KODIAK MANAGEMENT AREA COMMERCIAL SALMON ANNUAL MANAGEMENT REPORT, 2001

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Regional Information Report[1] No. 4K01-62

Alaska Department of Fish and Game
Division of Commercial Fisheries
211 Mission Road
Kodiak, Alaska 99615

December 2001

[1]The Regional Information Report Series was established in 1987 to provide an information access system for all unpublished division reports. These reports frequently serve diverse ad hoc informational purposes or archive basic uninterpreted data. To accommodate timely reporting of recently collected information, reports in this series undergo only limited internal review and may contain preliminary data; this information may be subsequently finalized and published in the formal literature. Consequently, these reports should not be cited without prior approval of the author or the Division of Commercial Fisheries.

ACKNOWLEDGEMENTS

The author expresses his appreciation to all the Alaska Department of Fish and Game seasonal employees who worked so diligently during the past salmon seasons, and also to the employees of Alaska State Parks, the U.S. Fish and Wildlife Service, and the Kodiak Regional Aquaculture Association, who have aided data collection. Thanks to Lucinda Neel, Joanne Shaker, Joan Brodie, Jim Blackburn, Ric Shepard and Mary Forner for their technical support. Thanks to Dennis Gretsch and Jeff Wadle for their management assistance. Thanks to Rod Campbell, Steve Honnold, Mark Witteveen, and Patti Nelson for editorial assistance.

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ABSTRACT

Five species of salmon return to streams of the Kodiak Archipelago and Alaska Peninsula including chinook *Oncorhynchus tshawytscha*, sockeye *O. nerka*, pink *O. gorbuscha*, chum *O. keta*, and coho *O. kisutch* salmon. This report describes the historic and current salmon escapements, commercial fisheries management strategies and plans, and commercial harvests of salmon from the waters of the Kodiak Management Area (KMA).

The majority of KMA sockeye salmon and all chinook salmon escapement counts are obtained with the use of fish weirs. For the remainder of the sockeye salmon systems and most pink, chum, and coho salmon systems, escapement counts are collected from fixed-wing aircraft surveys of bays and streams. Foot surveys are also used on a few streams. Commercial salmon fisheries (purse seine, beach seine, and set gillnet) occur throughout the KMA, from early June through September. The entire KMA is covered by BOF approved regulatory management plans, that specify the key species and time periods for fisheries (two plans limit the harvest of salmon considered to be non local).

Since 1988 there has been a decline in the gross exvessel value of the KMA salmon fisheries, and in participation by permit holders (number of active permits). In 2001 the estimated exvessel value was $18.9 million; 182 purse seiners and 172 set gillnetters participated. A total of 23,711,965 salmon (94,218,002 pounds) were harvested in the 2001. Seine fishers accounted for 89.6% of the total number of salmon harvested (including 63.2% of the sockeye) and set gillnet fishers accounted for 10.4%.

Kodiak chinook salmon stocks are considered healthy. The lower escapement goals for Ayakulik (6,500) and Karluk (4,500) chinook salmon were met annually from 1986 through 2000, and the upper goals (10,000 and 8,000 respectively) were exceeded each year from 1995 to 2000. The past 10-year (1991-2000) average aggregate chinook escapement was 25,342. In 2001 chinook escapement into the Karluk (4,453) was below average, while the escapement into the Ayakulik (13,929) was above average. Chinook salmon harvests have increased in the subsistence, sport, and commercial fisheries. During the 2001 season the commercial harvest was 23,827, above the previous 10-year (1991-2000) average of 20,974. The reported subsistence harvests average only 275 chinook salmon annually (1991-2000; 2001 catch estimates are not yet available). The sport fish harvest has increased; the 1991 through 2000 average was 4,375 chinook salmon, while the sport catches for 1999 was 6,791 and 2000 was 9,629 chinook salmon (2001 information is not yet available).

Overall, KMA sockeye stocks are healthy. KMA sockeye production has declined somewhat from the record levels of the 1990s, which may be a statewide phenomena associated with ocean rearing conditions. Overall, the lower aggregate escapement goal (1.28 million) for Kodiak sockeye salmon has been met or exceeded annually since 1984. The past 10-year (1991-2000) average aggregate sockeye escapement was 1,916,558. Run timing was early, for the second consecutive year. Run strength was varied. In 2001 the aggregate KMA sockeye escapement was 1,580,660. Escapement goals were achieved in most systems; the Litnik and late Upper Station sockeye runs were weak and did not achieve their respective escapement goals. Sockeye salmon harvests have decreased in commercial fisheries, but increased in the subsistence and sport fisheries. In 2001 the commercial harvest included 2,659,267 sockeye salmon, below the 10-year (1991-2000) average of 4,027,145. The reported subsistence harvests average 23,564 sockeye salmon annually (1991-2000; 2001 catch

estimates are not yet available). The estimated annual sport fish harvest has averaged 9,419 sockeye (1991-2000; 2001 catch estimates are not yet available), though catches for 2000 (16,972) were much higher than the average.

KMA pink salmon stocks are considered very healthy, except for occasional local variations. Overall, aggregate escapement goals have been met or exceeded each year since 1975. In 2001 the KMA pink escapement was 3,393,620, above the upper aggregate goal (3.02 million), but below the 1991 through 1999 odd-year average of 5,096,084. Escapement goals were met or exceeded for each district and for most major and minor systems. Pink salmon harvests have been at historically high levels in the commercial fisheries, but have decreased in the subsistence and sport fisheries. During the 2001 season the commercial harvest was 19,567,163 pink salmon, below the past decade (1991-1999) odd-year average of approximately 23,285,634 fish (this average includes the two highest years on record, 1993 and 1995). The Kitoi Bay Hatchery contribution to the 2001 commercial catch was very high, with a record 13,126,761 pink salmon harvested near the hatchery. The reported subsistence harvests average 1,416 pink salmon annually (1991-2000; 2001 catch estimates are not yet available). The estimated annual sport fish harvest has averaged 9,602 pink salmon annually (1991-2000; 2001 catch estimates are not yet available).

KMA chum salmon stocks are relatively healthy. Escapement estimates have been above the lower aggregate escapement goal (273,000) each year since 1994, though during that same period, the targeted escapement (550,000) has only been achieved in the last three years. The 2001 KMA chum escapement was 557,925, slightly below the past 10-year (1991-2000) average aggregate escapement of 572,947. Escapement goals were met or exceeded in most districts, with the exception of the Southwest Kodiak District (Sturgeon River). Chum salmon harvests have been variable in the commercial fisheries, and remain at low levels in the subsistence and sport fisheries. During the 2001 season the commercial harvest was 1,053,730 chum salmon, above the 10-year average (1991-1999) of 804,700 fish. The Kitoi Bay Hatchery contribution to the commercial catch has increased, with 216,266 chum salmon harvested near the hatchery in 2001.

Coho salmon stocks of the KMA are considered very healthy though there is significant annual variability in production. Coho salmon aggregate escapements have been above the lower aggregate escapement goal (54,600) each year since 1981. The 2001 KMA chum salmon escapement was estimated to be 244,360 fish, above the 10-year (1991-2000) average escapement of 205,492 coho salmon. In recent years, coho salmon have experienced a large increase in exploitation by commercial and sport users. During the 2001 season the commercial harvest was 407,978 coho salmon, above the 10-year (1991-2000) average of 316,013 fish. The Kitoi Bay Hatchery contribution to the 2001 commercial catch was 151,732 coho salmon. The reported subsistence harvests average 6,458 coho salmon annually (1991-2000; 2001 catch estimates are not yet available). The estimated annual sport fish harvest has averaged 20,243 coho salmon annually (1991-2000; 2001 catch estimates are not yet available).

INTRODUCTION

Since Alaska was granted statehood the Alaska Department of Fish and Game (ADF&G) has been charged with the management of the salmon resources of the state. The mission of the Division of Commercial Fisheries (CF) is to manage, protect, rehabilitate, enhance, and develop fisheries and aquatic plant resources in the interest of the economy and general well-being of the state, consistent with the sustained yield principle and subject to allocations established through public regulatory processes. The CF is responsible for management of the state's subsistence, commercial, and personal use fisheries, the rehabilitation and enhancement of existing fishery resources, and the development of new fisheries (ADF&G 1999).

Annual management reports of Kodiak Management Area (KMA) commercial salmon fisheries have been compiled since statehood. This report describes the KMA, provides an overview of the salmon resources, gives a brief history of the commercial fishery, and explains the current KMA commercial salmon fisheries and the various harvest strategies that are in effect throughout the commercial salmon fishing season. In addition, this report will cover recent and historical harvests and effort levels.

Please note: Due to the Exxon Valdez oil spill, most of the KMA remained closed to commercial salmon fishing for the entire 1989 season. Where average harvest information is used, 1989 may not be included in the averages. Tables and graphs in this report may not include 1989 data.

KODIAK MANAGEMENT AREA DESCRIPTION

Location and Boundaries

The KMA comprises the waters of the western Gulf of Alaska surrounding the Kodiak Archipelago, and along that portion of the Alaska Peninsula that drains into Shelikof Strait between Cape Douglas and Kilokak Rocks (Figure 1, Appendix A.1).

The archipelago is approximately 150 miles long extending from Shuyak Island south to Tugidak Island. The Alaska Peninsula portion is about 160 miles long and is separated from the archipelago by Shelikof Strait, which averages 30 miles in width. Chirikof Island, located approximately 40 miles south southwest of Tugidak Island, is also included in the Kodiak Management Area.

The regulatory description of the KMA is all waters of Alaska south of a line extending east from Cape Douglas at 58° 51.10' N lat., west of 150° W long., north of 55° 30.00' N lat., and north and east of a line extending 135° southeast from a point near Kilokak Rocks at 57° 10.34' N lat., 156° 20.22' W long. (the longitude of the southern entrance of Imuya Bay) for three miles, then due south (ADF&G 1999).[1]

[1] All latitudes and longitudes currently used in ADF&G Commercial Fishing Regulations are shown in decimal minutes and are based on North American datum of 1983 (5 AAC 39.997(b)). This document also follows that system.

Physical Description

Glaciation shaped the Kodiak Archipelago. Kodiak's topography ranges from sharp crested alpine peaks (which run down the northeast-southwest axis of the island), to broad U shaped alpine valleys, to low flat bottomed wetlands. The coastline is mostly very rocky and irregular, deeply indented by numerous glacially scoured straits, inlets, and branching fjords. Though the archipelago covers approximately 5,000 square miles of land area, there is no place on Kodiak Island that is more than 15 miles from the ocean (Buck et al. 1975). The southwest end of the island is lower with more subdued topography and a relatively smooth rounded coastline. Streams are generally short and steep, draining deep mountain lakes or small glaciers. In the southwest part of Kodiak streams are somewhat longer, flowing along wide valleys (the longest rivers, the Karluk and the Ayakulik, are located in this zone and each extend only about 30 miles).

The western portion of the KMA lies along the Alaska Peninsula. While similar in many ways to the Kodiak Archipelago, and also greatly shaped by glaciation, it is an area strongly influenced by volcanism. The rugged Aleutian Range dominates the topography, running in a northeast-southwest direction, down the peninsula, and forms the boundary of the watersheds that drain into Shelikof Strait. The mountains here are higher than those of the Kodiak Archipelago and there are many large glaciers. Generally, temperatures are lower on average and there is less annual precipitation. Again, streams are relatively short and steep. Because of the local occurrence of deep beds of volcanic ash some streams are unstable with shifting stream channels.

The marine waters of the area are influenced by the Alaska Current, which moves north along the Southeast Alaska panhandle, west by the north shore of the Gulf of Alaska (past Yakutat and Prince William Sound), then moves south and west past Kodiak Island. The Alaska Current narrows and intensifies near the Kodiak Archipelago, and becomes the Alaska Stream, which then passes down along the Alaska Peninsula. Little is known of the inshore circulation of marine waters over Kodiak's continental shelf. Actual surface currents are greatly influenced by tides and strong winds associated with frequent storms in the Gulf of Alaska. The climate of the Kodiak region is dominated by this strong marine influence. It is characterized by mild temperatures (the overall mean annual temperature is 40° F), predominantly cloudy skies (days are overcast more than half the year), and moderately to heavy precipitation (averaging over 68 inches per year, with up to 200 inches per year documented in specific locations).

The marine waters around the Kodiak Archipelago are among the most productive in the North Pacific. Offshore upwelling combines with abundant freshwater runoff to make nearshore waters rich in nutrients. There are over a hundred species of marine fish native to the KMA. Five species of salmon return to streams of the Kodiak Archipelago and the Alaska Peninsula, including chinook *Oncorhynchus tshawytscha*, sockeye *O. nerka*, pink *O. gorbuscha*, chum *O. keta*, and coho *O. kisutch* salmon.

Population and Communities

Approximately 14,000 people currently reside within boundaries of the KMA. The majority of area residents reside in the city of Kodiak (approximately 6,800) and along the connecting road system (approximately 6,200; including the U.S. Coast Guard Base adjacent to town, and outlying communities of Monashka Bay, Bell's Flats, Pasagshak, and Chiniak). The remaining 1,000 people reside in small communities scattered around the island, including the cities of Akhiok, Larsen Bay,

Old Harbor, Ouzinkie, Port Lions, the village of Karluk, and a logging camp located in Danger Bay (Figure 2). Approximately 11% of the population are of Alaska Native heritage.

Commercial fishing and processing is the largest employer in Kodiak. The seafood industry employees approximately 35% of the private sector work force. During the commercial salmon fishing season (approximately June through September) 4,200 to 5,000 people may be involved in the KMA commercial salmon fishery. This includes approximately 1,800 to 2,000 fishers and crew, 200 to 300 tender operators and crew, and 2,200 to 2,700 processing personnel (based on ADF&G estimates and Alaska Department of Labor statistics).

SALMON RESOURCES

Salmon Producing Streams

There are approximately 800 streams within the KMA in which salmon migration or spawning has been documented (ADF&G 1993). Of these, 440 streams have been documented to support yearly spawning populations of salmon (Table 1). The remainder of the streams are small streams that are usually used by pink salmon only in years with very large returns. Four streams support viable chinook salmon stocks; 39 streams support sockeye salmon stocks of varying size; 174 streams have coho salmon stocks; approximately 150 streams have chum salmon stocks; and all 440 streams support pink salmon stocks. Of these streams, 92 are located in the Mainland District on the Alaska Peninsula, 18 are on Shuyak Island, 84 are on Afognak Island, 234 are on Kodiak Island, and 12 are on the Trinity Island group.

Escapement Goals

The ADF&G salmon management and research staffs have established aggregate escapement goals for each salmon species for each district (Table 2). Escapement goals are expressed as a range. The KMA commercial salmon fisheries are managed to achieve escapement levels that are within the established range. The "targeted" aggregate escapement goals for KMA salmon are approximately 15,000 chinook salmon, 1,710,000 sockeye salmon, 150,000 coho salmon, 3,000,000 (odd years) to 4,500,000 (even years) pink[2] salmon, and 550,000 chum salmon (Table 3).

Salmon Production Potential (Wild Stocks)

The estimated production potential for certain KMA salmon species can be calculated by multiplying the expected escapement (the targeted goal) by an estimated average return per spawner (RPS; this can be calculated from escapement and subsequent estimated returns for specific salmon stocks). The annual potential harvest can then be calculated by subtracting the specific targeted escapement goal from the production potential (Table 3). In recent years the actual RPS estimates

[2] Pink salmon production in individual systems tends to be large one year, then small the next. Hence the escapement goal is different between odd and even years, with odd numbered years having lower goals, and even years having higher goals.

for Kodiak's major sockeye salmon systems have approached 3.7 to 1 (Prokopowich 1995), and for Kodiak pink salmon the odd year RPS was estimated at approximately 3.0 to 1 (Swanton et al. 1993). Using these known RPS estimates, the KMA sockeye salmon annual potential harvest is estimated to be approximately 4,617,000 fish. Pink salmon potential harvest is estimated to be 6,000,000 (odd year) to 9,000,000 (even year). These values are averages around which natural survival and return will fluctuate. It is of interest to note that the actual pink salmon production in recent odd years has far exceeded this estimated potential. Record pink salmon returns have occurred in 1989, 1993, and 1995 (Table 4). If targeted escapements are met and environmental conditions are favorable, KMA salmon systems should also produce average annual harvests of over 22,000 chinook, 990,000 chum, and 225,000 coho (recent coho salmon harvests surpass this average potential; Table 3).

Supplemental Production

Two hatcheries located in the KMA continue to produce salmon to supplement natural salmon production (Figure 2). The Kodiak Regional Aquaculture Association (KRAA) operates the Kitoi Bay and Pillar Creek hatcheries. Kitoi Bay Hatchery, located on the east side of Afognak Island, produces primarily pink salmon; however, sockeye, chum, and coho salmon are also cultured. Outstocking of juvenile coho and sockeye salmon fry occurs, but the majority of the salmon are intended to return to the hatchery for common property harvest (ADF&G 1999). Pillar Creek Hatchery, located north of the city of Kodiak at Monashka Bay, is utilized primarily as an incubation facility for sockeye salmon outstocking projects.

The Kodiak Regional Planning Team (KRPT) [3] identified sockeye salmon as the priority species for supplemental production. KRAA and ADF&G are involved in limnological monitoring studies of KMA lakes and ongoing lake fertilization to increase salmon fry growth and survival. Lake fertilization is currently being conducted on Malina, Laura, Little Waterfall, and Little Kitoi Lakes. Through the use of remote egg takes and hatchery incubation, sockeye salmon juveniles are being stocked to enhance future sockeye salmon harvests through put-and-take projects, broodstock development, and also to restore systems with existing runs. Stocking of sockeye salmon for put-and-take fisheries is currently occurring at Spiridon, Hidden, Crescent, Little Waterfall, and Big Waterfall Lakes. Sockeye salmon stocking for broodstock development occurs in Little Kitoi Lake. Backstocking for rehabilitation purposes has not occurred for several years in Malina and Pauls/Laura Lakes due to increasing runs as result of previous stockings.

The adult returns from the Kitoi Bay Hatchery chum, pink, and coho salmon stockings have been excellent. Coho salmon are also outstocked into Crescent Lake near the city of Port Lions, and into Katmai Lake on Spruce Island near the city of Ouzinkie.

The ADF&G Division of Sport Fish (SF), in conjunction with KRAA, has stocked coho salmon fingerlings and chinook salmon smolt to enhance sport fishing opportunities along the Kodiak road system. Chinook salmon smolts were stocked into Island and Mission Lakes near the city of Kodiak until 1995, and then into the Buskin River in 1995 and 1996. A new smolt stocking

[3] The RPT is a group consisting of representatives of ADF&G, regional aquaculture associations, and the public, mandated by Alaska Statutes (16.10.375-470) to develop and amend comprehensive salmon production plans for salmon production regions.

project is now underway, and annual chinook stocking of Monashka Creek is expected to begin in 2002. Coho salmon fry have been stocked into Island, Pony, Southern, Mayflower, Dark, Mission, Orbin, and Potato Patch Lakes near the city of Kodiak. The coho and chinook salmon stocking is intended to produce put-and-take sport fisheries.

Supplementing KMA salmon fisheries is an ongoing long-term project. The Kodiak Regional Comprehensive Salmon Plan (KRPT 1992) states an objective of increasing the annual harvest of salmon (over and above the KMA wild salmon harvest) by an additional 3,000 chinook, 1,700,000 sockeye, 383,000 coho, 11,500,000 pink, and 1,100,000 chum salmon by the year 2002. To date, the peak years of supplemental production have produced an additional 582,000 sockeye, 304,000 chum, 13,127,000 pink, 152,000 coho, and an undetermined number of chinook salmon to the annual harvest.

Non Local Salmon in the Kodiak Management Area

Salmon tagging studies have been conducted in the KMA to aid management of commercial fisheries through studies of stock composition present at a particular time and place, and to determine average travel time of major stocks through fishery management units. The earliest tagging study was done in 1927 (Rich and Morton 1929) and there were intermittent tagging studies through 1981 (Bowe 1941; Bevan 1959; Simon et al. 1969; Nicholson 1978; Tyler et al. 1986). Most occurred along the south and west sides of the Kodiak Archipelago, to learn more of the migration of sockeye salmon travelling to the major systems of Kodiak Island (Karluk, Ayakulik, Upper Station, and Frazer). Some sockeye salmon tagging was done along the north and east sides of the archipelago (Tyler et al. 1986) and at the south west end of the KMA, along the Alaska Peninsula near Wide Bay (Simon et al. 1969). Salmon migrating through KMA waters to the Chignik and Cook Inlet Management Areas were documented in some of those studies. Other tagging studies have documented the migration of salmon from Cook Inlet and South Peninsula waters to Kodiak Island waters (Norenburg and Calkins 1959; Eggers et al. 1987).

Chinook salmon from Oregon, Washington, British Columbia, Southeast Alaska, and Cook Inlet origin have been documented in the KMA from code wire tag (CWT) recoveries (Clark and Nelson 2001). CWT recovery projects were conducted in 1994, and 1997 through 1999. The majority of the non local chinook salmon documented by these studies were from British Columbia hatcheries and it was concluded that there was only a low exploitation of Cook Inlet chinook salmon (Clark and Nelson 2001). The only local chinook stock within the KMA that has been marked with coded wire tags are hatchery produced chinook fry released into the Buskin River; no Kodiak wild stock chinook were marked with coded wire tags prior to, during, or since this study.

Recent attempts at estimating sockeye salmon stock composition within the KMA have involved studies that used scale pattern analysis, run timing, and analysis of shifts in average weights of commercial catches (Barrett and Swanton 1992; Barrett and Nelson 1994; Swanton and Nelson 1994; Vining and Barrett 1994). Samples of KMA spawning chinook, sockeye, and chum salmon have been collected to establish baseline data for genetic stock identification.

SALMON FISHERIES

The salmon resources of the KMA have been used for subsistence for perhaps thousands of years, and have been exploited commercially for over 150 years (Roppel 1986). The first commercial fisheries were small salted salmon ventures by the occupying Russians in the early 1800s. Salmon streams were blocked and salmon captured as they became schooled behind these barriers. Sockeye salmon returning to the Karluk River brought fishermen and processors to Kodiak Island soon after the territory was transferred from the Russians in 1867. Commercial sockeye salmon harvest records date back to 1882 (Table 4). Intense competition led to expansion of the fishery to other areas and species. By the early 1900s fisheries for coho, pink, and chum salmon had developed.

Commercial Gear Use

Beach seines were the first gear type effectively used commercially in the KMA. In the late 1800s, beach seines 40 fathoms in length were used to harvest sockeye salmon in Karluk Lagoon. As competition for fish grew, the primary harvest location for Karluk sockeye salmon moved outside the lagoon, using heavily manned beach seines averaging 450 fathoms in length. The first fish trap was built in Kodiak in 1896. Until the late 1950s the Kodiak commercial salmon fishery was dominated by cannery owned fish traps, with some independent fishers owning purse seine, beach seine and set gillnet operations. When Alaska was granted statehood in 1959, fish traps were prohibited, and the KMA commercial salmon fishery was conducted by purse seine, set gillnet, and beach seine gear (in decreasing order of abundance). In 1974 a limited entry system was adopted by the State of Alaska, which restricted the number of individuals allowed to participate in commercial salmon fisheries. This system formally established poststatehood levels of purse seine, beach seine, and set gillnet gear participation.

There are 613 commercial salmon permits available for the KMA: 387 purse seine (making this the second largest purse seine fleet in the state), 36 beach seine, and 190 set gillnet. Actual numbers of permits issued and fished varies annually, and there has been a downward trend in the number of seine permits fished (Table 5 and Figure 3). Alaska state residents own 74.4 % of KMA permits (purse seine = 74.9%, beach seine = 88.2%, and set gillnet = 70.5%), with Kodiak Island residents owning approximately 59% (purse seine = 59.7%, beach seine = 58.8%, and set gillnet = 58.1%) of all KMA commercial salmon fishing permits.

Commercial Fishery Management Units and Legal Gear Areas

The KMA is one of 13 designated salmon net registration areas in the State of Alaska. Inseason management of the commercial salmon fishery is structured around 7 districts subdivided into 52 sections (Figure 4, Appendicies A.1-A.6). These sections are occasionally subdivided inseason to adjust fishing effort on unexpected salmon surpluses or deficits. Each management unit (section) defines a traditional geographic harvest area, managed for specific stocks or traditional fishing patterns.

There are restrictions on which gear types can operate in specific management units, based on historical gear use patterns and formalized into regulations (ADF&G 1999). Both purse and beach

seine gear are allowed to operate in the entire management area except for the Moser-Olga Bay Section of the Alitak Bay District, where set gillnets are the only legal gear[4] (Appendix A.4). In the Central Section of the Northwest Kodiak District both set gillnet and seine gear are allowed (Appendix A.3). Since 1974 the geographical areas currently open to specific gear types have, with few exceptions, remained unchanged.

In the mid 1970s that portion of the Karluk District between Rocky Point and Cape Uyak (statistical area 25520; Appendix A.4) was closed to set gillnet gear in an attempt to accelerate the rebuilding of the Karluk sockeye and pink salmon stocks. No existing gillnet sites were affected, as no gillnet gear had been documented as fished there since the early 1960s. Several purse seine fishing locations within this area, which could impact Karluk stocks, were brought under direct management control. This area was used to provide an expanded closed water sanctuary for severely depleted Karluk sockeye and pink salmon stocks.

In the late 1970s, a gear and area adjustment occurred in the Alitak Bay District (Appendix A.4). The common boundary between the Cape Alitak, Moser-Olga Bay, and Humpy-Deadman Sections was adjusted in an effort to reduce gear conflicts caused by an unclear boundary description. The area open to set gillnet gear was reduced from Cape Alitak to Tanner Head and was increased in Deadman Bay to a point northwest of Fox Island (statistical area 25741; Appendix A.4).

A gear and area adjustment was made in Zachar Bay to alleviate fixed and mobile gear conflicts (Appendix A.3). In the late 1970s closed water sanctuary markers were reduced (moved further into the bay) and the new area was designated seine-only. The creation of this small area adjacent to the closed waters within Zachar Bay was consistent with that of other major westside Kodiak bays.

In 1989, due to confusion between state and federal regulations, the Alaska State Board of Fisheries (BOF) specified that KMA commercial salmon fishing activities should be restricted to waters located within the State of Alaska territorial sea boundary (three-mile limit). An emergency order was issued to close waters seaward of the state territorial sea boundary for the 1991 and 1992 seasons. Beginning in 1993 a new regulation was in effect that states that all district and section boundaries do not extend beyond the three-mile limit. However, due to a conflict in the district and section descriptions, this three-mile-limit closure was further clarified in 1995 by listing those waters seaward of the state territorial sea boundary as closed to fishing under closed waters regulations (5 AAC 18.350).

Commercial Salmon Processing

Commercial salmon processing within the KMA began in the late 1860s with small salting and pickling operations located around Kodiak Island near major harvest areas (Roppel 1986). In 1882 processing evolved to canning, when the first cannery was built at Karluk Spit. Kodiak's processing plants have further evolved from those scattered, seasonally operated canning operations into efficient multi-tasked plants, mainly congregated within the city of Kodiak. The majority of these

[4] Prior to Alaska being granted statehood, this management unit was designated set gillnet-only. In 1970 this rule was amended such that the Moser-Olga Bay Section remains gillnet-only prior to September 5. Seine gear is then legal in the entire Alitak Bay District. The Dog Salmon Flats, Inner and Outer Akalura, and the Inner and Outer Upper Station Sections are normally closed to commercial fishing. In the event of overescapement, mop-up fisheries can occur in these sections. Prior to September 5 only set gillnet gear would be allowed in these sections.

plants are year-round operations, processing crab and groundfish in addition to salmon. Kodiak processors produce fresh, frozen, and canned salmon products. Recent technology has been adapted to salmon processing, yielding new, diverse salmon products (such as boneless-skinless fillets, surimi, hams, nuggets, burgers, and salmon-in-a-pouch).

From 10 to 15 salmon buyers or processors participate annually in KMA salmon fisheries. Processing plants are located in the city of Kodiak, Uganik Bay, Larsen Bay, and Alitak Bay (Figure 2). The latest estimate of the sustained processing capacity of Kodiak shorebased processors is approximately 4,335,000 pounds of salmon per day. With this high processing capacity, it is common for Kodiak processors to import salmon harvested elsewhere in the state. At times, salmon from Bristol Bay, Cook Inlet, Prince William Sound, Alaska Peninsula, and Chignik management areas are processed in Kodiak plants.

There has been an increase in the direct involvement of Kodiak area salmon fishers in marketing their product. Catcher-Seller permits have allowed individual fishers to sell their catch at the dock, and other fishers have developed specialty markets for limited amounts of salmon for value-added processing or roe recovery.

Commercial Salmon Fishery Management

Staff

The ADF&G, Division of Commercial Fisheries (CF), is responsible for the management of commercial and subsistence harvest activities on Alaska's salmon stocks. KMA staff responsible for regulation of the commercial salmon fishery consists of an Area Management Biologist, two Assistant Area Management Biologists, and approximately 15 seasonal employees. The Kodiak salmon research staff includes two Area and four assistant research biologists, and approximately 15 seasonal employees. A Regional Finfish Management Biologist and a Regional Finfish Research Biologist oversee these operations. Biologists and technicians from the Division of Sport Fish, Alaska State Parks, U.S. Fish and Wildlife Service (Kodiak National Wildlife Refuge), and KRAA aid in the collection of data during the salmon fishing season.

Preseason Forecasts

Preseason salmon forecasts are developed jointly by ADF&G management and research biologists. Pink salmon returns to the KMA are predicted by broad geographic area, while individual forecasts are made for major sockeye salmon stocks (Geiger and McNair 2001). Projected harvests are estimated by fishery and geographic area (Table 6). These include forecasts and harvest estimates for supplemental and enhanced salmon production from stocking projects conducted by ADF&G and KRAA (Table 7).

System specific salmon forecasts are developed for six major sockeye stocks including Karluk (early and late), Ayakulik, Frazer, and Upper Station (early and late) runs. These forecasts are based primarily on simple linear regression models employing recent brood year sibling relationships for all major age classes. Forecasts for minor systems are based on previous escapements and relative return analysis. Forecasts for supplemental sockeye production (e.g., Spiridon) are based on previous fry, presmolt, and smolt releases and the subsequent returns and the number and condition of recent stockings.

Previous forecasts for KMA wild pink salmon production used preemergent salmon fry overwinter survival data in regression analyses. Budget reductions eliminated preemergent fry sampling. As a consequence, the preseason forecast for total return of wild stock pink salmon is made by qualitative methods, using spawner-recruit models (past escapement and subsequent return data) and environmental conditions.

The 2001 wild pink salmon forecast was based on selecting one of five different harvest magnitude categories. These categories were delimited by melding harvest quintiles with forecast categories used by management biologists to determine initial fishing periods.

Harvest Category	Range (millions)
Very Weak	Less than 3
Weak	3 to 6
Average	6 to 10
Strong	10 to 14
Excellent	Greater than 14

The forecast for the 2001 Kitoi Bay Hatchery pink salmon return was developed using survival rates from brood years 1979 to present. Range estimates were calculated by using the average survival rate of the three lowest and three highest returns, plus a qualitative assessment of the condition of pink fry upon release.

The KMA pink salmon forecasts must be reliable in projecting extremes for major systems and total production. The pink salmon forecast assists fishery managers in making preseason decisions concerning fishing time and areas open to fishing, especially during the early portion of the pink salmon run.

Formal forecasts are not prepared for wild stock chinook, coho, or chum salmon. Potential harvest is estimated by the Area Management Biologist based on previous escapements and observed escapement/return relationships. The 2001 Kitoi Bay Hatchery chum and coho salmon forecasts were also developed using survival rates from past releases.

Regulatory Management Plans

Guiding the KMA salmon fishery are BOF approved management plans (MP) that the ADF&G management staff must follow when structuring commercial salmon fisheries (ADF&G 1999). There are 10 management plans that direct management activity for specific portions of the KMA (Table 8). Every section within the KMA is covered by a season-long regulatory management plan. These MPs are part of the Kodiak Area Commercial Salmon Fishery Regulations. They describe biological and allocative constraints, which reflect traditional fishing opportunities and the resulting harvest allocations between and within gear types participating in specific fisheries. Proper implementation of these plans requires a major effort in communication between ADF&G and processing industry personnel. Normally, the intent of these plans is to provide for the harvest of the majority of salmon in traditional fisheries located in management units covered by the plans.

Six plans establish the harvest strategies that have developed over time to maintain the biological integrity of local salmon stocks and the allocative concerns of local KMA fishers. These plans include the Alitak Bay District Salmon MP, the Westside Kodiak MP, the Eastside Afognak MP, the Eastside Kodiak Salmon MP, the North Afognak / Shuyak Island Salmon MP, and the Mainland District Salmon MP. These plans specify which species throughout the season affect fisheries in specific sections. The plans, when originally adopted into regulation, recognized a

historical chronology of management actions and fishing patterns. All 52 sections of the KMA are covered under one of these six, season long, regulatory plans (Figure 4).

The Cape Igvak Salmon MP and the North Shelikof Strait Sockeye Salmon MP affect Kodiak purse seine fishers and their opportunity to target salmon migrating through the KMA to spawning systems in the Chignik and Cook Inlet Management Areas. The Crescent Lake Coho Salmon MP and the Spiridon Lake Sockeye Salmon MP allocate stocked salmon from put-and-take fisheries developed by the ADF&G and the KRAA.

Cape Igvak Salmon Management Plan (5AAC 18.360). Beginning in 1964 a purse seine fishery developed along the capes in the southern portion of the Mainland District near Wide Bay, in what is now the Cape Igvak Section (statistical areas 26275-26290; Appendix A.6). Tagging studies and stock identification studies using average weight and age composition conducted in 1968 and 1969 concluded that up to 80 percent of the sockeye salmon harvested in the Cape Igvak Section were of Chignik origin (Simon et al. 1969).

The issue of interception of Chignik-bound sockeye salmon in the Cape Igvak Section came before the BOF several times in the 1970s, and management of this section was modified many times. From 1974 through 1978 this area was managed for "day-for-day" equal fishing time with Chignik. In 1978 a specific management plan for the Cape Igvak Section was adopted by the BOF.

The Cape Igvak Salmon Management Plan covers the time period from June 5 through July 25 for fishing activity in the Cape Igvak Section of the Mainland District. This management plan stipulates that 80% of the sockeye salmon harvest from the Cape Igvak Section during the June 5 to July 25 period will be considered Chignik bound, and allows the KMA fleet to harvest as near as possible 15% of the Chignik-bound sockeye salmon harvest[5]. The plan also stipulates strict allocative and biological requirements that must be met in the Chignik Management Area (CMA) prior to any fisheries occurring in the Cape Igvak Section.

There are two distinct runs of sockeye salmon to the Chignik river system. First-run sockeye salmon returns, bound for Black Lake, predominate in June; second-run sockeye salmon returns, bound for Chignik Lake, predominate in July and early August. Because of difficulty in evaluating the strength of the second run, the management plan states that commercial fishing will be restricted or disallowed in the Cape Igvak Section from approximately June 26 to July 9.

Since this plan was adopted in 1978, the catch of Chignik-bound sockeye salmon from the Cape Igvak Section has ranged from 0% to 15.9% of the total Chignik sockeye salmon harvest and has averaged 12.2 %, of the total Chignik sockeye salmon harvest (Brennan 2001). The Cape Igvak harvest has met or exceeded the 15% allocation level only 4 times (1983, 1987, 1993, and 1999).

A separate report to the BOF has been prepared to describe this management plan and the Cape Igvak fishery (Brennan 2001).

[5] Chignik-bound sockeye salmon are also harvested in the Southeastern District Mainland of the Alaska Peninsula Management Area, in accordance with the regulatory Southeastern District Mainland Salmon Management Plan, 5 AAC 09.360.

Alitak Bay District Salmon Management Plan (5AAC 18.361). The salmon fisheries of the Alitak Bay area are some of the longest operating in the KMA. Sockeye salmon bound for Upper Station (Olga Lakes) were targeted as early as 1882, and the first cannery was built in this area in 1889 with others soon following (Roppel 1986). As competition for the salmon resources of the area increased, sockeye salmon stocks declined. Pink salmon made up a substantial portion of the harvest from this district after 1924. With statehood came greater control over the fishery, and ADF&G was given the duty to conserve and rebuild salmon stocks. Sockeye salmon were introduced into the previously barren Frazer Lake beginning in 1951. This introduction was very successful, and since the early 1970s the Frazer system has had a self-sustaining sockeye salmon run.

The Alitak Bay District fishery is unique in the KMA, because set gillnet and seine gear can fish in this district but are segregated in different sections. Set gillnets are allowed only in the inside waters of the Moser-Olga Bay Section, while seine gear is limited to the outer waters of the Cape Alitak and Humpy-Deadman Sections (Appendix A.4). Prior to the mid 1980s various strategies were applied in the Alitak Bay District to conserve and build the sockeye salmon stocks returning to the Frazer, Akalura, and the Upper Station systems, while offering some protection to local pink, chum, and coho salmon stocks. In 1987 the existing harvest strategy was formalized into a regulatory management plan and was adopted by the BOF. This plan details the key species and targeted stocks that are managed for in each section of the district throughout the fishing season. The stated intent of this plan is that salmon be harvested in the "traditional" fisheries located in the Cape Alitak, Humpy-Deadman, and Moser-Olga Bay Sections (ADF&G 1999).

A separate report to the BOF has been prepared to describe this management plan and the Alitak Bay District fishery (Wadle and Brennan 2001).

Westside Kodiak Management Plan (5AAC 18.362). Commercial salmon fisheries along the westside of Kodiak Island are the longest operating in Alaska (Roppel 1986). Sockeye salmon returning to the Karluk River drew processors and fishers to Kodiak soon after the Alaska territory was transferred from the Russians in 1867. The Karluk system is said to have produced more sockeye salmon for its size than any other system in the world. In 1889 the catch at the mouth of this river totaled 3.5 million sockeye salmon. In 1896 the first catches from other westside Kodiak streams were documented, with sockeye salmon being landed from the Uganik, Little, and Ayakulik Rivers.

With increased fishing pressure, Kodiak sockeye salmon stocks declined. Fisheries spread along the westside to target migrating mixed sockeye, pink, chum, and coho salmon stocks. Fish traps were heavily used and accounted for the majority of the harvest. There was much controversy concerning the use of cannery owned fish traps, due to allocative concerns of independent fishermen and biological concerns of management biologists. Traps were outlawed by the State of Alaska in 1959, and seine and gillnet gear competed for the available salmon resources. Gear specific fishing areas, closed water sanctuaries, and complex stock-specific harvest strategies developed to ease allocative conflicts and to aid in rebuilding depressed sockeye salmon stocks.

Management of westside Kodiak fisheries is very complex due to the mixing of various local salmon stocks during inshore migration. Many tagging studies were done along Kodiak Island's westside to help discern migratory pathways and timing of the westside salmon stocks, as well as salmon moving to the Alitak Bay District. Both set gillnet and seine gear are legal in part of the westside (the Central Section), and occasional allocative disputes arose. Harvest strategies evolved

until 1990, when a specific management plan governing fisheries along the westside of Kodiak and southwest Afognak was adopted into regulation by the BOF. It was hoped that placing a management plan in regulation would clarify the management strategy to maintain the biological integrity of local salmon stocks and the allocative concerns of local fishers.

The intent of the Westside Kodiak Management Plan is to harvest salmon bound to local systems in "traditional" fisheries located in the westside sections (Appendix B.1). This plan is effective for the entire salmon season, and covers the Southwest Kodiak and Northwest Kodiak Districts, and the Southwest Afognak Section of the Afognak District (Appendix A.1 – A.4). This management plan guides early and late-run sockeye salmon fisheries, including the major systems of Ayakulik and Karluk, and the minor systems of Little River, Uganik, and Malina (Appendix B.2).

The Westside Kodiak Management Plan states that westside management units will be managed in June as mixed stock sockeye salmon fisheries on sockeye salmon bound for Alitak, Ayakulik, Karluk, and local minor systems. The plan also guides local pink, chum, and coho salmon fisheries of the Southwest Afognak Section and the Northwest and Southwest Kodiak Districts. These fisheries take place from early July through early October.

Harvest statistics from management units covered by this plan can be found in Appendices B.3 through B.6.

North Shelikof Strait Sockeye Salmon Management Plan (5AAC 18.363.). In 1988 there was a significant harvest of large (greater than 6 pound) sockeye salmon in management units bordering the northern portion of Shelikof Strait (Figure 1; Appendices A.2 and A.6.). Analysis of average weights, salmon ages (determined from scale analysis), review of past tagging studies, and estimates of migratory timing, led to the determination that the majority of these sockeye salmon were bound for Cook Inlet (Barrett 1989). Though the Cook Inlet sockeye salmon run was at record level, the BOF felt that this was an expanding, nontraditional harvest pattern. In 1990 the North Shelikof Strait Sockeye Salmon Management Plan was adopted into regulation (Appendices C.1 and C.2).

This plan limits purse seine fishing opportunities in those sections of the Kodiak Area that border the north Shelikof Strait in those waters of Shelikof Strait from Dakavak Bay to Cape Douglas in the Mainland District and from Raspberry Cape to Shuyak Island in the Afognak District. The plan covers the time period from July 6 through July 25 and defines two management units:

- The Southwest Afognak unit (comprised of the entire Southwest Afognak Section); and,
- The North Shelikof unit (comprised of the Dakavak Bay, Outer Kukak Bay, Hallo Bay, and Big River Sections of the Mainland District and the Shuyak Island and Northwest Afognak Sections of the Afognak District).

'Seaward Zones' are established in each management unit, encompassing of all waters seaward of a baseline drawn from cape to cape[6].

[6] In 1993 the Seaward Zone boundary of the Southwest Afognak unit was modified by the Alaska Board of Fisheries. The Seaward Zone boundary was moved 1/2 mile offshore of the baseline running cape to cape, in order to allow for traditional harvest opportunities of pink salmon.

The North Shelikof Strait Sockeye Salmon Management Plan establishes two specific sockeye salmon harvest 'triggers' for these management units, to protect Cook Inlet-bound sockeye salmon that migrate through the Shelikof Strait. If the sockeye salmon harvest within either of these units reaches an established level then commercial fishing opportunities within that unit are severely restricted:

- The Seaward Zone of the Southwest Afognak unit will close to fishing if 50,000 sockeye salmon are harvested between July 6 through July 25.
- The Seaward Zone of the North Shelikof unit will close to fishing if 15,000 sockeye salmon are harvested between July 6 through July 25.

If a Seaward Zone closure occurs, only the inshore 'Shoreward Zone' (all waters inside the baseline) may remain open to commercial fishing during normal fishing periods.

Permit holders who intend to fish in management units covered by this plan are advised that in-period closures of the Seaward Zones might occur. To monitor the salmon harvest, ADF&G management staff in Kodiak contact salmon processors several times daily for catch reports and the department's vessel, the R/V K-Hi-C, patrols the North Shelikof and Southwest Afognak management units. To provide for orderly in-period closures, such closures are announced on single side band radio channel 4125 MHz and VHF 6 at specific times (8:00 AM, 10:00 AM, 2:00 PM, or 6:00 PM daily) with the effective closure time occurring in as little as three hours following the initial announcement.

Length and timing of commercial salmon fishing periods in the areas covered by this plan during July are based on the Kodiak pink and chum salmon harvest strategy. These areas have traditionally been opened during this time to allow for the harvest of bright, high quality pink and chum salmon migrating down the Shelikof Strait towards the major spawning systems of the west and south sides of Kodiak, or to local systems of Afognak and the Alaska Peninsula. Weekly fishing periods are scheduled preseason based on the forecasted return strength of pink salmon.

In the twelve years this plan has been in effect, seaward zone closures occurred in the Southwest Afognak Unit in 1992 and 1993, and seaward zone closures occurred in the North Shelikof Unit in 1990, 1992 through 1999, and 2001. Harvest statistics from fisheries in the management units covered by this plan can be found in Appendices C.3 through C.5.

Eastside Afognak Management Plan (5AAC 18.365). The commercial fisheries conducted along the eastside of the Afognak District (Appendix A.2) are unique in the KMA. The Kitoi Bay Hatchery on the eastside of Afognak Island produces significant returns of pink, chum, and coho salmon (Figure 2). In 1992 the BOF approved the Eastside Afognak Management Plan to govern the fisheries in the vicinity of the hatchery (Appendices D.1 and D.2). This plan details the key species and targeted stocks that are managed in each of these sections throughout the fishing season. Although occasionally modified, the plan has essentially been in effect since 1981, and was formulated jointly by KMA commercial fishery managers and the Kitoi Bay Hatchery manager. It is the goal of this plan to achieve escapement and harvest objectives for salmon stocks of the Southeast Afognak, Duck Bay, Izhut Bay, and Kitoi Bay Sections, and assure broodstock for the hatchery. The BOF intended that local stocks and hatchery fish be harvested within these sections (ADF&G 1999). Modifications made to the plan in 1999 included a management plan for the Raspberry Strait Section and an adjustment of the time periods for management of hatchery stocks.

The fisheries associated with the Kitoi Bay Hatchery mainly target pink salmon; however, the hatchery also produces early chum and sockeye salmon, and late returns of sockeye and coho salmon (McCullough and Aro 2001). The management unit closest to the hatchery, the Kitoi Bay Section, is normally closed to allow buildup and collection of fish for hatchery broodstock. The initial openings in July for pink salmon fisheries around Kitoi are scheduled to coincide with general KMA pink salmon fisheries. Early July fisheries may be allowed if broodstock requirements are met for early chum and sockeye salmon, and fisheries may be limited from late July to late August until pink salmon broodstock requirements are met.

Within the Southeast Afognak Section, the Afognak Lake system produces significant runs of wild sockeye, pink, and coho salmon. This system has been fertilized yearly, and has had sockeye salmon juveniles planted in the lake (Schrof et al. 2000). The Eastside Afognak Management Plan also guides local sockeye, pink, chum, and coho salmon fisheries of the Southeast Afognak Section, which take place from early June through early October (Appendices D.1 and D.2).

Harvest statistics from management units covered by this plan can be found in Appendices D.3 and D.4.

Eastside Kodiak Salmon Management Plan (5AAC 18.367). The streams of the eastside of Kodiak Island support sockeye, pink, chum, and coho salmon runs. Additionally, mixed stocks of salmon, moving toward their natal streams after feeding in the Gulf of Alaska and North Pacific, pass along the east side of the Kodiak Island Archipelago. Salmon fisheries along Kodiak Island's east side are likely as old as human habitation. Many native villages and the first Russian settlements were located on the eastside of Kodiak Island, and the City of Kodiak and the village of Old Harbor remain. Since the early 1970s commercial salmon fisheries of the area followed a framework developed by fishery managers, with the eastside Kodiak harvest strategy remaining basically unchanged after the mid 1980s. In November 1995 the BOF put the Eastside Kodiak Salmon Management Plan into regulation, governing the commercial salmon fisheries of the Eastside Kodiak and Northeast Kodiak Districts (Figure 4; Appendix A.5). The goal of this plan is to achieve escapement and harvest objectives for sockeye, pink, chum, and coho salmon returning to spawning systems located in the Northeast Kodiak and Eastside Kodiak Districts (ADF&G 1999; Appendices E.1 and E.2). This plan details the key species and, targeted stocks that are managed for in each of these sections throughout the fishing season.

Several minor sockeye salmon systems are located within the area covered by this plan. Significant sockeye salmon runs return to the Buskin Lake system (within the Northeast Kodiak District near the City of Kodiak) and the Saltery Lake system (within the Inner Ugak Section of the Eastside Kodiak District connected to the City of Kodiak by an unmaintained road). The Buskin sockeye run is normally fully utilized by subsistence and sport fisheries, with no directed commercial fisheries. The Saltery sockeye run is targeted by commercial fisheries and this management plan specifies the time and area in which commercial fisheries may operate. The Saltery Lake system has experienced a large increase in sport fishing. Both these systems are weired for accurate escapement enumeration.

Harvest statistics from management units covered by this plan can be found in Appendix E.3.

North Afognak/Shuyak Island Salmon Management Plan (5AAC 18.368). The salmon fisheries of the north end of the Kodiak Archipelago (Appendix A.2) have unique characteristics. In Perenosa Bay (statistical areas 25182 and 25183) several systems have been the site of salmon

enhancement and rehabilitation work for many years (Schrof et al. 2000). Sockeye salmon were stocked into the Pauls and Laura Lake system and the Portage Lake system beginning in the 1950s. Fish passes were built at both systems to allow salmon to move further up stream, increasing spawning area and subsequent returns. The Little Waterfall system has recently been the site of extensive enhancement work (statistical area 25184), with fish pass remodeling and stocking, with the intent of increasing pink, sockeye, and coho salmon returns (Honnold 1999). Hidden Lake in the Northwest Afognak Section (statistical area 25140) has also been the site of coho and sockeye salmon stocking. Much of Shuyak Island and portions of north Afognak Island is a State of Alaska Park and the myriad deep bays, lagoons, small streams, and lakes support early, strong coho salmon runs. North Afognak and Shuyak Island fisheries have been important to local Kodiak salmon seine fishers (this is a seine-only area), though there has been an increasing interest in these fisheries by sport and commercial users (Brennan et al. 2001).

In November 1995 the BOF put into regulation the North Afognak/Shuyak Island Salmon Management Plan, governing all commercial salmon fisheries on the north end of the Kodiak Archipelago (the Northwest Afognak and Shuyak Island Sections are also managed based on the North Shelikof Strait Sockeye Salmon Management Plan from July 6 to 25). Though no comprehensive regulatory management plan was in effect prior to 1995, the commercial fisheries of the area had followed a framework developed by fishery managers beginning in the early 1970s, with the harvest strategy remaining basically unchanged after 1987. The goal of this plan is to achieve escapement and harvest objectives for sockeye, pink, and coho salmon returning to spawning systems located in the Northeast Afognak, Perenosa Bay, Shuyak Island, and Northwest Afognak Sections of the Afognak District (ADF&G 1999). This plan details the key species and targeted stocks that are managed in each of these sections throughout the fishing season.

As mentioned, within the Perenosa Section the Pauls Lake and Portage Lake systems produce significant runs of sockeye and coho salmon, and the Little Waterfall system is stocked with sockeye salmon. The Pauls and Portage systems are weired for accurate escapement enumeration. ADF&G and State Park personnel cooperatively operate small weirs on two Shuyak systems to enumerate coho salmon escapement. Dense forest cover limits aerial surveys, so escapement counts through these weirs are used as indicators of escapement to the small salmon streams of the North Afognak/Shuyak area.

This plan also provides for two put-and-take salmon fisheries for enhancement project sockeye salmon. Fishing time may be allowed to harvest enhanced sockeye salmon bound for the Hidden Lake system, but only in the Foul Bay Terminal Harvest Area (5 AAC 18.375). Similarly, the Waterfall Bay Terminal Harvest Area (5 AAC 18.376) is used to harvest enhanced sockeye salmon bound for the Little Waterfall system.

A separate report has been prepared for the BOF to describe the management of the North Afognak/Shuyak Island areas, with emphasis on the Perenosa Bay Section and related fisheries (Brennan et al. 2001).

Mainland District Salmon Management Plan (5AAC 18.369). The streams of the Alaska Peninsula portion of the Kodiak Management Area, in the Mainland District (Appendix A.6), support significant pink, chum, and coho salmon runs, and several minor sockeye salmon runs. Additionally, mixed stocks of salmon, moving toward their natal streams after feeding in the Gulf of Alaska and North Pacific, pass through the Shelikof Strait and may move into Mainland District waters. Several villages once existed in this district but have been uninhabited for decades.

Commercial salmon fisheries have occurred in what is now the Mainland District since before statehood. Previous BOF action placed into regulation specific allocation plans for non local sockeye salmon that migrate through portions of the Mainland District (the Cape Igvak and North Shelikof Strait Salmon Management Plans). In 1999 the general management framework for the Mainland, developed and used by fishery managers since the 1980s, was adopted by the BOF as the Mainland District Salmon Management Plan (Appendices F.1 and F.2). The goal of this plan is to achieve escapement and harvest objectives for sockeye, pink, chum, and coho salmon returning to spawning systems located in the Mainland District (ADF&G 1999). This plan details the key species and, targeted stocks that are managed for in each of these sections throughout the fishing season (Appendix F.1). It also recognizes that the Cape Igvak Salmon Management Plan is in effect from June 5 through July 25 and the North Shelikof Strait Sockeye Salmon Management Plan is in effect from July 6 through 25.

Harvest statistics from management units covered by this plan can be found in Appendix F.3.

Spiridon Lake Sockeye Salmon Management Plan (5AAC 18.366). Within the Northwest Kodiak District, sockeye salmon fry have been stocked into Spiridon Lake (Figure 2; Appendix A.3) since 1990, with the first returns evident in 1993 (about 4,000 fish; Schrof et al. 2000). The return of adult salmon to the lake is prevented by a large set of barrier falls in the river. There is no suitable spawning habitat for sockeye salmon in Telrod Creek, the creek into which Spiridon Lake drains. The Spiridon Lake salmon stocking is a put-and-take project, with the intent of harvesting returning sockeye salmon in the traditional commercial fishing areas of the Northwest Kodiak District (ADF&G 1999). The BOF adopted the Spiridon Lake Sockeye Salmon Management Plan in January of 1993. This plan provides for a THA and a strategy to harvest sockeye salmon that may escape westside Kodiak fisheries and return to the river mouth. Modifications were made by the BOF in 1995, including the reduction of the size of the THA to include only those waters in Telrod Cove. The Spiridon Lake Sockeye Salmon Management Plan provides for the full utilization of sockeye salmon returns from the Spiridon Lake enhancement project, while providing adequate protection to local wild stocks of Spiridon Bay.

