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PREFACE

The purpose of this report is to document the events of the 1983 Upper Cook Inlet commercial fisheries by providing sufficient data to comprise a reference source, and describing the rationale utilized in making management decisions affecting the conduct of those fisheries.

All catch statistics contained in this report supercede the figures used in previous reports and unless otherwise noted, are final.

The format for data tabulation divides current year TABLES (1983) from comparative APPENDIX TABLES (1959-1983) to facilitate the use of this report for reference purposes.

Although this report is intended primarily for interdepartmental use, it contains no confidential information and may be distributed to the public. Comments and corrections are invited and should be directed to the Commercial Fisheries Division, Box 3150, Soldotna, Alaska 99669.

Paul H. Ruesch
Area Management Biologist
March 15, 1985

PERSONNEL

Name	Status	Job Class	Activity
Paul Ruesch	P	FB III	Area Management Biologist
Kenneth Tarbox	P	FB III	Research Project Leader
James Browning	P	FB II	Assistant Area Management Biologist
Bruce King	P	FB II	Assistant Research Project Leader
David Waltemyer	P	FB II	Assistant Research Project Leader
Beverly Cross	P	FB II	Project Leader-Stock Separation
Sandra Seagren	P	CT III	Clerk-Typist
Virginia McBee	S	FB I	Summer Office Manager
Randall Davis	S	FB I	Kenai Sonar, Herring
Edward Borden	S	FT II	Kenai Sonar
Virginia Petanovich	S	FT II	Kenai Sonar
Morris Lambdin	S	FT III	Kasilof Sonar
Ellen Simpson	S	FT III	Kasilof Sonar
Edward Ashmead	S	FB I	Crescent Sonar
Bruce Iglehart	S	FT II	Crescent Sonar
Mark Clark	S	FB I	Susitna Sonar, Herring
Dennis Gretsch	S	FB I	Susitna Sonar
Kenneth Legg	S	FT II	Susitna Sonar
Mark Vania	S	FT II	Susitna Sonar
Linda Soquet	S	FB I	Scale Reader
Leah Rothermel	S	FB I	Scale Reader, Tyonek
Joni Piercy	S	FT II	Escapement Sampler
Frederic Kraus	S	FT II	Escapement Sampler, Tyonek
Philip Morrin	S	FT II	Escapement Sampler
David Westerman	S	FT II	Catch Sampler
Sandra Kyle	S	FB I	Catch Sampler
Diane DeStefano	S	CI I	Catch Sampler
Carole Bando	S	CI II	Catch Sampler
Michele Hertzic	S	CI I	Catch Sampler
Robert Zanella	S	CI II	Catch Sampler
Scott Banke	S	FT II	Escapement Sampler
Mark Fredrickson	S	FT II	Catch Sampler
Howard Teas	S	FB I	Catch Sampler
Brett Reid	S	FT I	Catch Sampler
Robert Sizemore	S	FT I	Catch Sampler
Steven Thomsen	S	FT II	Catch Sampler
Pat Shields	S	FB I	Inlet Tagging
Mike Villegas	S	FT II	Inlet Tagging
Ken Aldridge	S	FT II	Offshore Test Fish
David Blomstrom	S	FT II	Offshore Test Fish
Janice Ashpole	S	FT III	Personal Use, District Test Fish
Linda Lowder	S	FT III	Personal Use, District Test Fish
Gayle Nixon-Moyer	S	FT III	District Test Fish
Robert Bismark	S	FT I	Tyonek
Eileen Whipple	S	FT III	Beach Monitor

PERSONNEL, CONTINUED

Name	Status	Job Class	Activity
Randall Jensen	S	FT II	Beach Monitor
Rosemary Carroll	S	FT II	Beach Monitor
Judy Reis	S	FT II	Beach Monitor
Victoria Friedman	S	FT II	Beach Monitor
Kathryn Johnson	S	FT II	Beach Monitor
Ray Bumbaugh	S	FT II	Beach Monitor
Craig Lucas	S	FT II	Beach Monitor
Judy Brandt	S	FT II	Beach Monitor

INTRODUCTION

Upper Cook Inlet consists of that portion of Cook Inlet north of the latitude of Anchor Point and is divided into two districts, Central and Northern (Figure 1). The Central District is approximately 75 mi long, averages 32 mi in width, and consists of six subdistricts. The Northern District is 50 mi long, averages 20 mi in width, and is divided into two subdistricts. Currently, all five species of Pacific salmon (*Oncorhynchus sp.*), razor clams (*Siliqua patula*), and Pacific herring (*Clupea harengus pallasi*) are subject to commercial harvest in Upper Cook Inlet. In addition to these fisheries, this report will discuss subsistence and personal use salmon fisheries occurring in Upper Cook Inlet.

Salmon

Since the inception of the fishery in 1882, fish traps, set gill nets, drift gill nets, purse seines and beach seines have all been used, with varying degrees of success, to commercially harvest salmon in Upper Cook Inlet. Currently, set gill nets are the only legal gear type in the Northern District, while both set and drift gear is permitted in the Central District. The use of seines is restricted to the Chinitna Bay Subdistrict. Drift gill nets historically have averaged 60 percent of the annual harvest with set gill nets accounting for virtually all of the remainder (Appendix Tables 1 through 6).

All five species of Pacific salmon are subjected to commercial harvest as they migrate to their streams of origin (Appendix Table 7). Run timing and migration routes overlap to such a degree that the commercial fishery is largely mixed-stock and mixed-species in nature (Figure 2). Typically, the Upper Cook Inlet salmon fishery contributes less than 5 percent of the statewide harvest.

In terms of economic value, sockeye salmon (*O. nerka*) are by far the most important species harvested in the upper inles followed in order by chum salmon (*O. keta*), pink salmon (*O. gorbuscha*) (even years), coho salmon (*O. kisutch*), pink salmon (odd years), and chinook salmon (*O. tshawytscha*). A history of the exvessel value of the Upper Cook Inlet salmon fishery is presented in Appendix Table 8.

Herring

The Upper Cook Inlet commercial herring fishery began in 1973 as a sporadic harvest of bait-quality fish along the east side of the Central District and has expanded in recent years to include small-scale sac roe fisheries in Tuxedni and Chinitna bays (Appendix Table 9). Currently the total harvest has averaged less than 400 tons having an exvessel value below $200,000.

Because the glacial waters of Upper Cook Inlet preclude the use of visual observations for biomass assessment, the management approach used for these stocks has necessarily departed from the standard techniques of the more traditional herring fisheries. Current management strategy includes a 35-ton quota in Chinitna Bay and a policy of holding harvests in other areas to approximately the historic average until the subsequent recruitment from

recent brood years can be evaluated. Gill nets are the only legal gear for herring in Upper Cook Inlet with set gill nets being used almost exclusively. Gear is concentrated in the Clam Gulch area along the east side, in the Snug Harbor and Magnetic Island areas of Tuxedni Bay and near Clam Cove and Camp Point in Chinitna Bay.

Razor Clams

The commercial harvest of the Pacific razor clam from Cook Inlet 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 in 1922 (Appendix Table 10). The sporadic nature of the fishery has been a function of marketing rather than availability of the resource.

Razor clams are present in many areas of Cook Inlet with particularly dense populations occurring near Polly Creek on the western shore and from Clam Gulch to Ninilchik on the eastern shore. In 1959, the eastside beaches were reserved for sport harvest only and since that time all commercial production has come from the west side, principally from the Polly Creek area. Razor clams destined for the bait market may be taken from any area along the west side except that portion of the Polly Creek beach (Figure 3) "certified" for the human consumption market. Certification of a clam beach requires periodic sampling to insure that toxins associated with paralytic shellfish poisoning (PSP) are not present in harmful amounts. Division of Agriculture regulations require that bait clams harvested from non-certified beaches be dyed a specific color to prevent their use for human consumption.

Virtually all of the commercial harvesting of razor clams to date has been by hand-digging. Current regulations allow the use of hydraulic and mechanical harvesters south of Spring Point and also along a designated one-mile section of Polly Creek beach. Although there have been numerous attempts to develop a feasible razor clam dredge, none have been successful.

1983 COMMERCIAL SALMON FISHERY

The 1983 commercial harvest of nearly 6.8 million salmon represents a new all-species record for the second consecutive year in Upper Cook Inlet. The harvest was comprised of a record catch of sockeye salmon, near-record catches of chum and coho salmon, an above-average catch of chinook salmon and an average odd-year take of pink salmon. Substantial declines in prices paid per pound, particularly for sockeye salmon which fell from $1.10 in 1982 to $.74 in 1983, led to an actual reduction in the exvessel value from $39.3 million in 1982 to $29.4 million in 1983. Despite the decline, the 1983 exvessel value was the second highest on record.

A total of 587 drift gillnet permits and 745 set gillnet permits were issued by the Commercial Fisheries Entry Commission for Cook Inlet in 1983 which represents a slight decrease from the previous year (Appendix Table 11).

Season Parameters

Although no formal forecasts are made of annual salmon harvest for Upper Cook Inlet, the Commercial Fisheries staff issues yearly "projections" of harvest by species based largely on an evaluation of parent-year escapement levels augmented by supplemental data (smolt counts, abnormal weather patterns, etc.) when available. The 1983 projection included an above-average estimate of 1.1-1.6 million sockeye salmon and average harvests of pink salmon, chum salmon, coho salmon and chinook salmon (Table 1).

Meeting in Anchorage during April of 1983, the Alaska Board of Fisheries adopted two regulatory changes affecting the conduct of the Upper Cook Inlet commercial salmon fishery. The first concerned later opening dates for set gill netting in the Upper Subdistrict and was directed at reducing the incidental catch of Kenai River chinook salmon. Under the new regulation, set gill netting in that portion of the Upper Subdistrict south of the Kasilof River would not open until 5 July or until 75,000 sockeye salmon had passed the Kasilof River sonar counters, whichever occurred first. Set gill netting in that portion north of the Kasilof River would not open until 10 July or until 150,000 sockeye salmon had passed the Kenai River sonar counters, whichever occurred first. Additionally, drift gill netting was prohibited within two miles of the mean high tide mark along the affected beaches until opened for set nets. However, on 29 June Superior Court Judge Charles Cranston, in case 3KN-83-491 CI Melvin E. Johnson vs. Alaska Board of Fisheries, issued a preliminary injunction made effective 1 July, setting aside the new regulation. As a result, the Upper Subdistrict setnet fishery was reduced by only one period - the one which would have occurred on 27 June.

The second regulatory change limited the use of drift gill nets and seines in the Chinitna Bay Subdistrict to periods established by emergency order only. Adopted in the fall meeting in 1982, the Board clarified its intent for this regulatory change in the spring of 1983. Drift and seine gear was to be permitted (by emergency order) during the portions of the season when chum salmon were not a concern (i.e., both prior to and after the chum salmon return) as well as immediately after chum salmon escapements were observed.

As in past years, fishery information and emergency order announcements were dispersed through recorded phone messages, informational programs (Fishermen's Corner) and public service messages broadcast by several radio stations. For 1983, the stations carrying Fishermen's Corner and emergency order announcements were KSRM (Kenai-Soldotna), KGTL (Homer), KBBI (Homer), and KABN (Big Lake).

Sockeye Salmon

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, stock separation, district test fishing, sonar escapement enumeration and comparative analysis of historic commercial harvest and effort levels.

The offshore test fishing program utilizes a chartered gillnet vessel fishing standardized stations on a transect crossing Cook Inlet from Anchor Point to the Red River delta. The purpose of the program is to provide an in-season

projection of sockeye salmon run strength by estimating fish passage rates (computed by correlating the vessel's daily catch with subsequent commercial harvests and escapement) and fitting these rates to the appropriate run-timing curve. In 1983, the charter was awarded to the F/V Corrina Kay and the program operated smoothly. A tendancy of the program to underestimate total return was repeated in 1983, not surprising when considering the unprecedented magnitude of the sockeye salmon return. Run strength estimates were accurate enough to encourage continued use of the drift fishery and, therefore, aided in providing for adequate harvest levels. A complete discussion of this program's operation in 1983 is contained in Waltemyer (1983).

The use of scale pattern analysis to apportion commercial sockeye salmon catches to river of origin was first applied to Upper Cook Inlet in 1977 and has since become an integral part of the salmon management regime. Although this program is most effective in post-season analysis of total return by river system, in-season use is possible subject to some severe limitations. Due to the sharp and late entry pattern of sockeye salmon returning to the Susitna River, adequate escapement samples (i.e., scale from fish of known origin) used to build a stock separation model are frequently unavailable. This occurred in 1983 with insufficient Susitna River sockeye salmon escapement samples available during the critical management period in mid-July. However, using the hypothesis that growth characteristics within a river system are to some extent consistent within a brood year, models were constructed based on data gathered from 4-year old fish that returned the previous year. This methodology was then applied to current catches and provided useful information in-season (Table 2).

The district test fishing project utilizes six to eight commercial drift gillnet vessels to locate concentrations of sockeye salmon within the Central District during the interval separating commercial periods. Because sockeye salmon migrate through the District in a predictable manner, knowledge of the location of large schools is important in assessing the progress of the fish toward their river of origin. Because this effort represents a relatively small sampling level, the program is not capable of determining abundance. Due to the extremely large return of sockeye salmon and associated frequent drift openings, this program was not utilized during the 1983 season.

The use of hydroacoustic equipment to measure escapement levels on a daily basis in Upper Cook Inlet's glacial rivers began in 1968 in the Kenai and Kasilof rivers and was expanded to include the Susitna River in 1978 and the Crescent River in 1979. With the exception of Susitna Station, all sites operated quite successfully in 1983. Extremely high water levels and changing channel configuration compromised the sonar estimate in the Susitna, particularly during the peak of migration. As a result, the 1983 Susitna Station counts are viewed as minimal and escapement estimates provided by the Susitna Hydroelectric Feasibility study may more accurately reflect actual escapement levels. A complete discussion of sonar operations is contained in King and Tarbox (1984). Daily escapement counts for the four systems monitored by sonar are presented in Table 3.

Upper Cook Inlet commercial catch statistics refined to gear type, area and date are available from 1966. Comparative analysis of this data for in-season

assessment of run strength and timing is generally applied to the other species of salmon but frequently is useful as a source of confirmation of the sockeye salmon data generated by the aforementioned programs. The 1983 commercial catch by gear type and area is summarized in Table 4 while catches by period and area are contained in Tables 5 through 13. A summary of emergency orders is presented in Table 14. A summary of allowable fishing time by gear and area is presented in Table 15.

The 1983 sockeye salmon catch of 5.0 million established a new record exceeding the previous high of 3.3 million set in 1982 and is approximately four times the average annual harvest. This catch was valued at $23.8 million or 81% of the total value of the salmon fishery.

The Crescent River sockeye salmon return is managed primarily through the use of comparative catch figures and run-timing modeling as the other programs are not applicable to in-season management of this relatively small and discrete stock. Effort levels are confirmed by aerial survey (Table 16). The stock identification program has shown that the set gillnet fishery in the Western Subdistrict takes primarily Crescent-bound sockeye salmon and management of this stock consists of adjusting fishing time in this area to achieve proper escapement levels. Fishing began in the Western Subdistrict on 17 June with catches and effort remaining at average levels into early July. By 13 July, the Crescent River escapement began to increase rapidly and the Western Subdistrict setnet fishery was opened on that date and remained open on a continuous basis through Monday, 25 July when sockeye salmon catches began to drop off. The continuous fishing aided in controlling the Crescent River escapement although the final count of 92,343 substantially exceeded the 50,000 fish goal.

The remainder of the Upper Cook Inlet fishery opened on 27 June (1 July in the Upper Subdistrict) with sockeye salmon catches strong in the drift fishery but fairly light in the setnet fisheries. Early in July, however, catches of Kasilof River sockeye salmon increased along the lower eastside beach and the escapement rate past the Kasilof sonar counters picked up sharply. To slow the escapement, an additional 18-hour fishing period was opened on 6 July for the eastside set nets south of the Kenai River and for the drift fleet south of the Kasilof River within five miles of the eastside beach.

