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CHIGNIK MANAGEMENT AREA
COMMERCIAL SALMON FISHERY
MANAGEMENT PLAN, 1996

By

David Owen

and

David Sarafin

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

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INTRODUCTION

Area Description

The Chignik Commercial Salmon Management Area encompasses all coastal waters and inland drainages of the northwest Gulf of Alaska between Kilokak Rocks and Kupreanof Point (Figure 1). The area includes the Chignik River system and approximately 117 other salmon producing streams and tributaries.

The management area is divided into five fishing districts: Eastern, Central, Chignik Bay, Western, and Perryville (Figure 2). The Alaska Department of Fish and Game (ADF&G) manages commercial fisheries within these districts to achieve escapement goals for all salmon species while allowing the harvest of fish which are surplus to spawning requirements.

Closed water areas applicable to this year's commercial salmon fishing season are described in the Chignik Regulatory Section of the 1996 Westward Alaska commercial salmon regulation booklet. **Please note that as of 1996 all longitude and latitude coordinates in the Chignik Area have been converted to decimal minutes and are based on the North American Datum of 1983.**

Legal Gear Description

Purse and hand purse seines are the only legal gear types for the Chignik Management Area (CMA) commercial salmon fishery. In the Eastern, Central, Western and Perryville Districts, no seine less than 100 fathoms or more than 225 fathoms in length may be used. No lead may be more than 75 fathoms in length and the aggregate length of the lead and seine may not be more than 225 fathoms when fished in the Eastern, Central, Western and Perryville Districts. In the Chignik Bay District, seines may not be less than 100 fathoms or more than 125 fathoms in length. No seine may be less than three fathoms nor more than 375 meshes in depth; in addition, up to twenty-five meshes of chafing gear with a maximum mesh size of seven inches may be used.

BOARD OF FISHERIES ACTIONS

Board Of Fisheries Action 1996

In 1996 the Board of Fisheries closed waters around Kupreanof Point in both Area M (South Peninsula) and Area L (Chignik). In the Chignik Management Area, the closed area is between a line extending 65° (true north) from a point at 55° 34.90' N. lat., 159° 37.10' W. long. (55° 34' 54" N. lat., 159° 37 06" W. long) to a line extending 135°(true north) from Kupreanof Point at 55° 33.98' N. lat. 159° 35.88' (55° 33' 59" N. lat., 159° 35' 53" W. long.). This fishing closed water area will be in effect between July 6 through August 31 (Figure 3). Beginning September 1, the closed water status is removed from this area and based on the run strength of the various stocks, may be opened to a line extending 135° (true north) from Kupreanof point at 55° 33' 59" N. lat., 159° 35' 53" W. long.

CRITERIA FOR THE ISSUANCE OF EMERGENCY ORDERS

Inseason fishing time will be established by emergency order when salmon are determined surplus to interim escapement goals as run strengths of the various salmon stocks are assessed.

POSSIBLE CHANGES TO THE 1996 MANAGEMENT PLAN

Local processors, Chignik permit holders, and the Department, are, as of this writing, conferring on changes to the traditional way in which openings and closures have been implemented within the Chignik Management Area in an effort to improve product quality. A conference call on April 17 included representatives from the two local land-based processors; communities of Chignik Bay, Perryville, Chignik Lagoon, and Chignik Lake; inside and outside Lagoon fishermen; board members of the Chignik Seiners Association; and the Department. Many agreed in concept to: 1) allow fishing to the Mensis markers in the Lagoon when biologically feasible, 2) keep current interim escapement goals, 3) shorten daily openings from a 24 hour period to 16 hours or less, to encourage better quality harvesting and a more consistent distribution of escapement, 4) have openings in the Lagoon coincide, in a yet to be determined way, with high tide.

However, throughout this discussion it was less clear how to implement the shorter daily fishing periods in fisheries in outside districts. Further discussion is necessary with those fishermen that would be affected.

To implement a management strategy that may have some negative consequences, the Department would need consensus from local processors the, Chignik Seiners Association, and the Chignik Board of Fish Advisory Committee.

SOCKEYE SALMON

1996 Sockeye Salmon Forecast

The 1996 total forecasted return for the CMA is 3.0 million sockeye salmon for the two runs that originate from the Chignik River system. The early run returns to Black Lake and the late run returns to Chignik Lake. The total projected commercial common property harvest for both runs is 2.35 million sockeye salmon of which approximately 1.8 million sockeye salmon are expected to be caught in the CMA.

Black Lake (Early Run) Forecast

The total early run is projected to be 1.4 million sockeye salmon. The early run escapement goal is 400,000 sockeye salmon with a forecasted commercial common property harvest of 1.0 million sockeye salmon. Approximately 0.79 million sockeye salmon of the early run are expected to be

harvested in the CMA. The remaining early run sockeye salmon may potentially be harvested in either the Cape Igvak Section of the Kodiak Management Area (KMA), or the Southeastern District Mainland of the Alaska Peninsula Management Area (AMA).

Chignik Lake (Late Run) Forecast

The late run return is expected to be larger than the early run, and is forecasted at 1.60 million sockeye salmon. The escapement goal for the late run is 250,000 sockeye salmon which could allow a commercial common property harvest of approximately 1.35 million sockeye salmon. Approximately 1.1 million of those salmon are expected to be harvested in the CMA.

First Fishing Period

The first commercial fishing period can occur by regulation on June 1. However, since 1982 the first fishery usually occurs after June 11. Prior to the first commercial salmon fishing period, the following requirements must be met 1) a minimum escapement of 40,000 sockeye salmon through the weir by June 12, 2) a strong buildup of salmon in Chignik Lagoon as indicated by ADF&G test fishing program. Additional openings will be determined from several factors, including, commercial catches, test fishing results and escapement counts (Table 1).

