon season.*

The 1995 LCI set gillnet harvest totaled 70,600 fish, slightly greater than the 20-year average (Figure 6, Table 10) and the highest catch since 1982. Catches were dominated by pinks at 59 percent followed by sockeyes at 27 percent. For comparison, typical species composition in the commercial set gillnet fishery during the past decade has been 45 percent sockeyes, 39 percent pinks, 7 percent cohos, 6 percent chums, and 3 percent chinooks. Catches of chinook salmon, at 2,100 fish, were the highest ever recorded and nearly triple the 20-year average. Enhancement

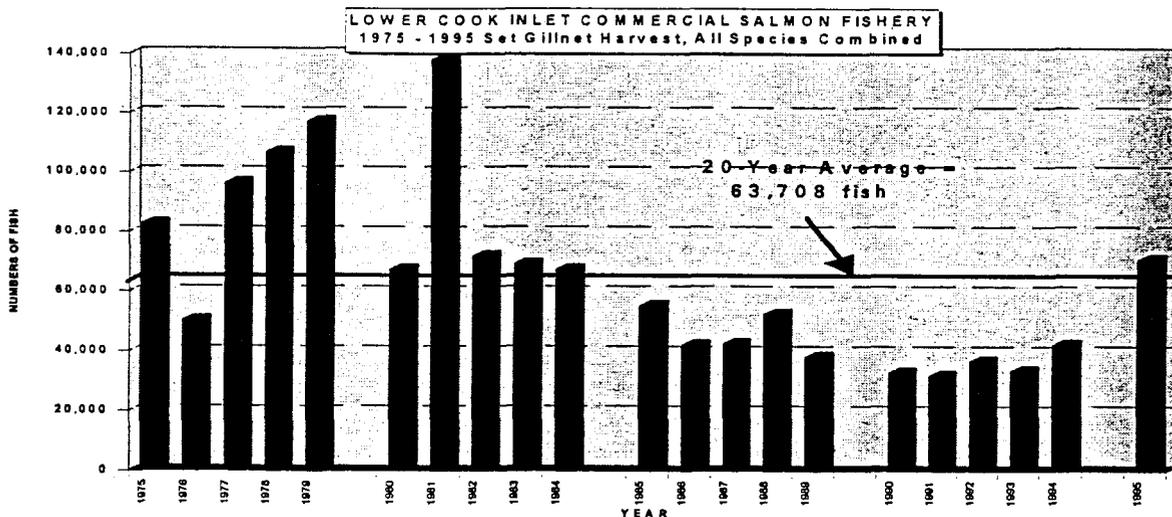


Figure 6. Historical commercial set gillnet salmon harvests, Lower Cook Inlet, 1975 - 1995.

efforts directed at recreational fisheries in Seldovia Bay and Halibut Cove Lagoon are primarily responsible for the increased commercial gillnet chinook catch during 1995.

## PERSONAL USE SALMON FISHERY

### KACHEMAK BAY FALL COHO SALMON PERSONAL USE FISHERY

The Southern District (Kachemak Bay) fall coho salmon gillnet fishery dates back prior to statehood under varying names, being known as a "personal use" fishery during the years 1986-1990 and 1993, and as a "subsistence" fishery in 1991, 1992, and 1994. Numerous court rulings have affected the status of this fishery over the past 15 years. Board of Fisheries actions during the fall 1992 meeting, creating a personal use fishery for the 1993 season, were voided by subsequent court action after the season, resulting in a subsistence fishery for the 1994 season. Yet another court action after the 1994 fishery reestablished the "subsistence" and "non-subsistence" areas originally created by the Board in 1992, and because most of Kachemak Bay was included in a "non-subsistence" area, the subsistence fishery and the regulations governing it were no longer valid. The Board responded by re-adopting personal use regulations governing this fishery into permanent regulation for the 1995 season and rescinding the subsistence regulations formerly governing the fishery.

The target species in the Kachemak Bay gillnet fishery has been coho salmon, with returning fish a mixture of natural stocks bound primarily for the Fox River drainage at the head of Kachemak Bay and enhanced runs bound for the Homer Spit fishing lagoon and Fox Creek near the head of Kachemak Bay. The regulations governing the fishery are found in the Personal Use Coho Salmon Fishery Management Plan (5 AAC 77.549), which directs ADF&G to close the fishery when an estimated 2,500 to 3,500 coho salmon are harvested. This amount was determined by the Board to be appropriate after they had reviewed historical harvests in years prior to enhancement.

All regulations which had applied to the 1994 subsistence fishery remained essentially unchanged for the 1995 personal use fishery. The regulatory opening date for the fishery, August 16, was delayed by Emergency Order (E.O.) until August 17 to prevent the fishery from opening in

darkness and creating logistical difficulties for setting gear and enforcement. Legal gear was limited to single set gillnet not exceeding 35 fathoms in length, 45 meshes in depth, and 6 inches in mesh size. Nets were not permitted more than 500 feet from the mean high water mark, and a net could not be set offshore of another net. A permit from the Homer office was required, with an Alaska resident sport fishing license necessary to obtain a permit. The seasonal limit was 25 salmon per head of household and 10 additional salmon per each dependent. There were two 48-hour scheduled fishing periods each week, from Monday 6:00 a.m. until Wednesday 6:00 a.m. and Thursday 6:00 a.m. until Saturday 6:00 a.m.

As has been the case during recent personal use fisheries in LCI, the Department requested voluntary daily reporting from each permit holder during the fishery. Based on those voluntary reports through the first 24-hours of fishing, early reports from the second fishing period, and fishery performance data from the previous five years, the staff estimated that the guideline harvest range would be achieved prior to the end of the second (48-hour) open fishing period. Therefore, E.O. No. 2-F-H-036-95 was issued closing the fishery effective at 7:00 a.m. Tuesday, August 22, for the remainder of the season. The closure time coincided with a low tide, facilitating removal of gear. Total fishing time allowed was 73 hours.

A total of 235 permits was issued for the 1995 fishery (Table 11), the lowest since 1977 and continuing a declining trend in the number of permits issued during this decade. Actual fishing effort was also down, representing only about one-third of the peak 1990 level (Table 11). A total of 231 permit holders (98%) reported their catches by phone or returned permits. Of this number, 177 permit holders (75%) actively fished, 54 (23%) did not fish at all, and the remaining 4 permit holders (2%) have not reported. A total of 227 permit holders (97%) have actually returned their permits as required by regulation. Based on permits actually returned and voluntary catch reports, the harvest was estimated to be 2,915 coho salmon (Figure 7, Table 11), 312 pink salmon, 103 sockeye salmon, 102 chinook, and 5 chums. The coho total represents roughly the mid-point of the guideline harvest range of 2,500 to 3,500 fish.