Fishing returned to standard periods until 13 July by which time several factors indicated a need to increase harvest rates. Extremely strong drift catches on 8 July and 11 July coupled with offshore test fishing data indicated the overall sockeye salmon return would be considerably above average with the majority of the fish bound for the Kenai and Kasilof rivers. The Susitna River return, while not particularly weak, did not appear to be as strong as the Kenai and Kasilof returns. In an attempt to target drift effort on Kenai River stocks, a period was opened on 13 July with fishing confined to the southern half of the Central District. The period proved very successful with the catch of 296,000 sockeye salmon being made up almost entirely of Kenai-bound fish. To target effort on Kasilof stocks, the eastside set nets south of the Kasilof River were also opened on 13 July and remained open through the regular period on Friday, 15 July. No fishing

occurred on Saturday, 16 July but by early Sunday is became apparent that tremendous numbers of sockeye salmon were moving into the Kenai River and that the Kasilof River escapement was also building very rapidly. In response, the entire Upper Subdistrict was opened at 3:00 P.M. Sunday, 17 July, and remained open through the regular period on Monday, 18 July. The Monday drift period was opened three hours early to aid in optimizing the catch. With tremendous catches occurring along the east beach and sockeye salmon still entering both the Kasilof and Kenai rivers in good numbers, the eastside set nets were extended through Wednesday, 20 July. The results of the 18 July period showed that excellent numbers of sockeye salmon had moved into the Northern District, presumably bound for the Susitna River, resulting in an additional period being opened for the Northern District setnet fishery on Wednesday, 20 July. With the movement of northern bound sockeye salmon out of the Central District and the remaining stocks present in excess numbers, the drift fleet was allowed to fish from Wednesday through the regular period on Friday, 22 July. All Central District setnet areas except the Chinitna Bay area were also open during this period. Because other species present in the offshore areas could not withstand constant fishing pressure, the drift fleet was restricted to fishing only along the eastside beaches over the weekend before going district-wide on Monday, 25 July. Set netting and drifting along the east side continued until the regular period on 29 July by which time sockeye salmon catch and escapement rates had dropped to fairly low levels. At this point, management emphasis shifted to the chum salmon and coho salmon returns.

The extremely strong sockeye return to most systems produced correspondingly strong levels of escapement. Escapement goals were exceeded in the Crescent River (50,000 goal, 92,000 escapement), the Kasilof River (150,000 maximum goal, 201,000 escapement) and the Kenai River (500,000 maximum goal, 630,000 escapement). Although the excellent abundance of sockeye salmon in the Northern District was thought to indicate sufficient numbers to achieve the 200,000 fish goal in the Susitna River, many of these fish were actually bound for the Fish Creek system which ultimately had an escapement of 119,000, the highest in 40 years. The final count in the Susitna River was 176,000 or 12 percent below the goal (Appendix Table 12).

Although the Kenai River escapement was well above the goal and the second largest on record, the number of fish headed for the Russian Lakes system proved insufficient to provide for an unrestricted sport fishery and still meet the 30,000 fish escapement goal. A closure of the Russian River sport fishery was expanded to include the mainstem Kenai River and also prompted a closure of the eastside setnet fishery on 5 August and a delay of the 8 August period until 10 August. The final Russian River escapement reached 34,000.

Chum Salmon

The 1983 catch of 1,115,000 chum salmon is the third highest on record and nearly double the long-term average. Typically, some 90 percent of the inlet's chum salmon catch is taken by the drift fleet and 1983 proved no exception with the drifters taking 94 percent. The Susitna River produces the bulk of the chum salmon, whose migration route and run-timing make them

available to the drift fleet during the latter portions of the principle sockeye salmon fishery. Because good numbers of chum salmon were taken during additional drift periods directed at sockeye salmon, no alteration of the standard fishing schedule was necessary following the sockeye salmon fishery.

The harvest of the relatively minor run of chum salmon in Chinitna Bay has, in past years, generated controversy far out of proportion to the magnitude of this small salmon stock. Because of chronic underescapement, the Board of Fisheries at its meeting in the fall of 1982, adopted regulations prohibiting drift gill netting and seining in Chinitna Bay except during periods provided by emergency order. The Board clarified its intent at the Spring 1983 meeting, directing the staff to utilize these two gear types during the periods both preceding and following the local chum salmon run. Accordingly, an emergency order was issued at the beginning of the commercial season, permitting the use of drift nets and seines until 15 July. When both catch rates and escapement by the end of July indicated that the presence of even set gill nets might jeopardize escapement goals, the bay was closed to all gear types effective 30 July. By 15 August it was clear that chum salmon escapement goals would be attained and the bay was opened for all gear types for the remainder of the season. The peak escapement count of chum salmon in Clearwater Creek was 11,000-14,000 and occurred on 24 August.

Coho Salmon

The 1983 harvest of 521,000 coho salmon represents the second highest catch on record and is double the long-term average. This high catch points out the management limitations of the mixed species fishery considering that the two major coho salmon stocks (Kenai and Susitna) are selected for minimization of commercial harvest under the provisions of the Upper Cook Inlet Comprehensive Management Plan.

Northern-bound coho salmon began appearing in the drift catch in large numbers by 8 July, substantially earlier than normal, and the intense fishery targeted on sockeye salmon inevitably harvested additional coho salmon. Subsequent escapement into northern streams was considered only adequate.

The early coho salmon run to the Kenai River also experienced an increased exploitation during its early portion due to continuous eastside setnet periods directed at sockeye salmon during the latter half of July. However, due to a later run-timing, the impact was relatively minor and was further lessened by the closures of the setnet fishery on 5 August and 8 August to protect remaining Russian River sockeye salmon. This time period conforms to the peak of the early coho salmon run. As judged from catch rates in the sport fishery, the Kenai coho salmon escapement was good although considerably reduced from the levels observed in 1981 and 1982.

Coho salmon returns appeared only slightly above average to streams along the west side of the Central District and did not merit additional fishing time. Because most production systems in the area are glacial, no estimate of escapement is made.

Pink Salmon

Pink salmon returns to Upper Cook Inlet are normally very small in odd-numbered years and 1983 proved no exception with the commercial catch totaling only 74,000, only slightly better than half of the average odd-year catch. Consequently, pink salmon did not play any significant role in the management of the fishery. No escapement goal is set for odd-year pink salmon.

Chinook Salmon

The commercial harvest of 20,000 chinook salmon was considerably above the average observed under the present regulatory structure and reflects both the excellent strength of returns and, to a lesser degree, increased interception due to the intense sockeye salmon fishery. As usual, the largest portion of the catch occurred in the Upper Subdistrict setnet fishery where the catch of 14,400 represented 71 percent of the inlet's chinook salmon catch. As noted earlier, the Board's attempt to reduce the eastside chinook salmon catch through later opening dates was set aside by the preliminary injunction issued on 30 June. It is interesting to note that the chinook salmon catch during periods that would have remained closed under the Board's regulation was 2,364 or 16 percent of the season's eastside catch. The sockeye salmon harvest during the same time period was 42,306 or less than 3 percent of the eastside's season total.

Management Review and Recommendations

Extremely large salmon returns are often viewed as being relatively easy to manage when in fact they often present problems not encountered in dealing with average-sized returns. This proved to be the case in 1983. The following discussion represents an assessment in hindsight of various management strategies utilized in 1983.

Crescent River Sockeye Salmon Management:

The strategy employed for this system for the past several years incorporated comparative catch per unit effort data from the Western Subdistrict setnet fishery coupled with initial escapement rates to formulate estimates of run-strength and timing. In 1983, early season catches did not compare favorably with those observed in 1979 and 1980, years in which the 50,000 fish escapement goal was exceeded. Initial escapement rates also did not indicate run strength comparable to 1979 and 1980. By the time sufficient escapement information had been accumulated to conclude that additional fishing time was warranted, the bulk of the sockeye salmon run had already entered the river. The estimated 10-day travel time from the river mouth to the sonar site greatly compromises the use of escapement data for in-season management. The anticipated move to a lower river site in 1984 should improve management capabilities considerably.

Kenai and Susitna River Sockeye Salmon Management:

The 1983 season vividly illustrates the desirability of obtaining reliable run-strength estimates of the sockeye salmon return as early as possible.

The additional period on 13 July for the drift fleet was the result of a favorable offshore test fish projection but did not adequately reduce the tremendous surplus of Kenai River sockeye salmon. If in-season stock identification information proves correct, an excellent opportunity existed prior to 15 July to selectively harvest the surplus Kenai-bound fish with little impact on other stocks or species. As the run progressed, the need arose to allow additional fishing time for the drift fleet on 21 and 22 July and throughout much of the latter half of July in the eastside setnet fishery. The timing of these later drift periods coincided with the peak of abundance of Susitna-bound coho salmon in the district and, in effect, maximized the interception of this stock. The extended setnet fishing time resulted in a significant increase in early Kenai River coho salmon interception and to a much larger degree Kenai River chinook salmon interception. It should be pointed out that Susitna coho salmon interception would have been substantial during additional periods just prior to 15 July also. Coho salmon catch per vessel observed on 13 July was 61 fish compared to 84 fish on 20 July. In summary, the goals of the Upper Cook Inlet Salmon Management Plan can best be realized by reducing sockeye salmon surpluses through drift gillnetting as early in the season as possible. This strategy requires accurate run strength and stock composition estimates beyond those currently available.

Prices, Average Weight and Quality

The price per pound paid the fishermen for sockeye salmon was $.70 at the beginning of the season and rose only slightly as the year progressed, finishing at an average of $.72. The near-record sockeye salmon harvest in Bristol Bay coupled with the record harvest in Cook Inlet provided little incentive for buyers to raise prices. Coho salmon sold for $.45 per pound while chinook salmon, chum salmon and pink salmon brought $.97, $.36, and $.18, respectively (Appendix Table 13). With the exception of pink salmon, prices paid for all species declined substantially from 1982 levels.

The average weight per fish as reported on fish tickets did not differ a great deal from that observed in past years. Sockeye salmon averaged 6.38 pounds while coho salmon, chinook salmon, chum salmon and pink salmon averaged 6.90, 29.24, 7.96, and 3.04 pounds, respectively (Appendix Table 14).

The record harvest of sockeye salmon the previous year (1982) had produced severe problems in the timely processing of fish during the peak of the season. These problems were not apparent in 1983 despite the substantially larger catch. The experience of the previous season prompted processors to expand processing and ice-making capacities and established logistical procedures for tendering fish to other ports. In addition, the sockeye salmon harvest was considerably more protracted in 1983, allowing processors to keep pace with catches. A total of 26 firms purchased Upper Cook Inlet salmon in 1983 (Table 17).

Minor System Escapement

Several minor salmon-producing systems were monitored for escapement levels during 1983 and merit mention. The Department's F.R.E.D. Division continued

the operation of a counting weir on Fish Creek as part of the evaluation of the Big Lake sockeye salmon stocking project. With the weir in place from 5 July to 30 August, a total of 118,797 sockeye salmon and 2,342 coho salmon were enumerated (Table 18). The mid point of the sockeye salmon count occurred on 25 July. The coho salmon count includes 1,305 fish downstream of the weir at the time of its removal. The Cook Inlet Aquaculture Association (CIAA) operated a weir on Packer's Creek on Kalgin Island from 23 May to 29 August and enumerated 18,403 sockeye salmon with the mid point of passage occurring on 8 August (Table 19). CIAA also maintained a weir on Wolverine Creek in the Big River lakes drainage from 10 June to 6 August, counting 18,189 sockeye salmon with the mid point occurring on 26 June (Table 20).

1984 Outlook

The projected sockeye salmon harvest for Upper Cook Inlet in 1984 is 2.2 million. This represents the first formal forecast of the sockeye salmon harvest and is based on historical recruit-spawner relationships and average marine maturity schedules. The parent-year escapement of sockeye salmon in 1979 in the Kenai River was well below escapement goals and was further compromised by poor distribution among the major spawning areas. As a result, the return to the Kenai River is expected to be well below that observed in recent years although other major systems (Kasilof, Susitna and Crescent rivers) are expected to experience good returns.

Very little data exists on which to base harvest projections for the other salmon species. Utilizing the apparent strength of parent-year returns coupled with fragmentory escapement values suggests that the chum salmon return will be poor, the coho salmon return average and the chinook salmon return above average. Pink salmon escapement was felt to be adequate in 1982 but returns to the Susitna River were weak despite an excellent escapement in 1980. If this trend continues, the 1984 pink salmon return may be below average.

Management techniques and strategies to be employed in 1984 will depend largely on the relative run strengths of numerous stocks but the overall approach of recent years is not expected to change a great deal. Should circumstances make it desirable, experiments with area restrictions on drift gill netting to vary exploitation rates by stock will be continued.

SUBSISTENCE AND PERSONAL USE FISHERIES

The adoption of criteria describing valid subsistence salmon fisheries in Upper Cook Inlet by the Board of Fisheries in 1980 reduced participation to only those residents of the village of Tyonek. The creation of a personal use category in 1982 enabled many of those personal consumptive users disenfranchised by the restrictive subsistence criteria to once again participate in the salmon harvest. The personal use fishery held at the terminus of the Kasilof River in late June was joined by a personal use fishery directed at fall-run coho salmon along the northern shores of the Kenai Peninsula beginning in 1983.

Tyonek Subsistence Salmon Fishery

The Tyonek subsistence fishery is open only to the residents of the village and is restricted to approximately 10 mi of beach from a point one mile south of the Chuitna River to Granite Point (Figure 4). Three 16-hour periods are allowed each week from 15 May to 15 June and one 12-hour period per week for the remainder of the summer. This period scheduling targets the fishery on king salmon for which a quota of 4,200 fish is in effect. Gear is limited to a single 10-fathom gill net having a mesh size no greater than six inches. The 1983 fishery was monitored on-site through 30 June by Department personnel to insure that the harvest did not exceed the quota. The results of the monitoring coupled with completed permit returns provide a total estimated harvest of 2,755 chinook salmon, 201 sockeye salmon, 59 coho salmon, and 6 chum salmon (Table 21).

Kasilof Sockeye Personal Use

This past season marked the second year for this popular gillnet fishery that takes place in waters closed to commercial fishing surrounding the mouth of the Kasilof River (Figure 5). The fishery is open to all Alaska residents holding a sport fishing license although only one permit may be issued per household. A permit holder may take 25 salmon plus an additional 10 salmon for each additional member of his household. Gear is limited to a single 10-fathom gill net having a mesh size no greater than six inches. Nets must be fished at least 100 feet apart and must be attended by permit-holders. A quota of 5,000 to 10,000 salmon is applied to the fishery which, by virtue of time and location, harvests predominately Kasilof River sockeye salmon. The fishery opens on 21 June and continues each day until the quota is reached. Daily fishing periods are from 6:00 A.M. until 6:00 P.M. Estimates of catch are provided by on-site Department personnel and confirmed by post-season permit returns.

A total of 684 permits were issued in 1983, a slight increase from the 649 issued in 1982. Consistently strong daily catches forced the closure of this fishery after only seven days, producing a catch of 8,846 sockeye salmon and 307 chinook salmon (Table 22). Intense crowding on the beaches seen in 1982 recurred with even more intensity. The requirement of minimum distances between nets provides for a limited number of net sites on the three miles of open beach and the entire area was saturated throughout the season. Late-comers had nowhere to fish and heated arguments over "territories" were common.

Fall Coho Personal Use

Created by the Board of Fisheries in the spring of 1983, this gillnet fishery extends from the Kasilof River northward to Point Possession along all eastside beaches open to commercial set netting. Gear and bag limits are identical to the Kasilof fishery although participants in both fisheries may not exceed a combined catch of 25 salmon plus 10 for each member of the household. The fishery opens on 15 September with a single weekly period from noon Saturday to noon Sunday and a quota of 6,000 salmon in effect. Monitoring was accomplished by aerial surveys to determine effort and a

mandatory call-in of catches. Timing and location dictates that this fishery harvests almost exclusively coho salmon bound for northern Kenai Peninsula streams, principally the Kenai River. A total of 295 permits were issued.

The first fishing period occurred on 17 and 18 September. An aerial survey counted 108 nets fishing and expansion of reported catch resulted in a harvest estimate of 712 coho salmon. Immediately following this initial period, the fishery was halted by a temporary restraining order issued by Superior Court Judge Charles Cranston in response to a lawsuit filed by the Kenai River Sportfishing Association (KRSA). An out-of-court settlement reached between KRSA and the State provided for reopening the fishery on alternate weekends beginning 23 October. As was expected, this settlement proved to be a legal expedient only with no catch reported from the few participants due to the lateness of the date. A trial on the merits of this lawsuit is scheduled for the summer of 1984, pending action by the Board of Fisheries.

1983 COMMERCIAL HERRING FISHERY

The 1983 herring fishery opened throughout Upper Cook Inlet by regulation on 15 April. The first significant catches occurred in late April in the Tuxedni Bay area. Catch monitoring indicated harvest rates were above that experienced in past years and the catch was comprised of primarily age 7 and age 8 herring (Table 23). The area was closed on 3 May after a harvest of 147.7 tons. Inexperienced fishermen and confusion over procedures used for grading roe led to a very poor mature sac-roe content of only 7 percent. The harvest was taken by set gill nets deployed from skiffs which in turn were supported by drift gillnet-type vessels.

Following the closure of Tuxedni Bay, effort quickly shifted to Chinitna Bay where by 5 May the harvest was approaching the 35-ton guideline harvest level. A closure at noon on 6 May resulted in a total harvest of 49.2 tons. The majority of the harvest came from the Camp Point area on the south shore and the Clam Cove area on the north shore. Abundance, as indicated by harvest rates, appeared similar to past years. The catch was comprised primarily of age 6 and age 7 herring (Table 24).

After allowing sufficient time for herring stocks present in Tuxedni Bay during the initial opening to disperse, the bay was re-opened on 17 May. Initial catches were poor but as tidal height decreased, catches picked up sharply. The area was closed on 20 May after a harvest of 84.8 tons. As expected, the harvest was comprised of younger fish than observed in the initial opening, with age 5 and age 6 fish predominating (Table 25). Mature roe recovery was excellent, averaging 12 percent with some lots reaching 14 percent.