The June and Early July Fishery

During June, commercial fishing will be allowed only in the Chignik Bay, Central, and Eastern Districts. Commercial salmon fishing, as outlined by the Eastern District Management Plan (5AAC 15.360, Appendix A), will open and close simultaneously in the Eastern, Chignik Bay, and Central Districts. During late June and early July, the Eastern District may close if the run strength of the late run (the Chignik Lake run) cannot be determined. After July 15, the Eastern District will be managed on sockeye salmon run strength as well as that of local pink and chum salmon. If it is determined that stocks being harvested within the Eastern District are not primarily Chignik stocks, the fishery in this district will be closed by emergency order as directed by the Board of Fisheries in the Eastern District Management Plan.

Run timing and strength of the Chignik River runs (Black Lake: Early Run and Chignik Lake: Late Run) will directly affect commercial fishing time in the Eastern, Western, and Perryville Districts. If the early sockeye salmon run into Black Lake is weaker than forecasted, and the 400,000 salmon escapement goal through the Chignik River weir is not achieved, then the early July openings in all waters where sockeye salmon could be harvested may be reduced. Commercial fishing openings during the transition period between the two sockeye salmon runs (June 26 to July 9) will also be closely monitored to evaluate the Chignik Lake run strength and assure the 250,000 salmon escapement goal.

Igvak and Southeastern District Mainland Management Plans

The fisheries in the Cape Igvak Section of the KMA and the Southeastern District Fishery of the AMA harvest Chignik bound sockeye salmon. The Cape Igvak Salmon Management Plan (5ACC 18.360; Appendix B) and the Southeastern District Mainland Salmon Management Plan (5ACC 09.360; Appendix C), as adopted by the Board of Fisheries, will be used to manage these fisheries.

September Clark River and Home Creek Subsistence Issues

The late fall subsistence fishery in Home Creek and Clark River areas was addressed in February, 1994. The Board of Fisheries directed the Department, industry, and subsistence users to devise a workable plan that addressed the availability of late season sockeye for subsistence use.

To determine the sockeye salmon escapement time period critical to subsistence use, the Department conducted a literature search regarding stream life for sockeye salmon in Home Creek and Clark River. The best estimate came from a tagging program (Dahlberg, 1966) which indicated that the average stream life for sockeye salmon in Home Creek and Clark River is 49 days. With this study in mind, general consensus was that curtailment of the fishery after September 15 would provide for subsistence needs in late fall/early winter. Therefore, if the subsistence users are concerned about the availability of late season sockeye salmon, then the Department will curtail the commercial salmon fishing periods to a maximum of a 48 hours per week. These fishing periods could be scheduled over twelve hours for four days per week, two 24-hour periods, or one 48-hour period from September 15 to the end of the regulatory season. If the latter part of the late run is extremely weak, fishing could be curtailed or reduced from the 48-hour schedule.

CHINOOK SALMON

The Chignik River System's chinook salmon minimum escapement goal above the subsistence and sport fishing removals is 1,450 spawners. If escapement in early July is weak and escapement goals are not likely to be met, the Hume's point markers may be used to encourage escapement.

PINK AND CHUM SALMON

Pink Salmon Forecast

The 1996 projected pink salmon commercial common property harvest is 1.30 million salmon. The pink salmon forecast for the Western/Perryville Districts is computed by multiplying the average recruit per spawner for the previous ten years by the parent year escapement. The largest pink catches should come from the Western/Perryville Districts and could account for 70% of the projected total harvest. For the Central/Eastern Districts the projection is based on the average

run size for the previous ten years. Unstable stream conditions in these districts have resulted in poor returns from excellent parent year escapements.

Chum Salmon Forecast

The projected chum salmon commercial common property harvest for the CMA is 230,000. The chum salmon forecast is based on the average of the run size since 1980. The Western/Perryville Districts should experience the largest proportion of the catch.

Criteria For Pink Salmon and Chum Salmon Openings and Closures

Aerial surveys will be conducted to monitor pink and chum salmon escapements. If interim escapement goals are met, openings are possible and where feasible, a 24 hour notice will be given prior to any commercial fishery opening. Openings and closures will be announced by a broadcast over single side band radio frequency 4.125 MHz and VHF radio channel 6.

First Openings For Pink and Chum Salmon In The Western and Perryville Districts

The first pink and chum salmon openings in the Western and Perryville Districts are tentatively scheduled for July 6. In the Eastern District, commercial salmon fishing must close on July 15 pending evaluation of the pink and chum salmon run strengths (5ACC 15.360).

Processors within the CMA primarily freeze fish for the higher quality fresh frozen market. Subsequently, greater demands are placed on ADF&G management activity to harvest fish in optimum condition. Management strategies will be adjusted to harvest fish as they migrate to their natal streams, such as increasing fishing effort early in the run, if a harvestable surplus is available.

COHO SALMON

If escapement goals are achieved for the late sockeye salmon run to Chignik Lake, fisheries for coho salmon will begin in mid-August and continue through September. The coho salmon commercial common property harvest in 1996 is projected to be 210,000 salmon. The average coho salmon harvest from 1986-95 was 206,089. The majority of the 1996 coho salmon harvest will come from the Chignik Bay District. Management in smaller systems, particularly in the Eastern District, will remain conservative to prevent overharvest.

TENDER AND PROCESSOR REPORTING REQUIREMENTS

Alaska Commercial Fishing Regulation 5 AAC 15.355 states:

The operator of a floating salmon processing vessel or tender, or a shorebased processing operation, and a company employing aircraft used for transporting salmon, shall report in person, or by radio or telephone, to a local representative of the department located in the management area of intended operation before the start of processing or buying operations. The report must include the location and the date of intended operation, and identify and describe each vessel or other method of transport employed in hauling or processing salmon.

