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COMMERCIAL FISHERIES MANAGEMENT AND DEVELOPMENT DIVISION

UPPER COOK INLET COMMERCIAL FISHERIES

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## INTRODUCTION

The Upper Cook Inlet management area consists of that portion of Cook Inlet north of the latitude of Anchor Point and is divided into the Central and Northern Districts (Figure 1). The Central District is approximately 75 mi long, averages 32 mi in width, and is further subdivided into six subdistricts. The Northern District is 50 mi long, averages 20 mi in width and is divided into two subdistricts. At present, all five species of Pacific salmon (*Oncorhynchus*), razor clams (*Siliqua patula*), and Pacific herring (*Clupea harengus pallasii*) are subject to commercial harvest in Upper Cook Inlet. Harvest statistics are gathered and reported by five-digit statistical areas and sub-areas (Figure 2).

### *Salmon*

Since the inception of a commercial fishery in 1882, many gear types, including fish traps, gillnets, and seines have been employed with varying degrees of success to harvest salmon in Upper Cook Inlet. Currently, set (fixed) gillnets are the only gear permitted in the Northern District, while both set and drift gillnets are used in the Central District. The use of seine gear is restricted to the Chinitna Bay Subdistrict where they are employed only sporadically. Drift gillnets have accounted for 60% of the average annual salmon harvest since 1966 with set gillnets harvesting virtually all of the remainder (Appendix A.1-6).

Commercial salmon harvest statistics specific to gear type and area are available only back to 1954 (Appendix A.7). Run-timing and migration routes utilized by all species overlap to such a degree that the commercial fishery is largely mixed-stock and mixed-species in nature. Typically, the Upper Cook Inlet harvest represents approximately 5% of the statewide catch.

In terms of their economic value, sockeye salmon (*O. nerka*) are by far the most important component of the catch followed by coho (*O. kisutch*), chum (*O. keta*), pink (*O. gorbuscha*) and chinook salmon (*O. tshawytscha*) (Appendix A.8).

### *Herring*

Commercial herring fishing began in Upper Cook Inlet in 1973 with a modest harvest of bait-quality fish along the east side of the Central District and expanded in the late 1970's to include small-scale sac roe fisheries in Chinitna and Tuxedni Bays (Appendix A.9). The total herring harvest has averaged less than 400 tons having an exvessel value below \$200,000, one of the smallest herring fisheries in the state.

Because the glacial waters of Upper Cook Inlet preclude the use of aerial surveys to estimate biomass of herring stocks, the management approach utilized has necessarily departed from the standard techniques employed in the more traditional herring fisheries. Gillnets are the only legal gear for herring in Upper Cook Inlet with set gillnets being used

almost exclusively. Harvests are generally concentrated in the Clam Gulch area (bait herring) and in the Snug Harbor and Magnetic Island areas of Tuxedni Bay and near Clam Cove and Camp Point in Chinitna Bay (roe herring).

Beginning in 1988 in Tuxedni Bay, significant decreases in herring abundance and a shift towards older age class herring were observed resulting in the closure of Tuxedni Bay by emergency order prior to the 1992 season. In Chinitna Bay and along the eastside beaches similar declines began to materialize after the 1990 season. As a result of these declines a Department proposal to the Alaska Board of Fisheries to open the Upper Cook Inlet herring fishery by emergency order only, was submitted. This proposal passed and became regulation for the 1993 season, ending a long period with fixed opening dates of April 15 on the east side and April 22 on the west side of the Inlet. This action effectively closes this fishery until the herring stocks have completed the rebuilding process. The 1993 season was the first year of a total closure of the Upper Cook Inlet Area which is expected to last several years.

### *Razor Clams*

The commercial harvest of razor clams from Upper Cook Inlet beaches dates back to 1919. Harvest levels have fluctuated from no fishery for as many as eight consecutive years to production in excess of half a million pounds (live weight) in 1922 (Appendix A.10). The sporadic nature of the fishery has been more a function of limited market opportunities rather than limited availability of the resource.

Razor clams are present in many areas of Cook Inlet with particularly dense concentrations occurring near Polly Creek on the western shore and from Clam Gulch to Ninilchik on the eastern shore. The eastern shoreline has been set aside for sport harvest exclusively since 1959 and all commercial harvests since that time have come from the west shore, principally from the Polly Creek area. A large portion of the Polly Creek beach is approved for the harvest of clams for the human food market. Bait clams may be taken only outside of this approved area. No overall harvest limits are in place for any area. Virtually all of the commercial harvest has come by hand-digging although regulations prior to 1990 allowed the use of mechanical harvesters (dredges) south of Spring Point or within a one mile section of the Polly Creek beach. Numerous attempts to develop feasible dredging operations were largely unsuccessful due to excessive shell breakage or the limited availability of clams in the area open to this gear.

## 1993 COMMERCIAL SALMON FISHERY

The 1993 commercial harvest of 5.3 million salmon in Upper Cook Inlet was somewhat above the long-term average catch of 4 million but a severe drop from the record harvest of 10.6 million set the previous year. The harvest was valued at approximately \$29.9 million, a 70% drop from 1992.

Throughout the 1993 season, emergency order announcements and fishery updates were provided to radio stations in Homer and the Kenai-Soldotna area and to processors, fishermen's organizations and other agencies via electronic facsimile. Emergency orders and daily escapement information were also made available through 24-hour recorded message telephone lines.

The Alaska Board of Fisheries, meeting in Anchorage in November, 1992, adopted a number of regulation changes that were in effect beginning with the 1993 fishing season:

- 1) The Board adopted the Department's recommendation to allow commercial herring fishing in any part of Upper Cook Inlet only by emergency order. Due to the depressed state of Upper Cook Inlet herring stocks, no fishery was anticipated for at least several years.
- 2) The Board made several amendments to the Big River Sockeye Salmon Management Plan. The season opening date was changed from May 25 to June 1. Fishing was allowed each Monday, Wednesday and Friday through June 24 or until 1,000 chinook salmon were estimated to have been harvested or conservation concerns caused a reduction in fishing periods by emergency order. The maximum mesh size of gill nets was increased to 5 1/2 inches. The "no net may be fished seaward of another net" provision was eliminated. The closed waters descriptions for this fishery was amended to read as follows: those waters within one statute mile of the high water terminus of Kustatan and Drift Rivers, within 500 yards of the high water terminus of Bachatna and Montana Bill Creeks, within one statute mile of Big River or in the freshwater portions of any anadromous fish stream. The wording regarding Big River was constructed to prevent fishing within one mile of the mouth of Big River at any tidal stage. As the mouth of the river changes with the tide, the one mile protected area will move with the river mouth.
- 3) A Packers Creek Sockeye Salmon Management Plan was adopted that limited fishing time in the Kalgin Island Subdistrict directed at harvesting surpluses of Packers Creek sockeye salmon to no more than one additional 12-hour fishing period a week.
- 4) All references to Susitna River chinook salmon in the Upper Cook Inlet Salmon Management Plan were changed to read "Northern District chinook salmon". Fishing time in the Northern District after August 15 was limited to a maximum of the regular Monday and Friday fishing periods.
- 5) The closed waters area at the Kenai River mouth was redefined to prohibit the use of drift gill nets inside of the set nets closest to the river.
- 6) Set net buoy stickers are no longer required for any area except the Upper Subdistrict of the Central District (the east side set nets).
- 7) All set net fishermen were required to register prior to fishing for one of three areas of Cook Inlet: the Upper Subdistrict of the Central District, the Northern District, or all remaining areas of Cook Inlet. Once registered for one of these three areas, fishermen could fish only in the area for which they are registered for the remainder of the year. No

transfers are permitted. The Fish Creek fishery in Knik Arm is exempt from the registration restrictions - fishermen registered in any area of Cook Inlet may participate in the Knik Arm fishery. 8) Drift gillnetting after August 15 is now permitted only in the Kustatan, Western and Chinitna Bay Subdistricts and within one mile of the western shoreline in the Lower Subdistrict. 9) Beginning June 25, closed waters in that area along the west side of Cook Inlet from the northern boundary of the Central District south to Harriet Point would be as follows: those waters within one statute mile of the terminus, at mean high water, of the Kustatan River, Drift River, and Big River, or within 500 yards of the terminus, at mean high water, of all other anadromous streams, or within 900 feet of the stream bed or channel of an anadromous fish stream throughout the intertidal portion of that stream out to the mean lower low water mark.

### *Sockeye Salmon*

The 1993 commercial sockeye salmon harvest of 4.8 million fish was the seventh highest on record but only half of the preceding year's catch and approximately double the long-term average. Valued at \$28 million, the sockeye salmon harvest comprised 93.6% of the value of the total commercial salmon fishery. The distribution of the catch between drift gear (54%) and set net gear (46%) differed only slightly from the long-term average (58% drift).

Management of the Upper Cook Inlet sockeye salmon fishery integrates information received from a variety of programs which together provide an in-season model of the actual return. These programs include offshore test fishing, escapement enumeration by sonar and weir, comparative analysis of historic commercial harvest and effort levels, and age composition studies.

The offshore test fishing program employs a chartered gillnet vessel fishing standardized stations along a transect crossing Cook Inlet from Anchor Point to the Red River delta. The program provides an in-season estimation of sockeye salmon run-strength by determining fish passage rates (computed by correlating the vessel's daily catch with subsequent commercial harvests and escapement) and fitting these rates to the appropriate historic run-timing profile (Table 1). In 1993, the program was conducted aboard the F/V *Corrina Kay*.

Hydroacoustic devices to quantify salmon escapement into glacial rivers were first employed in Upper Cook Inlet in the Kenai and Kasilof Rivers in 1968 and expanded to the Susitna River in 1978 and the Crescent River in 1979 (Appendix A.11). Operations followed standard procedures in all systems in 1993 and no unusual problems were observed (Table 2). Weirs placed on Fish Creek and Packers Creek provided daily escapement counts for those systems.

Upper Cook Inlet commercial catch statistics refined to gear type, area and date are available back to 1966. Availability of these statistics in a computerized database format

make them extremely valuable for evaluating in-season fishery performance. The 1993 commercial catch by gear type, area and date can be found in Tables 3 through 7. Total harvest by statistical area and average catch per permit are contained in Tables 8 and 9. A summary of emergency orders can be found in Table 10 and a summary of fishing periods by gear type and area in Table 11.

Inseason determination of the age composition of sockeye salmon entering the principle rivers frequently provides information helpful in estimating the stock contributions in various fisheries. During the 1993 fishery approximately 27,000 sockeye salmon were examined from catch and escapement samples. The age composition of adult sockeye returning to monitored systems is provided in Table 12.

The 1993 season began with the June 2 opening of the sockeye salmon fishery near Big River in the Kustatan Subdistrict. A management plan adopted by the Board of Fisheries first opened this fishery in 1989. As noted above, the Big River Sockeye Salmon Management Plan underwent substantial revision as the result of a Board of Fisheries review in November of 1992. The primary changes were a delay of the season opening date to no earlier than June 1 and a return to the regulatory 3 day per week fishing schedule. All changes to the plan functioned as envisioned and the harvest of 15,193 sockeye salmon was the highest on record for this fishery. The incidental harvest of chinook salmon (399 fish) was, by far, the smallest on record and well below the 1,000 fish cap imposed by the management plan. Twenty fishermen made landings in this fishery and sockeye salmon averaged 4.91 pounds based on fish ticket information.

The sockeye salmon return to the Crescent River on the west side of the Central District is sufficiently segregated from the other July sockeye salmon runs to allow management measures to be taken solely within the Western Subdistrict set gillnet fishery. The 1993 return was very poor, requiring the closure of the fishery for three consecutive fishing periods beginning July 23. The Western Subdistrict catch of 23,930 sockeye salmon was about half of the long-term average while the Crescent River escapement of 37,566 was well below the desired escapement range of 50,000 - 100,000.

Prior to the fishing season, fishermen were informed that returns to the Kenai River were expected to be considerably smaller than the recent average and that there were concerns related to a likely weak return to the Susitna River. Unless early season catches indicated otherwise, a reduction in fishing time was likely in the drift fishery prior to mid July in the offshore areas of the Central District. This time frame was chosen to coincide with the historical peak of abundance of Susitna-bound fish in the Central District .

The drift fishing season began on the regulatory opening date of June 25 with sockeye salmon catches through early July being unremarkable. The southern Upper Subdistrict set nets opened one period early on June 28 when the Kasilof sockeye escapement reached the required 50,000 level. By July 7, the Kasilof escapement had reached 74,000, nearly half the

minimum goal and well ahead of the pace needed to assure optimum totals. An additional period was opened for the Upper Subdistrict set nets and drift nets within 3 miles of shore south of the Blanchard Line (a regulatory marker approximately 4 1/2 miles north of the Kasilof River) on Thursday, July 8 from 1:00 pm to 10:00 pm.

As had been anticipated, the regular drift period on July 9 was restricted to those waters within 3 miles of the Kenai Peninsula shoreline from Colliers Dock to Ninilchik (hereafter referred to as the "corridor") in order to reduce the level of harvest of Susitna River sockeye. The restriction greatly reduced participation and the harvest totaled only 2,400 fish. The July 12 regular drift period produced an unexpectedly strong catch (549,000 fish, 1,110 fish per delivery) and an age composition closely matching the early escapement samples from the Kenai River. This information, coupled with another increase in escapement rate in the Kasilof River, resulted in additional fishing time for the Upper Subdistrict set nets and drift nets in the corridor from 12:00 noon July 13 until 3:00 pm July 14 (on this, as well as all following corridor openings, drifting was not allowed during the dark hours from 10:00 pm to 5:00 am).

With strong numbers of fish passing the Kenai sonar counters daily and a Kenai River return that appeared to significantly stronger than forecast, it was apparent that additional substantial harvest was needed quickly but ongoing concerns for Susitna sockeye dictated some measure of protection remain in place until that return could be better evaluated. The regular drift period on Friday, July 16 was restricted to those waters south of the latitude of Clam Gulch (the lower 40% of the Central District) but included the three mile corridor up to Collier's Dock in order to accomplish both objectives. The harvest declined substantially from the July 12 period with only 222,000 fish taken, indicating that many fish had either passed into the rivers or remained within the closed portion of the district. This was confirmed by the Northern District set net catch of nearly 40,000 sockeye as well as continuing strong daily sonar counts at the Kenai site (through July 16, after only three days of strong counts, the minimum escapement objective had nearly been achieved). No substantial numbers of fish had yet arrived at the Susitna River counters. To maintain harvest pressure on the Kenai River return, the Upper Subdistrict set nets and the drift corridor fishery were opened from the end of the Friday, July 16 period until the beginning of the Monday, July 19 period.

With encouraging initial escapement counts from Yentna River beginning July 16, the regular period on July 19 was not restricted in either the drift or Northern District set net fishery. In order to maintain harvest pressure on the Kenai River return, which had now passed the minimum escapement goal, the Upper Subdistrict set nets and drift corridor fishery remained open through the evening of Wednesday, July 21. Due to a decline in the escapement rate at the Kasilof River, only that portion of the Upper Subdistrict set nets and the corridor north of the Blanchard Line continued fishing from Wednesday evening until the regular opening on Friday, July 23.

After three days of high counts (July 16-18) the Yentna River escapement dropped sharply,

leaving the Susitna River status still unresolved. In response, the Northern District fishery was closed for the regular period on July 23 and the drift net fishery restricted to that portion of the Central District south of the northern end of Kalgin Island. As Yentna escapement counts improved, no further restrictions were required for the remainder of the season. With the exception of Sunday, July 25, the Upper Subdistrict set nets and drift corridor fishery north of the Blanchard Line were opened continuously through Saturday, August 7. The southern portion of these fisheries received only very limited additional fishing time (27 hours on July 30-31) due to lagging escapement in the Kasilof River.

Under the new Packers Creek sockeye salmon management plan, additional periods in the Kalgin Island Subdistrict were limited to one 12-hour period weekly. After confirming adequate escapement levels into Packers Creek, periods were opened on August 4 and 11 to provide for additional harvest. These extra periods produced catches of 5,000 sockeye and 2,500 coho salmon.

The Knik Arm sockeye salmon set gill net fishery opened on July 18 and operated on a two-day-per-week schedule through July 25 as provided for in the recently amended Fish Creek Sockeye Salmon Management Plan. Fish were unusually abundant throughout the time fished and the resultant harvest of 47,751 sockeye nearly matched the highest catch on record and the 831 coho salmon taken was the lowest catch on record.

The final Kenai River sockeye salmon escapement of 813,617 was in excess of the desired range of 400,000 to 700,000. The peak day of passage past the sonar counters was July 14 (88,382) and the 50% point was reached July 18. The Kasilof River escapement of 149,939 equaled the lower end of the desired range (150,000 - 250,000). The peak daily passage occurred on July 13 (13,587) and the 50% point was reached on July 8. The Yentna River escapement of 141,694 was near the upper end of the desired range of 100,000 to 150,000. The peak daily count occurred on July 17 (21,259) while the 50% point was achieved on July 22. The Crescent River escapement of 37,556 was well short of the lower end of the desired range (50,000-100,000). The peak day of escapement into the Crescent occurred on July 4 (3,996) and the 50% point was reached on July 15. The 50,000 fish point escapement goal for Fish Creek was exceeded by 67,619 fish. The peak daily weir count (13,362) occurred on July 26, three days after the 50% point. The escapement goal range of 15,000 - 25,000 for Packers Creek was substantially exceeded with a final count of 40,869. The Cook Inlet Aquaculture Association was permitted to make cost recovery efforts when it became apparent that the 25,000 level would be exceeded and 13,603 sockeye salmon were harvested in this manner. The peak daily weir count on Packers Creek (4,767 on July 31) preceded the 50% point of the season's total by two days.

### *Chum Salmon*

Chum salmon returning to Upper Cook Inlet are bound principally for the Susitna River with much smaller returns bound for several streams in Knik and Turnagain Arms and along the west side of the Central District. The harvest occurs primarily in the drift fishery (87%), the Northern District set net fishery (7%) and the Central District west side set net fishery (6%). The timing of the Susitna River return significantly overlaps the timing of the sockeye salmon returns and as a result, management measures directed at sockeye salmon often influence the chum salmon harvest. The Susitna River chum salmon escapement is not measured and no escapement objectives are defined.

The 1993 harvest of 122,767 chum salmon was far below the long-term average of over 600,000 and, not counting the 1989 oil spill year, was the worst harvest on record, following the same dismal pattern evident throughout central and western Alaska. Chum salmon accounted for just 1% of the exvessel value of the salmon fishery. The drift fishery restrictions (limiting offshore drift fishing time on July 9, 16 and 23) contributed to reducing the exploitation of the return and the resulting Susitna River escapement was subjectively judged to be poor to fair.

Chum salmon returns to Central District west side streams were also relatively poor and harvests from these areas were well below average. Escapement in the few streams monitored was generally poor.

### *Pink Salmon*

Returns to the Susitna and Kenai rivers combine to account for the majority of the pink salmon production in Upper Cook Inlet. Both rivers have abundant returns only in even-numbered years.

The 1993 pink salmon return produced a harvest of 100,918 fish, slightly below average for an odd-numbered year, and accounted for only 0.1% of the value of the salmon fishery. No escapement objectives exist for even-year pink salmon and this species did not play a role in any management decision implemented during the 1993 season.

### *Coho Salmon*

For discussion purposes, it is useful to divide Upper Cook Inlet's diverse coho salmon stocks impacted by the commercial fishery into three broad categories. The first category contains those stocks bound for the Susitna River and other Northern District streams. These migrate through the Central District during the last three weeks of July. The Cook Inlet Salmon Management Plan identifies Susitna River coho salmon as a stock which should

experience a minimized commercial interception, to the extent consistent with other goals established within the Plan. While simple in concept, this directive is much more difficult to implement in practice. The management plan identifies a higher priority for the sustained commercial harvest of sockeye, chum and pink salmon stocks, many of which are bound for the same streams at similar times and along similar pathways utilized by Susitna River coho salmon stocks. Consequently, these stocks are normally exploited at fairly significant levels in the commercial drift and the Northern District set net fisheries. It is occasionally possible to time fishery closures aimed principally at stock conservation of sockeye salmon to take advantage of peaks in abundance of coho salmon but such opportunities arise too infrequently to consistently meet the Plan objectives.

The second category of interest is the early return of coho salmon to the Kenai River which peaks in abundance in early August and is intercepted in both the drift and eastside set net fisheries. The allocation status is the same as for Susitna coho salmon. Due to the overlap with the Kenai River sockeye salmon return, it is difficult to avoid a substantial interception of this stock in the commercial fishery.

The third stock grouping consists of a diverse collection of coho salmon returns to the numerous streams along the west side of Cook Inlet. Under the management plan, these stocks are managed primarily for commercial uses. Fishing time in the west side set net fisheries during August is based primarily on the strength of these returns.

The 1993 coho salmon harvest of 306,822 was slightly below the long-term average and accounted for 3.6% of the exvessel value of the salmon fishery. Commercial interception of Susitna River coho salmon was significantly reduced by the late July restrictions of the drift fleet and the brief closure of the Northern District set net fishery. Inriver abundance was not directly measured but appeared to be good to excellent.

The Kenai River early return exhibited average run strength as judged by daily catches in the eastside set net fishery. Commercial interception of this stock was about equal to the long-term average. Freshwater abundance, as indicated by harvest rates in the inriver recreational fishery, was average.

The west side and late Northern District coho salmon returns were generally average and fishing in these areas remained at the standard fishing schedule of two 12-hour periods each week through the remainder of the fishing season.

### *Chinook Salmon*

The principle stocks of chinook salmon harvested in the commercial fishery are the return to the Susitna River and the late run to the Kenai River. Created by the Board six years ago and conducted under the direction of the Susitna River Chinook Salmon Management

Plan, a minor fishery occurs each June for set gillnets in the Northern District. Each participant is allowed one 35-fathom net and a minimum distance of 1200 feet must be maintained between nets (twice the normal distance). Fishing is permitted for 6 hours each Monday in June until the quota of 12,500 chinook has been harvested or the regular season opens on June 25. Harvest levels approached or reached the quota in the first years of the fishery but have declined substantially in recent years as Susitna River chinook salmon run strength has dropped.

The 1993 Northern District chinook salmon fishery harvested 3,042 chinook salmon, the lowest catch since the inception of the fishery. The principle reason for the reduced harvest was the significantly reduced run-strength of chinook salmon as evidenced by reduced abundance in many rivers and tributaries.