The first significant catches along the eastside beach occurred in late April, peaked during 5 May to 10 May, and declined rather rapidly to a minimal level by 15 May. Effort was similar to recent years (peak net count of 70) and the abundance of fish appeared substantially above average. Decreasing catches and effort coupled with increasing interception of salmon led to a closure

on 21 May after a harvest of 165.3 tons. Approximately equal amounts of the catch were divided between the human food and bait markets. The catch was comprised of relatively old fish with age 6 and age 7 herring comprising 75 percent of the harvest (Table 26).

Prices for herring varied widely depending on individual markets and the quality of the product. Marginal quality roe herring brought only $400-$500 per ton while the high quality (12 percent) fish brought as much as $1,200 per ton. Herring purchased for food brought $.13/pound ($260/ton) while some fishermen were able to secure limited bait markets that paid as much as $600-$700 per ton.

The substantial increase in the overall herring catch - 453 tons in 1983 versus the previous high of 220 tons in 1981 - was the result of several factors. A concerted effort to contact the many catcher-sellers of bait herring along the east side and secure fish tickets for their catch provided for the first time what is felt to be a fairly accurate portrayal of the actual harvest from this area. Excellent herring abundance and an overall older age composition of harvested fish led to a more liberal harvest level in the initial roe fisheries further augmented by the somewhat experimental second opening in Tuxedni Bay.

1983 COMMERCIAL RAZOR CLAM FISHERY

The 1983 harvest of 269,618 pounds of razor clams represents a substantial decline from the harvest of the previous two years due largely to decreased effort. Only a single processor was involved with purchasing razor clams for human consumption as opposed to two processors in the previous years. Virtually all of the 1983 harvest came from the Crescent River bar area and were directed to the human food market.

Clam abundance in the principal harvest area appeared to be unchanged from previous years although no quantitative data exists on which to base relative abundance estimates. Biological parameters of the harvest (age, weight, length, etc.) are unknown. Two permits were issued to test experimental mechanical harvesters. One harvester was inspected for the purposes of attaining a permit to harvest but failed to remain below the required 10 percent breakage level. Hand-digging efforts were concentrated on Crescent River bar with approximately 40 diggers active at the height of harvest period in July. Digging commenced in April and continued into September.

All samples of water and clams needed to maintain certification of the area for human consumption harvest were obtained by personnel from the Alaska Department of Environmental Conservation. Laboratory analysis of the clam samples revealed no paralytic shellfish poisoning toxins in excess of allowable limits. A 1983 tide schedule is contained in Table 27.

LITERATURE CITED

Alaska Department of Fish and Game. 1966-1983. IBM Fish ticket summaries. Unpublished data.

Browning, J. 1984A. Tyonek subsistence salmon fishery, 1983. Alaska Dept. of Fish and Game. Upper Cook Inlet Data Report No. 84-3. 7 pp.

_____. 1984B. Kasilof River personal use gillnet fishery, 1983. Alaska Dept. of Fish and Game. Upper Cook Inlet Data Report No. 84-6. 11 pp.

Chlupach, R. 1983. Alaska Dept. of Fish and Game Fisheries Rehabilitation, Enhancement and Development Division, Big Lake, Alaska. (Memorandum)

Cross, B.A. 1983. Alaska Dept. of Fish and Game. Commercial Fisheries Division, Anchorage, Alaska. (Memorandum)

King, B.E. and K. Tarbox. 1984. Upper Cook Inlet salmon escapement studies, 1983. Alaska Dept. of Fish and Game Technical Data Report No. 122. 152 pp.

Marcuson, P. 1984A. Packers Lake project progress report 1983. Cook Inlet Aquaculture Association, Soldotna, Alaska. 18 pp.

Marcuson, P. 1984B. Big River Lake pre-enhancement investigation, 1983 field season. Cook Inlet Aquaculture Association, Soldotna, Alaska. 29 pp.

Nickerson, R.B. 1975. A critical analysis of some razor clam populations in Alaska. Alaska Dept. of Fish and Game, Fisheries Rehabilitation, Enhancement and Development Division. 294 pp.

Waltemyer, D. 1983. Describing the migrations of salmon and estimating abundance of sockeye salmon returning in 1983 to Upper Cook Inlet based on a test fishery. Alaska Dept. of Fish and Game. Upper Cook Inlet Data Report No. 84-1. 48 pp.

Table 1 . Commercial salmon harvest projections and subsequent harvest by species, Upper Cook Inlet, 1983.

Species	Pre-season Harvest Projection	Actual Harvest1/
Sockeye	1,100,000 - 1,600,000	5,049,733
Chum	400,000 - 600,000	1,114,858
Pink	50,000 - 150,000	70,327
Coho	200,000 - 300,000	516,322
Chinook	10,000 - 15,000	20,634

1/ Data Source: Honeywell computer catch files, ADFG, Soldotna.

Table 2. In-season stock composition estimates for selected fisheries and dates, Upper Cook Inlet, 1983.1/

Fishery	Date	Susitna	Kenai	Kasilof
Drift	6/27	.24 (± .25)	.41 (± .22)	.35 (± .21)
Drift	7/01	.10 (± .23)	.75 (± .26)	.15 (± .20)
Drift	7/04	.22 (± .26)	.78 (± .28)	0 (± .19)
Drift	7/08	.26 (± .21)	.60 (± .20)	.14 (± .17)
Drift	7/11	.06 (± .16)	.82 (± .19)	.12 (± .16)
Drift	7/13	Trace	1.00 (± .12)	Trace
Drift	7/15	Trace	.94 (± .13)	.06 (± .13)
Set Gillnet				
Cohoe/Ninilchik	7/01	--	.30 (± .14)	.70 (± .14)
Cohoe/Ninilchik	7/06	--	.39 (± .12)	.61 (± .12)
Cohoe/Ninilchik	7/11	--	.64 (± .13)	.36 (± .13)
Cohoe/Ninilchik	7/13	--	.89 (± .13)	.11 (± .13)
Kalifonsky	7/04	--	.54 (± .15)	.46 (± .15)
Kalifonsky	7/06	--	.33 (± .12)	.67 (± .12)
Kalifonsky	7/15	--	.72 (± .13)	.28 (± .13)

1/ Based on a model comprised of 1983 Age 5_2 Kenai and Kasilof rivers and 1982 Age 4_2 Susitna River escapement samples.

Data Source: B.A. Cross, ADFG, memorandum.

Table 3. Apportioned daily sockeye salmon escapement estimates obtained by side scan sonar for the Kenai, Kasilof, Susitna and Crescent rivers, 1983.

	Kenai		Kasilof		Susitna		Crescent	
Date	Daily	Accum	Daily	Accum	Daily	Accum	Daily	Accum
6/11			265	265				
6/12			375	640				
6/13			366	1,006				
6/14			289	1,295				
6/15			432	1,727				
6/16			460	2,187				
6/17			476	2,663				
6/18			525	3,188				
6/19			557	3,745				
6/20			526	4,271				
6/21			459	4,730				
6/22	434	434	583	5,313				
6/23	470	904	774	6,087				
6/24	443	1,347	474	6,561				
6/25	602	1,949	353	6,914				
6/26	422	2,371	348	7,262				
6/27	593	2,964	451	7,713				
6/28	595	3,559	677	8,390				
6/29	409	3,968	1,014	9,404				
6/30	419	4,387	4,332	13,736				
7/01	315	4,702	9,018	22,754	18	18	12	12
7/02	229	4,931	2,467	25,221	39	57	14	26
7/03	280	5,211	4,779	30,000	35	92	28	54
7/04	228	5,439	5,123	35,123	70	162	152	206
7/05	214	5,653	1,906	37,029	92	254	1,518	1,724
7/06	298	5,951	2,051	39,080	81	335	2,034	3,758
7/07	210	6,161	1,865	40,945	66	401	2,462	6,220
7/08	215	6,376	1,582	42,527	72	473	2,849	9,069
7/09	366	6,742	3,241	45,768	66	539	1,760	10,829
7/10	1,335	8,077	6,567	52,335	86	625	1,763	12,592
7/11	2,463	10,540	4,387	56,722	304	929	2,749	15,341
7/12	2,983	13,523	6,066	62,788	364	1,293	3,770	19,111
7/13	12,538	26,061	10,848	73,636	824	2,117	5,396	24,507
7/14	27,586	53,647	14,594	88,230	1,874	3,991	6,657	31,164
7/15	56,160	109,807	10,294	98,524	1,782	5,773	4,923	36,087
7/16	42,674	152,481	7,090	105,614	2,765	8,538	3,641	39,728
7/17	34,916	187,397	24,315	129,929	4,612	13,150	2,382	42,110
7/18	88,155	275,552	20,178	150,107	7,390	20,540	3,834	45,944
7/19	80,952	356,504	3,350	153,457	21,901	42,441	5,549	51,493
7/20	81,497	438,001	2,175	155,632	17,424	59,865	5,307	56,800

Table 3, continued. Apportioned daily sockeye salmon escapement estimates obtained by side scan sonar for the Kenai, Kasilof, Susitna and Crescent rivers, 1983.

	Kenai		Kasilof		Susitna		Crescent	
Date	Daily	Accum	Daily	Accum	Daily	Accum	Daily	Accum
7/21	44,845	482,846	3,882	159,514	8,847	68,712	4,644	61,444
7/22	18,914	501,760	3,942	163,456	2,751	71,283	3,226	64,670
7/23	10,660	512,420	2,227	165,683	6,519	77,802	2,801	67,471
7/24	12,506	524,926	1,814	167,497	7,442	85,244	2,944	70,415
7/25	7,344	532,270	1,505	169,002	7,509	92,753	2,131	72,546
7/26	10,459	542,729	1,044	170,046	7,944	100,697	2,318	74,864
7/27	2,381	545,110	938	170,984	3,579	104,276	2,384	77,248
7/28	4,424	549,534	799	171,783	2,190	106,466	1,808	79,056
7/29	3,925	553,459	1,061	172,844	1,363	107,829	2,067	81,123
7/30	2,372	555,831	1,360	174,204	794	108,623	3,139	84,262
7/31	5,751	561,582	3,259	177,463	500	109,123	2,748	87,010
8/01	9,703	571,285		210,271 1/	733	109,856		92,343 2/
8/02	6,288	577,573			483	110,339		
8/03	2,113	579,686			494	110,833		
8/04	9,319	589,005			241	111,074		
8/05	18,771	607,776			285	111,359		
8/06	8,156	615,932			235	111,594		
8/07	3,672	619,604			440	112,034		
8/08	3,966	623,570			280	112,314		
8/09	2,368	625,938						
8/10	1,781	627,719						
8/11	1,721	629,440						
8/12	900	630,340						

1/ Remainder of run extrapolated based on normal run timing as follows: Prior to 6/11 - 9,484; after 7/31 - 23,324.
2/ Remainder of run extrapolated based on normal run timing.
Data Source: King and Tarbox (1984).

Table 4. Commercial salmon harvest by gear type and area, Upper Cook Inlet, 1983.

Gear/Area	Chinook	Sockeye	Coho	Pink	Chum	Total
DRIFT	1,124	3,222,007	326,962	26,628	1,044,644	4,621,365
CENTRAL SET						
Upper	15,043	1,508,963	37,666	18,310	2,764	1,582,746
Kalgin Is.	1,519	62,546	44,131	1,899	8,447	118,542
Kustatan	159	10,243	10,434	1,370	722	22,928
Western	1,839	60,385	39,681	486	20,365	122,756
Chinitna Bay	17	1,370	3,581	30	8,595	13,593
Subtotal	18,577	1,643,507	135,493	22,095	40,893	1,860,565
NORTHERN SET						
General	841	117,015	42,089	20,749	26,556	207,250
Eastern	92	67,204	11,778	855	2,765	82,964
Subtotal	933	184,219	53,867	21,604	29,321	289,944
SEINE	0	0	0	0	0	0
GRAND TOTAL	20,634	5,049,733	516,322	70,327	1,114,858	6,771,874

Table 5. Commercial salmon catch by species and period for drift gill nets in the Central District, 1983.

Date	Chinook	Sockeye	Coho	Pink	Chum
6/27	66	21,621	447	44	1,367
7/01	189	58,278	2,555	153	16,392
7/04	125	162,872	7,424	146	29,765
7/06	182	65,568	2,054	30	8,779
7/08	58	306,289	14,019	128	60,691
7/11	87	336,053	20,126	311	58,730
7/13	49	295,631	26,227	729	53,841
7/15	50	376,919	34,209	1,909	60,609
7/18	21	292,408	32,824	2,656	66,526
7/20	22	303,631	35,697	3,479	103,626
7/21	36	333,277	26,253	3,605	61,284
7/22	34	217,310	18,664	3,455	40,192
7/23	38	58,116	3,305	990	6,682
7/24	57	44,811	2,201	1,174	7,097
7/25	30	101,930	18,089	2,416	96,750
7/26	13	38,527	2,839	1,449	14,895
7/27	8	59,528	4,408	630	21,289
7/28	8	30,412	2,709	569	14,283
7/29	12	74,230	23,371	1,049	99,512
8/01	12	36,344	19,357	1,113	102,427
8/05	9	4,843	11,177	444	59,318
8/08	3	2,675	6,205	99	49,708
8/12	9	397	694	7	2,788
8/15	5	215	3,653	21	4,955
8/19	0	58	2,905	8	1,761
8/22	1	14	2,652	11	978
8/26	0	33	1,325	1	245
8/29	0	11	828	2	75
9/02	0	3	421	0	76
9/05	0	2	178	0	0
9/12	0	1	146	0	3
Total	1,124	3,222,007	326,962	26,628	1,044,644

Data Source: Honeywell computer catch files, ADFG, Soldotna.

Table 6. Commercial salmon catch by species and period for drift gill nets in the Chinitna Bay Subdistrict, 1983.

Date	Chinook	Sockeye	Coho	Pink	Chum
6/27	8	103	2	0	4
7/01	0	35	0	0	0
8/15	0	13	2,000	10	1,947
8/19	0	42	2,493	6	1,284
8/22	1	10	1,881	7	914
8/26	0	13	1,092	0	187
8/29	0	5	673	2	59
9/02	0	3	421	0	76
9/05	0	0	92	0	0
9/12	0	0	100	0	3
Total	9	224	8,754	25	4,474

Data Source: Honeywell computer catch files, ADFG, Soldotna.

Table 7. Commercial salmon catch by species and period for set gill nets in the Upper Subdistrict, 1983.

Date	Chinook	Sockeye	Coho	Pink	Chum
7/01	1,018	21,929	46	20	7
7/04	825	13,100	37	45	8
7/06	1,764	11,790	31	51	22
7/08	737	15,906	79	79	7
7/11	958	51,058	378	137	52
7/13	749	54,384	180	357	74
7/14	450	13,871	113	315	7
7/15	1,035	99,972	1,223	657	156
7/17	114	106,928	692	78	109
7/18	770	281,768	1,724	1,258	649
7/19	583	92,720	1,511	2,176	181
7/20	638	114,492	1,361	1,907	44
7/21	864	127,828	2,235	1,389	132
7/22	558	94,846	2,182	1,969	85
7/23	554	92,295	2,087	1,338	157
7/24	423	98,577	2,546	1,965	664
7/25	391	46,621	1,904	1,651	125
7/26	564	30,719	1,991	1,072	45
7/27	576	52,693	4,097	757	34
7/28	393	23,971	2,260	428	22
7/29	453	30,666	2,934	334	29
8/01	311	22,601	2,956	259	17
8/10	213	6,181	2,554	25	23
8/12	75	2,589	1,457	7	89
8/15	27	1,458	1,088	36	26
Total	15,043	1,500,963	37,666	18,610	2,764

Data Source: Honeywell computer catch files, ADFG, Soldotna.

Table 8. Commercial salmon catch by species and period for set gill nets in the Kalgin Island Subdistrict, 1983.

Date	Chinook	Sockeye	Coho	Pink	Chum
6/27	1,077	8,962	53	1	26
7/01	75	3,965	339	2	33
7/04	28	867	177	17	4
7/08	19	2,081	394	5	20
7/11	80	2,732	1,374	10	81
7/15	31	2,826	1,994	99	473
7/18	45	9,563	5,697	292	1,074
7/20	21	3,780	2,651	169	250
7/21	6	4,276	1,565	242	375
7/22	31	5,330	3,730	236	595
7/25	19	5,014	4,321	238	304
7/29	23	4,528	4,339	269	601
8/01	32	2,607	3,134	252	1,349
8/05	6	1,816	1,723	15	172
8/08	11	2,280	2,347	29	298
8/12	6	1,167	1,729	16	1,129
8/15	4	449	1,976	5	917
8/19	2	108	1,559	0	407
8/22	0	71	1,061	1	90
8/26	1	73	986	0	129
8/29	2	23	1,226	1	106
9/02	0	20	902	0	6
9/05	0	7	446	0	7
9/09	0	1	263	0	1
9/12	0	0	145	0	0
Total	1,519	62,546	44,131	1,899	8,447

Data Source: Honeywell computer catch files, ADFG, Soldotna.