Further, processors and tender operators will be required to report daily catch information to ADF&G. This can be accomplished either by radio (SSB) or telephone. The Chignik ADF&G office will stand by on SSB 4.125 MHz and VHF channel 6, from 8 to 10 a.m., and 8 to 10 p.m. hours. The call sign for Chignik is KGB 76 "Chignik Weir", and the telephone number is 845-2243. If people are unable to contact ADF&G Chignik, their catch information should be given to ADF&G Cold Bay (532-2419) or Kodiak (486-1830) via telephone or single side band radio. The call signs for Kodiak and Cold Bay are WHM 29 and WHW 906, respectively. **Failure to report is a violation of commercial fishing regulations (5 AAC 27.590 (2)). Vigorous enforcement of this regulation should be expected.**

Individual code sheets will be given to each tender/processor for the purpose of reporting catch and statistical area of catch.

Table 1. Chignik River system sockeye salmon escapement goals for Black lake (early) and Chignik Lake (late runs), by time period.

The numbers of fish presented in the escapement tables below were derived from averages over several years of escapements of various timing and magnitude. It should be noted that daily escapement levels will fluctuate considerably throughout the run. The tables listed serve only as a guide for achieving the total escapement for each run. In-season variations from the figures listed may be due to variations in actual run timing and/or strength of the run.

DATE	EARLY RUN - 400,000 ESCAPEMENT
JUNE 12	40,000
JUNE 14	50 - 65,000
JUNE 16	75 - 100,000
JUNE 18	125 - 150,000
JUNE 20	175 - 200,000
JUNE 22	225 - 250,000
JUNE 25	275 - 325,000
JUNE 30	350 - 400,000

DATE	LATE RUN - 250,000 ESCAPEMENT	
	EARLY ESCAPEMENT IS ACHIEVED	EARLY ESCAPEMENT IS NOT ACHIEVED
JULY 6	-	40,000
JULY 8	-	45 - 50,000
JULY 10	40,000	55 - 65,000
JULY 12	50 - 60,000	70 - 75,000
JULY 14	65 - 75,000	75 - 80,000
JULY 16	80 - 90,000	80 - 90,000
JULY 19	100 - 115,000	100 - 115,000
JULY 21	125 - 135,000	125 - 135,000
JULY 23	145 - 160,000	150 - 160,000
JULY 26	170 - 180,000	170 - 180,000
JULY 29	185 - 195,000	190 - 195,000
JULY 31	195 - 200,000	195 - 200,000