The other major stock of chinook salmon harvested in the commercial fishery, the late run to the Kenai River, generates the greatest controversy in Upper Cook Inlet, pitting Kenai River recreational anglers against Upper Subdistrict ("eastside") set netters. An average of over 13,000 chinook salmon were taken annually during the 1980's in the commercial set net fishery, frequently exceeding the sport fish harvest. Much smaller numbers are taken in the drift gillnet fishery.

The 1993 eastside set net fish ticket total of 13,977 chinook salmon represents the highest catch since 1987, due in part to the intense fishing directed at surpluses of Kenai River sockeye salmon. Projections of chinook escapement throughout the season remained sufficiently high to prevent any of the restrictive provisions of the Kenai River Late Run Chinook Salmon Management Plan from being triggered.

The harvest was spread fairly evenly over the eastside beach areas with Ninilchik (244-21), Coho (244-22), Kalifonsky (244-30) and Salamatof (244-40) averaging 25, 24, 35 and 23 chinook salmon per permit holder, respectively. A total of 122 chinook salmon were reported as retained for personal use by commercial fishermen, 102 of those coming from the Central District eastside set net fishery.

#### *Price, Average Weight and Participation*

In general, prices paid to fishermen for their catch declined sharply from 1992 levels. The price per pound for sockeye salmon dropped to \$1.00, down 60 cents from the previous year (Appendix A.12). Chinook, coho, pink and chum salmon were sold for \$1.20, \$0.60, \$0.12 and \$0.45 per pound, respectively. It should be noted that these averages are generated from inseason grounds prices and do not reflect any post-season adjustments.

As determined from fish ticket calculations, the average weight by species generally were down from the long-term mean. Chinook salmon averaged 27.5 pounds per fish while

sockeye, coho, pink and chum salmon averaged 5.9, 5.9, 3.1 and 5.8 pounds, respectively (Table 13., Appendix A.13).

The Commercial Fisheries Entry Commission issued 582 drift gillnet permits (68.7% to Alaska residents) and 740 set gillnet permits (85.7% to Alaska residents) for the Cook Inlet area in 1993 (Appendix A.14). A total of 25 firms or individuals purchased Upper Cook Inlet fishery products during 1993 (Table 14).

### *Salmon Enhancement*

Salmon enhancement through hatchery stocking has been a part of Upper Cook Inlet salmon production since the early 1970's. Presently, three commercially-oriented hatcheries are sited in Upper Cook Inlet, all operated by the Cook Inlet Aquaculture Association. Two of the facilities were originally built and operated by the Department's FRED Division and have just recently been leased to CIAA as the state operating budget has been reduced. The hatcheries have functioned to produce primarily sockeye salmon with minor production of coho and chinook salmon. Most of the major projects operate without marking programs, making accurate estimates of contribution to common property harvests difficult. In general, hatchery-produced sockeye salmon have accounted for less than 10 percent of the commercial catch.

Owned and operated by CIAA, the Eklutna hatchery is located on the lower Knik River at the head of Knik Arm. Originally functioning as a chum salmon facility, this hatchery converted to sockeye salmon culture in 1992. The current program calls for annual production of 1 million sockeye salmon smolts and 50,000 coho salmon smolts for release at the hatchery site and 5 million sockeye salmon fry for release in the Big Lake drainage. All fish are of Big Lake origin. Hatchery cost recovery is permitted in the hatchery tailrace although this harvest is opportunistic and no provisions are made to manage common property fisheries to assure a fixed level of revenue. At this time, only small surpluses of past chum salmon stocking are returning to the hatchery. In 1993, 12,013 chum salmon and 3 coho salmon were taken by CIAA from the Eklutna tailrace and sold.

The Crooked Creek hatchery opened as a state facility in 1974 and has functioned primarily as an incubation site for sockeye fry destined for Tustumena Lake in the Kasilof River drainage. The stocking level for this project has declined from approximately 17 million to 6 million and the resulting surplus fry are currently stocked in a variety of lake systems in Lower Cook Inlet. The facility is currently operated by CIAA. No Upper Cook Inlet cost recovery revenues are presently generated by Crooked Creek activities with the exception of the few fish straying into the hatchery tailrace. CIAA harvested and sold 187 sockeye and 337 coho salmon from the Crooked Creek tailrace in 1993.

The Trail Lakes hatchery, located in the upper Kenai River drainage, opened as a state facility in 1982 and was transferred to CIAA in 1990. The current Upper Cook Inlet

sockeye salmon programs include a 2 million fry stocking project for Chelatna Lake in the Susitna River drainage, a 2.3 million fry stocking project for Hidden Lake in the Kenai River drainage, a 200,000 smolt stocking project for release in Coal Creek in the Kasilof drainage and a 2.75 million fry stocking program for Packers Lake on Kalgin Island. Only the Packers Lake project offers any opportunity for cost recovery. Any fish surplus to escapement needs may be recovered and sold by CIAA but no restriction of common property fisheries occurs in order to assure revenue opportunities. In 1993, the Packers Creek escapement reached the point where surpluses could be projected by early August and CIAA began harvesting fish at a weir site near tidewater beginning August 4. By late August, 13,603 sockeye salmon had been harvested and sold for cost recovery.

### *Stock Status and Outlook*

In general, Upper Cook Inlet's salmon stocks are in good condition although several problem areas currently exist. Although the Kenai River has recently produced sockeye salmon returns at record levels, monitoring of smolt production indicates this return will decline precipitously over the next several years. Studies presently suggest the sequential large escapements observed in 1987, 1988 and 1989 overtaxed the rearing capability of the system, leading to subsequent failures in fry survival that has carried at least two years beyond the large brood years. It is unknown at this time how long the low level of juvenile production will continue but adult returns in 1995 and 1996 will likely offer little in the way of harvestable surplus. Management actions in that portion of the commercial fishery harvesting significant numbers of Kenai River sockeye salmon will need to be severely curtailed in those years in order to achieve the best possible escapement. Kasilof River returns, very strong through the early and mid 1980's, appear to have stabilized at somewhat lower levels and returns there are expected to remain at about average levels over the next several years. Susitna River escapements in recent brood years were generally good although the 1992 brood year escapement was poor and the primary return year (1997) to this system will likely be diminished. Despite very high parent-year escapements, recent production from Crescent River has been poor. The near-term outlook for this system is difficult to project although most of the recent escapements were in excess of the minimum goal. In summary, Upper Cook Inlet sockeye salmon harvests through the 1990's will likely drop substantially from the 1980's while the severity and duration of the decline will depend on the status of the Kenai River.

For 1994, the expected total return of sockeye salmon is forecast to be 3.3 million and the harvest should equal 2.0 million (Appendix A.15).

Chum salmon production has been relatively poor in recent years, in part due to after-effects of the 1986 fall flooding of the Susitna Basin, but likely also due to poor general environmental factors. Chum salmon stocks throughout central and western Alaska have shown a similar drop in productivity. Lacking quantitative escapement information, it is

more difficult to speculate on near-term returns but it is likely that chum salmon returns will be, at best, poor to fair over the next four years. The 1994 harvest projection for chum salmon is 350,000.

Susitna River pink salmon have recovered substantially from the 1986 flood but overall marine survival of pink salmon appears to be waning. Although difficult to evaluate with any surety, the 1994 pink salmon return will most likely be below average for an even-numbered year with the harvest projected to be 600,000.

Upper Cook Inlet's coho salmon stocks generally produced very strong returns throughout most of the 1980's and no downturn in this trend has been observed. Susitna River escapements have been excellent for the last several years and the outlook for this return is very good. Early-run Kenai River coho salmon returns have ranged from average to good in recent years but harvests have been high in both the commercial fishery and in the rapidly growing sport fishery. The Upper Cook Inlet commercial harvest for 1994 is projected to be 400,000.

Chinook salmon stocks in Upper Cook Inlet appear to be in generally good condition although many Northern District stocks have declined substantially from the very high levels of several years ago. The 1994 projected Upper Cook Inlet commercial chinook salmon harvest is 15,000.

## COMMERCIAL RAZOR CLAM FISHERY

The commercial razor clam fishery in Upper Cook Inlet dates back to 1919 with sporadic harvests occurring until 1977 when a stable fishery developed that has harvested an average of 250,000 pounds annually. Since 1959 the east side of Upper Cook Inlet south of the Kenai River has been closed to commercial clam harvests. The remainder of the Upper Cook Inlet Management Area has no closed season and no overall harvest limits. Currently this fishery occurs primarily on the west side of Cook Inlet between the Crescent River and Redoubt Point. All clams harvested in this area are directed by regulation to be sold for human consumption, except for the small percentage (less than 10%) of broken clams which may be sold for bait. In the remainder of the Upper Cook Inlet Management Area there are no restrictions on the amount of clams that can be sold for bait. The minimum legal size for razor clams is four and one-half inches (114 mm) in shell length.

The 1993 fishery began on May 18 and the last reported deliveries were made on September 3. The season's harvest of 310,289 pounds was taken primarily from the Polly Creek/Crescent River area (Appendix A.10). A total of 29 diggers made 1,928 landings over the course of the season. Diggers were paid an average of \$.50 per pound for their harvest making the total fishery exvessel value \$155,000. Tide tables covering the 1993 fishery can be found in Table 17. Beginning in 1993 the Department of Environmental Conservation certified additional area for human consumption, north of the existing Polly Creek certified beach to Redoubt Creek. Plans for the 1994 season would extend this certification north to Harriet Point.

## SUBSISTENCE AND PERSONAL USE FISHERIES

The Alaska State Legislature, during the 1992 session, passed legislation that would allow the Boards of Fish and Game to establish non-subsistence areas, "where subsistence was not a principle part of the social or economic structure of the community". During the 1992 Board Meeting covering Upper Cook Inlet the Board of Fisheries established that most of Upper Cook Inlet was a non-subsistence area and rescinded the Upper Cook Inlet Subsistence Salmon Management Plan. This action ended all subsistence fisheries in Upper Cook Inlet with the exception of the Tyonek Subsistence fishery and reinstated personal use set net fisheries at the mouth of the Kasilof River in late June and along the eastern shoreline north of the Kasilof River during the last three weekends of September. In addition dip net fisheries were reinstated in the mouth of the Kenai and Kasilof Rivers and in Fish Creek in the Northern District.

Prior to the start of the 1993 fishing season in late June, a court order from Judge Fabe in the Superior Court for the Third Judicial District, in Anchorage, ordered the Department to create educational fisheries for the Kenaitze Indian Tribe, the Ninilchik Traditional Council, the Native Village of Eklutna and the Knik Tribal Council.

### *The Kenaitze Tribal Fishery*

This fishery first allowed in 1989 has continued each year to and including 1993. Under the terms of the permit, the Kenaitze Tribe was issued a single permit allowing the bearer, who must be a tribal member domiciled in Game Management Unit 7 or 15 (the Kenai Peninsula), to operate a single 10-fathom set gillnet having a mesh size no greater than 8.5 inches in the Kenai River downstream from a point one-quarter mile above the Warren Ames Bridge and including those marine waters adjacent to the river mouth normally closed to commercial salmon fishing. Fishing was permitted each day on a 24-hour basis from June 1 to September 1 and from September 16 to September 30. Fishing was to cease when a total of 5,000 salmon had been harvested. A total harvest quota of 300 chinook salmon was also in effect after which all chinook would be released alive. A third provision of this permit allowed for a harvest quota of no more than 500 coho salmon taken after September 15.

Fishing occurred primarily in marine waters south of the mouth of the Kenai River and occasionally in an area known as the "Birches", a prominent stand of birch trees on the south bank of the river immediately upstream of the Warren Ames Bridge. The harvest for the 1993 season, as reported by the tribal office, totaled 145 chinook, 1,533 sockeye, 1 pink and 477 coho salmon.

### *Ninilchik Traditional Council Fishery*

Under the terms of this permit first issued in 1993, Alaska residents accompanied by a council member may participate in this fishery. The permit allowed the council to operate a single 10-fathom set gillnet having a mesh size no greater than 6.0 inches in the waters of Cook Inlet between a point 100 yards north of the Ninilchik small boat harbor entrance and the latitude of the commercial fisheries marker located approximately 1 statute mile north of the Ninilchik small boat harbor entrance and extending one-fourth of a mile offshore. Fishing was permitted each day on a 24-hour basis from July 15 to September 1 and from September 16 to September 30. Fishing was to cease when a total of 2,000 salmon had been harvested, additionally no more than 250 coho and 100 chinook salmon, 50 of which could be harvested prior to July 21 with an additional 50 chinook salmon harvested after July 21 if the projected spawning escapement into the Kenai River exceeds 22,300 chinook was placed on this fishery. The harvest for the 1993 season totaled 1 chinook, 27 sockeye, 193 coho and 6 pink salmon.

### *Native Village of Eklutna Fishery*

Under the terms of this permit first issued in 1993, Alaska residents accompanied by a village member may participate in this fishery. The permit allowed the village to operate a single 10-fathom set gillnet having a mesh size no greater than 6.0 inches, in Knik Arm adjacent to the village site or in those waters within one mile from mean high water in an area from Goose Bay Creek, north to Fish Creek. Fishing was permitted each day on a 24-hour basis from July 8 to September 30 with the exception of closures in the Fish Creek area during commercial periods on July 18, July 22 and July 25. In addition no fishing was permitted in the Fish Creek area after July 26. A harvest quota of 1,000 salmon, no more than 250 of which could be coho salmon was placed on this fishery. Additionally this harvest quota was divided equally between each fishing location so that no more than 500 salmon and 125 coho could be taken at Fish Creek or at the village site. The harvest for the 1993 season totaled 67 sockeye, 14 coho and 15 chum salmon.

### *Knik Tribal Council Fishery*

Under the terms of this permit first issued in 1993, Alaska residents accompanied by a village member may participate in this fishery. The permit allowed the village to operate a single 10-fathom set gillnet having a mesh size no greater than 6.0 inches, in Knik Arm adjacent to the village site or in those waters within one mile from mean high water in an area from Goose Bay Creek to Fish Creek. Fishing was permitted each day on a 24-hour basis from July 15 to September 30. A harvest quota of 1,000 salmon, no more than 250 of which could be coho salmon was placed on this fishery. Additionally this harvest quota was divided equally between each fishing location so that no more than 500 salmon and 125 coho could be taken at Fish Creek or at the village site. The harvest for the 1993 season was 200 salmon, the permittee failed to report the species breakdown.

### *Tyonek Subsistence Salmon Fishery*

Created by court order in 1980, this fishery was originally open only to those individuals domiciled in the village of Tyonek. Recent court decisions allow any Alaska resident to participate although very few non-villagers seek permits. Only one permit is allowed per household and each permit holder is allowed a single ten-fathom net having a mesh size no greater than six inches. Fishing periods are open from 4:00 a.m. to 8:00 p.m. each Tuesday, Thursday and Friday from May 15 to June 15 and from 6:00 a.m. to 6:00 p.m. each Saturday after June 15. The 1993 season resulted in a total reported harvest of 1,247 chinook, 43 sockeye, 36 coho, 11 pink and 9 chum salmon (Miraglia, ADF&G, memorandum). Sixty-eight permits were issued for the Tyonek fishery for the 1993 season but only twelve permits were returned to the Department by December as required (Appendix A.16).

### *Kasilof Personal Use Gill Net Fishery*

The Kasilof River personal use gill net fishery was established by the Alaska Board of Fisheries in 1982. Under regulations adopted for this fishery, open fishing periods are set at 6:00 a.m. to 6:00 p.m. daily beginning June 21. Fishing is limited to the beaches adjacent to the mouth of the Kasilof River inside the ADF&G commercial salmon fishing regulatory markers. Participants are permitted a single 10-fathom gill net having a mesh size no greater than six inches and a depth no greater than forty-five meshes. Participants are required to have a current resident Alaska sport fishing license. The fishery is limited to a harvest of 5,000-10,000 sockeye salmon.

In 1993, as in prior years, daily net counts were made at each beach and on-site interviews with fishermen were conducted to determine an average catch per net for both sockeye and chinook salmon. Daily harvest estimates were based on the average catch per net multiplied by the total number of nets fishing.

The fishery was open for six days before achieving the sockeye salmon quota and was closed by emergency order at 6:00 p.m., Saturday, June 26. The final harvest was estimated to be 7,942 sockeye and 47 chinook salmon (Table 15). Effort peaked on the first day of the fishery when 123 nets were counted and showed a generally decreasing trend as the fishery progressed. The highest daily harvest occurred on June 26, the final day of fishing, when 1,800 sockeye salmon were harvested. Chinook salmon daily catches were highest on the first day of the season and declined to relatively low numbers for the remainder of the fishery.

### *Fall Personal Use Coho Salmon Fishery*

The Central and Northern Districts Personal Use Coho Salmon Management Plan was adopted by the Alaska Board of Fisheries in 1983. Open fishing periods are scheduled from

12:00 noon, Saturday until 12:00 noon, Sunday on the last three weekends of September or until 2,500 salmon have been taken; open areas are defined as all areas along the Kenai Peninsula shoreline normally open to commercial set gillnetting from the Kasilof River north to Point Possession. Each permit holder is allotted one 10-fathom set gill net have a mesh size no greater than six inches and not exceeding 45 meshes in depth. A minimum distance of 100 feet is required between nets. A current Alaska resident sportfishing license and a permit issued by the Soldotna ADF&G office is required prior to participation in the fishery. Permit holders are required to report their catch to the Soldotna office within five days of a fishing period in which they participate.

A total of 535 permits were issued for the 1993 fishery, a substantial increase from the 360 issued in 1991 the last year this fishery occurred. Aerial surveys were conducted each weekend to determine the total number of nets fishing and catch reports received in the Soldotna office from fishermen were used to calculate an average catch per net. Harvest estimates for each fishing period were generated by multiplying the average catch per net by the total number of nets fishing (Table 16).

The first weekend (September 11-12) generated an estimated harvest of 411 coho salmon from 173 nets for an average per net of 2.4 fish. The second weekend saw a significant decrease in effort (59 nets) and catches remained low with an average per net of 3.4 fish for a total harvest of 198 fish. Weather and tides contributed to the poor catches during the first two weekends of the fishery with strong westerly winds creating a very large surf all along the eastern coast. Harvests during the final weekend of the fishery increased significantly to 559, with an average of 9.3 fish per net. The total harvest in 1993 was 1,168 coho salmon, the lowest harvest in this fishery since 1983, the first year of the fishery.

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- Tarbox, K.E. 1994. An estimate of the 1993 total sockeye salmon return to Upper Cook Inlet, Alaska, using a test fishery. Alaska Department of Fish and Game, Commercial Fisheries Management and Development Division, Regional Information Report 2A94-13, Anchorage.

Table 1. Offshore sockeye salmon testfishing observations, F/V Corrina Kay, 1993.

DATE	NUMBER OF STATIONS	FISHING TIME (min)	CATCH	CUMULATIVE CATCH	INDEX	CUMULATIVE INDEX	MEAN LENGTH (mm)	MEAN WEIGHT (kgs)	WATER TEMP (c)	AIR TEMP (c)	SALINITY (ppm)	BEGINNING WIND VEL DIR	ENDING WIND VEL DIR
7/01	6	242.0	209	209	122.502	122.502	548.	.00	9.8	12.8	26.3	0	0
7/02	5	169.5	35	244	31.261	153.763	551.	.00	9.0	8.8	27.7	22 NW	18 N
7/03	6	222.0	51	295	39.829	193.592	549.	.00	9.2	10.5	27.9	0	10 SE
7/04	5	187.0	64	359	47.001	240.593	563.	.00	9.2	9.2	27.4	0	0
7/05	6	224.0	46	405	36.369	276.962	550.	.00	10.2	12.7	26.8	10 S	20 SW
7/06	5	165.0	20	425	31.026	307.988	551.	.00	9.8	13.2	27.1	7 S	5 SE
7/07	6	247.5	261	686	166.750	474.738	560.	.00	10.5	14.3	26.5	0	5 S
7/08	5	185.5	20	706	15.934	490.672	554.	.00	9.6	14.0	27.0	0	0
7/09	6	228.5	73	779	54.032	544.704	556.	.00	11.3	15.3	26.0	0	10 SW
7/10	5	198.0	99	878	68.462	613.166	564.	.00	10.0	13.2	27.3	0	5 W
7/11	6	226.0	39	917	29.122	642.288	547.	.00	10.8	18.0	27.8	0	5 SW
7/12	5	185.0	17	934	13.265	655.553	547.	.00	10.2	14.4	27.0	0	0
7/13	6	229.5	93	1027	70.756	726.309	558.	.00	10.8	13.3	26.9	11 S	15 S
7/14	5	191.0	209	1236	138.910	865.219	569.	.00	11.2	13.0	25.9	0	3 S
7/15	6	202.5	124	1360	94.232	959.451	560.	.00	10.3	16.7	25.8	5 S	5 S
7/16	5	185.0	52	1412	41.780	1001.231	566.	.00	12.0	14.4	24.9	15 SW	5 SE
7/17	6	244.5	335	1747	220.830	1222.061	574.	.00	11.7	16.2	25.3	15 SE	20 SW
7/18	5	189.5	103	1850	76.926	1298.987	572.	.00	10.8	13.0	25.9	20 SE	0
7/19	6	230.0	89	1939	68.430	1367.417	572.	.00	10.5	13.3	26.4	10 S	10 SW
7/20	5	187.0	22	1961	17.561	1384.978	569.	.00	10.6	11.6	26.3	10 S	0
7/21	6	230.0	68	2029	50.363	1435.341	569.	.00	10.7	16.2	26.4	5 S	3 SE
7/22	5	184.5	37	2066	29.419	1464.760	564.	.00	10.2	11.8	25.5	7 SE	8 SE
7/23	6	239.0	150	2216	107.676	1572.436	563.	.00	10.7	12.2	25.2	18 S	10 S
7/24	5	194.0	121	2337	82.976	1655.412	573.	.00	10.4	11.4	25.6	10 SW	5 SW
7/25	0		0	2337	53.000	1708.412	0.	.00	.0	.0	.0		
7/26	5	167.5	26	2363	23.721	1732.133	571.	.00	10.3	12.0	25.7	10 NW	0
7/27	6	237.5	43	2406	32.222	1764.355	581.	.00	11.5	17.5	24.4	0	3 S
7/28	5	161.0	26	2432	33.551	1797.906	581.	.00	11.2	11.6	24.8	3 SW	0
7/29	6	219.5	20	2452	16.176	1814.082	565.	.00	10.7	15.7	24.6	15 N	12 SW
7/30	5	174.5	1	2453	.857	1814.939	515.	.00	11.4	13.6	23.9	5 S	0

From Tarbox (1994)

Table 2. Upper Cook Inlet sockeye salmon escapement by river and date, 1993.