Sockeye salmon stocked into Spiridon Lake were from the late-run Upper Station (Olga Lakes) stock from 1990 through 1994 and in 1996 and 1997, and from Saltery Lake stock from 1998 through 2001 (Honnold and Schrof 2001). The timing of the run has coincided with the pink salmon and late sockeye salmon fisheries in the Northwest Kodiak District, with peak harvest timing expected to be mid August. However, the run timing is expected to be earlier, peaking in mid to late July, once only Saltery stock return, beginning in 2003. If there is a harvestable surplus within the THA, fishing periods are 24 hours per day, coordinated when possible with openings in the Northwest Kodiak District.

Harvest statistics from management units covered by this plan can be found in Appendix G.1 and G.2.

Crescent Lake Coho Salmon Management Plan (5AAC 18.364). This plan, as adopted by the BOF in 1990, deals with the subsistence, sport, and commercial harvest of coho salmon stocked into Crescent Lake, near the city of Port Lions (Figure 2). Coho salmon juveniles were first stocked into this lake in 1988 by ADF&G, to increase sport and subsistence fishing opportunities. Since returning coho salmon can't get above a barrier fall in Crescent Creek, this is intended as a put-and-take fishery, with all returning salmon to be harvested. This plan provides for subsistence and sport fisheries and allows commercial fisheries only on coho salmon surplus to those needs. Commercial

fishing may be allowed in the area of Crescent Creek in Settler Cove between the Causeway and the normal closed water boundary at the end of the Port Lions breakwater. This management plan covers the time period of July 15 to October 31. Commercial fishing is permissible only after September 10, and then only if there are 500 or more coho salmon in this area available for harvest.

Commercial Salmon Harvest Strategy

By regulation, the commercial salmon fishing season in the KMA may extend from June 5 through October 31 (ADF&G 1999). Inseason management activities focus around daily evaluations of actual run strength in comparison to preseason expectations (forecasts) by species. Commercial salmon fisheries may be allowed if there appears to be salmon surplus to escapement needs.

Salmon run timing by species within the KMA follows a general chronology (Figure 5). Commercial fisheries management is based on the run timing of the four targeted salmon species. Early-run sockeye salmon are targeted from June through mid July, and late-run sockeye salmon from mid July through September. Pink and chum salmon are available from July through August. Coho salmon are generally present from August through October. Commercial salmon fisheries are structured around the seasonal abundance of salmon. The management chronology can be used as a guide; inseason adjustment in fishing time and areas open to fishing is dictated by escapement requirements for the targeted salmon species.

Providing a preseason plan within which to structure fisheries is essential to the prosecution of orderly fisheries. Inseason management actions follow a plan described in an annual harvest strategy (Brennan et al. 2001). The harvest strategy emphasizes three criteria:

(1) Promote maximum production opportunities for future KMA salmon returns by ensuring salmon escapements of sufficient magnitude and distribution;

(2) Provide for orderly fisheries while maximizing harvest opportunities on the highest quality salmon;

(3) Adhere to the biological and allocative requirements of all BOF adopted Management Plans for the KMA.

This strategy recognizes a specific chronology of management actions related to run timing by species. The earliest opening dates for salmon fisheries are listed (Table 9), along with projections of run strength (Table 6 and 7). Also included in this annual harvest strategy are descriptions of the BOF approved regulatory management plans and how they will guide inseason management actions.

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

Switching to EO openings was a monumental step in allowing for orderly inseason adjustments of fishing time based on observed run strength. This, along with the refinement of escapement based management, was a key factor in leading to the success of the Kodiak salmon management program. Another basic element of current management is, whenever possible, to coordinate

specific fisheries to occur simultaneously (Figure 6). This provides for less concentrated fishing conditions, which in turn lessen the potential for gear and allocative conflicts.

The majority of KMA commercial salmon fisheries are dependent on specific escapement requirements being assured or are based on meeting allocative requirements specified in a regulatory management plan. There are four instances when fishing time may be set preseason:

(1) Two very limited (33 hour) commercial test fisheries in June for the Alitak Bay and westside Kodiak Districts;

(2) Two very limited (33 hour) fishing periods in June for selected minor sockeye salmon runs;

(3) Terminal Harvest Area fisheries on enhanced salmon runs; and

(4) The initial weekly periods of the general pink salmon fishery, from July 6 through early August.

Historically, June 1 was the opening date for the Kodiak commercial salmon fishing season. However, years of poor management practices and overfishing resulted in very poor production from KMA early sockeye stocks, so the department and BOF severely restricted June fishing opportunities beginning in 1971. Through 1984 the earliest possible opening date was June 14.

As the KMA early sockeye runs rebounded, the department began developing a set of consistent harvest strategies for KMA fisheries. The harvest strategies assured salmon conservation and created management stability by maintaining the complex allocative schemes that had developed between the various user groups. These plans outlined the primary management species for each area over the entire season. A key component of these plans was the use of June 9 as the initial opening date. Fisheries managers felt that it would be imprudent to conduct commercial salmon fisheries prior to June 9. Earlier than that date there is not enough escapement information available to evaluate run strength. Also, prior to June 9, it was felt that salmon stocks would likely be extremely mixed and fisheries would be indiscriminate. Early sockeye and chinook salmon, and out migrating steelhead kelts *Oncorhynchus mykiss* would be vulnerable to overharvest. Since the mid 1980s, June 9 has been used as the opening date for the first commercial test fishery targeting major Karluk, Ayakulik, and Alitak sockeye stocks. The June 9 initial opening date is specified in the Westside Kodiak MP (Appendix B.1). June 9 had also been the earliest opening date for the Alitak Bay District, but a modification of the Alitak Bay District MP at the January 1999 BOF meeting specified that fishing may begin as early as June 5.

Management of all major and most minor sockeye salmon runs utilizes daily escapement information to regulate fishing time and areas open to fishing. Establishing fishing time for sockeye salmon based solely on preseason harvest forecasts is not an acceptable method of managing KMA's wild sockeye salmon stocks.

Pink salmon constitute the bulk of the KMA salmon harvest (Table 4). In addition to the three management criteria identified above, the KMA harvest strategy for pink salmon utilizes:

(1) A fixed opening date of July 6;

(2) A pink salmon forecasting program to set the length of the initial fishing periods; and

(3) Coordination of multiple fisheries whenever possible, to disperse the purse seine fleet.

In contrast to sockeye salmon management, the initial fishing periods for pink salmon are set preseason and are dependent on the magnitude of the forecasted pink salmon harvest. Based on the predicted strength of the pink salmon run, fixed weekly fishing periods are planned for July and early August. Since 1978, the fixed opening date for pink salmon fisheries in the KMA has been July 6. Weekly fishing periods are initially based on the preseason forecast. If surveys of the escapement and inseason catch reports indicate the run has come in weaker or stronger than predicted, then adjustments to the length of fishing periods can be announced. This harvest strategy has been a major factor in contributing to the successful management program for KMA's relatively large pink salmon runs. With the Kodiak Archipelago's deep, protected bays and abundant fresh water runoff, if fish are allowed to build up in terminal areas they quickly darken (they take on the spawning dark color and humped back). To provide the best quality pink salmon to the market, fisheries are structured to harvest pink salmon as they first migrate into the nearshore zones.

Adjustments in fishing time and areas open to fishing occur as the actual run strength becomes apparent, through assessment of escapement (aerial and skiff surveys, and weir counts) and harvest rates. An accurate assessment of run strength, which may result in modification of fishing periods, usually occurs after the third weekly period in July (after approximately July 25). Many of the BOF approved management plans recognize this pink salmon harvest strategy, and the July 6 general pink salmon opening date is listed in the Westside Kodiak MP, the North Shelikof Strait Sockeye Salmon MP, the Eastside Afognak MP, The Eastside Kodiak MP, the Mainland MP and the North Afognak / Shuyak Island Salmon MP.

Chum and coho salmon management requires a blend of these two approaches. Both species are initially harvested in directed pink or sockeye salmon fisheries. Terminal or near-terminal fisheries targeting chum or coho salmon require an assessment of actual run strength through escapement estimation and current harvest information.
Specific fisheries are not directed toward chinook salmon. Minor harvests of chinook salmon occur during fisheries that are directed toward sockeye and/or pink salmon.

Escapement Estimation

The majority of KMA sockeye salmon and all chinook salmon escapement counts are obtained with the use of fish weirs. Weirs are used up to 15 different spawning systems (Table 10, Figure 2). In the KMA escapement numbers are hand tallied by species through fish weirs; sonar, video, or timed periodic counts are not used. Escapement gates within the weir are closed when ADF&G personnel are not present to count. Escapement counts are transmitted daily from fish counting camps to the Kodiak ADF&G office by single side band radio. The timely and accurate data from weir camps allow for precise stock specific management. All four major sockeye salmon systems and several of the minor sockeye salmon systems are monitored by seasonal ADF&G workers at fish weirs. The timely and accurate data from weir camps allows for a more precise stock specific management.

The remainder of the KMA sockeye salmon systems are monitored by aerial observation using small fixed-wing aircraft. Most pink, chum, and coho salmon estimates of buildup and escapement counts are collected from fixed-wing aircraft surveys of bays and streams. Foot surveys are also used on a few streams. Aerial and foot survey counts are considered an index of the actual escapement, for use inseason to aid fishery management. A "peak indexed escapement" estimate is

calculated postseason for all systems surveyed and, together with weir escapement data, an area wide escapement estimate is made (Table 11)[7].

Prosecuting and Monitoring Commercial Fisheries

Prior to the mid 1970s, fishing periods were set by regulation and any inseason changes, such as closures, were announced by emergency orders (EO). Since the mid 1970s actual fishing time has been regulated through the use of EO and news releases (NR) that announce specific details of when and which areas will open to fishing. With analysis of all available data, the KMA management biologist writes an EO that describes details for upcoming or continued commercial salmon fishing periods. The EO describes the starting date, time, and duration of the fishery along with the geographical areas (Districts, Sections, or subsections) that are to be opened or closed to fishing, and in effect creates a new regulation. A NR is then issued that publicly announces the fishery. Over 40 EOs may be released in a season, describing hundreds of individual management actions affecting the fisheries within KMA sections (Figure 6; Appendix H.1).

The ADF&G management staff's inseason duties include daily contact with all salmon buyers to obtain current harvest information by area and species. Also, staff has daily contact with fishermen to discuss run strength and distribution along with obtaining feedback concerning inseason management activities. As the season progresses, copies of fish tickets (harvest report for an individual landing) are collected from processors and tenders, and this information is entered into a computer database. Inseason, fish ticket summaries are made and compared to previous verbal reports to refine the catch estimate to date.

Additional inseason information on returning sockeye salmon run strength in the Alitak Bay District (the Frazer and Olga Lake stocks) is obtained from an ADF&G test fishery in Olga Narrows (Sagalkin and Swanton 2000). A 50 fathom gillnet is fished each day for a set time in a set location. Results are compared with past data on test fishery catches versus actual salmon runs, to help predict the number of salmon passing through Olga Narrows.

Subsistence Salmon Fishery

Subsistence salmon permits, available only to Alaska residents, are issued annually to obtain harvest data. Subsistence fishers are requested to return their permits to ADF&G after the salmon season, listing areas fished by date and salmon harvest by species. Since 1989 Kodiak salmon management staff have mailed out permits, regulations, and a map showing closed water areas to eligible residents. Additional permits are issued at the Kodiak ADF&G office. Beginning in 2001, CF and Division of Subsistence began a program seeking to collect better subsistence harvest information from village residents. Individuals within village government or corporations were

[7] Peak indexed escapement for sockeye, chum, and coho salmon is simply the highest daily aerial or foot survey count for each system for each year. For pink salmon, peak indexed escapement of each stream surveyed is estimated as the larger of either the highest daily survey count or the sum of two counts which are 30 or more days apart. This is done to compensate for the longer stream life of pink salmon. Expansion of aerial or foot survey counts to estimate total run strength can be accomplished by various methods, and may be done postseason by research staff. All escapement values in past Annual Management Reports are total counts from weirs plus peak index counts, and this document follows that method.

trained in the issuance and collection of subsistence permits. Division of Subsistence also collected past information and entered it into a statewide database.

With few restrictions, the entire KMA is open to subsistence salmon fishing. Only the freshwater systems of Afognak Island (which are relatively small, easily accessible and at risk of overexploitation) and some areas near heavily exploited salmon systems are closed to subsistence fishing for salmon (ADF&G 2001).

Reported harvests have averaged 32,100 fish for the 10-year period 1991 through 2000 (Table 12). Sockeye salmon accounting for the majority of the harvest (73.3%) followed by coho salmon (20.1%). The most utilized subsistence fishery areas include the north end of Kodiak Island and the southeast side of Afognak Island.

Salmon Sport Fishery

Since the early 1980s recreational and commercial sport fishing activities have increased, particularly in remote areas of the KMA. Commercial sport activity includes lodge operations, charter vessels, guiding, and directed air charter flights. Many charter boat operations are based out of the city of Kodiak, and the number of charter boat operations has been increasing. Remote lodges are currently being operated at Karluk Lagoon, Ayakulik River mouth, Olga Bay, Larsen Bay, Old Harbor, Saltery Lake, Port Lions, Port Bailey, Raspberry Strait, Seal Bay, Port Williams, Zachar Bay, Uyak Bay, Ugak Bay, Uganik Bay, and Kukak Bay. Floating cabins are located in Karluk Lagoon and Paramanof Bay. Air charter operations from Kodiak and Homer bring sport fishers to KMA streams, as do aircraft from sport fishing lodges in Bristol Bay, the Alaska Peninsula, and the Kenai Peninsula. Fly-in sport fishing areas include virtually all KMA chinook salmon and sockeye salmon systems, and most major coho salmon systems.

The ADF&G Division of Sport Fish (SF) manages sport fishing activities. The Kodiak SF staff also regularly conducts creel surveys, especially during the popular chinook salmon sport fisheries on the Ayakulik and Karluk Rivers. Additionally, sport fishing charter boat operators working in the Kodiak Area are required to fill out logbooks, which are then turned into and analyzed by Kodiak SF staff. Unfortunately, there is no logbook requirement for air charters or lodges that may fly clients in to the Kodiak Area to sport fish. Statewide, Alaska sport fishery salmon harvests are estimated by an annual SF statewide mail-out survey. The sport fish harvest statistics are compiled by sport fish regulatory area, which do not correspond to commercial fishery area boundaries. Kodiak Archipelago sport fishery statistics are compiled, but the fisheries that occur in the Mainland District are combined with north and south Alaska Peninsula and Aleutian Island area statistics. Only Kodiak Archipelago sport fish statistics are given in this report.

The most popular sport fishery, based on angler effort, is the fresh and marine water fishery adjacent to the Kodiak road system. An increase in effort and harvest of chinook salmon has occurred at both the Karluk and Ayakulik Rivers, and since 1992 a chinook salmon troll sport fishery has developed in Chiniak Bay (Schwarz and Clapsadl 2000).

The 2001 sport fishing statistics are not currently available, so the following summary figures are only current to 2000. The estimated 2000 Kodiak Archipelago sport harvest[8] was 9,629 chinook,

[8] This represents estimates of fish landed and kept, and does not include estimates of catch and release.

16,972 sockeye, 30,975 coho, 10,599 pink, and 955 chum salmon (Table 13). Based on recent averages, the Kodiak Archipelago sport harvest has increasing dramatically, with the 2000 harvest much greater (71.8%) than the previous 10-year average (1990-1999). Sport fish effort, as measured by angler days, has steadily increased in the Kodiak regulatory area (Howe et al. 1998).

Additional information on KMA sport fisheries is contained in a separate BOF report (Schwarz et al. *in press*)

SALMON STOCK STATUS

Chinook Salmon

The Kodiak area has two naturally occurring chinook salmon populations, in the Ayakulik and Karluk Rivers. A small introduced chinook salmon run in the Dog Salmon River is now self-sustaining. There are no directed commercial fisheries targeting these stocks and any commercial harvest occurs as bycatch in fisheries targeting sockeye and pink salmon. Sport fishing pressure on chinook salmon runs in the Ayakulik and Karluk Rivers is increasing, as commercial sport fish operators and recreational anglers continue to exploit fishing opportunities in the Kodiak area. In the Dog Salmon River sport fishing for chinook salmon is prohibited.

Chinook salmon have been introduced in other KMA systems. In the late 1970s chinook salmon eggs taken from the Chignik River were stocked into the Pasagshak River (Lake Rose Tead) to begin a chinook run accessible by road to Kodiak sport fishers. This run was not self-sustaining and has essentially disappeared (chinook salmon sport fishing remains closed in the Pasagshak River). Beginning in 1989 up to 100,000 chinook salmon smolts (from the Elmendorf Hatchery in Anchorage) were stocked into Island and Mission Lakes near the city of Kodiak, then into the Buskin River in 1995 and 1996. Chinook salmon produced by these projects, while not targeted, undoubtedly contributed in a small way to KMA commercial fishery harvests. A new chinook salmon stocking project is now underway, and annual stocking of Monashka Creek is expected to begin in 2002.

Kodiak wild chinook salmon stocks are considered healthy. Overall, minimum aggregate escapement requirements have been met annually since 1980, and have met or exceeded the upper end of the aggregate escapement range each year since 1987 (Tables 2 and 11; Figure 7). Escapement goals at the Karluk, Ayakulik, and Dog Salmon Rivers have met their individual escapement goals nearly every year (Table 14, Figure 8). In 2001 the chinook salmon escapements at the Ayakulik River were strong, with 13,929 passing the ADF&G weir. This is above the past 10-year average (1991-2000) of 12,955. The 2001 Karluk chinook run was very weak. It was unusual that one KMA chinook run was weak (Karluk) and the other strong (Ayakulik), as these runs have performed similarly in recent years. While there is no clear reason why the Karluk run was weak while the Ayakulik run was strong, there are definite factors that likely were not causal. Past escapements were of similar magnitude to those that produced large returns. Environmental conditions for spawning, rearing and outmigration were not unusually severe, and were no worse at the Karluk than the Ayakulik. It can be assumed that ocean conditions for these two chinook stocks were similar, though mixing and ocean migration patterns are not clearly known. There has been speculation that the Karluk chinook were harvested during commercial fisheries allowed in the terminal Inner Karluk Section during June, which were necessary because of unusually early and

strong Karluk sockeye salmon run (see below). However, the commercial harvest from the Inner Karluk Section from June 12 through July 9, 2001, included only 1,051 chinook (and 54,604 sockeye salmon; Appendix H.2).

Chinook salmon harvests have increased in the subsistence, sport, and commercial fisheries (Tables 4, 12, and 13; Figure 9). During the 2001 season the commercial harvest was 23,827, above the previous 10-year (1991-2000) average of 20,974. The reported subsistence harvests average only 275 chinook salmon annually (1991-2000; 2001 catch estimates are not yet available). The estimated average sport fish harvest has included 4,375 chinook annually (1991-2000; 2001 catch estimates are not yet available), though catches for 1999 (6,791) and 2000 (9,629) reveal a sharp increase.

Sockeye Salmon

There are 39 known sockeye salmon runs in the KMA. Large returns (greater than 500,000 fish) occur in four lake systems: Karluk, Ayakulik (Red Lake), Upper Station (Olga Lakes), and Frazer (Dog Salmon River) systems. The first three support naturally occurring runs, while the Frazer Lake sockeye salmon stock is a very successful introduced run. There is a large set of falls below Frazer Lake that blocks natural migration; this run is maintained through the use of a large fish ladder.

These systems provide approximately 85% of current KMA sockeye salmon production. Directed fisheries on these stocks are intense and require extensive management activities from June 5 through September 20. The Karluk and Upper Station systems have distinct early (May 25 through July 15) and late runs (July 16 through September 20). Frazer is primarily an early returning stock with most sockeye salmon entering fresh water by July 20. The Ayakulik sockeye run starts in June but has a more protracted run timing that continues into mid August (the late component is only significant when the Ayakulik run is very large). The overall escapement goals for these four major systems have been achieved annually since 1988.

Twelve sockeye salmon systems in the KMA have minor but significant runs. These include the Afognak, Uganik, Akalura, Saltery, Kaflia, Pauls, Buskin, Swikshak, Little, Malina, Thorsheim, and Perenosa systems. These systems annually account for approximately 5% to 10% of KMA's current sockeye salmon production. Escapement into each system is generally less than 60,000 sockeye salmon. Most of these systems support very limited commercial fisheries annually. The exception is the sockeye salmon run into Buskin Lake, which is not targeted by a commercial fishery. Buskin sockeye salmon are currently harvested in a subsistence fishery and, to a lesser degree, in a recreational sport fishery.

The remaining 23 systems are comparatively minor systems and are not usually exploited by directed commercial effort.

Commercial salmon harvest strategies have not limited sockeye salmon subsistence or sport fishing opportunities in the KMA. Both the Buskin and Barabara sockeye stocks receive substantial subsistence effort due to their proximity to communities. These two systems may be approaching maximum exploitation from subsistence effort alone. Sport fish interest in Barabara is low, while the Buskin is seeing increasing effort.

As mentioned previously, the KRPT established sockeye as the priority species for supplemental production. Currently, KRAA, in conjunction with ADF&G, is active in providing additional sockeye salmon production, both by introducing sockeye runs into previously unutilized lakes and by rehabilitating weak natural runs. In recent years the supplemental production of sockeye salmon has contributed up to 582,000 fish to the commercial harvest (Honnold and Schrof 2001).

Overall, KMA sockeye stocks are healthy. There has been a statewide decline in sockeye production, which may be associated with ocean rearing conditions (P. A. Nelson, Alaska Department of Fish and Game, Kodiak, personal communication, 2001). The lower aggregate escapement goal (1.28 million) for Kodiak sockeye salmon has been met or exceeded annually since 1984 (Tables 2 and 11; Figure 10). The 2001 sockeye escapement was estimated at 1,580,660 fish.

Sockeye salmon harvests have decreased in commercial fisheries, but increased in the subsistence and sport fisheries (Tables 4, 12, and 13; Figure 11). During the 2001 season the commercial harvest was 2,659,267 sockeye salmon, below the 10-year (1991-2000) average of 4,027,145 fish. The reported subsistence harvests average 23,564 sockeye salmon annually (1991-2000; 2001 catch estimates are not yet available). The estimated annual sport fish harvest has averaged 9,419 sockeye annually (1991-2000; 2001 catch estimates are not yet available), though catches for 2000 (16,972) were much higher than the average.

Pink Salmon

All salmon streams within the KMA support pink salmon runs. Pink salmon represent the foundation of Kodiak salmon production, and may constitute over 80% of the total annual harvest (Table 4). Primarily due to the cyclic production from Ayakulik and Karluk Rivers, KMA wild pink salmon runs are usually larger during the even numbered years. From 1989 to 1997 wild stock pink salmon odd-year production surpassed even-year production, but recent odd-year production has diminished[9]. In 1998 a new record for even-year pink salmon harvests was set (22,056,467).

Except for occasional local variations, KMA pink salmon stocks are considered very healthy. Pink salmon survival and subsequent returns are strongly influenced by environmental factors (Groot and Margolis 1991). Wild stock pink salmon production should remain above average as long as existing management strategies are retained (to ensure adequate escapement) and adverse environmental conditions do not persist. The long-term outlook for Kodiak's wild pink salmon stocks is very good. Escapement goals have been met or exceeded in each year since 1975 (Tables 2 and 11; Figure 12). The 2001 Kodiak wild pink salmon escapement was estimated to be 3,393,620 fish.

Pink salmon harvests have been at historically high levels in the commercial fisheries, but have decreased in the subsistence and sport fisheries (Tables 4, 12, and 13; Figure 13). During the 2001 season the commercial harvest was 19,567,163 pink salmon, below the past decade (1991-1999) odd-year average of approximately 23,285,634 fish (this average includes the two highest years on record, 1993 and 1995). The Kitoi Bay Hatchery contribution to the 2001 commercial catch was

[9] Kodiak odd year pink salmon production was generally greater than even year production prior to 1948. The mechanism which has led to switches in odd vs. even year dominance is not known.

very high, with a record 13,126,761 pink salmon harvested near the hatchery. The reported subsistence harvests average 1,416 pink salmon annually (1991-2000; 2001 catch estimates are not yet available). The estimated annual sport fish harvest has averaged 9,602 pink salmon annually (1991-2000; 2001 catch estimates are not yet available).

Chum Salmon

Chum salmon are present in at least 150 streams of the KMA. Kodiak chum salmon production has been variable, and has been slowly increasing after many years at low levels. Chum salmon management has received increasing emphasis. Increases in directed fishing on specific chum salmon stocks combined with efforts to harvest better quality fish (bright vs. dark fish) has required the development of more intensive chum salmon stock management strategies. The future status of this species is expected to be very good.

KMA chum salmon stocks are relatively healthy. In the Kodiak Area chum salmon may be the most difficult salmon for which to obtain consistent escapement estimates from year to year. This is mainly due to the variable survey conditions (visibility) due to the murky water of slough and side channels that chum may spawn in. In addition, chum salmon intermingle with pink salmon, and in years of large pink runs it is much more difficult to distinguish chum salmon. Escapement estimates have been above the lower aggregate escapement goal (273,000) each year since 1994, though the targeted escapement (550,000) has only been achieved in the last three years (Table 11, Figure 14). The 2001 KMA chum salmon escapement was estimated to be 557,925 fish.

Chum salmon harvests have been variable in the commercial fisheries, and remain at low levels in the subsistence and sport fisheries (Tables 4, 12, and 13; Figure 15). During the 2001 season the commercial harvest was 1,053,730 chum salmon, above the 10-year average (1991-1999) of 804,700 fish. The Kitoi Bay Hatchery contribution to the 2001 commercial catch has increased, with 216,266 chum salmon harvested near the hatchery. The reported subsistence harvests average 433 chum salmon annually (1991-2000; 2001 catch estimates are not yet available). The estimated annual sport fish harvest has averaged 677 chum salmon annually (1991-2000; 2001 catch estimates are not yet available).

Coho Salmon

Approximately 174 systems have been identified that support coho salmon runs in the KMA. Twenty percent of KMA coho salmon systems (35 streams) produce most of the total Kodiak Area coho production. The other 80% of Kodiak coho systems (139 streams) support coho runs that are relatively small with significant annual variability, and may be more susceptible to overexploitation. To provide adequate protection for these smaller stocks it may become necessary to monitor the harvest by all user groups inseason.

Coho salmon stocks of the KMA are considered very healthy though there is significant annual variability in production. Obtaining consistent escapement estimates for coho salmon is also very difficult. This is mainly due to late run timing; stormy fall weather washes out fish counting weirs and limits aerial surveys. Budget constraints also limit late season escapement estimation. Coho salmon escapement estimates have been above the lower escapement goal (54,600) each year since

1981 (Tables 2 and 11; Figure 16). The 2001 KMA chum salmon escapement was estimated to be 244,360 fish, above the 10-year (1991-2000) average escapement of 205,492 coho salmon.

In recent years, coho salmon have experienced a large increase in exploitation by commercial and sport users (Tables 4, 12, and 13; Figure 17). During the 2001 season the commercial harvest was 407,978 coho salmon, above the 10-year (1991-2000) average of 316,013 fish. The Kitoi Bay Hatchery contribution to the 2001 commercial catch was 151,732 coho salmon. The reported subsistence harvests average 6,458 coho salmon annually (1991-2000; 2001 catch estimates are not yet available). The estimated annual sport fish harvest has averaged 20,243 coho salmon annually (1991-2000; 2001 catch estimates are not yet available).

2001 COMMERCIAL SALMON FISHERY SUMMARY

The 2001 Kodiak commercial salmon fishery began on June 9 with a 33-hour fishing period in the Northwest Kodiak and Alitak Bay Districts. Fisheries extended over a 100-day period, with the last reported landing occurring on September 29 (Appendix H.1 and H.2).

For the 2001 season a total of 12 different processors, operating 11 shorebased plants and one small floating processor, participated in the salmon fishery (Table 15). Of the 605 eligible permit holders, only 354 participated (Table 5, Figure 3). By gear type, a total of 172 set gillnet, and 182 purse seine permit holders fished; there was no participation by beach seiners in 2001. This was the lowest participation by seine fishers since the inception of limited entry.

Harvest

A total of 23,711,965 salmon (94,218,002 pounds) were harvested in the KMA commercial fisheries, which is above the past 10-year (1991-2000) average of 21,506,048 salmon (Table 4).

Seine fishers accounted for 89.6% of the total number of salmon harvested (Table 16), which included 63.2% of the sockeye, 93.5% of the pink, and 84.5% of the chum salmon harvest. Set gillnet fishers accounted for 10.4% of the commercial salmon harvest (Table 16), including 36.8% of the sockeye harvest.

Chinook Salmon

The chinook harvest (23,827) was above the 1991 through 2000 average (20,974; Table 4). The average weight (13.89 pounds; Tables 16 and 17) was similar to those seen in the recent past. The majority of the chinook salmon harvest was taken by seine fishers during June fisheries in the Inner and Outer Ayakulik Sections, the Southwest Afognak Section, and the Northwest Kodiak District.

Sockeye Salmon

The sockeye salmon harvest (2,659,267) was above forecast (2.15 million; Table 6) and below the 1991 through 2000 average catch (4,027,145; Table 4). Average weight (5.54 pounds; Tables 16 and 17) was similar to those seen in the recent past. Run strength and timing was extremely variable.

Early-Run. For the second consecutive year, early-run sockeye salmon stocks were very early. It is suspected that sunny, warm spring conditions hastened sexual maturity, as sockeye salmon quickly entered the streams. There was little milling or build-up in bays, lagoons, and stream mouths. Many of the early-run sockeye salmon stocks were strong as well, while others were weak.

Karluk early-run sockeye salmon once again were strong and came in very early. The initial commercial test fishing periods was June 9. Due to strong escapement the commercial fishery along the westside reopened on June 12, including the terminal Inner and Outer Karluk Sections. These sections remained open targeting Karluk early sockeye salmon through July 9 (the end of the first pink salmon period). Approximately 661,600 sockeye salmon were harvested in early season westside fisheries, well above forecast (186,000; Table 6).

Ayakulik sockeye salmon were also very early, and early escapements started off strong. Both the Inner and Outer Ayakulik Sections were opened to commercial fishing on June 9. Both sections remained open continuously until June 26, when the Inner Ayakulik section closed. The Outer Ayakulik remained open until July 8. The early portion of the Ayakulik sockeye salmon harvest (411,800) was well above forecast (182,000; Table 6), with the majority of the sockeye harvest occurring in June.

Alitak early-run sockeye stocks were also earlier than normal. Early-run Upper Station sockeye salmon were strong and the Frazer sockeye salmon run was early. Upper Station early-run sockeye salmon exceeded the optimal escapement goal (25,000) by June 4 and escapements exceeded interim goals at Frazer (counted through the Dog Salmon Weir) through July 1. After initial openings on June 9 and 14, the commercial fisheries in the Alitak Bay District followed the maximum time schedule allowed by the current regulations (with mandatory 2.6 day closures within each 10 day period; Figure 6). In mid June the ADF&G test fishery in Olga Narrows seemed to indicate a strong movement of salmon into Olga Bay. In order to prevent possible overescapement of sockeye salmon into the Frazer system, a mop-up fishery was opened in the Dog Salmon Flats Section. No large "pulse" of fish came through and the sockeye salmon catch was low. The Alitak early-run sockeye salmon harvest (357,600) was slightly above forecast (349,000; Table 6).

Minor system sockeye salmon runs were variable. Afognak River (Litnik) and Pauls Bay sockeye salmon runs were weak and no directed fisheries for sockeye salmon were allowed. Malina and Saltery sockeye salmon runs were both strong and liberal fishing opportunities were allowed.

Late-Run. Late-run sockeye salmon were not significantly early, and were more variable in run strength. Karluk late-run sockeye salmon were stronger than expected. Weak pink salmon runs limited westside fishing opportunities during July and August, but the harvest from fisheries directed at Karluk late-run sockeye salmon was about 529,000 sockeye salmon, which exceeded the forecast (250,000; Table 6).

Upper Station late-run sockeye salmon were much weaker than expected. Despite very limited fishing, the escapement (74,400) did not meet the established goals (150,000 to 200,000). Late-run Alitak sockeye salmon harvests were weak (104,300) and well below forecast (275,000; Table 6).

Non Local Sockeye Salmon

For the Cape Igvak June 5 through July 25 fishery, allocative and biological criteria of the Cape Igvak Salmon Management Plan were met and commercial fisheries in June and July were allowed (Brennan 2001). Three days of fishing were allowed in June (June 24-26) during the first run to Chignik and 5 days of fishing were allowed in July (July 8-12) during the second Chignik sockeye run. Through July 25 the Cape Igvak harvest of sockeye salmon considered to be Chignik bound (80%) was 215,214. This Cape Igvak sockeye salmon harvest represents 14.96% of the total Chignik sockeye salmon harvest.

For the North Shelikof July 6 through July 25 fishery, a Seaward Zone closure was required in the North Shelikof Unit (mid to north Mainland and northwest Afognak/Shuyak), but Southwest Afognak Unit fisheries were not restricted. For the North Shelikof Unit at the time of the Seaward Zone closure (July 16) the sockeye salmon harvest was 14,729 (harvest cap = 15,000). For the Southwest Afognak Section, the July 6 to 25 sockeye salmon harvest was 33,289 (harvest cap = 50,000). The upper Cook Inlet sockeye salmon harvest was weaker than expected, and totaled 1.81 million (Appendix C.3).

Enhanced Sockeye Salmon

Terminal Harvest Areas (THA) are situated in locations where salmon enhancement projects create surplus production. Sockeye salmon harvests occurred at the Waterfall THA (16,023; forecast 11,700 to 35,500), Foul Bay THA (29,822; forecast 22,700 to 45,500), Malina THA (4,001 from June 9-12 only; forecast 19,000 to 57,000), and Spiridon THA (59,733, with the total Spiridon sockeye catch from all west side fisheries estimated at 146,678; Appendix G.2; forecast 141,000 to 261,000).

Pink Salmon

Based on the preseason forecast, fishing periods in July were set at 3.5 days per week, except for Mainland fisheries where a maximum of 2.5 days per week are allowed through July 25 (Brennan et al 2001). Many commercial fishers 'stood down' during the next weekly period, choosing not to fish during price negotiations with local processors. Most processing companies signed contracts with fishers by August 2. The wild pink salmon returns were variable by district. The runs were fair for the Northwest and Eastside Kodiak Districts, so fishing periods remained at 3.5 days per week through most of August. Fisheries in the Mainland and Northeast Kodiak Districts were restricted due to weak or late pink salmon runs. Fisheries in the Humpy-Deadman Section of the Alitak Bay District were open continuously from early August through the end of the season because of strong pink runs. The Kitoi Bay Hatchery pink return was much stronger than forecast, and portions of the eastside of Afognak was opened to fishing continuously throughout July and August.

Overall, the pink harvest (19,567,163) was well over the forecasted harvest (12.00 million; Table 6) but below the most recent five odd-year (1991-1999) average (23,285,634; Table 4). Average weight (3.46 pounds; Table 17) of the 2001 pink salmon catch was similar to those from the recent past. The wild stock pink salmon harvest (6.3 million; Table 6) was near the low end of the forecast range (6.0 to 10.0 million) with westside fisheries (Southwest Afognak to Ayakulik) accounting for over half of the estimated total (3.26 million, forecast 2.9 million; Table 6). During late July and August, most of the seine fleet was concentrated either in the Alitak bay District or at the Kitoi Bay hatchery, with very few seiners targeting pink salmon along the west

side of Kodiak and Afognak Islands. Fisheries associated with the Kitoi Bay Hatchery accounted for 13,126,761 pink salmon (forecast 3.0 to 5.0 million; Table 6).

Chum Salmon

Chum salmon runs were fair to good in most systems. There was a marked increase in interest in chum salmon fisheries in 2001, mainly because of a strong roe market. The chum harvest (1,053,730) was above forecast (752,000; Table 6) and above the 1991 through 2000 average (804,700; Table 4). Chum salmon average weight (8.16 pounds) was as large as has been seen in recent years (Table 17). West side fisheries accounted for 342,000 chum (forecast 297,000; Table 6), east/northeast Kodiak catches were approximately 207,500 chum (forecast 191,000), and Mainland catches were over 208,500 chum salmon (forecast 96,000). Kitoi Bay Hatchery chum production also exceeded expectations. The Kitoi Hatchery chum harvest (216,266) was well over the hatchery forecast of 63,000 (Table 6).

Coho Salmon

The coho salmon harvest (407,978) was well above forecast (348,000; Table 6) and the 1991 through 2000 average (316,013; Table 4). Average weight (7.63 pounds; Table 17) was lower than in the recent past. Westside fisheries accounted for over 114,200 coho (forecast 107,000; Table 6), the east/northeast Kodiak catch was 64,600 coho (forecast 47,000), Afognak catches included 56,000 coho (forecast 40,000) with particularly strong runs to North Afognak and Shuyak (38,700 coho were harvested). The Kitoi Hatchery coho harvest was 151,732, exceeding the hatchery forecast of 109,000 (Table 6).

Exvessel Value

The estimated total exvessel value of the 2001 fishery was $18,898,115 (Table 18, Figure 18). This is the lowest estimated value since 1983, and is well below the 1991 through 2000 average value of $33,772,714. This exvessel value is based on inseason price estimates and will likely increase as final processor reports are submitted. The inseason values do not reflect additional payments made to fishers for dock deliveries or refrigerated or iced fish. For example, a postseason adjustment of $0.05 per pound for pink salmon would increase the total exvessel value by almost $3,500,000.

Purse seine fishers accounted for 89.6% of the total number of salmon harvested (1991-2000 average 83.0%) and gross earning per permit holder averaged $78,114 (1991-2000 average $90,307; Tables 16 and 18). The average purse seine earnings would have been much less if not for the exceptional survival of Kitoi Bay Hatchery pink salmon, and the resulting record return.

Gillnet fishers accounted for 10.4% of the number of salmon harvest (1991-2000 average 16.7%) and gross earning per permit holder averaged $27,218 (1991-2000 average $48,931; Tables 16 and 18). This was the lowest gillnet average exvessel value since 1980. Gillnet fishers are much more dependent on sockeye salmon returns, and lower than average sockeye salmon production, particularly in the Alitak Bay District, affected set gillnet fishers more than seine fishers.

Escapement

Fish counting weirs were operated on 15 systems this year, with projects headed by ADF&G management and research staff, and by the US Fish and Wildlife Service (Table 10). In addition, 6 different observers flew 24 aerial surveys and made 376 escapement observations (Appendix I.1 – I.8).

Chinook Salmon

The total chinook salmon escapement of 18,753 was above established goals (11,000 to 18,000), but below the past 10-year (1991-2000) average of 25,342 (Tables 2 and 11). Chinook escapement into the Karluk (4,453) was below average, while the escapement into the Ayakulik (13,929) was above average (Table 14). The chinook salmon run to Kodiak systems was earlier than normal. It is likely that some level of additional chinook escapement entered the river prior to the installation of fish counting weirs.

Sockeye Salmon

Run strength and timing was extremely variable. Many of the early-run sockeye salmon stocks were very early and strong, while others were weak. Some late-run stocks were stronger than expected, while others were weaker. Sockeye salmon escapement goals were met in most major and most minor systems. The overall sockeye salmon escapement (1,580,660) was within the desired range (1.28–1.89 million; Table 2, Figure 10), but was below the 1991 through 2000 average (1,916,558; Table 11).

Karluk early-run (through July 15) sockeye salmon once again were strong and came in very early. The early-run escapement goal (150,000 to 250,000) was exceeded on June 12. Commercial fisheries operated in the Inner and Outer Karluk Section through July 9 so escapements continued at low levels (Figure 20). The Karluk early-run sockeye escapement (through July 15) was 337,098 fish. Karluk late-run (post July 15) sockeye salmon were somewhat stronger than expected. Fishing opportunities were limited along the northwest side of Kodiak Island, due to weak pink salmon runs. The Karluk late-run sockeye escapement was at or above the interim goals through mid August (Figure 20). Fisheries could then be targeted at Karluk sockeye and the westside remained open continuously after August 20. Seine effort was light (most of the seine fleet was at the Kitoi Bay Hatchery targeting a record pink salmon return). Set gillnet effort dropped drastically after August 30, as processors stopped operations for the season. The final late-run sockeye escapement to Karluk (526,438) was within the established goals (400,000 to 550,000).

Ayakulik sockeye salmon were also very early, and early escapements started off strong (Figure 20). Both the Inner and Outer Ayakulik Sections were opened to commercial fishing on June 9. Commercial catches were very good, and both sections remained open continuously until June 26, when the Inner Ayakulik Section closed. The Outer Ayakulik remained open until July 8. Escapements throughout July and August continued at a low rate. The end-of-season escapement of 218,892 was within established goals (200,000 to 300,000).

The Frazer Lake sockeye salmon run (counted through the Dog Salmon Weir) was also very early (Figure 21). As with the early Karluk and Ayakulik sockeye runs, but in stark contrast to the normal migration pattern, the early Frazer sockeye did not build up near the stream mouth, on

Dog Salmon Flats, but instead passed directly up the river. Because of a weak forecast and uncertainty about what the actual strength of the Frazer sockeye run would be, the commercial fishery followed the past pattern of first opening on June 9 for a 1 day test period, then reopening again on June 14. Thereafter the fishery followed the pattern prescribed by regulations, with mandatory 2.6-day closures within every 10-day period. This pattern worked well, allowing approximately 10,000 to 15,000 sockeye salmon to escape into the river during each closure. The interim escapement goals for Frazer were exceeded through July 1. The final Frazer sockeye escapement of 163,309 was within the established escapement goals (140,000 to 200,000).

The Upper Station (Olga Lakes) sockeye early run was strong (Figure 21) and by June 4 the escapement had exceeded the optimal escapement goal (25,000). The Upper Station early sockeye run was essentially over by mid June, with low levels of escapement through July 15. The final early–run sockeye escapement for Upper Station was 66,794 sockeye salmon, within the established goals (50,000 to 75,000). Upper Station late-run sockeye salmon were much weaker than expected (Figure 21). Despite very limited fishing, the escapement (74,407) did not meet the established goals (150,000 to 200,000).

For the 12 minor but significant producing sockeye systems, run strengths and resulting escapements was extremely variable. Afognak River (Litnik) and Pauls Bay sockeye salmon runs were weak. No directed fisheries for sockeye salmon were allowed at either system. Litnik sockeye escapement was 24,271, below the established goals (40,000 to 60,000). Pauls Bay sockeye came in very late, and eventually met established escapement goals (20,000 to 40,000) with an escapement of 23,230. Malina and Saltery sockeye salmon escapements both exceeded established goals despite liberal fishing opportunities. At Malina the sockeye escapement was 22,490, slightly exceeding the goals (10,000 to 20,000). Saltery sockeye escapement was 45,608, far exceeding the established goals (15,000 to 30,000). The Buskin River sockeye salmon run was at record levels and the escapement (20,556) surpassed the goals (8,000 to 13,000). Thorsheim had a good escapement (3,000) that fell within the desired range (2,000 to 5,000). Escapement to the other systems were either not surveyed (escapement unknown) or below desired levels.

Pink Salmon

Overall, pink escapement (3,393,620) was above established goals (1.01 to 3.02 million; Figure 12), but below the 1991 through 1999 odd-year average (5,096,084; Table 11). Escapement goals were met or exceeded for each district and for most major and minor systems (Table 2).

Chum Salmon

The overall chum escapement (557,925) met the established goals (273,000 to 819,000; Figure 14) but fell slightly below the 1991 through 2000 average (572,947; Table 11). Escapement goals were met or exceeded in most districts (Table 2), with the exception of the Southwest Kodiak District. The chum salmon run to the Sturgeon River was inexplicably weak. Chum systems in adjacent areas, notably Uyak, Zachar, and Uganik Bay streams to the north, all met or exceeded desired levels. Mainland chum escapements were fair to good (there was no documentation of the final escapement into Kukak Bay streams).

Coho Salmon

Coho salmon escapements were good (244,360), exceeding established goals (54,600 to 93,600; Table 2, Figure 16) and exceeding the 1991 through 2000 average (205,492; Table 11). Coho salmon escapement estimates are a minimum number; many more coho salmon entered area systems after the end of the weir and aerial survey projects. On systems with weirs, coho escapement met or exceeded established interim escapement goals. Coho escapement into the Pauls Bay system (25,032) far exceeded desired goals (6,500 to 9,000).

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Table 1. Estimated number of anadromous streams with significant salmon production by district, with species distribution, in the Kodiak Management Area, 2001.

Management District	Number of Streams[a]	Number of Streams with Each Species[b]				
		Chinook	Sockeye	Coho	Pink	Chum
Afognak	102	0	13	48	102	5
Northwest Kodiak	63	0	4	22	63	23
Southwest Kodiak	11	2	2	10	11	6
Alitak	30	1	5	15	30	14
Eastside Kodiak	116	1	8	32	116	47
Northeast Kodiak	26	0	1	20	26	9
Mainland	92	0	6	27	92	46
TOTAL	440	4	39	174	440	150

[a] The State of Alaska's Habitat Division identifies over 800 streams in the Kodiak Management Area which have documented use by anadromous fish (ADF&G 1993). Many of these streams are very small and may only be used by pink salmon in years with very large returns. The streams identified in this table are depicted on the 1999 Kodiak Area salmon statistical map, and have documentable use each year.

[b] These estimates are based on current knowledge and, in fact, are expected to change as more system specific data are collected.

Table 2. Salmon escapement goals and escapement estimates, by species and district, in the Kodiak Management Area, 2001.

DISTRICT	SOCKEYE ESCAPEMENT		PINK ESCAPEMENT		CHUM ESCAPEMENT		COHO ESCAPEMENT		CHINOOK ESCAPEMENT	
	AGGREGATE GOAL	DISTRICT ESTIMATE	ODD-YEAR DISTRICT GOAL	DISTRICT ESTIMATE	DISTRICT GOAL	DISTRICT ESTIMATE	AGGREGATE GOAL	DISTRICT ESTIMATE	AGGREGATE GOAL	DISTRICT ESTIMATE
	Lower Upper		Lower Upper		Lower Upper		Lower Upper		Lower Upper	
AFOGNAK	70,000	76,292	80,000	310,062		3,583	12,950	55,201		3
	120,000		240,000				22,500			
NORTHWEST	55,000	11,894	220,000	811,950	46,000	144,900		13,560		0
	85,000		660,000		138,000					
SOUTHWEST	750,000	1,082,428	30,000	101,928	25,000	3,582	22,000	108,804	11,000	18,382
	1,100,000		90,000		75,000		38,000		18,000	
ALITAK	380,000	321,782	212,000	767,986	26,000	45,286	8,500	15,469		367
	535,000		636,000		78,000		14,500			
EASTSIDE	16,000	51,508	140,000	449,560	35,000	45,974	5,100	31,193		1
	35,000		420,000		105,000		9,200			
NORTHEAST	8,000	20,556	110,000	545,134	8,000	19,900	6,050	20,133		0
	13,000		330,000		24,000		9,375			
MAINLAND		16,200	215,000	407,000	133,000	294,700		0		0
			645,000		399,000					
TOTAL	1,279,000	1,580,660	1,007,000	3,393,620	273,000	557,925	54,600	244,360	11,000	18,753
	1,888,000		3,021,000		819,000		93,575		18,000	

Table 3. Potential versus actual salmon production in the Kodiak Management Area, 2001.

SPECIES	PRODUCTION POTENTIAL			HARVEST		
	LONG TERM AVERAGE			POTENTIAL	ACTUAL	
	Targeted Escapement Goal[a]	Return Per Spawner[b]	Potential Total Return	Long Term Average (Total Return Minus Targeted Escapement)	53 Year Average (1948 - 2001)[c]	10 Year Average (1992 - 2001)[c]
CHINOOK	15,000	2.5	37,500	22,500	6,400	21,100
SOCKEYE	1,710,000	3.7	6,327,000	4,617,000	1,491,000	3,722,700
COHO	150,000	2.5	375,000	225,000	129,500	324,300
PINK						
Odd year	3,000,000	3.0	9,000,000	6,000,000	9,359,300	23,870,500
Even year	4,500,000	3.0	13,500,000	9,000,000	8,987,900	9,388,800
CHUM	550,000	2.8	1,540,000	990,000	779,500	807,200
TOTAL						
Odd year	-	-	17,279,500	11,854,500	11,765,700	28,745,800
Even year	-	-	21,779,500	14,854,500	11,394,300	14,264,100

[a] The expected indexed escapement within the biological escapement goal range. KMA fisheries are normally managed to achieve this level of escapement.

[b] Return per spawner (RPS) will vary each year. These values are averages around which natural survival and return will fluctuate. RPS for sockeye salmon from Prokopowich (1995), for pink salmon from Swanton et al (1993), and all others from Barrett (personal communication, October 1993).

[c] 1989 harvest data not included in averages. Fisheries were severely restricted in 1989 due to the M/V Exxon Valdez oil spill.

Table 4. Historical salmon catch, by species, in the Kodiak Management Area, 1882-2001.