Table 9. Commercial salmon catch by species and period for set gill nets in the Kustatan Subdistrict, 1983.

Date	Chinook	Sockeye	Coho	Pink	Chum
6/27	41	51	0	0	0
7/01	66	271	74	0	8
7/04	25	122	26	3	1
7/08	1	202	13	0	30
7/11	0	196	42	1	104
7/15	5	1,503	804	19	227
7/18	1	1,020	506	68	19
7/20	2	828	1,235	186	9
7/21	4	1,968	1,907	206	41
7/22	7	1,866	2,802	341	15
7/25	3	670	888	107	23
7/29	1	931	745	224	67
8/01	2	595	1,276	215	58
8/12	1	8	40	0	28
8/15	0	9	37	0	45
8/19	0	3	39	0	47
Total	159	10,243	10,434	1,370	722

Data Source: Honeywell computer catch files, ADFG, Soldotna.

Table 10. Commercial salmon catch by species and period for set gill nets in the Western Subdistrict, 1983.

Date	Chinook	Sockeye	Coho	Pink	Chum
6/17	631	1,013	0	0	0
6/20	297	1,040	0	0	0
6/24	446	2,200	14	5	6
6/27	136	3,981	54	0	16
7/01	53	2,546	79	6	52
7/04	47	2,855	326	25	84
7/08	25	2,086	300	17	216
7/11	17	1,566	578	7	297
7/13	43	2,714	1,131	35	475
7/14	13	557	203	8	80
7/15	19	2,534	823	27	1,021
7/16	10	2,977	585	8	89
7/17	17	3,685	1,473	17	214
7/18	14	7,120	2,242	32	748
7/19	3	739	490	7	142
7/20	22	5,986	1,917	27	1,254
7/21	5	1,910	1,098	6	396
7/22	10	4,278	2,612	39	1,361
7/23	3	1,547	1,148	27	348
7/24	1	844	1,100	6	363
7/25	5	2,945	4,544	63	1,669
7/29	2	1,771	1,922	21	1,784
8/01	15	1,274	2,724	49	2,421
8/05	2	783	2,253	10	2,200
8/08	2	281	876	6	1,170
8/12	0	534	2,011	7	1,318
8/15	1	247	2,085	14	1,366
8/19	0	155	2,102	6	733
8/22	0	67	1,158	4	284
8/26	0	88	1,135	6	88
8/29	0	27	1,244	1	134
9/02	0	21	976	0	36
9/05	0	14	478	0	0
Total	1,839	60,385	39,681	486	20,365

Data Source: Honeywell computer catch files, ADFG, Soldotna.

Table 11. Commercial salmon catch by species and period for set gill nets in the Chinitna Bay Subdistrict, 1983.

Date	Chinook	Sockeye	Coho	Pink	Chum
6/27	1	106	2	0	16
7/01	1	84	3	0	74
7/04	2	173	8	0	241
7/08	0	9	0	0	2
7/11	0	273	36	2	789
7/15	10	469	184	12	516
7/18	0	53	64	1	1,044
7/22	1	135	82	5	422
7/25	0	41	219	2	829
7/29	1	21	134	0	990
8/15	0	0	677	7	1,005
8/19	0	0	902	0	1,459
8/22	0	0	303	0	534
8/26	0	0	236	0	225
8/29	1	5	395	1	272
9/02	0	1	301	0	119
9/05	0	0	35	0	58
Total	17	1,370	3,581	30	8,595

Data Source: Honeywell computer catch files, ADFG, Soldotna.

Table 12. Commercial salmon catch by species and period for set gill nets in the General Subdistrict (Northern District), 1983.

Date	Chinook	Sockeye	Coho	Pink	Chum
6/27	150	29	1	0	0
7/01	254	357	17	2	15
7/04	123	483	101	6	1
7/08	67	280	351	6	0
7/11	32	1,286	823	34	107
7/15	29	23,090	7,196	813	8,611
7/18	50	47,961	17,416	4,077	6,322
7/20	37	15,378	3,450	2,723	1,089
7/22	24	15,424	3,699	4,547	899
7/25	23	6,845	3,247	4,485	946
7/29	13	2,842	1,066	1,820	1,282
8/01	34	1,967	334	1,621	249
8/05	2	829	3,271	472	5,038
8/08	0	90	178	25	48
8/12	0	56	263	84	1,080
8/15	0	56	239	25	463
8/19	2	19	153	8	264
8/22	1	18	236	0	109
8/26	0	5	48	1	33
Total	841	117,015	42,089	20,749	26,556

Data Source: Honeywell computer catch files, ADFG, Soldotna.

Table 13. Commercial salmon catch by species and period for set gill nets in the Eastern Subdistrict (Northern District), 1983.

Date	Chinook	Sockeye	Coho	Pink	Chum
6/27	41	564	3	0	0
7/01	32	1,433	9	5	0
7/04	5	1,729	22	21	1
7/08	3	730	43	15	2
7/11	2	1,822	32	15	1
7/15	1	14,620	663	50	123
7/18	2	24,221	1,905	181	383
7/20	1	4,367	216	86	22
7/22	0	6,151	199	66	19
7/25	1	3,326	190	114	82
7/29	0	1,051	31	27	10
8/01	0	2,293	130	16	18
8/05	1	2,437	2,339	153	1,646
8/07	1	1,221	513	81	77
8/08	0	351	161	23	14
8/12	1	373	1,367	0	118
8/15	0	338	1,435	1	16
8/19	1	79	483	0	22
8/22	0	41	1,369	0	169
8/26	0	15	207	1	7
8/29	0	32	284	0	30
9/02	0	3	109	0	3
9/05	0	7	68	0	2
Total	92	67,204	11,778	855	2,765

Data Source: Honeywell computer catch files, ADFG, Soldotna.

Table 14. Emergency order summary, Upper Cook Inlet commercial salmon fisheries, 1983.

Base fishing time = 6:00 A.M. until 6:00 P.M. on Mondays and Fridays.
For districts and subdistricts see map (Figure 1).

Emergency Order Number	Effective Date	Description	Reason
2S-05-83	June 27	Delayed opening of set gillnet fishery south of Kasilof River until July 5 or until 75,000 fish passed Kasilof counters, north of the Kasilof River until July 10 or until 150,000 fish passed the Kenai counters and drift gillnetting within 5 miles of the above beaches for the same time periods.	To comply with Board of Fisheries action aimed at reducing incidental commercial harvest of Kenai kings.
2S-06-83	June 27	Opened the Chinitna Bay Subdistrict to drift gillnetting and seining on regular periods from June 27 until July 15.	Drifting and seining during this time period represented no threat to local chum stocks.
2S-07-83	July 06	Opened set gillnets in Upper Subdistrict south of the Kenai River and drift gillnets between Cape Kasilof and Cape Ninilchik within 5 miles of the east shore on July 6 from 6:00 A.M. until 12:00 Midnight.	Kasilof River sockeye escapement has reached 45,000 and daily passage rates were climbing quickly.
2S-08-83	July 13	Opened set gillnets in Western Subdistrict and Upper Subdistrict south of Kasilof River on July 13 from 6:00 A.M. until 6:00 P.M. and drift gillnets in the portion of the Central District south of a line from Clam Gulch Tower to the southern tip of Kalgin Island to Harriet Point on July 13 from 6:00 A.M. until 6:00 P.M.	To reduce the rate of sockeye escapement in Crescent and Kasilof rivers and target additional drift effort on large Kenai sockeye return.

Table 14, continued. Emergency order summary, Upper Cook Inlet commercial salmon fisheries, 1983.

Emergency Order Number	Effective Date	Description	Reason
2S-09-83	July 13	Extended set gillnetting in Western Subdistrict and the Upper Subdistrict south of the Kasilof River from 9:00 P.M. July 13 until 6:00 A.M. July 15.	Reduce sockeye escapement rates into the Crescent and Kasilof rivers.
2S-10-83	July 15	Extended set gillnetting in Western Subdistrict until further notice.	Sockeye escapement goal assured in Crescent River.
2S-11-83	July 17	Opened set gillnetting in the Upper Subdistrict from 3:00 P.M. July 17 until 6:00 A.M. July 18 and drifting in the Upper and Lower subdistrict from 3:00 A.M. until 6:00 A.M. July 18.	Reduce the rate of sockeye escapement into both the Kasilof and Kenai rivers.
2S-12-83	July 18	Extended set gillnetting in the Upper Subdistrict from 6:00 P.M. July 18 until 6:00 P.M. July 19.	Reduce sockeye escapement rates in the Kenai and Kasilof rivers.
2S-13-83	July 19	Opened set gillnetting in all areas of the Central District except Chinitna Bay from 6:00 P.M. July 19 until 6:00 P.M. July 21. Opened set gillnetting in all areas of the Northern District on July 20 from 6:00 A.M. to 6:00 P.M. Opened drift gillnetting in all areas of the Central District except Chinitna Bay from 6:00 A.M. July 20 to 6:00 P.M. July 21.	Reduce sockeye escapement rates in the Kenai, Kasilof, Crescent, and Susitna rivers.
2S-14-83	July 21	Extended set gillnetting and drift gillnetting in all areas of the Central District except Chinitna Bay from 6:00 P.M. July 21 to 6:00 A.M. July 22.	Continue the harvest of surplus Kenai, Kasilof and Crescent river sockeyes.

Table 14, continued. Emergency order summary, Upper Cook Inlet commercial salmon fisheries, 1983.

Emergency Order Number	Effective Date	Description	Reason
2S-15-83	July 22	Extended set gillnetting in the Upper Subdistrict from 6:00 P.M. July 22 until 6:00 A.M. July 25. Opened drift gillnetting east of a line from the East Foreland to Cape Ninilchik from 4:00 A.M. until 9:00 P.M. on both July 23 and 24. (Set gillnetting in the Western Subdistrict remained open until further notice).	Continue the harvest of surplus Kenai, Kasilof and Crescent river sockeyes.
2S-16-83	July 25	Extended set gillnetting along the eastside beaches of the Upper Subdistrict from 6:00 P.M. July 25 until 6:00 P.M. July 26. Opened drift gillnetting east of a line from the East Foreland to Cape Ninilchik on July 26 from 6:00 A.M. until 6:00 P.M. Returned set gillnetting in the Western Subdistrict to regular Monday and Friday periods.	Continue the harvest of surplus Kenai and Kasilof river sockeyes. With coho and chums dominating Western catches, no further additional time warranted in that area.
2S-17-83	July 26	Extended set gillnetting along the eastside beaches of the Upper Subdistrict from 6:00 P.M. July 26 until 6:00 P.M. July 27. Opened drift gillnetting east of a line from the East Foreland to Cape Ninilchik on July 27 from 6:00 A.M. until 6:00 P.M.	Continue the harvest of surplus Kenai and Kasilof river sockeyes.
2S-18-83	July 27	Extended set gillnetting along the eastside beaches of the Upper Subdistrict from 6:00 P.M. July 27 until 6:00 P.M. July 28. Opened drift gillnetting east of a line from the East Foreland to Cape Ninilchik on July 28 from 6:00 A.M. until 6:00 P.M.	Continue the harvest of surplus Kenai and Kasilof river sockeyes.

Table 14, continued. Emergency order summary, Upper Cook Inlet commercial salmon fisheries, 1983.

Emergency Order Number	Effective Date	Description	Reason
2S-19-83	July 28	Extended set gillnetting along the east-side beaches of the Upper Subdistrict from 6:00 P.M. July 28 until 6:00 A.M. July 29.	Continue the harvest of surplus Kenai and Kasilof river sockeyes.
2S-20-83	July 30	Closed the Chinitna Bay Subdistrict to set gillnetting until further notice.	Poor chum catches and lagging escapement indicated weak chum return.
2S-21-83	August 5	Closed the Upper Subdistrict within 5 miles of the eastern shore to set and drift gillnetting on Friday, August 5.	Protect any remaining sockeyes bound for the Russian River where escapement was lagging.
2S-22-83	August 7	Opened the Eastern Subdistrict of the Northern District on August 7 from 6:00 A.M. until 9:00 P.M.	Provided for additional harvest of sockeyes bound for Fish Creek.
2S-23-83	August 8	Delayed the August 8 set gillnet period in Upper Subdistrict until August 10. Prohibited drift gillnetting within 5 miles of the eastern shore on August 8.	Provided for additional protection of any remaining sockeyes bound for the Russian River.
2S-24-83	August 15	Reopened Chinitna Bay for set gillnets, drift gillnets and seines on regular Monday and Friday periods.	Chum salmon escapement goal in Clearwater Creek was attained.

Table 15. Commercial salmon fishing periods by gear type and area, Upper Cook Inlet, 1983.

Date	Day	Time	Area Open: Set Nets	Area Open: Drift
6/17	Friday	0600-1800	Western Subdistrict	
6/20	Monday	0600-1800	Western Subdistrict	
6/24	Friday	0600-1800	Western Subdistrict	
6/27	Monday	0600-1800	All but Upper Subdist.	All except within two miles of eastside
7/01	Friday	0600-1800	All	All
7/04	Monday	0600-1800	All	All
7/06	Wednesday	0600-2400	Upper south of Kenai R.	Between C. Ninilchik and C. Kasilof within 5 miles
7/08	Friday	0600-1800	All	All
7/11	Monday	0600-1800	All	All
7/13	Wednesday	Set 0600-2100 Drift 0600-1800	Western, Upper south of Kasilof River	South of Clam Gulch to south end of Kalgin to Harriet Point
		2100-2400	Western, Upper south of Kasilof River	
7/14	Thursday	0000-2400	Western, Upper south of Kasilof River	
7/15	Friday	0000-0600	Western, Upper south of Kasilof River	
		0600-1800	All	All
		1800-2400	Western	
7/16	Saturday	0000-2400	Western	
7/17	Sunday	0000-1500	Western	
		1500-2400	Upper, Western	
7/18	Monday	0000-0300	Upper, Western	
		0300-0600	Upper, Western	Upper
		0600-1800	All	All except Chinitna
		0600-1800	Upper	

Table 15, continued. Commercial salmon fishing periods by gear type and area, Upper Cook Inlet, 1983.

Date	Day	Time	Area Open	
			Set	Drift
7/19	Tuesday	0000-1800	Upper	
		1800-2400	All Central except Chinitna	
7/20	Wednesday	0000-0600	All Central except Chinitna	
		0600-1800	Northern, all Central	All except Chinitna
		1800-2400	All Central except Chinitna	All except Chinitna
7/21	Thursday	0000-2400	All Central except Chinitna	All except Chinitna
7/22	Friday	0000-0600	All Central except Chinitna	All except Chinitna
		0600-1800	All	All except Chinitna
		1800-2400	Upper, Western	
7/23	Saturday	0000-0400	Upper, Western	
		0400-2100	Upper, Western	East of East Foreland to Ninilchik
		2100-2400	Upper, Western	
7/24	Sunday	0000-0400	Upper, Western	
		0400-2100	Upper, Western	East of East Foreland to Ninilchik
		2100-2400	Upper, Western	
7/25	Monday	0000-0600	Upper, Western	
		0600-1800	All	All except Chinitna
		1800-2400	Upper	
7/26	Tuesday	0000-0600	Upper	
		0600-1800	Upper	East of East Foreland to Ninilchik
		1800-2400	Upper	

Table 15, continued. Commercial salmon fishing periods by gear type and area, Upper Cook Inlet, 1983.

Date	Day	Time	Area Open	
			Set	Drift
7/27	Wednesday	0000-0600	Upper	
		0600-1800	Upper	East of East Foreland to Ninilchik
		1800-2400	Upper	
7/28	Thursday	0000-0600	Upper	
		0600-1800	Upper	East of East Foreland to Ninilchik
		1800-2400	Upper	
7/29	Friday	0000-0600	Upper	
		0600-1800	All	All except Chinitna
8/01	Monday	0600-1800	All except Chinitna	All except Chinitna
8/05	Friday	0600-1800	All except Chinitna and Upper	All except Chinitna and within 5 miles of eastside
8/07	Sunday	0600-2100	Eastern (N.D.)	
8/08	Monday	0600-1800	All except Chinitna and Upper	All except Chinitna and within 5 miles of eastside
8/10	Wednesday	0600-1800	Upper	
8/12	Friday	0600-1800	All except Chinitna	All except Chinitna
8/15	Monday	0600-1800	All	All
8/19 1/	Friday	0600-1800	All except Upper	All except within 5 miles of eastside

1/ Fishing continued for remainder of the year each Monday and Friday from 0600-1800 for these areas.

Table 16. Aerial survey set gillnet counts by subdistrict, Upper Cook Inlet, 1983.

	Central District					Northern District	
Date	Upper	Kalgin	Kustatan	Western	Chinitna	General	Eastern
6/17				145			
6/20				156			
6/24				143			
7/04		119		150	17		
7/08	512						
7/11	384						
7/18	713		25			197	133
8/12			2			14	28
8/15					19		

Table 17. Buyers and processors of Upper Cook Inlet salmon, 1983.