Date	KENAI RIVER daily cumulative		KASILOF RIVER daily cumulative		CRESCENT RIVER daily cumulative		YENTNA RIVER daily cumulative		FISH CREEK daily cumulative		PACKERS CREEK daily cumulative	
6-02 Wed											3	3
6-03 Thu											5	8
6-04 Fri											6	14
6-05 Sat											20	34
6-06 Sun											0	34
6-07 Mon											0	34
6-08 Tue											0	34
6-09 Wed											0	34
6-10 Thu											0	34
6-11 Fri											0	34
6-12 Sat			1,692	1,692							0	34
6-13 Sun			2,259	3,951							0	34
6-14 Mon			2,531	6,482							0	34
6-15 Tue			1,356	7,838							0	34
6-16 Wed			1,824	9,662							0	34
6-17 Thu			1,382	11,044							0	34
6-18 Fri			2,398	13,442							90	124
6-19 Sat			2,035	15,477							5	129
6-20 Sun			2,211	17,688							93	222
6-21 Mon			2,054	19,742							17	239
6-22 Tue			1,658	21,400							107	346
6-23 Wed			1,676	23,076							3	349
6-24 Thu			3,773	26,849							44	393
6-25 Fri			5,622	32,471	357	357					26	419
6-26 Sat			6,078	38,549	366	723					0	419
6-27 Sun			5,435	43,984	87	810					1	420
6-28 Mon			3,609	47,593	353	1,163					1	421
6-29 Tue			1,882	49,475	105	1,268					1	422
6-30 Wed			4,095	53,570	174	1,442					0	422
7-01 Thu	3,363	3,363	4,246	57,816	657	2,099					2	424
7-02 Fri	4,714	8,077	5,041	62,857	205	2,304					8	432
7-03 Sat	2,609	10,686	1,396	64,253	587	2,891					0	432
7-04 Sun	5,102	15,788	1,919	66,172	3,996	6,887					47	479
7-05 Mon	14,576	30,364	2,702	68,874	2,071	8,958					13	492
7-06 Tue	16,428	46,792	1,211	70,085	293	9,251					76	568
7-07 Wed	3,162	49,954	4,310	74,395	421	9,672	144	144			5	573
7-08 Thu	4,280	54,234	6,149	80,544	592	10,264	162	306	278		39	612
7-09 Fri	11,355	65,589	1,665	82,209	894	11,158	192	498	583	861	6	618
7-10 Sat	3,905	69,494	1,458	83,667	644	11,802	202	700	594	1,455	23	641
7-11 Sun	1,387	70,881	2,020	85,687	1,467	13,269	151	851	1,531	2,986	8	649
7-12 Mon	3,796	74,677	2,731	88,418	1,234	14,503	126	977	1,591	4,577	11	660
7-13 Tue	7,871	82,548	13,587	102,005	1,381	15,884	164	1,141	1,663	6,240	12	672
7-14 Wed	88,382	170,930	4,020	106,025	2,916	18,800	184	1,325	735	6,975	26	698
7-15 Thu	74,263	245,193	6,089	112,114	2,992	21,792	717	2,042	713	7,688	16	714
7-16 Fri	80,572	325,765	6,566	118,680	2,301	24,093	17,010	19,052	2,050	9,738	2	716
7-17 Sat	69,167	394,932	1,939	120,619	1,627	25,720	21,259	40,311	4,985	14,723	12	728
7-18 Sun	25,365	420,297	1,729	122,348	1,421	27,141	10,688	50,999	8,226	22,949	6	734
7-19 Mon	13,724	434,021	1,807	124,155	1,105	28,246	3,143	54,142	6,696	29,645	70	804
7-20 Tue	19,281	453,302	1,681	125,836	765	29,011	5,353	59,495	9,086	38,731	655	1,459
7-21 Wed	20,159	473,461	1,397	127,233	929	29,940	6,251	65,746	6,629	45,360	1,113	2,572
7-22 Thu	13,999	487,460	1,212	128,445	911	30,851	6,912	72,658	7,284	52,644	2,647	5,219
7-23 Fri	10,343	497,803	3,076	131,521	881	31,732	8,697	81,355	6,182	58,826	1,384	6,603
7-24 Sat	9,602	507,405	2,259	133,780	743	32,475	10,276	91,631	1,875	60,701	221	6,824
7-25 Sun	8,956	516,361	2,493	136,273	671	33,146	8,865	100,496	20	60,721	89	6,913
7-26 Mon	28,416	544,777	1,766	138,039	952	34,098	7,622	108,118	13,362	74,083	468	7,381
7-27 Tue	41,395	586,172	1,415	139,454	659	34,757	6,586	114,704	3,366	77,449	98	7,479
7-28 Wed	22,378	608,550	2,463	141,917	639	35,396	3,060	117,764	50	77,499	245	7,724
7-29 Thu	20,204	628,754	1,757	143,674	402	35,798	3,736	121,500	2	77,501	874	8,598
7-30 Fri	18,026	646,780	1,623	145,297	611	36,409	4,973	126,473	12,993	90,494	1,074	9,672
7-31 Sat	15,283	662,063	717	146,014	426	36,835	4,810	131,283	3,043	93,537	4,767	14,439
8-01 Sun	11,026	673,089	843	146,857	331	37,166	1,660	132,943	11	93,548	3,752	18,191
8-02 Mon	14,541	687,630	1,180	148,037	390	37,556	1,688	134,631	4	93,552	2,175	20,366
8-03 Tue	10,839	698,469	697	148,734			2,445	137,076	4,569	98,121	316	20,682
8-04 Wed	6,509	704,978	643	149,377			2,467	139,543	160	98,281	1,341	22,023
8-05 Thu	9,834	714,812	562	149,939			976	140,519	28	98,309	336	22,359
8-06 Fri	24,134	738,946					673	141,192	35	98,344	252	22,611

Table 2. Page 2 of 2.

Date	KENAI RIVER		KASILOF RIVER	CRESCENT RIVER	YENTNA RIVER		FISH CREEK		PACKERS CREEK	
	daily	cumulative	daily	daily	daily	cumulative	daily	cumulative	daily	cumulative
8-07 Sat	14,953	753,899			502	141,694	5,811	104,155	638	23,249
8-08 Sun	9,106	763,005					4,265	108,420	313	23,562
8-09 Mon	16,988	779,993					2,885	111,305	119	23,681
8-10 Tue	9,123	789,116					1,372	112,677	89	23,770
8-11 Wed	7,510	796,626					2,541	115,218	121	23,891
8-12 Thu	7,791	804,417					1,231	116,449	89	23,980
8-13 Fri	9,200	813,617					586	117,035	15	23,995
8-14 Sat							86	117,121	827	24,822
8-15 Sun							212	117,333	559	25,381
8-16 Mon							107	117,440	532	25,913
8-17 Tue							53	117,493	262	26,175
8-18 Wed							61	117,554	28	26,203
8-19 Thu							60	117,614	168	26,371
8-20 Fri							5	117,619	316	26,687
8-21 Sat									1,207	27,894
8-22 Sun									1,013	28,907
8-23 Mon									423	29,330
8-24 Tue									448	29,778
8-25 Wed									175	29,953
8-26 Thu									612	30,565
8-27 Fri									754	31,319
8-28 Sat									54	31,373
8-29 Sun									1,276	32,649
8-30 Mon									1,781	34,430
8-31 Tue									1,076	35,506
9-01 Wed									910	36,416
9-02 Thu									1,140	37,556
9-03 Fri									397	37,953
9-04 Sat									94	38,047
9-05 Sun									877	38,924
9-06 Mon									922	39,846
9-07 Tue									54	39,900
9-08 Wed									185	40,085
9-09 Thu									93	40,178
9-10 Fri									148	40,326
9-11 Sat									0	40,326
9-12 Sun									341	40,667
9-13 Mon									117	40,784
9-14 Tue									76	40,860
9-15 Wed									9	40,869
9-16 Thu									0	40,869



Table 4. Commercial sockeye salmon catch by area and date, Upper Cook Inlet, 1993.

Date	EAST SIDE SET NET										NORTHERN DISTRICT SET NET											
	DRIFT EXCLUDING CHINITNA		SALAMATOF		K-BEACH		COMHOE/NINILCHIK		TOTAL		WEST SIDE		KUSTATAN		KALGIN		CHINITNA		WEST SIDE		NORTHERN DISTRICT SET NET	
	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum
6-02																						
6-04																						
6-07																					52	52
6-09																					52	104
6-11																					69	173
6-14																					121	294
6-16																					121	415
6-18																					121	536
6-21																					23	559
6-23																					144	703
6-25	10,950	10,950																			144	847
6-28	39,108	50,058																			58	905
7-02	97,546	147,604	1,177	1,177	4,525	13,221	13,221	17,746	17,746	1,615	3,110	123,153	123,153	1,218	2,195	108	192	71	273	317	58	1,021
7-05	126,194	273,798	1,836	3,013	5,940	15,121	26,874	60,248	34,650	78,382	2,152	6,861	188,156	1,326	3,156	140	332	173	446	502	173	1,840
7-08	1,288	275,086		3,013	4,055	19,176	19,123	79,371	23,178	101,560		6,861	15,561	4,482	615	271	717	377	717	377	2,217	2,217
7-09	2,143	277,229		2,802	5,815	20,931	5,755	85,126	10,312	111,872		6,861	15,561	4,482	615	271	717	377	717	377	2,217	2,217
7-12	549,219	826,448		5,815	7,069	23,832	21,641	106,067	25,796	137,668		6,861	15,561	4,482	615	271	717	377	717	377	2,217	2,217
7-13	48,871	875,319		7,069	51,904	75,736	29,320	136,087	81,224	218,892		6,861	15,561	4,482	615	271	717	377	717	377	2,217	2,217
7-14	86,893	962,212		8,865	56,503	132,239	20,157	156,244	169,525	308,417		6,861	15,561	4,482	615	271	717	377	717	377	2,217	2,217
7-16	221,515	1,183,727		94,185	188,010	35,309	191,553	185,265	573,682	3,074	14,080	886,167	886,167	20,967	191	1,060	29,279	32,183	8,664	12,268	2,904	3,604
7-17	86,076	1,269,803		260,259	28,133	216,143	16,416	207,969	110,689	684,371		6,861	15,561	4,482	615	271	717	377	717	377	2,217	2,217
7-18	104,274	1,374,077		332,012	19,955	236,098	21,101	229,070	112,809	797,180		6,861	15,561	4,482	615	271	717	377	717	377	2,217	2,217
7-19	403,762	1,777,839		429,649	34,850	270,948	35,560	264,300	168,047	965,227		6,861	15,561	4,482	615	271	717	377	717	377	2,217	2,217
7-20	45,631	1,823,470		485,460	27,259	298,207	23,734	288,364	106,804	1,072,031		6,861	15,561	4,482	615	271	717	377	717	377	2,217	2,217
7-21	89,439	1,912,909		528,725	27,996	326,203	22,714	311,078	93,975	1,166,006		6,861	15,561	4,482	615	271	717	377	717	377	2,217	2,217
7-22	31,701	1,944,610		566,972	27,274	353,477	31,078	344,551	109,413	1,340,940		6,861	15,561	4,482	615	271	717	377	717	377	2,217	2,217
7-23	209,868	2,154,478		602,307	40,605	394,082	33,473	344,551	109,413	1,340,940		6,861	15,561	4,482	615	271	717	377	717	377	2,217	2,217
7-24	4,646	2,159,124		625,518	18,489	412,571	412,571	344,551	41,700	1,382,640		6,861	15,561	4,482	615	271	717	377	717	377	2,217	2,217
7-25	2,159,124			625,518	18,489	412,571	412,571	344,551	41,700	1,382,640		6,861	15,561	4,482	615	271	717	377	717	377	2,217	2,217
7-26	355,138	2,414,262		653,747	48,431	461,002	52,994	397,545	129,654	1,512,294		6,861	15,561	4,482	615	271	717	377	717	377	2,217	2,217
7-27	18,541	2,432,803		685,469	25,691	486,693	397,545	57,413	1,569,707	1,629	18,891	17,716	6,122	40,333	65	1,226	16,883	100,160	1,340	22,258	108,149	22,258
7-28	14,479	2,447,282		707,580	53,248	539,941	397,545	75,359	1,645,066	18,891	17,716	6,122	40,333	65	1,226	16,883	100,160	1,340	22,258	108,149	22,258	22,258
7-29	12,041	2,459,323		716,987	43,956	583,897	397,545	53,363	1,698,429	18,891	17,716	6,122	40,333	65	1,226	16,883	100,160	1,340	22,258	108,149	22,258	22,258
7-30	61,980	2,521,303		734,079	34,067	617,964	13,994	411,539	65,153	1,763,582		6,861	15,561	4,482	615	271	717	377	717	377	2,217	2,217
7-31	3,187	2,524,490		749,427	9,714	627,678	12,322	423,861	37,384	1,800,966		6,861	15,561	4,482	615	271	717	377	717	377	2,217	2,217
8-01	2,678	2,527,168		773,156	11,616	639,294	423,861	35,345	1,836,311	20,051	18,031	18,031	45,983	1,291	114,029	23,043	23,043	23,043	23,043	23,043	23,043	23,043
8-02	23,135	2,550,303		790,470	12,239	651,533	10,144	434,005	39,697	1,876,008		6,861	15,561	4,482	615	271	717	377	717	377	2,217	2,217
8-03	604	2,550,907		796,462	5,334	656,867	434,005	11,326	1,887,334	21,142	18,093	18,093	50,118	1,291	114,029	23,043	23,043	23,043	23,043	23,043	23,043	23,043
8-04	790	2,551,697		803,327	12,554	669,421	434,005	19,419	1,906,753	21,142	18,093	18,093	50,118	1,291	114,029	23,043	23,043	23,043	23,043	23,043	23,043	23,043
8-06	4,402	2,556,099		808,695	2,128	671,549	5,637	439,642	13,133	1,919,886		6,861	15,561	4,482	615	271	717	377	717	377	2,217	2,217
8-07	318	2,556,417		814,273	4,100	675,649	439,642	9,678	1,929,564	610	21,752	62,185	56,292	1,291	114,029	23,043	23,043	23,043	23,043	23,043	23,043	23,043
8-09	1,458	2,557,875		819,229	2,411	678,060	2,385	442,027	9,752	1,939,316		6,861	15,561	4,482	615	271	717	377	717	377	2,217	2,217
8-11	2,557,875			819,229	2,411	678,060	2,385	442,027	9,752	1,939,316		6,861	15,561	4,482	615	271	717	377	717	377	2,217	2,217
8-13	57	2,557,932		819,983	671	678,731	965	442,992	2,390	1,941,706		6,861	15,561	4,482	615	271	717	377	717	377	2,217	2,217
8-16	105	2,558,037		819,983	671	678,731	965	442,992	2,390	1,941,706		6,861	15,561	4,482	615	271	717	377	717	377	2,217	2,217
8-20	143	2,558,180		819,983	671	678,731	965	442,992	2,390	1,941,706		6,861	15,561	4,482	615	271	717	377	717	377	2,217	2,217
8-23	35	2,558,215		819,983	671	678,731	965	442,992	2,390	1,941,706		6,861	15,561	4,482	615	271	717	377	717	377	2,217	2,217
8-27	7	2,558,222		819,983	671	678,731	965	442,992	2,390	1,941,706		6,861	15,561	4,482	615	271	717	377	717	377	2,217	2,217
8-30	6	2,558,228		819,983	671	678,731	965	442,992	2,390	1,941,706		6,861	15,561	4,482	615	271	717	377	717	377	2,217	2,217
9-03	166	2,558,394		819,983	671	678,731	965	442,992	2,390	1,941,706		6,861	15,561	4,482	615	271	717	377	717	377	2,217	2,217
9-06	2,558,394			819,983	671	678,731	965	442,992	2,390	1,941,706		6,861	15,561	4,482	615	271	717	377	717	377	2,217	2,217
9-10	2,558,394			819,983	671	678,731	965	442,992	2,390	1,941,706		6,861	15,561	4,482	615	271	717	377	717	377	2,217	2,217
9-13	2,558,394			819,983	671	678,731	965	442,992														

Table 5. Commercial coho salmon catch by area and date, Upper Cook Inlet, 1993.

Date	EAST SIDE SET NET										TOTAL	WEST SIDE	KUSTATAN	KALGIN	CHINITNA	NORTHERN DISTRICT SET NET			
	DRIFT		SALAMATOF	K-BEACH	COFOE/NINILCHIK	TOTAL	WEST SIDE	KUSTATAN	KALGIN	CHINITNA						WEST SIDE	EAST SIDE		
	excl. CHINITNA	Daily																Daily	Daily
6-02	13																		
6-04	86																		
6-07	384																		
6-09	820	3	3	6	17	17	17	17	17	17	17	17	17	17	17	17	17	17	
6-11	3																		
6-14	7																		
6-16	2,402	36	50	16	25	5	39	33	114	114	114	114	114	114	114	114	114	114	
6-18	107	3,809	50	16	17	5	36	33	126	126	126	126	126	126	126	126	126	126	
6-21	3,976	8,107	193	530	64	118	44	100	408	555	38	329	329	329	329	329	329	329	
6-23	760	8,867	116	646	60	242	55	249	241	1,137	104	324	450	293	622	3	3	3	
6-25	718	9,385	195	841	118	360	183	432	496	1,633	104	450	622	622	622	622	622	622	
6-28	73	22,895	322	1,163	185	360	125	557	632	2,265	104	450	622	622	622	622	622	622	
7-02	384	22,895	322	1,163	185	360	125	557	632	2,265	104	450	622	622	622	622	622	622	
7-05	820	23,439	240	1,403	140	685	80	637	460	2,725	214	380	830	944	1,566	2	5	7,675	
7-08	3	23,439	240	1,403	140	685	80	637	460	2,725	214	380	830	944	1,566	2	5	7,675	
7-09	7	24,419	182	1,585	140	825	80	717	402	3,127	318	402	830	830	1,566	5	74	14,137	
7-12	2,402	25,454	382	1,967	233	1,058	717	717	615	3,742	318	402	830	830	1,566	5	74	14,137	
7-13	107	52,598	574	2,541	600	1,658	191	908	1,365	5,107	318	543	1,373	1,121	2,687	22	27	14,137	
7-16	3,976	53,114	472	3,013	396	2,054	396	908	868	5,975	318	543	1,373	1,121	2,687	22	27	14,137	
7-17	760	53,114	472	3,013	396	2,054	396	908	868	5,975	318	543	1,373	1,121	2,687	22	27	14,137	
7-18	718	53,114	472	3,013	396	2,054	396	908	868	5,975	318	543	1,373	1,121	2,687	22	27	14,137	
7-19	13,310	69,773	1,174	4,187	550	2,604	699	1,607	2,423	8,398	58	376	1,406	2,779	3,164	5,851	35	62	14,534
7-20	539	71,011	983	5,170	365	2,969	699	1,607	1,348	9,746	58	376	1,406	2,779	3,164	5,851	35	62	14,534
7-21	985	73,967	2,236	7,406	919	3,888	699	1,607	3,155	12,901	376	376	2,779	2,779	5,551	62	62	29,327	
7-22	1,035	77,167	2,039	9,445	1,743	5,631	699	1,607	3,782	16,683	376	376	2,779	2,779	5,551	62	62	29,327	
7-23	27,144	102,344	3,023	12,468	1,079	6,710	597	2,204	4,699	21,382	252	628	2,146	4,925	3,178	9,029	62	62	48,686
7-24	516	103,435	1,056	14,985	692	8,062	597	2,204	3,349	24,731	628	628	2,146	4,925	3,178	9,029	62	62	48,686
7-25	16,659	114,117	1,054	16,039	895	8,957	796	4,228	1,748	26,479	654	1,282	635	5,560	649	9,678	62	62	48,686
7-26	69,773	114,117	1,054	16,039	895	8,957	796	4,228	1,748	26,479	654	1,282	635	5,560	649	9,678	62	62	48,686
7-27	238	114,252	782	16,821	610	9,567	796	4,228	2,745	29,224	654	1,282	635	5,560	649	9,678	62	62	48,686
7-28	2,956	114,252	782	16,821	610	9,567	796	4,228	2,745	29,224	654	1,282	635	5,560	649	9,678	62	62	48,686
7-29	3,200	114,346	1,021	17,842	1,178	10,745	796	4,228	2,199	32,815	654	1,282	635	5,560	649	9,678	62	62	48,686
7-30	25,177	115,984	790	18,632	440	11,185	796	4,228	2,199	32,815	654	1,282	635	5,560	649	9,678	62	62	48,686
7-31	461	116,029	704	19,336	816	12,001	1,979	6,207	3,209	36,024	803	2,085	381	5,941	702	11,678	62	62	48,686
8-01	630	119,224	696	20,032	711	12,712	1,091	7,298	2,498	37,544	803	2,085	381	5,941	702	11,678	62	62	48,686
8-02	10,682	119,224	696	20,032	711	12,712	1,091	7,298	2,498	37,544	803	2,085	381	5,941	702	11,678	62	62	48,686
8-03	135	119,224	696	20,032	711	12,712	1,091	7,298	2,498	37,544	803	2,085	381	5,941	702	11,678	62	62	48,686
8-04	94	119,543	838	20,870	608	13,320	1,587	8,885	3,033	43,075	805	4,092	355	7,114	297	15,315	62	62	48,686
8-06	1,638	119,543	838	20,870	608	13,320	1,587	8,885	3,033	43,075	805	4,092	355	7,114	297	15,315	62	62	48,686
8-07	45	120,858	20,870	20,870	20,870	13,320	1,587	8,885	3,033	43,075	805	4,092	355	7,114	297	15,315	62	62	48,686
8-09	3,195	120,858	20,870	20,870	20,870	13,320	1,587	8,885	3,033	43,075	805	4,092	355	7,114	297	15,315	62	62	48,686
8-11	319	121,073	20,870	20,870	20,870	13,320	1,587	8,885	3,033	43,075	805	4,092	355	7,114	297	15,315	62	62	48,686
8-13	1,063	121,073	20,870	20,870	20,870	13,320	1,587	8,885	3,033	43,075	805	4,092	355	7,114	297	15,315	62	62	48,686
8-16	252	121,073	20,870	20,870	20,870	13,320	1,587	8,885	3,033	43,075	805	4,092	355	7,114	297	15,315	62	62	48,686
8-20	215	121,073	20,870	20,870	20,870	13,320	1,587	8,885	3,033	43,075	805	4,092	355	7,114	297	15,315	62	62	48,686
8-23	417	121,785	20,870	20,870	20,870	13,320	1,587	8,885	3,033	43,075	805	4,092	355	7,114	297	15,315	62	62	48,686
8-27	52	121,785	20,870	20,870	20,870	13,320	1,587	8,885	3,033	43,075	805	4,092	355	7,114	297	15,315	62	62	48,686
9-03	121,785	121,785	20,870	20,870	20,870	13,320	1,587	8,885	3,033	43,075	805	4,092	355	7,114	297	15,315	62	62	48,686
9-06	121,785	121,785	20,870	20,870	20,870	13,320	1,587	8,885	3,033	43,075	805	4,092	355	7,114	297	15,315	62	62	48,686
9-10	121,785	121,785	20,870	20,870	20,870	13,320	1,587	8,885	3,033	43,075	805	4,092	355	7,114	297	15,315	62	62	48,686
9-13	121,785	121,785	20,870	20,870	20,870	13,320	1,587	8,885	3,033	43,075	805	4,092	355	7,114	297	15,315	62	62	48,686

Table 6. Commercial pink salmon catch by area and date, Upper Cook Inlet, 1993.