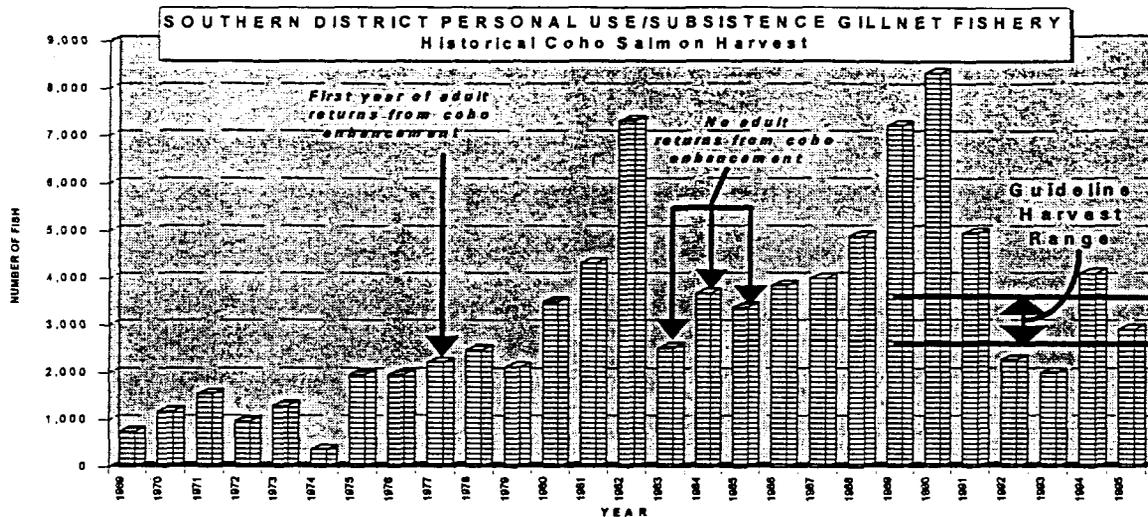


Figure 7. Historical harvests of coho salmon in the Southern District Coho Salmon Personal Use/Subsistence Set Gillnet Fishery, Lower Cook Inlet, 1969 - 1995.

The 1995 Southern District personal use fishery was the second shortest on record, longer only than the 1994 fishery, which had a total of 72 hours actual fishing time. The major factor which led to the short duration of the fishery was the strength of the return. Because coho assessment is limited in Lower Cook Inlet, sport and commercial catches are normally utilized as indicators of run strength. Unfortunately, commercial catches in Lower Cook Inlet did not accurately reflect the strength of the 1995 coho return due to a lack of directed effort. Informal observations in the local sport fisheries, however, suggested very strong returns. This information, along with catch rates from the first 24-hour fishing period as well as previous experience managing this fishery, led the staff to project that a harvest within the guideline range would be achieved prior to the end of the second (48-hour) fishing period.

The 1995 fishery once again demonstrated the extreme popularity of the east side of the Homer Spit as the most sought after fishing area, undeniably due to the coho enhancement project at the Homer Spit "fishing lagoon". Prior to enhancement, the Spit was only considered average in terms of harvest productivity. The Spit's easy road access and the enhanced coho return have combined to encourage fishermen to clamor for fishing sites on the Spit, a situation which resulted in numerous violations during previous gillnet fisheries. The staff made a concerted effort prior to this year's first opening to inform the public of the anticipated short duration of

the fishery. As in recent years, this prior knowledge of the brevity of the fishery led to the usual intense competition for desirable fishing sites, especially along the east side of the Homer Spit. Unlike previous years, however, compliance with the regulations along this hotly contested fishing area was better than any recent year, with Fish & Wildlife Protection (FWP) officers reporting only one violation, which did not result in a citation because one of the parties involved voluntarily removed their net. Perhaps the convictions of several violators during the 1994 fishery, combined with pre-fishery cautionary warnings contained in summary handouts, sufficiently deterred similar violations in 1995.

Despite the absence of violations in 1995, a new twist was added to the gillnet fishery when one permit holder set a gillnet within waters of the Homer Small Boat Harbor, apparently in reaction to the large numbers of cohos observed jumping there during the first open fishing period. Ironically, this activity was initiated by members of local law enforcement agencies, who determined that these waters were open to fishing. This determination was confirmed when the parties queried the local FWP officer. The Homer Harbormaster requested that the Department close these waters, citing hazards posed to boaters by nets within waters of the harbor. The staff concurred with the Harbormaster's assessment and, with additional requests from the U.S. Coast Guard Marine Safety Detachment in Kenai, issued E.O. # 2-F-H-034-95, closing waters of the Homer Harbor to personal use gillnet fishing for the remainder of the 1995 season. Although not biological in nature, the issue of safety could not be ignored, and in this instance the staff felt compelled to act based on input from the agencies mentioned above.

Normally aerial surveys of Clearwater Creek, the major coho index stream at the head of Kachemak Bay, are conducted in early September to gauge escapements. Heavy and continuous rainfall during late August and September precluded such surveys, therefore no coho escapement information is available.

Even though coho returns were strong, without the contribution of enhanced fish to the catches, the 1995 personal use fishery would undoubtedly have been more prolonged and therefore similar to historical fisheries prior to enhancement. The fishery in 1996 is expected to be very

similar to the 1995 fishery. Participation is not likely to decline any further but could be affected by other alternative fisheries elsewhere in Cook Inlet. Although limited as an inseason management tool, voluntary catch reports will once again be employed to help determine an appropriate closure time for the 1996 fishery. Based on experience gained during the past six years' fisheries, it should be possible to keep the coho harvest within the guideline range.

## **1996 LOWER COOK INLET SALMON HARVEST PROJECTIONS**

### **SOCKEYE SALMON**

Sockeye salmon harvest projections in Lower Cook Inlet are based on both forecasts of fish returning to enhancement sites and average historical harvests of natural runs. The preliminary 1996 forecasted harvest of sockeye salmon is nearly 293,000 fish, over 10 percent greater than the 265,000 fish landed in 1995 and about 25 percent more than the average annual catch of 229,000 fish during the last decade. If realized, this harvest would represent a new record for sockeye salmon in LCI. Returns to Leisure and Hazel Lakes in the Southern District, with a harvest forecast of 120,000 fish, to Bear Lake in the Eastern District, with a total return expected to approach 30,000 fish, and to Kirschner and Bruin Lakes in the Kamishak Bay District, with a combined harvest forecast of 45,000 fish, are once again expected to be the major contributors to enhanced sockeye production. Continuing the trend of decreased production due to the IHN virus, no harvest is expected to occur at Chenik Lake in Kamishak Bay. Natural returns to the Southern, Outer, Eastern, and Kamishak Bay Districts are expected to contribute up to 87,000 sockeyes to the 1996 harvests.