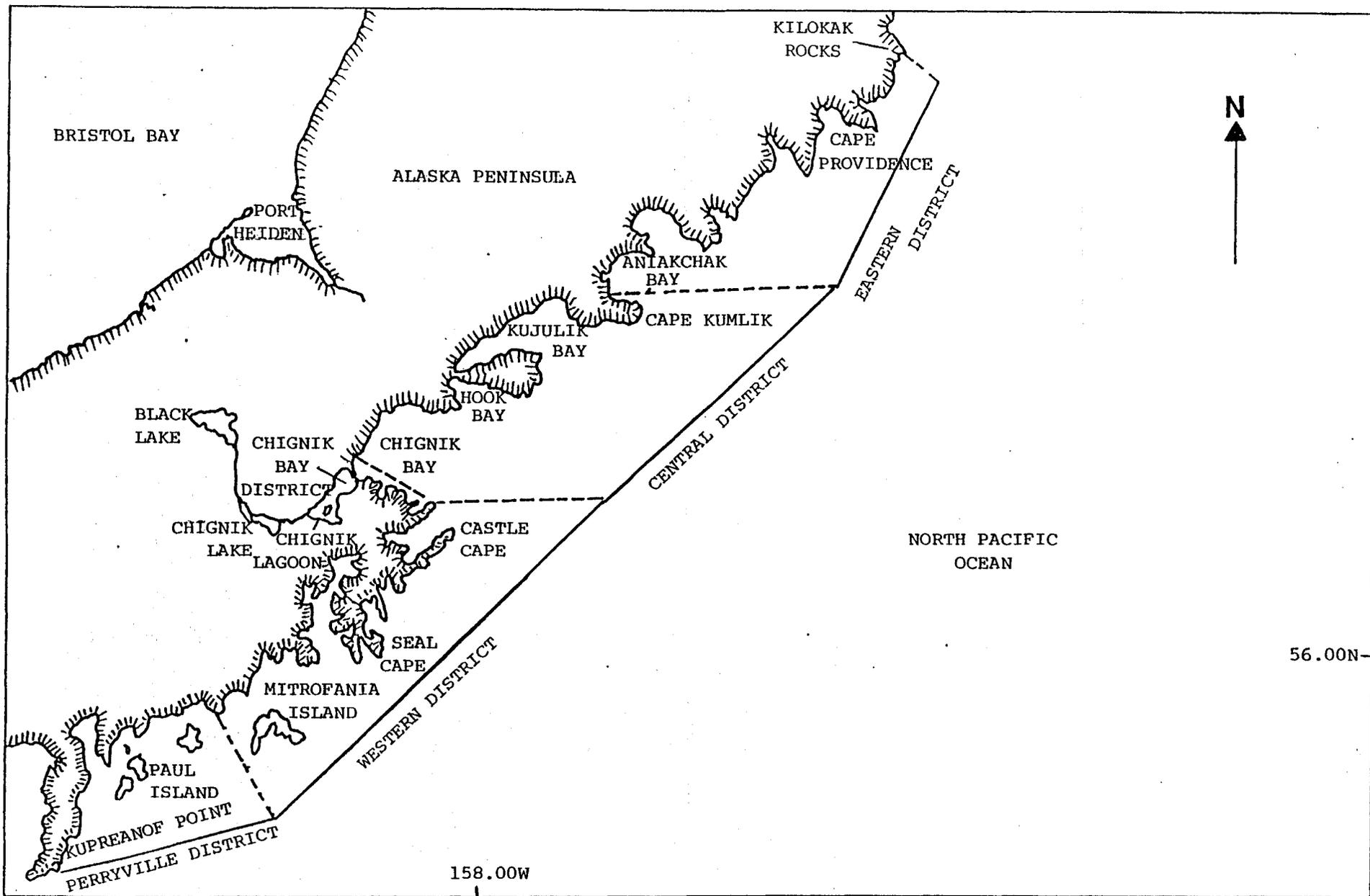


Figure 1. Map of the Chignik Management Area illustrating district boundaries, 1996.

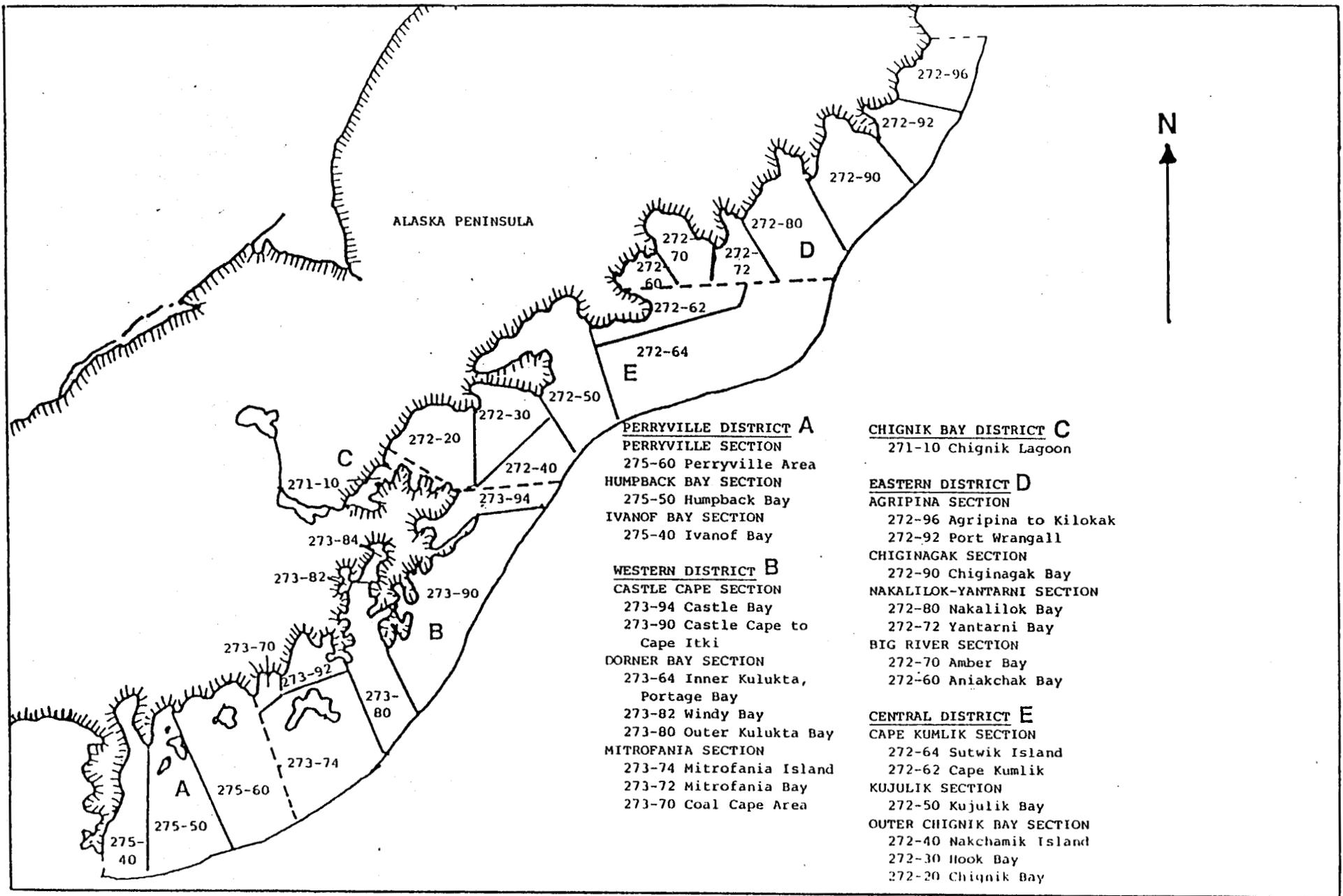


Figure 2. Map of the Chignik Management Area illustrating statistical areas, 1996.