Date	EAST SIDE SET NET												NORTHERN DISTRICT SET NET									
	DRIFT excluding CHINITNA		SALAMATOF		K-BEACH		CONDE/NINILCHIK		TOTAL		WEST SIDE		KUSTATAN		KALGIN		CHINITNA		WEST SIDE		EAST SIDE	
	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum
6-02	17																					
6-04	22	39																				
6-07	56	95	4	4	1	2	16	23	7	8	1	1	1	1	1	1	1	1	1	59	59	6
6-09	185	197	15	19	9	11	28	51	52	81	2	3	3	3	1	1	2	2	1	4	63	6
6-11	197	394	19	38	6	17	159	210	165	246	3	3	3	3	1	1	2	2	1	4	63	6
6-14	36	233	19	57	20	37	152	362	191	437	19	22	19	22	3	4	24	26	1	15	78	16
6-16	523	756	222	260	113	150	650	1,012	985	1,422	46	68	46	68	7	11	37	63	7	158	236	100
6-18	920	1,676	260	520	164	244	1,256	2,581	1,680	4,262	68	77	68	77	11	11	37	63	7	158	236	100
6-21	233	1,909	37	297	37	201	411	1,667	485	2,165	68	68	68	68	11	11	37	63	7	158	236	100
6-23	4,048	5,957	307	604	167	368	977	2,644	1,451	3,016	77	145	77	145	43	54	116	179	9	17	516	752
6-25	17	5,974	237	841	282	650	1,307	3,951	1,826	5,442	145	145	145	145	43	54	116	179	9	17	516	752
6-28	39	6,013	237	841	282	650	1,307	3,951	1,826	5,442	145	145	145	145	43	54	116	179	9	17	516	752
7-02	56	6,069	4	845	1,202	2,378	3,752	6,329	3,468	8,910	145	145	145	145	43	54	116	179	9	17	516	752
7-05	90	6,159	15	860	1,202	2,378	3,752	6,329	3,468	8,910	145	145	145	145	43	54	116	179	9	17	516	752
7-08	12	6,171	19	879	1,202	2,378	3,752	6,329	3,468	8,910	145	145	145	145	43	54	116	179	9	17	516	752
7-09	36	6,207	19	898	1,202	2,378	3,752	6,329	3,468	8,910	145	145	145	145	43	54	116	179	9	17	516	752
7-12	523	6,730	222	1,120	113	150	650	1,012	985	1,422	46	68	46	68	7	11	37	63	7	158	236	100
7-13	164	6,894	260	1,380	14	164	244	1,256	258	1,680	244	244	244	244	7	11	37	63	7	158	236	100
7-14	233	7,127	297	1,677	37	201	411	1,667	485	2,165	68	68	68	68	11	11	37	63	7	158	236	100
7-16	2,895	10,022	307	2,000	167	368	977	2,644	1,451	3,016	77	145	77	145	43	54	116	179	9	17	516	752
7-17	1,738	11,760	237	2,237	282	650	1,307	3,951	1,826	5,442	145	145	145	145	43	54	116	179	9	17	516	752
7-18	2,141	13,901	237	2,474	282	650	1,307	3,951	1,826	5,442	145	145	145	145	43	54	116	179	9	17	516	752
7-19	5,546	19,447	792	3,266	1,202	2,378	3,752	6,329	3,468	8,910	145	145	145	145	43	54	116	179	9	17	516	752
7-20	2,070	21,517	510	3,776	1,202	2,378	3,752	6,329	3,468	8,910	145	145	145	145	43	54	116	179	9	17	516	752
7-21	2,942	24,459	401	4,177	1,202	2,378	3,752	6,329	3,468	8,910	145	145	145	145	43	54	116	179	9	17	516	752
7-22	1,874	26,333	725	4,902	1,202	2,378	3,752	6,329	3,468	8,910	145	145	145	145	43	54	116	179	9	17	516	752
7-23	7,477	33,810	937	5,839	1,061	5,319	3,089	17,802	5,087	27,865	209	209	209	209	4	96	95	309	21	55	1,598	202
7-24	530	34,340	669	6,508	1,061	5,319	3,089	17,802	5,087	27,865	209	209	209	209	4	96	95	309	21	55	1,598	202
7-25	28,366	62,706	5,413	12,921	901	6,220	1,570	29,435	209	29,435	209	209	209	209	4	96	95	309	21	55	1,598	202
7-26	6,709	69,415	502	13,423	407	6,627	1,128	18,930	2,037	31,472	19	228	19	228	83	179	186	495	28	83	3,420	5,041
7-27	1,173	70,588	669	14,092	350	6,977	1,019	18,930	2,037	31,472	19	228	19	228	83	179	186	495	28	83	3,420	5,041
7-28	1,097	71,685	636	14,728	389	7,366	1,025	18,930	2,037	31,472	19	228	19	228	83	179	186	495	28	83	3,420	5,041
7-29	1,174	72,859	623	15,351	522	7,888	1,045	18,930	2,037	31,472	19	228	19	228	83	179	186	495	28	83	3,420	5,041
7-30	5,304	78,163	757	16,108	316	8,204	974	19,904	2,047	36,708	23	251	23	251	54	233	221	716	83	83	2,625	7,666
7-31	204	79,367	655	16,763	186	8,390	983	20,887	1,824	38,532	251	251	251	251	54	233	221	716	83	83	2,625	7,666
8-01	112	80,479	374	17,137	144	8,534	1,019	18,930	2,037	31,472	19	228	19	228	83	179	186	495	28	83	3,420	5,041
8-02	1,846	82,325	372	17,509	328	8,862	1,295	18,930	2,037	31,472	19	228	19	228	83	179	186	495	28	83	3,420	5,041
8-03	47	82,372	211	17,720	143	9,005	1,451	18,930	2,037	31,472	19	228	19	228	83	179	186	495	28	83	3,420	5,041
8-04	48	82,420	189	17,909	148	9,153	1,451	18,930	2,037	31,472	19	228	19	228	83	179	186	495	28	83	3,420	5,041
8-06	113	82,533	28	18,022	19	9,172	1,251	18,930	2,037	31,472	19	228	19	228	83	179	186	495	28	83	3,420	5,041
8-07	15	82,548	73	18,095	35	9,207	1,251	18,930	2,037	31,472	19	228	19	228	83	179	186	495	28	83	3,420	5,041
8-09	185	82,733	65	18,160	52	9,259	1,381	18,930	2,037	31,472	19	228	19	228	83	179	186	495	28	83	3,420	5,041
8-11	46	82,779	10,567	28,226	143	9,005	1,451	18,930	2,037	31,472	19	228	19	228	83	179	186	495	28	83	3,420	5,041
8-13	1	82,780	13	28,239	6	9,265	84	21,829	103	41,674	55	878	55	878	3	271	28	971	83	83	2,625	7,666
8-16	21	82,801	10,580	28,260	6	9,265	84	21,829	103	41,674	55	878	55	878	3	271	28	971	83	83	2,625	7,666
8-20	14	82,815	10,580	28,274	14	9,265	84	21,829	103	41,674	55	878	55	878	3	271	28	971	83	83	2,625	7,666
8-23	12	82,827	10,580	28,286	14	9,265	84	21,829	103	41,674	55	878	55	878	3	271	28	971	83	83	2,625	7,666
8-27	46	82,873	10,580	28,332	14	9,265	84	21,829	103	41,674	55	878	55	878	3	271	28	971	83	83	2,625	7,666
8-30	46	82,919	10,580	28,378	14	9,265	84	21,829	103	41,674	55	878	55	878	3	271	28	971	83	83	2,625	7,666
9-03	16	82,935	10,580	28,394	14	9,265	84	21,829	103	41,674	55	878	55	878	3	271	28	971	83	83	2,625	7,666
9-06	46	82,981	10,580	28,440	14	9,265	84	21,829	103	41,674	55	878	55	878	3	271	28	971	83	83	2,625	7,666

Table 7. Commercial chum salmon catch by area and date, Upper Cook Inlet, 1993.

Date	DRIFT		SALAMATOF		K-BEACH		COROE/NINILCHIK		TOTAL		WEST SIDE		KUSTATAN		KALGIN		CHINITNA		WEST SIDE		NORTHERN DISTRICT SET NET	
	excluding CHINITNA		Daily Cum		Daily Cum		Daily Cum		Daily Cum		Daily Cum		Daily Cum		Daily Cum		Daily Cum		Daily Cum		Daily Cum	
	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum	Daily	Cum
6-02																						
6-04																						
6-07																						
6-09																						
6-11																						
6-14																						
6-16																						
6-18																						
6-21																						
6-23																						
6-25	766	766																				
6-28	1,143	1,909																				
7-02	2,449	4,358	8	8	2	2	1	1	1	1	1	2	3	4	4	4	2	2	139	139	22	161
7-05	2,638	6,996	8	16	1	3	1	4	2	15	4	7	7	7	2	6	2	4	22	161	1	1
7-08	89	7,085	3	19	1	4	5	9	24	21	28	21	28	34	40	6	4	4	78	239	1	2
7-09	70	7,155	7	26	1	5	6	15	38	85	113	30	287	39	79	14	30	30	287	526	5	7
7-12	2,715	9,870	18	18	2	17	2	17	4	42	113	30	287	39	79	14	30	30	287	526	5	7
7-13	156	10,026	18	18	2	17	2	17	4	42	113	30	287	39	79	14	30	30	287	526	5	7
7-14	184	10,210	2	20	1	8	5	22	8	50	113	30	287	39	79	14	30	30	287	526	5	7
7-16	5,103	15,313	23	43	2	10	6	28	8	81	145	258	53	17	96	23	53	608	1,134	113	120	
7-17	884	16,197	25	68	2	12	7	35	34	115	161	258	53	17	96	23	53	608	1,134	113	120	
7-18	1,157	17,354	32	100	16	28	61	96	109	224	258	53	17	96	23	53	608	1,134	113	120		
7-19	8,024	25,378	35	135	9	37	25	121	69	293	205	463	3	33	129	92	92	1,473	2,662	192	312	
7-20	486	25,864	25	160	6	43	12	133	43	336	205	463	3	33	129	92	92	1,473	2,662	192	312	
7-21	625	26,489	17	177	6	49	7	140	30	366	205	463	3	33	129	92	92	1,473	2,662	192	312	
7-22	958	27,447	37	214	15	64	7	140	52	418	205	463	3	33	129	92	92	1,473	2,662	192	312	
7-23	12,596	40,043	61	275	11	75	21	161	93	511	463	63	4	4	118	247	202	2,708	5,376	206	732	
7-24	379	40,422	44	319	58	133	21	161	102	613	463	63	4	4	118	247	202	2,708	5,376	206	732	
7-25	14,756	55,178	77	396	21	154	115	276	213	826	463	63	4	4	118	247	202	2,708	5,376	206	732	
7-27	681	55,859	110	506	16	170	115	276	226	952	463	63	4	4	118	247	202	2,708	5,376	206	732	
7-28	1,054	56,913	80	586	23	193	115	276	249	1,055	463	63	4	4	118	247	202	2,708	5,376	206	732	
7-29	1,807	58,720	146	732	96	289	115	276	242	1,297	463	63	4	4	118	247	202	2,708	5,376	206	732	
7-30	14,451	73,171	172	904	39	328	65	341	276	1,573	463	63	4	4	118	247	202	2,708	5,376	206	732	
7-31	255	73,426	180	1,084	25	353	203	544	408	1,981	463	63	4	4	118	247	202	2,708	5,376	206	732	
8-01	226	73,652	86	1,170	13	366	203	544	408	1,981	463	63	4	4	118	247	202	2,708	5,376	206	732	
8-02	12,288	85,940	126	1,296	65	431	140	684	544	2,080	463	63	4	4	118	247	202	2,708	5,376	206	732	
8-03	87	86,027	61	1,357	20	451	140	684	544	2,080	463	63	4	4	118	247	202	2,708	5,376	206	732	
8-04	51	86,078	99	1,456	39	490	140	684	544	2,080	463	63	4	4	118	247	202	2,708	5,376	206	732	
8-06	708	86,786	24	1,480	14	504	75	759	513	2,743	463	63	4	4	118	247	202	2,708	5,376	206	732	
8-07	71	86,857	40	1,520	25	529	75	759	513	2,743	463	63	4	4	118	247	202	2,708	5,376	206	732	
8-09	1,596	88,453	40	1,560	13	542	46	805	599	2,907	463	63	4	4	118	247	202	2,708	5,376	206	732	
8-11		88,453		1,560		542	46	805	599	2,907	463	63	4	4	118	247	202	2,708	5,376	206	732	
8-13	37	88,490	17	1,577		542	53	858	70	2,977	463	63	4	4	118	247	202	2,708	5,376	206	732	
8-16	48	88,538		1,577		542		858		2,977	463	63	4	4	118	247	202	2,708	5,376	206	732	
8-20	119	88,657		1,577		542		858		2,977	463	63	4	4	118	247	202	2,708	5,376	206	732	
8-23	1	88,658		1,577		542		858		2,977	463	63	4	4	118	247	202	2,708	5,376	206	732	
8-27	1	88,659		1,577		542		858		2,977	463	63	4	4	118	247	202	2,708	5,376	206	732	
8-30		88,659		1,577		542		858		2,977	463	63	4	4	118	247	202	2,708	5,376	206	732	
9-03	91	88,750		1,577		542		858		2,977	463	63	4	4	118	247	202	2,708	5,376	206	732	
9-06		88,750		1,577		542		858		2,977	463	63	4	4	118	247	202	2,708	5,376	206	732	
9-10		88,750		1,577		542		858		2,977	463	63	4	4	118	247	202	2,708	5,376	206	732	

Table 8. Commercial catch by gear, statistical area and species, Upper Cook Inlet, 1993.

Gear	District	Subdistrict	Stat Area	Permits	Chinook	Sockeye	Coho	Pink	Chum	Total	
Drift	Central	All	All	580	746	2,558,492	121,828	46,463	88,823	2,816,352	
Set Net	Central	Upper	244-21	93	2,332	151,620	3,753	9,061	256	167,022	
			244-22	115	2,731	291,372	5,132	12,768	602	312,605	
			244-30	171	5,954	678,731	13,320	9,265	542	707,812	
			244-40	129	2,960	819,983	20,870	10,580	1,577	855,970	
			All	437	13,977	1,941,706	43,075	41,674	2,977	2,043,409	
		Kalgin Is.	246-10	19	52	32,082	10,118	632	1,020	43,904	
			246-20	11	14	32,039	6,708	371	601	39,733	
			All	27	66	64,121	16,826	1,003	1,621	83,637	
		Chinitna	245-10	4	6	1,474	2,061	97	464	4,102	
		Western	245-20	7	18	1,693	3,314	397	278	5,700	
			245-30	22	154	11,827	2,597	348	2,884	17,810	
			245-40	10	28	10,206	3,208	195	267	13,904	
			245-50	3	23	204	76	1	4	308	
			All	40	223	23,930	9,195	941	3,433	37,722	
		Kustatan	245-55	20	400	16,307	3,315	39	7	20,068	
			245-60	6	24	2,349	4,264	233	41	6,911	
			All	22	424	18,656	7,579	272	48	26,979	
		All	All	513	14,696	2,049,887	78,736	43,987	8,543	2,195,849	
		Northern	General	247-10	24	730	5,968	7,169	1,043	490	15,400
				247-20	31	1,290	11,692	15,529	1,325	2,422	32,258
				247-30	29	676	22,966	39,561	4,360	11,250	78,813
				247-41	13	27	16,815	8,005	767	3,148	28,762
				247-42	9	0	7,074	5,917	375	1,788	15,154
				247-43	8	51	7,452	10,179	1,265	3,785	22,732
				247-50	18	0	47,751	831	29	990	49,601
				All	90	2,774	119,718	87,191	9,164	23,873	242,720
				Eastern	247-70	28	347	17,995	9,202	992	1,420
247-80	7				112	2,971	4,115	176	32	7,406	
247-90	10		44		5,635	5,750	136	76	11,641		
All	40		503		26,601	19,067	1,304	1,528	49,003		
All	All		121	3,277	146,319	106,258	10,468	25,401	291,723		
All	All		All	624	17,973	2,196,206	184,994	54,455	33,944	2,487,572	
Seine	All		All	All	0	0	0	0	0	0	
All	All		All	All	1,204	18,719	4,754,698	306,822	100,918	122,767	5,303,924

Table 9. Commercial salmon catch per permit by statistical area, Upper Cook Inlet, 1993.

Gear	District	Subdistrict	Stat Area	Permits	Chinook	Sockeye	Coho	Pink	Chum	Total	
Drift	Central	All	All	580	1	4,411	210	80	153	4,856	
Set Net	Central	Upper	244-21	93	25	1,630	40	97	3	1,796	
			244-22	115	24	2,534	45	111	5	2,718	
			244-30	171	35	3,969	78	54	3	4,139	
			244-40	129	23	6,356	162	82	12	6,635	
			All	437	32	4,443	99	95	7	4,676	
		Kalgin Is.	246-10	19	3	1,689	533	33	54	2,311	
			246-20	11	1	2,913	610	34	55	3,612	
			All	27	2	2,375	623	37	60	3,098	
		Chinitna	245-10	4	2	369	515	24	116	1,026	
		Western	245-20	7	3	242	473	57	40	814	
			245-30	22	7	538	118	16	131	810	
			245-40	10	3	1,021	321	20	27	1,390	
			245-50	3	8	68	25	0	1	103	
			All	40	6	598	230	24	86	943	
		Kustatan	245-55	20	20	815	166	2	0	1,003	
			245-60	6	4	392	711	39	7	1,152	
			All	22	19	848	345	12	2	1,226	
		All	All	All	513	29	3,996	153	86	17	4,280
		Northern	General	247-10	24	30	249	299	43	20	642
				247-20	31	42	377	501	43	78	1,041
	247-30			29	23	792	1,364	150	388	2,718	
	247-41			13	2	1,293	616	59	242	2,212	
	247-42			9	0	786	657	42	199	1,684	
	247-43			8	6	932	1,272	158	473	2,842	
	247-50			18	0	2,653	46	2	55	2,756	
	All			90	31	1,330	969	102	265	2,697	
	Eastern			247-70	28	12	643	329	35	51	1,070
247-80				7	16	424	588	25	5	1,058	
247-90			10	4	564	575	14	8	1,164		
All			40	13	665	477	33	38	1,225		
All	All		All	121	27	1,209	878	87	210	2,411	
All	All		All	All	624	29	3,520	296	87	54	3,986
Seine	All		All	All	0	0	0	0	0	0	
All	All		All	All	1,204	16	3,949	255	84	102	4,405

Table 10. Commercial fishery emergency orders issued during the 1993 Upper Cook Inlet season.

Emergency Order No.	Effective Date	Action	Reason
2S-01-93	June 27	Opened set gillnetting in the Upper Subdistrict south of the Blanchard Line from 7:00 am to 7:00 pm, June 28.	Kasilof River sockeye escapement projected to exceed 50,000.
2S-02-93	July 8	Opened set and drift gill netting in the Upper Subdistrict south of the Blanchard Line and within 3 miles of shore on 7/8 from 1:00 pm to 10:00 pm.	To reduce the rate of escapement into the Kasilof River.
2S-03-93	July 9	Closed drift gillnetting in all areas of the Central District except that portion of the Upper Subdistrict south of Colliers Dock and within 3 miles of shore on 7/9.	Reduce the harvest rate of Susitna River sockeye in anticipation of a weak return.
2S-04-93	July 13	Opened set gillnetting in the Upper Subdistrict and drift gillnetting in the Upper Subdistrict south of Colliers Dock and within 3 miles of shore on 7/13 from 12:00 Noon to 10:00 P.M.	Reduce the escapement rate of Kenai and Kasilof River sockeye.
2S-05-93	July 13	Opened set gillnetting in the Upper Subdistrict from 10:00 pm 7/13 to 3:00 pm 7/14 and drift gillnetting in the Upper Subdistrict south of Colliers Dock and within 3 miles of shore on 7/14 from 5:00 am to 3:00 pm.	Reduce the escapement rate of Kenai and Kasilof River sockeye.
2S-06-93	July 16	Closed drift gillnetting in the Central District except that portion south of Clam Gulch Tower and that portion south of Colliers Dock and within 3 miles of shore on 7/16 from 7:00 am to 7:00 pm.	Reduce the harvest rate of Susitna River sockeye salmon.
2S-07-93	July 16	Opened set gillnetting in the Upper Subdistrict from 7:00 pm 7/16 until 10:00 pm 7/17. Opened drift gillnetting in the Upper Subdistrict south of Colliers Dock and within 3 miles of shore on 7/16 from 7:00 pm to 10:00 pm and 7/17 from 5:00 am to 10:00 pm.	Reduce the rate of sockeye salmon escapement into the Kenai and Kasilof Rivers.
2S-08-93	July 17	Opened setnetting in the Upper Subdistrict from 10:00 pm, 7/17 to 7:00 am, 7/19. Opened drift gillnetting in the Upper Subdistrict south of Colliers Dock within 3 miles of shore on 7/18 from 5:00 am to 10:00 pm and 7/19 from 5:00 am to 7:00 am.	Increase the harvest rate of sockeye salmon bound for the Kenai and Kasilof Rivers.
2S-09-93	July 19	Opened setnetting in the Upper Subdistrict from 7:00 pm, 7/19 until 10:00 pm, 7/20. Opened drift gillnetting in the Upper Subdistrict south of Colliers Dock and within 3 miles of shore on 7/19 from 7:00 pm to 10:00 pm, and on 7/20 from 5:00 am to 10:00 pm.	Reduce the rate of escapement of sockeye salmon into the Kenai and Kasilof Rivers.
2S-10-93	July 20	Opened set gillnetting in the Upper Subdistrict from 10:00 pm 7/20 until 10:00 pm 7/21. Opened drift gillnetting in the Upper Subdistrict south of Colliers Dock and within 3 miles of shore on 7/21 from 5:00 am to 10:00 pm.	Reduce the rate of escapement of sockeye salmon in the Kenai and Kasilof Rivers.
2S-11-93	July 21	Opened set gillnetting in the Upper Subdistrict north of the Blanchard line from 10:00 pm 7/21 until 7:00 am 7/23. Opened drift gillnetting north of the Blanchard Line, south of Colliers Dock and within 3 miles of shore on 7/22 from 5:00 am to 10:00 pm and on 7/23 from 5:00 am to 7:00 am.	Reduce the rate of escapement of sockeye salmon in the Kenai River.
2S-12-93	July 23	Closed drift gillnetting in the Central District except that portion south of the northern tip of Kalgin Island or that portion of the Upper Subdistrict south of Colliers and within 3 miles of shore on 7/23 from 7:00 am to 7:00 pm. Closed set gillnetting in the Northern District and the Western Subdistrict on 7/23.	Reduce the harvest rate of sockeye salmon bound for the Sustina and Crescent Rivers.