### **PINK SALMON**

The 1996 LCI pink salmon harvest is projected to exceed 2 million fish in 1996, despite the fact that even-year returns are generally weaker than odd years. Returns to Tutka Bay Hatchery are once again expected to provide the bulk of the catch, contributing 1.415 million pinks to the

harvest. Pink salmon escapements to most major systems in 1994 were considered poor, and the resulting natural production is only expected to contribute up to 258,000 fish to the 1996 harvests.

### CHUM SALMON

Based solely on the average catch from 1980 through 1995, chum salmon harvests in LCI during 1996 could approach 98,000 fish. However, LCI runs of chum salmon have been below average for the last seven seasons, and despite fair escapements to some chum systems during those early years, the resultant returns have generally failed to achieve preseason expectations. The chum projection for 1996 should similarly be viewed with caution.

### CHINOOK AND COHO SALMON

No formal harvest forecast is prepared for chinook or coho salmon in LCI. However, average annual harvests since 1980 indicate that about 1,300 chinook and 15,200 coho salmon can be expected to contribute to LCI commercial harvests in 1996.

The following table summarizes the preliminary projected harvest figures by species in the Lower Cook Inlet management area during 1996:

Species	Harvests of Enhanced Returns	Harvests of Natural Returns <sup>a</sup>	Total Harvest
Chinook	<sup>b</sup>	1,300	1,300
Sockeye	205,500 <sup>c</sup>	87,400	292,900
Coho	<sup>b</sup>	15,200	15,200
Pink	1,415,000 <sup>c</sup>	258,100	1,673,100
Chum	0	98,400	98,400
<b>TOTAL</b>	<b>1,620,500</b>	<b>460,400</b>	<b>2,080,900</b>

<sup>a</sup> Harvest forecasts for naturally produced chinook, sockeye, coho, and chum salmon are simply average commercial harvests during the years 1980 - 1995.

<sup>b</sup> Returns of chinook and coho salmon as a result of enhancement projects in Lower Cook Inlet are intended for recreational fisheries but are expected to contribute to commercial catches.

<sup>c</sup> Includes common property plus cost recovery harvests.

Table 1. Commercial, hatchery, and derby salmon catches in numbers of fish by species, district, and gear type, Lower Cook Inlet, 1995.

<i>District</i>		Chinook	Sockeye	Coho	Pink	Chum	Total
Gear Type							
<b><i>Southern</i></b>							
Commercial:							
Set gillnet		2,078	19,394	3,561	41,654	3,958	70,645
Purse seine		211	132,585	1,584	1,220,314	571	1,355,265
Hatchery:							
Purse seine		<u>0</u>	<u>12,500</u>	<u>4</u>	<u>1,213,322</u>	<u>0</u>	<u>1,225,846</u>
<b>Total</b>		<b>2,289</b>	<b>164,479</b>	<b>5,149</b>	<b>2,475,310</b>	<b>4,529</b>	<b>2,651,756</b>
<b><i>Outer</i></b>							
Commercial:							
Purse seine		12	17,642	1,272	192,098	474	211,498
<b><i>Eastern</i></b>							
Commercial:							
Purse seine		0	25,687	918	12,000	330	38,935
Derby:							
Hook & Line		0	0	2,960	0	0	2,960
Hatchery:							
Weir		<u>0</u>	<u>28,869</u>	<u>1,314</u>	<u>0</u>	<u>0</u>	<u>22,183</u>
<b>Total</b>		<b>0</b>	<b>46,556</b>	<b>5,192</b>	<b>12,000</b>	<b>330</b>	<b>64,078</b>
<b><i>Kamishak</i></b>							
Commercial:							
Purse seine		2	31,077	6,084	169,039	10,300	216,502
Hatchery:							
Purse seine		<u>0</u>	<u>5,350</u>	<u>0</u>	<u>0</u>	<u>2</u>	<u>5,367</u>
<b>Total</b>		<b>2</b>	<b>36,427</b>	<b>6,084</b>	<b>169,054</b>	<b>10,302</b>	<b>221,869</b>
LCI Total		2,303	265,104	17,697	2,848,462	15,635	3,149,201
Percent		0.07	8.42	0.56	90.45	0.50	100.00
1975-94 Average		1,142	173,438	12,815	1,072,521	103,484	1,363,399

Table 2. Exvessel value of the commercial salmon harvest in thousands of dollars by species, Lower Cook Inlet, 1975 - 1995<sup>a</sup>.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
1975	3	106	27	1,456	71	1,663
1976	7	287	13	207	217	731
1977	7	620	9	1,719	604	2,959
1978	62	1,516	52	370	341	2,341
1979	36	621	68	4,495	1,097	6,317
1980	12	336	64	1,196	298	1,906
1981	18	740	69	5,334	1,346	7,507
1982	28	827	367	406	820	2,448
1983	20	704	57	696	513	1,990
1984	23	1,393	120	635	242	2,413
1985	47	1,637	86	974	78	2,822
1986	21	1,414	132	1,245	201	3,013
1987	27	1,951	118	295	598	2,989
1988	32	3,812	127	2,237	2,548	8,756
1989	33	1,213	59	1,660	39	3,004
1990	29	1,287	28	306	31	1,681
1991 <sup>b</sup>	19	1,115	36	275	48	1,493
1992 <sup>b</sup>	30	1,152	19	212	53	1,466
1993 <sup>b</sup>	27	802	41	287	7	1,164
1994 <sup>b</sup>	18	496	93	745	9	1,361
1995 <sup>b</sup>	48	1,377	62	1,245	24	2,755
1975-94 Avg.	24	1,101	79	1,238	458	2,901
1995 % of Total	1.74%	49.97%	2.25%	45.17%	0.86%	100.01%

<sup>a</sup> Values obtained by using the formula: (average price per lb.) x (average weight per fish) x (catch) = Exvessel value; average prices are determined only from fish ticket information and may not reflect retroactive or postseason adjustments.

<sup>b</sup> Includes hatchery cost recovery.