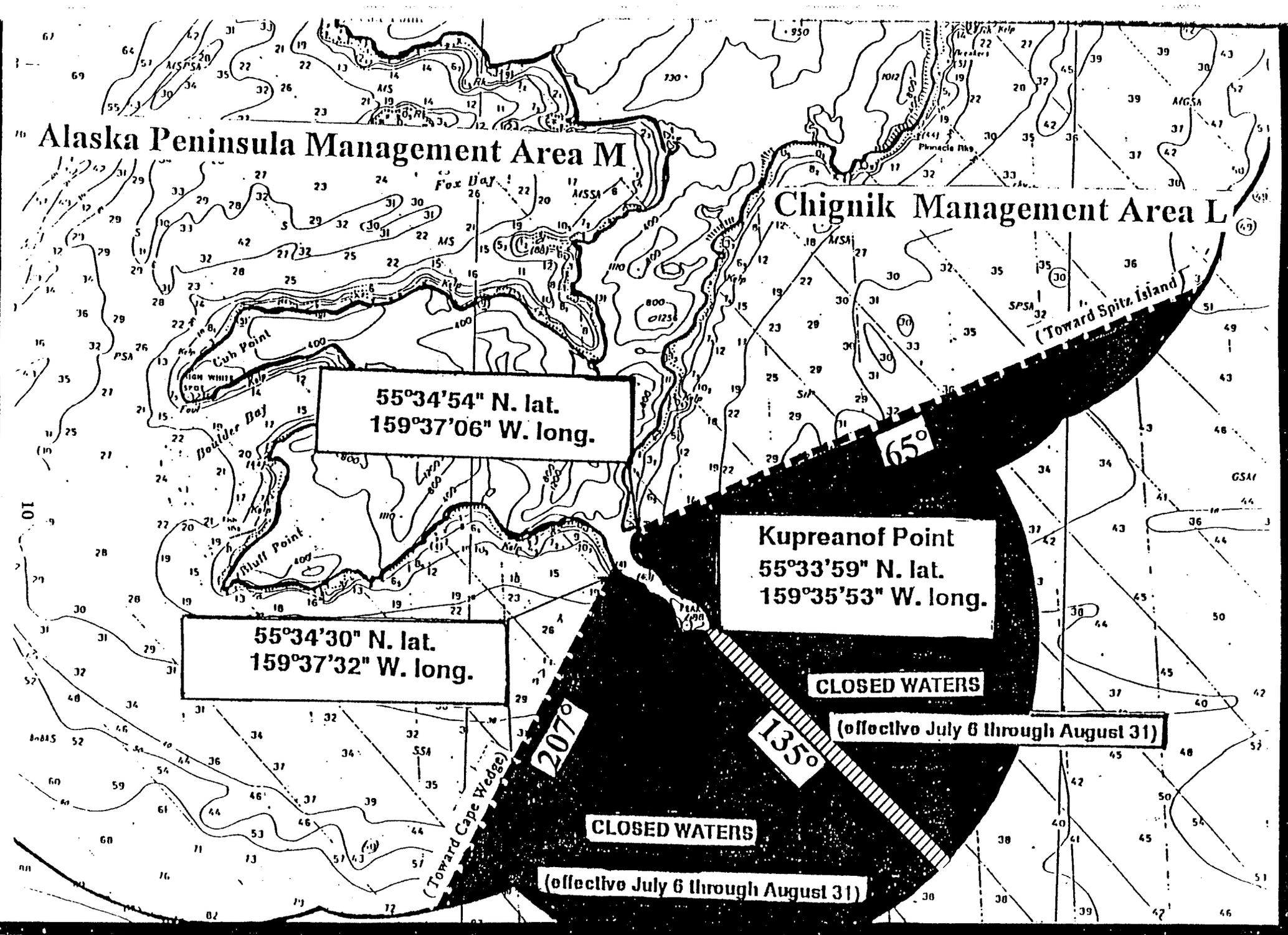


Figure 3. Map of the closed waters in the Chignik and Southeastern District Mainland Management Areas at Kupreanof Point.

APPENDIX

Appendix A. 5 AAC 15.360. Eastern District Salmon Management Plan, 1996.

(a)The department shall open and close the Eastern District for commercial salmon fishing concurrently with the Chignik Bay and Central Districts. The department may close the Eastern District for the period between the first (Black Lake) and second (Chignik Lake) sockeye salmon runs.

(b)The department shall close the Eastern District on July 15 to evaluate run strength of the pink and chum salmon runs.

(c)The department shall close the Eastern District if it is determined that the salmon being harvested in that district are from stocks not originating from spawning areas located in the Chignik Management Area.

Appendix B. Management guide for the Cape Igvak fishery, 1996.

05 AAC 018.0360 CAPE IGVAK SALMON MANAGEMENT PLAN.

(a) In years when a harvestable surplus beyond escapement goals for the first (Black Lake) and second (Chignik Lake) runs of Chignik River system sockeye salmon is expected to be less than 600,000, there will be no commercial salmon fishery allowed in the Cape Igvak Section, as described in 5 AAC 18.200(g)(8), until a harvest of 300,000 sockeye salmon in the Chignik Area, as described in 5 AAC 15.100, is achieved. After July 8, after at least 300,000 sockeye salmon have been harvested in the Chignik Area, and if escapement goals are being met, the department shall manage the fishery so that the number of sockeye salmon harvested in the Chignik Area will be at least 600,000 and the harvest in the Cape Igvak Section will approach as near as possible 15 percent of the total Chignik sockeye salmon catch.

(b) In years when a harvestable surplus beyond escapement goals for the first and second runs of Chignik River system sockeye salmon is expected to be more than 600,000, but the first run fails to develop as predicted and it is determined that a total sockeye salmon harvest in the Chignik Area of 600,000 or more may not be achieved, the Cape Igvak Section commercial salmon fishery will be curtailed in order to allow at least a minimum harvest in the Chignik Area of 300,000 sockeye salmon by July 9 if that number of fish are determined to be surplus to the escapement goals of the Chignik River system. After July 8, after at least 300,000 sockeye salmon have been harvested in the Chignik Area, and if escapement goals are being met, the department shall manage the fishery so that the number of sockeye salmon harvested in the Chignik Area will be at least 600,000 and the harvest in the Cape Igvak Section will approach as near as possible 15 percent of the total Chignik sockeye salmon catch.