Table 10. Page 2 of 3.

Emergency Order No.	Effective Date	Action	Reason
2S-13-93	July 23	Opened set gillnetting in the Upper Subdistrict north of the Blanchard Line from 7:00 pm 7/23 until 10:00 pm 7/24 and drifting in the Upper Subdistrict south of Colliers, north of the Blanchard Line and within 3 miles of shore on 7/23 from 7:00 pm to 10:00 pm and 7/24 from 6:00 am to 10:00 pm.	Reduce the escapement rate of sockeye salmon in the Kenai River.
2S-14-93	July 26	Closed set and drift gillnetting in that portion of the Western Subdistrict south of the latitude of Redoubt Point on 7/26.	Decrease the exploitation of sockeye salmon stocks bound for the Crescent River.
2S-15-93	July 26	Opened set gillnetting in the Upper Subdistrict north of the Blanchard Line from 7:00 pm 7/26 until 10:00 pm 7/27 and drifting in the Upper Subdistrict south of Colliers, north of the Blanchard Line and within 3 miles of shore on 7/26 from 7:00 pm to 10:00 pm and 7/27 from 6:00 am to 10:00 pm.	Increase the exploitation of sockeye salmon stocks bound for the Kenai River.
2S-16-93	July 27	Opened set gillnetting in the Upper Subdistrict north of the Blanchard Line from 10:00 pm 7/27 until 10:00 pm 7/28. Opened drifting south of Colliers, north of the Blanchard Line and within 3 miles of shore on 7/28 from 6:00 am to 10:00 pm.	Increase the exploitation of sockeye salmon bound for the Kenai River.
2S-17-92	July 28	Opened setnetting in the Upper Subdistrict north of the Blanchard Line from 10:00 pm 7/28 until 7:00 am 7/29. Opened drifting south of Colliers Dock, north of the Blanchard Line and within 3 miles of shore from 6:00 am to 10:00 pm on 7/29 and from 6:00 am to 7:00 am on 7/30.	Increase the harvest rate of sockeye salmon returning to the Kenai River.
2S-18-93	July 30	Closed set and drift gillnetting in the Western Subdistrict south of Redoubt Point on 7/30. Closed the Chinitna Bay Subdistrict to all gear types until further notice.	Reduce the harvest of sockeye salmon returning to the Crescent River and chum salmon returning to Chinitna Bay.
2S-19-93	July 30	Opened setnetting in the Upper Subdistrict from 7:00 pm 7/30 until 10:00 pm 7/31. Opened drifting in the Upper Subdistrict south of Colliers Dock and within 3 miles of shore on 7/30 from 7:00 pm to 10:00 pm and on 7/31 from 6:00 am to 10:00 pm.	Increase the harvest rate of sockeye salmon bound for the Kenai River.
2S-20-93	July 31	Opened setnetting in the Upper Subdistrict north of the Blanchard Line from 10:00 pm 7/31 until 7:00 am 8/2. Opened drifting south of Colliers Dock, north of the Blanchard Line and within 3 miles of shore on 8/1 from 6:00 am to 10:00 pm and on 8/2 from 6:00 am to 7:00 am.	Increase the harvest rate of sockeye salmon bound for the Kenai River.
2S-21-93	Aug. 2	Opened setnetting in the Upper Subdistrict north of the Blanchard Line from 7:00 pm 8/2 until 10:00 pm 8/3. Opened drifting south of Colliers Dock, north of the Blanchard Line and within 3 miles of shore on 8/2 from 7:00 pm to 10:00 pm and 8/3 from 6:00 am to 10:00 pm.	Increase the harvest rate of sockeye salmon bound for the Kenai River.
2S-22-93	Aug. 3	Opened setnetting in the Upper Subdistrict north of the Blanchard Line from 10:00 pm 8/3 until 10:00 pm 8/4. Opened drifting south of Colliers Dock, north of the Blanchard Line and within 3 miles of shore on 8/4 from 6:00 am to 10:00 pm. Opened set gillnetting in the Kalgin Island Subdistrict from 7:00 am to 7:00 pm 8/4.	Increase the exploitation of Kenai River and Packers Creek sockeye salmon.
2S-23-93	Aug. 6	Opened set gillnetting in the Upper Subdistrict north of the Blanchard Line from 7:00 pm 8/6 until 5:00 pm 8/7. Opened drifting south of Colliers Dock, north of the Blanchard Line and within 3 miles of shore on 8/6 from 7:00 pm to 10:00 pm and on 8/7 from 6:00 am to 5:00 pm.	Increase the exploitation of sockeye salmon bound for the Kenai River.

Table 10. Page 3 of 3.

Emergency Order No.	Effective Date	Action	Reason
2S-24-93	Aug. 11	Opened set gillnetting in the Kalgin Island Subdistrict from 7:00 am to 7:00 pm 8/11.	Increase the exploitation rate of sockeye salmon bound for Packers Creek.
2S-25-93	Aug. 27	Opened the Chinitna Bay Subdistrict to all gear types for all remaining regular fishing periods.	Completion of the chum salmon return to Chinitna Bay.

Table 11. Commercial salmon fishing periods, Upper Cook Inlet, 1993.

Date	Day	Time	Set Gill Net	Drift Gill Net
June 2	Wed	0700-1900	Big River Area	
June 4	Fri	0700-1900	Big River Area	
June 7	Mon	0700-1300 1300-1900	Northern District, Big River Big River Area	
June 9	Wed	0700-1900	Big River Area	
June 11	Fri	0700-1900	Big River Area	
June 14	Mon	0700-1300 1300-1900	Northern District, Big River Big River Area	
June 16	Wed	0700-1900	Big River Area	
June 18	Fri	0700-1900	Big River Area, Western	
June 21	Mon	0700-1300 1300-1900	North. Dist., Big River, Western Big River Area, Western	
June 23	Wed	0700-1900	Big River Area	
June 25	Fri	0700-1900	All except Upper	All <sup>1</sup>
June 28	Mon	0700-1900	All except Upper north of Blanchard Line	All
July 2	Fri	0700-1900	All	All
July 5	Mon	0700-1900	All	All
July 8	Thur	1300-2200	Upper south of Blanchard Line	Upper s. of Blanchard w/i 3 mi
July 9	Fri	0700-1900	All	Closed except for 3-mile corridor south of Colliers
July 12	Mon	0700-1900	All	All
July 13	Tues	1200-2200 2200-2400	Upper south of Blanchard Line Upper south of Blanchard Line	Upper south of Blanchard Line within 3 Miles
July 14	Wed	0000-0500 0500-1500	Upper south of Blanchard Line Upper	Upper S.of Colliers w/i 3 mi.
July 16	Fri	0700-1900 1900-2200 2200-2400	All Upper Upper	South of Clam Gulch or south of Colliers w/i 3 miles Upper S.of Colliers w/i 3 mi.
July 17	Sat	0000-0500 0500-2200 2200-2400	Upper Upper Upper	Upper S.of Colliers w/i 3 mi.
July 18	Sun	0000-0500 0500-2200 2200-2400	Upper Upper, Knik Arm Upper	Upper S.of Colliers w/i 3 mi.
July 19	Mon	0000-0500 0500-0700 0700-1900 1900-2200 2200-2400	Upper Upper All Upper Upper	Upper S.of Colliers w/i 3 mi. All Upper S.of Colliers w/i 3 mi.

Table 11. (Page 2 of 3).

Date	Day	Time	Set Gill Net	Drift Gill Net
July 20	Tue	0000-0500 0500-0700 0700-1900 1900-2200 2200-2400	Upper Upper Upper, Knik Arm Upper Upper	Upper S.of Colliers w/i 3 mi. Upper S.of Colliers w/i 3 mi. Upper S.of Colliers w/i 3 mi.
July 21	Wed	0000-0500 0500-2200 2200-2400	Upper Upper Upper n. of Blanchard Line	Upper S.of Colliers w/i 3 mi.
July 22	Thur	0000-0500 0500-2200 2200-2400	Upper n. of Blanchard Line Upper n. of Blanchard Line Upper n. of Blanchard Line	Colliers to Blanchard w/i 3 mi
July 23	Fri	0000-0500 0500-0700 0700-1900  1900-2200 2200-2400	Upper n. of Blanchard Line Upper n. of Blanchard Line All except Western, Northern  Upper n. of Blanchard Line Upper n. of Blanchard Line	Colliers to Blanchard w/i 3 mi S. of north tip of Kalgin, S. of Colliers w/i 3 mi Colliers to Blanchard w/i 3 mi
July 24	Sat	0000-0600 0600-2200	Upper n. of Blanchard Line Upper n. of Blanchard Line	Colliers to Blanchard w/i 3 mi
July 25	Sun	0700-1900	Knik Arm	
July 26	Mon	0700-1900 1900-2200 2200-2400	All except Western s. of Redoubt Upper n. of Blanchard Line Upper n. of Blanchard Line	All except Western s. of Redoubt Colliers to Blanchard w/i 3 mi
July 27	Tue	0000-0600 0600-2200 2200-2400	Upper n. of Blanchard Line Upper n. of Blanchard Line Upper n. of Blanchard Line	Colliers to Blanchard w/i 3 mi
July 28	Wed	0000-0600 0600-2200 2200-2400	Upper n. of Blanchard Line Upper n. of Blanchard Line Upper n. of Blanchard Line	Colliers to Blanchard w/i 3 mi
July 29	Thur	0000-0600 0600-2200 2200-2400	Upper n. of Blanchard Line Upper n. of Blanchard Line Upper n. of Blanchard Line	Colliers to Blanchard w/i 3 mi
July 30	Fri	0000-0600 0600-0700 0700-1900  1900-2200 2200-2400	Upper n. of Blanchard Line Upper n. of Blanchard Line All except Chinitna, Western south of Redoubt Upper Upper	Colliers to Blanchard w/i 3 mi All except Western s. of Redou Upper S.of Colliers w/i 3 mi.
July 31	Sat	0000-0600 0600-2200 2200-2400	Upper Upper Upper n. of Blanchard Line	Upper S.of Colliers w/i 3 mi.
Aug 1	Sun	0000-0600 0600-2200 2200-2400	Upper n. of Blanchard Line Upper n. of Blanchard Line Upper n. of Blanchard Line	Colliers to Blanchard w/i 3 mi
Aug 2	Mon	0000-0600 0600-0700 0700-1900 1900-2200 2200-2400	Upper n. of Blanchard Line Upper n. of Blanchard Line All except Chinitna Upper n. of Blanchard Line Upper n. of Blanchard Line	Colliers to Blanchard w/i 3 mi All Colliers to Blanchard w/i 3 mi
Aug 3	Tues	0000-0600 0600-2200 2200-2400	Upper n. of Blanchard Line Upper n. of Blanchard Line Upper n. of Blanchard Line	Colliers to Blanchard w/i 3 mi

Table 11. (Page 3 of 3).

Date	Day	Time	Set Gill Net	Drift Gill Net
Aug 4	Wed	0000-0600	Upper n. of Blanchard Line	
		0600-0700	Upper n. of Blanchard Line	Colliers to Blanchard w/i 3 mi
		0700-1900	Kalgin, Upper n. of Blanchard	Colliers to Blanchard w/i 3 mi
		1900-2200	Upper n. of Blanchard Line	Colliers to Blanchard w/i 3 mi
Aug 6	Fri	0700-1900	All except Chinitna	All
		1900-2200	Upper n. of Blanchard Line	Colliers to Blanchard w/i 3 mi
		2200-2400	Upper n. of Blanchard Line	
Aug 7	Sat	0000-0600	Upper n. of Blanchard Line	
		0600-1700	Upper n. of Blanchard Line	Colliers to Blanchard w/i 3 mi
Aug 9	Mon	0700-1900	All except Chinitna	All
Aug 11	Wed	0700-1900	Kalgin Island	
Aug 13	Fri	0700-1900	All except Chinitna	All
Aug 16	Mon	0700-1900	All except Chinitna or Upper	All <sup>2</sup>
Aug 20	Fri	0700-1900	All except Chinitna or Upper	All <sup>2</sup>
Aug 23	Mon	0700-1900	All except Chinitna or Upper	All <sup>2</sup>
Aug 27	Fri	0700-1900	All except Upper	All + Chinitna <sup>2</sup>
Aug 30	Mon	0700-1900	All except Upper	All + Chinitna <sup>2</sup>
Sept 3 <sup>3</sup>	Fri	0700-1900	All except Upper	All + Chinitna <sup>2</sup>

<sup>1</sup> "All" in reference to the drift fleet does not include Chinitna Bay.

<sup>2</sup> After 8/15, drifting was allowed only in the Western, Kustatan and the westernmost 1 mile of the Lower Subdistrict.

<sup>3</sup> Fishing continued each Monday and Friday as described for 8/30 and 9/3 for the remainder of the year.

Table 12. Age composition (in percent) of sockeye salmon escapements, Upper Cook Inlet, 1993.

Stream	Age Class									
	0.2	1.1	0.3	1.2	2.1	1.3	2.2	1.4	2.3	2.4
Kenai River	0.1	0.3	0.0	12.2	6.3	30.5	6.4	2.6	41.2	0.1
Kasilof River	0.0	0.4	0.0	16.3	0.4	29.8	28.0	0.0	25.2	0.0
Yentna River	1.0	0.1	4.6	32.1	0.4	35.5	11.7	0.0	14.5	0.1
Crescent River	0.0	0.2	0.0	8.8	0.9	37.2	5.8	0.0	46.9	0.2
Fish Creek	0.0	0.8	0.0	56.0	0.5	24.4	14.3	0.0	4.0	0.0
Packers Creek	0.0	0.0	0.0	2.4	0.3	16.5	24.6	0.0	56.2	0.0

Table 13. Upper Cook Inlet salmon average weights<sup>1</sup> (in pounds) by area, 1993.

Fishery	CHINOOK	SOCKEYE	COHO	PINK	CRUM
Upper Cook Inlet Total	27.47	5.88	5.87	3.05	5.83
A. Northern District Total	19.32	4.94	5.78	3.09	5.43
1. Northern District West	19.39	4.92	5.73	3.11	5.41
a. Trading Bay 247-10	20.27	5.30	5.60	2.72	5.25
b. Tyonek 247-20	19.36	5.32	5.62	2.93	5.29
c. Beluga 247-30	18.39	5.54	5.60	3.38	5.49
d. Susitna Flat 247-41	21.48	4.50	6.10	2.71	5.21
e. Pt. Mackenzie 247-42		4.63	5.90	2.69	5.10
f. Fire Island 247-43	19.61	4.72	6.03	3.03	5.30
g. Knik Arm 247-50		4.70	6.89	3.28	6.45
2. Northern District East	18.97	5.02	6.00	3.01	5.78
a. Pt. Possession 247-70	18.86	4.89	5.97	2.93	5.88
b. Birch Hill 247-80	19.96	5.42	6.01	3.16	4.87
c. Number 3 Bay 247-90	17.27	5.22	6.03	3.37	4.37
B. Central District Total	29.20	5.91	5.92	3.04	5.94
1. East Side Set Total	29.79	5.81	5.81	3.00	5.48
a. Salamatof 244-40	32.09	6.05	5.83	3.02	5.76
b. Kalifonsky Beach 244-30	29.22	5.74	5.68	2.89	5.30
c. Cohoe 244-22	29.82	5.51	5.90	2.96	5.01
d. Niniichik 244-21	28.28	5.34	6.05	3.12	5.21
2. West Side Set Total	26.84	5.31	6.01	3.38	5.94
a. Little Jack Slough 245-50	21.87	4.92	6.00	3.00	5.25
b. Polly Creek 245-40	20.11	4.71	5.79	3.31	5.70
c. Tuxedni Bay 245-30	28.25	5.76	5.74	3.24	5.96
d. Silver Salmon 245-20	31.61	5.81	6.43	3.53	5.89
3. Kustatan Total	25.26	5.00	5.75	2.19	5.62
a. Big River 245-55	25.79	4.92	5.59	2.31	4.57
b. West Foreland 245-60	16.29	5.57	5.87	2.18	5.80
4. Kalgin Island Total	24.00	5.37	6.04	3.12	5.54
a. West Side 246-10	23.83	5.51	5.98	3.16	5.38
b. East Side 246-20	24.64	5.23	6.13	3.06	5.81
5. Chinitna Bay Total	14.33	5.82	6.97	3.90	5.26
a. Set 245-10	14.33	5.72	6.98	3.97	5.32
b. Drift 245-10		7.35	6.58	2.83	4.90
6. Central District Set Total	29.58	5.78	5.91	3.00	5.67
7. Central District Drift Total	21.74	6.02	5.93	3.08	5.96
a. West Side 245-70,80,90	15.42	5.86	6.08	3.11	6.01
b. East Side 244-50,60,70	22.62	6.03	5.92	3.08	5.96
c. Chinitna Bay 245-10		7.35	6.58	2.83	4.90

<sup>1</sup> Pounds of fish divided by numbers of fish from fish ticket totals.

Table 14. Buyers and processors of Upper Cook Inlet fishery products, 1993.

Buyer/Processor	Plant Site	Contact	Address
Carlson Seafoods F1232-6	Kasilof	Dorius Carlson	HC2 Box 544 Kasilof Ak. 99610
Cook Inlet Processing F0186-3	Kenai	Pat Hardina	Box 8163 Nikiski Ak. 99635
Deep Creek Custom Packing F1051-5	Ninilchik	Jeff Berger	P.O. Box 39229 Ninilchik Ak. 99639
Dragnet Fisheries F0030-4	Kenai	Mike Mccune	P.O. Box 1260 Kenai Ak. 99615
Fishhawk Fisheries F1540-1	Kenai	Steve Frick	P.O. Box 715 Astoria Or. 97103
Icicle Seafoods F0133-0	Homer	Thomas King	P.O. Box 79003 Seattle Wa. 98119
Inlet Fisheries Inc. F1039-7	Soldotna	Patrick Klier	P.O. Box 530 Kenai Ak. 99611
Kachemak Fisheries F1274-0	Homer	Mark Mahan	P.O. Box 676 Homer Ak. 99603
Kachemak Fish Packers F1737-6	Homer	James Patrick	P.O. Box 3454 Homer Ak. 99603
Katch Seafoods Inc. F1689-5	Homer	Brad Dickey	P.O. Box 2677 Homer Ak. 99603
Keener Packing F0394-5	Kasilof	Mike Sawinski	P.O. Box 890 Kenai Ak. 99611
Kenai Packers F0361-8	Kenai	Dan Foley	P.O. Box 31179 Seattle Wa. 98103
Laona Processing F1696-0	Anchorage	Richard Amys	P.O. Box 220448 Anchorage Ak. 99520-0448
North Alaska Fisheries F1681-7	Wasilla	Art Chang	P.O. Box 877351 Wasilla Ak. 99687
Pacific Alaska Seafoods F0130-7	Nikiski	Jerry Cartee	P.O. Box 7498 Nikiski Ak. 99635
Quality Fresh Inc. F1726-7	Anchorage	Bill Horrell	P.O. Box 91477 Anchorage Ak. 99509-1477
R & J Enterprises F0838-6	Anchorage	Juanita Meier	4821 E. 101 St. Anchorage Ak. 99516
Royal Pacific Fisheries F0409-1	Kenai	Marvin Dragseth	P.O. Box 4609 Kenai Ak. 99611
Salamatof Seafoods F0037-1	Kenai	Wylie Reed	P.O. Box 5070 Kenai Ak. 99615
Seasonal Seafoods F0998-7	Kasilof	Baily Wharton	4039 21st Ave. Seattle Wa. 98199
Silvertip Fish 53832	Anchorage	Darrell Renner	P.O. Box 140414 Anchorage Ak. 99514
Snug Harbor Seafoods F1302-5	Kenai	Paul Dale	Box 701 Kenai Ak. 99611
Trans Aqua Int'l F1193-2	Kasilof	Taka Iwasaki	One Union Sq. #2800 Seattle Wa. 981101
Wards Cove Packing F0270-2	Kenai	Ray Landry	P.O. Box C-5030 Seattle Wa. 98105-0030
Whitney Foods F0827-7	Anchorage	Bruce Mitchell	P.O. Box 190429 Anchorage Ak. 99519-0429

Table 15. Kasilof River personal use gill net fishery salmon harvest by period, 1993.

Period Date	Total Nets	Sockeye Salmon		Chinook Salmon	
		Period	Accum	Period	Accum
21-Jun	123	1,505	1,505	18	18
22-Jun	104	1,070	2,575	6	24
23-Jun	71	1,282	3,857	5	29
24-Jun	67	1,002	4,859	8	37
25-Jun	74	1,283	6,142	4	41
26-Jun	68	1,800	7,942	6	47

Table 16. Central and Northern Districts personal use coho salmon fishery harvest by period, 1993.