Table 3. Exvessel value<sup>a</sup> of the commercial salmon catch in numbers of dollars by species, gear type, and harvest type, Lower Cook Inlet, 1995.

	Chinook	Sockeye	Coho	Pink	Chum	Total
<b>COMMON PROPERTY - PURSE SEINE</b>						
No. of Fish	225	206,930	9,858	1,593,451	11,675	1,822,139
Pounds	2,543	951,827	68,867	4,781,117	70,248	5,874,602
Price/lb.	\$0.85	\$1.11	\$0.47	\$0.15	\$0.23	
Value	\$2,162	\$1,056,528	\$32,367	\$717,168	\$16,157	\$1,824,382
<b>COMMON PROPERTY - SET GILLNET</b>						
No. of Fish	2,078	19,394	3,561	41,654	3,958	70,645
Pounds	38,475	106,593	29,688	158,703	29,333	362,792
Price/lb.	\$1.19	\$1.20	\$0.55	\$0.16	\$0.26	
Value	\$45,785	\$127,912	\$16,328	\$25,392	\$7,627	\$223,044
<b>HATCHERY - PURSE SEINE &amp; WEIR</b>						
No. of Fish		38,780	1,314	1,213,357	2	1,253,453
Pounds		182,114	11,734	3,347,306	11	3,541,165
Price/lb.		\$1.07	\$0.08	\$0.15	\$0.27	
Value		\$195,341	\$962	\$502,096	\$3	\$698,402
<b>SPORT FISHING DERBY - HOOK &amp; LINE</b>						
No. of Fish			2,960			2,960
Pounds			20,725			20,725
Price/lb.			\$0.60			
Value			\$12,435			\$12,435
<b>TOTAL ALL GEARS</b>						
No. of Fish	2,303	265,104	17,697	2,848,462	15,635	3,149,201
Pounds	41,018	1,240,534	131,014	8,287,126	99,592	9,799,284
Price/lb.	\$1.16	\$1.11	\$0.47	\$0.15	\$0.23	
Value	\$47,947	\$1,376,993	\$62,092	\$1,244,656	\$23,787	\$2,755,475

<sup>a</sup> Exvessel value is calculated from average prices, which are determined only by fish ticket information and may not reflect retroactive or postseason adjustments.

Table 4. Commercial salmon catch in numbers of fish by species, Lower Cook Inlet, 1975 - 1995<sup>a</sup>.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
1975	142	28,142	6,211	1,063,338	21,646	1,119,479
1976	450	58,159	3,216	136,445	50,822	249,092
1977	217	101,597	1,798	1,293,932	145,789	1,543,333
1978	1,747	156,404	6,529	352,561	73,518	590,759
1979	1,238	64,417	12,393	2,990,929	218,490	3,287,467
1980	424	69,442	14,505	889,703	73,492	1,047,566
1981	1,086	110,255	10,776	3,279,183	336,093	3,737,393
1982	1,066	131,320	46,892	551,589	198,185	929,052
1983	873	187,645	11,219	927,607	192,319	1,319,663
1984	714	268,950	16,797	700,622	92,540	1,079,623
1985	1,043	278,694	10,327	1,229,708	30,640	1,550,412
1986	796	234,861	18,852	1,408,293	82,688	1,745,490
1987	1,179	248,848	14,354	201,429	157,018	622,828
1988	1,694	319,008	7,946	921,296	321,911	1,571,855
1989	1,893	163,271	12,089	1,296,926	11,305	1,485,484
1990	1,560	203,895	9,297	383,670	6,951	605,373
1991	1,419	317,947	19,047	828,709	24,232	1,191,354
1992	1,891	176,644	5,902	479,768	22,203	686,408
1993	2,168	233,834	13,477	866,774	4,367	1,120,620
1994	1,231	115,418	14,673	1,647,929	5,469	1,784,720
1995	2,303	265,104	17,697	2,848,462	15,635	3,149,201
20-Year Avg.	1,142	173,438	12,815	1,072,521	103,484	1,363,399
1975-84 Avg.	796	117,633	13,034	1,218,591	140,289	1,490,343
1985-94 Avg.	1,487	229,242	12,596	926,450	66,678	1,236,454
1995 % of Total	0.07%	8.42%	0.56%	90.45%	0.50%	100.00%

<sup>a</sup> Data source: ADF&G fish ticket database.

Table 5. Commercial chinook salmon catches and escapements in numbers of fish by subdistrict, Lower Cook Inlet, 1995.

Subdistrict/System	Catch	Escapement <sup>a</sup>	Total Run
<b>SOUTHERN DISTRICT</b>			
Halibut Cove	785		785
China Poot Bay	126		126
Neptune Bay	44		44
Tutka/Kasitsna Bays	375		375
Barabara Creek	185		185
Seldovia Bay	770		770
English Bay	<u>4</u>		<u>4</u>
<b>SOUTHERN DISTRICT TOTAL</b>	<b>2,289</b>		<b>2,289</b>
<b>OUTER DISTRICT</b>			
Windy Bay	1		1
Rocky Bay	1		1
East Arm Nuka Bay	<u>10</u>		<u>10</u>
<b>OUTER DISTRICT TOTAL</b>	<b>12</b>		<b>12</b>
<b>EASTERN DISTRICT TOTAL</b>	<b>0</b>		<b>0</b>
<b>KAMISHAK BAY DISTRICT</b>			
McNeil River	<u>2</u>		<u>2</u>
<b>KAMISHAK BAY DISTRICT TOTAL</b>	<b>2</b>		<b>2</b>
<b>TOTAL LOWER COOK INLET</b>	<b>2,303</b>		<b>2,303</b>

<sup>a</sup> Chinook escapement in Lower Cook Inlet is very limited; no escapement surveys are conducted.

Table 6. Commercial sockeye salmon catches (including hatchery cost recovery) and escapements in numbers of fish by subdistrict, Lower Cook Inlet, 1995.