Year [a]	Chinook	Sockeye	Coho	Pink	Chum	TOTAL
1882		58,800				58,800
1883		188,706				188,706
1884		282,184				282,184
1885		468,580				468,580
1886		646,100				646,100
1887		1,004,500				1,004,500
1888		2,781,100				2,781,100
1889		3,754,735				3,754,735
1890		3,592,707				3,592,707
1891		3,846,388				3,846,388
1892		3,126,459				3,126,459
1893		3,244,609				3,244,609
1894		3,830,336				3,830,336
1895		2,246,966	8,321			2,255,287
1896		3,328,846				3,328,846
1897		2,785,515	1,500			2,787,015
1898		2,033,094	19,175			2,052,269
1899	1,104	1,934,771	32,475			1,968,350
1900	4,838	3,450,480	32,239			3,487,557
1901	3,838	4,826,159		2,015		4,832,012
1902	2,932	3,868,101	34,972			3,906,005
1903	1,187	1,826,163	119,541	10,000		1,956,891
1904	3,190	2,875,118	103,136	5,180		2,986,624
1905	2,496	2,142,367	86,913			2,231,776
1906	3,640	3,980,462	23,738			4,007,840
1907	4,015	4,232,454	38,059			4,274,528
1908	3,028	2,487,848	73,789	286,374		2,851,039
1909	3,907	1,915,230	51,500	153,595		2,124,232
1910	1,598	1,954,717	44,291	215,382		2,215,988
1911	689	2,685,949	21,870	229,551	6,492	2,944,551
1912	686	2,246,467	17,491	547,171	24,588	2,836,403
1913	1,082	1,663,163	27,634	590,039	3,822	2,285,740
1914	1,329	1,255,444	32,063	1,726,411	13,094	3,028,341
1915	939	1,664,426	51,819	252,073	20,331	1,989,588
1916	1,038	3,373,055	49,683	3,181,890	28,962	6,634,628
1917	1,457	3,645,914	30,485	225,335	15,961	3,919,152
1918	2,021	1,894,466	78,169	2,467,325	81,699	4,523,680
1919	1,831	1,619,101	104,233	282,715	60,102	2,067,982
1920	1,637	1,957,636	88,970	1,977,421	55,175	4,080,839
1921	660	2,857,922	45,764	67,688	24,779	2,996,813
1922	703	1,097,359	119,724	2,766,257	223,970	4,208,013
1923	1,915	1,090,117	77,554	928,510	38,653	2,136,749
1924	1,002	1,407,525	120,686	5,435,091	117,883	7,082,187
1925	1,911	1,693,057	92,960	2,673,675	212,492	4,674,095
1926	596	3,015,366	174,475	4,606,694	324,706	8,121,837
1927	4,358	1,155,202	151,548	5,297,305	417,956	7,026,369
1928	2,546	1,592,003	290,645	1,535,313	726,480	4,146,987
1929	3,200	712,126	144,226	6,108,402	1,057,662	8,025,616
1930	4,991	466,409	228,800	1,651,398	419,011	2,770,609

-Continued-

Table 4. (page 2 of 3)

Year [a]	Chinook	Sockeye	Coho	Pink	Chum	TOTAL
1931	1,541	1,183,074	170,075	6,839,906	183,737	8,378,333
1932	1,873	1,058,446	52,192	4,719,939	237,023	6,069,473
1933	1,140	1,428,373	91,428	6,573,660	536,935	8,631,536
1934	1,300	1,828,953	89,588	7,641,891	661,341	10,223,073
1935	1,393	1,613,519	76,849	10,780,612	381,753	12,854,126
1936	2,548	2,657,195	183,903	5,647,726	328,218	8,819,590
1937	1,257	1,881,304	164,902	16,787,150	346,238	19,180,851
1938	1,232	1,965,943	154,959	8,397,981	640,119	11,160,234
1939	2,272	1,786,445	112,171	11,741,218	641,693	14,283,799
1940	1,233	1,318,233	148,016	9,997,899	673,265	12,138,646
1941	2,571	1,730,201	199,515	7,601,531	444,521	9,978,339
1942	1,329	1,281,529	106,865	6,092,526	564,924	8,047,173
1943	1,133	1,990,557	59,661	12,479,608	454,205	14,985,164
1944	668	1,817,875	51,675	4,955,354	506,703	7,332,275
1945	2,021	2,041,090	60,122	9,044,544	559,332	11,707,109
1946	129	838,863	56,425	9,545,871	298,486	10,739,774
1947	99	993,394	76,230	8,856,666	294,518	10,220,907
1948	1,401	1,260,465	32,364	5,968,487	330,795	7,593,512
1949	851	892,336	53,737	4,927,779	699,548	6,574,251
1950	2,127	920,885	40,653	5,304,701	685,109	6,953,475
1951	2,402	467,875	48,792	2,100,377	483,057	3,102,503
1952	1,081	603,677	51,567	4,576,726	1,243,227	6,476,278
1953	2,991	317,150	41,681	5,174,645	547,574	6,084,041
1954	942	325,157	66,430	8,439,231	1,250,833	10,082,593
1955	2,428	164,482	34,582	10,794,164	482,425	11,478,081
1956	1,123	271,249	52,844	3,318,841	705,047	4,349,104
1957	1,030	234,253	34,995	4,716,482	1,208,472	6,195,232
1958	1,942	288,014	20,555	4,038,938	930,698	5,280,147
1959	1,837	330,087	14,512	1,967,058	733,784	3,047,278
1960	1,238	362,525	54,308	6,737,817	1,300,386	8,456,274
1961	864	407,979	28,579	3,926,023	518,935	4,882,380
1962	1,095	784,664	54,583	14,113,851	794,727	15,748,920
1963	286	407,040	57,011	5,480,158	305,061	6,249,556
1964	1,306	498,488	35,535	12,044,341	1,134,163	13,713,833
1965	786	346,237	26,672	2,886,831	431,340	3,691,866
1966	599	631,646	67,700	10,755,582	762,766	12,218,293
1967	1,753	308,756	10,354	187,813	226,681	735,357
1968	1,936	760,393	56,629	8,768,122	750,428	10,337,508
1969	2,469	591,481	48,759	12,500,823	534,933	13,678,465
1970	1,089	917,045	66,421	12,036,598	919,102	13,940,255
1971	920	478,479	22,844	4,332,994	1,541,444	6,376,681
1972	1,300	222,800	16,588	2,485,802	1,163,772	3,890,262
1973	800	167,341	3,573	518,692	317,921	1,008,327
1974	545	418,761	13,631	2,646,087	249,294	3,328,318
1975	101	136,418	23,659	2,942,801	84,431	3,187,410
1976	766	641,484	23,714	11,077,992	740,495	12,484,451
1977	585	623,468	27,920	6,252,405	1,072,313	7,976,691
1978	3,228	1,071,782	48,795	15,004,083	814,345	16,942,233

-Continued-

Table 4. (page 3 of 3)

Year [a]	Chinook	Sockeye	Coho	Pink	Chum	TOTAL
1979	1,905	631,735	140,629	11,287,592	358,400	12,420,261
1980	529	651,394	139,154	17,290,615	1,075,557	19,157,249
1981	1,418	1,288,980	121,544	10,336,829	1,345,328	13,094,099
1982	1,238	1,204,793	343,531	8,076,203	1,266,187	10,891,952
1983	3,839	1,231,989	157,612	4,603,371	1,085,165	7,081,976
1984	4,657	1,950,439	229,524	10,844,293	649,092	13,678,005
1985	4,970	1,843,185	284,166	7,334,815	430,757	9,897,893
1986	4,381	3,188,269	168,773	11,807,727	1,134,558	16,303,708
1987	4,612	1,792,819	192,540	5,076,002	681,982	7,747,955
1988	22,374	2,698,637	303,298	14,409,291	1,426,410	18,860,010
1989 [b]	4,851	2,628,565	141,433	22,648,511	835,734	26,259,094
1990	18,806	5,248,339	293,699	5,983,805	577,740	12,122,389
1991	22,233	5,704,041	324,860	16,642,804	1,029,070	23,723,008
1992	24,299	4,167,877	280,085	3,310,644	679,559	8,462,464
1993	42,199	4,377,688	313,387	34,019,420	588,331	39,341,025
1994	22,576	2,878,023	296,305	8,162,564	738,856	12,098,324
1995	18,704	4,485,321	307,729	42,832,437	1,522,705	49,166,896
1996	13,071	4,970,390	201,836	3,486,930	543,751	9,215,978
1997	18,728	2,505,660	380,925	11,035,128	520,329	14,460,770
1998	17,336	3,623,094	425,023	22,056,467	316,080	26,438,000
1999	18,299	4,652,961	296,979	11,898,382	913,867	17,780,488
2000	12,293	2,906,391	333,002	9,927,397	1,194,448	14,373,531
2001	23,827	2,659,267	407,978	19,567,163	1,053,730	23,711,965
AVERAGES [b]						
1992-2001	21,133	3,722,667	324,325	16,629,653	807,166	21,504,944
1991-2000	20,974	4,027,145	316,013	16,337,217	804,700	21,506,048
Even Years, 1992-2000				9,388,800		
Odd Years, 1991-1999				23,285,634		
1882-2001	4,214	1,799,462	108,370	6,907,582	583,933	9,403,560
1948-2001	6,373	1,490,995	129,501	9,000,299	779,537	11,409,102
Even Years, 1948-2000 [a]				8,987,894		
Odd Years, 1949-2001 [a]				9,359,346		

[a] 1882-1947 data are from processors case pack information. 1948-2001 data are from ADF&G fish ticket summaries and are considered more accurate than previous data.

[b] Averages do not include 1989. Fisheries were severely limited due to the M/V Exxon Valdez oil spill, and the 1989 catch data presented is the projected catch had there been no fishery restrictions (Barrett et al. 1990).

Table 5. Summary of limited entry permit activity in the commercial salmon fishery, by gear type, in the Kodiak Management Area, 1975-2001.

	Purse Seine[a]		Beach Seine[a]		Set Gillnet[a]		TOTAL[a]		
Year	Fishable	Fished	Fishable	Fished	Fishable	Fished	Fishable	Fished	Percent
1975	468	280	26	8	229	116	723	404	56
1976	394	325	23	17	187	140	604	482	80
1977	378	336	32	24	186	147	596	507	85
1978	389	372	34	29	188	160	611	561	92
1979	387	362	34	28	186	164	607	554	91
1980	388	370	35	33	187	168	610	571	94
1981	387	325	35	30	187	169	609	524	86
1982	386	345	35	30	187	170	608	545	90
1983	384	342	36	27	188	174	608	543	89
1984	384	296	35	25	188	168	607	489	81
1985	384	270	34	21	188	169	606	460	76
1986	385	287	34	14	187	174	606	475	78
1987	386	297	33	18	188	173	607	488	80
1988	387	323	33	21	188	179	608	523	86
1989[b]	388	4	33	1	189	87	610	92	15
1990	388	354	33	21	189	184	610	559	92
1991	388	348	33	17	189	185	610	550	90
1992	387	335	33	12	189	178	609	525	86
1993	387	324	34	9	190	176	611	509	83
1994	387	285	34	5	190	169	611	459	75
1995	386	312	34	8	189	173	609	493	81
1996	384	261	34	6	189	172	607	439	72
1997	384	261	34	5	188	174	606	440	73
1998	384	217	34	2	188	171	606	390	64
1999	383	220	34	4	188	173	605	397	66
2000	383	223	34	2	188	173	605	398	66
2001	383	182	34	0	188	172	605	354	59
Average - Past 10 Years:									
1992-2001	385	262	34	5	189	173	607	440	72
Average[c] - Previous Decades:									
1991-2000	385	279	34	7	189	174	608	460	76
1980-1990[c]	386	321	34	24	188	173	608	518	85
1975-1979	403	335	30	21	195	145	628	502	81
Average[c] - Overall									
1975-2001	389	302	33	16	190	168	612	486	80

[a] Fishable permits are those available for use, from Comercial Fisheries Entry Commission records. Fished permits are those actually reporting landings, from CFEC reports or ADF&G Fish Ticket summaries.

[b] Commercial fisheries were severely restricted in 1989 due to the M/V Exxon Valdez oil spill.

[c] 1989 data is not included in averages.

Table 6. Commercial salmon harvest projections and actual harvests for the Kodiak Management Area, 2001.

	Chinook	Sockeye	Coho	Pink	Chum	Total
Projected Harvest 2001[a]	20,000	2,147,000	348,000	12,000,000	752,000	15,267,000
Actual Harvest 2001[a]	23,827	2,657,601	407,977	19,567,052	1,053,691	23,710,148

	2001 Harvest[a]	
FISHERY	Projection	Actual
Early Sockeye Salmon Fisheries (6/9-7/15)		
Kitoi Bay Hatchery	8,000	24,000
Cape Igvak[b]	115,000	157,600
Karluk[c]	186,000	650,900
Ayakulik[d]	182,000	411,800
Frazer[e]	288,000	265,800
Upper Station[e]	61,000	91,800
Minor Systems[f]	70,000	8,900
Minor Enhancement[g]	74,000	53,600
Spiridon[h]	70,000	15,300
Other	100,000	95,000
Subtotal	**1,154,000**	**1,774,700**
Late Sockeye Salmon Fisheries (7/16-10/31)		
Kitoi Bay Hatchery[i]	28,000	24,500
Cape Igvak[b]	93,000	112,100
Karluk[c]	250,000	451,100
Ayakulik[d]	121,000	9,100
Frazer[e]	72,000	43,700
Upper Station[e]	203,000	60,600
Minor Systems[f]	20,000	6,100
Spiridon[h]	131,000	131,400
Other	75,000	44,300
Subtotal	**993,000**	**882,900**
TOTAL SOCKEYE	**2,147,000**	**2,657,600**
Pink Salmon Fisheries (7/6-10/31)		
Kitoi Bay Hatchery[i]	4,000,000	13,126,800
Afognak (Wild)[j]	650,000	542,700
Westside Kodiak[k]	2,850,000	3,257,800
Alitak[l]	2,050,000	1,440,000
Eastside/Northend Kodiak[m]	1,850,000	801,500
Mainland[n]	600,000	398,300
Subtotal	**12,000,000**	**19,567,100**

-Continued-

Table 6. (page 2 of 2)

FISHERY	2001 Harvest[a] Projection	Actual[b]
Chum Salmon Fisheries (6/9-10/31)		
Kitoi Bay Hatchery[i]	63,000	216,300
Afognak (Wild)[j]	32,000	26,900
Westside Kodiak[k]	297,000	342,000
Alitak[l]	73,000	52,500
Eastside/Northend Kodiak[m]	191,000	207,500
Mainland[n]	96,000	208,500
Subtotal	**752,000**	**1,053,700**
Coho Salmon Fisheries (8/1-10/31)		
Kitoi Bay Hatchery[i]	109,000	151,700
Afognak (Wild)[j]	40,000	57,300
Westside Kodiak[k]	107,000	114,200
Alitak[l]	25,000	2,500
Eastside/Northend Kodiak[m]	47,000	64,600
Mainland[n]	20,000	17,700
Subtotal	**348,000**	**408,000**
GRAND TOTAL	**15,267,000** [o]	**23,710,200** [p]

[a] All harvests in numbers of fish. Does not include ADF&G test fish catch of 1,666 sockeye, 111 pink, 39 chum, and 1 coho salmon.

[b] From the Cape Igvak Section. Early run is from beginning of season through June 26. Late run is from July 8 through 25. The Cape Igvak Section was closed June 27 to July 8.

[c] From the Southwest Afognak Section, Northwest Kodiak District (except for Spiridon and Settler Cove Terminal Harvest Areas), Inner and Outer Karluk Sections, plus 50% of Halibut Bay Section from June 21 through July 15 and 100% after July 31.

[d] From the Outer and Inner Ayakulik Sections, plus 50% of Halibut Bay Section from June 21 through July 15 and 100% from July 16 through 31.

[e] From the Alitak Bay District. Stock seperation by preliminary scale pattern analysis, with all unknown/other included in Frazer catch

[f] From minor systems at Inner and Outer Ugak Bay (Saltery), Buskin River, Southeast Afognak (Litnik), Perenosa Bay (Pauls and Portage), Northwest Afognak (Thorsheim &Long Lagoon), Big River (Swikshak), and Outer Kukak Bay (Kaflia & Kuliuk) Sections.

[g] From the Malina Creek, Foul Bay, Waterfall Bay, and Settler Cove Terminal Harvest Areas.

[h] From the Spiridon Lake Terminal Harvest Area in Telrod Cove; Spiridon bound sockeye taken in adjacent areas not included.

[i] From the Duck Bay, Izhut Bay, and Kitoi Bay Sections, plus Danger Bay (252-33) from August 7 to 19.

[j] From the Afognak District except for the Duck Bay, Izhut Bay, and Kitoi Bay Sections, and Danger Bay (252-33).

[k] From the Northwest Kodiak District (except for the North Cape, Anton Larson, Sheratin, and Kizhuyak Section, plus part of the Central Section; 259-36, -37, and -38) and the Southwest Kodiak District.

[l] From the Alitak Bay District.

[m] From the Eastside Kodiak District, Northeast Kodiak District, and the North Cape, Anton Larson, Sheratin, and Kizhuyak Sections, plus part of the Central Section (259-36, -37, and -38).

[n] From the Mainland District.

[o] Includes 20,000 chinook salmon - projected harvest.

[p] Includes 28,300 chinook salmon - actual harvest.

Table 7. Expected and actual harvest from supplemental salmon production, by system and species, for the Kodiak Management Area, 2001.

System	Species	Forecast Low	Forecast High	Expected Harvest	Actual Harvest
Spiridon Lake [a]	sockeye	141,000	261,000	201,000	146,678
Hidden Lake [a]	sockeye	22,700	45,500	34,000	29,822
L.Waterfall Lake [a]	sockeye	11,700	35,300	23,500	16,023
Crescent Lake [a]	sockeye	9,700	19,500	14,600	3,722
	coho	3,200	9,800	6,500	0
Kitoi Bay Area [a]	pink [b]	1,600,000	7,600,000	4,000,000	13,126,761
	chum [b]	61,000	143,000	62,000	216,266
	coho [b]	77,000	153,000	109,000	151,732
	ER sockeye [c]	5,000	11,600	8,400	23,974
	LR sockeye [d]	13,600	41,900	27,800	24,542
	Total sockeye	18,600	53,500	36,200	48,516
Afognak Lake	sockeye	10,500	31,600	[e]	0
Malina Lake	sockeye	19,000	57,000	[f]	4,001
Paul's/Laura Lake	sockeye	1,000	3,000	[g]	26
Katmai Lake [a]	coho	800	2,200	1,500	unavailable
Totals:	pink	1,600,000	7,600,000	4,000,000	13,126,761
	chum	61,000	143,000	62,000	216,266
	coho	81,000	165,000	117,000	151,732
	sockeye	235,000	508,600	310,800	248,788

[a] Barriered systems with Terminal Harvest Areas (THA). Spiridon Lake THA harvest was 59,733 sockeye salmon; To estimate Spiridon sockeye total harvest in 2001 the ratios of previous harvests in the THA to the harvest in other districts where Spiridon Lake fish have been harvested were applied. For Hidden Lake, harvest from statistical area 251-41. Little Waterfall harvest from stat area 251-84. Crescent Lake harvest from stat area 259-35. Kitoi Bay harvest from stat area 252-30, 252-31, and 252-32.

[b] Pink, chum, and coho salmon forecasts include broodstock needed for the Kitoi Hatchery program.

[c] From Little Kitoi Lake stocking.

[d] From Little Kitoi Lake, Kitoi Bay, Jennifer Lake, and Ruth Lake stocking. Approximately 2,500 of the projected late-run fish are from Saltery Lake stock releases.

[e] System has a natural sockeye run; expected harvest is not available. Run is not regularly forecast.

[f] System has a natural sockeye run; expected harvest is not available. Run was forecast to be ~52,000, based on smolt estimates.

[g] System has a natural sockeye run; expected harvest is not available.

Table 8. Board of Fisheries approved fishery management plans for the Kodiak Management Area, 2001.

MANAGEMENT PLAN	YEAR INITIATED	MGMT. UNITS AFFECTED	DATES IN EFFECT
Cape Igvak Salmon Management Plan	1978	Cape Igvak Section Wide Bay Section	6/5 - 7/25
Alitak Bay District Salmon Management Plan	1987	Alitak Bay District	6/5 - 10/31
Westside Kodiak Management Plan	1990	NW Kodiak District SW Kodiak District SW Afognak Section	6/9 - 10/31
North Shelikof Strait Sockeye Salmon Management Plan	1990	SW Afognak Section NW Afognak Section Shuyak Island Section Big River Section Hallo Bay Section Inner and Outer Kukak Bay Sections Dakavak Bay Section	7/6 - 7/25
Crescent Lake Coho Salmon Management Plan	1990	Terminal Harvest Area in the Central Section near Port Lions	7/15 - 10/31
Spiridon Lake Sockeye Salmon Management Plan	1993	Terminal Harvest Area in Spiridon Bay Section	6/9 - 10/31
Eastside Afognak Management Plan	1993	Southeast Afognak Section Kitoi Bay Section Izhut Bay Section Duck Bay Section Raspberry Strait Section	6/9 - 10/31
Eastside Kodiak Salmon Management Plan	1995	Eastside Kodiak District NE Kodiak District	6/14 - 10/31
North Afognak / Shuyak Island Salmon Management Plan	1995	NE Afognak Section Perenosa Bay Section Shuyak Island Section NW Afognak Section	6/9 - 10/31
Mainland District Salmon Management Plan	1999	Mainland District	6/14 – 10/31

Table 9. Commercial salmon season opening times and dates, by species and fishery, for the Kodiak Management Area, 2001.

FISHERY	EARLIEST POTENTIAL OPENING TIME/DATE Firm Time/Date	Approximate Time/Date
Early Run Sockeye Salmon Fisheries		
Cape Igvak Section [a]	-	12:01 AM June 5-14
NW Kodiak District [b]	12:00 NOON June 9	-
Alitak District [b]	12:00 NOON June 9	-
Eastside District	12:00 NOON June 14	
Inner Ayakulik and Outer Ayakulik Sections [c]	-	Low Tide June 5-14
Spiridon Lake Terminal Harvest Area (Telrod Cove)	-	12:00 NOON June 20
Minor Systems [d]		
Malina Lakes (Malina Creek Terminal Harvest Area)	-	12:00 NOON June 9-14
Litnik	-	12:00 NOON June 9-14
Uganik	-	12:00 NOON June 9
Paramanof	-	12:00 NOON June 14
Pauls/Perenosa	-	12:00 NOON June 14
Saltery	-	12:00 NOON June 14
Kaflia/Swikshak	-	12:00 NOON June 14
Foul Bay and Waterfall Terminal Harvest Areas	-	12:00 NOON June 9
Pink/Chum Salmon Fisheries [e]		
Mainland District	12:00 NOON July 6	-
Afognak District	12:00 NOON July 6	-
NW Kodiak District	12:00 NOON July 6	-
SW Kodiak District	12:00 NOON July 6	-
Alitak District	12:00 NOON July 6	-
Eastside Kodiak District	12:00 NOON July 6	-
NE Kodiak District	12:00 NOON July 6	-
Late Run Sockeye Salmon Fishery		
Cape Igvak Section [f]	-	12:01 AM July 9
All remaining late run sockeye fisheries [g]	-	12:00 NOON July 15
System Specific Coho Salmon Fisheries [h]		
Mainland District	-	12:00 NOON Aug. 15
Afognak District	-	12:00 NOON Aug. 21
NW Kodiak District	-	12:00 NOON Aug. 25
SW Kodiak District	-	12:00 NOON Aug. 25
Alitak District	-	12:00 NOON Aug. 26
Eastside Kodiak District	-	12:00 NOON Aug. 25
NE Kodiak District	-	12:00 NOON Aug. 25

-Continued-

Table 9. (page 2 of 2)

[a] Actual opening date will be determined by sockeye escapement levels into the Chignik Lakes system and the initial fishing period in Chignik. Fishing time will be in 24 hour increments.

[b] Actual opening time/date is as shown. This opening is considered a commercial test fishery; fishing time for this initial period will be 33 hours (12:00 NOON 6/9 through 9:00 PM 6/10).

[c] Actual opening date will be determined by the sockeye escapement level into Ayakulik River and opening time will be determined by low tide timing during daylight hours.

[d] Actual opening time/date for minor systems will be determined by sockeye escapement levels while the initial opening for the Foul Bay and Waterfall Bay Terminal Harvest Areas will occur on June 9.

[e] Actual opening time/date is as shown. Fishing time for the initial period will be 81 hours (12:00 NOON 7/6 through 9:00 PM 7/9) for the Kodiak Archipelago sections and 57 hours (12:00 NOON 7/6 through 9:00 PM 7/8) for the Mainland sections. See Fishing Periods for additional information.

[f] Actual opening date will be determined by sockeye escapement and anticipated harvest levels in the Chignik Management Area. Fishing time will be in 24 hour increments.

[g] Actual opening date for system specific fishing time will be determined by sockeye escapement levels into major systems. All fishing periods will begin at 12:00 NOON and end at 9:00 PM , except fishing periods beginning 8/16 will end at 6:00 PM.

[h] Actual opening dates for system specific fishing time will be determined by overall coho run strength evaluation and by escapement levels into major systems and minor systems with reliable escapement data.

Table 10. Escapement summary for systems with fish weirs in the Kodiak Management Area, 2001.

Weir Locations	Dates		Salmon Species Enumerated					Totals
	Installed	Removed	Sockeye	Chinook	Pink	Coho	Chum	
1. Karluk	5/24	9/18	863,536	4,453	65,554	22,660	86	956,289
2. Ayakulik	5/20	8/29	218,892	13,929	10,374	5,064	96	248,355
3. Dog Salmon	5/28	8/25	163,309	362	72,370	1,505	6,086	243,632
4. Frazer [a]	5/28	8/13	154,349[a]	166[a]	0	0	0	154,515[a]
5. Upper Station	5/25	9/12	141,201	5	12,684	3,530	0	157,420
6. Akalura	6/7	9/9	13,772	0	29,732	2,709	0	46,213
7. Saltery	6/24	8/29	45,608	1	19,280	131	24	65,044
8. Buskin	5/25 8/17	7/25 9/29	20,556	0	50,140	13,494	91	84,281
9. Litnik	5/26	9/6	24,271	1	25,228	12,981	6	62,487
10. Pauls Bay	5/30	9/5	23,230	0	15,409	25,032	77	63,748
11. Portage	6/7	6/29	3,147	0	0	0	0	3,147
12. Malina	5/23	8/1	22,490	2	3,847	0	0	26,339
13. Big Bay (Shuyak)	8/13	9/12	7	0	295	966	0	1,268
14. Bear Creek (Shuyak)	8/14	9/10	21	0	1,411	2,703	0	4,135
15. Little River	6/2	7/26	3,994	0	0	0	0	3,994
Totals			1,544,034	18,753	306,324	90,775	6,466	1,966,352

[a] Frazer salmon counts are not included in the totals because these salmon are initially counted through Dog Salmon weir.

Table 11. Historical indexed salmon escapements, by species, in the Kodiak Management Area, 1970-2001.

Year [a]	Chinook	Sockeye	Coho	Pink	Chum	TOTAL
1970	3,900	573,603		3,392,577	123,150	4,093,230
1971	4,524	456,197		1,070,173	249,327	1,780,221
1972	3,047	605,491		1,053,391	335,115	1,997,044
1973	4,762	543,111		604,592	258,044	1,410,509
1974	1,622	995,925	20,396	2,041,099	86,383	3,145,425
1975	3,059	704,801	29,634	1,100,555	156,761	1,994,810
1976	8,413	1,075,226	36,083	3,105,320	312,914	4,537,956
1977	13,804	1,269,374	59,095	2,212,488	742,384	4,297,145
1978	14,677	1,000,353	37,479	5,006,273	482,956	6,541,738
1979	14,445	1,410,800	93,940	3,067,647	607,430	5,194,262
1980	5,853	1,831,748	27,290	6,492,822	830,070	9,187,783
1981	15,657	1,391,593	58,729	3,188,869	741,981	5,396,829
1982	10,773	1,603,692	86,402	5,370,049	1,023,923	8,094,839
1983	27,445	1,304,233	101,950	2,090,104	824,754	4,348,486
1984	14,411	1,467,730	123,779	4,520,344	682,936	6,809,200
1985	13,877	2,554,067	191,406	3,204,316	723,390	6,687,056
1986	11,046	2,001,279	170,000	4,068,615	655,817	6,906,757
1987	23,744	1,551,543	153,000	2,978,510	641,579	5,348,376
1988	35,152	1,661,532	96,140	3,236,931	558,531	5,588,286
1989 [b]	26,131	3,022,886	166,622	14,642,587	1,432,609	19,290,835
1990	25,972	2,006,241	151,420	6,024,900	474,620	8,683,153
1991	27,306	2,515,659	259,850	4,317,610	934,336	8,054,761
1992	19,013	1,968,058	289,592	3,515,624	530,128	6,322,415
1993	22,113	1,705,440	159,996	4,291,581	234,381	6,413,511
1994	21,591	2,041,511	206,418	3,994,020	545,391	6,808,931
1995	30,843	1,840,112	231,175	10,498,232	469,856	13,070,218
1996	21,089	1,813,256	189,618	3,351,011	394,784	5,769,758
1997	28,534	1,787,611	225,938	3,217,075	454,980	5,714,138
1998	24,654	1,775,759	234,734	7,088,975	374,456	9,498,578
1999	26,872	2,119,169	133,398	4,081,686	882,257	7,243,382
2000	31,400	1,599,000	124,200	4,501,800	908,900	7,165,300
2001 [c]	18,753	1,580,660	244,360	3,393,620	557,925	5,795,318
Average - Past 10 Years:						
1992-2001	24,486	1,823,058	203,943	4,793,362	535,306	7,380,155
Odd Year Only 1991-1999				5,281,237		
Even Year Only 1992-2000				4,490,286		
Average [b] - Previous Decades:						
1991-2000	25,342	1,916,558	205,492	4,885,761	572,947	7,606,099
1980-1990 [b]	18,393	1,737,366	116,012	4,117,546	715,760	6,705,077
1970-1979	7,225	863,488	46,105	2,265,412	335,446	3,499,234
Average [b] - Overall						
1970-2001	17,328	1,555,552	139,380	4,085,106	569,752	6,349,695

[a] Includes peak counts from aerial and foot surveys, plus end of season totals from weired systems.

[b] Fisheries were severely restricted in 1989 due to the M/V Exxon Valdez oil spill. 1989 not included in averages.

[c] Preliminary Data.

Table 12. Subsistence salmon fishery harvest from ADF&G permit reports, by species, for the Kodiak Management Area, 1970-2001.

Year	Permits Issued	Permits Returned	Percent Returned	Subsistence Harvest[a] Sockeye	Coho	Pink	Chum	Chinook	TOTAL
1970	213	49	23	959	939	797	265	1	2,961
1971	267	131	49	3,442	1,720	1,276	472	5	6,915
1972	329	176	53	3,633	1,531	2,516	2,729	11	10,420
1973	400	149	37	4,453	2,289	1,393	1,166	7	9,308
1974	367	90	25	1,909	846	1,094	128	1	3,978
1975	508	90	18	1,141	922	947	221	1	3,232
1976	536	243	45	4,338	962	2,275	370	4	7,949
1977	739	451	61	8,119	2,508	2,849	317	54	13,847
1978	860	539	63	7,239	3,699	2,747	572	50	14,307
1979	1,085	697	64	10,376	3,840	3,300	333	111	17,960
1980	1,239	756	61	13,746	4,407	2,755	566	67	21,541
1981	1,166	658	56	12,924	4,029	2,458	484	49	19,944
1982	1,276	993	78	16,615	7,192	3,558	667	110	28,142
1983	1,307	1,082	83	15,526	6,283	2,536	800	111	25,256
1984	1,240	1,061	86	17,620	5,808	1,877	720	265	26,290
1985	1,476	1,196	81	16,231	8,873	2,756	855	172	28,887
1986	1,244	1,049	84	14,451	7,087	2,371	605	91	24,605
1987	1,124	904	80	13,277	6,737	2,421	1,316	101	23,852
1988	1,098	706	64	10,142	4,291	1,320	366	108	16,227
1989[b]	2,800	716	N/A	12,638	4,123	1,553	419	43	18,776
1990	2,900	1,181	N/A	17,972	8,646	1,605	655	131	29,009
1991	1,406	1,223	87	21,835	8,208	1,743	714	177	32,677
1992	1,561	1,193	76	20,684	8,643	1,646	643	318	31,934
1993	1,496	914	61	19,521	7,188	2,696	838	243	30,486
1994[c,d]	2,550	1,518	60	17,962	7,491	1,758	440	205	27,856
1995	1,950	1,218	62	19,416	5,603	1,548	293	175	27,035
1996	1,567	1,431	91	28,287	5,117	1,125	381	253	35,163
1997	2,098	1,651	79	33,293	6,369	1,458	234	383	41,737
1998	1,845	1,143	62	21,144	5,465	170	70	350	27,199
1999	1,430	1,139	80	21,867	4,107	1,030	339	296	27,639
2000	1,711	1,670	98	31,629	6,385	982	375	351	39,722
2001[e]	2,245	261	12	4,408	614	47	49	28	5,146
Average[e] - Past 10 Years:									
1992-2001	1,845	1,214	66	21,821	5,698	1,246	366	260	29,392
Average[b] - Previous Decades:									
1991-2000				23,564	6,458	1,416	433	275	32,145
1980-1990				14.850	6.335	2.366	703	121	24.375
1970-1979				4,561	1,926	1,919	657	25	9,088
Average[b] - Overall									
1970-2001				13,962	4,748	1,831	575	134	21,250

[a] Data are compiled from Annual Management Reports and the subsistence permit database. This is only the harvest for individuals returning permits to ADF&G, and so does not represent the total subsistence salmon harvest.

[b] Due to the 1989 Exxon Valdez oil spill harvest patterns were unusual; 1989 data is not included in averages. There was also an Exxon sponsored subsistence fishery in Karluk Lagoon. Harvest totaled an additional 1 chinook, 13,329 sockeye, 523 coho, 47 pink, and 19 chum salmon.

[c] Permits were mailed to all previous applicants. Many were returned as undeliverable.

[d] The salmon and shellfish subsistence permitting programs were merged.

[e] Preliminary numbers for 2001. Permits are still being returned.

Table 13. Estimated sport fish salmon harvest in the Kodiak regulatory area of the Kodiak Management Area, 1977-2000.

Year	Chinook[a]	Sockeye[a]	Coho[a]	Pink[a]	Chum[a]	Total[a]
1977	483	1,255	4,716	14,519	1,645	22,618
1978	350	1,776	4,927	17,739	1,287	26,079
1979	752	2,436	11,522	15,871	500	31,081
1980	327	2,178	12,692	18,969	525	34,691
1981	789	1,620	10,584	12,259	637	25,889
1982	1,120	3,055	13,329	18,850	1,324	37,678
1983	729	3,150	7,823	8,936	816	21,454
1984	921	5,385	14,612	12,779	1,321	35,018
1985	762	7,536	13,625	13,423	865	36,211
1986	520	5,259	20,873	14,509	336	41,497
1987	379	4,165	16,912	11,662	560	33,678
1988	1,564	6,222	18,809	19,044	1,546	47,185
1989	1,087	6,789	19,802	17,794	631	46,103
1990	996	6,056	13,728	7,464	191	28,435
1991	2,508	5,049	17,691	12,106	1,517	38,871
1992	2,217	6,240	13,668	5,904	625	28,654
1993	5,092	7,849	21,241	12,324	504	47,010
1994	3,166	12,502	12,406	5,336	290	33,700
1995	2,662	7,994	13,236	11,926	981	36,799
1996	2,407	10,158	16,822	6,917	692	36,996
1997	5,221	8,259	23,763	5,873	235	43,351
1998	4,052	8,763	24,850	12,226	547	50,438
1999	6,791	10,405	27,781	12,813	426	58,216
2000	9,629	16,972	30,975	10,599	955	69,130
Average - Past 10 Years:						
1991-2000	4,375	9,419	20,243	9,602	677	44,317
Average - Previous Decades:						
1990-1999	3,511	8,328	18,519	9,289	601	40,247
1980-1989	820	4,536	14,906	14,823	856	35,940
Average - Recent 5 Year Periods						
1996-2000	5,620	10,911	24,838	9,686	571	51,626
1991-1995	3,129	7,927	15,648	9,519	783	37,007
1986-1990	909	5,698	18,025	14,095	653	39,380
Average - All Years						
1977- 2000	2,272	6,295	16,099	12,493	790	37,949

[a] The Kodiak regulatory area encompasses only the Kodiak Archipelago. Estimated harvests from the Mainland District of the Kodiak Management Area are summarized in Alaska Peninsula/Aleutian Islands regulatory area statistics. Includes harvest from both marine and freshwater fisheries; does not include the number of salmon caught and released. Harvest data is from Sport Fish Division Annual Management Reports.

Table 14. Chinook salmon escapement through the Ayakulik, Karluk, and Dog Salmon (Frazer) weirs, in the Kodiak Management Area, 1970-2001.

	Chinook Salmon Escapement			
Year	Ayakulik	Karluk	Dog Salmon	Total[a]
1970	1,264 [a]	3,900 [a]		5,164
1971	1,500 [a]	437 [a]		1,937
1972	1,644	1,000 [a]		2,644
1973	1,262	3,000 [a]		4,262
1974	851	700 [a]		1,551
1975	1,053	2,000 [a]		3,053
1976	1,493	6,897		8,390
1977	5,163	8,434		13,597
1978	4,739	9,795		14,534
1979	4,833	9,555		14,388
1980	974	4,810		5,784
1981	8,018	7,575		15,593
1982	3,230	7,489		10,719
1983	15,511	11,746	169	27,426
1984	6,502	7,747	137	14,386
1985	8,151	5,362	340	13,853
1986	6,371	4,429	221	11,021
1987	15,636	7,930	103	23,669
1988	21,370	13,337	303	35,010
1989	15,432	10,484	156	26,072
1990	11,251	14,442	270	25,963
1991	12,988	14,022	282	27,292
1992	9,135	9,601	265	19,001
1993	7,819	13,944	337	22,100
1994	9,138	12,049	385	21,572
1995	17,701	12,657	470	30,828
1996	10,344	10,051	683	21,078
1997	14,357	13,443	662	28,462
1998	14,038	10,239	293	24,570
1999	13,503	13,063	281	26,847
2000	20,527	10,460	357	31,344
2001	13,929	4,453	362	18,744
Average - Past 10 Years				
1991- 2000	12,955	11,953	402	25,309
Average - Previous Decades:				
1990-1999	12,027	12,351	393	24,771
1980-1989	10,120	8,091	204	18,353
1970-1979	2,380	4,572		6,952
Average - All Years				
1970- 2001	8,741	8,283	320	17,214

[a] During this year the weir was installed at the lake outlet, so this count is an estimate based on the number of fish passing the weir plus aerial survey estimates.

Table 15. Commercial salmon buyers and processors, Kodiak Management Area, 2001.

Buyers/Processors[a]	Shorebased Processors			Floating Processors			Product	
	Kodiak City	Kodiak Borough	Other Areas	Kodiak City	Kodiak Borough	Other Areas	Canned	Frozen
Alaska Pacific Seafoods	X						X	X
Cook Inlet Processors	X							X
Cook Inlet Processors-Uganik		X					X	
International Seafoods	X							X
Kodiak King Crab/Ocean Beauty`.	X						X	X
Kodiak Salmon Packers-Larsen Bay		X					X	X
Wards Cove Packing -Alitak		X					X	X
Western Alaska Seafoods	X							X
Island Seafoods	X							X
Alaska Fresh Seafood	X							X
Alaska Native Seafoods			X					X
Wild Alaskan Seafood						X		X
Icicle Seafoods, Homer			X					X
TOTALS	7	3	2	0		1	5	12

[a] In 2001 12 individual companies participated in the Kodiak Management Area commercial salmon fisheries. One company operated more than one shorebased processing plant.

Table 16. Commercial salmon harvest and value, by gear type and species, in the Kodiak Management Area, 2001.

Purse Seine		**Chinook**	**Sockeye**	**Coho**	**Pink**	**Chum**	**Total**	**%**
Total # [a]		21,611	1,679,985	346,472	18,303,011	889,936	21,241,015	89.6
Avg. Wt.		14.13	5.44	7.73	3.41	8.12		
Total Lbs. [a]		305,325	9,133,393	2,676,906	62,336,822	7,226,296	81,678,742	86.7
Avg. $/Lb. [b]		0.60	0.65	0.20	0.09	0.27		
Exvessel $		183,195.00	5,936,705.45	535,381.20	5,610,313.98	1,951,099.92	14,216,695.55	75.2
# of Permits=	**182**							-
Average Value $		1,006.57	32,619.26	2,941.65	30,825.90	10,720.33	**78,113.71**	
Percent		1.29	41.76	3.77	39.46	13.72	100.00	

Set Gillnet		**Chinook**	**Sockeye**	**Coho**	**Pink**	**Chum**	**Total**	**%**
Total # [a]		2,216	977,616	61,505	1,264,041	163,755	2,469,133	10.4
Avg. Wt.		11.54	5.72	8.24	3.98	8.38		
Total Lbs. [a]		25,571	5,596,142	507,007	5,028,053	1,372,083	12,528,856	13.3
Avg. $/Lb. [b]		0.52	0.66	0.20	0.10	0.27		
Exvessel $		13,296.92	3,693,453.72	101,401.40	502,805.30	370,462.41	4,681,419.75	24.8
# of Permits=	**172**							-
Average Value $		77.31	21,473.57	589.54	2,923.29	2,153.85	**27,217.56**	
Percent		0.28	78.90	2.17	10.74	7.91	100.00	

Total All Gear	**Chinook**	**Sockeye**	**Coho**	**Pink**	**Chum**	**Total**
Total # [a]	23,827	2,657,601	407,977	19,567,052	1,053,691	23,710,148
Avg. Wt.	13.89	5.54	7.80	3.44	8.16	
Total Lbs. [a]	330,896	14,729,535	3,183,913	67,364,875	8,598,379	94,207,598
Avg. $/Lb. [b]	0.59	0.65	0.20	0.09	0.27	
Exvessel $	196,491.92	9,630,159.17	636,782.60	6,113,119.28	2,321,562.33	18,898,115.30
% of Total Value	1.04	50.96	3.37	32.35	12.28	

Test Fishery	**Chinook**	**Sockeye**	**Coho**	**Pink**	**Chum**	**Total**	**%**
Total # [a]	0	1,666	1	111	39	1,817	0.0
Avg. Wt.	0.00	5.77	7.00	4.13	8.49		
Total Lbs. [a]	0	9,608	7	458	331	10,404	0.0
Avg. $/Lb. [b]	0.60	0.85	0.50	0.12	0.20		
Exvessel $	0.00	8,166.80	3.50	54.96	66.20	8,291.46	0.0

a Numbers and pounds of fish are derived from ADF&G fish ticket summaries. There were 12,995 fish tickets generated in 2001; each ticket represents a landing. Each gear type had the following landings: Purse Seine - 6,731; Beach Seine - 0; Set Gillnet - 6,228; and Test Fishery - 36.

b Average price per pound figures are based on fish ticket information. These average prices do not reflect payments made to fishers for iced fish, dock deliveries, and postseason settlements.

Table 17. Salmon average weights and average price per pound by species from commercial salmon fisheries of the Kodiak Management Area, 1990-2001.

Year		Gear Type	Average Chinook	Sockeye	Coho	Pink	Chum
1990	**Avg. Wt.[a]**		**12.19**	**5.20**	**8.23**	**3.18**	**7.69**
	Avg. $/lb.[b]	Seine	$1.06	$1.55	$0.75	$0.34	$0.51
		Gillnet	$1.07	$1.50	$0.71	$0.24	$0.48
1991	**Avg. Wt.[a]**		**12.14**	**5.11**	**7.26**	**2.92**	**6.98**
	Avg. $/lb.[b]	Seine	$0.72	$0.93	$0.56	$0.13	$0.30
		Gillnet	$0.72	$0.91	$0.46	$0.14	$0.28
1992	**Avg. Wt.[a]**		**14.13**	**5.68**	**8.18**	**3.75**	**7.25**
	Avg. $/lb.[b]	Seine	$1.02	$1.47	$0.56	$0.18	$0.39
		Gillnet	$1.00	$1.46	$0.59	$0.16	$0.33
1993	**Avg. Wt.[a]**		**11.92**	**5.13**	**6.72**	**3.13**	**5.99**
	Avg. $/lb.[b]	Seine	$0.78	$0.88	$0.47	$0.16	$0.28
		Gillnet	$0.60	$0.85	$0.35	$0.15	$0.22
1994	**Avg. Wt.[a]**		**13.95**	**4.98**	**8.69**	**3.81**	**7.43**
	Avg. $/lb.[b]	Seine	$0.72	$1.27	$0.69	$0.18	$0.23
		Gillnet	$0.58	$1.26	$0.70	$0.17	$0.23
1995	**Avg. Wt.[a]**		**13.78**	**5.11**	**8.03**	**3.51**	**7.49**
	Avg. $/lb.[b]	Seine	$0.70	$1.07	$0.41	$0.17	$0.28
		Gillnet	$0.63	$1.03	$0.36	$0.16	$0.24
1996	**Avg. Wt.[a]**		**13.66**	**5.68**	**8.16**	**3.46**	**8.17**
	Avg. $/lb.[b]	Seine	$0.65	$0.89	$0.43	$0.07	$0.15
		Gillnet	$0.66	$0.90	$0.41	$0.07	$0.13
1997	**Avg. Wt.[a]**		**9.98**	**5.25**	**7.97**	**3.38**	**7.99**
	Avg. $/lb.[b]	Seine	$0.64	0.94	$0.57	$0.16	$0.19
		Gillnet	$0.66	$0.98	$0.51	$0.16	$0.18
1998	**Avg. Wt.[a]**		**14.37**	**4.84**	**8.45**	**3.71**	**7.80**
	Avg. $/lb.[b]	Seine	$0.72	$1.16	$0.37	$0.15	$0.19
		Gillnet	$0.63	$1.19	$0.36	$0.16	$0.19
1999	**Avg. Wt.[a]**		**12.71**	**5.26**	**7.41**	**3.05**	**7.92**
	Avg. $/lb.[b]	Seine	$0.68	$1.07	$0.40	$0.14	$0.19
		Gillnet	$0.67	$1.12	$0.42	$0.14	$0.17
2000	**Avg. Wt.[a]**		**14.92**	**5.73**	**8.00**	**3.27**	**8.17**
	Avg. $/lb.[b]	Seine	$0.66	$0.89	$0.48	$0.14	$0.22
		Gillnet	$0.64	$0.90	$0.50	$0.14	$0.23
2001	**Avg. Wt.[a]**		**13.89**	**5.54**	**7.80**	**3.44**	**8.16**
	Avg. $/lb.[c]	Seine	$0.60	$0.65	$0.20	$0.09	$0.27
		Gillnet	$0.52	$0.66	$0.20	$0.10	$0.27

[a] Average weight information is derived from ADF&G Fish Ticket summaries.

[b] Average price per pound figures are based on CFEC reports

[c] Average price per pound figures are from ADF&G fish ticket data base. These average prices do not reflect payments made to fishers for iced fish, dock deliveries, and postseason settlements.

Table 18. Estimated commercial salmon harvest and value, by gear type, in the Kodiak Management Area, 1970 - 2001.

Year	Total Catch [a]	Total Value [b]	Average Exvessel Value		
			Purse Seine	Beach Seine	Set Net
1970	13,949,206	$21,658,000	$41,880	$10,470	$21,083
1971	6,378,179	$4,973,000	$13,397	$2,919	$3,015
1972	3,883,197	$3,909,000	$9,233	$647	$1,451
1973	1,001,343	$2,094,000	$5,075	$251	$852
1974	3,329,427	$4,808,000	$15,993	$4,406	$4,828
1975	3,187,410	$3,831,000	$13,300	$5,600	$3,849
1976	12,484,451	$16,976,000	$43,017	$11,035	$14,481
1977	7,976,691	$18,873,142	$46,942	$12,107	$19,117
1978	16,942,215	$30,357,179	$70,685	$14,772	$22,711
1979	12,420,260	$22,958,317	$51,263	$20,348	$23,363
1980	19,157,249	$27,410,296	$62,363	$23,385	$21,215
1981	13,094,099	$32,647,230	$79,877	$26,946	$34,785
1982	10,891,952	$18,803,822	$39,309	$11,038	$28,889
1983	7,081,976	$13,405,578	$30,239	$5,918	$16,689
1984	13,678,005	$25,948,012	$71,560	$12,341	$26,552
1985	9,897,903	$20,428,111	$57,782	$8,405	$27,517
1986	16,304,165	$38,723,961	$92,693	$11,885	$68,700
1987	7,746,980	$31,107,864	$79,812	$15,664	$41,163
1988	19,009,757	$103,816,936	$252,388	$47,017	$119,013
1989 [c]	26,455,944	$61,046,024	$146,502	$28,288	$72,955
1990	12,122,389	$52,611,882	$113,302	$10,424	$66,715
1991	23,723,008	$37,019,293	$77,511	$5,257	$53,817
1992	8,462,464	$40,498,352	$98,379	$5,436	$41,984
1993	39,341,025	$38,554,977	$94,927	$8,230	$43,889
1994	12,098,324	$27,103,339	$67,545	$9,392	$46,189
1995	49,187,163	$53,921,533	$135,769	$14,388	$66,165
1996	9,215,978	$27,627,620	$71,080	$2,954	$52,632
1997	14,460,978	$21,017,587	$54,940	$8,419	$38,135
1998	26,444,750	$34,797,884	$119,346	$3,649	$52,048
1999	17,780,488	$34,090,487	$108,951	$7,342	$57,744
2000	14,373,531	$23,096,064	$74,618	$15,251	$36,711
2001 [d]	23,711,965	$18,898,115	$78,114	$0	$27,218
Average - Past 10 Years:					
1992-2001	21,507,667	$31,960,596	$90,367	$7,506	$46,271
Average [e] - Previous Decades:					
1991-2000	21,508,771	$33,772,714	$90,307	$8,032	$48,931
1980-1990 [c]	12,898,448	$36,490,369	$87,933	$17,302	$45,124
1970-1979	8,155,238	$13,043,764	$31,079	$8,256	$11,475
Average [e] - Overall					
1970-2001	14,494,727	$27,482,793	$70,042	$10,835	$34,920

[a] Number of fish. Includes commercial harvest, test fisheries, and Kitoi Bay Hatchery cost recovery harvests.

[b] Exvessel values for 1970-76 and 2001 are based on inseason price estimates, and do not include postseason adjustments. Values from 1977-88 and 1990-00 are from Commercial Fisheries Entry Commission reports.

-Continued-

Table 18. (page 2 of 2)

[c] In 1989 due to the presence of oil from the M/V Exxon Valdez spill there were extensive fishery closures. Harvest figures include actual and projected harvest of wild stocks and actual harvest of hatchery stocks from a supplemental cost recovery fishery. The 1989 exvessel value is estimated by multiplying price information from CFEC records for the limited fisheries that did occur by the projected total harvest had there been no oil spill. The 1989 exvessel value by gear type is estimated by using 1988 gear levels and proportional harvest by gear type, as if a normal fishery had occured on a normal distribution of fish.

[d] Exvessel value is based on fish ticket information. These average values do not reflect payments made to fishers for iced fish, dock deliveries, and postseason settlements.

[e] 1989 data not included in averages.

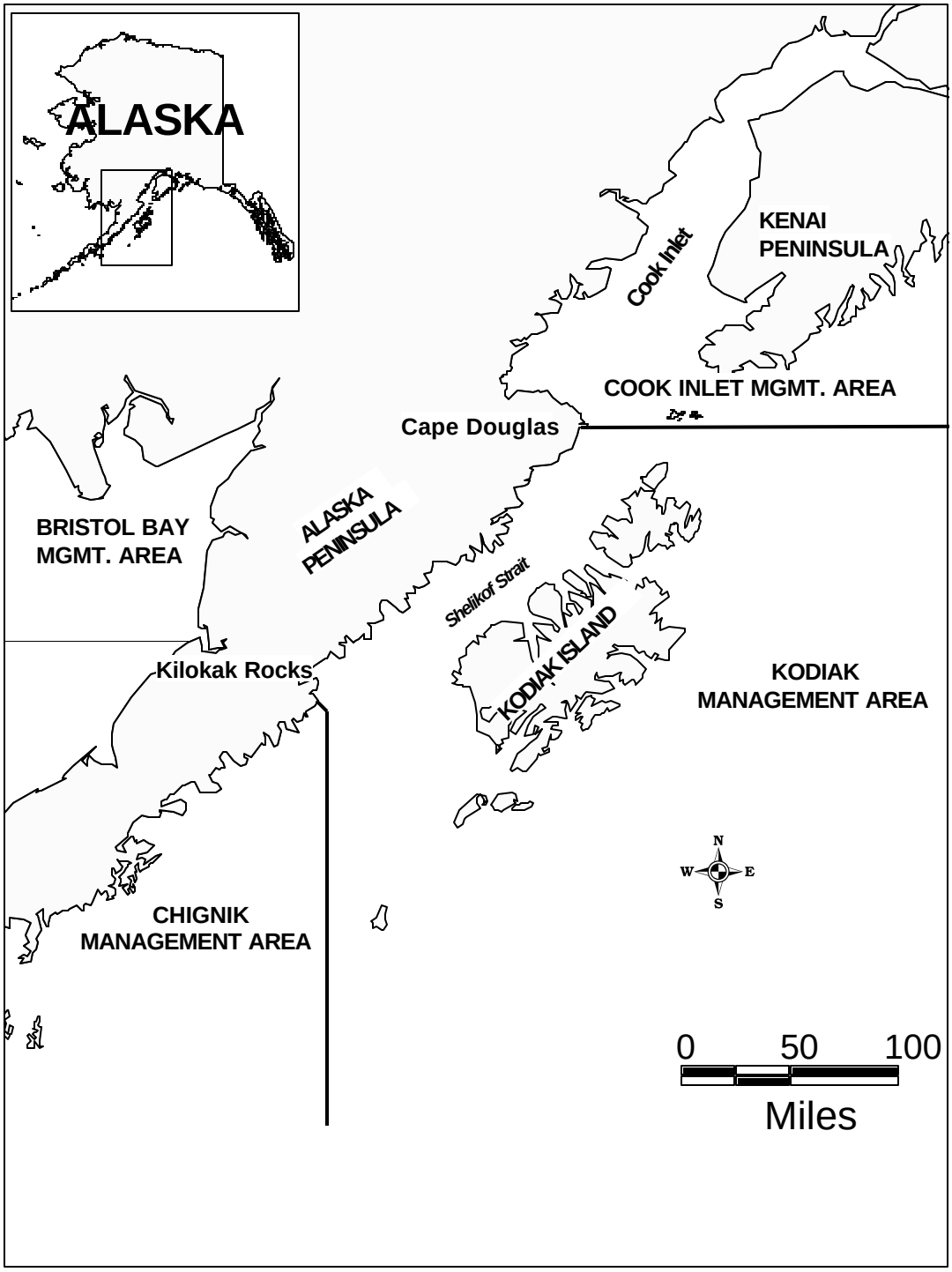


Figure 1. Location of the Kodiak Management Area, 2001.

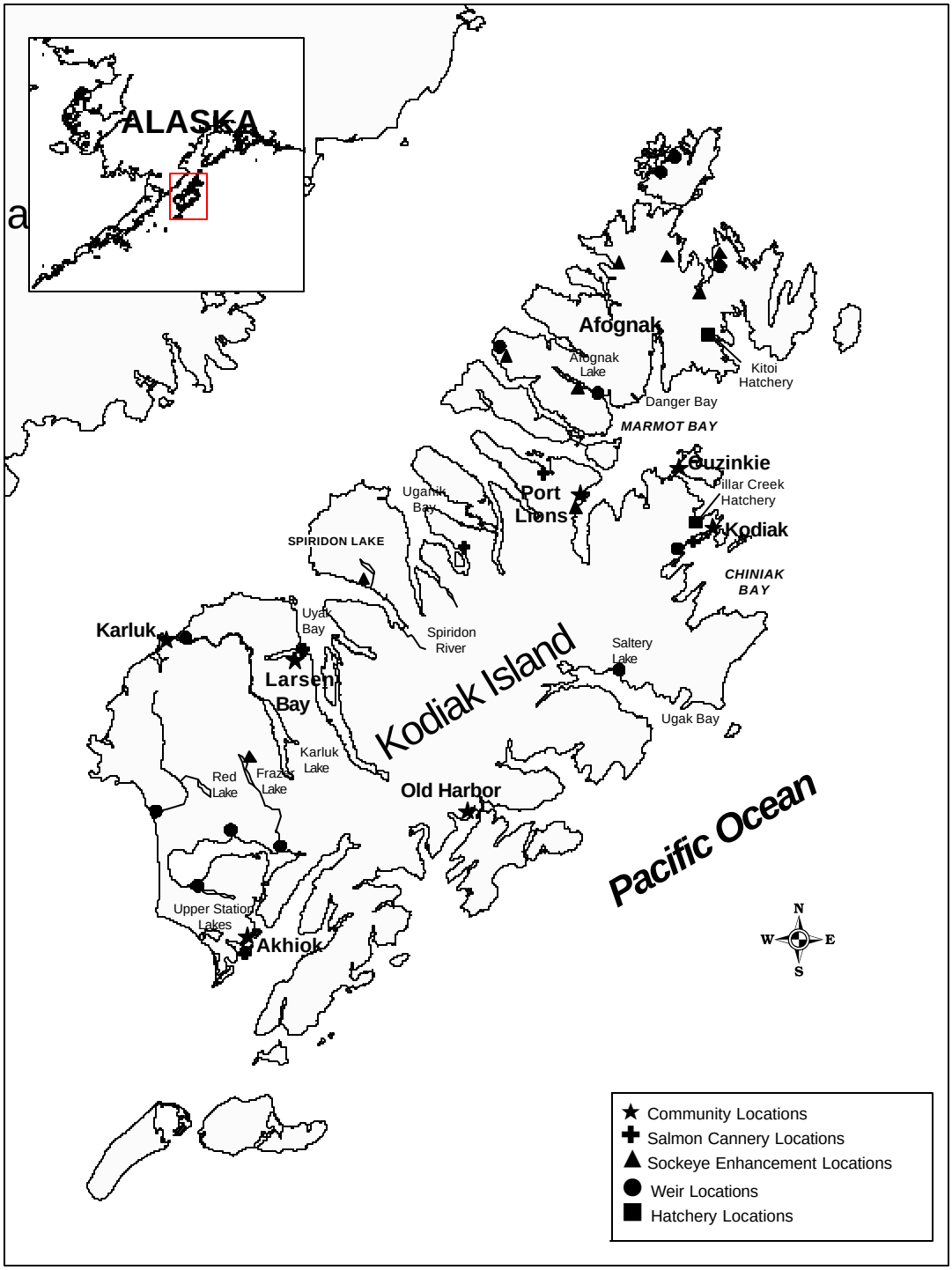


Figure 2. Map of Kodiak Island showing communities, canneries, sockeye salmon enhancement, weir, and hatchery locations in the Kodiak Management Area, 2001.