Date	Total Nets	Coho Salmon/Net	Coho Salmon Catch	
			Period	Accum
9/11-12	173	2.4	411	411
9/18-19	59	3.4	198	609
9/25-26	60	9.3	559	1,168

Table 17. Seldovia District tide tables, April-September, 1993.

APRIL						MAY												
HIGH TIDES			LOW TIDES			HIGH TIDES			LOW TIDES									
Date Day	A.M.	P.M.	Date Day	A.M.	P.M.	Date Day	A.M.	P.M.	Date Day	A.M.	P.M.							
Time	Feet	Time	Time	Feet	Time	Time	Feet	Time	Time	Feet	Time							
1 Thur	8:57	14.3	10:31	14.2	2:54	6.6	3:48	2.4	1 Sat	11:03	14.7	11:45	16.8	4:57	3.5	5:17	1.6	
2 Fri	10:24	15.2	11:28	16.0	3 Sat	5:26	2.8	4:56	1.2	2 Sun	-----	-----	12:15	15.9	6:03	1.3	6:17	1.0
3 Sat	11:34	16.8	-----	-----	4 Sun	7:19	0.2	7:39	-1.1	3 Mon	0:35	18.4	1:16	17.3	6:58	-0.9	7:09	0.4
4 Sun	1:14	18.0	1:31	18.5	5 Mon	8:07	-2.0	8:23	-1.8	4 Tue	1:22	19.8	2:10	18.5	7:47	-2.9	7:58	0.0
5 Mon	1:56	19.9	2:23	20.0	6 Tue	8:52	-3.9	9:06	-2.0	5 Wed	2:06	20.9	2:59	19.3	8:34	-4.4	8:44	-0.1
6 Tue	2:37	21.4	3:10	20.8	7 Wed	9:36	-4.9	9:49	-1.6	6 Thur	2:50	21.5	3:46	19.6	9:19	-5.1	9:29	0.1
7 Wed	3:17	22.3	3:57	21.0	8 Thur	10:19	-5.1	10:32	-0.7	7 Fri	3:32	21.5	4:32	19.3	10:03	-5.1	10:13	0.7
8 Thur	3:57	22.4	4:43	20.5	9 Fri	11:04	-4.3	11:15	0.6	8 Sat	4:15	20.8	5:18	18.6	10:46	-4.3	10:58	1.6
9 Fri	4:38	21.8	5:30	18.3	10 Sat	11:49	-2.9	-----	-----	9 Sun	4:58	19.6	6:05	17.5	11:30	-3.0	11:45	2.7
10 Sat	5:19	20.5	6:19	17.7	11 Sun	0:01	2.3	12:38	-1.0	10 Mon	5:43	18	6:54	16.3	-----	-----	12:16	-1.4
11 Sun	6:04	18.7	7:12	16.0	12 Mon	0:52	4.0	1:32	0.9	11 Tue	6:30	16.3	7:47	15.2	0:34	3.9	1:04	0.3
12 Mon	6:52	16.7	8:15	14.4	13 Tue	1:52	5.5	2:39	2.5	12 Wed	7:23	14.6	8:45	14.4	1:30	4.9	1:57	2.0
13 Tue	7:51	14.8	9:31	13.5	14 Wed	3:10	6.4	4:00	3.5	13 Thur	8:27	13.2	9:46	14.0	2:36	5.6	2:58	3.3
14 Wed	9:05	13.4	10:52	13.5	15 Thur	4:41	6.2	5:18	3.7	14 Fri	9:42	12.4	10:45	14.2	3:52	5.5	4:04	4.2
15 Thur	10:35	12.9	11:57	14.1	16 Fri	5:55	5.1	6:16	3.4	15 Sat	11:00	12.4	11:35	14.7	5:05	4.8	5:07	4.5
16 Fri	11:54	13.4	-----	-----	17 Sat	6:46	3.7	6:58	3.0	16 Sun	-----	-----	12:07	13.0	6:03	3.6	6:00	4.5
17 Sat	0:43	15.0	12:51	14.4	18 Sun	7:25	2.3	7:33	2.6	17 Mon	0:17	15.4	1:01	14.0	6:48	2.3	6:44	4.3
18 Sun	1:17	16.0	1:34	15.4	19 Mon	7:59	0.9	8:05	2.2	18 Tue	0:55	16.3	1:45	15.0	7:27	0.9	7:25	3.9
19 Mon	1:47	17.0	2:12	16.4	20 Tue	8:32	-0.2	8:37	2.0	19 Wed	1:30	17.2	2:25	15.9	8:03	-0.2	8:03	3.6
20 Tue	2:15	17.9	2:47	17.3	21 Wed	9:04	-1.1	0:09	1.9	20 Thur	2:05	18.0	3:04	16.7	8:38	-1.3	8:40	3.2
21 Wed	2:43	18.6	3:22	17.8	22 Thur	9:36	-1.6	9:42	2.1	21 Fri	2:41	18.6	3:42	17.1	9:14	-2.1	9:18	3.0
22 Thur	3:13	19.1	3:57	17.9	23 Fri	10:09	-1.9	10:16	2.5	22 Sat	3:17	19.0	4:21	17.3	9:50	-2.6	9:57	2.9
23 Fri	3:44	19.2	4:34	17.7	24 Sat	10:44	-1.7	10:51	3.1	23 Sun	3:54	19.0	5:00	17.2	10:28	-2.7	10:37	3.0
24 Sat	4:15	19.0	5:11	17.1	25 Sun	11:21	-1.3	11:30	3.8	24 Mon	4:34	18.7	5:42	16.9	11:07	-2.6	11:20	3.3
25 Sun	4:49	18.5	5:52	16.3	26 Mon	-----	-----	12:02	-0.6	25 Tue	5:16	18.1	6:27	16.6	11:50	-2.0	-----	-----
26 Mon	5:26	17.7	6:37	15.4	27 Tue	0:14	4.6	12:50	0.2	26 Wed	6:04	17.1	7:15	16.2	0:07	3.5	12:36	-1.2
27 Tue	6:10	16.7	7:31	14.6	28 Wed	1:08	5.3	1:47	1.1	27 Thur	7:00	16.0	8:08	16.0	1:02	3.8	1:28	-0.1
28 Wed	7:05	15.5	8:33	14.2	29 Thur	2:16	5.6	2:55	1.8	28 Fri	8:06	14.9	9:05	16.1	2:05	3.7	2:27	0.9
29 Thur	8:16	14.5	9:41	14.5	30 Fri	3:38	5.0	4:09	1.9	29 Sat	9:22	14.2	10:05	16.6	3:17	3.2	3:32	1.8
30 Fri	9:40	14.2	10:47	15.4	31 Mon	11:58	14.8	-----	-----	30 Sun	10:43	14.2	11:04	17.3	4:31	2.0	4:40	2.4
										31 Mon	-----	-----	-----	-----	5:40	0.4	5:44	2.5

Table 17. (page 2 of 3)

JUNE

HIGH TIDES

LOW TIDES

A.M. P.M.

Date Day Time Feet Time Feet

1 Tue 0:01 18.2 1:04 15.9

2 Wed 0:53 19.2 2:01 17.0

3 Thur 1:42 19.9 2:51 17.8

4 Fri 2:29 20.3 3:38 18.3

5 Sat 3:14 20.3 4:22 18.5

6 Sun 3:58 19.8 5:05 18.2

7 Mon 4:41 19.0 5:47 17.6

8 Tue 5:24 17.8 6:29 16.9

9 Wed 6:07 16.4 7:11 16.1

10 Thur 6:54 15.0 7:54 15.4

11 Fri 7:47 13.6 8:40 14.9

12 Sat 8:48 12.5 9:29 14.6

13 Sun 9:50 11.9 10:20 14.6

14 Mon 11:15 12.0 11:12 15.0

15 Tue ----- 12:23 12.7

16 Wed 0:01 15.6 1:19 13.7

17 Thur 0:48 16.5 2:05 14.8

18 Fri 1:32 17.4 2:47 15.9

19 Sat 2:15 18.3 3:26 16.8

20 Sun 2:57 19.1 4:05 17.5

21 Mon 3:39 19.5 4:45 18.0

22 Tue 4:23 19.5 5:25 18.3

23 Wed 5:08 19.1 6:06 18.3

24 Thur 5:57 18.2 6:50 18.2

25 Fri 6:51 16.9 7:37 17.9

26 Sat 7:52 15.5 8:29 17.6

27 Sun 9:03 14.3 9:26 17.4

28 Mon 10:24 13.8 10:28 17.3

29 Tue 11:46 14.0 11:31 17.6

30 Wed ----- 12:57 14.9

JULY

HIGH TIDES

LOW TIDES

A.M. P.M.

Date Day Time Feet Time Feet

1 Thur 0:32 18.1 1:56 16.0

2 Fri 1:28 18.7 2:45 17.0

3 Sat 2:17 19.2 3:28 17.8

4 Sun 3:03 19.4 4:08 18.2

5 Mon 3:45 19.4 4:45 18.4

6 Tue 4:25 18.9 5:20 18.2

7 Wed 5:04 18.2 5:54 17.8

8 Thur 5:43 17.1 6:28 17.2

9 Fri 6:24 15.8 7:03 16.5

10 Sat 7:08 14.4 7:40 15.8

11 Sun 7:59 13.1 8:21 15.2

12 Mon 9:03 12.1 9:10 14.8

13 Tue 10:21 11.6 10:08 14.7

14 Wed 11:45 12.0 11:12 15.1

15 Thur ----- 12:54 13.0

16 Fri 0:13 15.9 1:45 14.4

17 Sat 1:07 17.1 2:27 15.8

18 Sun 1:55 18.5 3:05 17.3

19 Mon 2:41 19.6 3:43 18.5

20 Tue 3:26 20.4 4:20 19.5

21 Wed 4:11 20.7 4:59 20.1

22 Thur 4:57 20.4 5:38 20.3

23 Fri 5:46 19.4 6:19 20.0

24 Sat 6:38 17.9 7:04 19.4

25 Sun 7:36 16.2 7:53 18.5

26 Mon 8:45 14.5 8:51 17.5

27 Tue 10:08 13.6 9:59 16.8

28 Wed 11:38 13.7 11:13 16.6

29 Thur ----- 12:54 14.6

30 Fri 0:24 17.1 1:50 15.8

31 Sat 1:22 17.8 2:35 16.9

A.M. P.M.

Date Day Time Feet Time Feet

1 Thur 7:22 1.8 7:23 3.4

2 Fri 8:11 2.7 8:14 2.8

3 Sat 8:55 3.2 9:01 2.2

4 Sun 9:36 3.4 9:44 1.9

5 Mon 10:13 3.1 10:25 1.8

6 Tue 10:49 2.4 11:06 2.0

7 Wed 11:24 1.4 11:45 2.4

8 Thur 11:59 0.1 -----

9 Fri 0:26 3.0 12:33 1.3

10 Sat 1:09 3.6 1:10 2.9

11 Sun 1:58 4.1 1:51 4.4

12 Mon 2:56 4.5 2:42 5.8

13 Tue 4:05 4.4 3:48 6.8

14 Wed 5:18 3.7 5:02 7.0

15 Thur 6:20 2.4 6:10 6.6

16 Fri 7:10 0.9 7:06 5.6

17 Sat 7:53 0.6 7:55 4.3

18 Sun 8:34 2.1 8:40 2.9

19 Mon 9:13 3.3 9:24 1.6

20 Tue 9:53 4.0 10:07 0.6

21 Wed 10:33 4.0 10:52 0.1

22 Thur 1:13 3.4 11:38 0.3

23 Fri 1:56 2.2 -----

24 Sat 0:28 0.1 12:41 0.4

25 Sun 1:22 0.3 1:31 1.5

26 Mon 2:25 0.9 2:30 3.4

27 Tue 3:40 1.4 3:41 4.9

28 Wed 5:01 1.2 5:01 5.5

29 Thur 6:16 0.5 6:16 5.1

30 Fri 7:15 0.4 7:17 4.2

31 Sat 8:02 1.3 8:06 3.2

Table 17. (page 3 of 3)

**AUGUST**

**SEPTEMBER**

**HIGH TIDES**

**LOW TIDES**

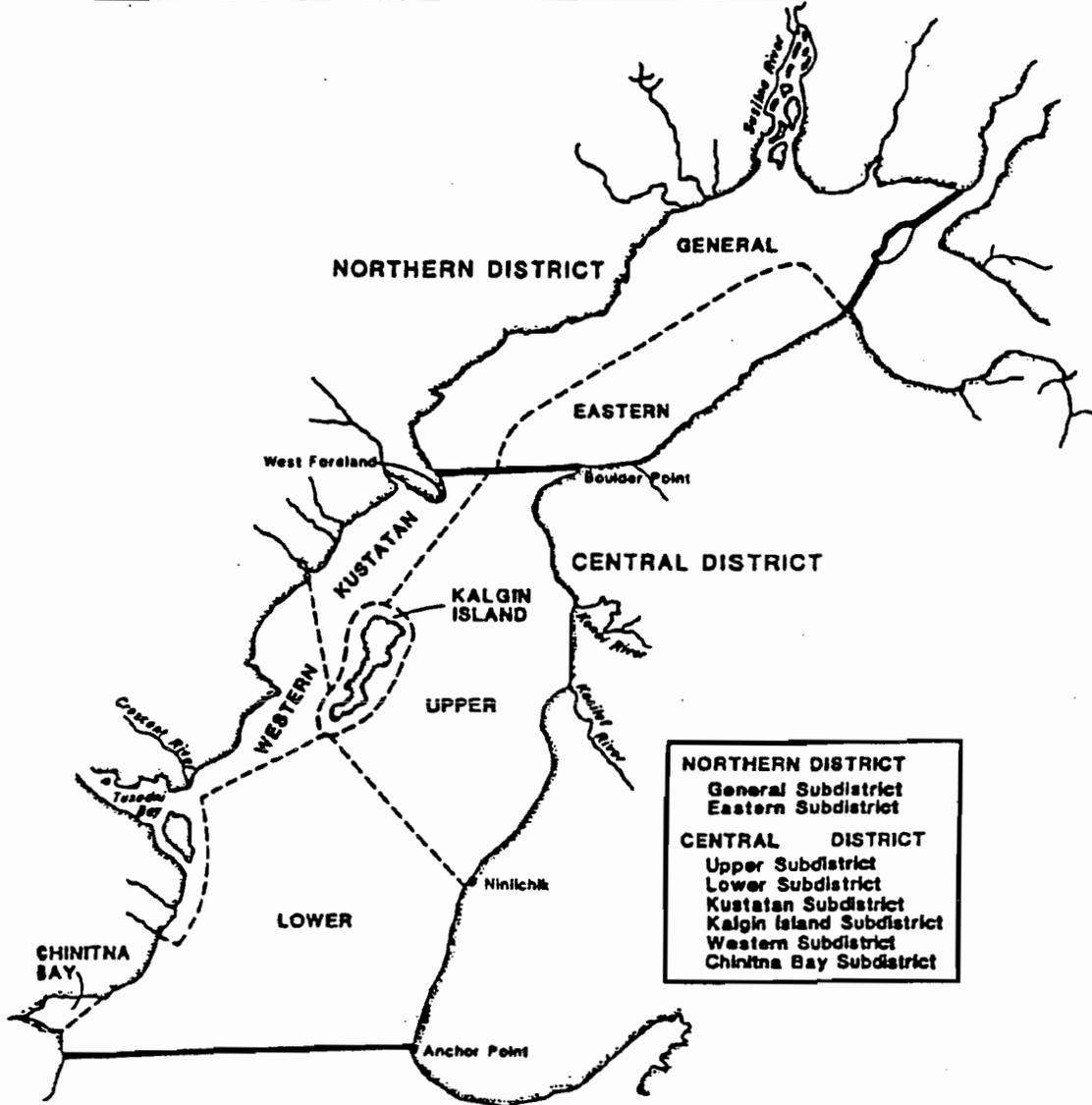
**HIGH TIDES**

**LOW TIDES**

A.M.				P.M.				A.M.				P.M.							
Date	Time	Feet		Date	Time	Feet		Date	Time	Feet		Date	Time	Feet					
1 Sun	2:11	18.5	3:12	17.9	1 Sun	8:42	-1.8	8:49	2.3	1 Wed	3:13	19.3	3:41	19.5	1 Wed	9:23	-0.5	9:39	0.4
2 Mon	2:52	19.1	3:46	18.5	2 Mon	9:18	-2.1	9:28	1.6	2 Thur	3:46	19.4	4:07	19.7	2 Thur	9:52	-0.1	10:11	0.2
3 Tue	3:30	19.3	4:16	18.9	3 Tue	9:51	-2.0	10:04	1.2	3 Fri	4:19	19.2	4:33	19.5	3 Fri	10:21	0.5	10:43	0.3
4 Wed	4:06	19.2	4:46	19.0	4 Wed	10:22	-1.5	10:39	1.2	4 Sat	4:53	18.5	5:01	19.1	4 Sat	10:50	1.5	11:15	0.8
5 Thur	4:42	18.8	5:15	18.8	5 Thur	10:53	-0.6	11:14	1.4	5 Sun	5:28	17.5	5:29	18.3	5 Sun	11:21	2.7	11:49	1.6
6 Fri	5:17	17.8	5:43	18.3	6 Fri	11:24	0.4	11:49	1.9	6 Mon	6:05	16.2	6:05	17.4	6 Mon	11:53	4.1	-----	-----
7 Sat	5:54	16.8	6:13	17.6	7 Sat	11:55	1.8	-----	-----	7 Tue	6:48	14.7	6:33	16.3	7 Tue	0:26	2.5	12:28	5.5
8 Sun	6:33	15.4	6:45	16.7	8 Sun	0:26	2.6	12:27	3.3	8 Wed	7:42	13.3	7:18	15.3	8 Wed	1:11	3.5	1:11	6.9
9 Mon	7:18	13.9	7:21	15.9	9 Mon	1:07	3.4	1:03	4.9	9 Thur	8:58	12.3	8:26	14.4	9 Thur	2:12	4.4	2:18	8.0
10 Tue	8:16	12.6	8:07	15.0	10 Tue	1:56	4.2	1:48	6.4	10 Fri	10:33	12.4	9:57	14.3	10 Fri	3:37	4.6	3:52	8.2
11 Wed	9:34	11.7	9:11	14.5	11 Wed	3:02	4.7	2:53	7.5	11 Sat	11:51	13.6	11:22	15.3	11 Sat	5:04	3.8	5:21	7.1
12 Thur	11:09	11.9	10:30	14.6	12 Thur	4:26	4.4	4:21	7.9	12 Sun	-----	-----	12:43	15.4	12 Sun	6:08	2.2	6:25	5.1
13 Fri	12:27	13.0	11:45	15.6	13 Fri	5:44	3.3	5:43	7.2	13 Mon	0:28	17.0	1:25	17.4	13 Mon	6:58	0.5	7:16	2.7
14 Sat	-----	-----	1:19	14.7	14 Sat	6:42	1.6	6:46	5.7	14 Tue	1:22	18.9	2:03	19.4	14 Tue	7:41	-0.8	8:01	0.3
15 Sun	0:47	17.1	2:00	16.5	15 Sun	7:29	-0.1	7:36	3.8	15 Wed	2:11	20.5	2:40	21.2	15 Wed	8:22	-2.0	8:44	-1.8
16 Mon	1:39	18.8	2:37	18.3	16 Mon	8:10	-1.7	8:21	1.8	16 Thur	2:58	21.7	3:17	22.4	16 Thur	9:03	-2.5	9:28	-3.3
17 Tue	2:27	20.3	3:13	19.9	17 Tue	8:50	-3.0	9:05	0.0	17 Fri	3:43	22.1	3:56	23.0	17 Fri	9:44	-2.3	10:11	-4.0
18 Wed	3:12	21.4	3:50	21.1	18 Wed	9:29	-3.6	9:48	-1.3	18 Sat	4:30	21.7	4:35	22.9	18 Sat	10:26	-1.5	10:56	-3.8
19 Thur	3:58	21.8	4:27	21.9	19 Thur	10:09	-3.6	10:32	-2.2	19 Sun	5:17	20.6	5:17	21.9	19 Sun	11:09	-0.1	11:43	-2.7
20 Fri	4:44	21.4	5:06	21.9	20 Fri	10:50	-2.8	11:17	-2.3	20 Mon	6:08	18.9	6:02	20.4	20 Mon	11:55	1.7	-----	-----
21 Sat	5:32	20.3	5:47	21.4	21 Sat	11:32	-1.3	-----	-----	21 Tue	7:05	17.0	6:53	18.4	21 Tue	0:34	-1.1	12:26	3.7
22 Sun	6:23	18.6	6:31	20.3	22 Sun	0:05	-1.7	12:17	0.5	22 Wed	8:13	15.3	7:55	16.5	22 Wed	1:33	0.7	1:49	5.6
23 Mon	7:20	16.7	7:21	18.7	23 Mon	0:57	-0.6	1:07	2.7	23 Thur	9:38	14.3	9:15	15.0	23 Thur	2:48	2.4	3:10	6.7
24 Tue	8:28	14.8	8:21	17.1	24 Tue	1:59	-0.8	2:07	4.7	24 Fri	11:09	14.4	10:50	14.7	24 Fri	4:19	3.1	4:46	6.6
25 Wed	9:55	13.8	9:36	15.9	25 Wed	3:45	1.9	3:24	6.1	25 Sat	-----	-----	12:18	15.3	25 Sat	5:40	2.8	6:04	5.4
26 Thur	11:30	13.9	11:03	15.6	26 Thur	4:45	2.3	4:54	6.4	26 Sun	0:08	15.3	1:06	16.4	26 Sun	6:37	2.4	6:57	4.0
27 Fri	-----	-----	12:44	14.9	27 Fri	6:05	1.7	6:13	5.6	27 Mon	1:03	16.3	1:41	17.4	27 Mon	7:19	1.8	7:37	2.6
28 Sat	0:20	16.2	1:35	16.2	28 Sat	7:03	0.9	7:11	4.3	28 Tue	1:45	17.3	2:10	18.3	28 Tue	7:52	1.4	8:11	1.4
29 Sun	1:17	17.1	2:14	17.3	29 Sun	7:47	0.2	7:55	3.0	29 Wed	2:20	18.2	2:37	19.1	29 Wed	8:22	1.2	8:42	0.4
30 Mon	2:01	18.1	2:46	18.2	30 Mon	8:22	-0.3	8:33	1.9	30 Thur	2:53	18.8	3:02	19.7	30 Thur	8:51	1.2	9:13	-0.2
31 Tue	2:39	18.8	3:14	19.0	31 Tue	8:53	-0.5	9:07	1.0										

Figure 1.