Subdistrict/System	Catch	Escapement <sup>a</sup>	Total Run
<b>SOUTHERN DISTRICT</b>			
Humpy Creek	139		139
Halibut Cove	9,341		9,341
China Poot Bay			
Common Property Fishery	85,089		
Hatchery Cost Recovery	6,434		
China Poot Creek		450 <sup>b</sup>	
Total Run			91,973
Neptune Bay			
Common Property Fishery	35,194		
Hatchery Cost Recovery	6,063		
Total Run			41,257
Tutka/Kasitsna Bays	12,314 <sup>c</sup>		12,314
Barabara Creek	3,080		3,080
Seldovia Bay	4,245		4,245
English Bay	<u>2,580</u>	<u>22,467<sup>d</sup></u>	<u>25,047</u>
<b>SOUTHERN DISTRICT TOTAL</b>	<b>164,479</b>	<b>22,917</b>	<b>187,396</b>
<b>OUTER DISTRICT</b>			
Port Chatham	5		5
Chugach Bay	2		2
Windy Bay	8		8
Rocky Bay	1		1
East Arm Nuka Bay (McCarty Fiord)	17,626		
Delight Lake		15,780	
Desire Lake		15,800	
Delusion Lake		1,520	
Total Run			<u>50,726</u>
<b>OUTER DISTRICT TOTAL</b>	<b>17,642</b>	<b>33,100</b>	<b>50,742</b>
<b>EASTERN DISTRICT</b>			
Aialik Bay	1,971	2,620	4,591
Resurrection Bay North			
Common Property Fishery	23,716		
Hatchery Cost Recovery	20,869		
Bear Lake		8,328 <sup>d</sup>	
Total Run			<u>52,913</u>
<b>EASTERN DISTRICT TOTAL</b>	<b>46,556</b>	<b>10,948</b>	<b>57,504</b>

-continued-

Table 6. (page 2 of 2)

Subdistrict/System	Catch	Escapement <sup>a</sup>	Total Run
<b>KAMISHAK BAY DISTRICT</b>			
Iniskin Bay/North Head Creek		200	200
Ursus Cove Lagoon Creek	5	1,300	1,305
Kirschner Lake			
Common Property Fishery	8,772		
Hatchery Cost Recovery	5,350		
Total Run			14,122
Bruin Bay	19,491		
Bruin Lake Creek		5,000 <sup>b</sup>	
Bruin River		300	
Total Run			24,791
Chenik Lake			
Amakdedori Creek		2,390	
Chenik Creek/Lake		1,086 <sup>d</sup>	
Total Run			3,476
Paint River		250 <sup>e</sup>	250
McNeil Cove (Mikfik Creek/Lake)	136	10,050	10,186
Kamishak/Douglas Reef	2		2
Douglas River/Silver Beach	<u>2,671</u>		<u>2,671</u>
<b>KAMISHAK BAY DISTRICT TOTAL</b>	<b>36,427</b>	<b>20,576</b>	<b>57,003</b>
<b>TOTAL LOWER COOK INLET</b>	<b>265,104</b>	<b>87,541</b>	<b>352,645</b>

<sup>a</sup> Escapement estimates derived from limited aerial surveys. Numbers represent unexpanded aerial live counts.

<sup>b</sup> No freshwater escapement, prevented by barrier falls.

<sup>c</sup> Figure includes 3 sockeyes taken during hatchery pink salmon cost recovery.

<sup>d</sup> Weir counts.

<sup>e</sup> No freshwater escapement, ladder not opened during 1995.

<sup>f</sup> Insufficient survey data to generate escapement information.

Table 7. Commercial coho salmon catches and escapements in numbers of fish by subdistrict, Lower Cook Inlet, 1995.

Subdistrict/System	Catch	Escapement <sup>a</sup>	Total Run
<b>SOUTHERN DISTRICT</b>			
Humpy Creek	27		27
Halibut Cove	437		437
China Poot Bay	869		869
Neptune Bay	243 <sup>b</sup>		243
Tutka/Kasitsna Bays	1,254		1,254
Barabara Creek	443		443
Seldovia Bay	53		53
English Bay	<u>1,823</u>		<u>1,823</u>
<b>SOUTHERN DISTRICT TOTAL</b>	<b>5,149</b>		<b>5,149</b>
<b>OUTER DISTRICT</b>			
Port Chatham	1		1
Chugach Bay	2		2
Windy Bay	34		34
Rocky Bay	3		3
East Arm Nuka Bay (McCarty Fiord)	<u>1,232</u>		<u>1,232</u>
<b>OUTER DISTRICT TOTAL</b>	<b>1,272</b>		<b>1,272</b>
<b>EASTERN DISTRICT</b>			
Aialik Bay	917		917
Resurrection Bay North			
Common Property Fishery	1		
Hatchery Cost Recovery	1,314		
Sport Derby	2,960		
Bear Lake (weir counts)		444	
Hatchery Brood Stock		1,537	
Total Run			<u>6,256</u>
<b>EASTERN DISTRICT TOTAL</b>	<b>5,192</b>	<b>1,981</b>	<b>7,173</b>
<b>KAMISHAK BAY DISTRICT</b>			
Ursus Cove	2		2
Rocky Cove	54		54
Kirschner Lake	3		3
Bruin Bay	4		4
Kamishak River/Douglas Reef	2,788		2,788
Douglas River/Silver Beach	<u>3,233</u>		<u>3,233</u>
<b>KAMISHAK BAY DISTRICT TOTAL</b>	<b>6,084</b>		<b>6,084</b>
<b>TOTAL LOWER COOK INLET</b>	<b>17,697</b>	<b>1,981</b>	<b>19,678</b>

<sup>a</sup> Coho escapement in Lower Cook Inlet is very limited; no escapement surveys were conducted during 1995.

<sup>b</sup> Includes 4 cohos taken during hatchery sockeye salmon cost recovery.

Table 8. Commercial pink salmon catches (including hatchery cost recovery) and escapements in numbers of fish by subdistrict, Lower Cook Inlet, 1995.

Subdistrict/System	Catch	Escapement <sup>a</sup>	Total Run
<b>SOUTHERN DISTRICT</b>			
Humpy Creek	13,693	89,293	102,986
Halibut Cove	1,869		1,869
China Poot Bay/Creek	9,565 <sup>b</sup>	1,953	11,518
Neptune Bay	5,101 <sup>b</sup>		5,101
Tutka/Kasitsna Bays			
Common Property Fishery	1,210,572		
Hatchery Cost Recovery	1,213,322		
Hatchery Brood Stock		166,052	
Tutka Lagoon Creek		15,899	
Jakalof Creek		669	
Total Run			2,606,514
Barabara Creek	2,806	10,831	13,637
Seldovia Bay & River	8,214	48,519	56,733
Port Graham			
Hatchery Brood Stock		16,224 <sup>c</sup>	
Port Graham River		10,030	
Port Graham Left		1,300	
Total Run			27,554
English Bay	<u>10,168</u>		<u>10,168</u>
<b>SOUTHERN DISTRICT TOTAL</b>	<b>2,475,310</b>	<b>360,770</b>	<b>2,836,080</b>
<b>OUTER DISTRICT</b>			
Dogfish Bay		13,286	13,286
Port Chatham	17,618	13,950	31,568
Chugach Bay	8,408	7,811	16,219
Windy Bay	111,219		
Windy Right Creek		11,415	
Windy Left Creek		31,594	
Total Run			154,228
Rocky Bay	27,456		
Scurvy Creek		1,086	
Rocky River		56,266	
Total Run			84,808
Port Dick	0		
Port Dick (head end) Creek		6,644	
Slide Creek		444	
Island Creek		10,563	
Total Run			17,651