(c) On years when a harvestable surplus beyond the escapement goals for the first and second runs of Chignik River system sockeye salmon is expected to be more than 600,000 and the department determines the runs are as strong as expected, the department will manage the fishery in such a manner whereby the number of sockeye salmon taken in the Cape Section will approach as near as possible 15 percent of the total Chignik sockeye salmon catch.

(d) The total Chignik sockeye salmon catch constitutes those sockeye salmon caught within the Chignik Area plus 80 percent of the sockeye salmon caught in the East Stepovak, Southwest Stepovak, Stepovak Flats, Balboa Bay, and Beaver Bay Sections, as described in (f), plus 80 percent of the sockeye salmon caught in the Cape Igvak Section. The harvest in the Cape Igvak Section at any time before July 25 may be permitted to fluctuate above or below 15 percent of the cumulative Chignik sockeye salmon catch.

(e) This allocation method will be in effect through July 25. The first fishing period of the commercial salmon fishing season in the Cape Igvak Section will not occur before the first fishing period of the commercial salmon fishing season in the Chignik Area. After July 25, commercial salmon fishing in the Cape Igvak Section may be allowed on the local Kodiak Area stocks.

(f) During the period from approximately June 26 to July 9, the strength of the second run of Chignik River system sockeye salmon cannot be evaluated. In order to prevent over-harvest of the second run, commercial salmon fishing in the Cape Igvak Section will, in the department's discretion, be disallowed or severely restricted during this period.

(g) The department shall announce commercial salmon fishing periods by emergency order. The department shall give at least one-day notice prior to the opening of a commercial salmon fishing period unless it is an extension of a fishing period in progress.

Appendix C.

SOUTHEASTERN DISTRICT MAINLAND (ALASKA PENINSULA AREA
SALMON MANAGEMENT PLAN, 1996

By

Rodney D. Campbell

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

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INTRODUCTION

The Southeastern District Mainland (SEDM) fishery of Area "M" is located on the south side of the Alaska Peninsula (Figure 1). Included in this fishery are the Beaver Bay, Balboa Bay, Southwest Stepovak, Northwest Stepovak, East Stepovak, and Stepovak Flats Sections (Figure 2). Under a management plan established by the Alaska Board of Fisheries (BOF) in 1991, and most recently revised in 1996 (Appendix A), the fishery is allocated six percent of the total Chignik bound sockeye salmon harvest through July 25. The present plan to regulate the SEDM fishery is based on the Cape Igvak Salmon Management Plan, in the Kodiak Management Area (KMA), which the BOF instituted in 1978. After July 25, the SEDM is managed for local stocks.

MANAGEMENT PLAN

BOF Changes for the 1996 Season

The SEDM fishery (Figures 1 and 2) will be managed according to the SEDM Management Plan (Appendix A). During the January 1996 meeting the BOF made the following changes to the SEDM management plan:

1. The area to be managed for local Orzinski Lake sockeye salmon was increased from only Orzinski Bay to the entire Northwest Stepovak Section (Figures 3 and 4). Prior to July 1, the entire Northwest Stepovak Section will be managed on an allocation based on the strength of the Chignik sockeye salmon runs 5AAC 09.360(a)(1) and (b)-(h). Beginning July 1, the Northwest Stepovak Section will be managed entirely on local stocks. The Stepovak Flats Section will continue to be managed for chum salmon returning to Stepovak Flats streams throughout the entire season (Figure 5).
2. The percentage of sockeye salmon allocated to the SEDM fishery was decreased by the BOF from 7% to 6% of the total Chignik bound sockeye harvest through July 25. This BOF action was taken to maintain traditional harvest levels of Chignik bound sockeye in the SEDM fishery and to compensate for the increased area managed for local Orzinski Lake sockeye salmon.
3. The BOF established a closed waters area encompassing Kupreanof Point (55°33'59" N. lat., 159°35'53" W. long.) 5AAC 09.350 (38) from July 6 through August 31 (Figure 6).

Chignik Sockeye Salmon Forecast and SEDM Allocation

The forecasted midpoint harvest for the Chignik sockeye salmon runs for 1996 are 1,000,000 salmon for the early run and 1,350,000 salmon for the second run (Appendix B). Historically, about 80% of the Chignik bound sockeye harvest for the entire season occurs through July 25. Therefore, if the runs come in as expected and the goals of the management plan are achieved, about 112,800 estimated Chignik destined sockeye salmon will be harvested in the SEDM area through July 25

(2.35 million, total estimated Chignik sockeye harvest for the entire 1996 season, x 0.80, average % caught through July 25, x 0.06, SEDM percent, equals 112,800 sockeye). The 1996 estimated harvest of about 112,800 Chignik destined sockeye in the SEDM, through July 25, is slightly larger than both the most recent 10 and 20 year averages of 102,305 and 106,265 respectively (Table 1).

The total Chignik sockeye salmon catch is 100% of those sockeye salmon caught within the Chignik Management Area (CMA), 80% of those sockeye salmon caught in the Cape Igvak Section of the KMA, through July 25, and 80% of those sockeye salmon caught in the SEDM fishery through July 25, excluding 100% of those sockeye salmon caught in the Northwest Stepovak Section from July 1 through July 25.

Harvest Scenarios

Because the harvestable surplus in Chignik is expected to exceed 600,000 sockeye salmon, the SEDM fishery may open when the fishery opens in the CMA. Based on the 1,000,000 sockeye salmon early run harvest forecast, it is possible that the first opening for the SEDM fishery could be in early to mid-June.

If the first run fails to develop as expected, the SEDM fishery will be curtailed in order to allow a minimum harvest in the CMA of at least 300,000 sockeye salmon through July 8, if that many salmon are surplus to escapement requirements.