UPPER COOK INLET SALMON DISTRICTS





Appendix A.1. Upper Cook Inlet commercial chinook salmon harvest by gear type and area, 1966-1993.

Year	Central District Set Gillnet						Total	
	Central District Drift Gillnet		Central District Set Gillnet		Northern District Set Gillnet			
	Number	%	Number	%	Number	%		
1966	392	4.6	7,329	85.8	401	4.7	422	4.9
1967	489	6.3	6,646	85.0	500	6.4	184	2.3
1968	182	4.0	3,304	72.8	579	12.8	471	10.4
1969	362	2.9	5,834	47.1	3,286	26.6	2,904	23.4
1970	367	4.4	5,366	64.3	1,152	13.9	1,460	17.5
1971	237	1.2	7,055	35.7	2,875	14.5	9,598	48.6
1972	375	2.3	8,599	53.5	2,199	13.7	4,913	30.5
1973	244	4.7	4,411	84.9	369	7.1	170	3.3
1974	422	6.4	5,571	84.5	434	6.5	169	2.6
1975	250	5.2	3,675	76.8	733	15.0	129	2.7
1976	690	6.4	8,249	75.9	1,469	13.5	457	4.2
1977	3,411	23.1	9,732	65.8	1,084	7.3	565	3.8
1978	2,072	12.0	12,468	72.1	2,093	12.1	666	3.9
1979	1,089	7.9	8,671	63.1	2,264	16.5	1,714	12.5
1980	889	6.4	9,643	69.9	2,273	16.5	1,993	7.2
1981	2,320	19.0	8,358	68.3	837	6.8	725	5.9
1982	1,293	6.2	13,658	65.4	3,203	15.3	2,716	13.0
1983	1,125	5.5	15,043	72.9	3,534	17.1	933	4.5
1984	1,377	13.7	6,165	61.3	1,516	14.9	1,004	10.0
1985	2,048	8.5	17,723	73.6	2,427	10.1	1,890	7.8
1986	1,834	4.7	19,810	50.5	2,108	5.4	15,488	39.5
1987	4,552	11.5	21,379	53.9	1,029	2.6	12,701	32.0
1988	2,217	7.6	12,870	44.3	1,137	3.9	12,836	44.2
1989	0	0.0	10,919	40.8	3,092	11.6	12,731	47.6
1990	621	3.9	4,319	25.7	1,763	10.9	9,582	59.5
1991	241	1.8	4,891	36.1	1,544	11.4	6,859	50.7
1992	615	3.6	10,718	62.4	1,284	7.5	4,554	26.5
1993	746	4.0	13,977	74.7	719	3.8	3,277	17.5
Average <sup>1</sup>	1,128	6.9	9,455	63.9	1,586	11.0	3,607	18.1
								15,775

<sup>1</sup> 1989 excluded from averages.

Appendix A.2. Upper Cook Inlet commercial sockeye salmon harvest by gear type and area, 1966-1993.

Year	Central District Set Gillnet						Northern District Set Gillnet			Total		
	Central District Drift Gillnet			East Side			Kalgin/West Side					
	Number	%		Number	%		Number	%				
1966	1,103,261	59.6		485,330	26.2		132,443	7.2		131,080	7.1	1,852,114
1967	1,890,152	64.6		303,858	22.0		66,414	4.8		118,065	8.6	1,378,489
1968	561,737	50.8		317,535	28.7		85,049	7.7		140,575	12.7	1,104,896
1969	371,747	53.7		210,834	30.5		71,184	10.3		38,050	5.5	1,691,815
1970	460,690	62.9		142,701	19.5		62,723	8.6		66,458	8.9	732,572
1971	423,107	66.5		111,505	17.5		61,144	9.6		40,533	6.4	636,289
1972	506,281	57.5		204,599	23.3		83,176	9.5		85,755	9.7	879,811
1973	375,695	56.1		188,816	28.2		59,973	8.9		45,614	6.8	670,098
1974	265,771	53.5		136,889	27.5		52,962	10.7		41,563	8.4	497,185
1975	368,124	53.8		177,336	25.9		73,765	10.8		65,526	9.7	684,751
1976	1,055,786	63.4		476,376	28.6		62,338	3.7		69,649	4.2	1,664,149
1977	1,073,098	52.3		751,178	36.6		104,265	5.1		123,780	6.0	2,052,321
1978	1,803,479	68.8		660,797	25.2		105,767	4.0		51,378	2.0	2,621,421
1979	1,454,707	49.1		248,359	26.8		108,422	11.7		113,918	12.2	2,925,406
1980	770,247	48.9		559,812	35.6		137,882	8.8		105,647	6.7	1,573,588
1981	633,280	44.0		496,003	34.5		60,217	4.2		249,662	17.3	1,439,262
1982	2,103,429	64.5		971,423	29.9		66,952	2.1		118,060	3.6	3,259,864
1983	3,222,428	63.8		1,490,273	23.3		162,139	2.7		184,219	3.6	5,049,733
1984	1,235,337	58.6		1,561,200	38.4		134,575	7.7		218,695	10.4	2,106,714
1985	2,032,957	50.1	1	1,508,511	29.9	1	285,081	7.0		181,191	4.5	4,060,429
1986	2,834,534	59.2	1	1,490,273	34.6	1	153,714	3.2		141,830	3.0	4,787,982
1987	5,631,746	59.3	3	3,495,802	36.8	3	208,036	2.2		164,602	1.7	9,500,186
1988	4,129,878	60.4	4	2,428,597	35.5	4	146,154	2.1		129,713	1.9	6,834,342
1989	2,305,742	0.0	3	4,543,066	90.7	4	186,828	3.7		280,801	5.6	5,010,698
1990	1,117,514	64.0	2	1,116,975	31.0	2	84,949	2.4		96,398	2.7	3,604,064
1991	6,069,495	66.6	2	844,156	38.8	2	99,705	4.6		116,201	5.3	2,177,576
1992	2,558,492	53.8	2	838,076	31.2	2	131,291	1.4		69,478	0.8	9,108,340
1993			1	1,941,706	40.8	1	108,181	2.3		146,319	3.1	4,754,698
Average <sup>1</sup>	1,642,919	57.7		900,983	33.2		107,722	6.2		113,120	6.6	2,764,744

<sup>1</sup> 1989 excluded from average.

Appendix A.3. Upper Cook Inlet commercial coho salmon harvest by gear type and area, 1966-1993.

Year	Central District Set Gillnet						Total
	Central District Drift Gillnet		Central District Set Gillnet		Northern District Set Gillnet		
	Number	%	East Side	Kalgin/West Side	Number	%	
1966	80,901	27.9	68,877	23.8	59,509	20.5	289,837
1967	53,071	29.9	40,738	22.9	40,066	22.5	177,729
1968	167,383	35.8	80,828	17.3	63,301	13.5	468,160
1969	33,053	32.8	18,988	18.8	28,231	28.0	100,697
1970	114,070	40.9	30,114	10.8	52,299	18.7	279,205
1971	35,491	35.4	16,589	16.5	26,188	26.1	100,362
1972	21,577	26.7	24,673	30.5	15,300	18.9	80,896
1973	31,784	30.4	23,901	22.9	24,784	23.7	104,420
1974	75,640	37.8	36,837	18.4	40,610	20.3	200,125
1975	88,579	40.0	46,209	20.8	53,537	23.5	221,376
1976	80,712	38.7	47,873	22.9	42,243	20.2	208,663
1977	110,184	57.2	23,693	12.3	38,093	19.8	192,593
1978	76,259	34.8	34,134	15.6	61,711	28.2	219,193
1979	114,496	43.2	29,284	11.2	68,306	25.8	265,164
1980	89,510	33.0	40,281	14.8	51,527	19.0	271,416
1981	226,366	46.6	36,024	7.4	88,390	18.2	485,405
1982	416,274	52.5	108,393	13.7	182,205	23.0	792,224
1983	326,965	63.3	37,694	7.3	97,796	18.9	516,322
1984	213,423	47.4	37,166	8.3	84,618	18.8	449,993
1985	357,388	53.6	70,657	10.6	147,331	22.1	667,213
1986	506,405	66.9	76,385	10.1	85,932	11.4	756,830
1987	202,306	44.8	74,977	16.6	74,930	16.6	451,404
1988	277,703	49.6	55,419	9.9	77,058	13.8	560,022
1989	247,453	0.2	81,744	24.1	81,004	23.9	339,201
1990	175,504	41.2	40,351	8.1	73,429	14.7	500,634
1991	267,300	57.0	57,078	7.1	53,400	20.6	425,724
1992	121,828	39.7	43,075	14.0	35,661	11.4	468,911
1993							306,822
Average <sup>1</sup>	167,097	42.8	45,580	15.0	64,962	19.6	354,124

<sup>1</sup> 1989 excluded from average.

Appendix A.4. Upper Cook Inlet commercial pink salmon harvest by gear type and area, 1966-1993.

Year	Central District Set Gillnet						Northern District Set Gillnet			Total	
	Central District Drift Gillnet		Central District Set Gillnet		Northern District Set Gillnet		Number	%	Number		%
	Number	%	East Side	Kalgin/West Side	Number	%					
1966	593,654	29.6	969,624	48.3	70,507	3.5	371,960	18.5	2,005,745		
1967	7,475	23.2	12,900	40.5	3,256	10.1	8,460	26.4	32,091		
1968	880,512	38.7	785,887	34.5	75,755	3.3	534,839	23.5	2,276,993		
1969	8,233	25.1	10,968	34.4	5,711	17.2	7,587	23.3	33,499		
1970	334,737	41.9	281,067	34.0	24,763	3.0	174,193	21.4	814,760		
1971	6,433	18.1	18,097	50.8	2,637	7.4	8,423	23.7	35,590		
1972	115,117	18.3	403,706	64.2	18,913	3.0	90,830	14.5	628,566		
1973	91,901	28.2	80,596	24.7	16,437	5.0	137,250	42.1	326,184		
1974	140,432	29.1	291,408	60.2	9,014	1.9	42,876	8.9	483,730		
1975	113,868	33.9	112,423	33.5	19,086	5.5	90,953	27.0	336,330		
1976	599,594	47.7	479,024	38.1	30,030	2.4	148,080	11.8	1,256,728		
1977	286,308	51.7	125,817	22.1	25,212	4.6	116,518	21.0	553,855		
1978	934,442	55.3	372,601	22.1	54,785	3.2	326,614	19.3	1,688,442		
1979	19,554	26.8	19,983	27.4	7,061	9.7	26,382	36.1	72,980		
1980	964,526	54.0	299,444	16.8	47,963	2.7	474,488	26.6	1,786,421		
1981	53,888	42.4	15,654	12.3	4,276	3.4	53,325	41.9	127,143		
1982	270,380	34.2	432,715	54.7	14,242	1.8	73,307	9.3	790,644		
1983	26,629	37.9	18,309	26.0	3,785	5.4	21,604	30.7	70,327		
1984	273,565	44.3	220,895	35.8	16,708	2.7	106,284	17.2	617,452		
1985	34,228	39.0	17,715	20.2	5,653	6.4	30,232	34.4	87,828		
1986	614,453	47.3	530,445	40.8	15,460	1.2	139,002	10.7	1,299,360		
1987	38,660	35.2	47,707	43.4	5,229	4.8	18,205	16.6	109,801		
1988	226,776	48.3	179,092	38.1	9,890	2.1	54,210	11.5	469,968		
1989	1	0.0	37,971	56.3	5,580	8.3	23,878	35.4	67,430		
1990	323,955	53.7	225,429	37.3	10,302	1.7	43,944	7.3	603,630		
1991	5,791	39.5	2,670	18.2	1,049	7.2	5,153	35.1	14,663		
1992	423,738	60.9	244,068	35.1	4,248	0.6	23,805	3.4	695,859		
1993	46,457	46.0	41,674	41.3	2,313	2.3	10,468	10.4	100,918		
Average <sup>1</sup>	275,382	38.9	231,108	35.4	18,677	4.5	116,259	21.2	641,426		

<sup>1</sup> 1989 excluded from average.

Appendix A.5. Upper Cook Inlet commercial chum salmon harvest by gear type and area, 1966-1993.

Year	Central District Set Gillnet						Northern District Set Gillnet			Total	
	Central District Drift Gillnet		East Side		Kalgin/West Side		Number	%	Number		%
	Number	%	Number	%	Number	%					
1966	424,972	79.8	7,461	1.4	64,725	12.1	35,598	6.7	532,756		
1967	233,041	78.5	1,399	0.1	25,013	8.4	38,384	12.9	296,837		
1968	1,022,900	90.7	1,563	0.1	44,986	4.0	58,454	5.2	1,127,903		
1969	238,497	89.1	1,399	0.1	16,954	6.3	11,836	4.3	267,686		
1970	678,448	90.4	1,228	0.2	48,591	6.5	24,507	3.1	750,774		
1971	274,567	84.8	1,128	0.0	32,647	10.1	16,603	5.1	323,945		
1972	564,726	90.2	1,727	0.3	40,179	6.4	19,780	3.2	626,412		
1973	605,738	90.7	1,965	0.3	29,019	4.3	30,851	4.6	667,573		
1974	344,496	86.8	506	0.1	15,346	3.9	36,492	9.2	396,840		
1975	886,474	93.2	980	0.1	33,347	3.5	30,787	3.2	951,588		
1976	405,769	86.5	1,484	0.3	47,882	10.2	14,045	3.0	469,180		
1977	1,153,454	93.5	1,413	0.1	54,708	4.4	23,861	1.9	1,233,436		
1978	489,119	85.5	4,563	0.8	40,946	7.2	37,151	6.5	571,779		
1979	609,239	93.8	867	0.1	30,342	4.7	9,310	1.4	649,758		
1980	339,970	87.7	2,147	0.6	28,970	7.5	16,728	4.3	387,815		
1981	756,922	91.0	2,386	0.3	26,461	3.2	46,208	5.6	831,977		
1982	1,348,510	94.1	4,777	0.3	36,647	2.6	43,006	3.0	1,432,940		
1983	1,044,636	93.7	2,822	0.3	38,079	3.4	29,321	2.6	1,114,858		
1984	568,097	83.5	3,695	0.5	34,207	5.0	74,727	11.0	680,726		
1985	700,848	90.7	4,133	0.5	31,746	4.1	36,122	4.7	772,849		
1986	1,012,028	89.2	7,027	0.6	39,078	3.4	76,040	6.7	1,134,173		
1987	211,580	60.6	16,608	4.8	53,558	15.3	67,180	19.3	348,926		
1988	580,650	81.9	11,841	1.7	40,354	5.7	75,728	10.7	708,573		
1989	72	0.1	12,302	10.1	27,705	22.7	81,948	67.2	122,027		
1990	289,521	82.4	4,611	1.3	21,355	6.1	35,710	10.2	351,197		
1991	215,469	76.9	2,387	0.9	22,974	8.2	39,393	14.1	280,223		
1992	232,955	84.9	2,867	1.0	13,180	4.8	25,301	9.2	274,303		
1993	88,823	72.4	2,977	2.4	5,566	4.5	25,401	20.7	122,767		
Average <sup>1</sup>	556,738	83.0	3,272	0.7	33,167	5.9	34,845	6.7	628,022		

<sup>1</sup> 1989 excluded from average.

Appendix A.6. Upper Cook Inlet commercial salmon harvest by gear type and area, 1966-1993.

Year	Central District Set Gillnet						Total
	Central District Drift Gillnet			Northern District Set Gillnet			
	Number	%		Number	%		
			East Side	Kalgin/West Side			
			Number	Number	%	Number	%
1966	2,203,180	47.0	1,538,621	327,585	7.0	619,610	13.2
1967	1,184,228	62.6	364,541	135,249	7.1	208,947	11.0
1968	2,612,714	52.6	1,189,117	269,670	5.4	890,987	18.0
1969	651,892	59.0	247,023	125,366	11.3	80,910	7.3
1970	1,584,301	61.4	460,478	189,528	7.3	349,340	13.5
1971	1,739,835	66.3	153,374	125,491	11.2	97,251	8.7
1972	1,208,076	54.1	643,304	159,767	7.2	220,626	9.9
1973	1,105,362	62.3	299,689	130,582	7.4	237,836	13.4
1974	826,761	52.2	471,211	118,366	7.5	168,138	10.6
1975	1,457,295	66.1	340,623	186,468	8.5	220,446	10.0
1976	2,142,551	59.4	1,013,006	183,962	5.1	270,066	7.5
1977	2,626,455	64.9	911,831	223,362	5.5	285,317	7.1
1978	3,305,371	64.6	1,084,563	265,302	5.2	462,898	9.0
1979	1,199,085	62.3	306,164	216,395	11.2	204,402	10.6
1980	2,165,142	53.7	911,327	268,615	6.7	687,954	17.1
1981	1,672,876	57.8	558,425	180,181	6.2	483,545	16.7
1982	4,139,886	65.7	1,530,966	303,249	4.8	322,441	5.1
1983	4,621,783	68.2	1,582,378	277,769	4.1	289,944	4.3
1984	2,291,799	59.3	1,758,194	299,188	7.7	515,766	13.3
1985	3,127,469	55.7	1,671,428	472,238	8.4	341,272	6.1
1986	4,969,254	62.0	2,291,571	296,292	3.7	460,468	5.7
1987	6,088,844	58.3	3,656,473	342,782	3.3	361,608	3.5
1988	5,217,224	60.7	2,687,819	274,593	3.2	422,229	4.9
1989	819	0.0	4,686,002	304,209	5.5	575,068	10.3
1990	3,167,292	62.6	1,391,505	174,798	3.5	325,035	6.4
1991	1,514,519	52.0	884,539	212,787	7.3	299,876	10.3
1992	6,994,103	66.2	3,152,807	203,403	1.9	214,271	2.0
1993	2,861,352	53.9	2,043,409	152,440	2.9	291,723	5.5
Average <sup>1</sup>	2,654,765	59.7	1,190,533	226,497	6.3	345,589	9.3
			24.8				4,415,717

<sup>1</sup> 1989 figures excluded from average.

Appendix Table A.7. Upper Cook Inlet commercial salmon harvest by species, 1954-1993.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
1954	63,780	1,207,046	321,525	2,189,207	510,068	4,291,626
1955	45,926	1,027,528	170,777	101,680	248,343	1,594,254
1956	64,977	1,258,789	198,189	1,595,375	782,051	3,899,381
1957	42,158	643,712	125,434	21,228	1,001,470	1,834,002
1958	22,727	477,392	239,765	1,648,548	471,697	2,860,129
1959	32,651	612,676	106,312	12,527	300,319	1,064,485
1960	27,512	923,314	311,461	1,411,605	659,997	3,333,889
1961	19,737	1,162,303	117,778	34,017	349,628	1,683,463
1962	20,210	1,147,573	350,324	2,711,689	970,582	5,200,378
1963	17,536	942,980	197,140	30,436	387,027	1,575,119
1964	4,531	970,055	452,654	3,231,961	1,079,084	5,738,285
1965	9,741	1,412,350	153,619	23,963	316,444	1,916,117
1966	8,544	1,852,114	289,837	2,005,745	532,756	4,688,996
1967	7,859	1,380,062	177,729	32,229	296,837	1,894,716
1968	4,536	1,104,904	469,850	2,278,197	1,119,114	4,976,601
1969	12,397	692,175	100,777	33,383	269,847	1,108,579
1970	8,336	732,605	275,399	814,895	776,229	2,607,464
1971	19,765	636,303	100,636	35,624	327,029	1,119,357
1972	16,086	879,824	80,933	628,574	630,103	2,235,520
1973	5,194	670,098	104,420	326,184	667,573	1,773,469
1974	6,596	497,185	200,125	483,730	396,840	1,584,476
1975	4,787	684,752	227,379	336,333	951,796	2,205,047
1976	10,865	1,664,150	208,695	1,256,728	469,802	3,610,240
1977	14,790	2,052,291	192,599	553,855	1,233,722	4,047,257
1978	17,299	2,621,421	219,193	1,688,442	571,779	5,118,134
1979	13,738	924,415	265,166	72,982	650,357	1,926,658
1980	13,798	1,573,597	271,418	1,786,430	390,675	4,035,918
1981	12,240	1,439,277	484,411	127,164	833,542	2,896,634
1982	20,870	3,259,864	793,937	790,648	1,433,866	6,299,185
1983	20,634	5,049,733	516,322	70,327	1,114,858	6,771,874
1984	10,062	2,106,714	449,993	617,452	680,726	3,864,947
1985	24,088	4,060,429	667,213	87,828	772,849	5,612,407
1986	39,240	4,787,982	756,830	1,299,360	1,134,173	8,017,585
1987	39,661	9,500,186	451,404	109,801	349,139	10,450,191
1988	29,060	6,834,342	560,022	469,972	708,573	8,601,969
1989	26,742	5,010,698	339,201	67,430	122,027	5,566,098
1990	16,105	3,604,064	500,634	603,630	351,197	5,075,630
1991	13,535	2,177,576	425,724	14,663	280,223	2,911,721
1992	17,171	9,108,340	468,911	695,859	274,303	10,564,584
1993	18,719	4,754,698	306,822	100,918	122,767	5,303,924
Average	20,605	2,286,138	316,264	760,015	613,485	3,996,508

Appendix A.8. Approximate exvessel value of the Upper Cook Inlet commercial salmon harvest by species, 1960-1993.