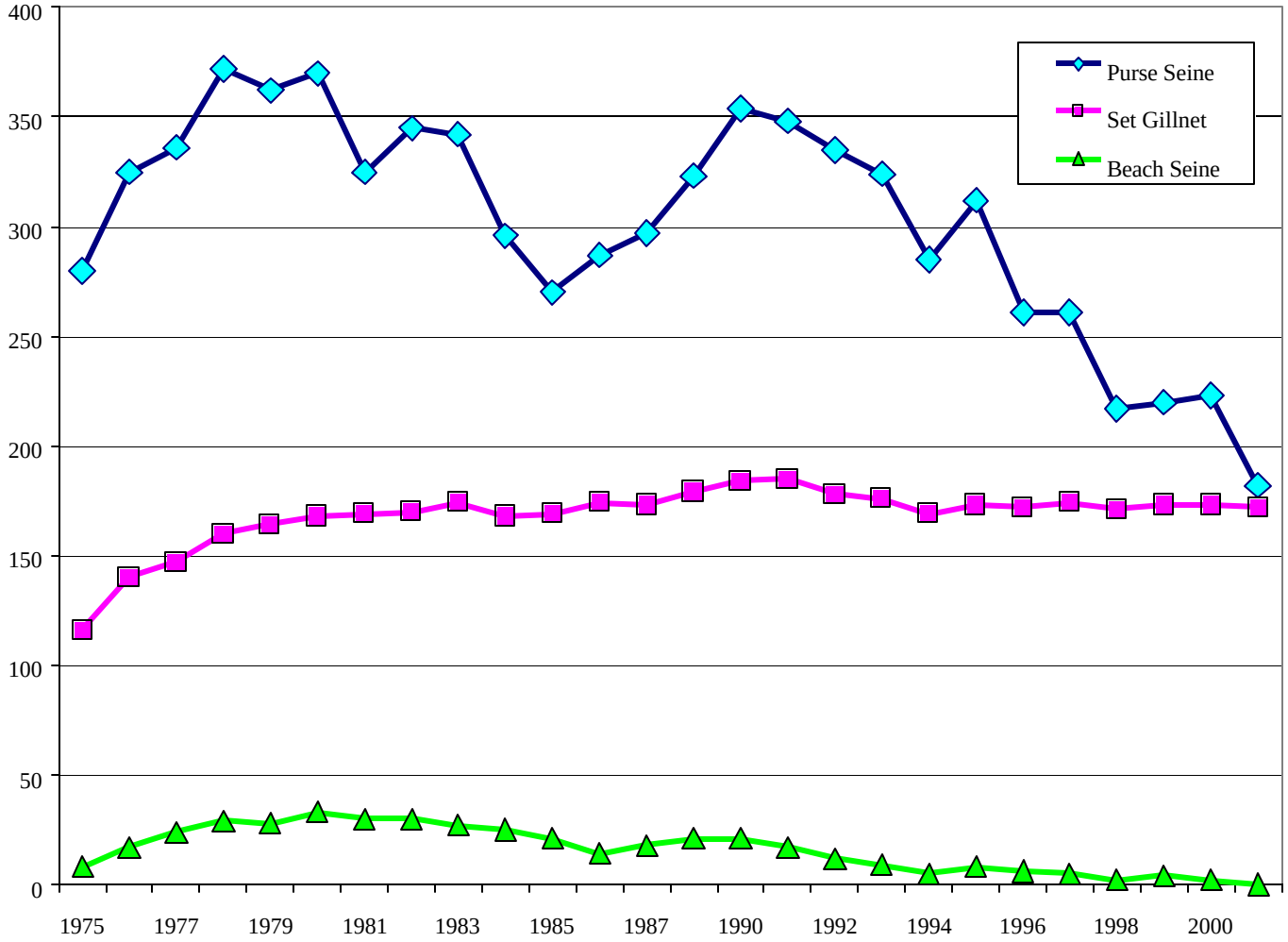


Figure 3. Number of commercial salmon fishing permits fished by gear type, in the Kodiak Management Area, 1975-2001.

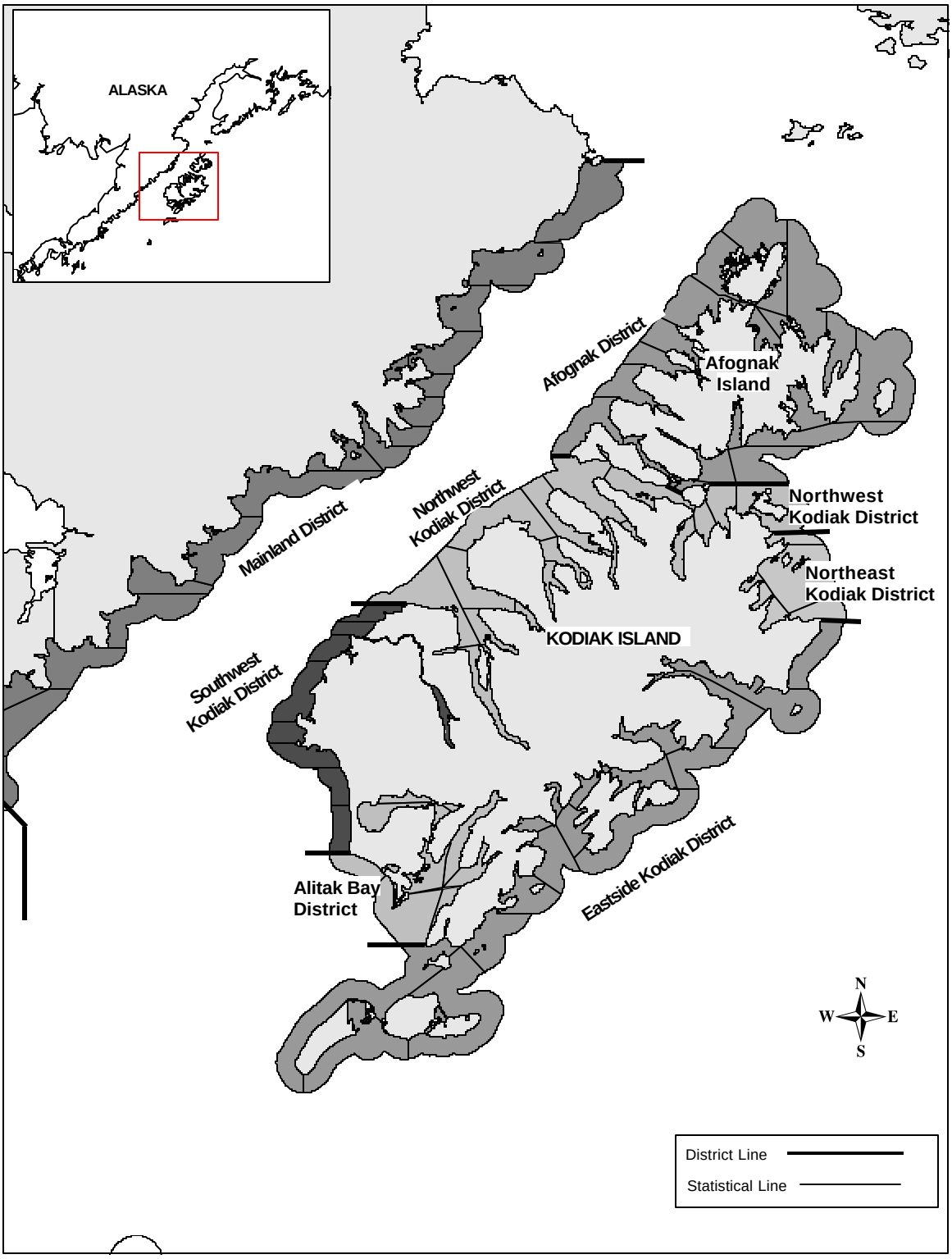
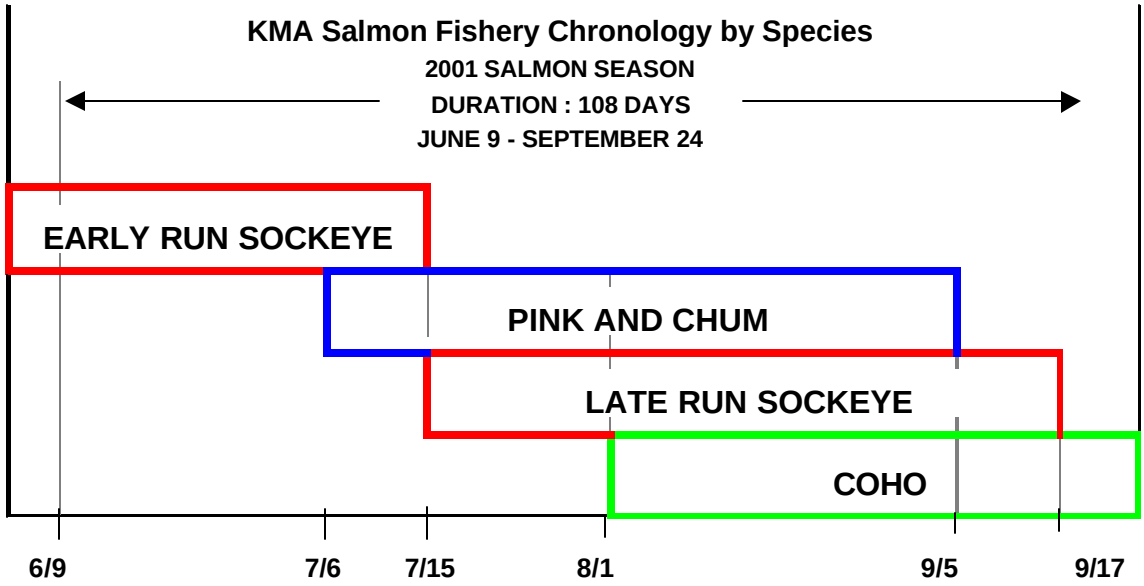


Figure 4. Map of the commercial salmon fishing districts in the Kodiak Management Area, 2001.



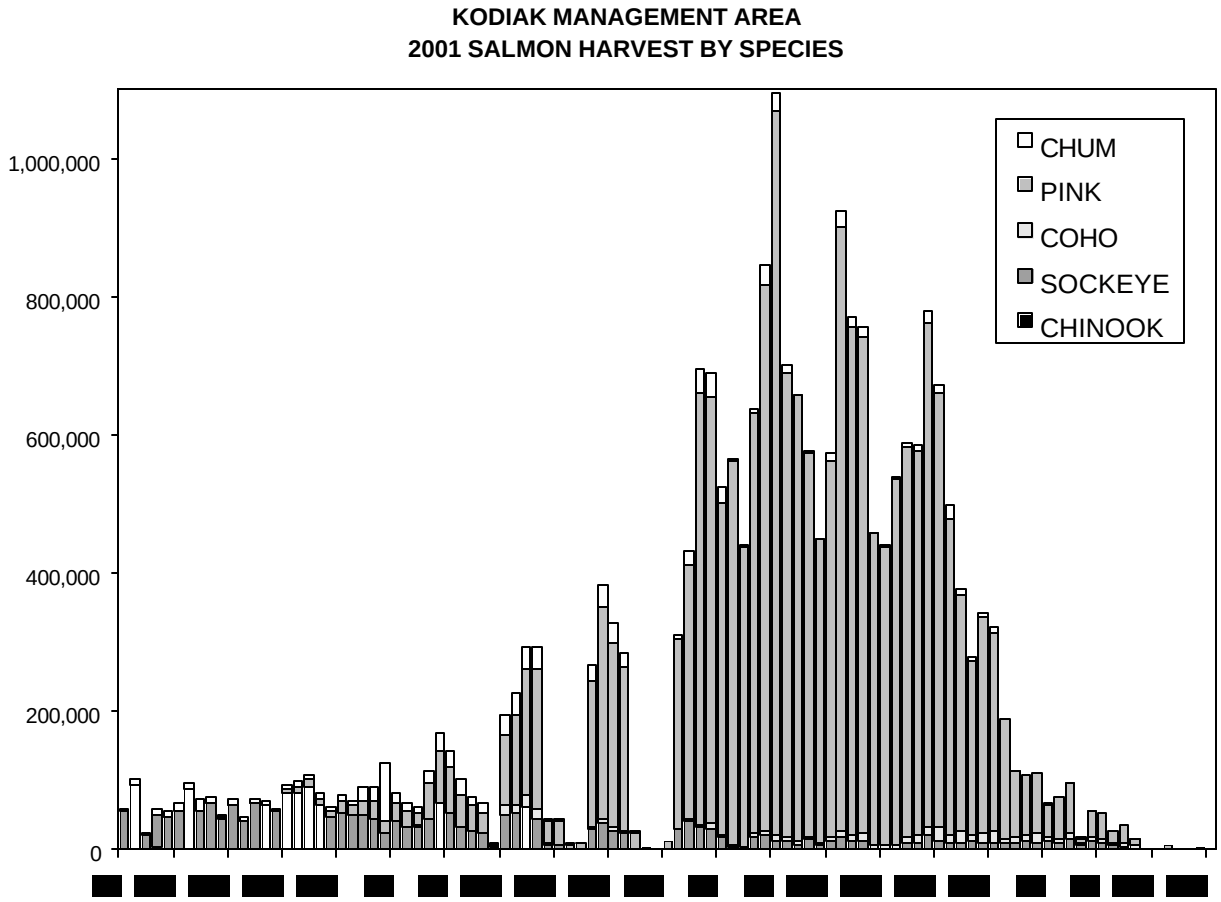


Figure 5. Commercial salmon fishery chronology, by species, for the Kodiak Management Area, 2001.

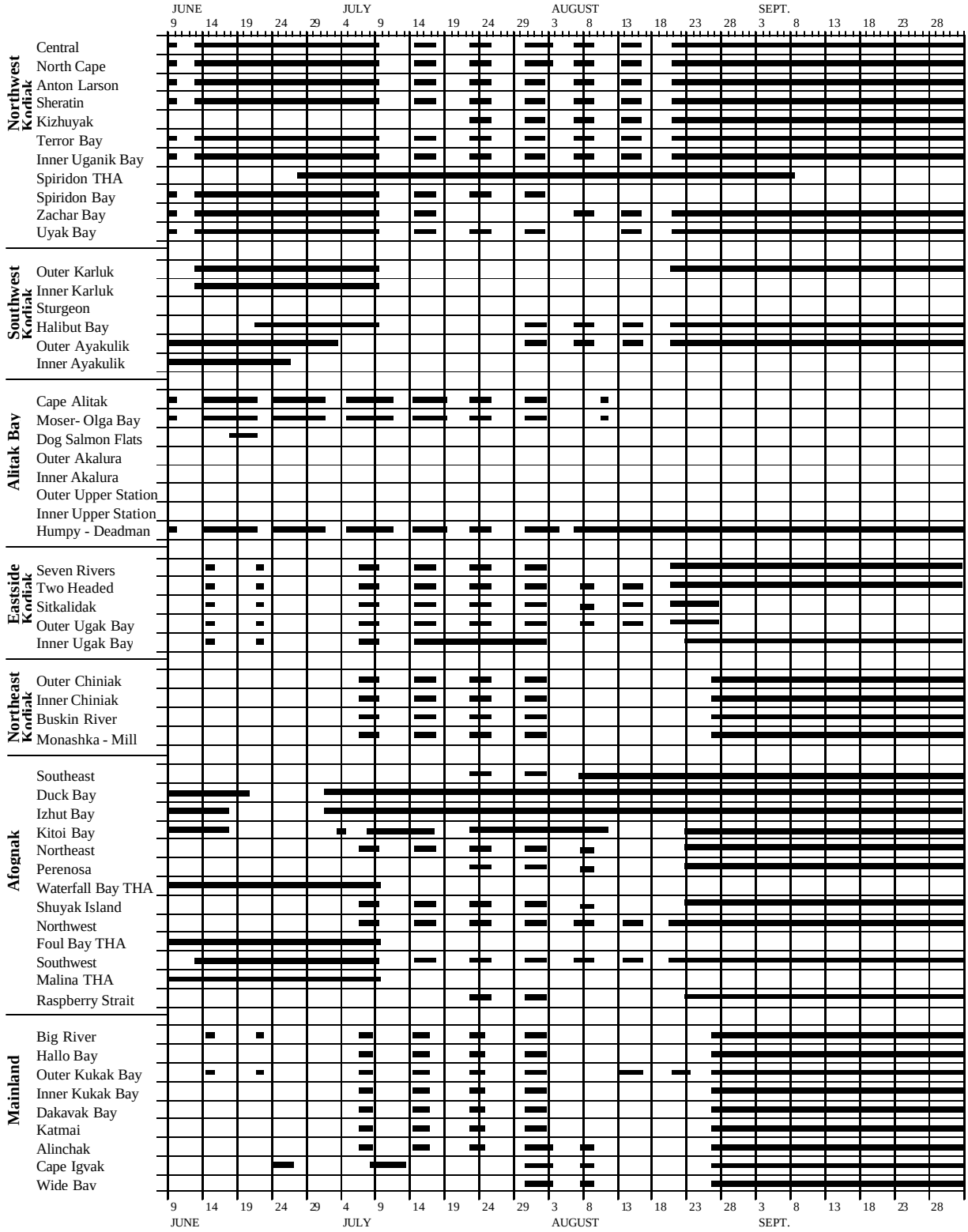


Figure 6. Commercial salmon fishing time by district and section, in the Kodiak Management Area, 2001.

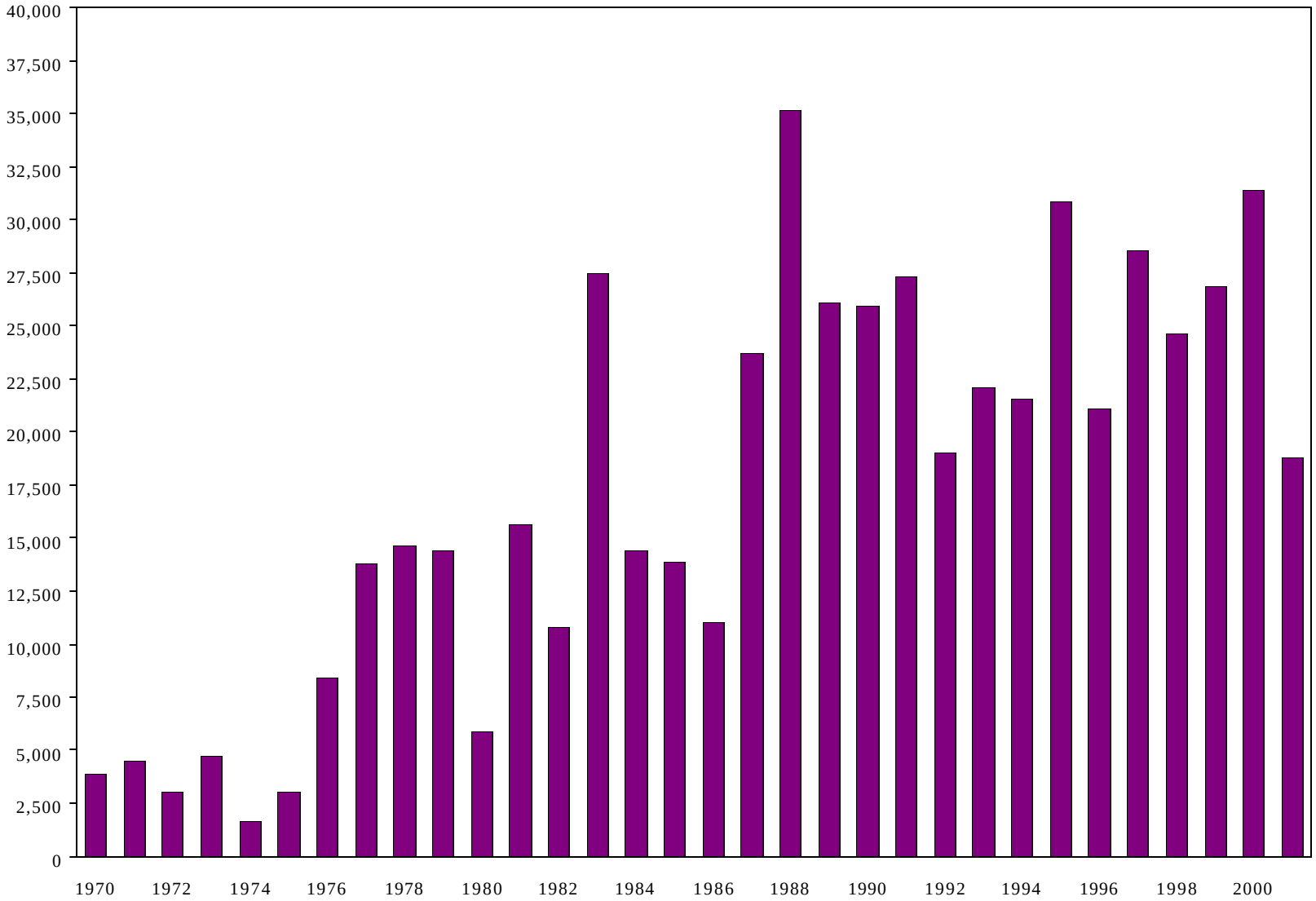
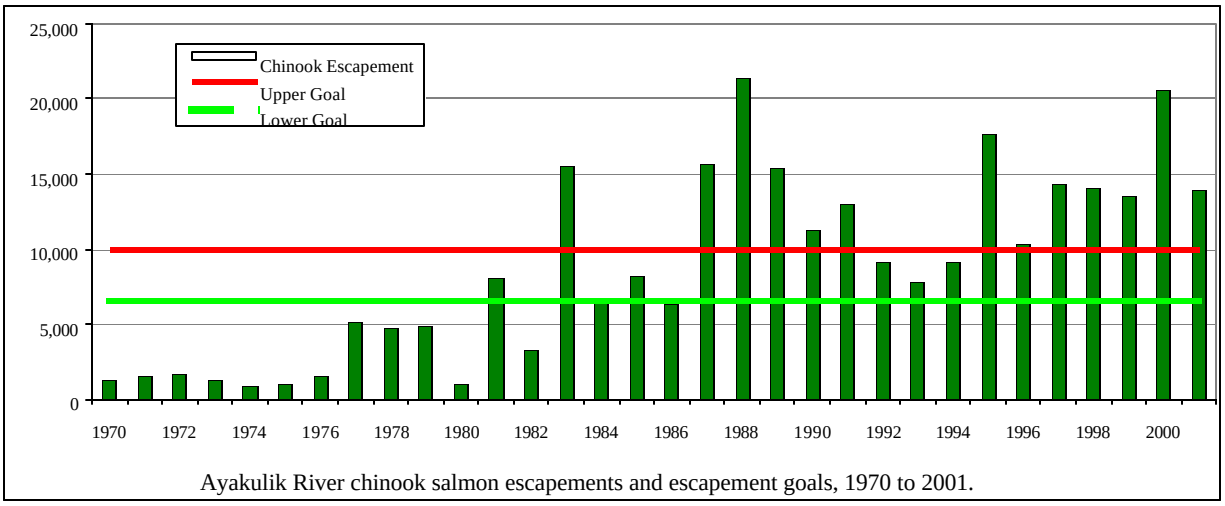
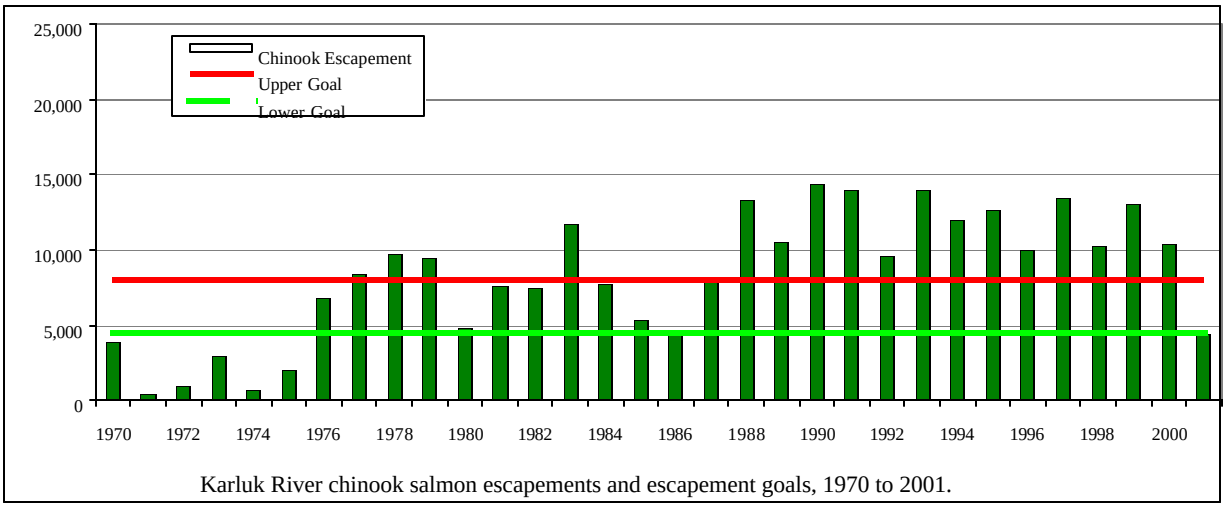


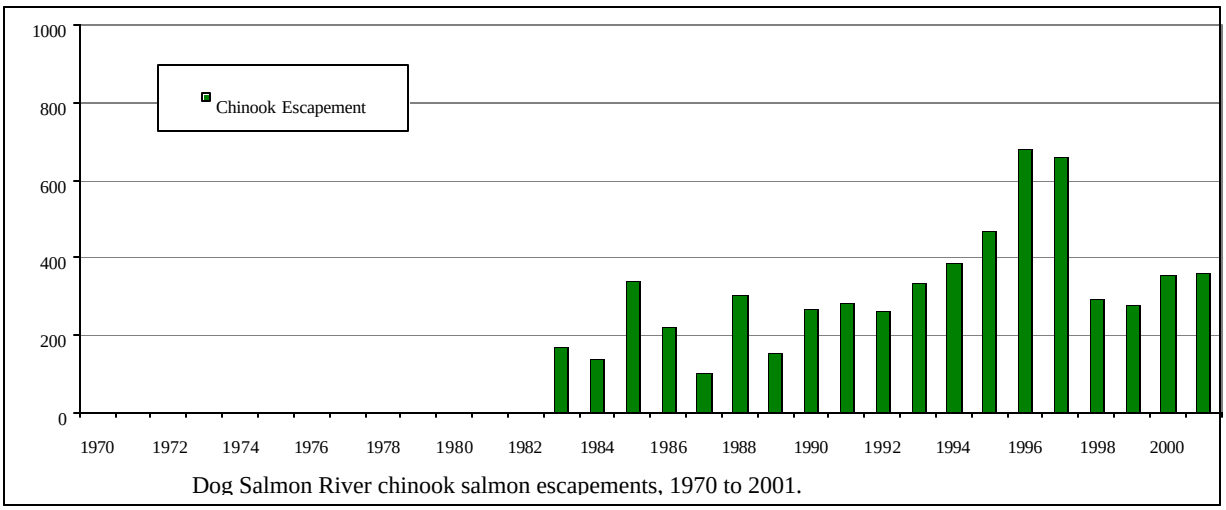
Figure 7. Chinook salmon escapements in the Kodiak Management Area, 1970-2001.



Ayakulik River chinook salmon escapements and escapement goals, 1970 to 2001.



Karluk River chinook salmon escapements and escapement goals, 1970 to 2001.



Dog Salmon River chinook salmon escapements, 1970 to 2001.

Figure 8. Ayakulik, Karluk, and Dog Salmon (Frazer) chinook salmon escapements and current escapement goals, Kodiak Management Area, 1970-2001.

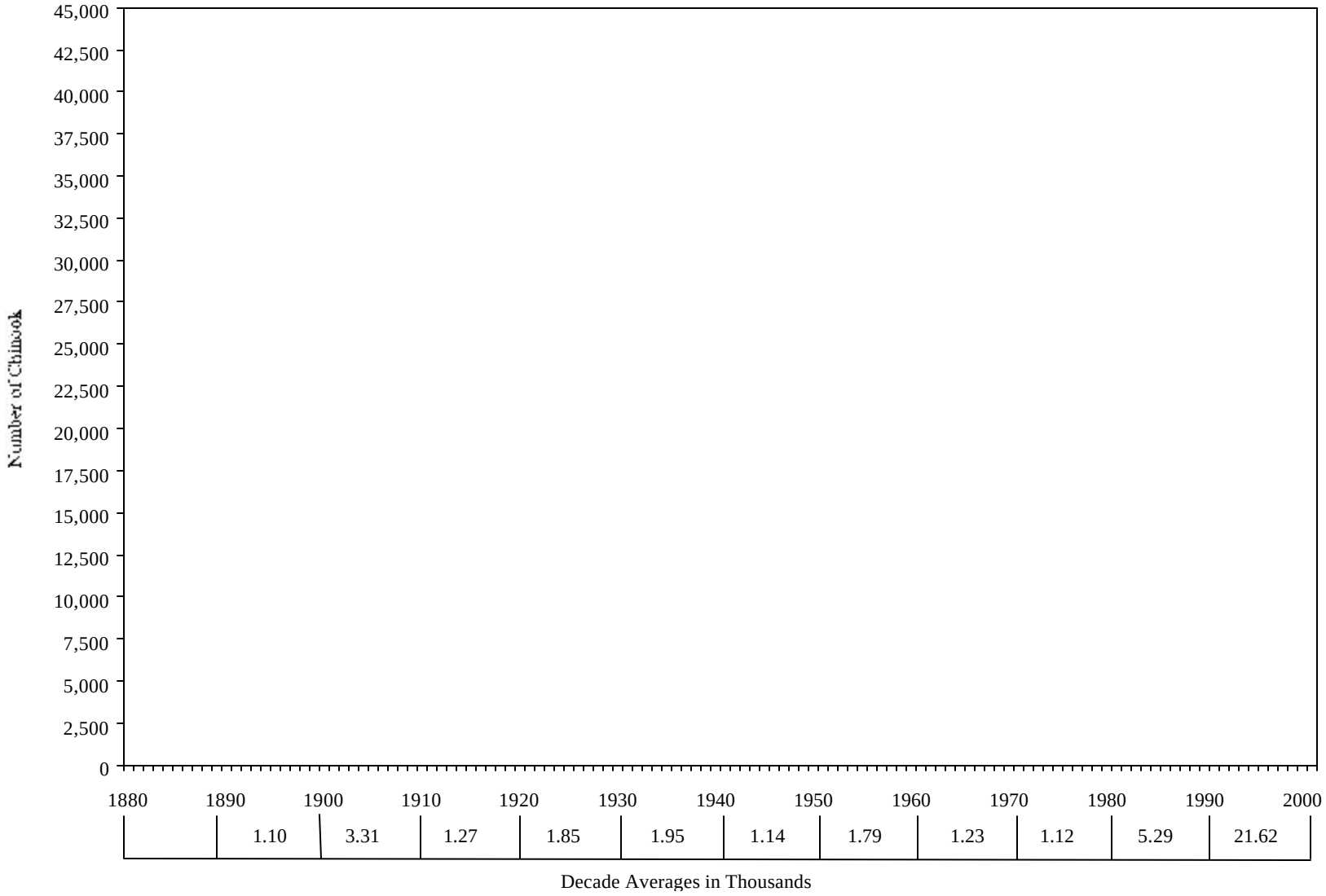


Figure 9. Chinook salmon commercial harvest, all gear combined, in the Kodiak Management Area, 1899-2001.

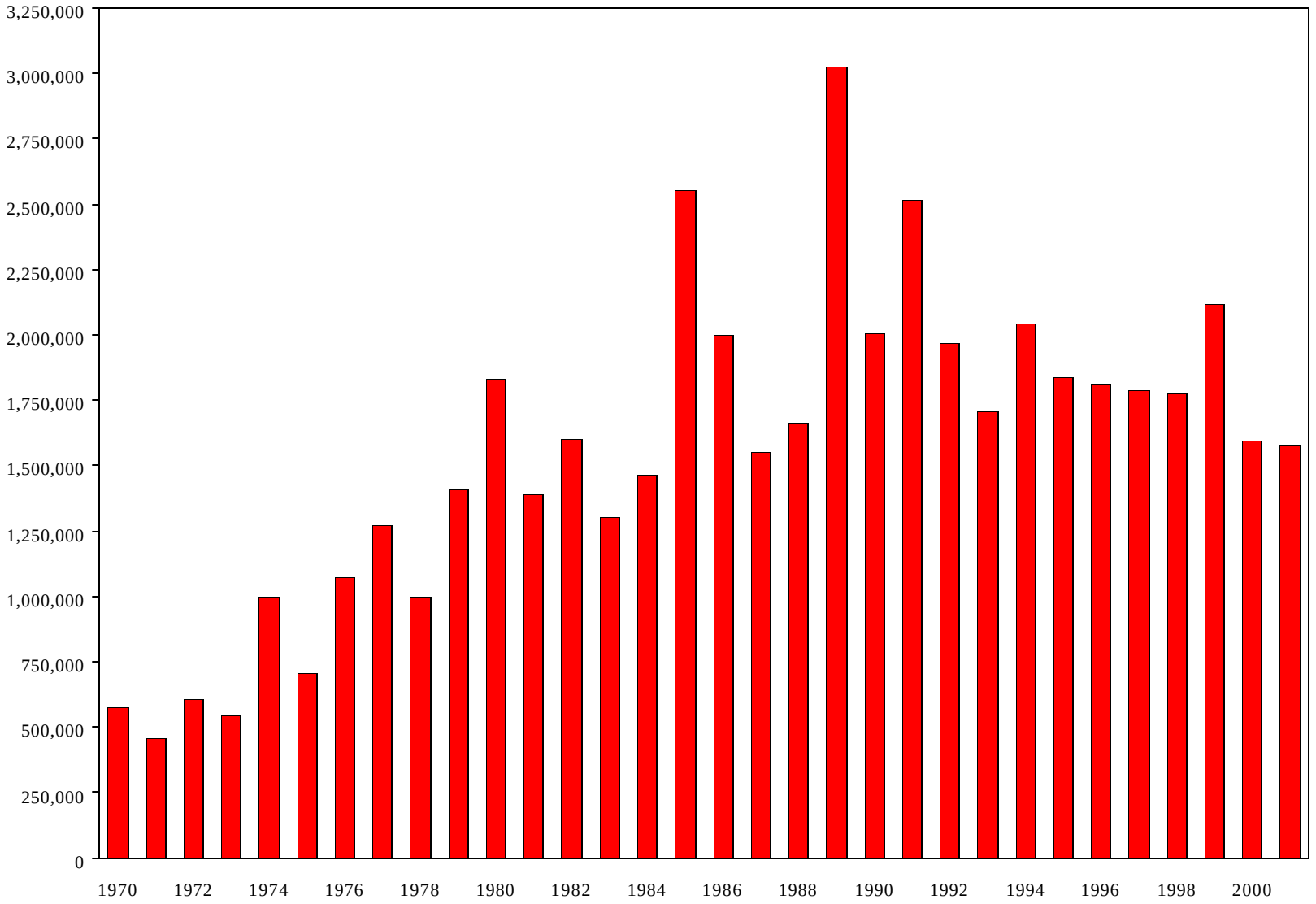


Figure 10. Sockeye salmon escapements in the Kodiak Management Area, 1970-2001.

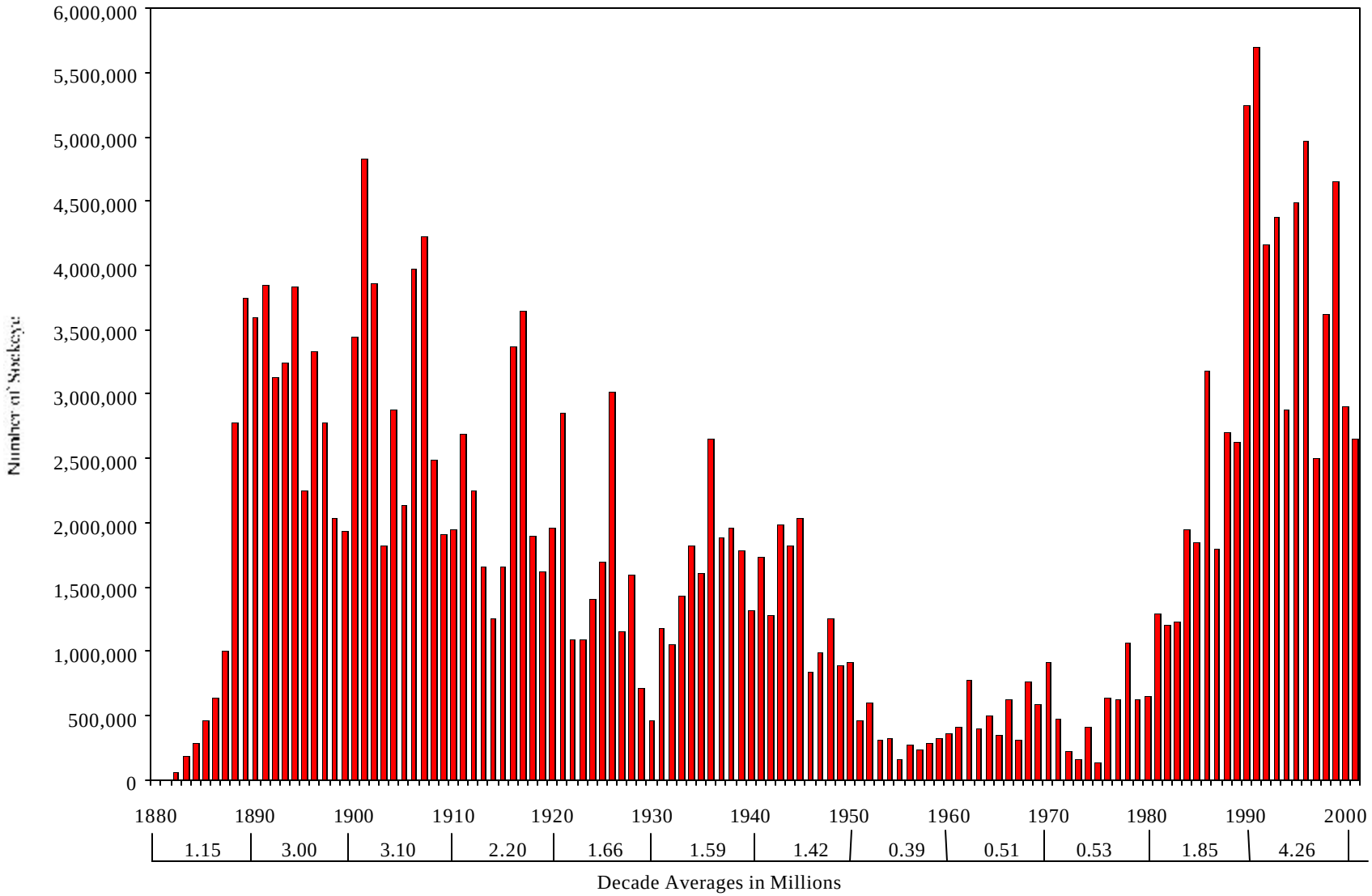


Figure 11. Sockeye salmon commercial harvest, all gear combined, in the Kodiak Management Area, 1882-2001.

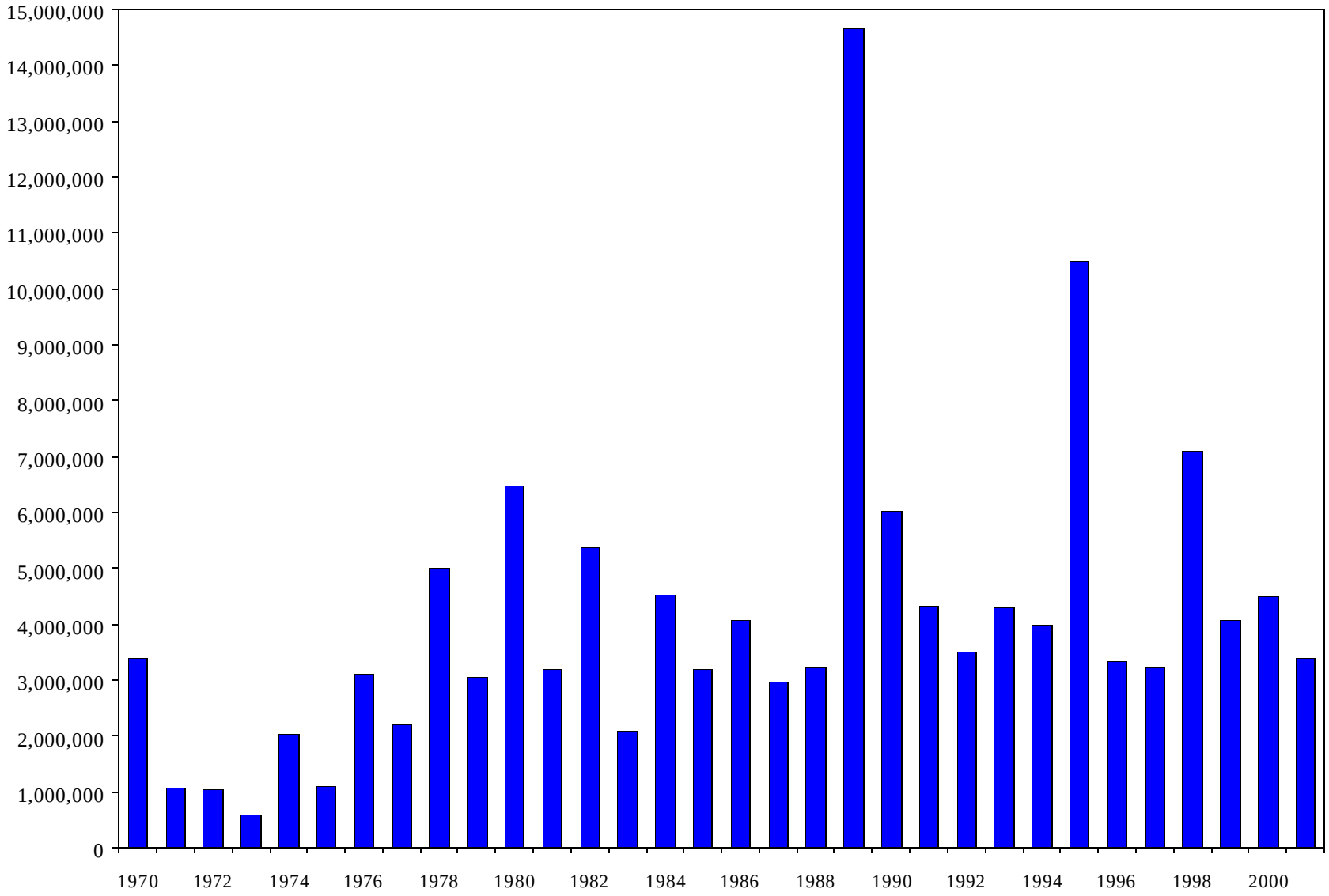


Figure 12. Pink salmon escapements in the Kodiak Management Area, 1970-2001.

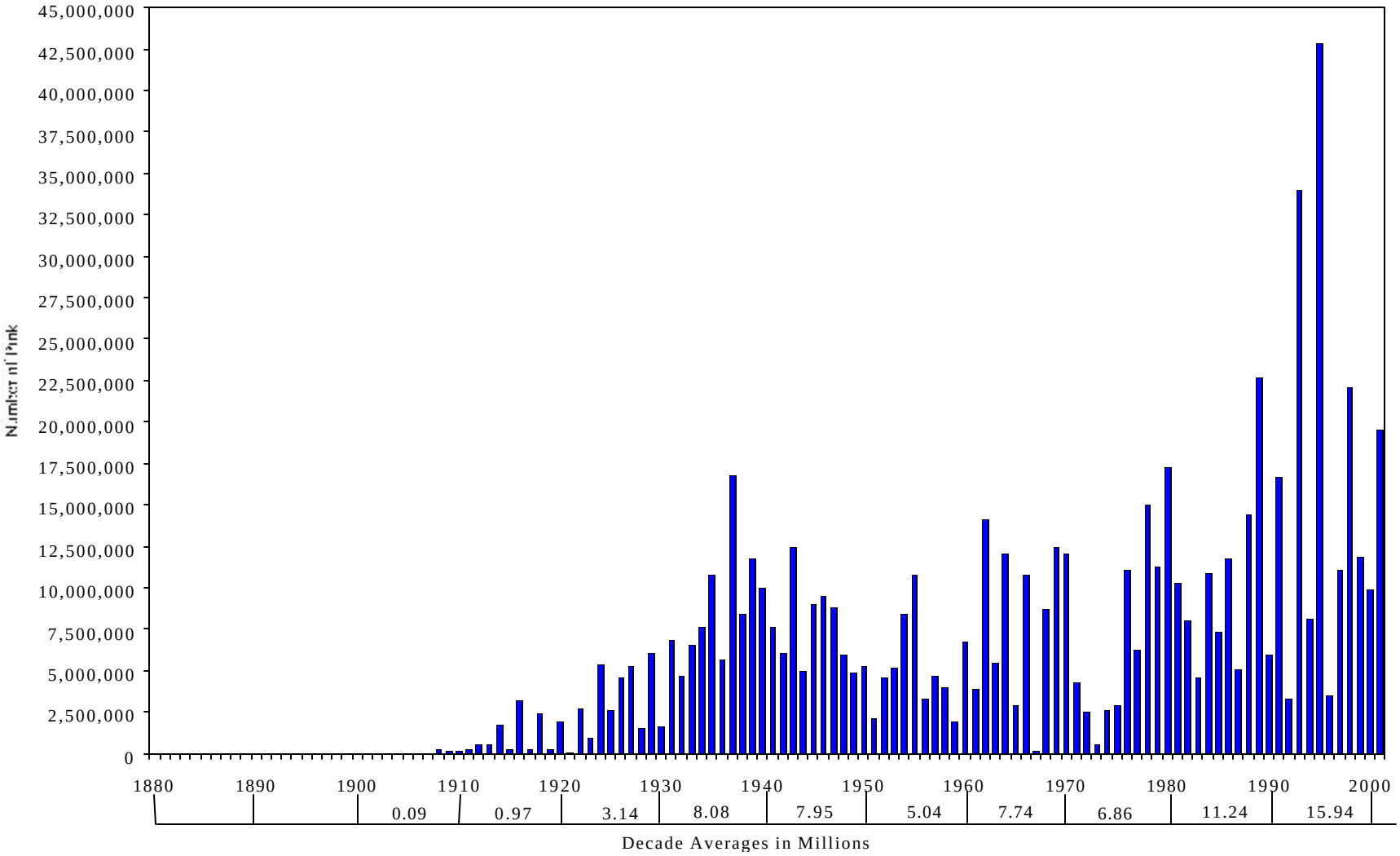


Figure 13. Pink salmon commercial harvest, all gear combined, in the Kodiak Management Area, 1901-2001.

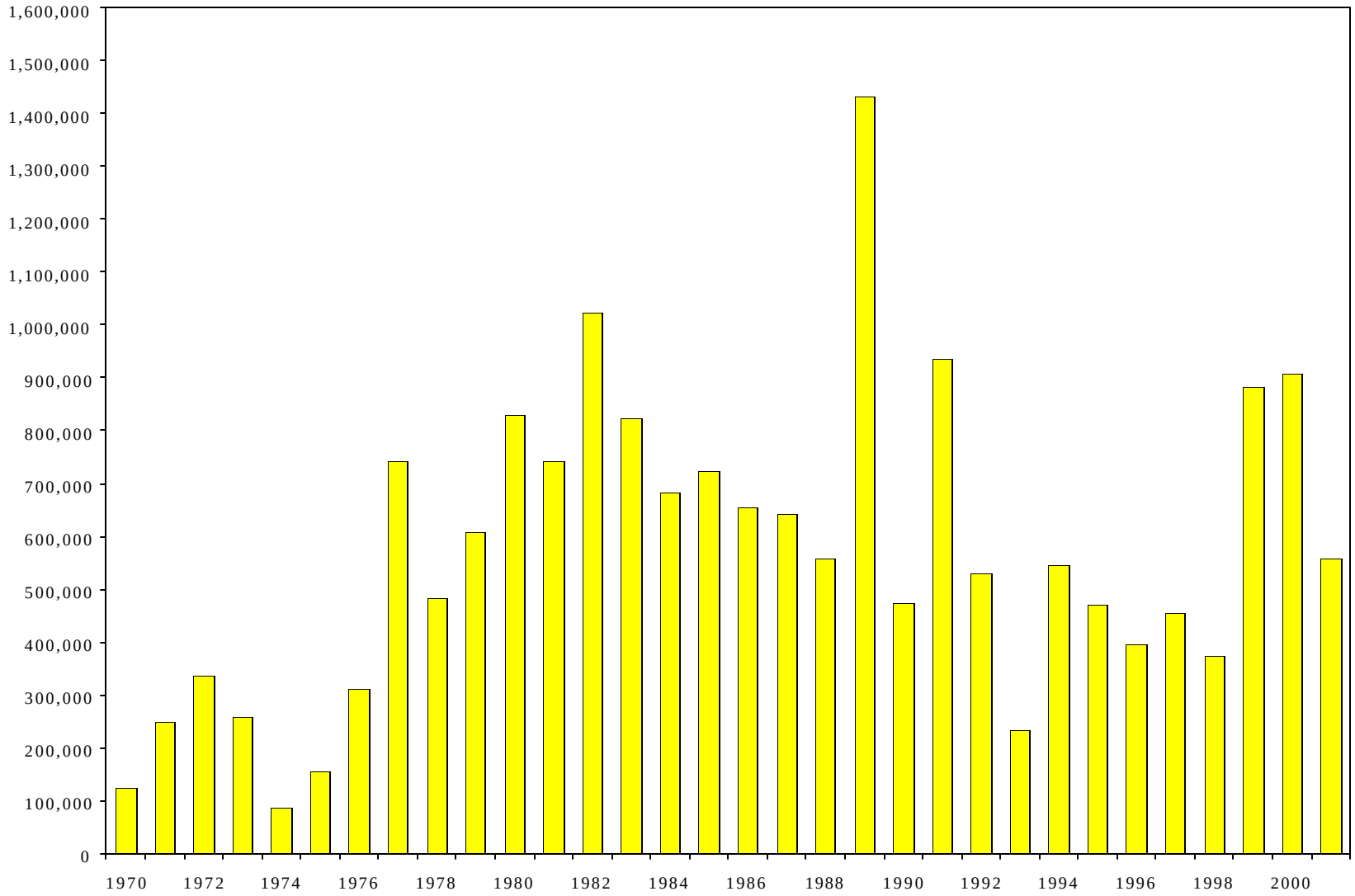


Figure 14. Chum salmon escapements in the Kodiak Management Area, 1970-2001.