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Table 8. (page 2 of 3)

Subdistrict/System	Catch	Escapement <sup>a</sup>	Total Run
<b>OUTER DISTRICT (cont'd)</b>			
Nuka Island	5,993		
South Nuka Island Creek		6,160	
Berger Bay		434	
Mike's Bay		3,234	
Home Cove		651	
Total Run			16,472
East Arm Nuka Bay (McCarty Fiord)	21,404		
Delight Lake		2,550	
James Lagoon		579	
Total Run			24,233
<b>OUTER DISTRICT TOTAL</b>	<b>192,098</b>	<b>166,667</b>	<b>358,765</b>
<b>EASTERN DISTRICT</b>			
Aialik Bay	11,999	1,140	13,139
Resurrection Bay North	1		
Bear/Salmon Creeks		38,649	
Clear Creek		1,903	
Grouse Creek		2,584	
Lost Creek		1,236	
Sawmill Creek		60	
Spring Creek		1,073	
Tonsina Creek		435	
Tonsina Left Creek		22	
Humpy Cove		1,766	
Thumb Cove		9,326	
Total Run			57,055
<b>EASTERN DISTRICT TOTAL</b>	<b>12,000</b>	<b>58,194</b>	<b>70,194</b>
<b>KAMISHAK BAY DISTRICT</b>			
Inisksin Bay			
North Head Creek		26,009	
Sugarloaf Creek		111	
Total Run			26,120
Ursus Cove/Brown's Peak Creek	8,327	96,652	104,979
Rocky Cove/Sunday Creek	11,543	95,906	107,449
Kirschner Lake	19,095		19,095
Bruin Bay & River	123,845	307,309	431,154
Chenik Lake/Amakdedori Creek		4,500	4,500

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Table 8. (page 3 of 3)

Subdistrict/System	Catch	Escapement <sup>a</sup>	Total Run
KAMISHAK BAY DISTRICT (cont'd)			
Kamishak/Douglas Reef	1,944		1,944
Douglas River/Silver Beach	<u>4,300</u>		<u>4,300</u>
<b>KAMISHAK BAY DISTRICT TOTAL</b>	<b>169,054</b>	<b><u>530,487</u></b>	<b><u>699,541</u></b>
<b>TOTAL LOWER COOK INLET</b>	<b>2,848,462</b>	<b>1,115,449</b>	<b>3,963,911</b>

- <sup>a</sup> Escapement estimates are derived from periodic ground or aerial surveys with stream life factors applied.
- <sup>b</sup> China Poot/Neptune catches include 4/16 pinks (respectively) caught during hatchery sockeye salmon cost recovery.
- <sup>c</sup> Brood stock figure for Port Graham Hatchery includes 948 pinks that died due to suffocation during capture.

Table 9. Commercial chum salmon catches and escapements in numbers of fish by subdistrict, Lower Cook Inlet, 1995.

Subdistrict/System	Catch	Escapement*	Total Run
<b>SOUTHERN DISTRICT</b>			
Humpy Creek	1	103	104
Halibut Cove	40		1
China Poot Bay	82		82
Neptune Bay	10		10
Tutka Bay	1,620		
Tutka Lagoon Creek		18	
Jakalof Creek		189	
Total Run			1,827
Seldovia Bay & River	1,389	1,805	3,194
Port Graham & River		3,837	3,837
English Bay	<u>708</u>		<u>708</u>
<b>SOUTHERN DISTRICT TOTAL</b>	<b>4,529</b>	<b>5,952</b>	<b>10,481</b>
<b>OUTER DISTRICT</b>			
Dogfish Bay		4,189	4,189
Port Chatham	33	547	580
Chugach Bay	2		2
Windy Bay	298		
Windy Right Creek		948	
Windy Left Creek		465	
Total Run			1,711
Rocky Bay & River	65	5,132	5,197
Port Dick	0		
Port Dick (head end) Creek		3,306	
Slide Creek		1,072	
Middle Creek		354	
Island Creek		7,667	
Total Run			12,399
Nuka Island/Petrof River	0	950	950
East Arm Nuka Bay/James Lagoon	<u>76</u>	<u>129</u>	<u>205</u>
<b>OUTER DISTRICT TOTAL</b>	<b>474</b>	<b>24,759</b>	<b>25,233</b>
<b>EASTERN DISTRICT</b>			
Aialik Bay	58		58
Resurrection Bay North	272		
Mayor Creek		2	
Sawmill Creek		85	
Spring Creek		193	

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Table 9. (page 2 of 2)

Subdistrict/System	Catch	Escapement <sup>a</sup>	Total Run
<b>EASTERN DISTRICT (cont'd)</b>			
Tonsina Creek		3,224	
Tonsina Left Creek		4	
Thumb Cove		52	
Total Run			<u>3,832</u>
<b>EASTERN DISTRICT TOTAL</b>	<b>330</b>	<b>3,560</b>	<b>3,890</b>
<b>KAMISHAK BAY DISTRICT</b>			
Inisksin Bay	0		
Iniskin River		22,667	
Sugarloaf Creek		2,045	
North Head Creek		523	
Total Run			25,235
Cottonwood Bay & Creek		12,020	12,020
Ursus Cove	254		
Brown's Peak Creek		500	
Ursus Lagoon Right Creek		3,614	
Ursus Cove Lagoon Creek		7,439	
Total Run			11,807
Rocky Cove/Sunday Creek	3,200	2,831	6,031
Kirschner Lake	769 <sup>b</sup>		769
Bruin Bay & River	5,253	6,600	11,853
McNeil River	3	14,411	14,414
Kamishak/Douglas Reef	78	<sup>c</sup>	78
Douglas River/Douglas Beach Creek	745	<sup>c</sup>	745
<b>KAMISHAK BAY DISTRICT TOTAL</b>	<b>10,302</b>	<b>72,650</b>	<b>82,952</b>
<b>TOTAL LOWER COOK INLET</b>	<b>15,635</b>	<b>106,921</b>	<b>122,556</b>

<sup>a</sup> Escapement estimates are derived from periodic ground or aerial surveys with stream life factors applied.