During the period from about June 26 through July 9, the strength of the second run of Chignik River sockeye salmon cannot be evaluated. To prevent over-harvest of the second run, the Alaska Department of Fish and Game (ADF&G) may close or restrict commercial salmon fishing in the SEDM during this period.

After July 8, fishing time in the SEDM fishery will be dependent upon the strength of the second run as evaluated at Chignik and on the catch of Chignik bound sockeye during the first run at Cape Igvak, Chignik, and the SEDM fisheries. When the second run escapement goals are being met and the second run appears strong enough for a fishery at Chignik, the SEDM may open to commercial salmon fishing if at least 300,000 combined first and second run sockeye salmon were harvested in the CMA. ADF&G will manage the fishery so that the number of sockeye salmon harvested in the CMA from both runs combined will be at least 600,000 salmon and the harvest in the SEDM will approach as near as possible 6.0% of the total Chignik bound sockeye salmon catch (Appendix C), if that many sockeye salmon are surplus to escapement requirements.

Harvest Goals

The SEDM fishery will be managed according to the plan as stated in the 1996-1997 Alaska Peninsula commercial salmon fishing regulation book (ADF&G 1996; Appendix A). No attempt will be made to allow equal fishing time with Chignik, as had been done from 1974 through 1977, but rather the goal will be to meet the 6.0% allocation level after the conditions of the management plan have been satisfied. An interim management goal of 6.0% at midnight July 10 will also be attempted after the conditions of the management plan have been satisfied. The interim management

goal of 6.0% at midnight July 10 is desirable to achieve historical harvest levels between set gillnet and purse seine fishers; purse seine gear is legal in the fishery beginning July 11. To meet the goal of 6.0% by July 11 and July 25, the percentage may fluctuate above or below 6.0% prior to July 11 and July 25. Because of the restrictions placed upon the SEDM fishery to protect the Chignik runs, it may not be possible to achieve a 6.0% allocation level, even though escapement goals are met and the minimum catch level of 600,000 salmon at Chignik is exceeded.

Fishing Periods

The SEDM fishery is regulated independently of other fisheries occurring in the Alaska Peninsula Management Area. However, ADF&G will attempt to have fishing periods in the Northwest Stepovak and Stepovak Flats Sections concurrent with fishing periods in the remainder of the SEDM area to avoid concentrating fishing gear. All fishing periods will be announced by emergency orders. At least 36 hours notice will be given prior to the first commercial fishing period. At least 24 hours notice will be given prior to the opening of any other fishing period, unless it extends the current fishing period.

Dent Point

There has been confusion for several years concerning the definition of Dent Point. The Alaska Board of Fisheries approved definition of Dent Point is 55° 47'15" N. lat., 159° 52'00" W. long. which is based on the 1983 datum chart. This definition of Dent Point will be used as: (1) the boundary between the Northwest Stepovak and Stepovak Flats Sections; (2) as one of the closed waters points for Stepovak Bay when the head of Stepovak Bay is closed after July 29; and (3) whenever an ADF&G reference is made regarding Dent Point (Figure 5).

Legal Gear Types

In the SEDM area, set gillnet gear is the only legal gear type allowed through midnight July 10. Beginning July 11, set gillnet, purse seine, and hand purse seine gear types are allowed.

LOCAL STOCKS

Northwest Stepovak Section

The Northwest Stepovak Section will be managed on the basis of the Orzinski Lake sockeye salmon stock from July 1 through July 25, and after July 25 on local salmon runs.

Based on aerial surveys and weir counts, sockeye salmon escapement requirements for Orzinski Lake by time periods have been developed (Table 2). The sockeye escapement goal for Orzinski Lake is 20,000 adult salmon. In 1995, the total estimated sockeye escapement was 30,000 salmon. ADF&G intends to operate a weir on the Orzinski system in 1996.

A weir was used to count escapements into the lake from 1935 to 1941, and in 1990-95. The earliest recorded sockeye escapement through the weir occurred on June 11, 1940 (11 salmon). Sockeye salmon usually enter the lake about mid to late June, and normally by the second week of July 50% of the annual escapement goal has been achieved. By the end of July or the first week of August about 99% of the escapement goal of 20,000 sockeye salmon has occurred.

After July 25, fishing time will be based on local sockeye, pink, chum, and coho salmon stocks. If the sockeye salmon escapement goals into Orzinski Lake are not met, the Northwest Stepovak Section will be closed, until management of the area shifts to pink salmon.

Stepovak Flats Section

Commercial salmon fishing in the Stepovak Flats Section is managed for chum salmon returning to local Stepovak Flats streams. Through July 25, eighty percent of the sockeye harvested in this section are considered Chignik destined fish and included in the 6.0% allocation criteria stated in the SEDM management plan. After July 28, the entire Stepovak Flats Section is closed to commercial salmon fishing to protect schooling chum salmon (5 AAC 09.350(23)).

After July 25, the entire SEDM area will be managed on the basis of local stocks (sockeye, pink, chum, and coho salmon)

LITERATURE CITED

ADF&G (Alaska Department of Fish and Game). 1996. 1996-1997 Alaska Peninsula, Atka-Amlia, Aleutian Islands, and Bristol Bay commercial fishing regulations salmon and miscellaneous finfish, 1996 edition. Alaska Department of Fish and Game, Commercial Fisheries Management and Development Division, Juneau.

McCullough, J.N., A.R. Shaul, R.D. Campbell and R.S. Berceci. 1995. South Peninsula Annual Salmon Management Report, 1994. Alaska Department of Fish and Game, Commercial Fisheries Management and Development Division, Regional Information Report 4K95-46, Kodiak.

Table 1. Southeastern District Mainland fishery catch of Chignik destined sockeye salmon through July 25, 1983-95.