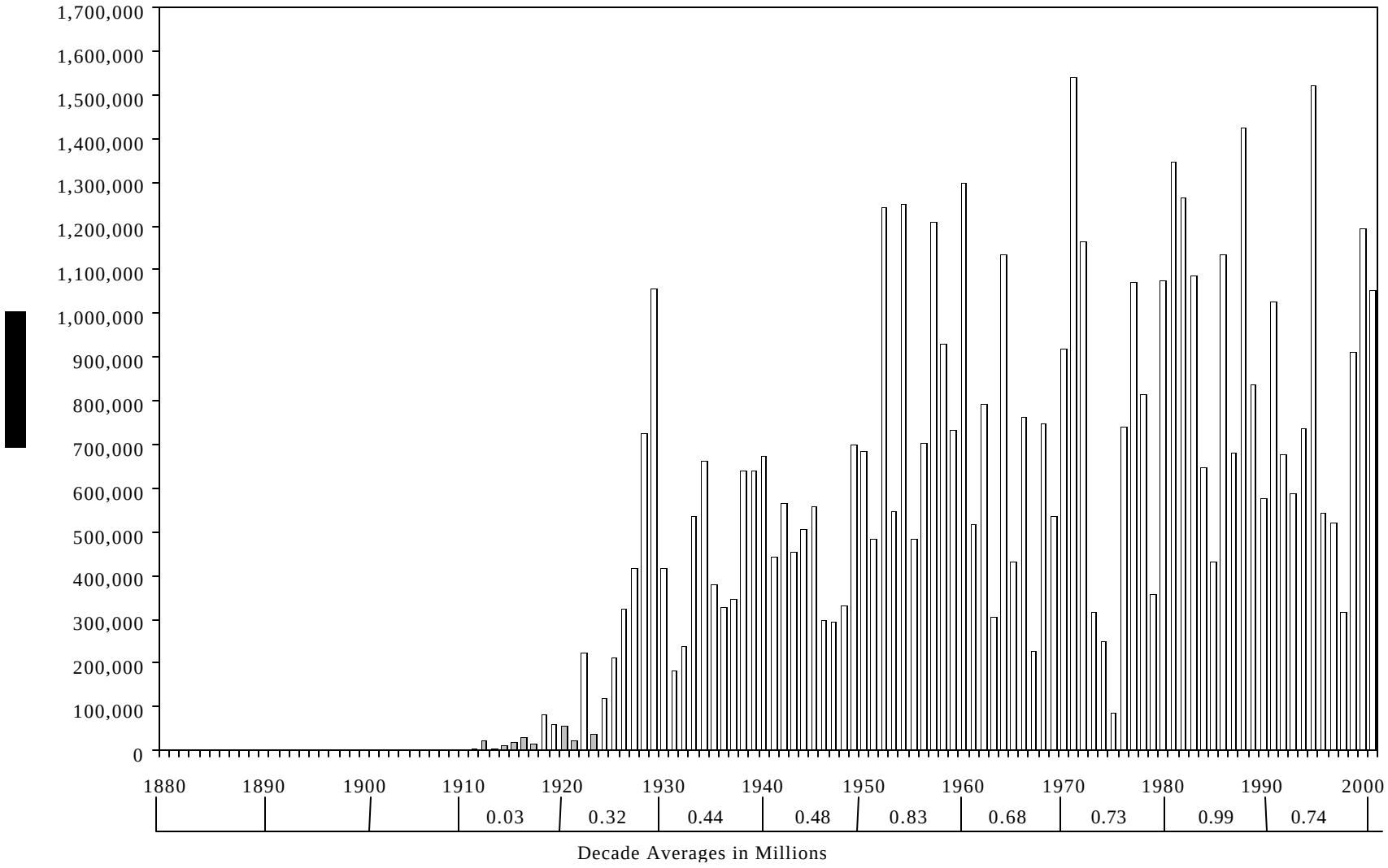


Figure 15. Chum salmon commercial harvest, all gear combined, in the Kodiak Management Area, 1911-2001.

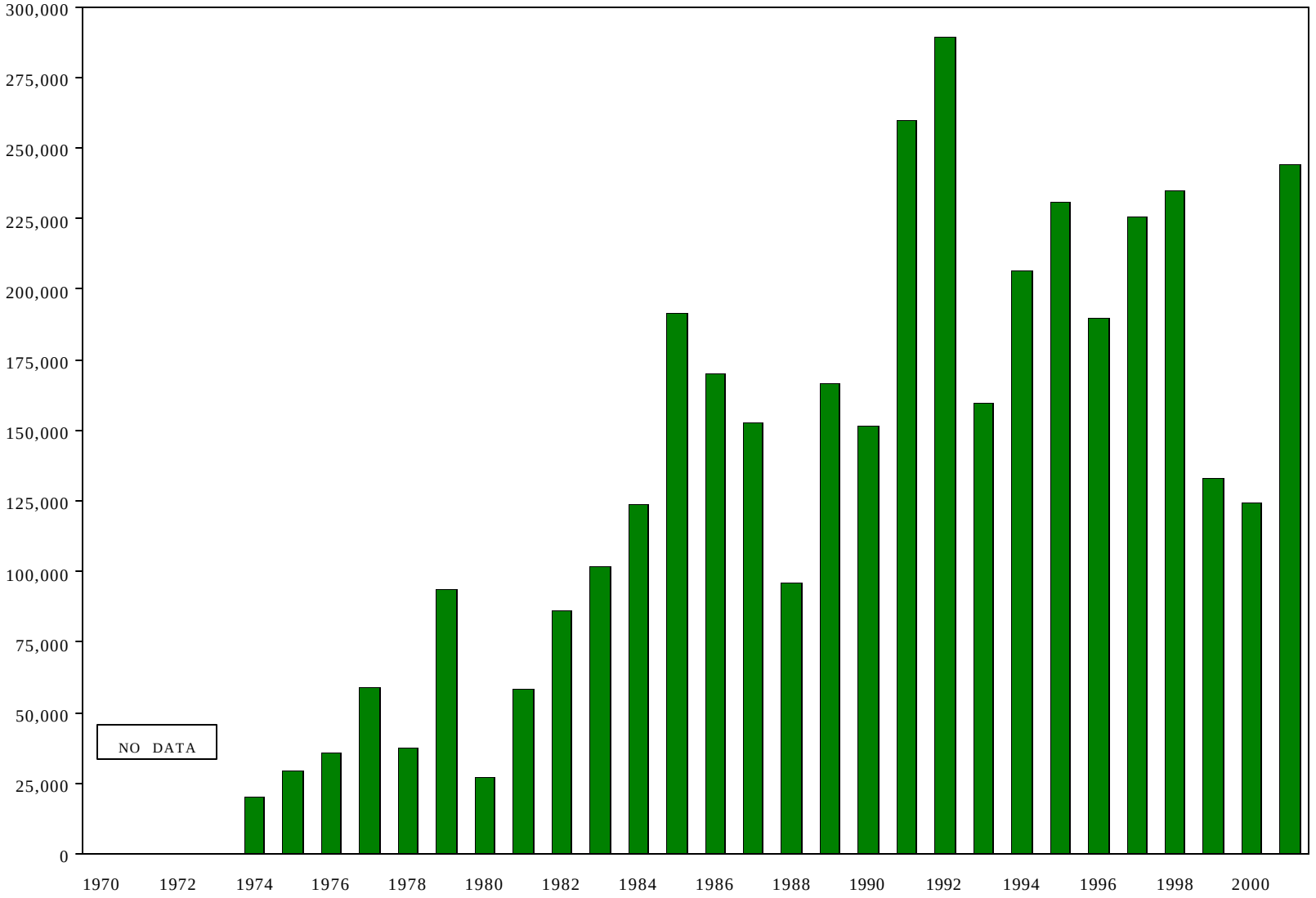


Figure 16. Coho salmon escapements in the Kodiak Management Area, 1974-2001.

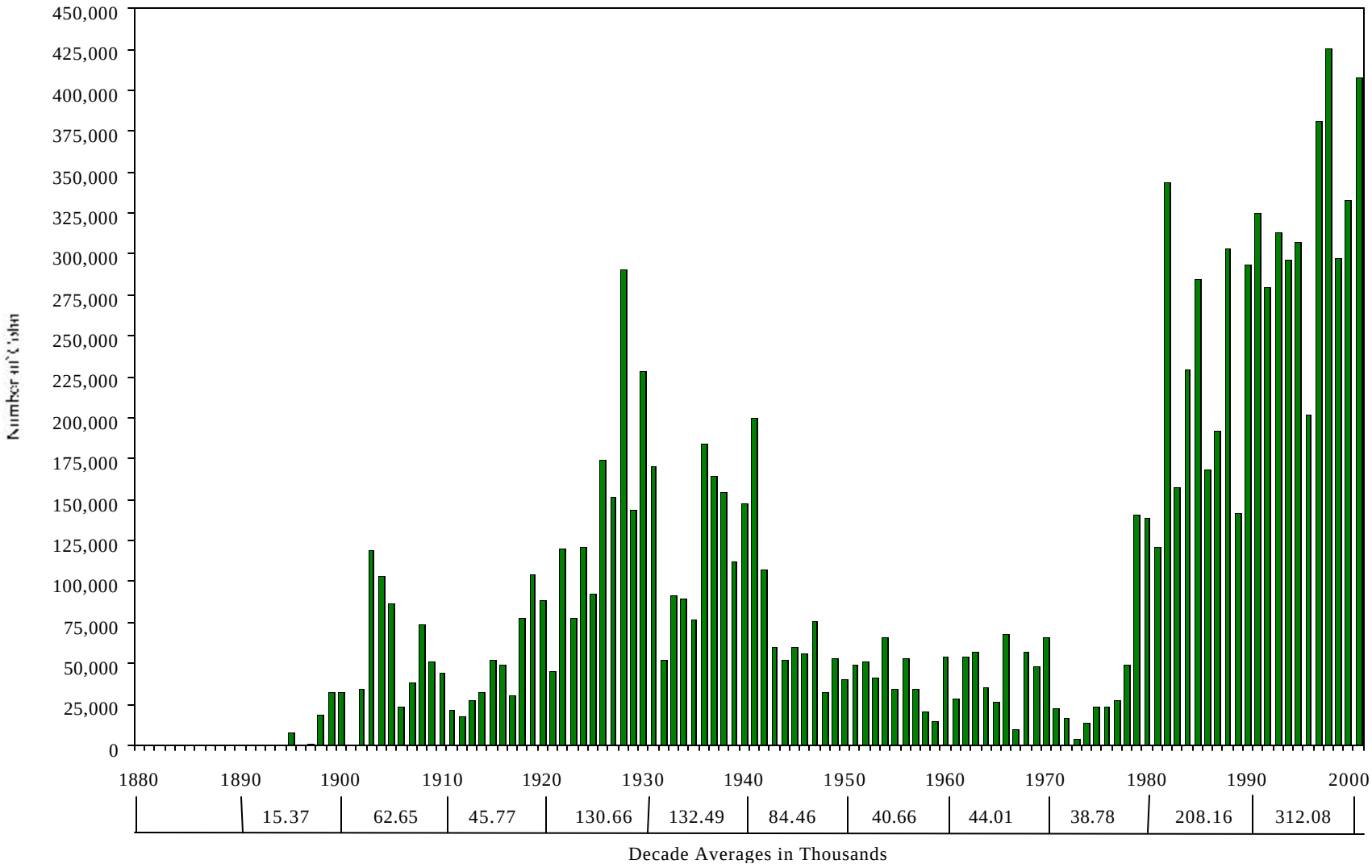


Figure 17. Coho salmon commercial harvest, all gear combined, in the Kodiak Management Area, 1895-2001.

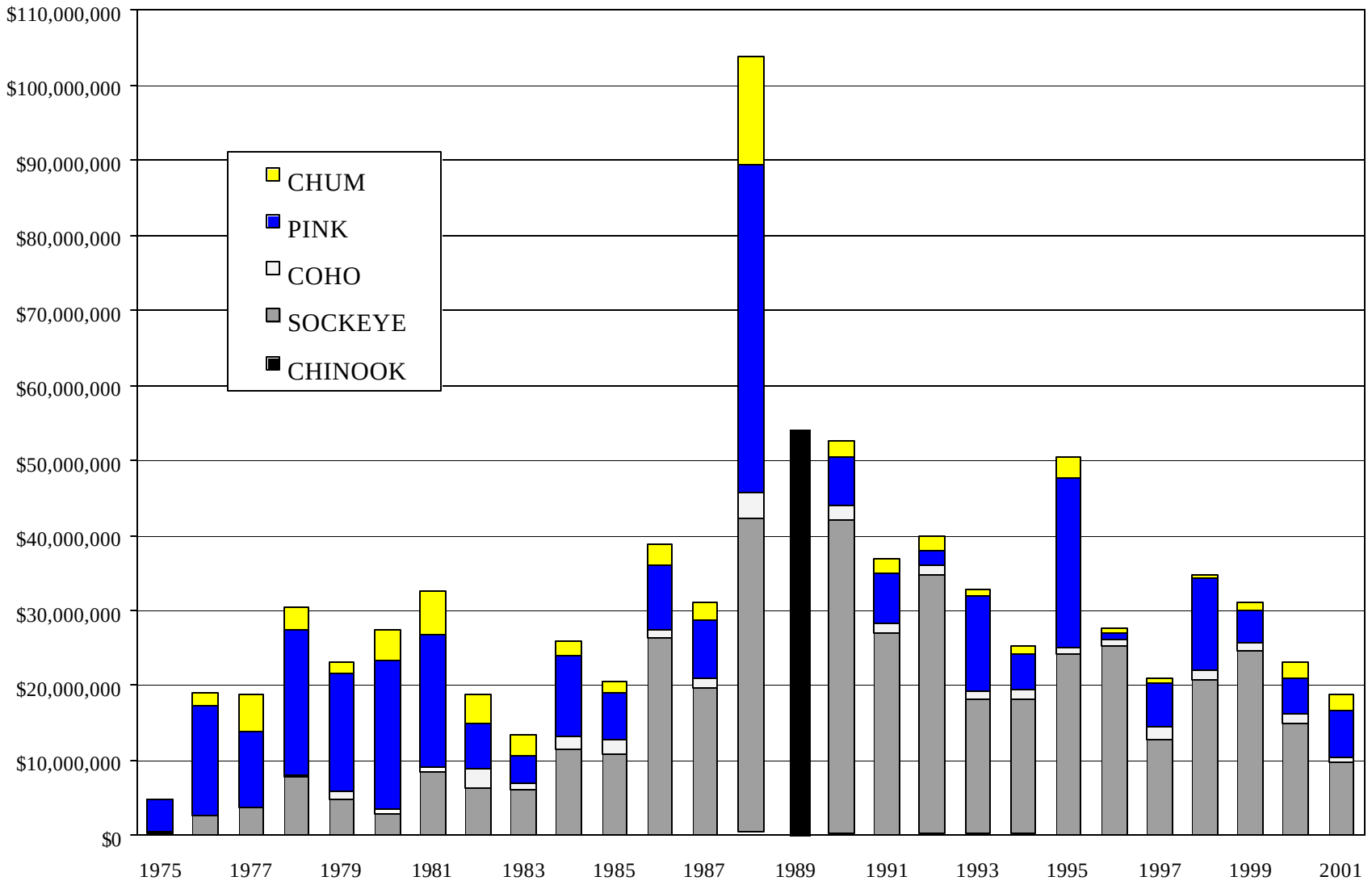


Figure 18. Exvessel value of the commercial salmon fishery, by species, in the Kodiak Management Area, 1975-2001.

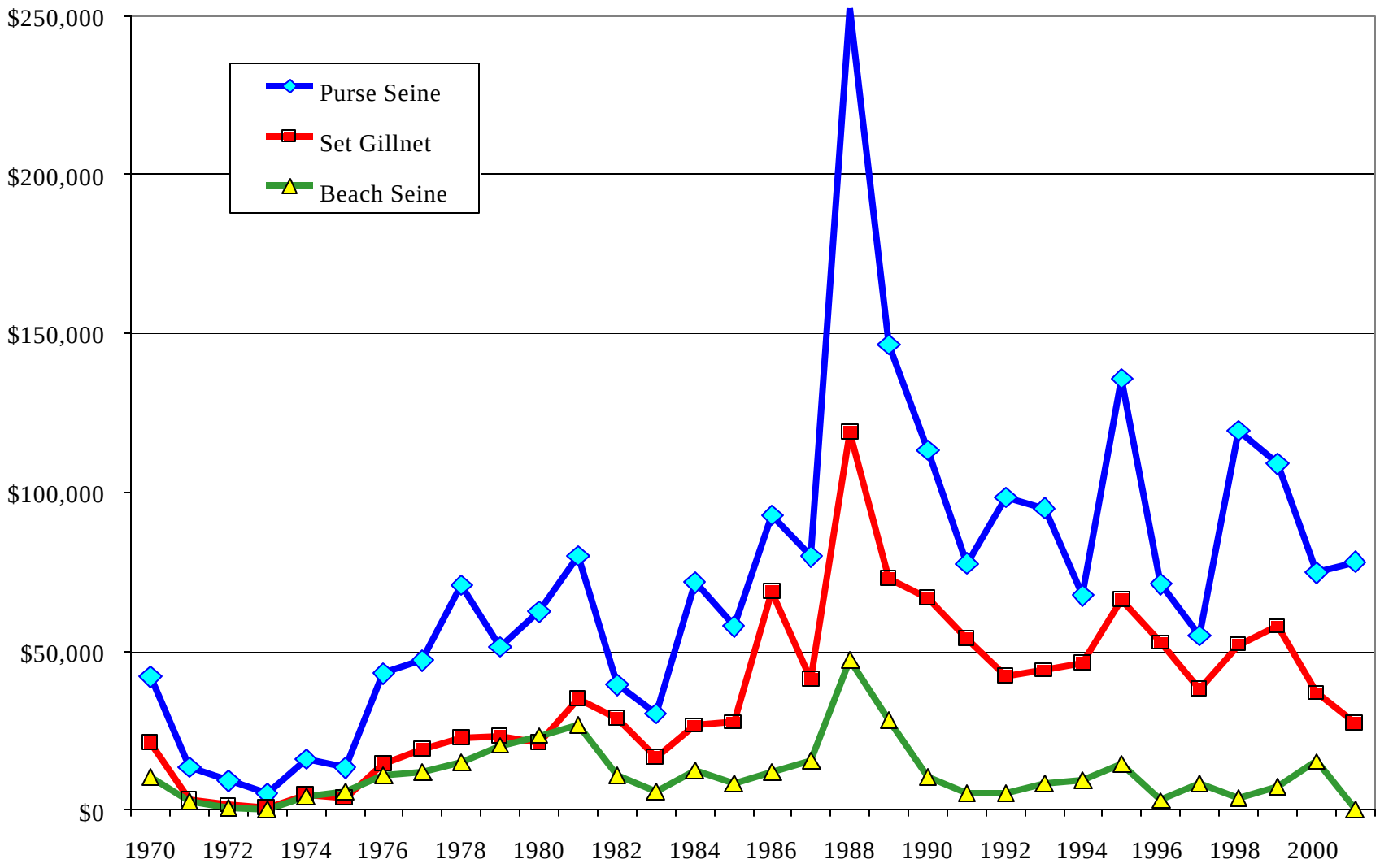
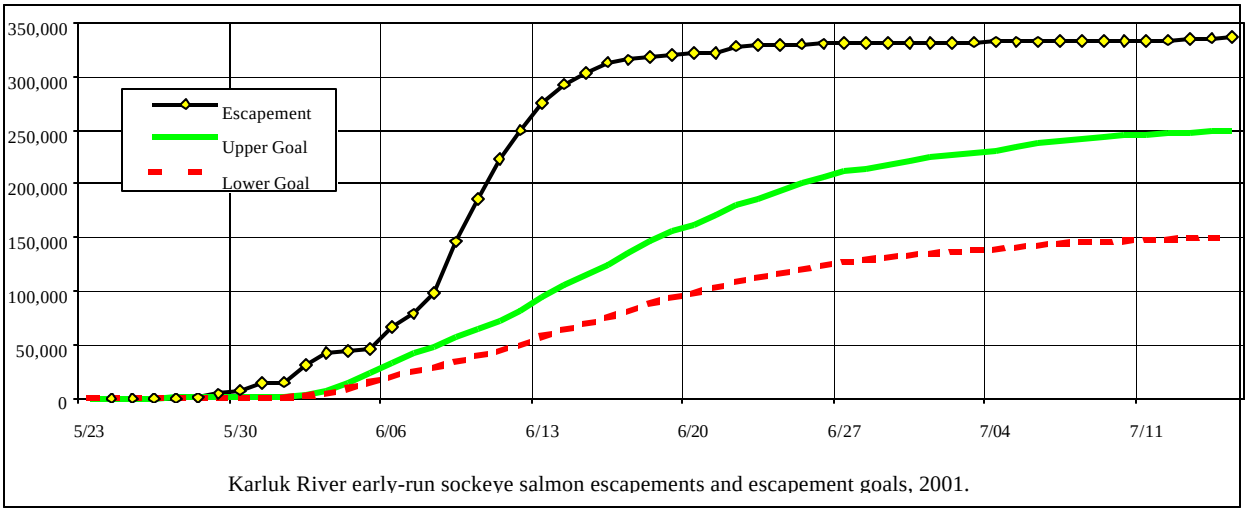
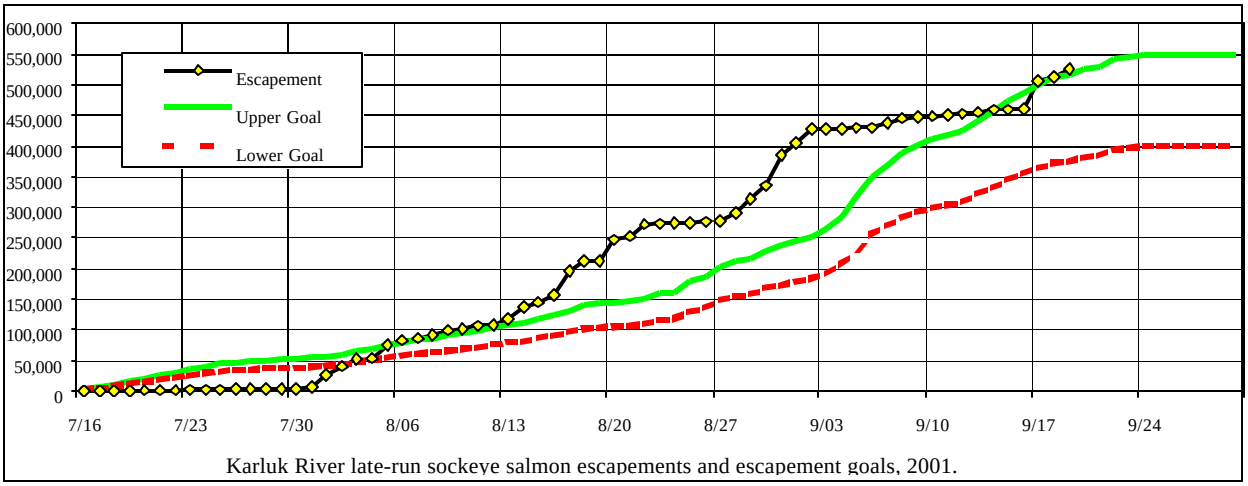


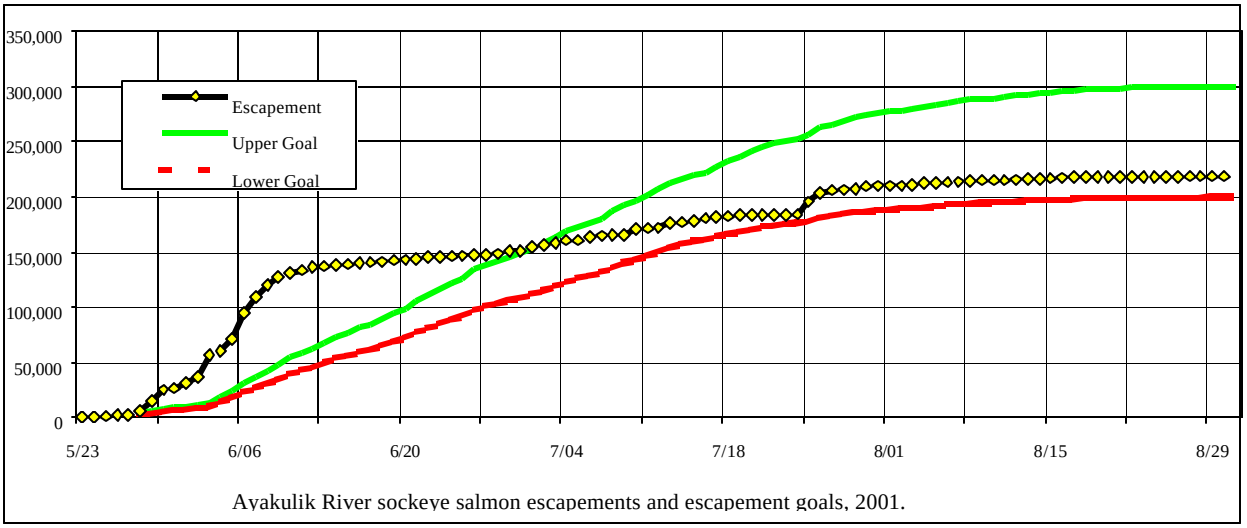
Figure 19. Average exvessel value of the commercial salmon fishery, by gear type, in the Kodiak Management Area, 1970-2001.



Karluk River early-run sockeye salmon escapements and escapement goals, 2001.

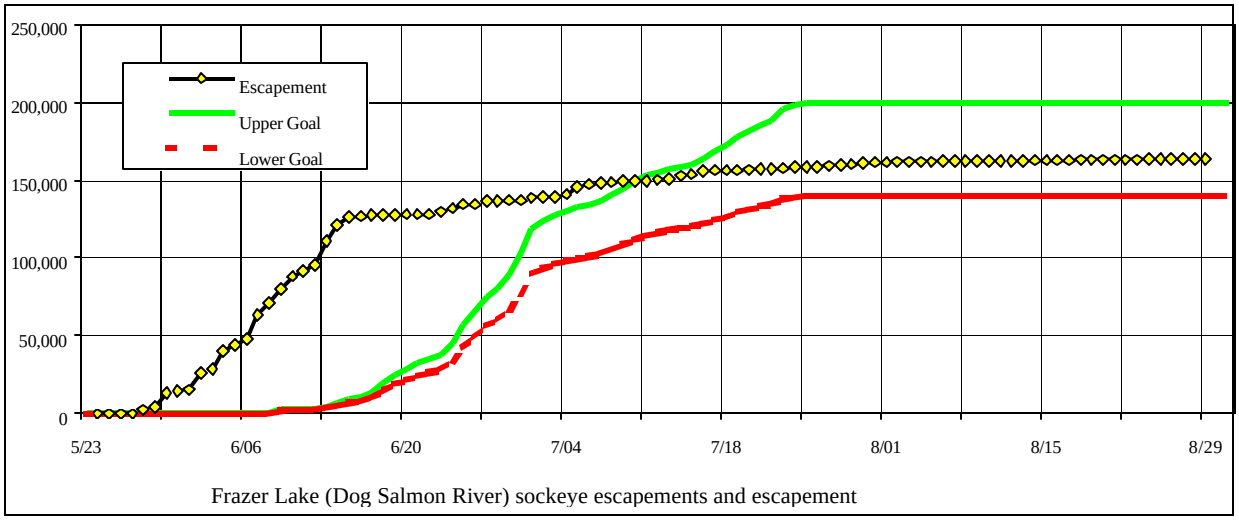


Karluk River late-run sockeye salmon escapements and escapement goals, 2001.

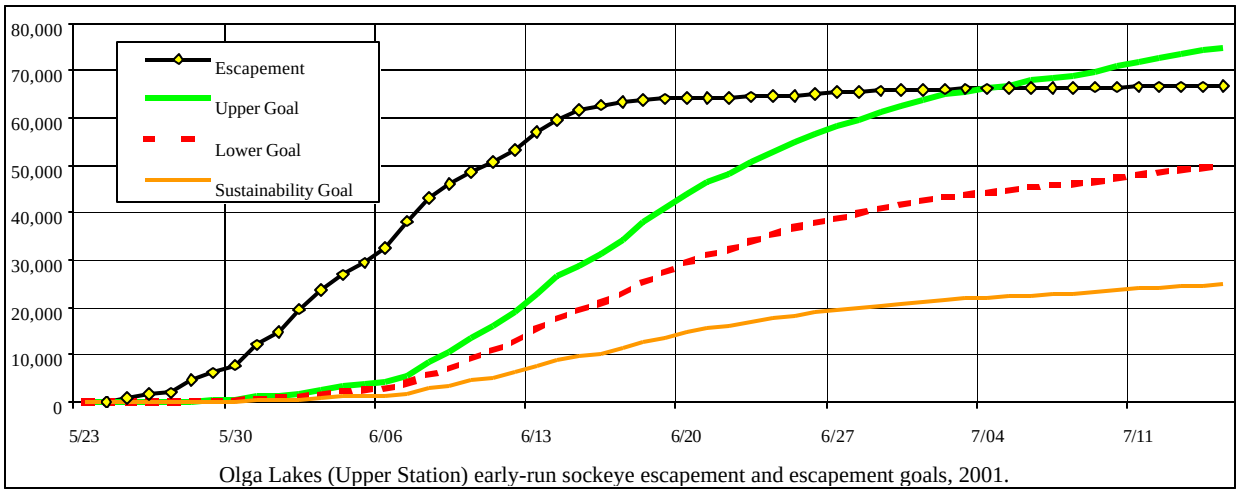


Ayakulik River sockeye salmon escapements and escapement goals, 2001.

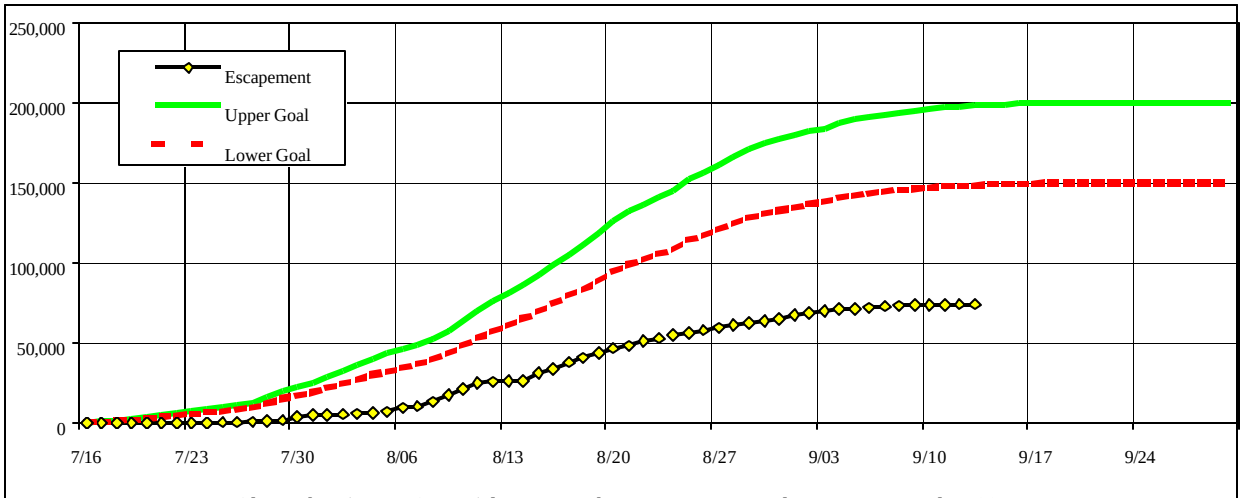
Figure 20. Early-run Karluk, late-run Karluk, and Ayakulik sockeye salmon escapements and interim escapement goals, Kodiak Management Area, 2001.



Frazer Lake (Dog Salmon River) sockeye escapements and escapement



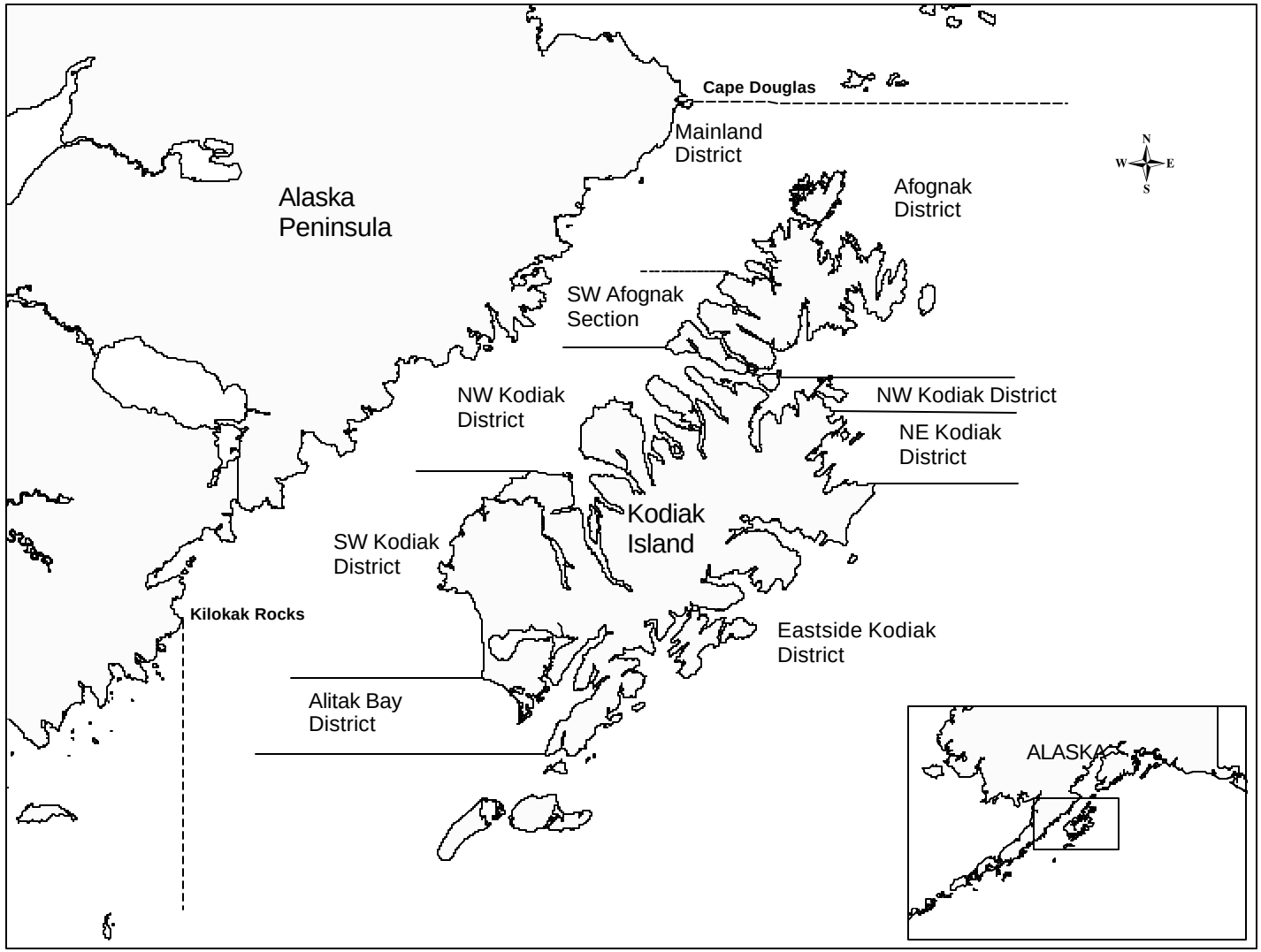
Olga Lakes (Upper Station) early-run sockeye escapement and escapement goals, 2001.



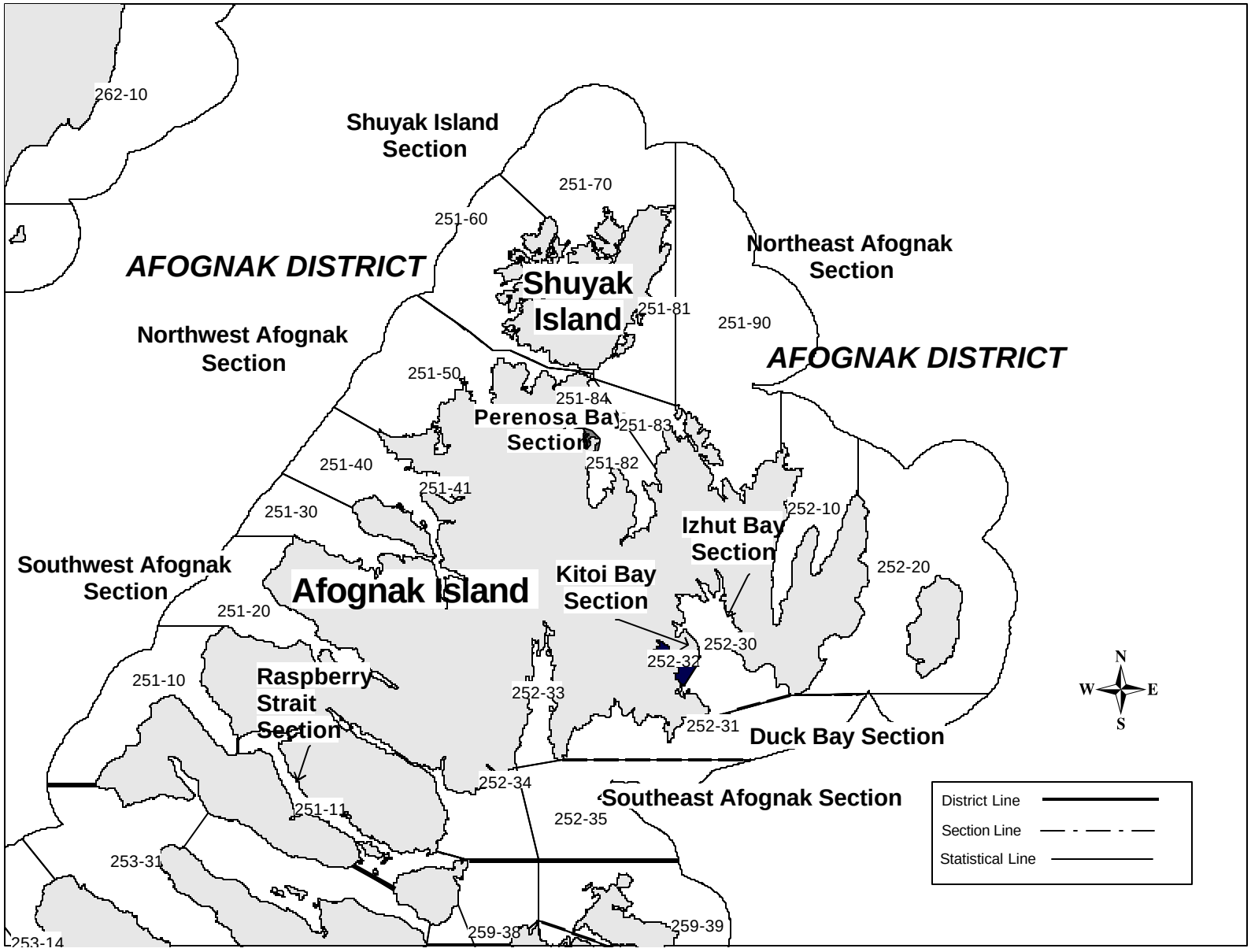
Olga Lakes (Upper Station) late-run sockeye escapement and escapement goals, 2001.

Figure 21. Frazer, early-run Upper Station, and late-run Upper Station sockeye salmon escapements and interim escapement goals, Kodiak Management Area, 2001.

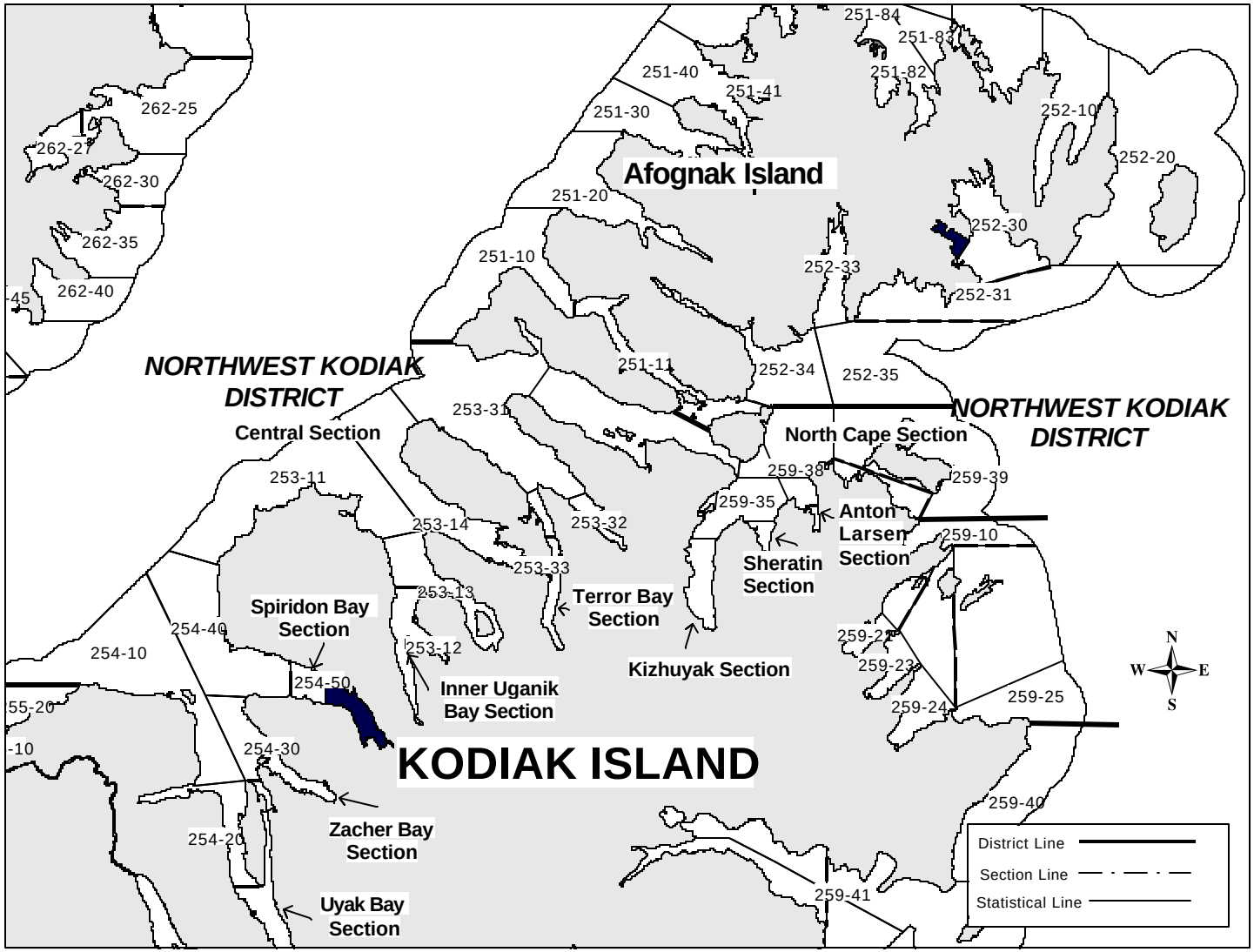
APPENDIX



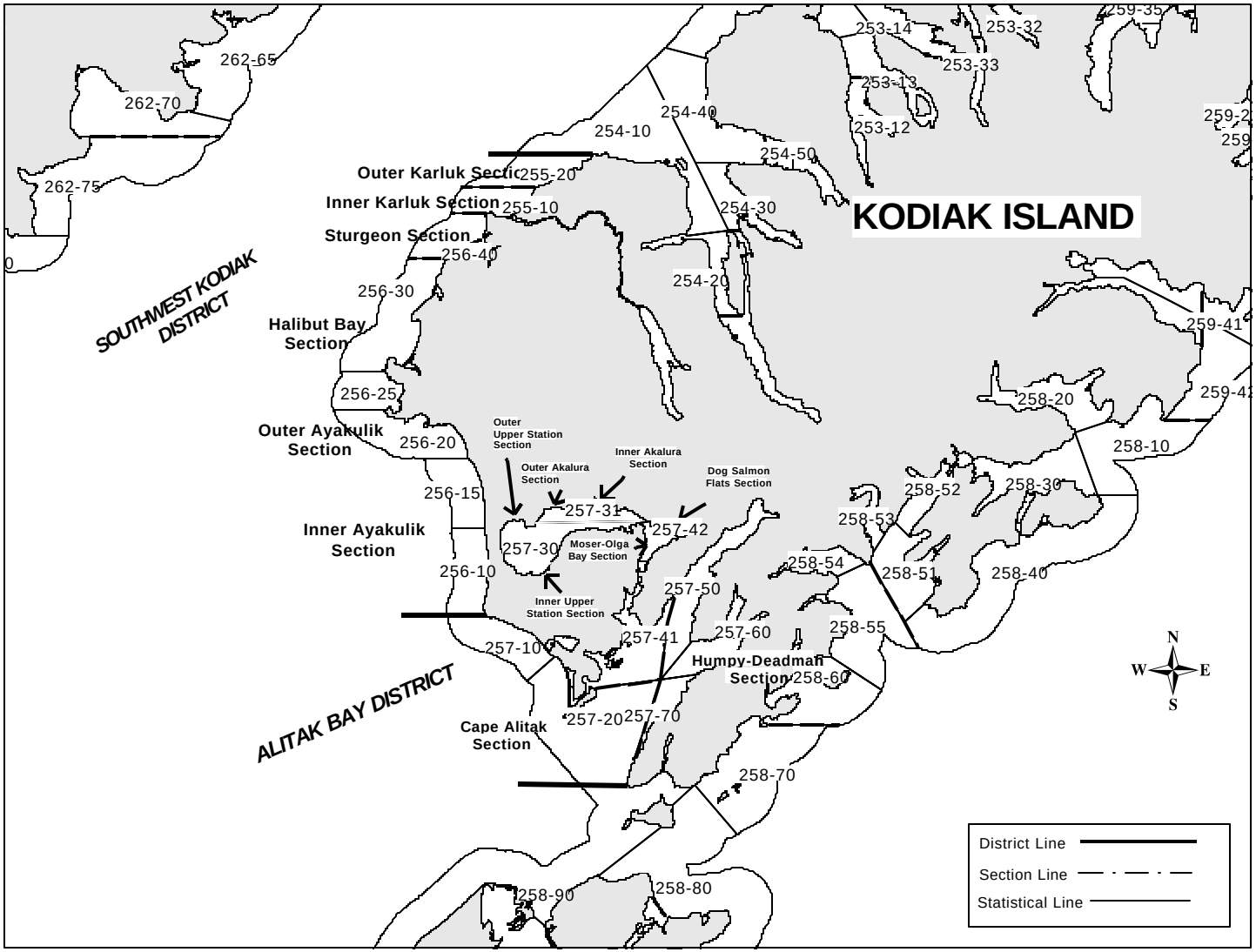
Appendix A.1. Map of the Kodiak Management Area identifying commercial salmon fishing districts.



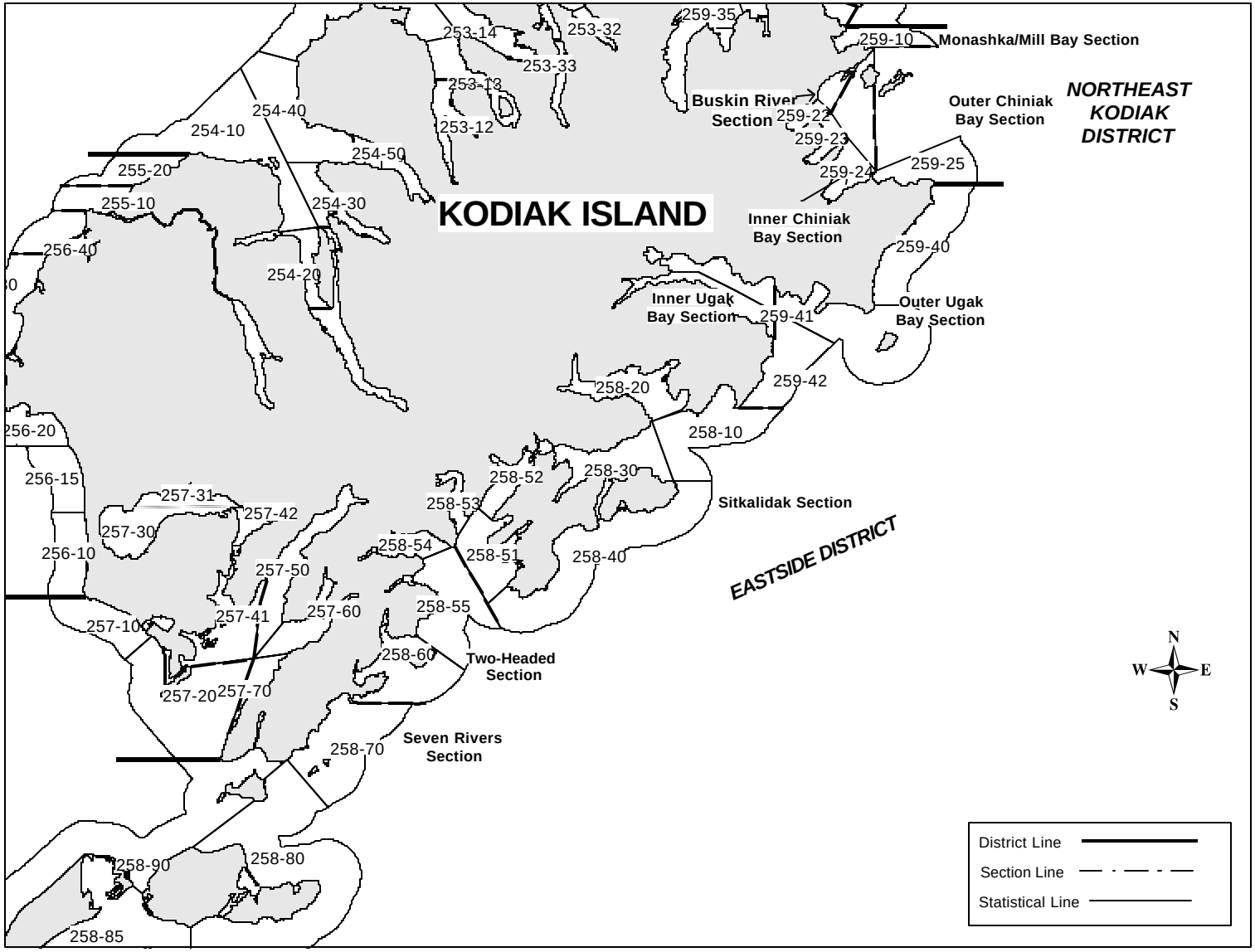
Appendix A.2. Map of the Afognak District identifying commercial salmon fishing sections and statistical areas.



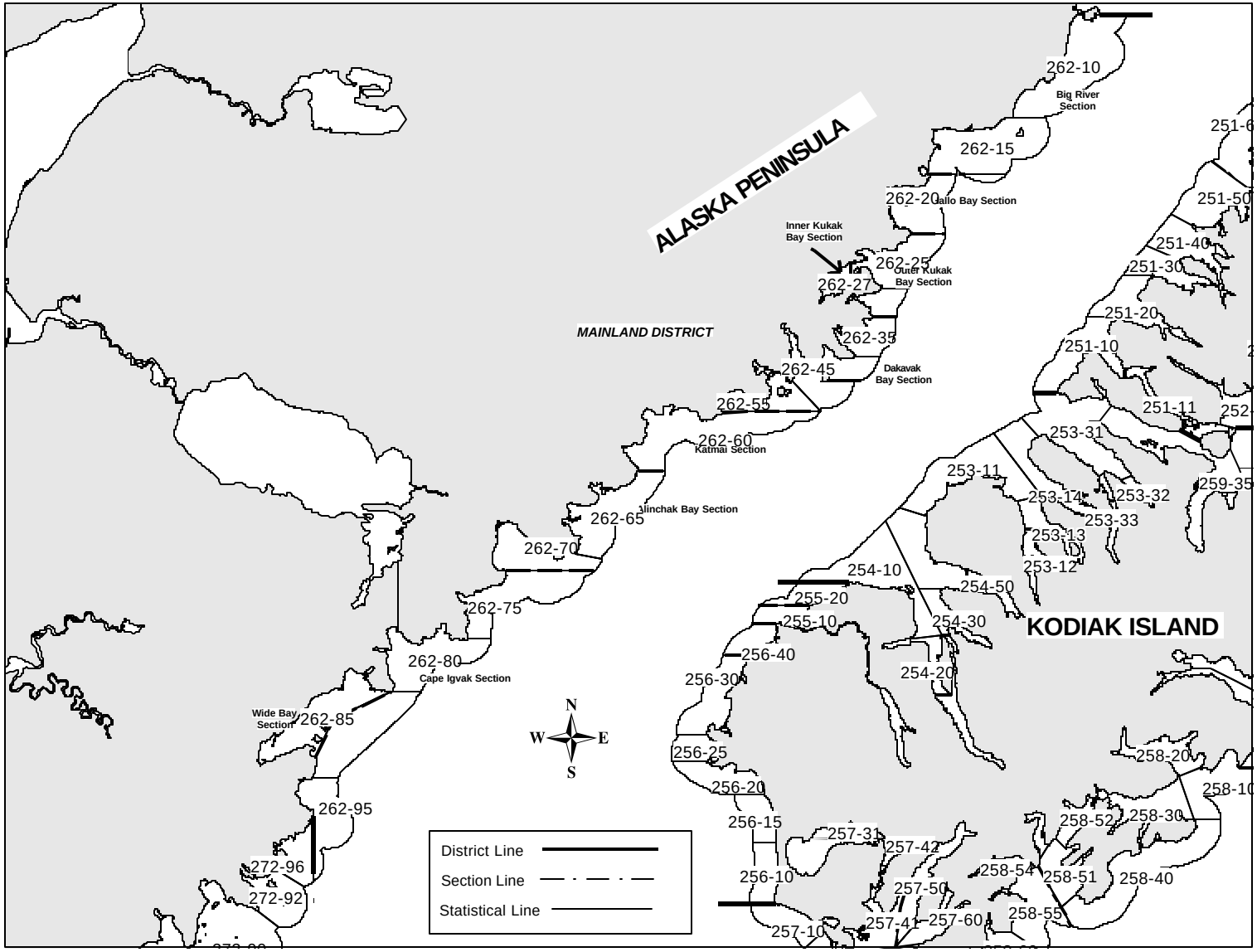
Appendix A.3. Map of the Northwest Kodiak District identifying commercial salmon fishing sections and statistical areas.