<sup>b</sup> Kirschner Lake catches include 2 chums taken during hatchery sockeye salmon cost recovery.

<sup>c</sup> Insufficient survey data to generate escapement estimates for Little and Big Kamishak Rivers, Strike Creek, and Douglas Beach Creek.

Table 10. Commercial salmon set gillnet catch in numbers of fish by species in the Southern District, Lower Cook Inlet, 1975 - 1995<sup>a</sup>.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
1975	96	26,588	2,337	49,490	4,020	82,531
1976	176	33,993	1,321	13,412	1,353	50,255
1977	175	54,404	869	38,064	2,765	96,277
1978	1,052	86,934	3,053	11,556	4,117	106,712
1979	483	34,367	7,595	69,368	5,266	117,079
1980	225	29,922	8,038	26,613	2,576	67,374
1981	222	53,665	6,735	68,794	8,524	137,940
1982	894	42,389	5,557	15,838	7,113	71,791
1983	822	41,707	1,799	20,533	4,377	69,238
1984	639	40,987	2,862	17,836	5,008	67,332
1985	958	23,188	3,908	22,898	4,221	55,173
1986	745	21,807	2,827	14,244	2,426	42,049
1987	653	28,209	2,025	9,224	2,419	42,530
1988	1,145	14,758	2,819	29,268	4,423	52,413
1989	1,281	13,970	4,792	16,210	1,877	38,130
1990	1,361	15,863	1,046	12,646	1,938	32,854
1991	842	20,525	5,011	3,954	1,577	31,909
1992	1,288	17,002	848	15,958	1,687	36,783
1993	1,089	14,791	3,088	12,008	2,591	33,567
1994	1,103	14,004	1,073	23,621	2,419	42,220
1995	2,078	19,394	3,561	41,654	3,958	70,645
20-Year Avg.	762	31,454	3,380	24,577	3,535	63,708
1975-84 Avg.	478	44,496	4,017	33,150	4,512	86,653
1985-94 Avg.	1,047	18,412	2,744	16,003	2,558	40,763
1995 % of Total	2.94%	27.45%	5.04%	58.96%	5.60%	100.00%

<sup>a</sup> Data source: ADF&G fish ticket database.

Table 11. Personal use/subsistence set gillnet salmon catch in numbers of fish by species and effort, Southern District, Lower Cook Inlet, 1969 - 1995<sup>a</sup>.

Year	Permits Issued	Permits Returned		Permits		Total			Catch			Total
		Number	%	Did Fish	Not Fished	Chinook	Sockeye	Coho	Pink	Chum	Other	
1969	47	44	93.6	35	9	0	9	752	38	0	17	816
1970	78	73	93.6	55	18	0	12	1,179	143	13	39	1,386
1971	112	95	84.8	53	42	2	16	1,549	44	7	20	1,638
1972	135	105	77.8	64	41	1	11	975	48	69	19	1,123
1973	143	128	89.5	82	46	0	18	1,304	84	40	9	1,455
1974	148	118	79.7	52	66	0	16	376	43	77	27	539
1975	292	276	94.5	221	55	4	47	1,960	632	61	95	2,799
1976	242	221	91.3	138	83	16	46	1,962	1,513	56	75	3,668
1977	197	179	90.9	137	42	12	46	2,216	639	119	84	3,116
1978	311	264	84.9	151	113	4	35	2,482	595	34	89	3,239
1979	437	401	91.8	238	163	6	37	2,118	2,251	41	130	4,583
1980	533	494	92.7	299	195	43	32	3,491	1,021	25	153 <sup>b</sup>	4,765
1981	384	374	97.4	274	100	25	64	4,314	732	89	100	5,324
1982	395	378	95.7	307	71	39	46	7,303	955	123	8	8,474
1983	360	328	91.1	210	118	4	21	2,525	330	40	2	2,922
1984	390	346	88.7	219	127	4	25	3,666	821	87	25	4,628
1985	316	302	95.6	205	97	5	43	3,372	166	35	3	3,624
1986	338	310	91.7	247	63	7	68	3,831	3,132	56	0	7,094
1987	361	338	93.6	249	89	5	50	3,977	279	61	0	4,372
1988	438	404	92.2	287	117	14	60	4,877	1,422	75	0	6,448
1989	466	452	97.0	332	120	41	156	7,215	882	53	49	8,396
1990	578	543	93.9	420	123	12	200	8,323	1,846	69	0	10,450
1991	472	459	97.2	295	164	8	47	4,931	366	23	0	5,375
1992	365	350	95.9	239	111	5	63	2,277	643	21	0	3,009
1993	326	317	97.2	215	102	6	44	1,992	463	18	0	2,523
1994	286	284	99.3	224	60	66	80	4,097	1,178	18	0	5,439
1995	235	231	98.3	177	54	118	108	2,915	341	7	0	3,489
69-94												
Avg.	313	292	93.0	202	90	13	50	3,195	779	50	36	4,123

<sup>a</sup> Figures after 1991 include information from both returned permits and inseason oral reports.

<sup>b</sup> Steelhead trout (*Onchorhynchus mykiss*).