Processors/Buyers	Location	Contact
Alaska Lobster Exchange	Anchorage	
Alaska Rim Seafoods	Anchorage	Thomas Jensen
Alaska Seafare	Anchorage	
Alaska Ocean Products	Clam Gulch	Per Osmar
Bessie M Seafoods	Homer	Robert Proulx
Columbia Wards Fisheries	Kenai	Ray Landry
Cook Inlet Processing	Kenai	Carl Summers
D&A Enterprises	Homer	
Dragnet Fisheries	Kenai	Jay Cherrier
Ed's Kasilof Seafoods	Kasilof	
Fishermen's Packing Inc.	Kenai	Lottie Edelman
Galley Seafoods	Seldovia	Royal Devaney
Katch Canning Co.	Homer	Velma Ellyson
Keener Packing Co.	Soldotna	Leonard Keener
Kenai Packers	Kenai	Clyde Sterling
Little Fisherman Shoppe	Anchorage	T.A. Reaves
Polar Ice Seafoods, Inc.	Seattle	K. Kikuchi
Royal Pacific Fisheries	Kenai	Marvin Dragseth
Salamatof Seafoods	Kenai	Bob Scott
Schenk Associates, Inc.	Kasilof	Terrell Schenk
Sea-Nik Foods	Ninilchik	Tony Garroute
Seasonal Seafoods	Ninilchik	Bailey Wharton
Seward Fisheries	Homer	Rob Rogers
Summit Seafoods	Kenai	Marvin Breese
Tenth & M Lockers	Anchorage	
Whitney Fidalgo Seafoods	Anchorage	Murray Simpson

Table 18. Daily sockeye salmon and coho salmon weir counts, Fish Creek (Big Lake), 1983.

Date	Sockeye Daily	Sockeye Accum	Coho Daily	Coho Accum	Date	Sockeye Daily	Sockeye Accum	Coho Daily	Coho Accum
7/05	0	0	0	0	8/03	839	103,427	6	169
7/06	0	0	0	0	8/04	5,017	108,444	10	179
7/07	0	0	0	0	8/05	3,145	111,589	15	194
7/08	0	0	0	0	8/06	283	111,872	4	198
7/09	0	0	0	0	8/07	913	112,785	7	205
7/10	0	0	0	0	8/08	74	112,859	0	205
7/11	0	0	0	0	8/09	1,882	114,741	5	210
7/12	1	1	0	0	8/10	903	115,644	53	263
7/13	6	7	0	0	8/11	675	116,319	35	298
7/14	220	227	0	0	8/12	12	116,331	0	298
7/15	267	494	0	0	8/13	218	116,549	6	304
7/16	441	935	4	4	8/14	325	116,874	7	311
7/17	257	1,192	2	6	8/15	78	116,952	22	333
7/18	141	1,333	5	11	8/16	347	117,299	16	349
7/19	1,346	2,679	3	14	8/17	263	117,562	8	357
7/20	2,276	4,955	0	14	8/18	203	117,765	23	380
7/21	11,487	16,442	4	18	8/19	184	117,949	25	405
7/22	19,120	35,562	11	29	8/20	12	117,961	4	409
7/23	10,806	46,368	9	38	8/21	96	118,057	34	443
7/24	8,327	54,695	2	40	8/22	74	118,131	17	460
7/25	10,731	65,426	26	66	8/23	156	118,287	69	529
7/26	6,680	72,106	26	92	8/24	188	118,475	103	632
7/27	8,221	80,327	20	112	8/25	74	118,549	117	749
7/28	5,254	85,581	11	123	8/26	38	118,587	61	810
7/29	4,996	90,577	1	124	8/27	102	118,689	67	877
7/30	3,480	94,057	2	126	8/28	82	118,771	102	979
7/31	1,412	95,469	3	129	8/29	6	118,777	16	995
8/01	2,874	98,343	20	149	8/30	20	118,797	42	1,037 1/
8/02	4,245	102,588	14	163					

1/ An additional 1,305 coho salmon were counted downstream of the weir at the time of its removal. The total coho escapement is estimated to be 2,342.
Data Source: Robert Chlupach, ADFG, F.R.E.D. Division.

Table 19. Sockeye salmon daily weir counts, Packers Lake, 23 May-30 August 1983.

Date	Daily Count	Cumulative Count	Date	Daily Count	Cumulative Count
5/23	1	1	7/07	825	2,457
5/24	4	5	7/08	266	2,723
5/25	3	8	7/09	1,077	3,800
5/26	1	9	7/10	78	3,878
5/27	4	13	7/11	210	4,088
5/28	0	13	7/12	116	4,204
5/29	15	28	7/13	132	4,336
5/30	9	37	7/14	180	4,516
5/31	1	38	7/15	135	4,651
			7/16	50	4,701
6/01	0	38	7/17	86	4,787
6/02	0	38	7/18	37	4,824
6/03	0	38	7/19	270	5,094
6/04	2	40	7/20	112	5,206
6/05	1	41	7/21	362	5,568
6/06	20	61	7/22	29	5,597
6/07	3	64	7/23	51	5,648
6/08	126	190	7/24	59	5,707
6/09	18	208	7/25	9	5,716
6/10	8	216	7/26	2	5,718
6/11	0	216	7/27	8	5,726
6/12	0	216	7/28	8	5,734
6/13	0	216	7/29	5	5,739
6/14	145	361	7/30	12	5,751
6/15	172	533	7/31	12	5,763
6/16	64	597			
6/17	10	607	8/01	32	5,795
6/18	5	612	8/02	59	5,854
6/19	153	765	8/03	90	5,944
6/20	3	768	8/04	76	6,020
6/21	31	799	8/05	930	6,950
6/22	102	901	8/06	653	7,603
6/23	207	1,108	8/07	838	8,441
6/24	13	1,121	8/08	4,372	12,813
6/25	14	1,135	8/09	1,518	14,331
6/26	4	1,139	8/10	207	14,538
6/27	0	1,139	8/11	636	15,174
6/28	7	1,146	8/12	370	15,544
6/29	1	1,147	8/13	297	15,841
6/30	1	1,148	8/14	288	16,129
			8/15	96	16,225
7/01	65	1,213	8/16	747	16,972
7/02	81	1,294	8/17	465	17,437
7/03	0	1,294	8/18	345	17,782
7/04	1	1,295	8/19	80	17,862
7/05	0	1,295	8/20	102	17,964
7/06	337	1,632	8/21	106	18,070

Table 19, continued. Sockeye salmon daily weir counts, Packers Lake, 23 May-30 August 1983.

Date	Daily Count	Cumulative Count	Date	Daily Count	Cumulative Count
8/22	90	18,160	8/26	29	18,364
8/23	72	18,232	8/27	23	18,387
8/24	59	18,291	8/28	9	18,396
8/25	44	18,335	8/29	7	18,403

Data Source: Marcuson (1984A).

Table 20. Daily weir counts of sockeye salmon in Wolverine Creek, 1983.

Date	Daily Count	Cumulative Count	Date	Daily Count	Cumulative Count
6/10	0	0	7/09	0	14,118
6/11	0	0	7/10	403	14,521
6/12	0	0	7/11	461	14,982
6/13	792	792	7/12	530	15,512
6/14	1	793	7/13	112	15,624
6/15	23	816	7/14	485	16,109
6/16	268	1,084	7/15	285	16,394
6/17	825	1,909	7/16	542	16,936
6/18	1,254	3,163	7/17	80	17,016
6/19	677	3,840	7/18	37	17,053
6/20	556	4,396	7/19	17	17,070
6/21	1,475	5,871	7/20	256	17,326
6/22	1,484	7,355	7/21	51	17,377
6/23	763	8,118	7/22	79	17,456
6/24	507	8,625	7/23	-4	17,452
6/25	206	8,831	7/24	0	17,452
6/26	408	9,239	7/25	23	17,475
6/27	350	9,589	7/26	18	17,493
6/28	451	10,040	7/27	23	17,516
6/29	0	10,040	7/28	62	17,578
6/30	1,062	11,102	7/29	101	17,679
			7/30	0	17,679
7/01	0	11,102	7/31	61	17,740
7/02	890	11,992			
7/03	406	12,398	8/01	43	17,783
7/04	411	12,809	8/02	31	17,814
7/05	628	13,437	8/03	96	17,910
7/06	487	13,924	8/04	175	18,085
7/07	84	14,008	8/05	58	18,143
7/08	110	14,118	8/06	46	18,189

Data Source: Marcuson (1984B).

Table 21. Tyonek Subdistrict salmon harvest by period, 1983.

Date	No. of Nets	Chinook	Sockeye	Coho	Pink	Chum
5/17	10	49	1	0	0	0
5/19	17	100	3	0	0	0
5/20	16	236	8	0	0	0
5/24	21	274	12	0	0	0
5/26	16	355	14	0	0	0
5/27	16	213	7	0	0	0
5/31	16	284	21	0	0	0
6/02	13	148	15	0	0	0
6/03	13	167	22	0	0	0
6/07	16	125	21	0	0	0
6/09	13	266	24	0	0	0
6/10	11	327	18	0	0	0
6/14	11	152	14	0	0	0
6/18	4	38	5	0	0	0
6/25	4	16	0	0	0	0
7/02	2	1	0	8	0	0
7/09	3	0	8	4	0	0
7/16	2	0	7	7	0	0
7/23	1	0	0	2	0	0
7/30	1	0	0	2	0	0
8/06	2	0	0	6	0	0
8/13	3	0	1	11	0	6
8/20	2	0	0	11	0	0
8/27	2	4	0	3	0	0
9/03	1	0	0	5	0	0
Total		2,755	201	59	0	6

Data Source: Browning (1984 A).

Table 22. Salmon harvest by period for the Kasilof River personal use gillnet fishery, 1983.1/

Period Date	Nets	Sockeye Salmon Period	Sockeye Salmon Accum	Chinook Salmon Period	Chinook Salmon Accum
6/21	127	1,510	1,510	55	55
6/22	127	1,510	3,020	83	138
6/23	126	1,319	4,339	51	189
6/24	137	730	5,069	30	219
6/25	117	1,218	6,287	30	249
6/26	103	1,070	7,357	23	272
6/27	62	1,489	8,846	35	307
Total			8,846		307

$\bar{x}$ = 114 nets

1/ Inseason estimates expanded from monitoring results.

Data Source: Browning (1984 B).

Table 23. Age composition of commercially harvested herrring, Tuxedni Bay, 25 April to 3 May, 1983.

Sample Period	Age (years)	Sex			Total	Percent of Total	Weight			Std. Length		
		Male	Female	Unknown			Mean (gm)	Std. Dev.	Number Weighed	Mean (mm)	Std. Dev.	Number Measured
	1	-	-	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-	-	-
	4	-	2	-	2	.5	134	-	1	234	18.4	2
4/25- 5/ 3	5	4	9	-	13	3.4	147	19.3	9	239	9.5	13
	6	22	48	-	70	18.2	165	24.3	50	243	10.9	70
	7	56	77	-	133	34.6	175	19.7	66	248	9.4	133
	8	47	57	-	104	27.1	187	18.6	40	250	10.1	104
	9+	24	38	-	62	16.1	186	28.6	13	253	10.5	62
Period total		153	231	-	384	100.0	174	24.0	179	248	10.7	384

Table 24. Age composition of commercially harvested herring, Chinitna Bay, 4 May to 6 May, 1983.

Sample Period	Age (years)	Sex: Male	Sex: Female	Sex: Unknown	Total	Percent of Total	Weight: Mean (gm)	Weight: Std. Dev.	Weight: Number Weighed	Std. Length: Mean (mm)	Std. Length: Std. Dev.	Std. Length: Number Measured
	1	-	-	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-	-	-
	4	14	17	-	31	9.5	-	-	-	225	7.7	31
5/ 4- 5/ 6	5	26	19	-	45	13.7	-	-	-	228	7.5	45
	6	64	65	-	129	39.3	-	-	-	237	8.8	129
	7	32	34	-	66	20.1	-	-	-	242	9.4	66
	8	25	21	-	46	14.0	-	-	-	248	9.7	46
	9+	6	5	-	11	3.4	-	-	-	252	6.0	11
Period total		167	161	-	328	100.0	-	-	-	238	11.2	328

Table 25. Age composition of commercially harvested herring, Tuxedni Bay, 17 May to 20 May, 1983.

Sample Period	Age (years)	Sex			Total	Percent of Total	Weight			Std. Length		
		Male	Female	Unknown			Mean (gm)	Std. Dev.	Number Weighed	Mean (mm)	Std. Dev.	Number Measured
	1	-	-	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-	-	-
	4	8	17	-	25	14.1	-	-	-	222	7.8	25
5/17- 5/20	5	14	30	-	44	24.9	-	-	-	228	8.7	44
	6	25	46	-	71	40.1	-	-	-	231	11.8	71
	7	8	14	-	22	12.4	-	-	-	239	13.5	22
	8	6	5	-	11	6.2	-	-	-	246	13.3	11
	9+	2	2	-	4	2.3	-	-	-	259	22.7	4
Period total		63	114	-	177	100.0	-	-	-	232	13.3	177

Table 26. Age composition of commercially harvested herring, Upper Cook Inlet, Eastside, 1983.

Sample Period	Age (years)	Sex			Total	Percent of Total	Weight			Std. Length		
		Male	Female	Unknown			Mean (gm)	Std. Dev.	Number Weighed	Mean (mm)	Std. Dev.	Number Measured
	1	-	-	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-	-	-
	4	2	11	-	13	2.9	136	35.4	13	230	19.5	13
5/ 1- 5/11	5	10	23	-	33	7.3	144	19.7	33	234	11.8	33
	6	54	183	-	237	52.8	149	16.4	237	235	8.6	237
	7	33	67	-	100	22.3	163	18.5	100	242	8.5	100
	8	18	29	-	47	10.5	168	25.9	47	243	10.3	47
	9+	8	11	-	19	4.2	186	22.0	19	250	8.5	19
Period total		125	324	-	449	100.0	155	21.8	449	238	10.5	449

Table 27. Seldovia District tide tables, May-August, 1983.

HIGH Tides SELDOVIA District
MAY 1983

DATE DAY	DOT'S GUIDE	A.M. TIME	A.M. FT.	P.M. TIME	P.M. FT.
1 SUN	•	4:21	17.8	5:30	15.5
2 Mon	•	4:58	16.3	6:20	14.1
3 Tues	•	5:39	14.7	7:21	13.0
4 Wed	•	6:32	13.2	8:35	12.4
5 Thur	•	7:47	12.2	9:54	12.7
6 Fri	•	9:16	12.0	10:53	13.6
7 Sat	•	10:37	12.7	11:33	14.7
8 SUN	•	11:38	13.9	.....	....
9 Mon	•	0:07	16.0	12:23	15.3
10 Tues	●	0:37	17.3	1:06	16.5
11 Wed	●	1:08	18.5	1:46	17.6
12 Thur	●	1:40	19.5	2:25	18.3
13 Fri	○	2:14	20.2	3:07	18.5
14 Sat	○	2:51	20.4	3:51	18.3
15 SUN	○	3:30	20.1	4:39	17.6
16 Mon	○	4:13	19.3	5:29	16.7
17 Tues	○	5:05	18.0	6:28	15.7
18 Wed	○	6:04	16.5	7:34	15.2
19 Thur	○	7:16	15.1	8:47	15.2
20 Fri	○	8:39	14.4	9:52	15.8
21 Sat	○	10:04	14.5	10:51	16.8
22 SUN	○	11:17	15.2	11:41	17.9
23 Mon	○	.....	....	12:15	16.2
24 Tues	●	0:23	18.8	1:08	17.0
25 Wed	●	1:00	19.4	1:52	17.6
26 Thur	●	1:37	19.6	2:33	17.8
27 Fri	•	2:09	19.5	3:12	17.7
28 Sat	•	2:45	19.1	3:51	17.2
29 SUN	•	3:20	18.4	4:31	16.5
30 Mon	•	3:57	17.4	5:13	15.6
31 Tues	•	4:34	16.2	5:58	14.7

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• BIGGER THE DOT—BETTER THE FISHING

LOW Tides SELDOVIA District
MAY 1983

DATE DAY	DOT'S GUIDE	A.M. TIME	A.M. FT.	P.M. TIME	P.M. FT.
1 SUN	•	10:55	–0.7	11:06	4.7
2 Mon	•	11:35	0.8	11:51	6.0
3 Tues	•	.....	....	12:22	2.3
4 Wed	•	0:46	7.2	1:26	3.5
5 Thur	•	2:06	7.7	2:43	4.2
6 Fri	•	3:40	7.2	4:00	4.0
7 Sat	•	4:49	5.8	4:57	3.5
8 SUN	•	5:38	4.1	5:41	2.8
9 Mon	•	6:15	2.2	6:18	2.1
10 Tues	●	6:52	0.3	6:55	1.5
11 Wed	●	7:27	–1.4	7:33	1.1
12 Thur	●	8:04	–2.8	8:12	1.1
13 Fri	○	8:41	–3.8	8:50	1.3
14 Sat	○	9:23	–4.2	9:32	1.8
15 SUN	○	10:05	–4.0	10:18	2.5
16 Mon	○	10:54	–3.3	11:06	3.5
17 Tues	○	11:48	–2.1	.....	....
18 Wed	○	0:06	4.3	12:49	–0.9
19 Thur	○	1:18	4.8	1:58	0.2
20 Fri	○	2:42	4.5	3:13	0.8
21 Sat	○	4:03	3.2	4:20	1.0
22 SUN	○	5:09	1.4	5:17	1.0
23 Mon	○	6:02	–0.4	6:07	1.0
24 Tues	●	6:47	–1.8	6:50	1.1
25 Wed	●	7:27	–2.8	7:32	1.3
26 Thur	●	8:06	–3.3	8:10	1.7
27 Fri	•	8:44	–3.3	8:49	2.3
28 Sat	•	9:19	–2.8	9:26	3.0
29 SUN	•	9:55	–2.1	10:05	3.9
30 Mon	•	10:33	–1.1	10:44	4.7
31 Tues	•	11:11	0.1	11:29	5.6