Appendix A.4. Map of the Southwest Kodiak and Alitak Bay Districts identifying commercial salmon fishing sections and statistical areas.

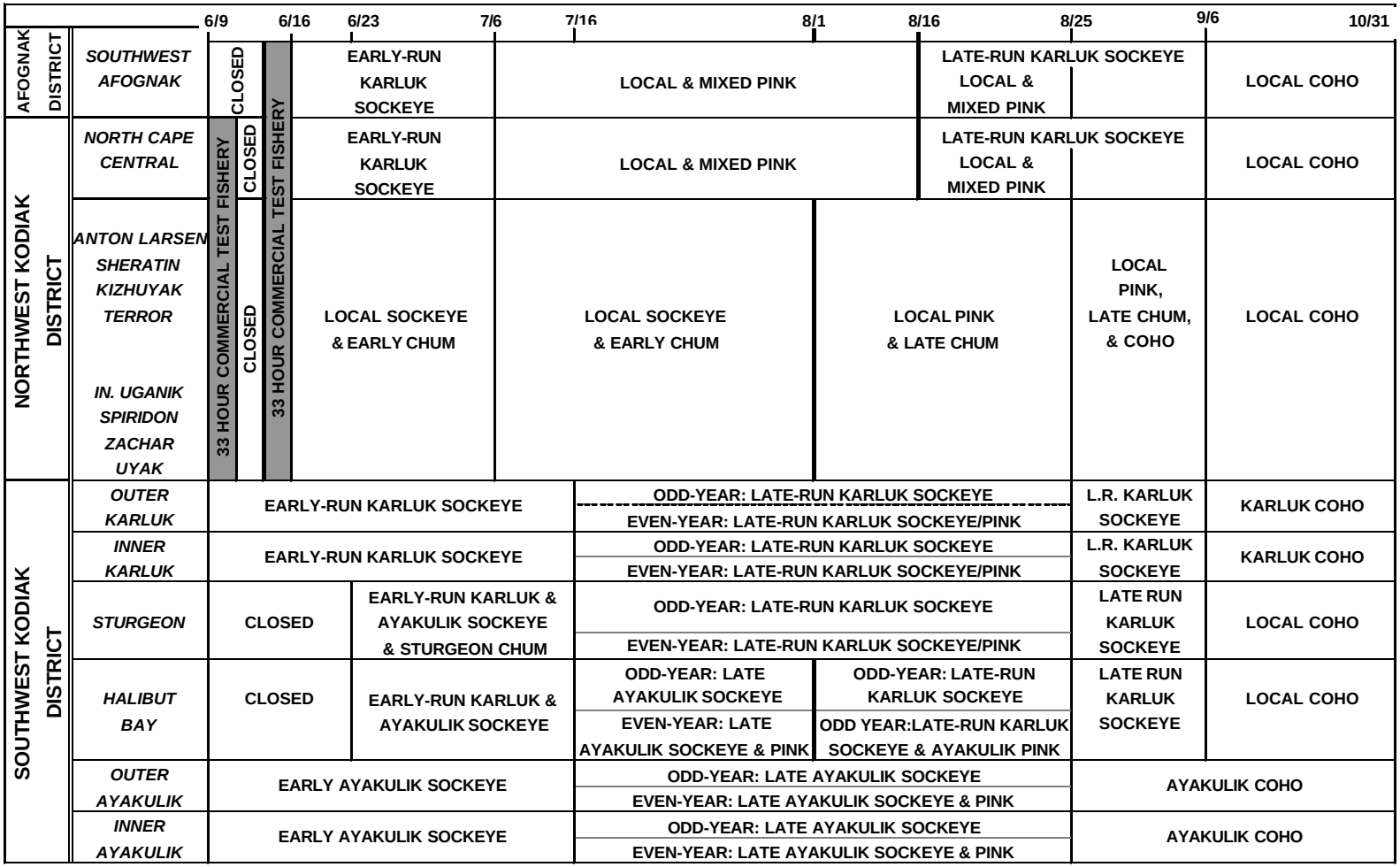


Appendix A.5. Map of the Northeast Kodiak and Eastside Kodiak Districts identifying commercial salmon fishing sections and statistical areas.



Appendix A.6. Map of the Mainland District identifying commercial salmon fishing sections and statistical areas.

Appendix B.1. Primary management species and management chronology of the Westside Kodiak Management Plan for the Kodiak Management Area, 2001.



L.R. = LATE RUN STOCKS

Appendix B.2. Narrative account of the Westside Kodiak salmon fisheries in the Kodiak Management Area, 2001.

The first commercial salmon fishing period for the Kodiak Management Area was scheduled in the 2001 Kodiak Area Commercial Salmon Fishery Harvest Strategy to begin at NOON June 9 (Brennan et al. 2001). This preseason-scheduled opening is limited to the Northwest Kodiak District, and to only 33 hours in length. It serves as a commercial test fishery, to help gauge the strength of the early Karluk sockeye run. The initial period for the Ayakulik sockeye run also can not begin before June 9, but the actual opening date is determined by run strength.

The timing of both these sockeye runs was earlier than normal for the second consecutive year. By June 6 there was sufficient escapement in the Ayakulik to include the Inner and Outer Ayakulik Sections with the Northwest Kodiak District for the June 9 initial fishing period. Sockeye escapements remained strong and the Ayakulik fishery was extended. The second fishing period targeting Karluk was opened earlier than planned, on June 12, and was also extended. The Inner and Outer Karluk Sections were also opened on June 12 to slow sockeye escapement into the Karluk River. The Halibut Bay Section was first opened on June 21.

The preseason scheduled opening targeting westside pink salmon began on July 6. Based on the pink salmon forecast 81 hour periods were planned each week through the beginning of August. Pink salmon returns to Ayakulik and Karluk were not expected to be strong (these systems are even-year dominant, with low returns in odd-years), so fisheries targeted pink salmon returning to westside streams in the Uganik and Uyak Bay complexes. Commercial fisheries continued in westside Kodiak management units throughout the season, based on return strength of sockeye, pink, chum, and coho salmon stocks. The last westside set gillnet delivery was September 9, and the last westside purse seine delivery was September 11.

The total commercial harvest from westside Kodiak management units (Southwest Afognak to Ayakulik[1]) was 5,847,989 salmon, including 18,317 chinook, 1,617,700 sockeye, 143,681 coho, 3,687,193 pink, and 381,098 chum salmon from 6,815 landings, which represents 24.7% of the total KMA salmon harvest. Purse seine fishers made 2,735 landings for 16,171 chinook, 935,319 sockeye, 82,766 coho, 2,520,215 pink, and 228,493 chum salmon. Set gillnet fishers made 4,080 landings for 2,146 chinook, 682,381 sockeye, 60,915 coho, 1,166,978 pink, and 152,605 chum salmon. Commercial salmon harvests, by gear type, for westside management units can be found in Appendix B.3. to B.6.

[1] Westside Kodiak salmon harvest totals do not include salmon taken in the Spiridon Lake Terminal Harvest Area. Sockeye salmon from an enhancement project return to this area. It is covered under a separate management plan.

Appendix B.3. Commercial salmon harvest, by species, for Westside management units in the Kodiak Management Area, 1970 - 2001.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total [a]
1970	702	230,424	36,038	3,485,342	135,658	3,888,164
1971	96	66,199	5,596	752,869	128,747	953,507
1972	867	121,203	4,990	608,989	193,569	929,618
1973	145	76,010	1,403	288,568	49,931	416,057
1974	227	181,075	4,919	930,645	34,214	1,151,080
1975	50	75,983	14,439	1,441,658	36,358	1,568,488
1976	253	350,403	10,412	4,786,866	91,524	5,239,458
1977	454	363,690	12,619	2,107,769	115,435	2,599,967
1978	1,352	491,503	20,216	6,245,588	134,794	6,893,453
1979	611	185,363	47,043	3,860,734	59,469	4,153,220
1980	385	411,862	44,639	11,344,424	132,910	11,934,220
1981	899	415,018	36,650	3,183,618	246,825	3,883,010
1982	858	427,454	128,718	5,538,196	450,819	6,546,045
1983	2,344	297,045	49,393	1,728,428	374,187	2,451,397
1984	3,634	925,236	104,347	9,291,637	166,069	10,490,923
1985	4,304	920,015	97,474	1,979,788	226,726	3,228,307
1986	3,728	1,632,227	102,304	9,472,330	584,538	11,795,127
1987	2,268	754,943	855,055	1,643,187	261,601	3,517,054
1988	11,848	998,895	141,115	8,574,478	609,946	10,336,282
1989[b]	0	3,489	986	1,005	53	5,533
1990	12,090	3,383,351	176,475	3,674,278	218,883	7,465,077
1991	11,780	2,842,802	179,852	5,588,982	346,193	8,969,609
1992	17,238	2,306,791	128,737	1,538,305	302,779	4,293,850
1993	22,189	2,425,370	124,497	10,344,080	300,571	13,216,707
1994	16,930	1,365,227	137,963	3,903,911	329,578	5,753,609
1995	13,819	2,081,175	147,403	21,070,138	722,823	24,035,358
1996	10,472	2,685,573	73,610	1,823,460	367,700	4,960,815
1997	11,152	1,412,061	108,459	6,520,085	214,730	8,266,487
1998	11,550	2,274,571	154,945	12,065,707	173,493	14,680,266
1999	12,795	2,734,413	104,836	4,114,567	267,471	7,234,082
2000	7,254	1,518,705	97,512	4,988,417	358,693	6,970,581
2001	18,317	1,617,700	143,681	3,687,193	381,098	5,847,989
Average [c] 1970-2001	6,471	1,147,493	106,301	5,051,104	258,624	6,569,994
Average [c] 1986-2001	12,229	2,002,254	178,430	6,600,608	362,673	9,156,193

[a] Westside Kodiak Management Plan units include the Southwest Afognak Section, the Northwest Kodiak District (except for the Spiridon Lake Terminal Harvest Area), and the Southwest Kodiak District.

[b] Commercial salmon fisheries were severely restricted in 1989 due to the presence of oil from the *M/V Exxon Valdez* spill.

[c] Averages do not include 1989.

Appendix B.4. Commercial salmon harvest, by gear type and species, for Westside Kodiak Management Plan units, 2001.

			Chinook		Sockeye		Coho		Pink		Chum		Total [a]	
GEAR TYPE	Permits	Lndgs	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
PURSE SEINE	169	2,735	16,171	227,006	935,319	4,937,679	82,766	670,594	2,520,215	8,369,078	228,493	1,985,499	3,782,964	16,189,856
Average weight -				14.0		5.3		8.1		3.3		8.7		
SET GILLNET	96	4,080	2,146	24,196	682,381	3,903,979	60,915	502,057	1,166,978	4,654,088	152,605	1,274,124	2,065,025	10,358,444
Average weight -				11.3		5.7		8.2		4.0		8.4		
GRAND TOTAL	265	6,815	18,317	251,202	1,617,700	8,841,658	143,681	1,172,651	3,687,193	13,023,166	381,098	3,259,623	5,847,989	26,548,300
Average weight -				13.7		5.5		8.2		3.5		8.6		

[a] Westside Kodiak Management Plan units include the Southwest Afognak, the Northwest Kodiak District except for the Spiridon Lake Terminal Harvest Area, and the Southwest Kodiak District.

Appendix B.5. Seine daily salmon harvest by species for Westside Kodiak Management Plan units, 2001.

Stat Week	Week Ending	Permits	Lndgs	Chinook		Sockeye		Coho		Pink		Chum		Total Salmon	
				Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
SOUTHWEST AFOGNAK SECTION															
24	16-Jun	23	44	3,663	25,705	10,858	54,006	0	0	3	14	2,189	21,139	16,713	100,864
25	23-Jun	8	10	140	1,103	1,657	8,149	0	0	28	95	121	953	1,946	10,300
26	30-Jun	9	12	339	2,249	5,982	30,786	11	72	4,039	12,608	1,115	9,130	11,486	54,845
27	7-Jul	16	31	108	1,003	15,079	79,572	35	228	35,538	110,111	3,529	30,058	54,289	220,972
28	14-Jul	12	21	24	201	6,024	32,166	290	1,537	23,546	72,947	1,680	13,460	31,564	120,311
29	21-Jul	27	38	328	3,176	11,110	63,116	1,221	8,615	55,236	173,752	6,402	53,548	74,297	302,207
30	28-Jul	30	55	128	1,624	12,373	64,962	5,606	37,198	101,852	333,990	7,003	56,533	126,962	494,307
31	4-Aug	9	15	33	530	8,707	48,040	4,658	32,473	58,243	209,167	2,211	17,920	73,852	308,130
32	11-Aug	3	4	3	35	828	4,979	603	4,484	10,935	40,074	371	2,829	12,740	52,401
33	18-Aug	5	9	13	174	1,204	6,376	3,106	21,752	36,872	130,604	681	5,393	41,876	164,299
34	25-Aug	1	1	0	0	26	132	396	2,574	2,436	8,768	35	247	2,893	11,721
35	1-Sep	1	1	0	0	54	272	137	1,240	898	2,694	8	70	1,097	4,276
37	15-Sep	1	1	0	0	495	2,422	505	5,140	170	556	0	0	1,170	8,118
Total		58	242	4,779	35,800	74,397	394,978	16,568	115,313	329,796	1,095,380	25,345	211,280	450,885	1,852,751
Avg.wt.					7.5		5.3		7.0		3.3		8.3		
NORTHWEST KODIAK DISTRICT															
23	9-Jun	13	13	167	1,250	3,430	17,216	0	0	9	25	265	2,410	3,871	20,901
24	16-Jun	35	69	385	4,978	22,330	112,166	0	0	12	41	1,098	8,689	23,825	125,874
25	23-Jun	33	54	217	1,787	22,227	119,957	10	71	1,137	3,442	4,426	34,816	28,017	160,073
26	30-Jun	26	44	81	970	8,953	45,865	25	159	2,150	7,241	1,737	15,899	12,946	70,134
27	7-Jul	29	63	31	433	6,111	33,443	119	793	24,935	74,906	23,563	223,153	54,759	332,728
28	14-Jul	42	67	143	1,173	13,024	70,770	5,872	37,925	57,286	193,136	18,892	177,255	95,217	480,259
29	21-Jul	75	137	207	2,429	28,845	149,577	7,160	47,803	201,749	631,691	33,306	287,879	271,267	1,119,379
30	28-Jul	102	229	82	1,249	17,542	94,682	2,766	18,989	471,408	1,591,370	47,863	411,754	539,661	2,118,044
31	4-Aug	42	116	71	1,424	19,533	104,931	3,210	23,572	356,846	1,151,675	10,055	89,470	389,715	1,371,072
32	11-Aug	37	81	59	1,084	8,005	42,686	5,814	43,389	226,199	754,640	3,722	31,161	243,799	872,960
33	18-Aug	26	61	64	1,039	8,394	45,882	5,856	47,981	238,135	764,166	4,850	39,903	257,299	898,971
34	25-Aug	22	61	4	64	9,686	53,075	5,010	42,938	139,806	515,295	1,197	9,377	155,703	620,749
35	1-Sep	17	40	1	30	7,159	37,360	2,217	20,661	57,985	213,005	817	7,322	68,179	278,378
36	8-Sep	18	31	5	93	12,570	63,601	9,249	89,124	55,912	200,562	409	3,439	78,145	356,819
37	15-Sep	3	6	0	0	900	4,457	926	11,081	21,048	77,233	11	92	22,885	92,863
Total		133	1,072	1,517	18,003	188,709	995,668	48,234	384,486	1,854,617	6,178,428	152,211	1,342,619	2,245,288	8,919,204
Avg.wt.					11.9		5.3		8.0		3.3		8.8		

-Continued-

Appendix B.5. (Page 2 of 3)

Stat Week	Week Ending	Permits	Lndgs	Chinook		Sockeye		Coho		Pink		Chum		Total Salmon	
				Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
OUTER KARLUK SECTION															
24	16-Jun	28	38	565	7,442	27,586	132,686	0	0	24	61	463	4,100	28,638	144,289
25	23-Jun	42	110	771	9,759	61,284	313,057	0	0	419	1,222	1,164	9,419	63,638	333,457
26	30-Jun	26	54	182	2,579	15,772	83,277	0	0	1,584	4,707	1,003	7,896	18,541	98,459
27	7-Jul	12	24	15	278	5,517	28,261	4	27	3,367	10,157	682	5,894	9,585	44,617
28	14-Jul	4	4	4	33	2,174	10,937	5	45	2,745	9,182	380	3,588	5,308	23,785
34	25-Aug	11	26	3	55	12,924	79,790	5,051	48,516	25,233	86,398	193	1,756	43,404	216,515
35	1-Sep	12	34	1	6	21,167	117,715	5,556	58,759	8,240	29,708	143	1,173	35,107	207,361
36	8-Sep	6	8	0	0	4,511	23,537	1,618	16,989	2,626	9,312	31	258	8,786	50,096
37	15-Sep	2	2	0	0	1,481	8,116	664	5,199	0	0	0	0	2,145	13,315
Total		62	300	1,541	20,152	152,416	797,376	12,898	129,535	44,238	150,747	4,059	34,084	215,152	1,131,894
Avg.wt.					13.1		5.2		10.0		3.4		8.4		
INNER KARLUK SECTION															
24	16-Jun	30	50	736	8,695	29,590	150,658	0	0	9	27	275	2,301	30,610	161,681
25	23-Jun	26	42	291	3,929	22,559	115,695	0	0	202	606	352	3,177	23,404	123,407
26	30-Jun	3	3	24	373	805	4,131	0	0	17	50	38	337	884	4,891
27	7-Jul	2	2	0	0	1,300	7,653	0	0	1,472	5,055	206	1,849	2,978	14,557
28	14-Jul	1	1	0	0	350	1,963	0	0	80	241	15	144	445	2,348
Total		41	98	1,051	12,997	54,604	280,100	0	0	1,780	5,979	886	7,808	58,321	306,884
Avg.wt.					12.4		5.1		0.0		3.4		8.8		
HALIBUT BAY SECTION															
25	23-Jun	7	9	95	1,916	6,433	33,238	0	0	353	1,025	176	1,664	7,057	37,843
26	30-Jun	20	42	132	1,783	17,165	90,817	1	11	6,461	19,803	2,414	21,391	26,173	133,805
27	7-Jul	37	99	168	2,519	28,096	155,284	9	65	16,317	50,631	5,541	48,230	50,131	256,729
28	14-Jul	8	13	48	845	4,728	25,545	3	24	4,518	11,807	459	4,144	9,756	42,365
31	4-Aug	7	16	53	1,069	7,577	41,864	237	1,681	40,914	134,181	1,040	9,127	49,821	187,922
32	11-Aug	5	7	42	814	3,308	19,587	322	2,762	27,215	86,807	478	3,954	31,365	113,924
33	18-Aug	5	15	10	167	8,468	49,320	2,815	23,394	89,344	297,027	564	4,592	101,201	374,500
34	25-Aug	3	4	4	72	1,268	7,033	1,173	9,311	15,242	49,035	122	1,246	17,809	66,697
35	1-Sep	2	2	0	0	184	1,008	226	1,942	1,572	6,128	14	138	1,996	9,216
Total		56	207	552	9,185	77,227	423,696	4,786	39,190	201,936	656,444	10,808	94,486	295,309	1,223,001
Avg.wt.					16.6		5.5		8.2		3.3		8.7		

-Continued-

Appendix B.5. (Page 3 of 3)

Stat Week	Week Ending	Permits	Lndgs	Chinook		Sockeye		Coho		Pink		Chum		Total Salmon	
				Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
OUTER AYAKULIK SECTION															
23	9-Jun	25	26	157	2,791	10,629	56,049	0	0	0	0	192	1,333	10,978	60,173
24	16-Jun	75	190	1,161	18,445	72,003	369,292	14	98	10	32	3,240	27,757	76,428	415,624
25	23-Jun	57	187	1,667	26,902	90,637	468,799	1	5	712	1,924	5,552	47,770	98,569	545,400
26	30-Jun	69	193	256	4,650	87,638	468,192	1	8	20,289	59,316	14,370	118,639	122,554	650,805
27	7-Jul	48	79	60	858	41,040	228,717	4	41	12,865	38,875	8,505	71,771	62,474	340,262
31	4-Aug	4	8	2	21	3,674	20,882	223	1,676	44,393	152,681	1,594	13,522	49,886	188,782
32	11-Aug	6	6	2	77	670	3,290	36	233	9,229	28,186	373	2,951	10,310	34,737
Total		107	689	3,305	53,744	306,291	1,615,221	279	2,061	87,498	281,014	33,826	283,743	431,199	2,235,783
Avg.wt.					16.3		5.3		7.4		3.2		8.4		
INNER AYAKULIK SECTION															
23	9-Jun	13	13	124	2,543	4,305	22,360	0	0	0	0	18	149	4,447	25,052
24	16-Jun	43	78	2,146	48,865	43,956	227,412	0	0	0	0	245	2,291	46,347	278,568
25	23-Jun	17	28	1,069	23,699	23,914	124,788	1	9	4	10	333	2,733	25,321	151,239
26	30-Jun	5	7	87	2,018	9,500	56,080	0	0	26	103	86	895	9,699	59,096
34	25-Aug	1	1	0	0	0	0	0	0	320	973	676	5,411	996	6,384
Total		57	127	3,426	77,125	81,675	430,640	1	9	350	1,086	1,358	11,479	86,810	520,339
Avg.wt.					22.5		5.3		9.0		3.1		8.5		
WESTSIDE KODIAK MANAGEMENT PLAN SEINE HARVEST															
Total		169	2,735	16,171	227,006	935,319	4,937,679	82,766	670,594	2,520,215	8,369,078	228,493	1,985,499	3,782,964	16,189,856
Avg.wt.					14.0		5.3		8.1		3.3		8.7		

Appendix B.6. Set gillnet daily salmon harvest, by species, for Westside Kodiak Management Plan units, 2001.

Stat	Week			Chinook		Sockeye		Coho		Pink		Chum		Total Salmon	
Week	Ending	Permits	Lndgs	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
NORTHWEST KODIAK DISTRICT															
23	9-Jun	49	49	50	615	6,668	35,964	0	0	1	4	55	476	6,774	37,059
24	16-Jun	74	363	970	9,710	94,498	506,398	12	71	90	339	3,067	23,450	98,637	539,968
25	23-Jun	70	390	523	5,767	61,501	336,764	9	63	1,249	4,805	5,000	40,404	68,282	387,803
26	30-Jun	75	417	192	2,066	67,362	368,460	27	180	10,651	40,424	10,334	83,918	88,566	495,048
27	7-Jul	75	441	151	2,109	74,577	435,626	476	3,162	46,948	185,337	17,866	152,303	140,018	778,537
28	14-Jul	73	203	50	725	27,784	164,488	803	5,439	41,996	171,430	9,802	83,472	80,435	425,554
29	21-Jul	74	244	63	921	39,998	243,975	1,859	12,793	103,213	415,596	22,846	197,569	167,979	870,854
30	28-Jul	75	306	27	506	46,077	272,227	2,044	15,403	157,046	628,657	27,228	230,121	232,422	1,146,914
31	4-Aug	75	385	38	583	70,036	422,051	4,632	36,383	227,327	908,616	26,934	220,153	328,967	1,587,786
32	11-Aug	70	282	31	473	32,900	199,651	5,033	39,723	129,711	518,725	12,251	101,046	179,926	859,618
33	18-Aug	72	294	24	381	27,742	165,325	10,841	90,016	189,253	752,599	10,264	84,420	238,124	1,092,741
34	25-Aug	61	306	11	162	40,005	239,382	11,776	101,994	161,445	648,920	4,096	33,651	217,333	1,024,109
35	1-Sep	57	250	13	137	39,351	227,260	12,984	115,191	61,548	246,751	1,891	15,530	115,787	604,869
36	8-Sep	28	139	3	41	51,133	271,836	9,170	72,898	32,789	118,154	891	6,985	93,986	469,914
37	15-Sep	6	11	0	0	2,749	14,572	1,249	8,741	3,711	13,731	80	626	7,789	37,670
Total		96	4,080	2,146	24,196	682,381	3,903,979	60,915	502,057	1,166,978	4,654,088	152,605	1,274,124	2,065,025	10,358,444
Avg.wt.					11.3		5.7		8.2		4.0		8.4		

Appendix C.1. Primary management species and general management chronology in management units affected by the North Shelikof Strait Sockeye Salmon Management Plan for the Kodiak Management Area, 2001.

<table>
<tr><th colspan="9">NORTH SHELIKOF STRAIT SOCKEYE SALMON MANAGEMENT PLAN</th></tr>
<tr><td rowspan="6">MAINLAND DISTRICT</td><td>BIG RIVER SECTION</td><td>CLOSED</td><td>EARLY-RUN SOCKEYE MINOR SYSTEMS</td><td rowspan="8">NORTH SHELIKOF MANAGEMENT UNIT (5AAC 18.363.(b)(3)(A) & (B))</td><td rowspan="8">MANAGEMENT BASED ON LOCAL PINK AND CHUM SALMON STOCKS EXCEPT:

IF SOCKEYE HARVEST EXCEEDS 15,000 THEN THE "SEAWARD ZONES" ARE CLOSED, AND ONLY THE "SHOREWARD ZONES" MAY REMAIN OPEN. (5AAC 18.363.(b))</td><td>PINK AND CHUM SALMON</td><td rowspan="8">COHO</td></tr>
<tr><td>HALLO BAY SECTION</td><td>CLOSED</td><td>CLOSED</td><td>PINK AND CHUM SALMON</td></tr>
<tr><td>INNER KUKAK SECTION</td><td>CLOSED</td><td>CLOSED</td><td>PINK AND CHUM SALMON</td></tr>
<tr><td>OUTER KUKAK SECTION</td><td>CLOSED</td><td>EARLY-RUN SOCKEYE MINOR SYSTEMS</td><td>PINK AND CHUM SALMON</td></tr>
<tr><td>DAKAVAK SECTION</td><td>CLOSED</td><td>CLOSED</td><td>PINK AND CHUM SALMON</td></tr>
<tr><td rowspan="3">AFOGNAK DISTRICT</td><td>SHUYAK ISLAND SECTION</td><td>CLOSED</td><td>EARLY-RUN SOCKEYE MINOR SYSTEMS</td><td>PINK SALMON</td></tr>
<tr><td>NW AFOGNAK SECTION</td><td colspan="2">EARLY-RUN SOCKEYE MINOR AND ENHANCED SYSTEMS</td><td>PINK SALMON</td></tr>
<tr><td>SOUTHWEST AFOGNAK SECTION</td><td>CLOSED</td><td>EARLY-RUN KARLUK SOCKEYE</td><td>SW AFOGNAK MGMT UNIT (5AAC 18.363.(c)(3)0</td><td>MANAGEMENT BASED ON LOCAL PINK AND CHUM SALMON STOCKS EXCEPT:
IF THE SOCKEYE HARVEST EXCEEDS 50,000 THEN THE "SEAWARD ZONE" CLOSES, AND ONLY THE "SHOREWARD ZONE" MAY REMAIN OPEN. (5AAC 18.363.(c))</td><td>PINK SALMON</td><td>PINK SALMON AND LATE-RUN KARLUK SOCKEYE</td><td>COHO</td></tr>
<tr><td></td><td></td><td>6/9</td><td>6/14</td><td></td><td>7/6</td><td>7/25</td><td>8/15</td><td>9/5</td></tr>
</table>

Appendix C.2. Narrative account of the North Shelikof sockeye salmon fishery in the Kodiak Management Area, 2001.

In 2001 during the July 6 to 25 period of the North Shelikof Management Plan, three fishing periods were scheduled preseason (Brennan et al. 2001). For both the Southwest Afognak unit and the eastern portion of the North Shelikof management unit (the Northwest Afognak and Shuyak Islands Sections), weekly fishing periods were scheduled to be 81 hours: NOON July 6 to 9:00 PM July 9, NOON July 14 to 9:00 PM July 17, and NOON July 22 to 9:00 PM July 25. For the western portion of the North Shelikof management unit (in the Mainland District from Big River to Dakavak), weekly fishing periods were scheduled to be 57 hours: NOON July 6 to 9:00 PM July 8, NOON July 14 to 9:00 PM July 16, and NOON July 22 to 9:00 PM July 24.

First Fishing Period (July 6 to 9)

Commercial salmon harvests during the first fishing period of July were small. There had been high winds of up to 25 knots on July 6 and heavy seas hampered travel and fishing along the capes. Even with the limited amount of fishing it was evident that fish numbers were low. Winds eventually diminished through the period, however effort and catch remained low on both the Mainland and Afognak Sections. Effort in the Mainland sections was extremely low with 7 boats fishing. Effort in the Afognak sections was also light, with about 15 vessels fishing in these sections during the first period. Seine harvests average less than 20% sockeye salmon and most vessels left the area, opting to fish in other areas of the KMA that were open to fishing. The sockeye salmon caps for the North Shelikof unit and the Southwest Afognak unit were not met during this first period, and the areas closed as previously scheduled. Commercial seine catches for the Southwest Afognak unit for this first period included 7,418 sockeye salmon, 29,335 pink, 1,872 chum, 247 coho, and 60 chinook salmon. Average weight of the sockeye salmon harvested in this section was approximately 5.22 pounds (Appendix C.4.). The salmon harvest for the North Shelikof unit for this first period included 4,731 sockeye (with over 85% coming from the Northwest Afognak Section), 6,400 pink, 1,042 chum, 94 coho and 62 chinook salmon. Sockeye salmon from the Northwest Afognak, Shuyak, and Mainland Sections averaged 5.52 pounds (Appendix C.5.).

Second Fishing Period (July 14 to 17)

Initial effort levels on the Mainland side of the North Shelikof unit (Dakavak Bay to Cape Douglas) were light, with less than 25 vessels present. Fishing started predominately in Dakavak Bay of the Dakavak Bay Section. Initial catches were small and the majority of the fleet headed to other areas. The remaining vessels (around 8) began fishing in Missak Bay of the Dakavak Bay Section. Harvest rates increased, with sockeye salmon comprising approximately 38% of the catch. Fishermen pointed out that the majority of the sets were being made for southbound fish. Few boats delivered and the total daily harvest was estimated at 4,000 to 4,500 sockeye salmon. By afternoon of the third day (July 15) about 12 vessels were fishing within the Dakavak Bay Section. Few boats were fishing more than 1/2 mile from shore, with about half of the fleet were fishing inside the Seaward Zone. There were no vessels fishing south of the area covered by the management plan. Fishing effort and harvests along the Afognak side of the North Shelikof unit, in the Northwest Afognak and Shuyak Island Sections, were very small during this second fishing period.

It was estimated by the biologist aboard the ADF&G vessel K-Hi-C, monitoring the fishery along the Mainland, that the North Shelikof unit harvest cap (15,000 sockeye salmon) would likely be surpassed during this second fishing period. On the ground observations was the best information available. Processors had few deliveries to report to the Area Management Biologist in Kodiak. The decision was made by 10:00 AM to close the North Shelikof Seaward Zones at 1:00 PM July 16. The estimated total sockeye salmon catch in the North Shelikof unit at the time of the closure was 14,729 sockeye salmon.

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After the closure of the North Shelikof unit Seaward Zones approximately 8 vessels remained in the north Mainland District, fishing within the Shoreward Zone (particularly in Dakavak Bay). The cumulative catch for the North Shelikof Unit, through the end of the second period, was 20,113 sockeye, 23,753 pink, 8,033 chum, 5,718 coho, and 197 chinook salmon (Appendix C.5).

Fishing effort in the Southwest Afognak unit was very light with pink salmon comprising the majority of the catch. Only 13,189 sockeye salmon were caught in this section during the second fishing period (average weight 5.63 pounds), bringing the cumulative catch to 20,607 sockeye, 88,499 pink, 8,625 chum, 1,449 coho, and 366 chinook salmon for the Southwest Afognak. management unit (Appendix C.4).

Third Fishing Period (July 22 to 25)

At the opening of the third fishing period (July 22) approximately 8 vessels fished the Shoreward Zone of the Dakavak Bay Section, with little or no effort in the remaining sections of the Mainland. There was little effort on the Afognak side of the North Shelikof unit (in the Northwest Afognak and Shuyak Island Sections). Only 2,208 sockeye salmon were harvested in the Shoreward Zone of the North Shelikof unit during the third opening. Also harvested were 9,781 pink, 2,315 chum, 4,225 coho, and 48 chinook salmon.

Approximately 27 vessels fished the Southwest Afognak unit. Fishing was slow, with relatively few sockeye salmon in the catches. As this period progressed, the catches of pink salmon increased, however, catches were not sufficient to justify an extension in the Shoreward Zones of the North Shelikof management unit. Commercial fishing closed as scheduled on July 25. The number of sockeye salmon harvested in the Southwest Afognak Section during this third period was not high enough to trigger a closure of the Seaward Zones. The salmon harvest in the Southwest Afognak unit for the third fishing period was 12,373 sockeye, 101,852 pink, 7,003 chum, 5,606 coho, and 128 chinook salmon.

Summary

The 2001 Southwest Afognak Unit harvest for the July 6 through July 25 period totaled 517 chinook, 33,289 sockeye, 7,139 coho, 191,947 pink, and 15,913 chum salmon, with 48 vessels participating (Appendix C.4).

The 2001 North Shelikof Unit harvest for the time period July 6 through July 25 totaled 245 chinook, 22,321 sockeye, 9,943 coho, 33,534 pink, and 10,348 chum salmon, with 26 vessels participating (Appendix C.5).

Appendix C.3. Summary of fishing time, zone closures, effort, and harvest by species, for management units affected by the North Shelikof Strait Sockeye Salmon Management Plan for the Kodiak Management Area, 1990 – 2001.

North Shelikof Units (15,000 Sockeye Harvest Trigger) [a/]														
YEAR	MAINLAND		N. AFOGNAK		Zone Closure		Sockeye Harvest at Time of Zone Closure	Number of Vessels	Total Harvest By Species - July 6 through July 25					Upper Cook Inlet Sockeye Harvest
	# of days open to Fishing	# of days Seaward Zone closed	# of days open to fishing	# of days Seaward Zone closed	Date	Time			CHINOOK	SOCKEYE	COHO	PINK	CHUM	
1990	7.1	2.4	9.1	4.4	7/15	9 PM	36,800	69	140	57,700	3,900	18,600	19,400	3.6 MILLION
1991	7.1	0	13.1	0	none	none	No Closure	42	2,500	18,800	2,700	44,800	3,800	2.2 MILLION
1992	7.1	5.1	9.1	7.1	7/8	1 PM	13,500	77	900	128,400	3,100	24,300	12,000	8.9 MILLION
1993	7.1	4.7	13.8	8.9	7/10	5 PM	15,220	89	1,200	78,400	2,000	75,600	4,200	4.7 MILLION
1994	7.1	2.8	9.1	4.8	7/14	11AM	22,830	58	165	38,800	2,400	52,000	10,500	3.5 MILLION
1995	7.1	3.3	13.3	8.5	7/13	10PM	15,770	77	150	37,400	1,260	178,800	16,590	2.9 MILLION
1996	7.1	4.3	7.1	4.3	7/15	10PM	11,675	77	260	73,720	1,820	30,050	14,585	3.9 MILLION
1997	7.1	4.9	10.1	7.9	7/8	5 PM	19,850	80	1,940	59,140	1,840	38,190	4,550	4.1 MILLION
1998	7.1	2.4	10.1	4.4	7/16	9 PM	17,812	39	140	40,630	5,380	59,535	6,370	1.2 MILLION
1999	7.1	3.3	10.1	6.3	7/13	10PM	13,021	45	310	30,830	230	31,920	7,795	2.7 MILLION
2000	7.1	0	10.1	0	none	none	No Closure	31	68	9,225	1,045	20,215	22,155	1.3 MILLION
2001	7.1	2.7	10.1	4.7	7/16	1 PM	14,729	26	245	22,321	9,943	33,534	10,348	1.8 MILLION

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Southwest Afognak Section (50,000 Sockeye Harvest Trigger) [b/]												
YEAR	# of Days Open to Fishing	# of Days Seaward Zone closed	Zone Closure		Sockeye Harvest at Time of Zone Closure	Number of Vessels	Total Harvest By Species July 6 through July 25					Upper Cook Inlet Sockeye Harvest
			Date	Time			CHINOOK	SOCKEYE	COHO	PINK	CHUM	
1990	9.1	0	none	none	No Closure	64	300	22,900	3,600	53,800	6,000	3.6 MILLION
1991	13.1	0	none	none	No Closure	55	300	34,200	3,600	100,700	4,000	2.2 MILLION
1992	9.1	4.7	7/14	1pm	48,200	84	300	50,600	600	30,000	6,800	8.9 MILLION
1993	13.6	7.7	7/14	1pm	45,900	87	860	74,000	7,100	243,000	7,400	4.7 MILLION
1994	9.6	0	none	none	No Closure	45	360	13,600	1,000	64,300	3,100	3.5 MILLION
1995	13.6	0	none	none	No Closure	64	760	21,360	1,750	490,510	22,220	2.9 MILLION
1996	7.6	0	none	none	No Closure	32	185	10,510	803	79,205	10,785	3.9 MILLION
1997	10.6	0	none	none	No Closure	61	1,500	18,120	1,760	62,730	8,440	4.1 MILLION
1998	10.6	0	none	none	No Closure	22	240	10,340	2,290	82,685	1,900	1.2 MILLION
1999	10.6	0	none	none	No Closure	38	700	18,725	375	41,960	4,720	2.7 MILLION
2000	10.6	0	none	none	No Closure	31	90	17,810	1,220	37,340	7,225	1.3 MILLION
2001	10.6	0	none	none	No Closure	48	517	33,289	7,139	191,947	15,913	1.8 MILLION

[a] In 1988, from 7/6-725, with 6.9 days open to fishing in the North Shelikof Unit 392,000 sockeye were harvested. In Upper Cook Inlet 6,800,000 sockeye were harvested.

[b] In 1988, from 7/6-7/25, with 11.1 days open to fishing in Southwest Afognak 86,000 sockeye were harvested. In Upper Cook Inlet 6,800,000 sockeye were harvested

Appendix C.4. Daily salmon harvest by section and species for the Southwest Afognak managment unit of the North Shelikof Strait Sockeye Salmon Management Plan, 2001.

			Chinook		Sockeye		Coho		Pink		Chum		Total Salmon	
Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
SOUTHWEST AFOGNAK SECTION														
FIRST PERIOD (7/6-7/9)														
6-Jul	4	4	9	89	1,770	9,710	5	41	2,019	6,417	281	2,265	4,084	18,522
7-Jul	6	6	28	222	2,012	10,095	17	104	9,294	27,978	547	4,704	11,898	43,103
8-Jul	7	7	8	91	2,111	10,979	225	1,151	8,469	26,940	564	4,351	11,377	43,512
9-Jul	8	9	15	95	1,525	7,906	0	0	9,553	29,227	480	3,862	11,573	41,090
TOTAL	16	26	60	497	7,418	38,690	247	1,296	29,335	90,562	1,872	15,182	38,932	146,227
AVG.WT.				8.28		5.22		5.25		3.09		8.11		
SECOND PERIOD (7/14-7/17)														
14-Jul	5	5	1	15	2,388	13,281	65	386	5,524	16,780	636	5,247	8,614	35,709
15-Jul	9	9	20	271	1,671	9,613	199	1,138	11,485	37,462	1,316	9,894	14,691	58,378
16-Jul	12	12	173	1,530	4,639	26,235	271	2,242	18,532	58,890	2,719	24,091	26,334	112,988
17-Jul	16	16	122	1,256	4,491	25,099	667	4,565	23,623	72,407	2,082	17,276	30,985	120,603
TOTAL	26	42	316	3,072	13,189	74,228	1,202	8,331	59,164	185,539	6,753	56,508	80,624	327,678
AVG.WT.				9.72		5.63		6.93		3.14		8.37		
THIRD PERIOD (7/22-7/25)														
22-Jul	4	4	7	57	1,074	5,572	323	2,461	6,350	21,325	511	4,146	8,265	33,561
23-Jul	19	19	65	978	5,865	30,091	1,864	11,759	40,827	129,321	3,263	26,341	51,884	198,490
24-Jul	15	15	40	375	2,700	14,375	1,575	10,787	25,848	89,408	1,491	12,575	31,654	127,520
25-Jul	17	17	16	214	2,734	14,924	1,844	12,191	28,827	93,936	1,738	13,471	35,159	134,736
TOTAL	30	55	128	1,624	12,373	64,962	5,606	37,198	101,852	333,990	7,003	56,533	126,962	494,307
AVG.WT				12.69		5.25		6.64		3.28		8.07		
SOUTHWEST AFOGNAK MANAGEMENT UNIT, JULY 6-25														
TOTALS	48	124	517	5,312	33,289	180,049	7,139	47,495	191,947	615,084	15,913	130,510	248,805	978,450
AVG.WT.				10.27		5.41		6.65		3.20		8.20		

Appendix C.5. Daily salmon harvest by section and species for the North Shelikof managment units of the North Shelikof Strait Sockeye Salmon Management Plan, 2001.

			Chinook		Sockeye		Coho		Pink		Chum		Total Salmon	
Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
NORTH SHELIKOF MANAGEMENT UNITS														
FIRST PERIOD (7/6-7/9)														
6-Jul	*	*	*	*	*	*	*	*	*	*	*	*	*	*
7-Jul	7	8	47	1,283	3,670	20,452	94	573	4,093	12,336	807	6,796	8,711	41,440
8-Jul	*	*	*	*	*	*	*	*	*	*	*	*	*	*
TOTAL	9	11	62	1,763	4,731	26,096	94	573	6,400	19,233	1,042	8,690	12,329	56,355
AVG.WT.				28.44		5.52		6.10		3.01		8.34		
SECOND PERIOD (7/14-7/17)														
14-Jul	9	9	68	722	5,722	37,475	2,044	15,038	4,921	11,875	2,335	18,632	15,090	83,742
15-Jul	5	5	4	29	3,891	26,109	1,610	12,312	4,455	10,007	1,436	11,520	11,396	59,977
16-Jul	13	13	63	850	5,769	36,384	1,970	15,522	7,977	24,060	3,220	26,717	18,999	103,533
TOTAL	18	27	135	1,601	15,382	99,968	5,624	42,872	17,353	45,942	6,991	56,869	45,485	247,252
AVG.WT.				11.86		6.50		7.62		2.65		8.13		
THIRD PERIOD (7/22-7/25)														
22-Jul	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23-Jul	*	*	*	*	*	*	*	*	*	*	*	*	*	*
24-Jul	*	*	*	*	*	*	*	*	*	*	*	*	*	*
25-Jul	*	*	*	*	*	*	*	*	*	*	*	*	*	*
TOTAL	8	11	48	688	2,208	13,295	4,225	33,824	9,781	32,927	2,315	18,148	18,577	98,882
AVG.WT.				14.33		6.02		8.01		3.37		7.84		
NORTH SHELIKOF MANAGEMENT UNITS HARVEST, JULY 6-25														
Total	26	49	245	4,052	22,321	139,359	9,943	77,269	33,534	98,102	10,348	83,707	76,391	402,489
AVG. WT.				16.54		6.24		7.77		2.93		8.09		

* = Confidential information.

Appendix D.1. Primary management species and management chronology of the Eastside Afognak Management Plan for the Kodiak Management Area, 2001.

EASTSIDE AFOGNAK MANAGEMENT PLAN				
	6/9	7/6	7/18	7/26	8/24
RASPBERRY STRAIT SECTION	CLOSED	LOCAL AND MIXED KODIAK PINK SALMON			LOCAL COHO
SE AFOGNAK SECTION	AFOGNAK LAKE (LITNIK) SOCKEYE	LOCAL PINK SALMON			LOCAL COHO
DUCK BAY SECTION	EARLY HATCHERY CHUM AND/OR SOCKEYE		HATCHERY AND LOCAL PINK SALMON		LOCAL COHO
IZHUT BAY SECTION	EARLY HATCHERY CHUM AND/OR SOCKEYE			HATCHERY AND LOCAL PINK SALMON	LOCAL COHO AND LATE HATCHERY SOCKEYE
KITOI BAY [a] SECTION	HATCHERY CHUM AND/OR EARLY SOCKEYE			HATCHERY PINK SALMON	LATE HATCHERY SOCKEYE OR COHO
	6/9	7/6	7/18	7/26	8/24

[a] Throughout the season fishing time may be restricted in order to meet broodstock goals for hatchery bound chum, sockeye, pink, and coho salmon.

Appendix D.2. Narrative account of the Eastside Afognak salmon fishery in the Kodiak Management Area, 2001.

For the Southeast Afognak Section management is based on local salmon runs. Fisheries may be allowed from June 9 to July 5 based on the sockeye salmon returning to the Afognak Lake system, and after July 6 based on local pink, chum, and coho salmon. The initial opening for this system is normally scheduled for June 14. However, the Afognak Lake system had very strong runs of sockeye for several years, so in the 2001 harvest strategy it was stated that this section might open as early as June 9, depending on sockeye salmon escapement and build up (Brennan et al 2001). The Raspberry Strait Section is closed to fishing until July 6, after which fishing time is based on local and mixed pink and coho salmon. The sockeye salmon run to the Afognak Lake system was very weak and no directed fisheries were allowed. Pink salmon fisheries were allowed in late July but there was no effort. The pink run was also weak so after August 2 no further fisheries were allowed targeting local pink salmon.

The 2001 harvest strategy also stated that an opening in the Duck Bay, Izhut Bay, and the normally closed Kitoi Bay Section would be allowed June 9 to harvest early returns of sockeye and chum salmon. The Kitoi Bay Hatchery chum salmon run was stronger than expected and fisheries were allowed targeting chum salmon through June 20. Chum salmon needed as broodstock were slow to build-up near the hatchery, but by July 1 fishing was allowed in the Duck and Izhut Bay Sections. A local seiner helped secure the last of the chum broodstock requirements and mop-up fisheries were allowed after July 3. The hatchery pink salmon return was much stronger than projected, and fisheries targeting hatchery returns remained opened through the end of the commercial fishing season. The eastern portion of the Southeast Afognak Section (Danger Bay and Cape Kostromitinof) also opened on August 7, in order to provide more opportunity to harvest the strong hatchery return. The last landing occurred September 18.

In fisheries targeting the Kitoi Bay Hatchery returns, in the Duck Bay, Izhut Bay, and the Kitoi Bay Sections, 148 permit holders harvested 830 chinook, 48,516 sockeye, 216,266 chum, 13,126,761 pink, and 151,732 coho salmon (Appendix D.3). The Southeast Afognak Section harvest included 4 chinook, 774 sockeye, 359 chum, 145,366 pink, and 1,232 coho salmon. An additional 835 sockeye, 349 chum, 5,860 pink, and 751 coho salmon were harvested from the Raspberry Strait Section during westside salmon fisheries.

Appendix D.3. Daily salmon harvest, by species, for the management units of the East Afognak Management Plan, 2001.

Stat Week	Week Ending	Permits	Lndgs	Chinook		Sockeye		Coho		Pink		Chum		Total Salmon	
				Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
RASPBERRY STRAIT SECTION															
30	28-Jul	*	*	*	*	*	*	*	*	*	*	*	*	*	*
31	4-Aug	*	*	*	*	*	*	*	*	*	*	*	*	*	*
35	1-Sep	*	*	*	*	*	*	*	*	*	*	*	*	*	*
38	22-Sep	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total		5	5	0	0	835	4,189	751	6,319	5,860	21,846	349	3,047	7,795	35,401
Avg.wt.					0		5.02		8.41		3.73		8.73		
SOUTHEAST AFOGNAK SECTION															
32	11-Aug	9	13	4	68	649	3,677	553	4,020	91,492	330,658	314	2,432	93,012	340,855
33	18-Aug	5	5	0	0	118	604	559	4,360	48,338	170,962	45	349	49,060	176,275
34	25-Aug	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total		12	19	4	68	774	4,326	1,232	9,376	145,366	520,443	359	2,781	147,735	536,994
Avg.wt.					17.00		5.59		7.61		3.58		7.75		
IZHUT BAY SECTION															
23	9-Jun	4	4	3	45	286	1,508	0	0	2	5	1,944	16,458	2,235	18,016
24	16-Jun	8	10	67	601	429	1,957	0	0	19	71	9,884	74,769	10,399	77,398
25	23-Jun	*	*	*	*	*	*	*	*	*	*	*	*	*	*
27	7-Jul	24	29	56	234	1,684	8,612	61	366	1,524	5,105	27,163	211,782	30,488	226,099
28	14-Jul	8	8	9	118	1,888	9,274	856	5,099	3,836	14,395	7,253	49,234	13,842	78,120
29	21-Jul	*	*	*	*	*	*	*	*	*	*	*	*	*	*
30	28-Jul	*	*	*	*	*	*	*	*	*	*	*	*	*	*
31	4-Aug	40	75	3	63	1,141	6,010	473	3,290	459,971	1,596,962	957	7,266	462,545	1,613,591
32	11-Aug	83	162	18	189	1,804	10,034	2,999	22,631	1,018,664	3,398,210	987	7,702	1,024,472	3,438,766
33	18-Aug	114	361	9	138	1,949	10,702	14,300	109,098	2,207,875	7,659,284	873	6,550	2,225,006	7,785,772
34	25-Aug	74	212	11	142	554	2,919	17,193	137,647	1,406,614	4,768,656	204	1,550	1,424,576	4,910,914
35	1-Sep	36	109	0	0	248	1,372	20,598	154,386	715,779	2,500,242	97	806	736,722	2,656,806
36	8-Sep	6	9	0	0	32	175	7,627	53,385	61,970	228,438	13	103	69,642	282,101
37	15-Sep	*	*	*	*	*	*	*	*	*	*	*	*	*	*
38	22-Sep	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total		128	993	204	1,772	10,606	55,552	75,169	563,288	5,893,524	20,234,230	51,542	393,482	6,031,045	21,248,324
Avg.wt.					8.69		5.24		7.49		3.43		7.63		

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Stat Week	Week Ending	Permits	Lndgs	Chinook		Sockeye		Coho		Pink		Chum		Total Salmon	
				Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
DUCK BAY SECTION															
23	9-Jun	*	*	*	*	*	*	*	*	*	*	*	*	*	*
24	16-Jun	11	13	100	1,148	4,013	20,425	0	0	116	376	11,810	85,334	16,039	107,283
25	23-Jun	15	15	79	776	3,296	17,045	1	4	432	1,501	11,193	92,933	15,001	112,259
27	7-Jul	4	7	14	62	1,461	7,581	125	746	1,093	4,115	3,613	30,843	6,306	43,347
28	14-Jul	7	11	15	74	4,994	26,316	2,135	14,716	10,369	36,158	2,776	20,772	20,289	98,036
29	21-Jul	12	15	30	210	1,770	10,534	1,402	11,326	15,522	51,415	994	8,528	19,718	82,013
30	28-Jul	17	19	22	610	1,770	6,070	535	3,786	59,099	197,046	1,563	12,448	62,989	219,960
31	4-Aug	75	143	28	431	3,841	19,798	3,564	25,428	989,685	3,245,609	3,246	24,752	1,000,364	3,316,018
32	11-Aug	107	356	38	639	6,084	32,068	11,615	85,758	2,415,911	8,207,729	3,438	25,953	2,437,086	8,352,147
33	18-Aug	77	172	12	260	1,662	8,973	10,257	77,470	991,936	3,364,158	774	6,207	1,004,641	3,457,068
34	25-Aug	65	194	5	96	1,798	9,685	26,645	208,118	1,525,869	5,256,572	497	3,581	1,554,814	5,478,052
35	1-Sep	24	41	4	48	166	895	11,452	85,461	235,533	816,355	81	656	247,236	903,415
36	8-Sep	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total		131	988	347	4,354	31,119	160,792	68,298	516,217	6,247,574	21,188,466	40,158	313,732	6,387,496	22,183,561
Avg.wt.					12.55		5.17		7.56		3.39		7.81		
KITOI BAY SECTION															
23	9-Jun	4	4	63	560	615	3,622	0	0	0	0	2,589	21,680	3,267	25,862
24	16-Jun	13	27	181	2,309	3,056	15,671	0	0	0	0	33,928	275,077	37,165	293,057
25	23-Jun	*	*	*	*	*	*	*	*	*	*	*	*	*	*
27	7-Jul	41	47	8	102	623	3,192	8	44	665	2,200	76,060	550,321	77,364	555,859
28	14-Jul	7	7	23	162	736	3,639	190	1,261	1,675	5,357	9,979	71,694	12,603	82,113
31	4-Aug	22	37	2	88	624	3,244	196	1,395	260,421	878,545	450	3,168	261,693	886,440
32	11-Aug	30	50	2	27	283	1,571	563	3,876	264,095	905,227	168	1,228	265,111	911,929
33	18-Aug	*	*	*	*	*	*	*	*	*	*	*	*	*	*
34	25-Aug	15	20	0	0	61	400	868	6,425	135,982	412,724	0	0	136,911	419,549
35	1-Sep	12	17	0	0	131	733	3,425	29,503	159,596	523,973	13	84	163,165	554,293
36	8-Sep	7	14	0	0	539	4,752	2,825	23,566	126,622	427,751	0	0	129,986	456,069
Total		82	228	279	3,248	6,791	37,447	8,265	67,454	985,663	3,278,564	124,566	934,216	1,125,564	4,320,929
Avg.wt.					11.64		5.51		8.16		3.33		7.50		
EAST AFOGNAK MANAGEMENT PLAN															
Total		148	2,233	834	9,442	50,125	262,306	153,715	1,162,654	13,277,987	45,243,549	216,974	1,647,258	13,699,635	48,325,209
Avg.wt.					11.32		5.23		7.56		3.41		7.59		

* Confidentiality requirements prevent the release of this information.