Year	Chinook	%	Sockeye	%	Coho	%	Pink	%	Chum	%	Total
1960	\$140,000	5.0	\$1,334,000	47.9	\$307,000	11.0	\$663,000	23.8	\$343,000	12.3	\$2,787,000
1961	\$100,000	4.7	\$1,687,000	79.4	\$118,000	5.6	\$16,000	0.8	\$204,000	9.6	\$2,125,000
1962	\$100,000	2.5	\$1,683,000	42.3	\$342,000	8.6	\$1,274,000	32.0	\$582,000	14.6	\$3,981,000
1963	\$89,000	4.6	\$1,388,000	72.3	\$193,000	10.1	\$13,000	0.7	\$236,000	12.3	\$1,919,000
1964	\$20,000	0.5	\$1,430,000	38.9	\$451,000	12.3	\$1,131,000	30.8	\$646,000	17.6	\$3,678,000
1965	\$50,000	2.0	\$2,099,000	82.1	\$109,000	4.3	\$70,000	2.7	\$230,000	9.0	\$2,558,000
1966	\$50,000	1.2	\$2,727,000	64.4	\$295,000	7.0	\$823,000	19.4	\$338,000	8.0	\$4,233,000
1967	\$49,000	1.9	\$2,135,000	82.6	\$187,000	7.2	\$13,000	0.5	\$202,000	7.8	\$2,586,000
1968	\$30,000	0.7	\$1,758,000	40.4	\$515,000	11.8	\$1,209,000	27.8	\$843,000	19.4	\$4,355,000
1969	\$70,000	4.3	\$1,231,000	75.2	\$109,000	6.7	\$23,000	1.4	\$204,000	12.5	\$1,637,000
1970	\$49,000	1.8	\$1,135,000	42.5	\$354,000	13.3	\$387,000	14.5	\$745,000	27.9	\$2,670,000
1971	\$189,000	10.7	\$1,102,000	62.2	\$143,000	8.1	\$22,000	1.2	\$316,000	17.8	\$1,772,000
1972	\$217,000	6.3	\$1,795,000	52.0	\$135,000	3.9	\$473,000	13.7	\$834,000	24.1	\$3,454,000
1973	\$122,000	2.0	\$3,214,000	52.2	\$320,000	5.2	\$363,000	5.9	\$2,134,000	34.7	\$6,153,000
1974	\$210,000	3.2	\$3,058,000	46.5	\$843,000	12.8	\$946,000	14.4	\$1,521,000	23.1	\$6,578,000
1975	\$65,000	1.0	\$2,596,000	39.0	\$821,000	12.3	\$423,000	6.4	\$2,753,000	41.3	\$6,658,000
1976	\$276,000	2.0	\$8,626,000	63.2	\$818,000	6.0	\$1,879,000	13.8	\$2,040,000	15.0	\$13,639,000
1977	\$525,000	2.4	\$13,274,000	61.8	\$933,000	4.3	\$772,000	3.6	\$5,991,000	27.9	\$21,495,000
1978	\$667,000	2.0	\$26,128,000	80.3	\$1,388,000	4.3	\$2,154,000	6.6	\$2,217,000	6.8	\$32,554,000
1979	\$625,000	4.3	\$8,094,000	55.2	\$1,658,000	11.3	\$89,000	0.6	\$4,201,000	28.6	\$14,667,000
1980	\$417,000	3.2	\$7,932,000	61.6	\$902,000	7.0	\$2,114,000	16.4	\$1,516,000	11.8	\$12,881,000
1981	\$422,000	2.6	\$11,071,000	67.9	\$2,638,000	16.2	\$179,000	1.1	\$2,005,000	12.3	\$16,315,000
1982	\$753,000	2.1	\$25,029,000	69.0	\$4,139,000	11.4	\$515,000	1.4	\$5,851,000	16.1	\$36,287,000
1983	\$585,000	2.0	\$23,841,000	81.5	\$1,603,000	5.5	\$38,000	0.1	\$3,195,000	10.9	\$29,262,000
1984	\$311,990	1.8	\$12,445,633	71.8	\$2,041,480	11.8	\$522,419	3.0	\$2,007,827	11.6	\$17,329,349
1985	\$799,173	2.3	\$27,479,840	80.0	\$3,358,083	9.8	\$57,440	0.2	\$2,646,553	7.7	\$34,341,089
1986	\$881,356	1.9	\$37,665,832	83.3	\$2,838,881	6.3	\$698,527	1.5	\$3,123,485	6.9	\$45,208,081
1987	\$1,609,681	1.6	\$96,331,886	94.9	\$2,368,968	2.3	\$84,547	0.1	\$1,115,477	1.1	\$101,510,559
1988	\$1,204,321	1.0	\$111,102,230	91.2	\$4,731,340	3.9	\$650,309	0.5	\$4,113,356	3.4	\$121,801,556
1989	\$803,494	1.4	\$56,194,753	95.0	\$1,674,393	2.8	\$86,012	0.1	\$415,535	0.7	\$59,174,187
1990	\$436,822	1.1	\$35,804,485	88.0	\$2,419,202	5.3	\$512,590	1.3	\$1,495,827	3.7	\$40,668,906
1991	\$348,553	2.3	\$12,259,753	80.4	\$1,996,348	13.1	\$5,472	0.0	\$643,392	4.2	\$15,253,518
1992	\$634,383	0.6	\$96,038,337	96.0	\$2,262,323	2.3	\$404,990	0.4	\$740,618	0.7	\$100,080,651
1993	\$462,819	1.5	\$27,969,409	93.6	\$1,081,175	3.6	\$36,935	0.1	\$322,205	1.1	\$29,872,543

Appendix A.9. Commercial herring harvest by fishery, Upper Cook Inlet, 1973-1993.

Year	Harvest (Tons)			Total
	Eastside	Chinitna Bay	Tuxedni Bay	
1973	13.8	0	0	13.8
1974	36.7	0	0	36.7
1975	6.2	0	0	6.2
1976	5.8	0	0	5.8
1977	17.3	0	0	17.3
1978	8.3	55.3	0	63.6
1979	67.3	96.2	24.8	188.3
1980	37.4	20.0	86.5	143.9
1981	86.2	50.5	84.9	221.6
1982	60.2	91.8	50.2	202.2
1983	165.3	49.2	238.2	452.7
1984	117.5	90.6	159.0	367.1
1985	121.7	47.4	220.5	389.6
1986	178.9	111.1	191.9	481.9
1987	130.5	65.1	152.5	348.1
1988	50.7	23.4	14.1	88.2
1989	55.2	122.3	34.3	211.7
1990	55.4	55.9	16.1	127.4
1991	13.4	15.7	1.6	30.7
1992	24.7	10.4	0	35.2
1993	0	0	0	0

Appendix A.10. Commercial harvest of razor clams in Cook Inlet, 1919-1993.

Year	Pounds	Year	Pounds
1919	76,963	1956	0
1920	11,952	1957	0
1921	72,000	1958	0
1922	510,432	1959	0
1923	470,280	1960	372,872
1924	156,768	1961	277,830
1925	0	1962	195,650
1926	0	1963	0
1927	25,248	1964	0
1928	0	1965	0
1929	0	1966	0
1930	0	1967	0
1931	No Record	1968	0
1932	93,840	1969	0
1933	No Record	1970	0
1934	No Record	1971	14,755
1935	No Record	1972	31,360
1936	No Record	1973	34,415
1937	8,328	1974	0
1938	No Record	1975	10,020
1939	No Record	1976	0
1940	No Record	1977	1,762
1941	0	1978	45,931
1942	0	1979	144,358
1943	0	1980	140,420
1944	0	1981	441,949
1945	15,000	1982	460,639
1946	11,424	1983	269,618
1947	11,976	1984	261,742
1948	2,160	1985	319,034
1949	9,672	1986	258,632
1950	304,073	1987	312,349
1951	112,320	1988	392,610
1952	0	1989	222,747
1953	0	1990	323,602
1954	0	1991	201,320
1955	0	1992	296,727
		1993	310,289

Appendix Table A.11. Escapement goals and counts of sockeye salmon in selected streams of Upper Cook Inlet, 1968-1993.

Year	Kenai River		Kasilof River		Fish Creek	
	Escapement Goal	Escapement Estimate <sup>1</sup>	Escapement Goal	Escapement Estimate <sup>1</sup>	Escapement Goal	Escapement Estimate <sup>2</sup>
1968	0	88,000	0	93,000	0	19,616
1969	150,000	53,000	75,000	46,000	0	12,456
1970	150,000	73,000	75,000	37,000	0	25,000
1971	150,000	--	75,000	--	0	31,900
1972	150,000-250,000	318,000	75,000-150,000	112,000	0	6,981
1973	150,000-250,000	367,000	75,000-150,000	40,000	0	2,705
1974	150,000-250,000	161,000	75,000-150,000	64,000	0	16,225
1975	150,000-250,000	142,000	75,000-150,000	48,000	0	29,882
1976	150,000-250,000	380,000	75,000-150,000	140,000	0	14,032
1977	150,000-250,000	708,000	75,000-150,000	155,000	0	5,183
1978	350,000-500,000	399,000	75,000-150,000	117,000	0	3,555
1979	350,000-500,000	285,000	75,000-150,000	152,000	0	68,739
1980	350,000-500,000	464,000	75,000-150,000	187,000	0	62,828
1981	350,000-500,000	408,000	75,000-150,000	257,000	0	50,479
1982	350,000-500,000	620,000	75,000-150,000	180,000	50,000	28,164
1983	350,000-500,000	630,000	75,000-150,000	210,000	50,000	118,797
1984	350,000-500,000	345,000	75,000-150,000	232,000	50,000	192,352
1985	350,000-500,000	501,000	75,000-150,000	503,000	50,000	68,577
1986	350,000-500,000	501,000	150,000-250,000	276,000	50,000	29,800
1987	400,000-700,000	1,597,000	150,000-250,000	249,000	50,000	91,215
1988	400,000-700,000	1,021,500	150,000-250,000	202,000	50,000	71,603
1989	400,000-700,000	1,599,959	150,000-250,000	158,206	50,000	67,224
1990	400,000-700,000	658,908	150,000-250,000	144,289	50,000	50,000
1991	400,000-700,000	645,000	150,000-250,000	238,000	50,000	50,500
1992	400,000-700,000	994,760	150,000-250,000	183,178	50,000	71,385
1993	400,000-700,000	813,617	150,000-250,000	149,939	50,000	117,619

Year	Susitna River		Crescent River		Packers Creek	
	Escapement Goal	Escapement Estimate <sup>1</sup>	Escapement Goal	Escapement Estimate <sup>1</sup>	Escapement Goal	Escapement Estimate <sup>2</sup>
1978	200,000	94,000	0	N/C	0	N/C
1979	200,000	157,000	50,000	87,000	0	N/C
1980	200,000	191,000	50,000	91,000	0	16,477
1981	200,000	340,000	50,000	41,000	0	13,024
1982	200,000	216,000 <sup>3</sup>	50,000	59,000	0	15,687
1983	200,000	112,000 <sup>4</sup>	50,000	92,000	0	18,403
1984	200,000	194,000 <sup>5</sup>	50,000	118,000	0	30,684
1985	200,000	228,000 <sup>5</sup>	50,000	129,000	0	36,850
1986	100,000-150,000 <sup>6</sup>	92,000 <sup>6</sup>	50,000-100,000	N/A	0	29,604
1987	100,000-150,000 <sup>6</sup>	66,000 <sup>6</sup>	50,000-100,000	119,000	0	35,401
1988	100,000-150,000 <sup>6</sup>	52,347 <sup>6</sup>	50,000-100,000	57,716	15,000-25,000	18,607
1989	100,000-150,000 <sup>6</sup>	96,269 <sup>6</sup>	50,000-100,000	71,064	15,000-25,000	22,304
1990	100,000-150,000 <sup>6</sup>	140,379 <sup>6</sup>	50,000-100,000	52,180	15,000-25,000	31,868
1991	100,000-150,000 <sup>6</sup>	105,000 <sup>6</sup>	50,000-100,000	44,500	15,000-25,000	41,275
1992	100,000-150,000 <sup>6</sup>	66,057 <sup>6</sup>	50,000-100,000	58,227	15,000-25,000	28,361
1993	100,000-150,000 <sup>6</sup>	141,694 <sup>6</sup>	50,000-100,000	37,556	15,000-25,000	40,869

<sup>1</sup> Derived from sonar counters unless otherwise noted.

<sup>2</sup> Weir counts.

<sup>3</sup> Poor field conditions make this a minimum estimate; mark/recapture estimate from Su-Hydro studies was 265,000.

<sup>4</sup> Minimum estimate. Combining Yentna sonar with Sunshine Station mark/recapture estimate yields 176,000.

<sup>5</sup> Yentna River sonar count combined with Sunshine Station mark/recapture estimate.

<sup>6</sup> Yentna River only.

Appendix A.12. Average price paid for commercially harvested salmon, Upper Cook Inlet, 1969-1993.<sup>1</sup>

Year	Chinook	Sockeye	Coho	Pink	Chum
1969	0.38	0.28	0.19	0.14	0.12
1970	0.40	0.28	0.25	0.14	0.14
1971	0.37	0.30	0.21	0.15	0.15
1972	0.47	0.34	0.27	0.19	0.20
1973	0.62	0.65	0.50	0.30	0.42
1974	0.88	0.91	0.66	0.46	0.53
1975	0.54	0.63	0.54	0.35	0.41
1976	0.92	0.76	0.61	0.37	0.54
1977	1.26	0.86	0.72	0.38	0.61
1978	1.16	1.32	0.99	0.34	0.51
1979	1.63	1.41	0.98	0.34	0.88
1980	1.15	0.85	0.57	0.34	0.53
1981	1.46	1.20	0.83	0.38	0.65
1982	1.27	1.10	0.72	0.18	0.49
1983	0.97	0.74	0.45	0.18	0.36
1984	1.08	1.00	0.64	0.21	0.39
1985	1.20	1.20	0.70	0.20	0.45
1986	0.90	1.40	0.60	0.15	0.38
1987	1.40	1.50	0.80	0.22	0.45
1988	1.30	2.47	1.20	0.37	0.76
1989	1.25	1.70	0.75	0.40	0.47
1990	1.20	1.55	0.75	0.25	0.60
1991	1.20	1.00	0.77	0.12	0.35
1992	1.50	1.60	0.75	0.15	0.40
1993	1.20	1.00	0.60	0.12	0.45

<sup>1</sup> Expressed as dollars paid per pound.

Data Source: 1969-1983 - Commercial Fisheries Entry Commission.  
1984-1993 - Random fish-ticket averages.

Appendix A.13. Average weight<sup>1</sup> (in pounds) of commercially harvested salmon, Upper Cook Inlet, 1969-1993.

Year	Chinook	Sockeye	Coho	Pink	Chum
1969	17.11	6.69	7.00	3.91	7.30
1970	26.81	5.80	6.80	4.00	7.18
1971	25.91	6.55	6.52	3.44	9.26
1972	29.68	6.23	6.28	4.00	6.67
1973	37.62	7.41	6.11	3.71	7.61
1974	36.13	6.79	6.38	4.13	7.22
1975	24.75	6.09	6.83	3.56	7.05
1976	27.43	6.85	6.43	4.03	8.05
1977	28.11	7.55	6.72	3.65	7.97
1978	32.96	7.56	6.36	3.75	7.60
1979	27.52	6.21	6.31	3.32	7.34
1980	26.14	5.93	5.76	3.48	7.33
1981	23.75	6.42	6.53	3.52	7.66
1982	28.80	7.01	7.14	3.89	8.24
1983	29.51	6.43	6.89	3.27	7.75
1984	28.61	5.91	7.08	4.03	7.58
1985	27.65	5.64	7.19	3.27	7.61
1986	25.91	5.77	6.41	3.72	7.42
1987	28.99	6.73	6.57	3.50	7.10
1988	29.67	6.61	7.05	3.74	7.67
1989	24.04	6.60	6.58	3.19	7.25
1990	22.60	6.41	6.45	3.40	7.10
1991	21.46	5.63	6.09	3.11	6.56
1992	24.63	6.59	6.43	3.88	6.75
1993	27.47	5.88	5.87	3.05	5.83
Average	27.33	6.47	6.55	3.62	7.40

<sup>1</sup> Total poundage divided by numbers of fish from fish ticket totals.

Appendix A.14. Registered<sup>1</sup> units of gillnet fishing effort by gear type in Cook Inlet, 1960-1993.

Year	Drift			Set			Total
	Resident	Non-Resident		Resident	Non-Resident		
		Sub-total	Resident		Non-Resident	Sub-total	
1960	221	67	288	511	59	570	858
1961	279	93	372	564	22	586	958
1962	260	112	372	589	28	617	989
1963	333	139	472	626	34	660	1,132
1964	323	145	468	596	35	631	1,099
1965	329	145	474	556	34	590	1,064
1966	328	176	504	580	48	628	1,132
1967	350	186	536	554	50	604	1,140
1968	407	204	611	638	43	681	1,292
1969	497	208	687	686	42	728	1,415
1970	537	220	757	707	65	772	1,529
1971	519	191	710	693	38	731	1,441
1972	419	152	571	672	35	701	1,272
1973	516	146	662	632	43	675	1,437
1974	458	150	608	764	39	803	1,411
1975	291	162	453	613	44	657	1,110
1976	343	171	514	669	42	711	1,225
1977	360	179	539	690	41	731	1,270
1978	366	183	549	698	44	742	1,291
1979	372	182	554	700	44	744	1,298
1980	373	179	554	697	47	744	1,298
1981	414	185	599	688	59	747	1,346
1982	416	175	591	697	51	748	1,339
1983	417	170	587	685	60	745	1,332
1984	426	162	588	672	72	744	1,332
1985	420	170	590	666	65	731	1,321
1986	436	178	614	682	76	758	1,372
1987	422	164	586	666	77	743	1,329
1988	421	163	584	659	82	741	1,325
1989	420	165	585	648	95	743	1,328
1990	408	174	585	648	97	745	1,330
1991	414	168	582	643	98	741	1,323
1992	405	178	583	638	107	745	1,328
1993	400	182	582	634	106	740	1,322

<sup>1</sup> Source: 1960-74 ADF&G unpublished reports, 1975-93 Commercial Fisheries Entry Commission

Appendix A.15. Forecast<sup>1</sup> and projected<sup>2</sup> commercial harvests of salmon by species, Upper Cook Inlet, 1984-1993.

Year	Sockeye		Coho		Pink		Chum		Chinook	
	Forecast	Actual Error	Projected	Actual Error	Projected	Actual Error	Projected	Actual Error	Projected	Actual Error
1984	2,200,000	2,102,767 - 4%	250,000	442,619 +77%	1,700,000	622,510 -63%	350,000	684,124 +95%	14,000	8,819 -37%
1985	3,700,000	4,060,260 +10%	250,000	667,213 +167%	112,500	87,828 -22%	700,000	772,829 +10%	17,500	24,086 +38%
1986	4,200,000	4,787,982 +14%	450,000	756,830 +68%	1,250,000	1,299,360 + 4%	900,000	1,134,173 +26%	32,500	39,240 +21%
1987	4,800,000	9,500,186 +98%	500,000	451,404 -10%	150,000	109,801 -27%	1,000,000	349,132 -65%	30,000	39,661 +32%
1988	5,300,000	6,834,342 +29%	400,000	560,022 +40%	400,000	469,972 +17%	800,000	708,573 -11%	35,000	29,060 -17%
1989	2,500,000	5,010,698 +100%	400,000	339,201 -15%	100,000	67,430 -33%	800,000	122,027 -85%	30,000	26,742 -11%
1990	4,300,000	3,604,064 -16%	250,000	500,026 +100%	600,000	603,630 +1%	400,000	351,197 -12%	25,000	16,105 -36%
1991	3,200,000	2,177,576 -32%	400,000	425,724 +6%	90,000	14,663 -84%	500,000	280,223 -44%	20,000	13,535 -32%
1992	3,600,000	9,108,340 +153%	400,000	468,911 +17%	400,000	695,859 +74%	350,000	274,303 -22%	20,000	17,171 -14%
1993	2,500,000	4,754,698 +90%	450,000	306,822 -32%	25,000	100,918 +304%	350,000	122,767 -65%	15,000	18,719 +25%
1994	2,000,000		400,000		600,000		250,000		15,000	
Average Error (unsigned)		55%		53%		63%		43%		26%

<sup>1</sup> Harvest forecasts have typically been prepared using average return per spawner values, parent-year escapements and average marine maturity schedules or time series modeling tempered by available juvenile production data or combinations of these data sets.

<sup>2</sup> Harvest projections are prepared using subjective estimates of parent-year escapements, gross trends in harvest and expected intensity of fishery.

Appendix A.16. Subsistence and personal use gill net salmon harvest, Upper Cook Inlet, 1980-1993.

Fishery	No. of Permits	Chinook	Sockeye	Coho	Pink	Chum
<u>Tyonek Subsistence</u>						
1980	67	1,936	262	0	0	0
1981	70	2,002	269	64	32	15
1982	69	1,565	209	113	15	4
1983	75	2,750	185	40	0	2
1984	75	2,354	310	66	3	23
1985	76	1,720	44	8	0	10
1986	65	1,523	198	210	45	44
1987	64	1,552	161	149	5	24
1988	47	1,474	52	185	6	9
1989	49	1,314	67	175	0	1
1990	42	797	92	366	124	10
1991	57	1,105	25	80	0	0
1992	57	905	74	234	7	19
1993	53	1,247	43	36	11	9
<u>Non-Commercial Gillnet</u>						
1981	1,108	68	466	12,713	149	305
<u>Kasilof Personal Use</u>						
1982	649	372	7,543	24	17	0
1983	684	307	8,846	0	0	0
1984	698	165	12,926	0	0	0
1985	692	203	10,746	0	0	0
1986	N/A	168	9,609	0	0	0
1987	N/A	184	9,375	0	0	0
1988	N/A	118	9,803	0	0	0
1989	N/A	186	9,928	0	0	0
1990	N/A	133	7,123	0	0	0
1991	N/A	34	8,380	0	0	0
1993	N/A	47	7,942	0	0	0
<u>Fall Coho Personal Use/Subsistence</u>						
1983	295	0	0	712	0	0
1984	309	1	2	2,261	10	7
1985	998	50	805	11,265	108	53
1986	892	0	0	2,422	0	0
1987	486	8	9	2,213	2	37
1988	449	2	19	2,662	38	10
1989	365	0	0	2,376	0	0
1990	420	0	0	2,290	0	0
1991	360	0	0	2,703	0	8
1993	535	0	0	1,168	23	0
<u>Northern/Central Districts Subsistence</u>						
1985	638	117	2,218	1,427	90	121
1991	7,065	550	32,230	3,520	537	1,598
1992	9,200	1,139	46,419	10,320	1,818	1,827
<u>Knik Arm Subsistence</u>						
1985	405	4	1,649	2,055	48	212
<u>Kenaitze Tribal Fishery</u>						
1989	N/A	95	2,212	1,814	0	0
1990	N/A	53	3,477	1,117	326	0
1991	N/A	34	2,965	1,945	4	0
1992	N/A	55	2,025	3	3	0
1993	N/A	145	1,533	477	1	0