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DAYLIGHT TIME

HIGH Tides SELDOVIA District
JUNE 1983

DATE DAY	DOT'S GUIDE	A.M. TIME	A.M. FT.	P.M. TIME	P.M. FT.
1 Wed	•	5:19	14.9	6:46	13.9
2 Thur	•	6:08	13.7	7:42	13.5
3 Fri	•	7:10	12.6	8:41	13.5
4 Sat	•	8:23	12.1	9:34	13.9
5 SUN	•	9:39	12.2	10:22	14.8
6 Mon	●	10:48	13.0	11:04	15.9
7 Tues	●	11:46	14.1	11:44	17.1
8 Wed	●	.....	....	12:37	15.4
9 Thur	○	0:26	18.3	1:24	16.6
10 Fri	○	1:05	19.4	2:09	17.6
11 Sat	○	1:48	20.2	2:55	18.2
12 SUN	○	2:30	20.6	3:43	18.3
13 Mon	○	3:18	20.4	4:29	18.1
14 Tues	○	4:07	19.8	5:21	17.7
15 Wed	○	5:00	18.6	6:14	17.2
16 Thur	○	5:59	17.1	7:12	16.8
17 Fri	○	7:07	15.6	8:11	16.6
18 Sat	○	8:23	14.5	9:10	16.6
19 SUN	○	9:42	14.0	10:08	16.9
20 Mon	○	10:59	14.2	11:01	17.3
21 Tues	○	12:02	14.8	11:49	17.7
22 Wed	●	.....	....	12:55	15.6
23 Thur	•	0:31	18.1	1:41	16.2
24 Fri	•	1:11	18.3	2:22	16.6
25 Sat	•	1:48	18.4	2:59	16.9
26 SUN	•	2:25	18.4	3:37	16.9
27 Mon	•	3:03	18.1	4:13	16.6
28 Tues	•	3:40	17.5	4:52	16.2
29 Wed	•	4:18	16.8	5:29	15.7
30 Thur	•	5:00	15.8	6:09	15.2

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• BIGGER THE DOT—BETTER THE FISHING

LOW Tides SELDOVIA District
JUNE 1983

DATE DAY	DOT'S GUIDE	A.M. TIME	A.M. FT.	P.M. TIME	P.M. FT.
1 Wed	•	11:56	1.3	.....	....
2 Thur	•	0:22	6.3	12:44	2.4
3 Fri	•	1:26	6.6	1:41	3.4
4 Sat	•	2:40	6.4	2:45	3.9
5 SUN	•	3:51	5.3	3:48	4.1
6 Mon	●	4:48	3.8	4:40	3.5
7 Tues	●	5:36	1.9	5:30	3.5
8 Wed	●	6:18	0.0	6:18	3.0
9 Thur	○	7:00	–1.9	7:03	2.5
10 Fri	○	7:40	–3.4	7:48	2.1
11 Sat	○	8:24	–4.6	8:32	1.9
12 SUN	○	9:09	–5.1	9:19	1.9
13 Mon	○	9:54	–5.0	10:07	2.1
14 Tues	○	10:44	–4.3	11:00	2.5
15 Wed	○	11:35	–3.2	.....	....
16 Thur	○	0:01	2.9	12:32	–1.7
17 Fri	○	1:07	3.2	1:29	–0.1
18 Sat	○	2:20	3.0	2:35	1.2
19 SUN	○	3:35	2.2	3:42	2.3
20 Mon	○	4:45	1.1	4:43	2.9
21 Tues	●	5:41	–0.1	5:38	3.2
22 Wed	●	6:31	–1.1	6:26	3.4
23 Thur	●	7:11	–1.8	7:11	3.4
24 Fri	●	7:51	–2.2	7:51	3.4
25 Sat	•	8:28	–2.4	8:31	3.4
26 SUN	•	9:03	–2.2	9:08	3.6
27 Mon	•	9:38	–1.9	9:48	3.8
28 Tues	•	10:13	–1.3	10:26	4.2
29 Wed	•	10:50	–0.5	11:06	4.7
30 Thur	•	11:27	0.5	11:53	5.1

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DAYLIGHT TIME

HIGH Tides SELDOVIA District
JULY 1983

DATE DAY	DOT'S GUIDE	A.M. TIME	A.M. FT.	P.M. TIME	P.M. FT.
1 Fri	•	5:43	14.7	6:50	14.8
2 Sat	•	6:36	13.5	7:34	14.6
3 SUN	•	7:34	12.6	8:21	14.7
4 Mon	•	8:48	12.2	9:10	15.1
5 Tues	●	10:05	12.5	10:06	15.8
6 Wed	●	11:15	13.4	10:59	16.8
7 Thur	○	12:15	14.7	11:49	18.0
8 Fri	○	.....	....	1:08	16.1
9 Sat	○	0:39	19.3	1:57	17.4
10 SUN	○	1:30	20.3	2:42	18.4
11 Mon	○	2:20	21.0	3:28	19.0
12 Tues	○	3:09	21.2	4:15	19.3
13 Wed	○	3:59	20.7	5:02	19.3
14 Thur	○	4:52	19.6	5:48	18.9
15 Fri	○	5:48	18.0	6:36	18.3
16 Sat	○	6:49	16.2	7:28	17.6
17 SUN	○	7:56	14.6	8:24	16.9
18 Mon	●	9:16	13.6	9:24	16.5
19 Tues	●	10:37	13.4	10:24	16.3
20 Wed	●	11:51	13.9	11:18	16.4
21 Thur	•	.....	....	12:48	14.7
22 Fri	•	0:10	16.8	1:32	15.6
23 Sat	•	0:56	17.3	2:11	16.3
24 SUN	•	1:35	17.8	2:46	16.8
25 Mon	•	2:12	18.2	3:18	17.2
26 Tues	•	2:49	18.4	3:49	17.4
27 Wed	•	3:25	18.3	4:21	17.4
28 Thur	•	4:02	17.8	4:55	17.1
29 Fri	•	4:39	16.9	5:27	16.8
30 Sat	•	5:18	15.9	5:59	16.3
31 SUN	•	6:03	14.7	6:35	15.9

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• BIGGER THE DOT—BETTER THE FISHING

LOW Tides SELDOVIA District
JULY 1983

DATE DAY	DOT'S GUIDE	A.M. TIME	A.M. FT.	P.M. TIME	P.M. FT.
1 Fri	•	.....	....	12:04	1.6
2 Sat	•	0:44	5.4	12:49	2.8
3 SUN	•	1:41	5.3	1:39	3.8
4 Mon	•	2:47	4.8	2:42	4.7
5 Tues	●	3:52	3.6	3:45	5.1
6 Wed	●	4:53	2.0	4:48	5.0
7 Thur	○	5:47	0.1	5:46	4.4
8 Fri	○	6:37	–1.8	6:39	3.6
9 Sat	○	7:24	–3.5	7:30	2.7
10 SUN	○	8:10	–4.8	8:19	1.8
11 Mon	○	8:57	–5.5	9:08	1.2
12 Tues	○	9:43	–5.5	9:58	0.9
13 Wed	○	10:29	–4.8	10:50	0.7
14 Thur	○	11:16	–3.5	11:43	1.2
15 Fri	○	.....	....	12:05	–1.7
16 Sat	○	0:44	1.7	12:57	0.4
17 SUN	○	1:47	2.0	1:57	2.4
18 Mon	●	3:00	2.1	3:00	4.0
19 Tues	●	4:15	1.8	4:09	5.0
20 Wed	●	5:20	1.1	5:15	5.4
21 Thur	•	6:15	0.3	6:09	5.2
22 Fri	•	7:00	–0.4	6:55	4.8
23 Sat	•	7:37	–1.0	7:37	4.2
24 SUN	•	8:13	–1.4	8:15	3.7
25 Mon	•	8:46	–1.6	8:52	3.4
26 Tues	•	9:18	–1.6	9:28	3.2
27 Wed	•	9:50	–1.3	10:05	3.2
28 Thur	•	10:21	–0.6	10:42	3.3
29 Fri	•	10:55	0.3	11:21	3.6
30 Sat	•	11:29	1.5	.....	....
31 SUN	•	0:03	3.9	12:06	2.8

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DAYLIGHT TIME

HIGH Tides SELDOVIA District
AUGUST 1983

DATE DAY	DOT'S GUIDE	A.M. TIME	A.M. FT.	P.M. TIME	P.M. FT.
1 Mon	●	6:57	13.5	7:17	15.6
2 Tues	●	8:03	12.6	8:07	15.4
3 Wed	○	9:27	12.4	9:13	15.7
4 Thur	○	10:51	13.1	10:22	16.4
5 Fri	○	Noon	14.5	11:28	17.7
6 Sat	○	.....	....	12:55	16.2
7 SUN	○	0:27	19.2	1:41	17.8
8 Mon	○	1:21	20.7	2:27	19.2
9 Tues	○	2:12	21.7	3:09	20.3
10 Wed	○	3:01	22.0	3:51	20.8
11 Thur	○	3:49	21.6	4:31	20.8
12 Fri	○	4:39	20.4	5:14	20.3
13 Sat	○	5:29	18.7	5:56	19.3
14 SUN	●	6:25	16.7	6:44	18.1
15 Mon	●	7:29	14.7	7:33	16.7
16 Tues	●	8:47	13.4	8:35	15.6
17 Wed	•	10:20	13.0	9:45	15.0
18 Thur	•	11:41	13.6	10:57	15.1
19 Fri	•	12:39	14.6	11:57	15.8
20 Sat	•	.....	....	1:19	15.6
21 SUN	•	0:45	16.7	1:51	16.6
22 Mon	•	1:22	17.7	2:22	17.4
23 Tues	•	1:59	18.5	2:49	18.0
24 Wed	•	2:34	19.0	3:17	18.5
25 Thur	•	3:09	19.1	3:46	18.7
26 Fri	•	3:41	18.8	4:13	18.6
27 Sat	•	4:18	18.0	4:41	18.3
28 SUN	•	4:55	17.0	5:08	17.7
29 Mon	●	5:35	15.7	5:40	17.1
30 Tues	○	6:25	14.3	6:22	16.4
31 Wed	○	7:34	13.1	7:18	15.7

SE-8

• BIGGER THE DOT—BETTER THE FISHING

LOW Tides SELDOVIA District
AUGUST 1983

DATE DAY	DOT'S GUIDE	A.M. TIME	A.M. FT.	P.M. TIME	P.M. FT.
1 Mon	●	0:51	4.1	12:48	4.2
2 Tues	●	1:50	4.1	1:45	5.5
3 Wed	○	3:02	3.6	2:58	6.3
4 Thur	○	4:16	2.4	4:15	6.3
5 Fri	○	5:22	0.7	5:26	5.4
6 Sat	○	6:18	–1.3	6:26	4.0
7 SUN	○	7:09	–3.1	7:19	2.4
8 Mon	○	7:56	–4.5	8:07	1.0
9 Tues	○	8:41	–5.3	8:54	–0.2
10 Wed	○	9:25	–5.2	9:43	–0.9
11 Thur	○	10:08	–4.3	10:30	–0.9
12 Fri	○	10:51	–2.8	11:19	–0.4
13 Sat	○	11:35	–0.7	.....	....
14 SUN	●	0:12	0.6	12:21	1.7
15 Mon	●	1:12	1.7	1:17	4.0
16 Tues	●	2:21	2.6	2:19	5.9
17 Wed	•	3:40	3.0	3:40	6.9
18 Thur	•	5:01	2.6	4:59	6.9
19 Fri	•	6:00	1.9	6:02	6.2
20 Sat	•	6:45	1.0	6:46	5.3
21 SUN	•	7:22	0.2	7:24	4.2
22 Mon	•	7:54	–0.4	7:59	3.3
23 Tues	•	8:24	–0.9	8:32	2.5
24 Wed	•	8:53	–1.1	9:06	1.9
25 Thur	•	9:21	–0.8	9:38	1.7
26 Fri	•	9:53	–0.3	10:13	1.7
27 Sat	•	10:23	0.7	10:47	1.9
28 SUN	•	10:55	2.0	11:24	2.3
29 Mon	●	11:29	3.4	.....	....
30 Tues	○	0:09	2.8	12:12	5.0
31 Wed	○	1:05	3.3	1:07	6.4

SE-8

DAYLIGHT TIME

Appendix Table 1. Upper Cook Inlet commercial chinook salmon harvest by gear type and area, 1966-1983.

Year	Central District Drift Gillnet		Central District Set Gillnet				Northern District Set Gillnet	
			Eastside		Kalgin/Westside			
	Number	%	Number	%	Number	%	Number	%
1966	392	5	7,329	86	401	4	422	5
1967	489	6	6,686	84	500	7	184	2
1968	182	4	3,304	73	579	13	471	10
1969	363	3	5,834	47	3,295	27	2,904	23
1970	367	4	5,366	64	1,165	14	1,460	17
1971	237	1	7,055	36	2,875	14	9,598	49
1972	375	1	8,600	53	2,199	14	4,912	31
1973	244	5	4,411	85	369	7	170	3
1974	422	6	5,570	85	425	6	169	3
1975	250	5	3,678	77	716	15	129	3
1976	692	6	8,249	76	1,469	13	457	5
1977	3,411	23	9,732	66	1,084	7	565	4
1978	2,072	12	12,468	72	2,093	12	669	4
1979	1,089	8	8,671	63	2,264	17	1,714	12
1980	889	6	9,643	70	2,273	16	990	7
1981	2,319	19	8,359	68	837	7	725	6
1982	1,293	6	13,658	65	3,203	15	2,716	13
1983	1,124	5	15,043	73	3,534	17	933	5
Ave.	901	7	7,981	69	1,627	13	1,622	11

Data Source: Soldotna ADFG Honeywell computer files.

Appendix Table 2. Upper Cook Inlet commercial sockeye salmon harvest by gear type and area, 1966-1983.

Year	Central District Drift Gillnet		Central District Set Gillnet				Northern District Set Gillnet	
			Eastside		Kalgin/Westside			
	Number	%	Number	%	Number	%	Number	%
1966	1,103,261	60	485,330	26	132,443	7	131,080	7
1967	890,152	65	305,431	22	66,414	5	118,065	8
1968	561,737	51	317,535	29	85,049	7	140,575	13
1969	371,751	54	210,877	31	71,191	10	38,065	5
1970	474,718	64	142,701	19	62,724	9	66,458	9
1971	423,107	66	111,505	17	61,639	10	40,533	6
1972	505,935	57	204,617	23	83,422	10	85,737	10
1973	375,695	56	188,743	28	59,973	9	45,614	7
1974	265,751	53	136,889	27	52,957	11	41,563	8
1975	368,116	54	177,336	26	67,758	10	65,526	10
1976	1,055,767	63	476,376	28	62,338	4	69,649	5
1977	1,073,098	52	751,368	37	104,265	5	123,780	6
1978	1,803,358	69	660,918	25	105,767	4	51,624	2
1979	454,707	49	248,828	27	108,422	12	112,449	12
1980	770,247	49	559,812	35	137,922	9	105,647	7
1981	633,145	44	496,193	35	60,220	4	249,662	17
1982	2,103,429	65	971,423	30	66,952	2	118,060	4
1983	3,222,007	64	1,508,963	30	134,544	3	184,219	4
Ave.	914,221	57	441,936	28	84,667	7	99,350	8

Data Source: Soldotna ADFG Honeywell computer files.

Appendix Table 3. Upper Cook Inlet commercial coho salmon harvest by gear type and area, 1966-1983.