Appendix E.1. Primary management species and management chronology of the Eastside Kodiak Management Plan for the Kodiak Management Area, 2001.

EASTSIDE KODIAK MANAGEMENT PLAN

District	Area	6/9–6/14	6/14	6/14–6/21	6/21	6/21–7/6	7/6–7/10	7/10–8/25	8/25–9/6	9/6–10/3
NORTHEAST KODIAK DISTRICT	OUTER CHINIAK BAY	CLOSED					LOCAL AND MIXED PINK		LOCAL PINK & COHO	LOCAL COHO
	INNER CHINIAK BAY	CLOSED					LOCAL AND MIXED PINK		LOCAL PINK & COHO	LOCAL COHO
	BUSKIN RIVER	CLOSED					LOCAL PINK & BUSKIN SOCKEYE	LOCAL PINK & CHUM	LOCAL PINK, COHO, & CHUM	LOCAL COHO
	MONASHKA / MILL BAY	CLOSED					LOCAL AND MIXED PINK		LOCAL PINK & COHO	LOCAL COHO
EASTSIDE KODIAK DISTRICT	SEVEN RIVERS	CLOSED	33 HOURS-LOCAL/MIXED SOCKEYE	CLOSED	33 HOURS-LOCAL/MIXED SOCKEYE	CLOSED	LOCAL AND MIXED PINK		LOCAL PINK & COHO	LOCAL COHO
	TWO HEADED	CLOSED		CLOSED		CLOSED	LOCAL AND MIXED PINK		LOCAL PINK & COHO	LOCAL COHO
	SITKALIDAK	CLOSED		CLOSED		CLOSED	LOCAL AND MIXED PINK		LOCAL PINK, CHUM & COHO	LOCAL COHO
	OUTER UGAK BAY	CLOSED		CLOSED		PASAGSHAK SOCKEYE	LOCAL AND MIXED PINK		LOCAL PINK, CHUM & COHO	LATE CHUM &COHO
	INNER UGAK BAY	CLOSED		CLOSED		SALTERY SOCKEYE	LOCAL PINK & CHUM, SALTERY SOCKEYE	LOCAL PINK & CHUM	LOCAL PINK & COHO	COHO

Appendix E.2. Narrative account of the Eastside Kodiak salmon fishery in the Kodiak Management Area, 2001.

For the Northeast Kodiak District, all sections are to remain closed to commercial salmon fishing until July 6, when the general pink salmon fishery begins for most of the KMA. Fishing opportunities through August 24 are to be based on the abundance of local and mixed pink and chum salmon, except that in the Buskin River Section from July 6 to 10 fishing may be allowed based on local pink salmon and Buskin River sockeye salmon. From August 25 to September 5, fishing periods are based on the abundance of local pink and coho salmon, and after September 5, on local coho salmon.

For the Eastside Kodiak District, in the southern Seven Rivers, Two-Headed, and Sitkalidak Sections, not more than two 33-hour fishing periods may occur from June 14 to July 5, to harvest local and mixed sockeye salmon. In the Inner and Outer Ugak Bay Sections not more than two 33-hour fishing periods may occur from June 14 to June 22, to harvest local and mixed sockeye salmon, then from June 23 to July 5 fishing opportunities are to be based on sockeye salmon bound to either the Pasagshak River (stream # 259-411) in Outer Ugak Bay or the Saltery River (stream # 259-415) in Inner Ugak Bay. From July 6 through August 24, fishing opportunities in all sections are to be based on the abundance of local and mixed pink and chum salmon, except that in Inner Ugak Saltery sockeye salmon must be considered through July 10. From August 25 to September 5, fishing periods are based on the abundance of local pink, chum, and coho salmon and after September 5 on local coho salmon.

In 2001 the sockeye runs to both the Buskin and Saltery were very strong. The Buskin sockeye run is heavily used for subsistence and no commercial fisheries were allowed through July 6. By that time the sockeye run was essentially over. For Saltery, fisheries were allowed on June 14-15 and June 21-22, as anticipated. Based on a review of the Biological Escapement Goal (BEG) by the department, the Saltery sockeye salmon BEG range was reduced for the 2001 season (Honnold and Sagalkin 2001). Early escapement did not appear to be strong and the fishery reopened on July 6 for three days, during the initial pink salmon fishery. The fishery opened again on July 14. Sockeye escapements picked up and commercial fishing was moved into the stream terminus, through August 2.

By the first week of August it was apparent that pink salmon runs were late or weak along the east and northeast side of Kodiak. Fishing periods were restricted through August 20, when escapements appeared to have improved. Coho salmon runs were strong in most systems and commercial fishing was allowed in most areas through the end of the season.

The last landing from Eastside Kodiak management units occurred on September 24 (Appendix E.3.) The total commercial harvest from Eastside Kodiak management units (Northeast and Eastside Kodiak Districts) was 969,359 salmon by 74 permit holders, including 774 chinook, 105,285 sockeye, 51,364 coho, 631,001 pink, and 180,935 chum salmon.

Appendix E.3. Daily commercial salmon harvest, by species, for Eastside Kodiak Management Plan units, 2001.

Stat Week				Chinook		Sockeye		Coho		Pink		Chum		Total Salmon	
Week	Ending	Permits	Lndgs	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
NORTHEAST KODIAK DISTRICT															
27	7-Jul	*	*	*	*	*	*	*	*	*	*	*	*	*	*
29	21-Jul	4	4	6	38	1,793	10,896	2,023	14,642	4,819	16,524	788	6,263	9,429	48,363
30	28-Jul	*	*	*	*	*	*	*	*	*	*	*	*	*	*
31	4-Aug	*	*	*	*	*	*	*	*	*	*	*	*	*	*
35	1-Sep	*	*	*	*	*	*	*	*	*	*	*	*	*	*
36	8-Sep	*	*	*	*	*	*	*	*	*	*	*	*	*	*
38	22-Sep	*	*	*	*	*	*	*	*	*	*	*	*	*	*
39	29-Sep	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total		12	20	22	163	3,361	18,861	7,077	59,097	15,210	56,014	1,334	10,270	27,004	144,405
Avg.wt.					7.41		5.61		8.35		3.68		7.70		
EASTSIDE KODIAK DISTRICT															
24	16-Jun	16	17	106	1,651	11,330	65,636	0	0	78	241	2,841	21,049	14,355	88,577
25	23-Jun	44	50	131	2,481	28,273	152,918	3	18	971	2,709	4,480	33,897	33,858	192,023
27	7-Jul	18	20	99	1,319	12,776	70,966	347	2,507	4,085	14,568	2,488	19,815	19,795	109,175
28	14-Jul	21	26	111	1,260	18,713	101,594	6,645	49,243	16,412	57,056	2,428	19,512	44,309	228,665
29	21-Jul	24	49	179	1,410	21,597	114,478	25,038	178,434	35,811	112,808	6,765	55,844	89,390	462,974
30	28-Jul	16	24	63	746	4,218	22,400	2,423	18,012	38,222	134,433	6,843	54,601	51,769	230,192
31	4-Aug	9	14	16	444	654	3,494	112	870	35,555	142,655	9,947	88,412	46,284	235,875
32	11-Aug	14	33	22	513	1,331	6,015	212	1,319	100,128	357,987	25,045	177,880	126,738	543,714
33	18-Aug	19	52	17	359	1,327	6,597	1,464	9,664	124,920	425,074	40,781	336,829	168,509	778,523
34	25-Aug	16	67	3	74	1,075	5,760	4,739	35,819	212,708	717,771	62,186	468,839	280,711	1,228,263
35	1-Sep	10	17	5	115	630	2,810	3,304	19,090	46,901	155,807	15,132	104,284	65,972	282,106
37	15-Sep	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total		74	370	752	10,372	101,924	552,668	44,287	314,976	615,791	2,121,109	179,601	1,386,282	942,355	4,385,407
Avg.wt.					13.79		5.42		7.11		3.44		7.72		
EASTSIDE KODIAK MANAGEMENT PLAN															
Total		74	390	774	10,535	105,285	571,529	51,364	374,073	631,001	2,177,123	180,935	1,396,552	969,359	4,529,812
Avg.wt.					13.61		5.43		7.28		3.45		7.72		

* Confidentiality requirements prevent the release of this information.

Appendix F.1. Primary management species and management chronology for the Mainland District Management Plan for the Kodiak Management Area, 2001.

MAINLAND DISTRICT SALMON MANAGEMENT PLAN										
	6/5	6/14		6/21		7/6	7/25	8/15	8/20	8/25
BIG RIVER[a]	CLOSED	33 Hr	CLOSED	33 Hr	CLOSED	LOCAL & MIXED KODIAK PINK & CHUM SALMON			LOCAL COHO	
HALLO BAY[a]	CLOSED					LOCAL & MIXED KODIAK PINK & CHUM SALMON			LOCAL COHO	
OUTER KUKAK[a]	CLOSED	33 Hr	CLOSED	33 Hr	CLOSED	LOCAL & MIXED KODIAK PINK & CHUM SALMON		LATE RUN CHUM & COHO		
INNER KUKAK	CLOSED					LOCAL & MIXED KODIAK PINK & CHUM SALMON		LATE RUN CHUM & COHO		
DAKAVAK[a]	CLOSED					LOCAL & MIXED KODIAK PINK & CHUM SALMON				LATE PINK & COHO SALMON
KATMAI & ALINCHAK	CLOSED					LOCAL & MIXED KODIAK PINK & CHUM SALMON				LATE PINK & COHO SALMON
CAPE IGVAK	CAPE IGVAK SALMON MANAGEMENT PLAN (5AAC 18.360)						LOCAL & MIXED KODIAK PINK & CHUM SALMON			LATE PINK & COHO SALMON
WIDE BAY	CLOSED						LOCAL PINK & CHUM SALMON			LATE PINK & COHO SALMON

[a] During the time period July 6 through July 25 these management sections must also be managed in accordance with the North Shelikof Strait Sockeye Salmon Management Plan (5AAC 18.363).

33 Hr: A 33 hour fishing period for local sockeye salmon.

Appendix F.2. Narrative account of the Mainland salmon fishery in the Kodiak Management Area, 2001.

The Mainland District is unique in the Kodiak Management Area, for this district is covered under three separate regulatory management plans, two of which are strictly allocative plans allowing the harvest of sockeye salmon considered to be non-local. The Cape Igvak Salmon Management Plan covers the southernmost sections of the district and from June 5 to July 25 limits the harvest of sockeye salmon considered by regulation to be Chignik bound (a separate report for the Alaska Board of Fisheries has been prepared to describe this management plan and Cape Igvak fisheries; see Brennan 2001). The North Shelikof Strait Sockeye Salmon Management Plan covers the northernmost sections of the Mainland District, and from July 6 to 25 limits the harvest of sockeye salmon due to concern for interception of Cook Inlet-bound fish (see Appendix C). The Mainland District Salmon Management Plan, while recognizing these other plans, sets forth the key species and targeted stocks that are managed for in each section throughout the entire fishing season.

For the majority of the Mainland District, commercial salmon fisheries remain closed until July 6, when the general pink salmon fishery begins for most of the Kodiak Area. The exceptions are the Cape Igvak Section (managed based on the strength of the Chignik sockeye salmon through July 25) and two very limited (33 hour) fisheries in June targeting local sockeye salmon runs (Swikshak River sockeye in the Big River Section, and Kaflia Lake sockeye in the Outer Kukak Section). From July 6 through 25, weekly fishing periods may not exceed 57 hours and fishing opportunities are to be based on the abundance of local and mixed pink and chum salmon, except in the Wide Bay Section, which must remain closed. From July 25 to the end of the season, fishing periods are based on the abundance of local pink, chum and coho salmon.

For sections north of the Cape Igvak Section, the first three weekly fishing periods (through July 25) were 57 hours long in 2001. The early chum salmon runs were strong to systems in the Wide Bay, Cape Igvak, and Alinchak Sections, but little information was available on pink salmon return strength. Fishing periods were increased to 81 hours, from July 30 to August 2, with an additional 24-hour extension (through August 3) in the Wide Bay, Cape Igvak, and Alinchak Sections. Aerial surveys and reports from commercial fishermen indicated that the pink salmon runs were weak to mid and north Mainland systems, so only Alinchak, Cape Igvak, and Wide Bay opened the following week. In mid-August two weekly periods were allowed in the Outer Kukak Bay Section, to provide opportunity to harvest early returns of Kukak chum salmon, however there was very little effort. After August 25 the entire district was opened continuously to allow harvests of strong runs of late pink and coho salmon, though once again effort was very minimal. The last landing from the Mainland District occurred on September 13 (Appendix F.3).

The total commercial harvest from the Mainland District was 940,792 salmon, including 3,090 chinook, 313,168 sockeye, 17,751 coho, 398,338 pink, and 208,445 chum salmon by 90 permit holders. This includes all salmon harvested along the Mainland, including those harvested under the direction of the Cape Igvak Salmon Management Plan and the North Shelikof Strait Sockeye Salmon Management Plan.

Appendix F.3. Daily commercial salmon harvest, by species, for the Mainland District, 2001.

Stat	Week			Chinook		Sockeye		Coho		Pink		Chum		Total Salmon	
Week	Ending	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
MAINLAND DISTRICT															
26	30-Jun	57	119	729	10,589	157,648	943,979	5	62	22,819	69,962	10,692	83,888	191,893	1,108,480
27	7-Jul	10	12	108	2,365	3,927	22,003	44	274	3,244	9,579	1,624	13,860	8,947	48,081
28	14-Jul	65	230	1,980	27,697	120,607	725,343	4,814	33,593	123,816	374,129	74,508	610,175	325,725	1,770,937
29	21-Jul	32	49	153	1,999	21,394	133,438	5,239	39,947	21,985	62,912	15,376	119,869	64,147	358,165
30	28-Jul	9	14	51	738	2,392	14,082	4,418	35,342	14,006	37,649	9,109	78,098	29,976	165,909
31	4-Aug	12	32	28	497	3,051	18,332	1,401	11,184	90,904	295,868	65,550	531,074	160,934	856,955
32	11-Aug	12	27	41	525	3,685	22,401	691	5,528	111,739	327,367	23,755	192,793	139,911	548,614
33	18-Aug	*	*	*	*	*	*	*	*	*	*	*	*	*	*
34	25-Aug	*	*	*	*	*	*	*	*	*	*	*	*	*	*
35	1-Sep	*	*	*	*	*	*	*	*	*	*	*	*	*	*
37	15-Sep	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total		90	490	3,090	44,410	313,168	1,881,899	17,751	136,206	398,338	1,211,567	208,445	1,692,545	940,792	4,966,627
Avg.wt.					14.37		6.01		7.67		3.04		8.12		
MAINLAND DISTRICT															
Total		90	490	3,090	44,410	313,168	1,881,899	17,751	136,206	398,338	1,211,567	208,445	1,692,545	940,792	4,966,627
Avg.wt.					14.37		6.01		7.67		3.04		8.12		

* Confidentiality requirements prevent the release of this information.

Appendix G.1. Narrative account of the Spiridon Lake sockeye salmon fishery in the Kodiak Management Area, 2001.

Adult sockeye salmon, resulting from juvenile stocking of Spiridon Lake, return each year to Telrod Cove in Spiridon Bay, and are vulnerable to harvest in westside Kodiak commercial fisheries. A significant return of approximately 201,000 Spiridon Lake sockeye salmon was expected in 2001. Sockeye salmon stocked into Spiridon Lake were from the late-run Upper Station (Olga Lakes) and Saltery Lake stocks; the timing of the return was to coincide with the pink salmon and late sockeye salmon fisheries in the Northwest Kodiak District. Peak harvest timing was expected to be mid-August, based on past timing. It was hoped the majority of the returning sockeye salmon would be harvested in the Central Section of the Northwest Kodiak District during the planned general pink salmon fisheries occurring along Kodiak's west side, or during fisheries targeting late-run Karluk sockeye salmon. If there was a harvestable surplus within the Spiridon Lake Terminal Harvest Area (THA) in Telrod Cove, fishing periods were to be 24 hours per day, coordinated when possible with openings in the Northwest Kodiak District.

On June 27 the Spiridon Lake THA in Telrod Cove was opened until further notice to allow harvest of enhancement project sockeye salmon. From ADF&G Fish Ticket reports, 22 seiners harvested 1 chinook, 59,733 sockeye, 345 coho, 70,833 pink, and 12,885 chum salmon from the Spiridon Terminal Harvest Area (Appendix G.2). Many seine and gillnet fishers operated along the westside of Kodiak in traditional fishing areas during fisheries directed at westside pink, chum, and late-run Karluk sockeye salmon, and caught some Spiridon bound sockeye salmon. The total contribution of Spiridon enhancement project sockeye salmon to the common property harvest can be estimated based on past analyses of commercial catch samples from westside Kodiak fisheries. The total 2001 harvest of Spiridon enhancement project sockeye salmon is estimated at 146,678, with approximately 41% (59,733) harvested within the terminal harvest area and 59% (86,945) harvested in the Southwest Afognak Section and Northwest Kodiak District (Appendix G.2). These are considered minimum estimates.

Appendix G.2. Estimated commercial harvest of Spiridon Lake enhancement project sockeye salmon, by area, in the Kodiak Management Area, 2001.

			Chinook		Sockeye		Coho		Pink		Chum		Total Salmon	
	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
TOTAL	22	170	1	6	59,733	311,261	345	3,459	70,883	256,429	12,885	124,949	143,847	696,104
AVG.WT.				6.00		5.21		10.03		3.62		9.70		

	Actual	Estimated	
	Telrod Cove[a]	Southwest Afognak Section and NW Kodiak District[b]	WESTSIDE TOTAL
Total	59,733	86,945	146,678
Percent	41%	59%	100%

[a] Statistical Area 254-50.

[b] Statistical Area 251-10 and 251-20, 253-11 through 253-35, and 254-10 through 254-40.

Appendix H.1. Summary of emergency orders issued in the Kodiak Management Area, 2001.

E.O.#	Issued	Effective	Action Taken
1	4:00 PM 6/6/01	NOON 6/9/01	Opening for 33 hours, NOON 6/9 to 9:00 PM 6/10 - Northwest Kodiak District except the Kizhuyak Bay Section - Alitak Bay District - Inner and Outer Ayakulik Open until further notice - Duck Bay, Izhut Bay, and Kitoi Bay Sections - Foul Bay and Waterfall Bay Terminal Harvest Areas - Malina Creek Terminal Harvest Area Closed water adjustments Reduced in: Kitoi Bay, Foul Bay, Little Waterfall Bay, Malina Creek, and Settler Cove
2	11:00 AM 6/10/01	9:00 PM 6/10/01	Extension for 72 hours, 9:00 PM 6/10 to 9:00 PM 6/15 - Inner and Outer Ayakulik Sections
		NOON 6/12/01	Opening for 9 hours, NOON 6/12 to 9:00 PM 6/12 - Inner Karluk Section Opening for 33 hours, NOON 6/12 to 9:00 PM 6/13 - Southwest Afognak Sections - Northwest Kodiak District, except for the Kizhuyak Section which remains closed - Outer Karluk Section Open until further notice: -Duck Bay, Izhut Bay, and Kitoi Bay Sections -Foul Bay, Waterfall Bay, and Malina Creek Terminal Harvest Areas Closed water adjustments Reduced in: Settlers Cove, Foul Bay, Little Waterfall Bay, and Kitoi Bay to the ADF&G markers at Big Kitoi and Little Kitoi Creeks
3	1:00 PM 6/12/01	NOON 6/14/01	Opening for 81 hours, NOON June 14 to 9:00 PM June 17 - Alitak Bay District Opening for 33 hours, NOON June 14 to 9:00 PM June 15 - Eastside Kodiak District - Outer Kukak and Big River Sections Extension until further notice - Inner and Outer Ayakulik - Inner and Outer Karluk

-Continued-

E.O.#	Issued	Effective	Action Taken
			- Northwest Kodiak District, except for the Kizhuyak Bay Section - Southwest Afognak Section - Duck Bay, Izhut Bay, and Kitoi Bay Sections - Waterfall Bay, Foul Bay, and Malina Creek Terminal Harvest Areas Closed water adjustments Reduced in: Kaflia Creek, Saltery Creek, Malina Creek, Settler Cove, Foul Bay, Little Waterfall Bay and Kitoi Bay to the ADF&G markers at Big Kitoi and Little Kitoi Creeks.
4	NOON 6/16/01	NOON 6/17/01	Opening for 105 hours, NOON 6/17 to 9:00 PM 6/21 - Dog Salmon Flats Extension for 96 hours, 9:00 PM 6/17 to 9:00 PM 6/21 - Alitak Bay District Closure at 9:00 PM 6/17 - Kitoi Bay and Izhut Bay Open until further notice - Southwest Afognak - Northwest Kodiak District except for the Kizhuyak Section - Inner and Outer Karluk Sections - Inner and Outer Ayakulik Sections - Waterfall Bay, Foul Bay, and Malina Creek Terminal Harvest Areas - Duck Bay Section Closed water adjustments Reduced in: Malina Creek, Foul Bay, Little Waterfall Bay, Settlers Cove, and Kitoi Bay to the ADF&G markers at Big Kitoi and Little Kitoi Creeks until 9:00 PM 6/17
5	1:00 PM 6/19/01	9:00 PM 6/20/01	Closure at 9:00 PM 6/20 - Duck Bay Section
		NOON 6/21/01	Opening for 33 hours, NOON 6/21 to 9:00 PM 6/22 - Eastside Kodiak District - Outer Kukak and Big River Sections Open until further notice beginning NOON 6/21 - Halibut Bay Section Open until further notice - Foul Bay, Malina Creek, and Waterfall Bay Terminal Harvest Areas

-Continued-

E.O.#	Issued	Effective	Action Taken
			- Southwest Afognak - Inner and Outer Ayakulik Sections - Inner and Outer Karluk Sections - Northwest Kodiak District except for the Kizhuyak Section Closed water adjustments Reduced in: Malina Creek, Settler Cove, Saltery Creek, Foul Bay, Little Waterfall Bay, and Kaflia Creek
6	4:00 PM 6/22/01	12:01 AM 6/24/01	Opening for 48 hours, 12:01 AM 6/24 to 9:00 PM 6/26 - Cape Igvak Section
		NOON 6/24/01	Opening for 81 hours, NOON 6/24 to 9:00 PM 6/27 - Alitak Bay District Open until further notice - Southwest Afognak section - Inner and Outer Karluk Sections - Inner and outer Ayakulik Sections - Northwest Kodiak District except for the Kizhuyak Section - Halibut Bay Section - Foul Bay, Malina Creek and Little Waterfall Bay Terminal Harvest Areas Closed water adjustments Reduced in: Kaflia Creek, Saltery Creek, Malina Creek, Settler Cove, Foul Bay, and Waterfall Bay
7	12:30 PM 6/25/01	12:01 AM 6/26/01	Extension for 24 hours, 12:01 AM 6/26 to 12:01 AM 6/27 - Cape Igvak Section
		9:00 PM 6/26/01	Closure at 9:00 PM 6/26 - Inner Ayakulik Section
		9:00 PM 6/27/01	Extension for 96 hours, 9:00 PM 6/27 to 9:00 PM 7/1 - Alitak Bay District
		NOON 6/27/01	Open until further notice beginning NOON 6/27 - Spiridon Lake Terminal Harvest Area Open until further notice - Outer Ayakulik Sections - Southwest Afognak Section - Inner and Outer Karluk Sections - Northwest Kodiak District except for the Kizhuyak Section - Halibut Bay Section - Foul Bay, Malina Creek and Waterfall Bay Terminal Harvest Areas

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E.O.#	Issued	Effective	Action Taken
			Closed water adjustments Reduced in: Malina Creek, Settler Cove, Foul Bay, and Little Waterfall Bay
8	NOON 6/30/01	NOON 7/1/01	Opening for 81 hours, NOON 7/1 to 9:00 PM 7/4 - Duck Bay and Izhut Bay Sections Extension until further notice - Southwest Afognak - Inner and Outer Karluk Sections - Outer Ayakulik Section - Northwest Kodiak District except for Kizhuyak Section - Spiridon Lake, Foul Bay, Malina Creek and Waterfall Bay Terminal Harvest Areas - Halibut Bay Section Closed water adjustments Reduced in: Malina Creek, Settler Cove, Foul Bay and Little Waterfall Bay
9	4:30 PM 7/2/01	NOON 7/3/01	Opening for 6 hours from NOON 7/3 to 6:00 PM 7/3 - Inner Kitoi Bay (west of the jaws) Opening from NOON 7/3 to 9:00 PM 7/4 - Kitoi Bay Section
		9:00 PM 7/3/01	Closure at 9:00 PM 7/3 - Outer Ayakulik Section
		NOON 7/4/01	Opening from NOON 7/4 to 9:00 PM 7/11 - Alitak Bay District Open until further notice - Southwest Afognak - Inner and Outer Karluk Sections - Halibut Bay Section - Northwest Kodiak District except for the Kizhuyak Section - Spiridon Lake, Foul Bay, Malina Creek, and Waterfall Bay Terminal Harvest Areas Closed water adjustments Reduced in: Malina Creek, Settler Cove, Little Waterfall Bay, Inner Kitoi Bay until 6:00 PM 7/3, and Kitoi Bay to the jaws until 9:00 PM 7/4
10	3:00 PM 7/3/01	NOON 7/6/01	Opening for 81 hours from NOON 7/6 to 9:00 PM 7/9 - Northwest Afognak, Shuyak Island, and Northeast

-Continued-

E.O.#	Issued	Effective	Action Taken
			Afognak Sections - Eastside Kodiak District - Northeast Kodiak District Opening for 57 hours, NOON 7/6 to 9:00 PM 7/8 - Mainland District except for the Cape Igvak and Wide Bay Sections
		9:00 PM 7/4/01	Extension only until 9:00 PM 7/9 - Duck Bay and Izhut Bay Districts - Inner and Outer Karluk Sections - Northwest Kodiak District - Halibut Bay Section - Southwest Afognak Section - Foul Bay, Malina Creek and Waterfall Bay Terminal Harvest Areas Open until further notice - Spiridon Lake Terminal Harvest Area Closed water adjustments Reduced in: Malina Creek, Settler Cove, Foul Bay and Little Waterfall Bay until 9:00 PM 7/9; and Kitoi Bay to the ADF&G markers at Big Kitoi and Little Kitoi Creeks until 6:00 PM 7/3 and Kitoi Bay to the jaws until 9:00 PM 7/4
11	NOON 7/6/01	NOON 7/7/01	Opening for 57 hours, 12:00 PM 7/7 to 9:00 PM 7/9 - Kitoi Bay Section (seaward of the ADF&G regulatory markers at the jaws)
		12:01 AM 7/8/01	Opening for 48 hours at 12:01 AM 7/8 to12:01 AM 7/10 - Cape Igvak Section Open until 9:00 PM 7/9 - Duck Bay and Izhut Bay Sections - Inner and Outer Karluk Sections - Halibut Bay Section - Northeast Kodiak District - Eastside Kodiak District - Northwest Kodiak District except for the Kizhuyak Section - Southwest Afognak, Northwest Afognak, Shuyak Island, and Northeast Afognak Sections - Foul Bay, Malina Creek and Waterfall Bay Terminal Harvest Areas Open until further notice: - Spiridon Lake Terminal Harvest Area

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E.O.#	Issued	Effective	Action Taken
			Closed water adjustments Reduced until 9:00 PM 7/9 in: Malina Creek, Settler Cove, Foul Bay, Little Waterfall Bay and in the Kitoi Bay Section to the jaws.
12	NOON 7/8/01	9:00 PM 7/9/01	Extension for 72 hours, 9:00 PM 7/9 to 9:00 PM 7/12 - Duck Bay and Izhut Bay Sections - Kitoi Bay Section east of the jaws
		12:01 AM 7/10/01	Extension for 24 hours from 12:01 AM 7/10 to12:01 AM 7/11 - Cape Igvak Section
			Open until further notice: - Spiridon Lake Terminal Harvest Area
			Closed water adjustments Reduced in: Malina Creek, Settler Cove, Foul Bay and Little Waterfall Bay until 9:00 PM 7/9 Kitoi Bay Section to the ADF&G markers at the jaws until 9:00 PM 7/12
13	NOON 7/10/01	12:01 AM 7/11/01	Extension for 48 hours from 12:01 AM 7/11 to 12:01 AM 7/13 - Cape Igvak Section
		9:00 PM 7/12/01	Extension from 9:00 PM 7/12 to 9:00 PM 7/17 - Duck Bay and Izhut Bay Sections - Kitoi Bay Section east of the jaws
		NOON 7/14/01	Opening for 81 hours, NOON 7/14 to 9:00 PM 7/17 - Alitak Bay District - Southwest Afognak, Northwest Afognak, Shuyak Island, and Northeast Afognak Sections - Northwest Kodiak District except for the Kizhuyak Section which is closed - Eastside Kodiak District - Northeast Kodiak District
		NOON 7/14/01	Opening for 57 hours from NOON 7/14 to 9:00 PM 7/16 - Big River, Hallo Bay, Inner and Outer Kukak Bay, Dakavak Bay, Katmai, and Alinchak Sections
			Open until further notice - Spiridon Lake Terminal Harvest Area
			Closed water adjustments - Reduced in: Settler Cove, Kitoi Bay Section east of the ADF&G regulatory markers located at the jaws, and Saltery Creek to the stream terminus until 9:00 PM 7/17

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E.O.#	Issued	Effective	Action Taken
14	10:00 AM 7/16/01	1:00 PM 7/16/01	Closure at 1:00 PM 7/16 - Seaward Zones of the Northwest Afognak, Shuyak Island, Big River, Hallo Bay, Outer Kukak Bay, and Dakavak Bay Sections
		9:00 PM 7/17/01	Extension for 48 hours to 9:00 PM 7/19 - Alitak Bay District - Duck Bay and Izhut Bay Sections - Inner Ugak Bay Section between 152°43' and - 152°49' W long. Open until further notice - Spiridon Lake Terminal Harvest Area Closed water adjustments Reduced in: Saltery Creek to the stream terminus until 9:00 PM 7/19
15	10:00 AM 7/19/01	9:00 PM 7/19/01	Extension until 9:00 PM 7/25 - Duck Bay and Izhut Bay Sections - Inner Ugak Bay Section between 152°43' and - 152°49' W long.
		NOON 7/22/01	Opening for 81 hours, NOON 7/22 to 9:00 PM 7/25 - Afognak District, including the Kitoi Bay Section - Northwest Kodiak District except for the Zacher Bay Section which remains closed - Alitak Bay District - Eastside Kodiak District - Northeast Kodiak District Opening for 57 hours, NOON 7/22 to 9:00 PM 7/24 - Alinchak, Katmai and Inner Kukak Bay Sections - Shoreward Zones of the Dakavak Bay, Outer Kukak Bay Hallo Bay, and Big River Sections Open until further notice - Spiridon Lake Terminal Harvest Area Closed water adjustments Increased in: Perenosa Bay Section at Pauls Bay which includes all water east of a line at 152° 21.65' W long. from NOON 7/22 to 9:00 PM 7/25 Reduced in: Saltery Cove, in the Inner Ugak Bay Section, and Kitoi Bay to the ADF&G markers at the jaws
16	10:00 AM 7/25/01	NOON 7/25/01	Extension through 9:00 PM 7/29 - Inner Ugak Bay Section between 152°43' and

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E.O.#	Issued	Effective	Action Taken
			152°49' W long. - Kitoi Bay Section east of the ADF&G markers at the jaws - Duck Bay and Izhut Bay Sections Open until further notice - Spiridon Lake Terminal Harvest Area Closed water adjustments Increased in: Perenosa Bay Section at Pauls Bay which includes all water east of a line at 152° 21.65' W long. from NOON 7/22 to 9:00 PM 7/25 Reduced in: Saltery Cove, in the Inner Ugak Bay Section, and Kitoi Bay to the ADF&G markers at the jaws until 9:00 PM 7/29
17	11:00 AM 7/28/01	NOON 725/01	Extension until 9:00 PM 8/2 - Duck Bay, Izhut Bay, and Kitoi Bay Sections - Inner Ugak Bay Section between 152°43' and 152°49' W long.
		NOON 7/30/01	Opening for 81 hours, NOON 7/30 to 9:00 PM 8/2 - Afognak District - Northwest Kodiak District except for the Zacher Bay Section which remains closed - Halibut Bay and Outer Ayakulik Sections - Alitak Bay District - Eastside Kodiak District - Northeast Kodiak District - Mainland District Open until further notice - Spiridon Lake Terminal Harvest Area Closed water adjustments Reduced in: In the Inner Ugak Bay Section at Saltery Creek to the stream terminus and Kitoi Bay Section to the ADF&G markers at Big Kitoi and Little Kitoi Creeks until 9:00 PM 8/2
18	4:30 PM 8/1/01	9:00 PM 8/2/01	Extension for 24 hours until 9:00 PM 8/3 - Central and North Cape Sections - Alinchak, Cape Igvak, and Wide Bay Sections Extension for 48 hours until 9:00 PM 8/4 - Duck Bay, Izhut Bay, and Kitoi Bay Sections - Humpy-Deadman Section Open until further notice - Spiridon Lake Terminal Harvest Area

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E.O.#	Issued	Effective	Action Taken
			Closed water adjustments Reduced in: Kitoi Bay to the ADF&G markers at Big Kitoi and Little Kitoi bays (west of the jaws)
19	4:00 PM 8/3/01	9:00 PM 8/4/01	Extension through 9:00 PM 8/9 - Duck Bay, Izhut Bay and Kitoi Bay Sections
		NOON 8/6/01	Opening for 81 hours NOON 8/6 to 9:00 PM 8/9 - Northwest and Southwest Afognak Sections - Northwest Kodiak District except for inner Uyak and Spiridon Bay Sections which remain closed - Halibut Bay and Outer Ayakulik Sections - Humpy-Deadman Section
		NOON 8/7/01	Opening for 57 hours from NOON 8/7 to 9:00 PM 8/9 - Southeast Afognak Section except for that portion in Afognak Bay west of a line at 152° 40.00 W long. which remains closed - Perenosa Bay, Shuyak Island, and Northeast Afognak Sections - Two-Headed and Outer Ugak Bay Sections - Sitkalidak Section except for that portion of Kiliuda Bay west of a line form Left Cape to Pillar Point which will remains closed - Alinchak, Cape Igvak, and Wide Bay Sections Open until further notice - Spiridon Lake Terminal Harvest Area Closed water adjustments Reduced in: Kitoi Bay to the ADF&G markers at Big Kitoi and Little Kitoi bays (west of the jaws)
20	12:30 PM 8/8/01	9:00 PM 8/9/01	Extension for 48 hours through 9:00 PM 8/11 - Duck Bay, Izhut Bay, and Kitoi Bay Sections - Southeast Afognak Section except for that portion in Afognak Bay west of a line at 152° 40.00' W long. which remains closed - Humpy-Deadman Section
		NOON 8/10/01	Opening for 33 hours from NOON 8/10 to 9:00 PM 8/11 - Cape Alitak and Moser-Olga Bay Sections Open until further notice - Spiridon Lake Terminal Harvest Area

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E.O.#	Issued	Effective	Action Taken
			Closed water adjustments Reduced in: Humpy Cove to the stream terminus of Humpy Creek (stream # 257-701) effective at NOON 8/9/01 and Kitoi Bay Section to the ADF&G regulatory markers located at Big Kitoi and Little Kitoi bays (west of the jaws)
21	4:30 PM 8/10/01	6:00 PM 8/11/01	Extension through 6:00 PM 8/16 - Duck Bay and Izhut Bay Sections - Southeast Afognak Section except for that portion in Afognak Bay west of a line at 152° 40.00' W long. which remains closed - Humpy-Deadman Section Closure at 9:00 PM 8/11 - Kitoi Bay Section Opening for 78 hours from NOON 8/13 to 6:00 PM 8/16 - Northwest Afognak and Southwest Afognak Sections - Northwest Kodiak District, except for the Spiridon Bay Section which remains closed - Halibut Bay and Outer Ayakulik Sections - Two-Headed and Outer Ugak Bay Sections - Sitkalidak Section, except for that portion in Kiliuda Bay west of a line from Left Cape to Pillar Point which remains closed - Outer Kukak Bay Section Open until further notice - Spiridon Lake Terminal Harvest Area Closed water adjustments Reduced in: Humpy Cove to the stream terminus of Humpy Creek (stream # 257-701) effective at NOON 8/9
22	3:30 PM 8/15/01	6:00 PM 8/16/01	Extension through 6:00 PM 8/20 - Duck Bay and Izhut Bay Sections - Southeast Afognak Section except for that portion in Afognak Bay west of a line at 152° 40.00' W long. which remains closed - Humpy-Deadman Section Open until further notice - Spiridon Lake Terminal Harvest Area Closed water adjustments Reduced in: Humpy Cove to the stream terminus of Humpy Creek (stream # 257-701)

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E.O.#	Issued	Effective	Action Taken
23	11:30 AM 8/18/01	6:00 PM 8/20/01	Extension through 6:00 PM 8/23 - Duck Bay and Izhut Bay Sections - Southeast Afognak Section except for that portion in Afognak Bay west of a line at 152° 40.00' W long. which remains closed - Humpy-Deadman Section
		NOON 8/20/01	Opening for 78 hours from NOON 8/20 to 6:00 PM 8/23 - Northwest Afognak and Southwest Afognak Sections - Northwest Kodiak District, except for the Spiridon Bay Section which remains closed - Outer Karluk Section north of the latitude of Cape Uyak (57° 38.20' N lat.) - Halibut Bay and Outer Ayakulik Sections - Eastside Kodiak District, except for the Inner Ugak Bay Section and that portion of the Sitkalidak Section in Kiliuda Bay west of a line from Left Cape to Pillar Point which remains closed - Outer Kukak Bay Section Open until further notice - Spiridon Lake Terminal Harvest Area Closed water adjustments Reduced in: Humpy Cove to the stream terminus of Humpy Creek (stream # 257-701)
24	11:00 AM 8/21/01	NOON 8/22/01	Opening for 30 hours, from NOON 8/22 to 6:00 PM 8/23 - Kitoi Bay Section outside (east) of the ADF&G markers at the jaws - Northeast Afognak, Perenosa Bay and Shuyak Island Sections - Inner Ugak Bay Section - Sitkalidak Section in Kiliuda Bay west of a line from Left Cape to Pillar Point Open until further notice - Spiridon Lake Terminal Harvest Area Closed Water Adjustments Reduced in: Kitoi Bay Section to ADF&G markers at the jaws and in Humpy Cove to the stream terminus of Humpy Creek (stream # 257-701)
25	6:30 AM 8/22/01	6:00 PM 8/23/01	Extension for 24 hours through 6:00 PM 8/24 - Kitoi Bay Section outside (east) of the ADF&G markers at the jaws

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E.O.#	Issued	Effective	Action Taken
			Extension for 96 hours through 6:00 PM 8/27 - Afognak District, except that portion of the Kitoi Bay Section outside (east) of the ADF&G markers at the jaws that is currently open through 6:00 PM 8/24 - Northwest Kodiak District, except for the Spiridon Bay Section which remains closed - Outer Karluk Section north of Cape Uyak (57° 38.20' N lat.) - Halibut Bay and Outer Ayakulik Sections - Humpy-Deadman Section - Eastside Kodiak District - Outer Kukak Bay Section Open until further notice - Spiridon Lake Terminal Harvest Area Closed Water Adjustments Reduced in: Kitoi Bay Section to ADF&G markers at the jaws and in the Perenosa Bay Section at Pauls Bay (stream # 251-831) to only those waters east of 152° 20.80' W long. effective NOON 8/23 Increased in: Humpy Cove effective at NOON 8/23 to the normal closed water area as listed in 5 AAC 18.350 (a)(1)(A): all waters east of a line from 56° 53.55' N lat., 153° 58.95' W long., to 56° 50.95' N lat., 154° 03.80' W long.
26	NOON 8/24/01	NOON 8/26/01	Open until further notice at NOON 8/26/01 - Northeast Kodiak District - Mainland District Open until further notice - Spiridon Lake Terminal Harvest Area - Afognak District except the Kitoi Bay Section outside of the ADF&G markers at the jaws - Northwest Kodiak District except for the Spiridon Bay Section - Outer Karluk Section north of Cape Uyak (57° 38.20' N lat.) - Halibut Bay Section - Outer Ayakulik Section - Humpy-Deadman Section - Eastside Kodiak District, except for the Outer Ugak Bay and Sitkalidak Sections which will close as scheduled at 6:00 PM 8/27 Closed Water Adjustments Reduced in: Kitoi Bay Section to ADF&G markers at the jaws until 6:00 PM 8/27 and in the Perenosa Bay Section at Pauls Bay

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E.O.#	Issued	Effective	Action Taken
			(stream # 251-831) to only those waters east of 152° 20.80' W long.
27	NOON 8/27/01	6:00PM 8/27/01	Extension for 48 hours through 6:00 PM 8/29 - Kitoi Bay Section outside the ADF&G markers at the jaws Open until further notice - Spiridon Lake Terminal Harvest Area - Afognak District except the Kitoi Bay Section ouside of the ADF&G markers at the jaws - Northwest Kodiak District except for the Spiridon Bay Section - Outer Karluk Section north of Cape Uyak (57° 38.20' N lat.) - Halibut Bay Section - Outer Ayakulik Section - Humpy-Deadman Section - Eastside Kodiak District, except for the Outer Ugak Bay and Sitkalidak Sections which will close as scheduled at 6:00 PM 8/27 Reduced in: Kitoi Bay Section to ADF&G markers at the jaws until 6:00 PM 8/29 and in the Perenosa Bay Section at Pauls Bay (stream # 251-831) to only those waters east of 152° 20.80' W long.
28	NOON 8/29/01	6:00PM 8/29/01	Extension through 6:00 PM 8/31 - Kitoi Bay Section outside the ADF&G markers at the jaws Open until further notice - Spiridon Lake Terminal Harvest Area - Afognak District except the Kitoi Bay Section outside of the ADF&G markers at the jaws - Northwest Kodiak District except for the Spiridon Bay Section - Outer Karluk Section north of Cape Uyak (57° 38.20' N lat.) - Halibut Bay Section - Outer Ayakulik Section - Humpy-Deadman Section - Eastside Kodiak District, except for the Outer Ugak Bay and Sitkalidak Sections which will close as scheduled at 6:00 PM 8/27 Reduced in: Kitoi Bay Section to ADF&G markers at the jaws until 6:00 PM 8/31 and in the Perenosa Bay Section at Pauls Bay (stream # 251-831) to only those waters east of 152° 20.80' W long.

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E.O.#	Issued	Effective	Action Taken
29	NOON 8/31/01	6:00PM 8/31/01	Extension through 6:00 PM 9/3 - Kitoi Bay Section outside the ADF&G markers at the jaws Open until further notice - Spiridon Lake Terminal Harvest Area - Afognak District except the Kitoi Bay Section inside of the ADF&G markers at the jaws - Northwest Kodiak District except for the Spiridon Bay Section - Outer Karluk Section north of Cape Uyak (57° 38.20' N lat.) - Halibut Bay Section - Outer Ayakulik Section - Humpy-Deadman Section - Eastside Kodiak District, except for the Outer Ugak Bay and Sitkalidak Sections which will close as scheduled at 6:00 PM 8/27 Reduced in: Kitoi Bay Section to ADF&G markers at the jaws until 6:00 PM 8/29 and in the Perenosa Bay Section at Pauls Bay (stream # 251-831) to only those waters east of 152° 20.80' W long.
30	NOON 9/3/01	6:00PM 9/3/01	Open until further notice - Kitoi Bay Section outside the ADF&G markers at the jaws
		NOON 9/4/01	Opening for 6 hours from NOON 9/4 to 6:00 PM 9/4 - Kitoi Bay Section inside (west) of the jaws Open until further notice - Spiridon Lake Terminal Harvest Area - Afognak District except the Kitoi Bay Section inside of the ADF&G markers at the jaws - Northwest Kodiak District except for the Spiridon Bay Section - Outer Karluk Section north of Cape Uyak (57° 38.20' N lat.) - Halibut Bay Section - Outer Ayakulik Section - Humpy-Deadman Section - Eastside Kodiak District, except for the Outer Ugak Bay and Sitkalidak Sections which will close as scheduled at 6:00 PM 8/27 Reduced in: Kitoi Bay Section to ADF&G markers at the jaws until 6:00 PM 8/29 and in the Perenosa Bay Section at Pauls Bay (stream # 251-831) to only those waters east of 152° 20.80' W long.

Appendix H.2. Commercial salmon harvest, by management unit and statistical week, all gear combined, in the Kodiak Management Area, 2001.

SECTION (STAT AREA)	STAT WEEK/ WEEK END		Chinook Number	Chinook lbs.	Chinook avg.	Sockeye Number	Sockeye lbs.	Sockeye avg.	Coho Number	Coho lbs.	Coho avg.	Pink Number	Pink lbs.	Pink avg.	Chum Number	Chum lbs.	Chum avg.
S.W.AFOGNAK	16-Jun	24	3,663	25,705	7.0	10,858	54,006	5.0	0	0	0.0	3	14	4.7	2,189	21,139	9.7
& RASPBERRY STRAITS	23-Jun	25	140	1,103	7.9	1,657	8,149	4.9	0	0	0.0	28	95	3.4	121	953	7.9
(COMBINE)	30-Jun	26	339	2,249	6.6	5,982	30,786	5.1	11	72	6.5	4,039	12,608	3.1	1,115	9,130	8.2
(251-10,11,20)	7-Jul	27	108	1,003	9.3	15,079	79,572	5.3	35	228	6.5	35,538	110,111	3.1	3,529	30,058	8.5
	14-Jul	28	24	201	8.4	6,024	32,166	5.3	290	1,537	5.3	23,546	72,947	3.1	1,680	13,460	8.0
	21-Jul	29	328	3,176	9.7	11,110	63,116	5.7	1,221	8,615	7.1	55,236	173,752	3.1	6,402	53,548	8.4
	28-Jul	30	128	1,624	12.7	13,170	68,967	5.2	5,705	37,853	6.6	105,885	349,567	3.3	7,320	59,331	8.1
	4-Aug	31	33	530	16.1	8,730	48,168	5.5	4,660	32,489	7.0	59,800	214,626	3.6	2,236	18,127	8.1
	11-Aug	32	3	35	11.7	828	4,979	6.0	603	4,484	7.4	10,935	40,074	3.7	371	2,829	7.6
	18-Aug	33	13	174	13.4	1,204	6,376	5.3	3,106	21,752	7.0	36,872	130,604	3.5	681	5,393	7.9
	25-Aug	34	0	0	0.0	26	132	5.1	396	2,574	6.5	2,436	8,768	3.6	35	247	7.1
	1-Sep	35	0	0	0.0	69	328	4.8	265	2,394	9.0	1,168	3,504	3.0	15	112	7.5
	15-Sep	37	0	0	0.0	495	2,422	4.9	505	5,140	10.2	170	556	3.3	0	0	0.0
	22-Sep	38	0	0	0.0	0	0	0.0	522	4,494	8.6	0	0	0.0	0	0	0.0
TOTAL			4,779	35,800	7.5	75,232	399,167	5.3	17,319	121,632	7.0	335,656	1,117,226	3.3	25,694	214,327	8.3
N.W.AFOGNAK	9-Jun	23	0	0	0.0	12,726	63,348	5.0	0	0	0.0	0	0	0.0	0	0	0.0
(251-30,40,41,50)	16-Jun	24	104	627	6.0	11,280	56,141	5.0	0	0	0.0	0	0	0.0	29	200	6.9
	23-Jun	25	0	0	0.0	2,684	13,185	4.9	0	0	0.0	0	0	0.0	0	0	0.0
	30-Jun	26	0	0	0.0	2,404	12,707	5.3	0	0	0.0	0	0	0.0	0	0	0.0
	7-Jul	27	0	0	0.0	1,449	7,311	5.0	0	0	0.0	2,351	7,027	3.0	50	402	8.0
	14-Jul	28	0	0	0.0	223	1,116	5.0	0	0	0.0	1,949	5,850	3.0	15	121	8.1
	28-Jul	30	0	0	0.0	105	689	6.6	56	423	7.6	3,188	12,097	3.8	83	621	7.5
	25-Aug	34	0	0	0.0	0	0	0.0	947	9,000	9.5	140	420	3.0	0	0	0.0
	8-Sep	36	0	0	0.0	0	0	0.0	913	6,394	7.0	30	113	3.8	0	0	0.0
	15-Sep	37	0	0	0.0	1,303	9,090	7.0	3,287	23,011	7.0	21	80	3.8	0	0	0.0
	22-Sep	38	0	0	0.0	0	0	0.0	773	5,409	7.0	51	188	3.7	0	0	0.0
TOTAL			104	627	6.0	32,174	163,587	5.1	5,976	44,237	7.4	7,730	25,775	3.3	177	1,344	7.6
SHUYAK	7-Jul	27	1	24	24.0	487	2,436	5.0	50	299	6.0	666	1,998	3.0	100	895	9.0
(251-60,70,81)	25-Aug	34	1	20	20.0	0	0	0.0	3,361	27,463	8.2	327	981	3.0	0	0	0.0
	1-Sep	35	0	0	0.0	0	0	0.0	5,654	43,501	7.7	111	400	3.6	0	0	0.0
	22-Sep	38	0	0	0.0	0	0	0.0	519	4,469	8.6	0	0	0.0	0	0	0.0
TOTAL			2	44	22.0	487	2,436	5.0	9,584	75,732	7.9	1,104	3,379	3.1	100	895	9.0
PERENOSA	9-Jun	23	0	0	0.0	3,015	14,455	4.8	0	0	0.0	0	0	0.0	0	0	0.0
(251-82,83,84)	16-Jun	24	0	0	0.0	7,193	34,029	4.7	0	0	0.0	7	15	2.1	0	0	0.0
	23-Jun	25	2	18	9.0	3,427	14,498	4.2	0	0	0.0	0	0	0.0	0	0	0.0
	30-Jun	26	0	0	0.0	1,821	7,994	4.4	0	0	0.0	0	0	0.0	0	0	0.0
	7-Jul	27	1	8	8.0	567	2,838	5.0	0	0	0.0	26	86	3.3	3	23	7.7
	11-Aug	32	0	0	0.0	26	143	5.5	492	3,418	6.9	1,596	5,314	3.3	13	92	7.1
	25-Aug	34	0	0	0.0	0	0	0.0	5,779	48,999	8.5	1,050	3,734	3.6	0	0	0.0