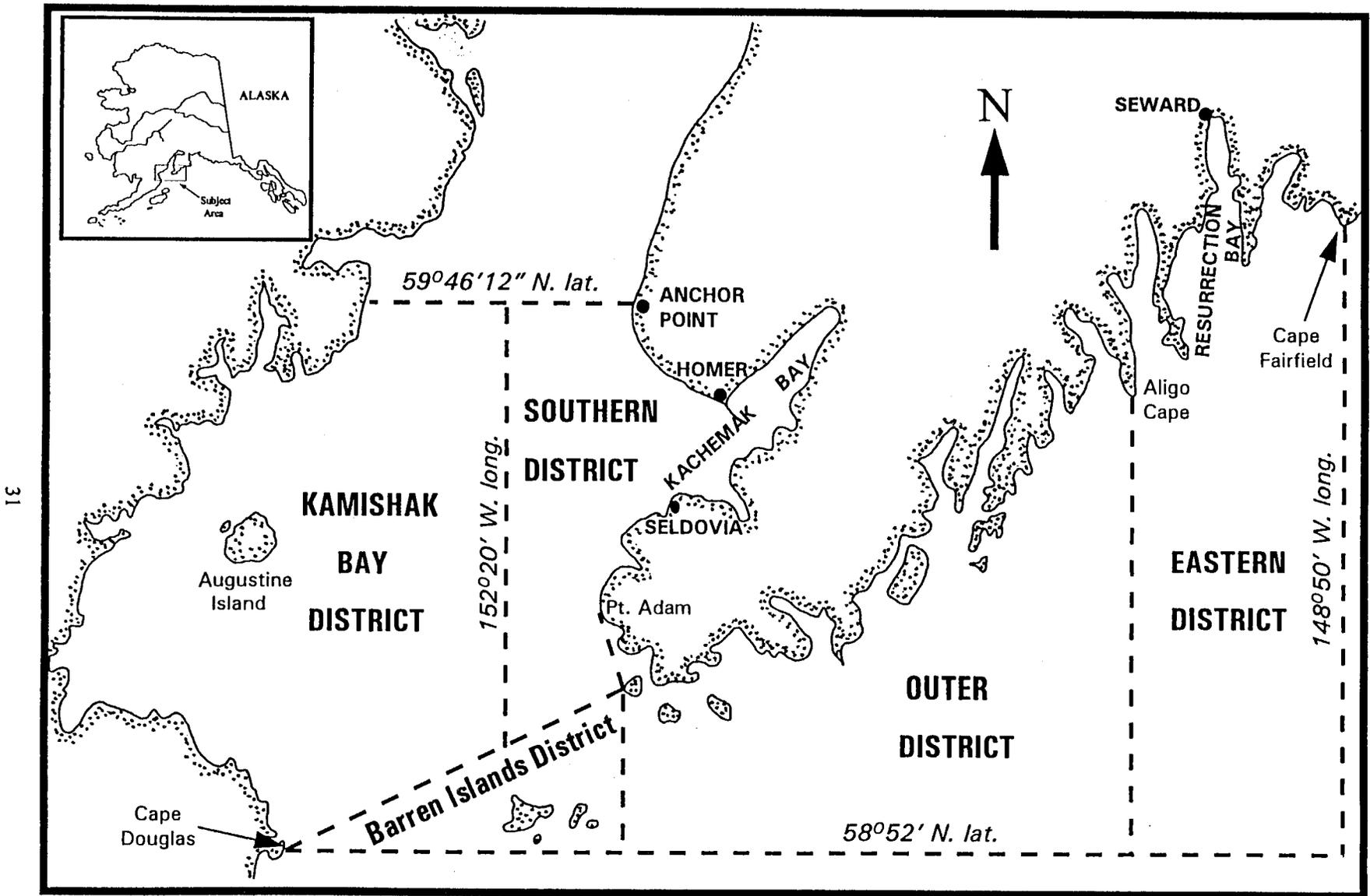


Figure 8. Lower Cook Inlet salmon and herring management area (not drawn to scale).

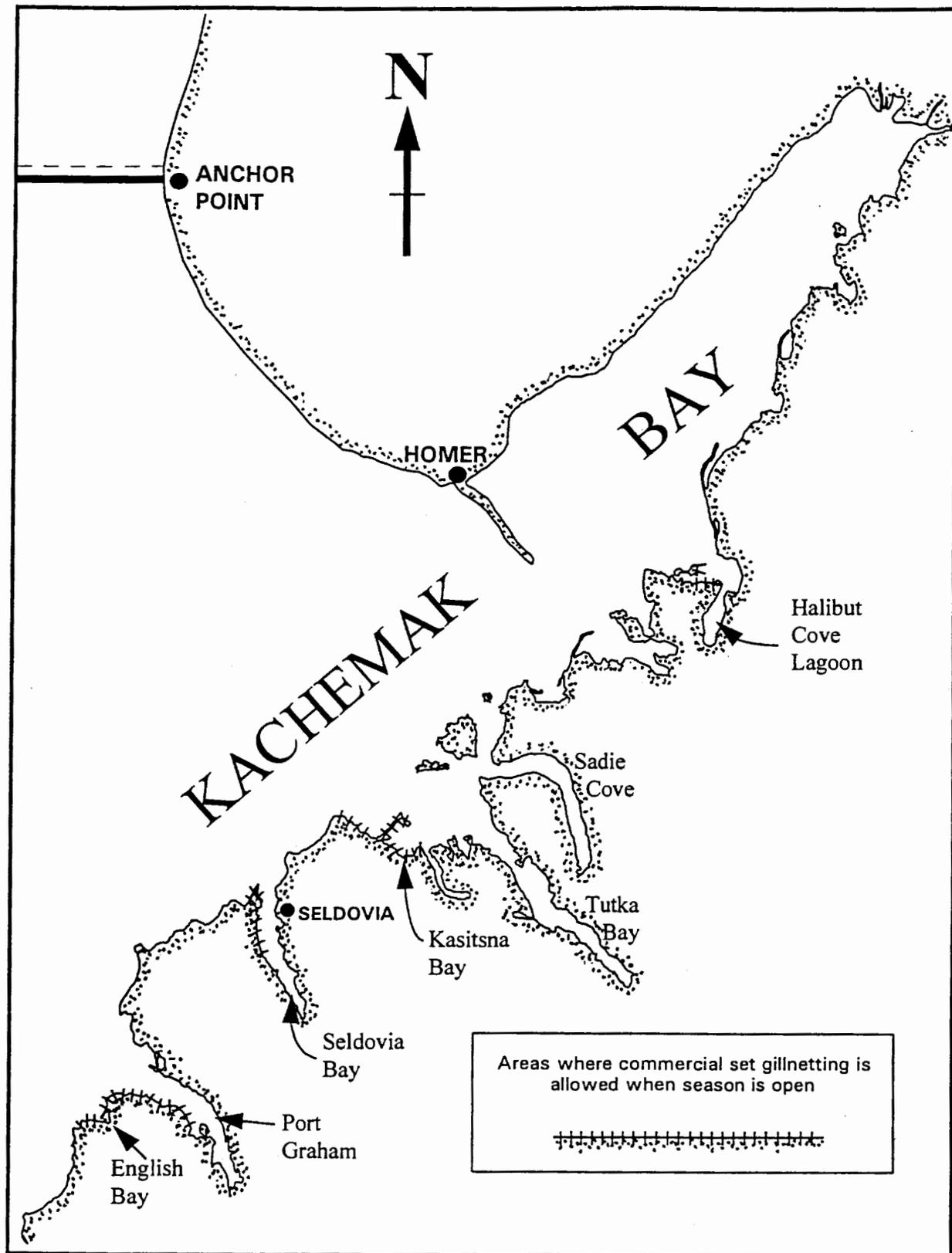


Figure 9. Commercial set gillnet locations in the Southern District of Lower Cook Inlet.

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