Year	Central District Drift Gillnet		Central District Set Gillnet				Northern District Set Gillnet	
			Eastside		Kalgin/Westside			
	Number	%	Number	%	Number	%	Number	%
1966	80,901	28	68,877	24	59,509	20	80,550	28
1967	53,071	30	40,738	23	40,066	22	43,854	25
1968	167,383	36	80,828	17	63,301	14	156,648	33
1969	33,064	33	18,988	19	28,392	28	20,425	20
1970	114,392	41	30,318	10	52,363	19	82,722	30
1971	35,491	35	16,589	17	26,188	26	22,094	22
1972	21,578	27	24,673	30	15,319	19	19,346	24
1973	31,784	30	23,901	23	24,744	24	23,944	23
1974	75,640	38	36,837	19	40,610	20	47,038	23
1975	88,569	40	46,209	21	53,910	24	33,051	15
1976	80,731	39	47,873	23	42,224	20	37,850	18
1977	110,184	57	23,693	12	38,093	20	20,623	11
1978	76,252	35	34,141	16	61,711	28	47,256	21
1979	114,496	43	29,727	11	68,306	26	52,635	20
1980	89,510	33	40,281	15	51,487	19	90,098	33
1981	226,257	47	36,031	8	88,492	18	134,362	28
1982	416,274	53	108,393	14	182,205	23	85,352	11
1983	326,962	64	37,666	8	97,827	18	53,867	10
Ave.	119,029	39	41,431	17	57,486	22	58,429	22

Data Source: Soldotna ADFG Honeywell computer files.

Appendix Table 4. Upper Cook Inlet commercial pink salmon harvest by gear type and area, 1966-1983.

Year	Central District Drift Gillnet		Central District Set Gillnet				Northern District Set Gillnet	
			Eastside		Kalgin/Westside			
	Number	%	Number	%	Number	%	Number	%
1966	593,654	30	969,624	48	70,507	4	371,960	18
1967	7,475	23	13,038	40	3,256	10	8,460	27
1968	880,512	39	785,887	35	75,755	3	534,839	23
1969	8,336	25	11,416	35	5,714	17	7,680	23
1970	346,485	42	281,067	34	24,763	3	174,193	21
1971	6,433	18	18,097	51	2,637	7	8,423	24
1972	115,096	18	403,706	64	18,936	3	90,830	15
1973	91,901	28	80,596	25	16,437	5	137,249	42
1974	140,734	29	291,408	60	9,014	2	42,879	9
1975	113,868	34	112,423	34	18,385	5	90,953	27
1976	599,600	48	479,009	38	30,044	2	148,090	12
1977	286,308	52	125,817	23	25,212	4	116,518	21
1978	934,178	55	372,865	22	54,785	3	327,270	20
1979	19,554	27	20,033	27	7,061	10	26,332	36
1980	964,526	54	299,444	17	47,963	2	474,488	27
1981	53,888	42	15,659	12	4,276	4	53,325	42
1982	270,380	35	432,715	55	14,242	2	73,307	8
1983	26,628	40	18,310	25	3,785	5	21,604	30
Even Yr	538,352	41	479,525	37	38,445	3	248,601	19
Odd Yr	68,266	39	46,154	26	9,640	5	52,283	30

Data Source: Soldotna ADFG Honeywell computer files.

Appendix Table 5. Upper Cook Inlet commercial chum salmon harvest by gear type and area, 1966-1983.

Year	Central District Drift Gillnet		Central District Set Gillnet				Northern District Set Gillnet	
			Eastside		Kalgin/Westside			
	Number	%	Number	%	Number	%	Number	%
1966	424,972	80	7,461	1	64,725	12	35,598	7
1967	233,041	79	399	0	25,013	8	38,384	13
1968	1,002,900	91	1,563	0	44,986	4	58,454	5
1969	238,497	89	399	0	16,949	6	11,836	5
1970	705,467	90	1,228	0	48,783	6	24,507	3
1971	274,567	85	128	0	32,647	10	16,603	5
1972	564,253	90	1,727	0	40,567	7	19,780	3
1973	605,730	90	1,965	0	29,019	5	30,847	5
1974	344,594	87	506	0	15,346	4	36,492	9
1975	886,474	93	979	0	32,741	4	30,787	3
1976	405,773	86	1,484	0	47,877	11	14,050	3
1977	1,153,454	93	1,413	0	54,708	5	23,861	2
1978	489,065	86	4,617	1	40,946	7	37,331	6
1979	609,239	94	907	0	30,342	5	9,270	1
1980	339,970	88	2,147	0	30,105	8	16,728	4
1981	756,848	91	2,415	0	26,513	3	46,208	6
1982	1,348,510	94	4,777	0	36,647	3	43,006	3
1983	1,044,644	94	2,764	0	38,129	3	29,321	3
Ave.	634,889	39	2,049	0	36,447	6	29,059	5

Data Source: Soldotna ADFG Honeywell computer files.

Appendix Table 6. Upper Cook Inlet commercial salmon harvest by gear type and area, 1966-1983.

Year	Central District Drift Gillnet		Central District Set Gillnet				Northern District Set Gillnet	
			Eastside		Kalgin/Westside			
	Number	%	Number	%	Number	%	Number	%
1966	2,203,180	47	1,538,621	33	327,585	7	619,610	13
1967	1,184,228	63	366,292	19	135,249	7	208,947	11
1968	2,612,714	53	1,189,117	24	269,670	5	890,987	18
1969	652,011	59	247,514	23	125,541	11	80,910	7
1970	1,641,429	62	460,680	18	189,798	7	349,340	13
1971	739,835	66	153,374	14	125,986	11	97,251	9
1972	1,207,217	54	643,323	29	160,443	7	220,605	10
1973	1,105,354	62	299,616	17	130,542	7	237,824	14
1974	827,141	52	471,210	30	118,352	7	168,141	11
1975	1,457,277	66	340,625	15	173,510	8	220,446	11
1976	2,142,563	59	1,012,991	28	183,952	5	270,096	8
1977	2,626,455	65	912,023	22	223,362	6	285,347	7
1978	3,304,925	65	1,085,009	21	265,302	5	464,150	9
1979	1,199,085	62	308,166	16	216,395	11	202,400	11
1980	2,165,142	54	911,327	23	269,750	6	687,951	17
1981	1,672,457	58	558,657	19	180,338	6	484,282	17
1982	4,139,886	66	1,530,966	25	303,249	4	322,441	5
1983	4,621,365	70	1,582,746	24	277,819	4	289,944	4
Ave.	1,972,348	60	756,237	22	204,269	7	338,926	11

Data Source: Soldotna ADFG Honeywell computer files.

Appendix Table 7. Commercial salmon harvest by species, Upper Cook Inlet, 1966-1983.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
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	12,407	692,244	100,962	34,030	269,842	1,109,485
1970	8,358	746,634	279,989	826,639	800,829	2,662,449
1971	19,765	636,798	100,636	35,624	327,029	1,119,852
1972	16,086	879,724	80,933	628,576	630,016	2,235,335
1973	5,194	670,025	104,373	326,183	667,561	1,773,336
1974	6,586	497,160	200,125	484,035	396,938	1,584,844
1975	4,773	678,736	221,739	335,629	950,981	2,191,858
1976	10,867	1,664,131	208,710	1,256,743	469,806	3,610,257
1977	14,792	2,052,511	192,599	553,855	1,233,722	4,047,479
1978	17,302	2,621,667	219,360	1,689,098	571,959	5,119,386
1979	13,738	924,415	265,166	72,982	650,357	1,926,658
1980	13,795	1,573,637	271,378	1,786,430	390,810	4,036,050
1981	12,240	1,439,235	485,148	127,169	833,549	2,897,341
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
Average	12,130	1,540,200	276,600	Even 1,305,123 Odd 176,448	705,046	3,274,761

Data Source: Honeywell computer catch files, ADFG, Soldotna.

Appendix Table 8. Approximate exvessel value of the Upper Cook Inlet commercial salmon catch, 1960-1983.1/

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
1960	140	1,334	307	663	343	2,787
1961	100	1,687	118	16	204	2,125
1962	100	1,683	342	1,274	582	3,981
1963	89	1,388	193	13	236	1,919
1964	20	1,430	451	1,131	646	3,678
1965	50	2,099	109	70	230	2,558
1966	50	2,727	295	823	338	4,233
1967	49	2,135	187	13	202	2,586
1968	30	1,758	515	1,209	843	4,355
1969	70	1,231	109	23	204	1,637
1970	49	1,135	354	387	745	2,670
1971	189	1,102	143	22	316	1,772
1972	217	1,795	135	473	834	3,454
1973	122	3,214	320	363	2,134	6,153
1974	210	3,058	843	946	1,521	6,578
1975	65	2,596	821	423	2,753	6,658
1976	276	8,626	818	1,879	2,040	13,639
1977	525	13,274	933	772	5,991	21,495
1978	667	26,128	1,388	2,154	2,217	32,554
1979	625	8,094	1,658	89	4,201	14,667
1980	417	7,932	902	2,114	1,516	12,881
1981	422	11,071	2,638	179	2,005	16,315
1982	753	25,029	4,139	515	5,851	36,287
1983	585	23,841	1,603	38	3,195	29,362

1/ Expressed in thousands of dollars.
Data Source: 1960-1971 - Unpublished ADFG files.
1972-1983 - Average weight x average price per pound x catch (all from CFEC and ADFG computer files).

Appendix Table 9. Commercial herring harvest by area, Upper Cook Inlet, 1973-1983.

Year	Harvest (Pounds) Tuxedni Bay	Chinitna Bay	Eastside	Total
1973	0	0	27,704	27,704
1974	0	0	73,386	73,386
1975	0	0	12,483	12,483
1976	0	0	11,625	11,625
1977	0	0	34,618	34,618
1978	0	110,693	16,548	127,241
1979	49,679	192,350	134,625	376,654
1980	172,994	40,012	74,766	287,772
1981	169,905	100,989	172,408	443,302
1982	100,426	183,616	120,378	404,420
1983	476,364	98,356	330,563	905,283

Data Source: Final IBM statistical files, ADFG, Juneau.

Appendix Table 10. Commercial harvest of razor clams in Cook Inlet, 1919-1983.[1/]

Year	Pounds	Year	Pounds
1919	76,968	1951	112,320
1920	11,952	1952	0
1921	72,000	1953	0
1922	510,432	1954	0
1923	470,280	1955	0
1924	156,768	1956	0
1925	0	1957	0
1926	0	1958	0
1927	25,248	1959	0
1928	0	1960	372,872
1929	0	1961	277,830
1930	0	1962	195,650
1931	No Record	1963	0
1932	93,840	1964	0
1933	No Record	1965	0
1934	No Record	1966	0
1935	No Record	1967	0
1936	No Record	1968	0
1937	8,328	1969	0
1938	No Record	1970	0
1939	No Record	1971	14,755
1940	No Record	1972	31,360
1941	0	1973	34,415
1942	0	1974	No Record
1943	0	1975	10,020
1944	0	1976	No Record
1945	15,000	1977	1,762
1946	11,424	1978	45,931
1947	11,976	1979	144,358
1948	2,160	1980	140,420
1949	9,672	1981	441,949
1950	304,073	1982[2/]	460,639
		1983[2/]	269,618

1/ Data for 1919-1968 from Nickerson (1975). Data for 1969-1983 from IBM fish ticket summaries (ADFG, Division of Commercial Fisheries, Computer Services).

2/ Preliminary.

Appendix Table 11. Registered units of gillnet fishing effort by gear type in Cook Inlet, 1960-1983.1/

	Drift			Set			
Year	Resident	Non-Resident	Sub-total	Resident	Non-Resident	Sub-total	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	775	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

1/ Data Source: 1960-1974 ADFG unpublished reports.
1975-1983 Commercial Fisheries Entry Commission.

Appendix Table 12. Escapement goals and sonar counts of Kenai River, Kasilof River, and Crescent River sockeye salmon, and Susitna River sockeye salmon, pink salmon, chum salmon and coho salmon.

	Kenai River		Kasilof River		Crescent River	
Year	Escape. Goal	Escape. Estimate	Escape. Goal	Escape. Estimate	Escape. Goal	Escape. Estimate
1968	0	88,000	0	93,000	0	0
1969	150,000	53,000	75,000	46,000	0	0
1970	150,000	73,000	75,000	37,000	0	0
1971	150,000	--	75,000	--	0	0
1972	150,000-250,000	318,000	75,000-150,000	112,000	0	0
1973	150,000-250,000	367,000	75,000-150,000	40,000	0	0
1974	150,000-250,000	161,000	75,000-150,000	64,000	0	0
1975	150,000-250,000	142,000	75,000-150,000	48,000	0	0
1976	150,000-250,000	380,000	75,000-150,000	140,000	0	0
1977	150,000-250,000	708,000	75,000-150,000	155,000	0	0
1978	350,000-500,000	399,000	75,000-150,000	117,000	0	0
1979	350,000-500,000	285,000	75,000-150,000	152,000	50,000	87,000
1980	350,000-500,000	464,000	75,000-150,000	187,000	50,000	91,000
1981	350,000-500,000	408,000	75,000-150,000	257,000	50,000	41,000
1982	350,000-500,000	620,000	75,000-150,000	180,000	50,000	59,000
1983	350,000-500,000	630,000	75,000-150,000	210,000	50,000	92,000

	Susitna River					
	Sockeye		Pink		Chum	Coho
Year	Escape. Goal	Escape. Estimate	Escape. Goal	Escape. Estimate	Escape. Index	Escape. Index
1978	200,000	94,000	1,000,000	1,943,000	148,000	101,000
1979	200,000	157,000	0	125,000	49,000	37,000
1980	200,000	191,000	1,000,000	2,047,000	8,000	43,000
1981	200,000	340,000	0	113,000	46,000	33,000
1982	200,000	216,000 1/	1,000,000	N/A 2/	N/A 2/	N/A 2/
1983	200,000	112,000 3/	0	101,000 4/	N/A 2/	N/A 2/

1/ Poor field conditions make this a minimum estimate; mark/recapture estimate from Su-Hydro studies was 265,000.
2/ High water conditions prevented obtaining comparable estimates.
3/ Minimum estimate. Combining Yentna sonar with Sunshine Station mark/recapture estimate yields 176,000.
4/ Yentna sonar combined with Sunshine Station mark/recapture estimate.

Appendix Table 13. Average price paid for commercially harvested salmon, Upper Cook Inlet, 1969-1983.1/

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

1/ Expressed as dollars paid per pound.
Data Source: Commercial Fisheries Entry Commission.

Appendix Table 14. Average weights of commercially harvested salmon, Upper Cook Inlet, 1972-1983.1/

Year	Average Weight (lbs)				
	Chinook	Sockeye	Coho	Pink	Chum
1972	28.76	6.00	6.18	3.96	6.62
1973	37.85	7.38	6.13	3.71	7.61
1974	36.20	6.76	6.39	4.25	7.21
1975	25.14	6.07	6.86	3.60	7.06
1976	27.63	6.82	6.43	4.04	8.04
1977	28.19	7.52	6.73	3.67	7.96
1978	33.24	7.55	6.39	3.75	7.60
1979	27.93	6.21	6.38	3.58	7.34
1980	26.29	5.93	5.83	3.48	7.32
1981	23.64	6.41	6.55	3.70	7.66
1982	28.42	6.98	7.24	3.62	8.33
1983	29.24	6.38	6.90	3.04	7.96
Average	29.47	6.65	6.43	3.71	7.48

1/ Data Source: Final IBM stat runs of fish ticket data, ADFG, Juneau.

Figure 1.