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SECTION	STAT WEEK/		Chinook			Sockeye			Coho			Pink			Chum		
(STAT AREA)	WEEK END		Number	lbs.	avg.	Number	lbs.	avg.	Number	lbs.	avg.	Number	lbs.	avg.	Number	lbs.	avg.
PERENOSA (Cont.)	1-Sep	35	0	0	0.0	0	0	0.0	12,725	109,932	8.6	2,619	8,183	3.1	9	82	9.1
	8-Sep	36	0	0	0.0	0	0	0.0	2,522	20,869	8.3	183	675	3.7	0	0	0.0
TOTAL			3	26	8.7	16,049	73,957	4.6	21,518	183,218	8.5	5,481	18,007	3.3	25	197	7.9
N.E.AFOGNAK	7-Jul	27	50	314	6.3	201	1,167	5.8	58	415	7.2	435	1,304	3.0	293	2,374	8.1
(251-90,252-10,20)	28-Jul	30	1	22	22.0	191	955	5.0	270	1,618	6.0	1,776	7,103	4.0	92	829	9.0
	11-Aug	32	0	0	0.0	422	2,186	5.2	1,059	7,342	6.9	45,034	151,557	3.4	144	1,139	7.9
	8-Sep	36	0	0	0.0	281	1,516	5.4	185	1,881	10.2	160	484	3.0	2	16	8.0
TOTAL			51	336	6.6	1,095	5,824	5.3	1,572	11,256	7.2	47,405	160,448	3.4	531	4,358	8.2
IZHUT	9-Jun	23	3	45	15.0	286	1,508	5.3	0	0	0.0	2	5	2.5	1,944	16,458	8.5
(252-30)	16-Jun	24	67	601	9.0	429	1,957	4.6	0	0	0.0	19	71	3.7	9,884	74,769	7.6
	23-Jun	25	21	204	9.7	297	1,530	5.2	1	6	6.0	59	182	3.1	1,897	15,226	8.0
	7-Jul	27	56	234	4.2	1,684	8,612	5.1	61	366	6.0	1,524	5,105	3.3	27,163	211,782	7.8
	14-Jul	28	9	118	13.1	1,888	9,274	4.9	856	5,099	6.0	3,836	14,395	3.8	7,253	49,234	6.8
	21-Jul	29	7	38	5.4	208	958	4.6	122	708	5.8	1,210	3,820	3.2	148	1,059	7.2
	28-Jul	30	0	0	0.0	68	405	6.0	54	379	7.0	3,462	12,462	3.6	116	927	8.0
	4-Aug	31	3	63	21.0	1,141	6,010	5.3	473	3,290	7.0	459,971	1,596,962	3.5	957	7,266	7.6
	11-Aug	32	18	189	10.5	1,804	10,034	5.6	2,999	22,631	7.5	1,018,664	3,398,210	3.3	987	7,702	7.8
	18-Aug	33	9	138	15.3	1,949	10,702	5.5	14,300	109,098	7.6	2,207,875	7,659,284	3.5	873	6,550	7.5
	25-Aug	34	11	142	12.9	554	2,919	5.3	17,193	137,647	8.0	1,406,614	4,768,656	3.4	204	1,550	7.6
	1-Sep	35	0	0	0.0	248	1,372	5.5	20,598	154,386	7.5	715,779	2,500,242	3.5	97	806	8.3
	8-Sep	36	0	0	0.0	32	175	5.5	7,627	53,385	7.0	61,970	228,438	3.7	13	103	7.9
	15-Sep	37	0	0	0.0	18	96	5.3	4,865	34,150	7.0	12,258	45,358	3.7	6	50	8.3
	22-Sep	38	0	0	0.0	0	0	0.0	6,020	42,143	7.0	281	1,040	3.7	0	0	0.0
TOTAL			204	1,772	8.7	10,606	55,552	5.2	75,169	563,288	7.5	5,893,524	20,234,230	3.4	51,542	393,482	7.6
KITOI BAY	9-Jun	23	63	560	8.9	615	3,622	5.9	0	0	0.0	0	0	0.0	2,589	21,680	8.4
(252-32)	16-Jun	24	181	2,309	12.8	3,056	15,671	5.1	0	0	0.0	0	0	0.0	33,928	275,077	8.1
	23-Jun	25	0	0	0.0	108	542	5.0	0	0	0.0	0	0	0.0	1,368	10,874	7.9
	7-Jul	27	8	102	12.8	623	3,192	5.1	8	44	5.5	665	2,200	3.3	76,060	550,321	7.2
	14-Jul	28	23	162	7.0	736	3,639	4.9	190	1,261	6.6	1,675	5,357	3.2	9,979	71,694	7.2
	4-Aug	31	2	88	44.0	624	3,244	5.2	196	1,395	7.1	260,421	878,545	3.4	450	3,168	7.0
	11-Aug	32	2	27	13.5	283	1,571	5.6	563	3,876	6.9	264,095	905,227	3.4	168	1,228	7.3
	18-Aug	33	0	0	0.0	15	81	5.4	190	1,384	7.3	36,607	122,787	3.4	11	90	8.2
	25-Aug	34	0	0	0.0	61	400	6.6	868	6,425	7.4	135,982	412,724	3.0	0	0	0.0
	1-Sep	35	0	0	0.0	131	733	5.6	3,425	29,503	8.6	159,596	523,973	3.3	13	84	6.5
	8-Sep	36	0	0	0.0	539	4,752	8.8	2,825	23,566	8.3	126,622	427,751	3.4	0	0	0.0
TOTAL			279	3,248	11.6	6,791	37,447	5.5	8,265	67,454	8.2	985,663	3,278,564	3.3	124,566	934,216	7.5
DUCK BAY	9-Jun	23	0	0	0.0	264	1,402	5.3	0	0	0.0	0	0	0.0	173	1,725	10.0
(252-31)	16-Jun	24	100	1,148	11.5	4,013	20,425	5.1	0	0	0.0	116	376	3.2	11,810	85,334	7.2
	23-Jun	25	79	776	9.8	3,296	17,045	5.2	1	4	4.0	432	1,501	3.5	11,193	92,933	8.3

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SECTION (STAT AREA)	STAT WEEK/ WEEK END		Chinook Number	Chinook lbs.	Chinook avg.	Sockeye Number	Sockeye lbs.	Sockeye avg.	Coho Number	Coho lbs.	Coho avg.	Pink Number	Pink lbs.	Pink avg.	Chum Number	Chum lbs.	Chum avg.
DUCK BAY (Cont.)	7-Jul	27	14	62	4.4	1,461	7,581	5.2	125	746	6.0	1,093	4,115	3.8	3,613	30,843	8.5
	14-Jul	28	15	74	4.9	4,994	26,316	5.3	2,135	14,716	6.9	10,369	36,158	3.5	2,776	20,772	7.5
	21-Jul	29	30	210	7.0	1,770	10,534	6.0	1,402	11,326	8.1	15,522	51,415	3.3	994	8,528	8.6
	28-Jul	30	22	610	27.7	1,770	6,070	3.4	535	3,786	7.1	59,099	197,046	3.3	1,563	12,448	8.0
	4-Aug	31	28	431	15.4	3,841	19,798	5.2	3,564	25,428	7.1	989,685	3,245,609	3.3	3,246	24,752	7.6
	11-Aug	32	38	639	16.8	6,084	32,068	5.3	11,615	85,758	7.4	2,415,911	8,207,729	3.4	3,438	25,953	7.5
	18-Aug	33	12	260	21.7	1,662	8,973	5.4	10,257	77,470	7.6	991,936	3,364,158	3.4	774	6,207	8.0
	25-Aug	34	5	96	19.2	1,798	9,685	5.4	26,645	208,118	7.8	1,525,869	5,256,572	3.4	497	3,581	7.2
	1-Sep	35	4	48	12.0	166	895	5.4	11,452	85,461	7.5	235,533	816,355	3.5	81	656	8.1
	8-Sep	36	0	0	0.0	0	0	0.0	567	3,404	6.0	2,009	7,432	3.7	0	0	0.0
TOTAL			347	4,354	12.5	31,119	160,792	5.2	68,298	516,217	7.6	6,247,574	21,188,466	3.4	40,158	313,732	7.8
S.E.AFOGNAK	11-Aug	32	4	68	17.0	649	3,677	5.7	553	4,020	7.3	91,492	330,658	3.6	314	2,432	7.7
(252-33,34,35)	18-Aug	33	0	0	0.0	118	604	5.1	559	4,360	7.8	48,338	170,962	3.5	45	349	7.8
	25-Aug	34	0	0	0.0	7	45	6.4	120	996	8.3	5,536	18,823	3.4	0	0	0.0
TOTAL			4	68	17.0	774	4,326	5.6	1,232	9,376	7.6	145,366	520,443	3.6	359	2,781	7.7
CENTRAL, TERROR BAY,	9-Jun	23	185	1,622	8.8	7,149	37,450	5.2	0	0	0.0	1	4	4.0	232	2,114	9.1
INNER UGANIK, SPIRIDO	16-Jun	24	1,292	13,607	10.5	104,684	550,946	5.3	12	71	5.9	86	322	3.7	3,715	28,621	7.7
ZACHAR, & UYAK COMB	23-Jun	25	560	5,964	10.7	57,865	314,191	5.4	8	57	7.1	1,187	4,536	3.8	5,016	40,375	8.0
(253-11,12,13,14,31	30-Jun	26	218	2,341	10.7	68,341	370,708	5.4	20	137	6.9	10,815	40,003	3.7	10,762	88,998	8.3
32,33,35,254-10,20,	7-Jul	27	143	1,870	13.1	71,162	416,370	5.9	141	1,035	7.3	64,566	231,405	3.6	37,601	342,332	9.1
30,40,50)	14-Jul	28	105	1,331	12.7	35,568	204,285	5.7	347	2,476	7.1	75,528	276,321	3.7	28,155	258,472	9.2
	21-Jul	29	212	2,811	13.3	62,124	353,602	5.7	1,829	12,860	7.0	282,694	964,771	3.4	62,424	551,714	8.8
	28-Jul	30	89	1,498	16.8	67,975	388,944	5.7	4,361	31,447	7.2	586,120	2,072,489	3.5	66,596	582,664	8.7
	4-Aug	31	108	2,003	18.5	99,013	575,967	5.8	7,613	58,332	7.7	582,996	2,046,881	3.5	33,592	282,882	8.4
	11-Aug	32	84	1,508	18.0	51,298	292,535	5.7	9,216	71,219	7.7	326,990	1,162,733	3.6	12,840	107,211	8.3
	18-Aug	33	82	1,374	16.8	41,723	238,340	5.7	13,523	113,042	8.4	390,918	1,382,006	3.5	12,192	100,482	8.2
	25-Aug	34	15	226	15.1	57,452	333,272	5.8	16,573	143,775	8.7	303,512	1,176,231	3.9	4,794	39,950	8.3
	1-Sep	35	14	167	11.9	46,546	264,707	5.7	14,229	128,075	9.0	115,030	443,634	3.9	1,756	14,391	8.2
	8-Sep	36	8	134	16.8	64,888	341,362	5.3	18,254	160,542	8.8	89,791	321,979	3.6	1,083	8,488	7.8
	15-Sep	37	0	0	0.0	3,649	19,029	5.2	2,175	19,822	9.1	24,759	90,964	3.7	91	718	7.9
TOTAL			3,115	36,456	11.7	839,437	4,701,708	5.6	88,301	742,890	8.4	2,854,993	10,214,279	3.6	280,849	2,449,412	8.7
NORTH CAPE, ANTON	9-Jun	23	32	243	7.6	2,949	15,730	5.3	0	0	0.0	9	25	2.8	88	772	8.8
LARSEN, SHERATIN,	16-Jun	24	63	1,081	17.2	12,144	67,618	5.6	0	0	0.0	16	58	3.6	450	3,518	7.8
& KIZHUYAK COMB.	23-Jun	25	180	1,590	8.8	25,863	142,530	5.5	11	77	7.0	1,199	3,711	3.1	4,410	34,845	7.9
(259-35,36,37,38,39)	30-Jun	26	55	695	12.6	7,974	43,617	5.5	32	202	6.3	1,986	7,662	3.9	1,309	10,819	8.3
	7-Jul	27	39	672	17.2	10,245	56,696	5.5	454	2,920	6.4	7,573	29,762	3.9	3,948	34,196	8.7
	14-Jul	28	89	573	6.4	10,087	55,877	5.5	6,328	40,888	6.5	27,815	101,321	3.6	1,891	15,078	8.0
	21-Jul	29	58	539	9.3	12,996	72,111	5.5	7,201	47,829	6.6	48,059	166,611	3.5	2,397	19,336	8.1
	28-Jul	30	20	257	12.9	1,805	9,747	5.4	438	2,852	6.5	36,744	132,156	3.6	9,485	69,177	7.3
	4-Aug	31	1	4	4.0	2,159	13,219	6.1	229	1,623	7.1	24,135	96,211	4.0	4,353	35,162	8.1

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SECTION (STAT AREA)	STAT WEEK/ WEEK END		Chinook			Sockeye			Coho			Pink			Chum		
			Number	lbs.	avg.	Number	lbs.	avg.	Number	lbs.	avg.	Number	lbs.	avg.	Number	lbs.	avg.
NORTH CAPE, ANTON	11-Aug	32	6	49	8.2	2,592	16,491	6.4	1,636	11,935	7.3	39,169	149,362	3.8	3,634	29,340	8.1
LARSEN, SHERATIN,	18-Aug	33	6	46	7.7	2,280	13,805	6.1	3,186	25,065	7.9	41,216	152,643	3.7	3,150	25,956	8.2
& KIZHUYAK COMB.	25-Aug	34	0	0	0.0	172	1,041	6.1	502	4,074	8.1	4,591	17,245	3.8	568	3,684	6.5
(Cont.)	1-Sep	35	0	0	0.0	120	718	6.0	1,000	8,060	8.1	4,957	17,843	3.6	952	8,461	8.9
	8-Sep	36	0	0	0.0	0	0	0.0	176	1,587	9.0	16	56	3.5	217	1,936	8.9
TOTAL			549	5,749	10.5	91,386	509,200	5.6	21,193	147,112	6.9	237,485	874,666	3.7	36,852	292,280	7.9
OUTER KARLUK	16-Jun	24	565	7,442	13.2	27,586	132,686	4.8	0	0	0.0	24	61	2.5	463	4,100	8.9
(255-20)	23-Jun	25	771	9,759	12.7	61,284	313,057	5.1	0	0	0.0	419	1,222	2.9	1,164	9,419	8.1
	30-Jun	26	182	2,579	14.2	15,772	83,277	5.3	0	0	0.0	1,584	4,707	3.0	1,003	7,896	7.9
	7-Jul	27	15	278	18.5	5,517	28,261	5.1	4	27	6.8	3,367	10,157	3.0	682	5,894	8.6
	14-Jul	28	4	33	8.3	2,174	10,937	5.0	5	45	9.0	2,745	9,182	3.3	380	3,588	9.4
	25-Aug	34	3	55	18.3	12,924	79,790	6.2	5,051	48,516	9.6	25,233	86,398	3.4	193	1,756	9.1
	1-Sep	35	1	6	6.0	21,167	117,715	5.6	5,556	58,759	10.6	8,240	29,708	3.6	143	1,173	8.2
	8-Sep	36	0	0	0.0	4,511	23,537	5.2	1,618	16,989	10.5	2,626	9,312	3.5	31	258	8.3
	15-Sep	37	0	0	0.0	1,481	8,116	5.5	664	5,199	7.8	0	0	0.0	0	0	0.0
TOTAL			1,541	20,152	13.1	152,416	797,376	5.2	12,898	129,535	10.0	44,238	150,747	3.4	4,059	34,084	8.4
INNER KARLUK	16-Jun	24	736	8,695	11.8	29,590	150,658	5.1	0	0	0.0	9	27	3.0	275	2,301	8.4
(255-20)	23-Jun	25	291	3,929	13.5	22,559	115,695	5.1	0	0	0.0	202	606	3.0	352	3,177	9.0
	30-Jun	26	24	373	15.5	805	4,131	5.1	0	0	0.0	17	50	2.9	38	337	8.9
	7-Jul	27	0	0	0.0	1,300	7,653	5.9	0	0	0.0	1,472	5,055	3.4	206	1,849	9.0
	14-Jul	28	0	0	0.0	350	1,963	5.6	0	0	0.0	80	241	3.0	15	144	9.6
TOTAL			1,051	12,997	12.4	54,604	280,100	5.1	0	0	0.0	1,780	5,979	3.4	886	7,808	8.8
HALIBUT BAY	23-Jun	25	95	1,916	20.2	6,433	33,238	5.2	0	0	0.0	353	1,025	2.9	176	1,664	9.5
(256-25,30)	30-Jun	26	132	1,783	13.5	17,165	90,817	5.3	1	11	11.0	6,461	19,803	3.1	2,414	21,391	8.9
	7-Jul	27	168	2,519	15.0	28,096	155,284	5.5	9	65	7.2	16,317	50,631	3.1	5,541	48,230	8.7
	14-Jul	28	48	845	17.6	4,728	25,545	5.4	3	24	8.0	4,518	11,807	2.6	459	4,144	9.0
	4-Aug	31	53	1,069	20.2	7,577	41,864	5.5	237	1,681	7.1	40,914	134,181	3.3	1,040	9,127	8.8
	11-Aug	32	42	814	19.4	3,308	19,587	5.9	322	2,762	8.6	27,215	86,807	3.2	478	3,954	8.3
	18-Aug	33	10	167	16.7	8,468	49,320	5.8	2,815	23,394	8.3	89,344	297,027	3.3	564	4,592	8.1
	25-Aug	34	4	72	18.0	1,268	7,033	5.5	1,173	9,311	7.9	15,242	49,035	3.2	122	1,246	10.2
	1-Sep	35	0	0	0.0	184	1,008	5.5	226	1,942	8.6	1,572	6,128	3.9	14	138	9.9
TOTAL			552	9,185	16.6	77,227	423,696	5.5	4,786	39,190	8.2	201,936	656,444	3.3	10,808	94,486	8.7
INNER & OUTER	9-Jun	23	281	5,334	19.0	14,934	78,409	5.3	0	0	0.0	0	0	0.0	210	1,482	7.1
AYAKULIK	16-Jun	24	3,307	67,310	20.4	115,959	596,704	5.1	14	98	7.0	10	32	3.2	3,485	30,048	8.6
(256-10,15,20)	23-Jun	25	2,736	50,601	18.5	114,551	593,587	5.2	2	14	7.0	716	1,934	2.7	5,885	50,503	8.6
	30-Jun	26	343	6,668	19.4	97,138	524,272	5.4	1	8	8.0	20,315	59,419	2.9	14,456	119,534	8.3
	7-Jul	27	60	858	14.3	41,040	228,717	5.6	4	41	10.3	12,865	38,875	3.0	8,505	71,771	8.4
	4-Aug	31	2	21	10.5	3,674	20,882	5.7	223	1,676	7.5	44,393	152,681	3.4	1,594	13,522	8.5
	11-Aug	32	2	77	38.5	670	3,290	4.9	36	233	6.5	9,229	28,186	3.1	373	2,951	7.9
	25-Aug	34	0	0	0.0	0	0	0.0	0	0	0.0	320	973	3.0	676	5,411	8.0
TOTAL			6,731	130,869	19.4	387,966	2,045,861	5.3	280	2,070	7.4	87,848	282,100	3.2	35,184	295,222	8.4

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Appendix H.2. (Page 5 of 7)

SECTION (STAT AREA)	STAT WEEK/ WEEK END		Chinook			Sockeye			Coho			Pink			Chum		
			Number	lbs.	avg.	Number	lbs.	avg.	Number	lbs.	avg.	Number	lbs.	avg.	Number	lbs.	avg.
CAPE ALITAK	9-Jun	23	0	0	0.0	180	971	5.4	0	0	0.0	0	0	0.0	0	0	0.0
(257-10&20)	16-Jun	24	81	1,897	23.4	6,927	37,219	5.4	0	0	0.0	0	0	0.0	46	569	12.4
	23-Jun	25	110	2,566	23.3	37,723	219,071	5.8	0	0	0.0	8	31	3.9	778	6,586	8.5
	30-Jun	26	100	2,103	21.0	22,995	127,966	5.6	0	0	0.0	2,975	11,523	3.9	1,742	16,211	9.3
	7-Jul	27	48	993	20.7	15,800	85,708	5.4	4	25	6.3	5,632	21,731	3.9	1,039	10,066	9.7
	14-Jul	28	59	1,187	20.1	11,335	61,389	5.4	22	157	7.1	26,001	103,703	4.0	4,441	44,461	10.0
	21-Jul	29	40	1,037	25.9	15,775	85,883	5.4	99	710	7.2	90,729	353,553	3.9	10,792	84,950	7.9
	28-Jul	30	6	187	31.2	738	3,799	5.1	13	99	7.6	11,694	46,844	4.0	1,453	13,825	9.5
	11-Aug	32	1	27	27.0	2,036	10,448	5.1	135	1,309	9.7	15,232	60,699	4.0	275	2,578	9.4
TOTAL			445	9,997	22.5	113,509	632,454	5.6	273	2,300	8.4	152,271	598,084	3.9	20,566	179,246	8.7
MOSER-OLGA BAY &	2-Jun	22	0	0	0.0	294	1,655	5.6	0	0	0.0	0	0	0.0	0	0	0.0
DOG SALMON FLATS	9-Jun	23	3	52	17.3	11,761	63,825	5.4	0	0	0.0	0	0	0.0	4	52	13.0
(257-40,41,42)	16-Jun	24	16	357	22.3	49,763	277,397	5.6	0	0	0.0	0	0	0.0	76	725	9.5
	23-Jun	25	25	435	17.4	32,762	180,914	5.5	0	0	0.0	9	36	4.0	228	1,969	8.6
	30-Jun	26	13	217	16.7	67,501	385,672	5.7	2	10	5.0	1,161	4,412	3.8	1,532	13,513	8.8
	7-Jul	27	3	64	21.3	38,743	223,552	5.8	12	72	6.0	6,826	25,548	3.7	1,947	16,957	8.7
	14-Jul	28	6	149	24.8	25,419	146,475	5.8	35	221	6.3	12,302	46,707	3.8	1,980	17,552	8.9
	21-Jul	29	1	28	28.0	17,999	105,237	5.8	50	389	7.8	14,851	57,559	3.9	2,239	19,583	8.7
	28-Jul	30	3	73	24.3	18,348	110,254	6.0	52	400	7.7	20,877	81,571	3.9	1,178	10,167	8.6
	4-Aug	31	0	0	0.0	23,230	140,640	6.1	142	1,026	7.2	25,732	97,231	3.8	1,123	10,139	9.0
	11-Aug	32	0	0	0.0	11,081	66,150	6.0	298	2,839	9.5	15,416	61,359	4.0	882	7,633	8.7
TOTAL			70	1,375	19.6	296,901	1,701,771	5.7	591	4,957	8.4	97,174	374,423	3.9	11,189	98,290	8.8
HUMPY/DEADMAN	16-Jun	24	10	231	23.1	2,532	14,088	5.6	0	0	0.0	0	0	0.0	18	182	10.1
(257-50,60,70)	30-Jun	26	20	424	21.2	2,619	14,159	5.4	0	0	0.0	168	505	3.0	230	1,741	7.6
	7-Jul	27	24	583	24.3	16,913	93,816	5.5	27	165	6.1	14,613	56,530	3.9	1,544	15,070	9.8
	14-Jul	28	48	826	17.2	7,405	40,779	5.5	186	1,779	9.6	22,094	88,403	4.0	671	6,593	9.8
	21-Jul	29	4	74	18.5	8,926	49,272	5.5	37	249	6.7	36,949	146,113	4.0	465	4,424	9.5
	28-Jul	30	14	330	23.6	4,740	25,587	5.4	46	332	7.2	154,922	615,121	4.0	1,147	10,474	9.1
	4-Aug	31	7	174	24.9	3,342	18,532	5.5	49	360	7.3	306,949	1,087,373	3.5	2,521	21,767	8.6
	11-Aug	32	8	229	28.6	3,377	17,858	5.3	144	1,351	9.4	266,047	970,505	3.6	3,596	33,056	9.2
	18-Aug	33	1	25	25.0	1,775	9,910	5.6	390	3,592	9.2	227,017	781,197	3.4	5,069	50,854	10.0
	25-Aug	34	0	0	0.0	1,412	6,460	4.6	729	5,349	7.3	161,837	527,636	3.3	5,544	49,292	8.9
TOTAL			136	2,896	21.3	53,041	290,461	5.5	1,608	13,177	8.2	1,190,596	4,273,383	3.6	20,805	193,453	9.3
SEVEN RIVERS	23-Jun	25	51	850	16.7	9,875	49,641	5.0	2	12	6.0	562	1,456	2.6	2,341	17,325	7.4
(258-70,80,83,85,90)	14-Jul	28	24	270	11.3	4,113	22,592	5.5	2,621	20,946	8.0	5,977	22,214	3.7	552	4,337	7.9
	21-Jul	29	81	475	5.9	4,411	22,745	5.2	4,790	33,866	7.1	6,048	23,086	3.8	1,420	10,731	7.6
	28-Jul	30	0	0	0.0	50	270	5.4	9	77	8.6	90	268	3.0	16	173	10.8
TOTAL			156	1,595	10.2	18,449	95,248	5.2	7,422	54,901	7.4	12,677	47,024	3.7	4,329	32,566	7.5

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Appendix H.2. (Page 6 of 7)

SECTION (STAT AREA)	STAT WEEK/ WEEK END		Chinook			Sockeye			Coho			Pink			Chum		
			Number	lbs.	avg.	Number	lbs.	avg.	Number	lbs.	avg.	Number	lbs.	avg.	Number	lbs.	avg.
TWO-HEADED	16-Jun	24	11	170	15.5	500	2,422	4.8	0	0	0.0	0	0	0.0	39	285	7.3
(258-54,55,60)	23-Jun	25	24	498	20.8	4,419	23,690	5.4	0	0	0.0	170	486	2.9	474	3,316	7.0
	7-Jul	27	2	46	23.0	915	5,192	5.7	30	227	7.6	395	1,513	3.8	41	380	9.3
	14-Jul	28	21	253	12.0	3,397	18,895	5.6	607	4,406	7.3	1,840	6,254	3.4	345	2,709	7.9
	21-Jul	29	6	17	2.8	560	2,813	5.0	270	2,032	7.5	840	2,524	3.0	75	740	9.9
	28-Jul	30	3	104	34.7	79	421	5.3	10	82	8.2	630	2,526	4.0	64	579	9.0
	11-Aug	32	0	0	0.0	0	0	0.0	0	0	0.0	2,500	10,000	4.0	0	0	0.0
	18-Aug	33	2	44	22.0	283	1,632	5.8	167	1,179	7.1	8,071	25,934	3.2	858	6,489	7.6
	1-Sep	35	3	42	14.0	149	819	5.5	502	3,716	7.4	3,459	13,302	3.8	348	2,769	8.0
TOTAL			72	1,174	16.3	10,302	55,884	5.4	1,586	11,642	7.3	17,905	62,539	3.5	2,244	17,267	7.7
SITKALIDAK	16-Jun	24	95	1,481	15.6	10,830	63,214	5.8	0	0	0.0	78	241	3.1	2,802	20,764	7.4
(258-10,20,30,40,51,	23-Jun	25	49	1,025	20.9	13,614	77,459	5.7	1	6	6.0	235	751	3.2	1,662	13,230	8.0
52,53)	7-Jul	27	31	457	14.7	6,775	39,586	5.8	277	2,059	7.4	3,527	12,356	3.5	1,715	13,685	8.0
	14-Jul	28	61	625	10.2	8,760	47,532	5.4	3,417	23,891	7.0	8,023	26,857	3.3	1,200	9,813	8.2
	21-Jul	29	80	844	10.6	14,778	77,213	5.2	19,868	141,809	7.1	27,994	84,420	3.0	2,622	22,472	8.6
	28-Jul	30	55	503	9.1	2,572	13,324	5.2	2,396	17,811	7.4	35,589	126,326	3.5	2,927	25,197	8.6
	4-Aug	31	16	444	27.8	581	3,166	5.4	111	857	7.7	32,857	131,994	4.0	8,224	76,815	9.3
	11-Aug	32	22	513	23.3	1,327	5,996	4.5	211	1,309	6.2	97,613	347,934	3.6	21,216	150,940	7.1
	18-Aug	33	5	101	20.2	1,006	4,761	4.7	1,257	8,167	6.5	111,661	382,527	3.4	20,347	163,391	8.0
	25-Aug	34	2	40	20.0	1,026	5,515	5.4	4,638	35,165	7.6	210,494	709,800	3.4	39,560	310,453	7.8
	1-Sep	35	2	73	36.5	481	1,991	4.1	2,762	15,110	5.5	42,901	140,557	3.3	4,769	31,413	6.6
TOTAL			418	6,106	14.6	61,750	339,757	5.5	34,938	246,184	7.0	570,972	1,963,763	3.4	107,044	838,173	7.8
INNER & OUTER UGAK	23-Jun	25	7	108	15.4	365	2,128	5.8	0	0	0.0	4	16	4.0	3	26	8.7
(259-40,41,42)	7-Jul	27	66	816	12.4	5,086	26,188	5.1	40	221	5.5	163	699	4.3	732	5,750	7.9
	14-Jul	28	5	112	22.4	2,443	12,575	5.1	0	0	0.0	572	1,731	3.0	331	2,653	8.0
	21-Jul	29	12	74	6.2	1,848	11,707	6.3	110	727	6.6	929	2,778	3.0	2,648	21,901	8.3
	28-Jul	30	5	139	27.8	1,517	8,385	5.5	8	42	5.3	1,913	5,313	2.8	3,836	28,652	7.5
	4-Aug	31	0	0	0.0	73	328	4.5	1	13	13.0	2,698	10,661	4.0	1,723	11,597	6.7
	11-Aug	32	0	0	0.0	4	19	4.8	1	10	10.0	15	53	3.5	3,829	26,940	7.0
	18-Aug	33	10	214	21.4	38	204	5.4	40	318	8.0	5,188	16,613	3.2	19,576	166,949	8.5
	25-Aug	34	1	34	34.0	49	245	5.0	101	654	6.5	2,214	7,971	3.6	22,626	158,386	7.0
	1-Sep	35	0	0	0.0	0	0	0.0	40	264	6.6	541	1,948	3.6	10,015	70,102	7.0
	15-Sep	37	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	665	5,320	8.0
TOTAL			106	1,497	14.1	11,423	61,779	5.4	341	2,249	6.6	14,237	47,783	3.4	65,984	498,276	7.6
OUTER CHINIAK	7-Jul	27	8	75	9.4	563	3,353	6.0	22	157	7.1	201	719	3.6	103	818	7.9
(259-21,25)	21-Jul	29	6	38	6.3	1,793	10,896	6.1	2,023	14,642	7.2	4,819	16,524	3.4	788	6,263	7.9
	28-Jul	30	7	28	4.0	1,005	4,612	4.6	284	1,759	6.2	1,764	5,486	3.1	330	2,261	6.9
	4-Aug	31	0	0	0.0	0	0	0.0	0	0	0.0	8,345	33,051	4.0	6	47	7.8
TOTAL			21	141	6.7	3,361	18,861	5.6	2,329	16,558	7.1	15,129	55,780	3.7	1,227	9,389	7.7

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SECTION (STAT AREA)	STAT WEEK/ WEEK END		Chinook Number	Chinook lbs.	Chinook avg.	Sockeye Number	Sockeye lbs.	Sockeye avg.	Coho Number	Coho lbs.	Coho avg.	Pink Number	Pink lbs.	Pink avg.	Chum Number	Chum lbs.	Chum avg.
INNER CHINIAK	1-Sep	35	1	22	22.0	0	0	0.0	147	1,323	9.0	72	216	3.0	102	816	8.0
(259-23,24)	8-Sep	36	0	0	0.0	0	0	0.0	99	987	10.0	9	18	2.0	5	65	13.0
	22-Sep	38	0	0	0.0	0	0	0.0	3,191	28,422	8.9	0	0	0.0	0	0	0.0
	29-Sep	39	0	0	0.0	0	0	0.0	1,311	11,807	9.0	0	0	0.0	0	0	0.0
TOTAL			1	22	22.0	0	0	0.0	4,748	42,539	9.0	81	234	2.9	107	881	8.2
OUTER KUKAK	21-Jul	29	0	0	0.0	34	173	5.1	31	156	5.0	101	304	3.0	57	460	8.1
(262-25,30)	18-Aug	33	0	0	0.0	0	0	0.0	14	132	9.4	167	634	3.8	1,547	11,871	7.7
	25-Aug	34	0	0	0.0	0	0	0.0	325	2,911	9.0	1,370	4,914	3.6	3,691	30,149	8.2
TOTAL			0	0	0.0	34	173	5.1	370	3,199	8.6	1,638	5,852	3.6	5,295	42,480	8.0
INNER KUKAK	1-Sep	35	0	0	0.0	464	2,321	5.0	792	7,178	9.1	918	2,756	3.0	2,588	20,728	8.0
(262-27) TOTAL			0	0	0.0	464	2,321	5.0	792	7,178	9.1	918	2,756	3.0	2,588	20,728	8.0
DAKAVAK	7-Jul	27	61	1,739	28.5	3,300	18,877	5.7	44	274	6.2	2,575	7,782	3.0	901	7,457	8.3
(262-35,40,45,50,55)	14-Jul	28	68	722	10.6	5,722	37,475	6.5	2,044	15,038	7.4	4,921	11,875	2.4	2,335	18,632	8.0
	21-Jul	29	67	879	13.1	9,626	62,320	6.5	3,549	27,678	7.8	12,331	33,763	2.7	4,599	37,777	8.2
	28-Jul	30	48	688	14.3	2,103	12,606	6.0	4,169	33,401	8.0	6,593	20,830	3.2	2,232	17,527	7.9
	11-Aug	32	3	36	12.0	239	1,433	6.0	122	975	8.0	5,107	15,321	3.0	150	1,241	8.3
	15-Sep	37	0	0	0.0	0	0	0.0	8	55	6.9	7,370	25,797	3.5	5	40	8.0
TOTAL			247	4,064	16.5	20,990	132,711	6.3	9,936	77,421	7.8	38,897	115,368	3.0	10,222	82,674	8.1
KATMAI	7-Jul	27	38	460	12.1	156	780	5.0	0	0	0.0	167	500	3.0	346	3,115	9.0
(262-60)	14-Jul	28	21	207	9.9	1,303	8,408	6.5	301	2,013	6.7	963	2,584	2.7	999	8,577	8.6
	21-Jul	29	29	364	12.6	796	5,041	6.3	230	1,653	7.2	884	3,183	3.6	508	4,205	8.3
	28-Jul	30	2	15	7.5	25	132	5.3	51	350	6.9	76	245	3.2	218	1,576	7.2
TOTAL			90	1,046	11.6	2,280	14,361	6.3	582	4,016	6.9	2,090	6,512	3.1	2,071	17,473	8.4
ALINCHAK	7-Jul	27	9	166	18.4	471	2,346	5.0	0	0	0.0	502	1,297	2.6	377	3,288	8.7
(262-65,70)	14-Jul	28	17	100	5.9	2,213	14,497	6.6	536	3,365	6.3	1,409	4,310	3.1	5,001	40,371	8.1
	21-Jul	29	57	756	13.3	10,938	65,904	6.0	1,429	10,460	7.3	8,669	25,662	3.0	10,212	77,427	7.6
	28-Jul	30	1	35	35.0	264	1,344	5.1	198	1,591	8.0	7,337	16,574	2.3	6,659	58,995	8.9
	4-Aug	31	5	76	15.2	155	956	6.2	50	403	8.1	47,325	176,590	3.7	42,130	335,081	8.0
	11-Aug	32	20	259	13.0	104	559	5.4	2	10	5.0	51,877	156,396	3.0	15,097	122,476	8.1
TOTAL			109	1,392	12.8	14,145	85,606	6.1	2,215	15,829	7.1	117,119	380,829	3.3	79,476	637,638	8.0
CAPE IGVAK	30-Jun	26	729	10,589	14.5	157,648	943,979	6.0	5	62	12.4	22,819	69,962	3.1	10,692	83,888	7.8
(262-75,80,90,95)	14-Jul	28	1,874	26,668	14.2	111,369	664,963	6.0	1,933	13,177	6.8	116,523	355,360	3.0	66,173	542,595	8.2
	4-Aug	31	23	421	18.3	2,882	17,279	6.0	1,336	10,677	8.0	15,689	50,645	3.2	6,086	55,652	9.1
	11-Aug	32	17	205	12.1	3,261	19,855	6.1	539	4,320	8.0	20,877	62,849	3.0	2,281	18,426	8.1
TOTAL			2,643	37,883	14.3	275,160	1,646,076	6.0	3,813	28,236	7.4	175,908	538,816	3.1	85,232	700,561	8.2
WIDE BAY	4-Aug	31	0	0	0.0	14	97	6.9	15	104	6.9	27,890	68,633	2.5	17,334	140,341	8.1
(262-85)	11-Aug	32	1	25	25.0	81	554	6.8	28	223	8.0	33,878	92,801	2.7	6,227	50,650	8.1
TOTAL			1	25	25.0	95	651	6.9	43	327	7.6	61,768	161,434	2.6	23,561	190,991	8.1
GRAND TOTAL			23,827	330,896	13.9	2,659,267	14,739,143	5.5	407,978	3,183,920	7.8	19,567,163	67,365,333	3.4	1,053,730	8,598,710	8.2

Appendix I.1. Indexed peak salmon escapements for the Kodiak Management Area, by district and species, 2001.

District	Number of Fish					Number of Surveys
	Chinook	Sockeye	Coho	Pink	Chum	
Afognak	3	76,292	55,201	310,062	3,583	33
Northwest Kodiak	0	11,894	13,560	811,950	144,900	91
Southwest Kodiak	18,382	1,082,428	108,804	101,928	3,582	15
Alitak Bay	367	321,782	15,469	767,986	45,286	55
Eastside Kodiak	1	51,508	31,193	449,560	45,974	85
Northeast Kodiak	0	20,556	20,133	545,134	19,900	38
Mainland	0	16,200	0	407,000	294,700	59
TOTAL	18,753	1,580,660	244,360	3,393,620	557,925	376

Appendix I.2. Indexed peak salmon escapements for the Afognak District, by stream and species, in the Kodiak Management Area, 2001.

Stream	Number of Fish					Date	Observer	Number of Surveys
	Chinook	Sockeye	Coho	Pink	Chum			
251-101	0	50	3,000	2,000	0	9/30	Guchen	2
251-105	2	22,490	0	3,847	0	8/1	Weir Count	
	0	0	0	26,800	0	8/23	Brennan	1
251-201	0	0	0	100	0	8/23	Brennan	1
251-202	0	0	0	1,000	0	8/23	Brennan	1
251-207	0	0	0	500	0	8/23	Brennan	1
251-301	0	-	0	50,000	0	8/11	Baer	1
251-302	0	3,000	0	0	0	6/11	Rodgers	3
	-	-	0	30,000	0	8/11	Baer	
251-403	0	0	0	500	0	8/23	Brennan	1
251-404	0	0	0	25,400	0	8/6	Brennan	2
251-601	0	7	966	295	0	9/12	Weir Count	1
251-705	0	21	2,703	1,411	0	9/10	Weir Count	1
251-822	0	76	-	-	0	8/11	Swanson	4
	0	0	19	18,422	0	8/18	Swanson	
251-825	0	3,147	0	0	0	6/29	Weir Count	
	0	0	4,000	6,000	0	8/22	Baer	2
251-831	0	23,230	25,032	15,409	77	9/5	Weir Count	
251-901	0	0	0	3,000	0	8/22	Baer	1
252-323	0	0	500	26,000	0	9/30	Aro	1
252-324	0	0	5,000	45,000	3,500	9/30	Aro	1
252-331	0	0	0	350	0	8/23	Brennan	1
252-332	0	0	1,000	18,000	0	8/6	Brennan	5
252-335	0	0	0	0	0	8/23	Brennan	1
252-342	1	24,271	12,981	25,228	6	9/6	Weir Count	1
252-343	0	0	0	10,800	0	8/23	Brennan	1
	3	76,292	55,201	310,062	3,583			33

Appendix I.3. Indexed peak salmon escapements for the Northwest Kodiak District, by stream and species, in the Kodiak Management Area, 2001.

Stream	Number of Fish					Date	Observer	Number of Surveys
	Chinook	Sockeye	Coho	Pink	Chum			
253-115	0	3,994	0	0	0	7/26	Weir	
	0	-	0	20,800	0	8/1	Brennan	4
	0	0	1,000	1,000	0	9/19	Wadle	
253-121	0	0	0	13,700	0	8/1	Brennan	3
253-122	0	-	0	-	22,600	8/1	Brennan	10
	0	3,500	0	-	0	8/6	Wadle	
	0	-	0	117,000	0	8/22	Brennan	
	0	0	3,950	0	0	10/29	Chatto	
253-331	0	0	0	73,600	-	8/1	Brennan	7
	0	0	0	-	17,000	8/22	Brennan	
	0	0	0	7,000	0	9/18	Wadle	
	0	0	260	0	0	10/30	Chatto	
253-332	0	0	0	9,000	0	8/1	Brennan	2
254-201	0	0	0	5,400	0	8/22	Brennan	3
254-202	0	0	0	41,800	-	8/1	Brennan	9
	0	0	0	134,000	-	9/7	Brennan	
	0	0	0	-	24,200	9/19	Wadle	
	0	0	500	0	0	10/11	Chatto	
254-203	0	0	0	74,000	0	9/7	Brennan	6
	0	0	200	-	0	9/19	Wadle	
254-204	0	0	0	17,200	0	9/7	Brennan	6
	0	0	1,000	-	0	9/19	Wadle	
254-208	0	0	0	0	0	8/1	Brennan	1
254-209	0	0	0	0	0	8/22	Brennan	1
254-210	0	0	0	1,300	0	8/22	Brennan	1
254-212	0	0	0	2,200	0	8/1	Brennan	2
254-301	0	0	0	-	20,700	8/1	Brennan	7
	0	0	0	47,500	0	8/22	Brennan	
	0	0	2,100	0	0	10/29	Chatto	
254-302	0	0	0	3,400	0	8/7	Brennan	1
254-401	0	0	0	-	3,000	8/1	Brennan	8
	0	0	0	18,000	0	8/7	Brennan	
	0	0	4,550	0	0	10/29	Chatto	
254-403	0	1,600	0	450	0	8/18	Rodgers	5
259-363	0	2,800	0	0	0	7/25	Brennan	1
259-365	0	0	0	75,000	30,700	8/23	Brennan	5
259-366	0	0	0	4,300	0	8/23	Brennan	2
259-371	0	0	0	22,600	-	8/1	Brennan	4
	0	0	0	-	16,000	8/23	Brennan	
	0	0	0	107,000	0	9/8	Gretsch	
259-382	0	0	0	13,200	9,500	8/23	Brennan	1
259-383	0	0	0	0	1,200	8/23	Brennan	1
259-391	0	0	0	2,500	0	9/8	Gretsch	1
	0	11,894	13,560	811,950	144,900			91

Appendix I.4. Indexed peak salmon escapements for the Southwest Kodiak District, by stream and species, in the Kodiak Management Area, 2001.

Stream	Number of Fish					Date	Observer	Number of Surveys
	Chinook	Sockeye	Coho	Pink	Chum			
255-101	4,453	863,536	22,660	65,554	86	9/18	Weir Count	
	0	0	20,950	0	0	10/30	Chatto	4
256-201	13,929	218,892	5,064	10,374	96	8/29	Weir Count	
	0	0	18,300	0	0	10/30	Chatto	2
256-301	0	0	30	0	0	9/19	Wadle	1
256-303	0	0	800	0	0	9/19	Wadle	1
256-401	0	0	0	0	2,600	6/22	Brennan	5
	0	0	0	16,500	0	8/22	Brennan	
	0	0	41,000	0	0	9/19	Wadle	
256-402	0	0	0	0	800	7/17	Chatto	2
	0	0	0	9,500	0	8/22	Brennan	
	18,382	1,082,428	108,804	101,928	3,582			15

Appendix I.5. Indexed peak salmon escapements for the Alitak Bay District, by stream and species, in the Kodiak Management Area, 2001.

Stream	Number of Fish					Date	Observer	Number of Surveys
	Chinook	Sockeye	Coho	Pink	Chum			
257-101	0	0	0	0	2,000	7/31	Kuriscak	1
257-102	0	0	0	0	500	7/31	Kuriscak	1
	0	0	475	0	0	10/30	Chatto	
257-302	0	13,772	2,709	29,732	0	9/9	Weir Count	
	0	500	2,000	2,500	0	9/19	Wadle	4
257-303	0	2,500	0	0	0	7/17	Chatto	2
	0	0	1,000	0	0	9/19	Wadle	
257-304	5	141,201	3,530	12,684	0	9/12	Weir Count	1
257-305	0	0	0	300	100	8/5	Kuriscak	1
257-401	0	0	0	8,800	0	8/7	Brennan	2
257-402	0	500	0	0	0	8/7	Brennan	6
	0	0	800	0	0	9/19	Wadle	
257-403	362	163,309	1,505	72,370	6,086	8/25	Weir Count	1
257-502	0	0	0	187,000	15,500	9/7	Brennan	7
	0	0	3,000	-	-	9/19	Wadle	
257-503	0	0	0	22,500	5,000	9/7	Brennan	4
257-504	0	0	0	7,000	0	7/31	Kuriscak	2
257-601	0	0	0	9,300	2,000	7/26	Brennan	4
	0	0	40	0	0	10/30	Chatto	
257-602	0	0	0	11,000	0	7/26	Brennan	4
257-603	0	0	0	0	14,100	8/7	Brennan	5
	0	0	350	0	0	10/30	Chatto	
257-604	0	0	0	44,400	0	8/7	Brennan	2
	0	0	10	0	0	10/30	Chatto	
257-701	0	0	0	201,900	0	8/6	Wadle	6
	0	0	0	154,500	0	9/7	Brennan	
	0	0	50	0	0	10/30	Chatto	
257-702	0	0	0	4,000	0	7/31	Kuriscak	2
	367	321,782	15,469	767,986	45,286			55

Appendix I.6. Indexed peak salmon escapements for the Eastside Kodiak District, by stream and species, in the Kodiak Management Area, 2001.

Stream	Number of Fish					Date	Observer	Number of Surveys
	Chinook	Sockeye	Coho	Pink	Chum			
258-101	0	0	0	0	0	7/27	Wadle	1
258-201	0	0	0	2,500	0	8/9	Brennan	2
258-2021	0	0	0	0	0	7/27	Wadle	1
258-203	0	0	0	0	0	7/27	Wadle	1
258-204	0	0	0	50	0	7/27	Wadle	3
	0	0	0	-	3,100	8/2	Brennan	
258-205	0	0	0	0	500	8/2	Brennan	3
258-206	0	0	0	250	50	7/27	Wadle	2
258-207	0	0	0	13,300	2,000	8/9	Brennan	5
	0	0	550	100	0	10/2	Chatto	
258-208	0	0	0	300	0	7/27	Wadle	1
258-209	0	0	0	200	0	7/27	Wadle	1
258-212	0	0	0	50	0	7/27	Wadle	3
258-213	0	0	0	100	0	7/27	Wadle	1
258-305	0	0	0	1,500	0	8/9	Brennan	1
258-521	0	0	0	2,000	7,100	8/9	Brennan	2
	0	0	25,000	4,000	0	10/2	Chatto	
258-522	0	0	0	52,000	6,000	8/7	Brennan	5
	0	0	2,700	60,000	0	10/2	Chatto	
258-531	0	0	0	0	0	10/2	Chatto	1
258-532	0	0	0	0	0	10/2	Chatto	1
258-541	0	0	0	2,500	0	8/7	Brennan	3
	0	0	320	0	0	10/30	Chatto	
258-542	0	0	0	-	4,100	8/7	Brennan	4
	0	0	0	47,000	0	9/5	Wadle	
	0	0	75	0	0	10/30	Chatto	
258-544	0	0	0	1,900	0	7/26	Brennan	1
258-551	0	0	0	11,000	3,200	7/26	Brennan	1
258-554	0	0	0	7,000	0	9/5	Wadle	1
258-602	0	0	0	-	1,400	7/26	Brennan	4
	0	0	0	20,000	0	9/5	Wadle	
	0	0	1,900	0	0	10/30	Chatto	
258-603	0	0	0	3,000	0	7/31	Kuriscak	1
258-604	0	0	0	2,000	0	7/31	Kuriscak	1
258-701	0	0	0	12,500	0	7/31	Kuriscak	5
	0	0	0	131,000	0	9/5	Wadle	
258-702	0	0	0	5,300	0	7/31	Kuriscak	1
258-706	0	0	0	0	0	7/26	Brennan	1
258-707	0	0	0	500	0	7/26	Brennan	1
258-901	0	0	0	300	0	7/31	Kuriscak	1
258-903	0	0	0	7,000	0	8/7	Brennan	1
259-401	0	0	0	17,000	0	9/8	Gretsch	1
259-410	0	0	0	500	0	9/8	Gretsch	1
259-411	0	3,800	0	0	0	8/9	Brennan	3
	0	0	17	0	0		Sportfish	
259-412	0	2,100	0	4,000	0	8/2	Brennan	3
	0	0	500	12,000	2,000	9/8	Gretsch	
259-415	1	45,608	131	19,280	24	8/29	Weir Count	4
259-416	0	0	0	500	5,000	8/2	Brennan	1

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Stream	Number of Fish					Date	Observer	Number of Surveys
	Chinook	Sockeye	Coho	Pink	Chum			
259-419	0	0	0	-	-	8/9	Brennan	1
259-421	0	0	0	0	0	7/27	Wadle	1
259-422	0	0	0	30	0	7/27	Wadle	1
259-423	0	0	0	500	400	8/2	Brennan	2
259-424	0	0	0	8,300	11,100	8/2	Brennan	4
259-425	0	0	0	0	0	7/27	Wadle	1
259-426	0	0	0	0	0	7/27	Wadle	1
259-427	0	0	0	100	0	7/27	Wadle	1
	1	51,508	31,193	449,560	45,974			85

Appendix I.7. Indexed peak salmon escapements for the Northeast Kodiak District, by stream and species, in the Kodiak Management Area, 2001.

Stream	Number of Fish					Date	Observer	Number of Surveys
	Chinook	Sockeye	Coho	Pink	Chum			
259-101	0	0	0	6,000	0	9/8	Gretsch	2
	0	0	83	0	0	10/18	Schmidt	
259-102	0	0	0	9,000	0	9/8	Gretsch	2
	0	0	121	0	0	10/9	Nagler	
259-211	0	-	-	-	2,900	8/23	Brennan	4
	0	-	-	24,294	0	9/8	Gretsch	
	0	20,556	13,494	50,140	-	9/29	Weir Count	
259-220	0	0	0	70,000	1,000	9/8	Gretsch	1
259-221	0	0	0	30,000	0	9/8	Gretsch	2
	0	0	282	0	0	10/11	Schmidt	
259-222	0	0	0	80,000	0	9/8	Gretsch	2
	0	0	183	0	0	10/10	Schmidt	
259-223	0	0	0	48,000	0	9/8	Gretsch	3
	0	0	594	0	0	10/30	Schmidt	
259-224	0	0	0	600	0	9/8	Gretsch	1
259-231	0	0	0	6,600	-	8/2	Brennan	4
	0	0	300	100,000	8,000	9/8	Gretsch	
	0	0	233	0	0	10/19	Schmidt	
259-233	0	0	0	5,500	0	9/8	Gretsch	1
259-234	0	0	0	8,000	2,500	9/8	Gretsch	2
	0	0	57	0	0	10/19	Schmidt	
259-242	0	0	0	24,000	-	8/2	Brennan	5
	0	0	0	35,000	5,500	9/8	Gretsch	
	0	0	3,454	0	0	10/16	Schmidt	
259-243	0	0	0	4,000	0	9/8	Gretsch	1
259-244	0	0	0	500	0	9/8	Gretsch	1
259-245	0	0	0	2,500	0	8/9	Brennan	2
	0	0	0	3,500	0	9/8	Gretsch	
259-251	0	0	0	12,000	0	9/8	Gretsch	2
	0	0	832	0	0	10/12	Schmidt	
259-252	0	0	0	500	0	9/8	Gretsch	1
259-254	0	0	0	25,000	0	9/8	Gretsch	2
	0	0	500	0	0	10/15	Schmidt	
	0	20,556	20,133	545,134	19,900			38

Appendix I.8. Indexed peak salmon escapements for the Mainland District, by stream and species, in the Kodiak Management Area, 2001.

Stream	Number of Fish					Date	Observer	Number of Surveys
	Chinook	Sockeye	Coho	Pink	Chum			
262-151	0	9,200	0	0	0	8/6	Brennan	1
262-152	0	0	0	8,500	67,600	8/6	Brennan	1
262-153	0	0	0	7,600	28,600	8/6	Brennan	1
262-154	0	0	0	0	14,100	8/6	Brennan	1
262-155	0	0	0	3,000	0	8/6	Brennan	1
262-201	0	0	0	-	-	8/6	Brennan	1
262-202	0	0	0	0	0	8/6	Brennan	1
262-203	0	0	0	6,500	14,500	8/6	Brennan	1
262-205	0	0	0	0	0	8/6	Brennan	1
262-207	0	0	0	-	-	8/6	Brennan	1
262-253	0	0	0	0	0	8/6	Brennan	1
262-271	0	0	0	3,300	0	8/6	Brennan	1
262-272	0	0	0	0	0	8/6	Brennan	1
262-301	0	7,000	0	700	0	8/6	Brennan	1
262-401	0	0	0	2,000	0	8/6	Brennan	1
262-402	0	0	0	17,700	0	8/6	Brennan	1
262-451	0	0	0	3,500	2,000	8/6	Brennan	1
262-452	0	0	0	2,000	0	8/6	Brennan	1
262-501	0	0	0	7,700	0	8/6	Brennan	1
262-502	0	0	0	0	0	7/31	Brennan	1
262-505	0	0	0	0	0	7/31	Brennan	1
262-551	0	0	0	12,500	500	7/31	Brennan	2
262-602	0	0	0	-	-	7/31	Brennan	1
262-604	0	0	0	14,700	0	7/31	Brennan	1
262-651	0	0	0	30,000	9,900	7/31	Brennan	1
262-652	0	0	0	25,100	14,000	7/31	Brennan	1
262-653	0	0	0	26,000	0	7/31	Brennan	1
262-654	0	0	0	6,300	8,000	7/31	Brennan	1
262-655	0	0	0	6,000	0	7/31	Brennan	1
262-656	0	0	0	500	0	7/31	Brennan	1
262-701	0	0	0	12,500	0	7/31	Brennan	2
262-702	0	0	0	15,200	4,000	7/31	Brennan	2
262-703	0	0	0	21,000	7,000	7/31	Brennan	2
262-704	0	0	0	1,000	0	7/31	Brennan	2
262-705	0	0	0	2,200	0	8/7	Wadle	2
262-706	0	0	0	4,000	3,000	8/7	Wadle	2
262-751	0	0	0	20,700	0	7/31	Brennan	1
262-752	0	0	0	0	7,100	7/31	Brennan	1
262-801	0	0	0	7,200	3,500	7/31	Brennan	1
262-802	0	0	0	15,000	2,000	7/31	Brennan	1
262-851	0	0	0	49,700	-	7/31	Brennan	2
	0	0	0	-	23,000	8/7	Wadle	
262-852	0	0	0	17,000	4,700	7/31	Brennan	2
	0	0	0	-	15,500	8/7	Wadle	
262-853	0	0	0	5,800	5,000	7/31	Brennan	1
262-854	0	0	0	26,000	6,000	7/31	Brennan	1

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Stream	Number of Fish					Date	Observer	Number of Surveys
	Chinook	Sockeye	Coho	Pink	Chum			
262-859	0	0	0	0	14,200	7/31	Brennan	1
262-861	0	0	0	5,500	0	7/31	Brennan	1
262-865	0	0	0	4,000	0	7/31	Brennan	1
262-951	0	0	0	12,100	-	7/31	Brennan	2
	0	0	0	0	40,500	8/7	Wadle	
262-952	0	0	0	4,500	0	7/31	Brennan	1
	0	16,200	0	407,000	294,700			59