UPPER COOK INLET SALMON DISTRICTS

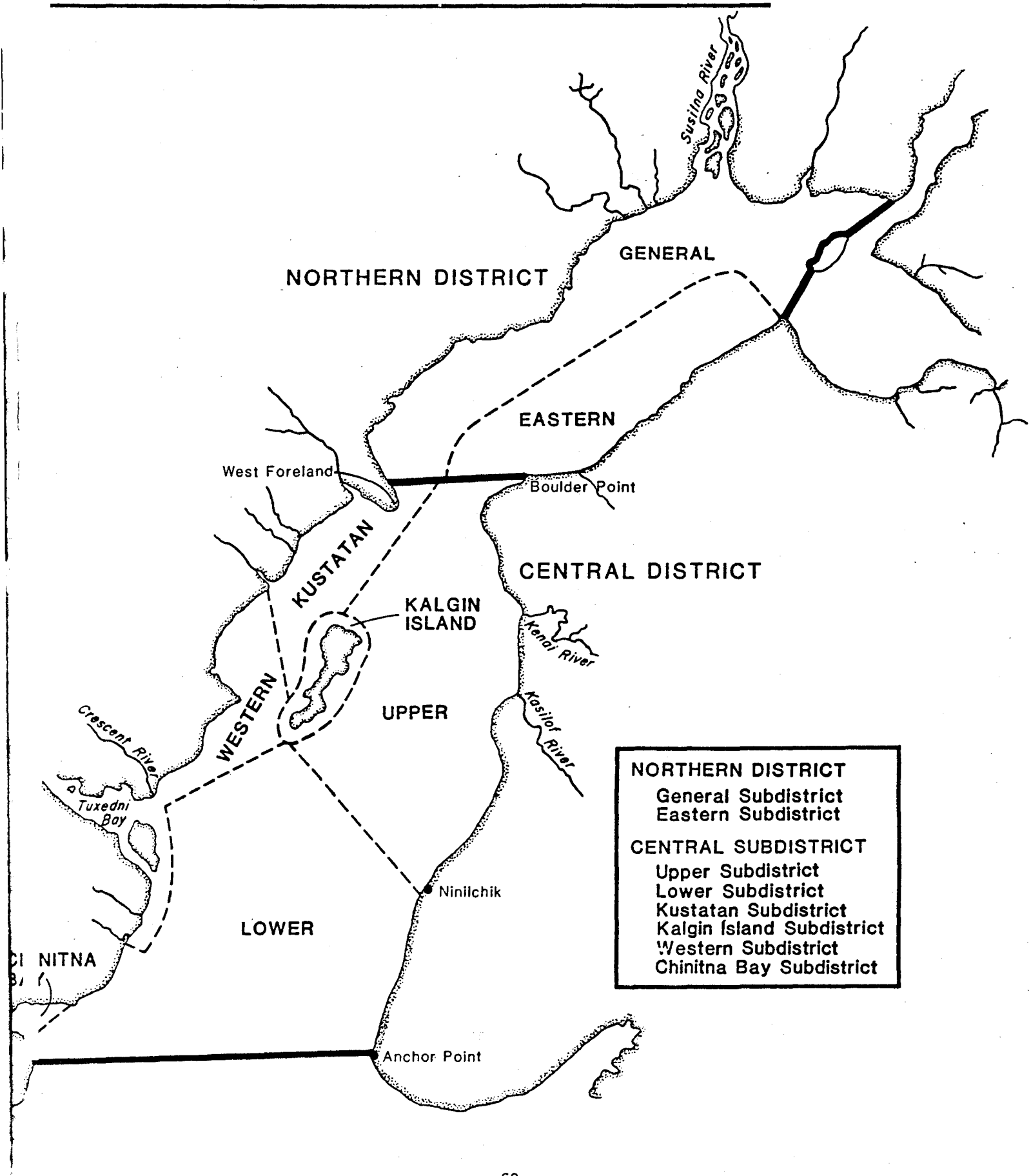
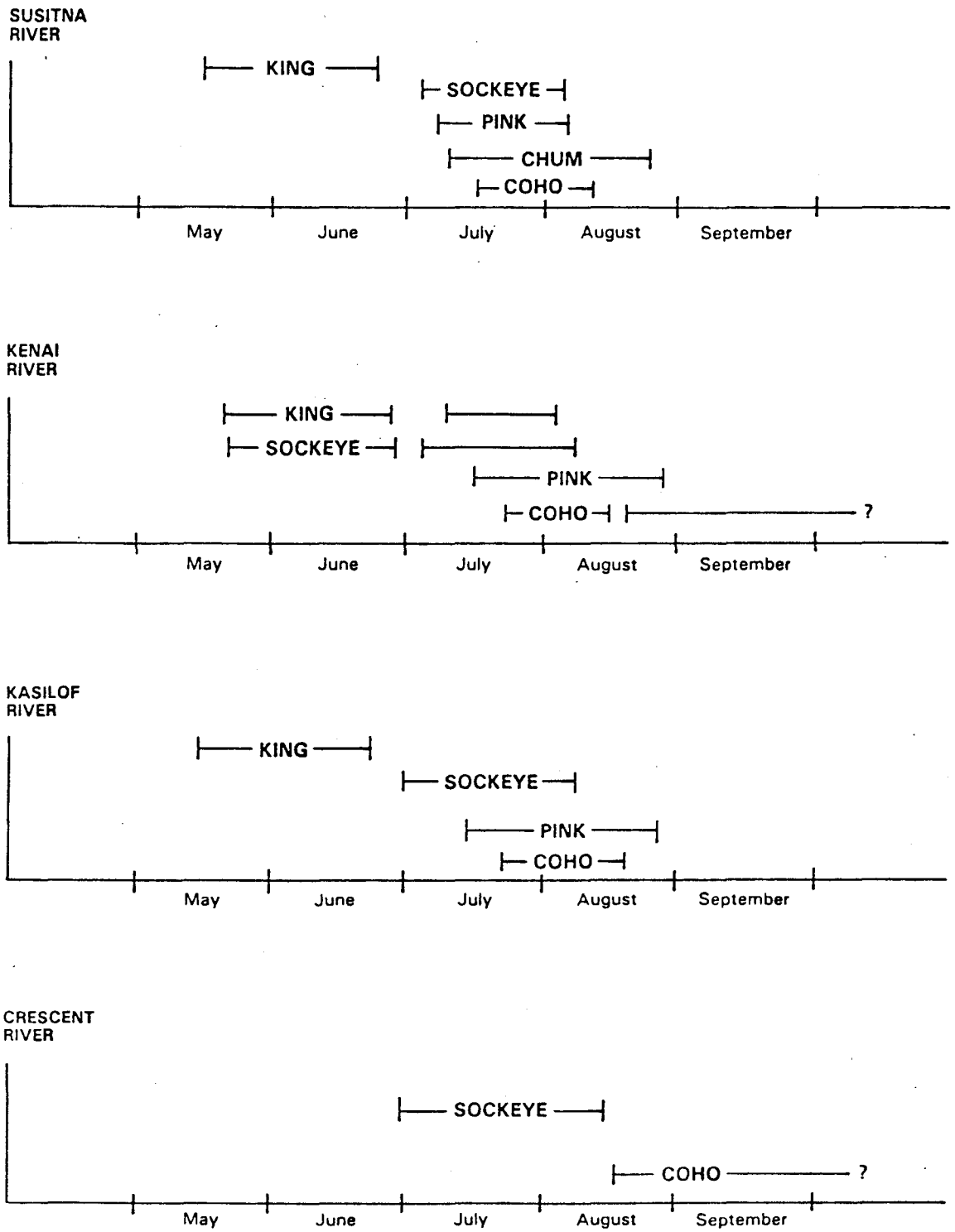


Figure 2.
MAJOR SALMON RUN TIMING



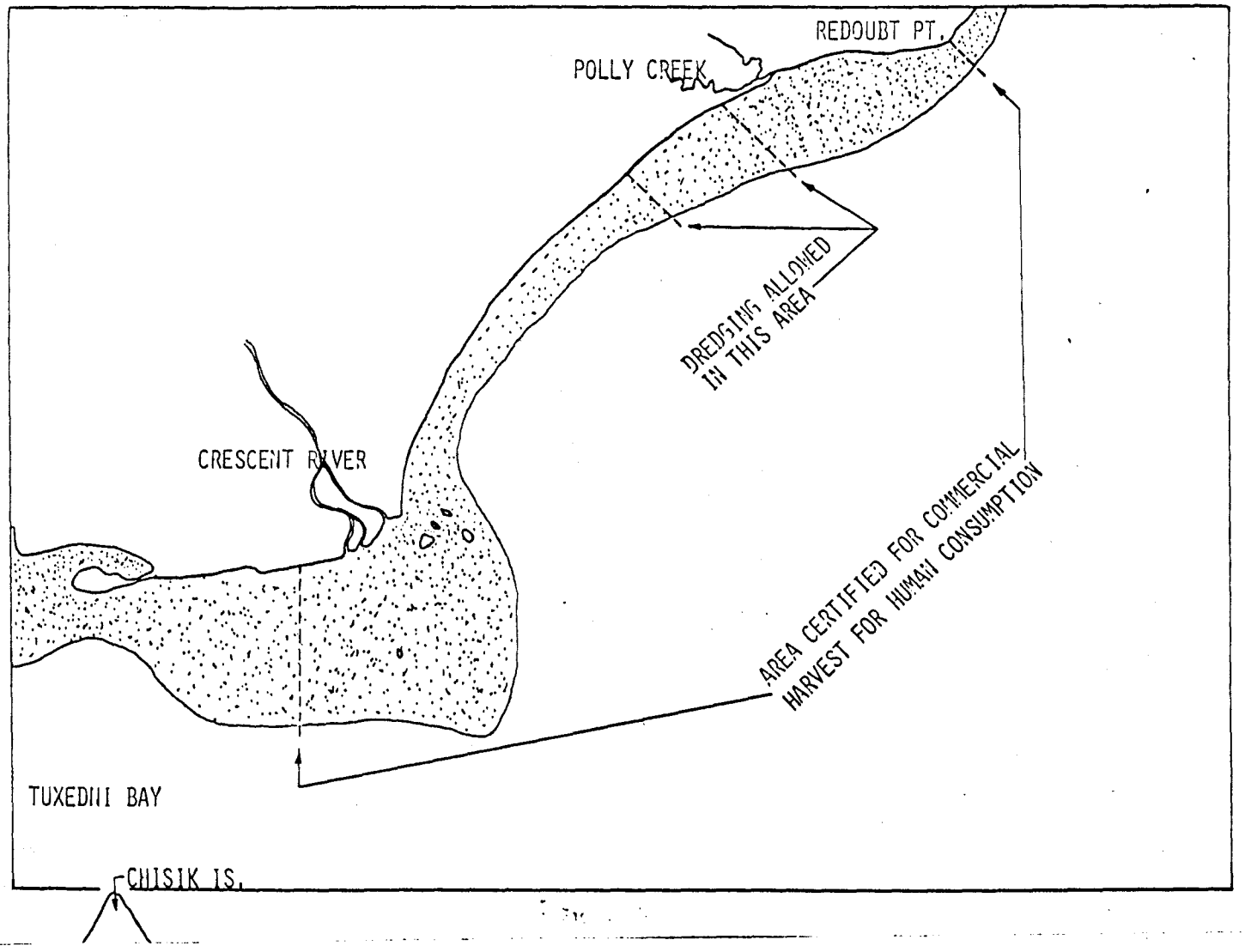


Figure 3. Polly Creek Razor Clam Beach.

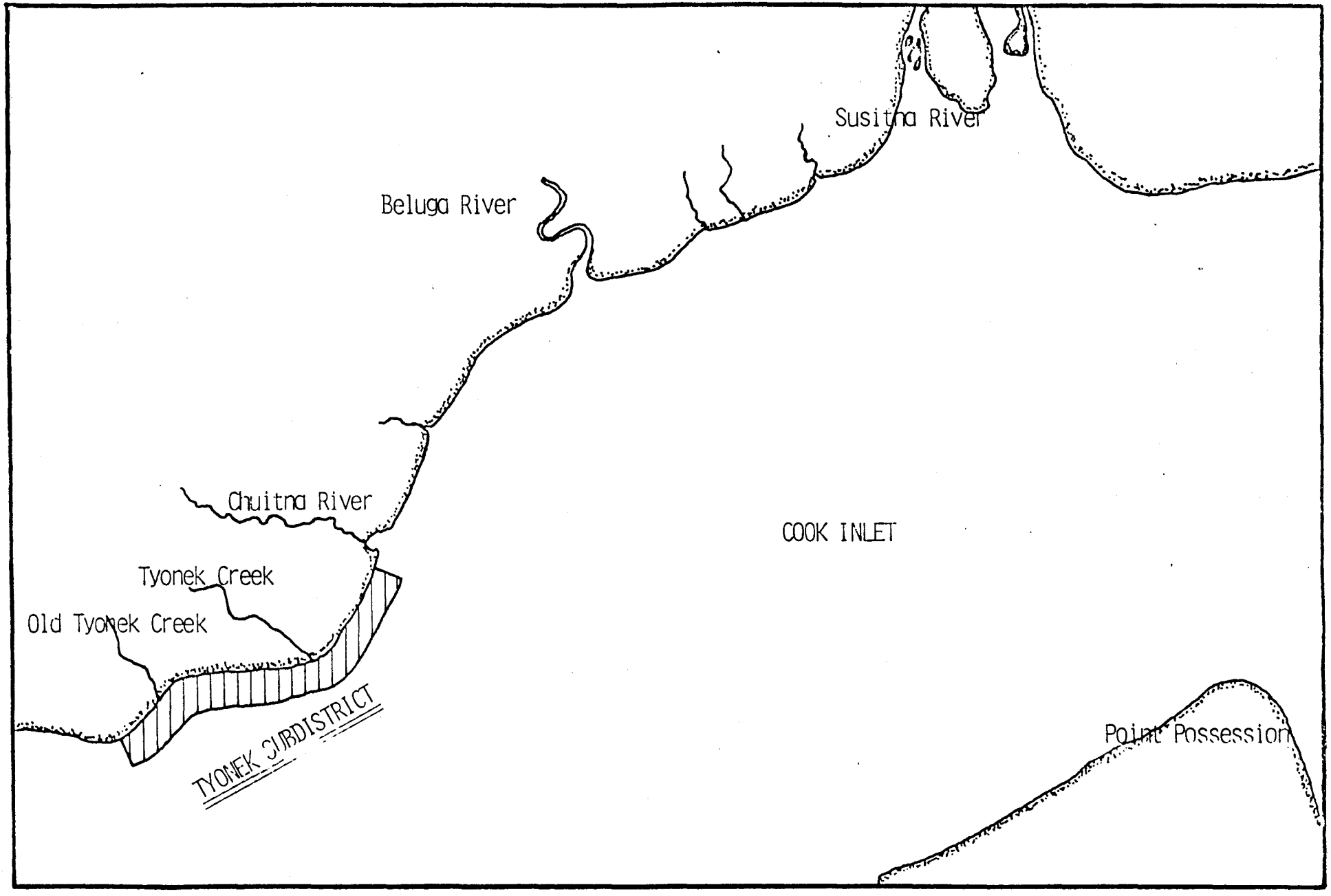


Figure 4. Tyonek Subdistrict.

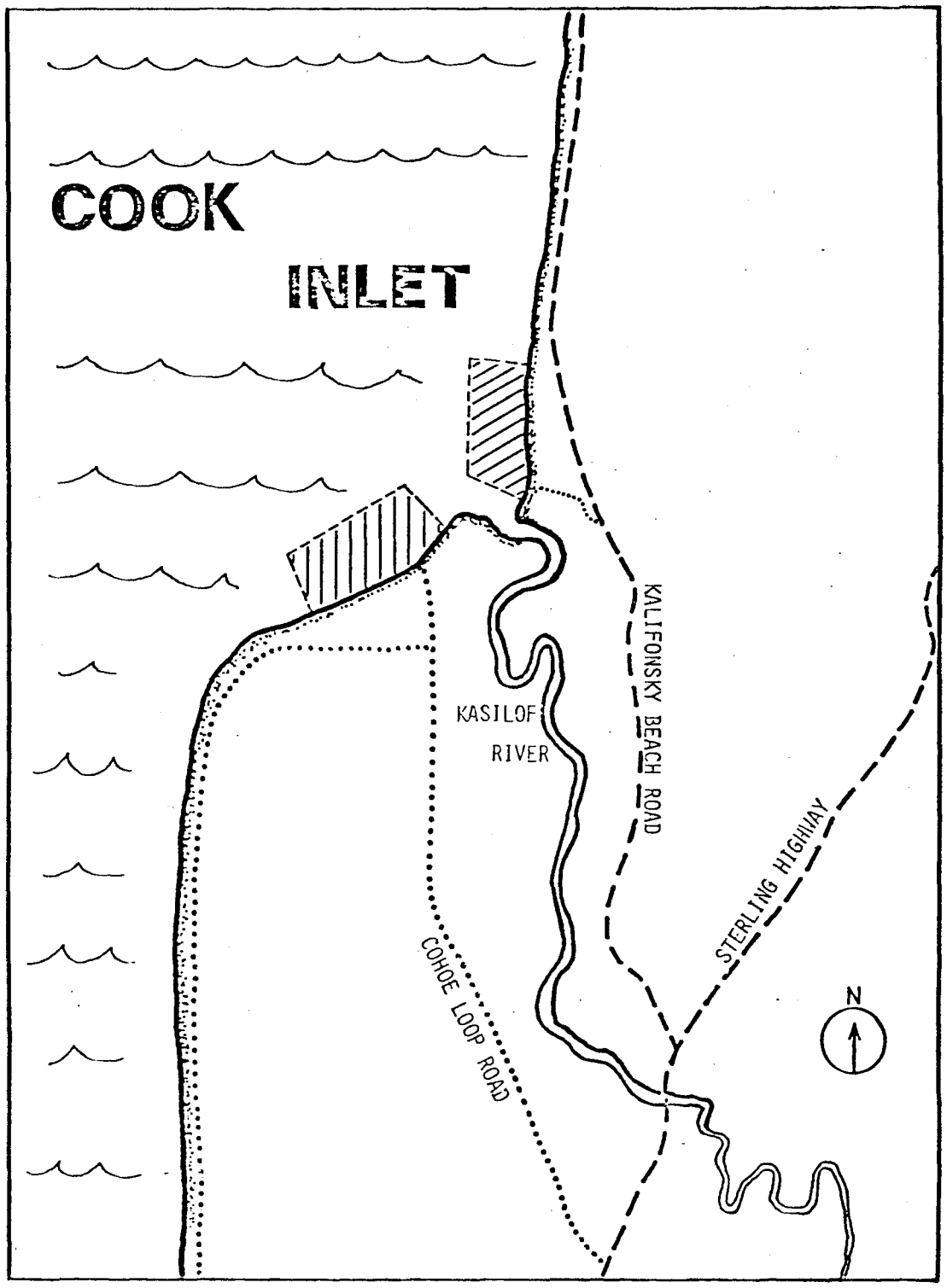


Figure 5. Location of the 1983 Kasilof personal use fishery.