Year	Total Catch	Northwest Stepovak ^a	Total Catch Minus Northwest Stepovak	Chignik Bound Catch ^b
1983	300,158	15,918	284,240	227,392
1984	595,043	66,209	528,834	423,067
1985	80,957	16,681	64,276	51,421
1986	206,532	59,025	147,507	118,006
1987	244,895	61,287	183,608	146,886
1988	81,160	57,010	24,150	19,320
1989	89,224	83,618	5,606	4,484
1990	164,028	3,279	160,749	128,599
1991	289,727	98,834	190,893	152,714
1992	215,444	98,138	117,306	93,845
1993	210,927	50,257	160,670	128,536
1994	221,657	43,719	177,938	142,350
1995	159,381	49,004	110,377	88,302
Average:				
1991-95	219,427	67,990	151,437	121,149
1986-95	188,298	60,417	127,880	102,304

^a From 1970-91, the Northwest Stepovak Section figures include the harvest from the entire Northwest Stepovak Section. In 1992, 1993, 1994 and 1995 the figures include only the Orzinski Bay harvest.

^b From 1970-91, the Chignik contribution is 80% of the sockeye salmon harvested in Beaver Bay, Balboa Bay, Southwest Stepovak, Stepovak Flats, and East Stepovak Sections. In 1992, 1993, 1994 and 1995, the Chignik contribution is 80% of the sockeye salmon harvested in the Southeastern District Mainland fishery except Orzinski Bay where 100% of the sockeye salmon are considered local production.

Table 2. Sockeye salmon adult escapement requirements for Orzinski Lake.

Time Period	Cumulative Escapement Goal
June 15	0
July 1	2,000
July 9	5,000
July 16	10,000
July 23	15,000
August 7	20,000
Season Total	20,000

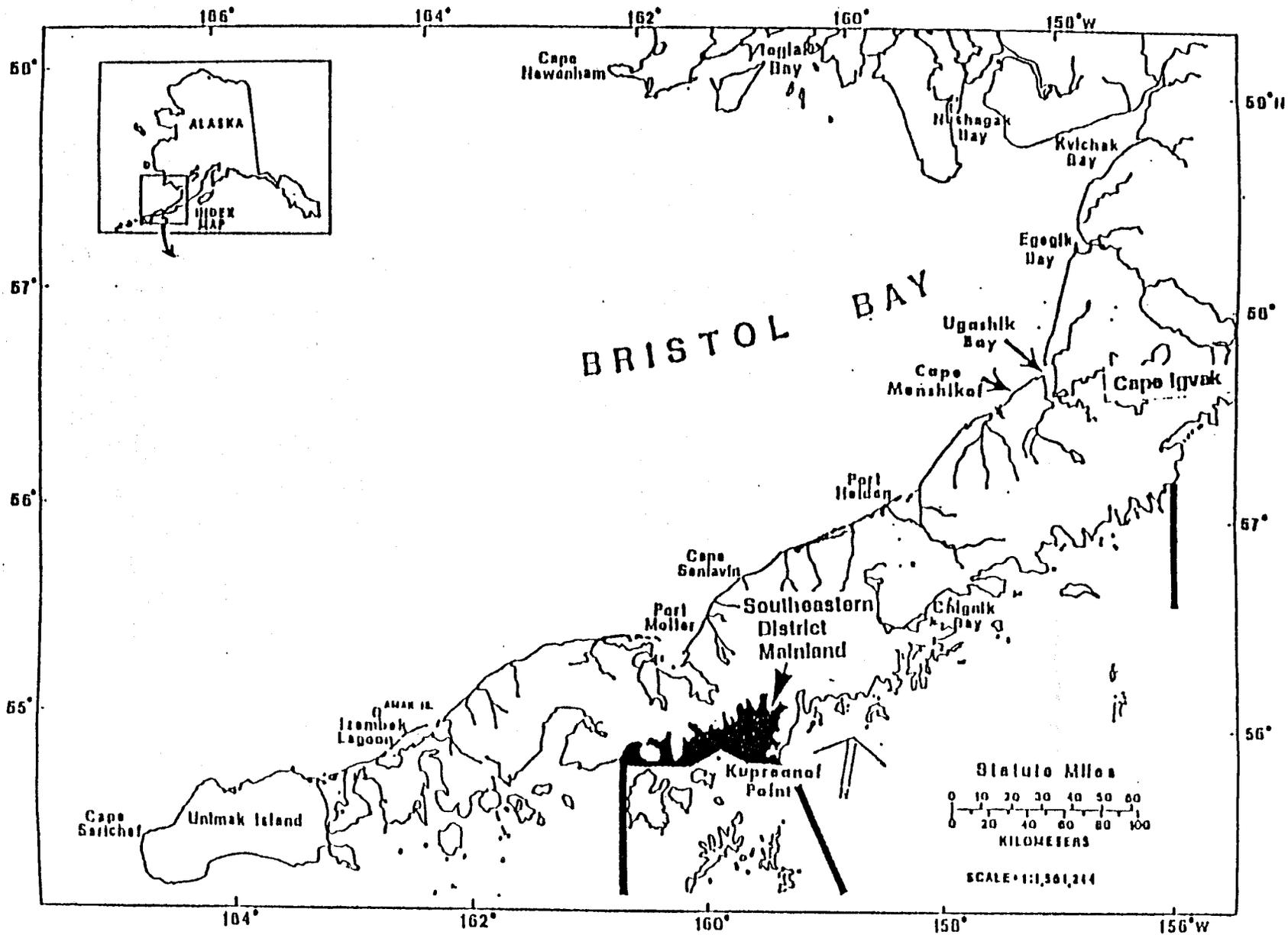


Figure 1. Map of the Alaska Peninsula Management Area with the Southeastern District Mainland area defined.

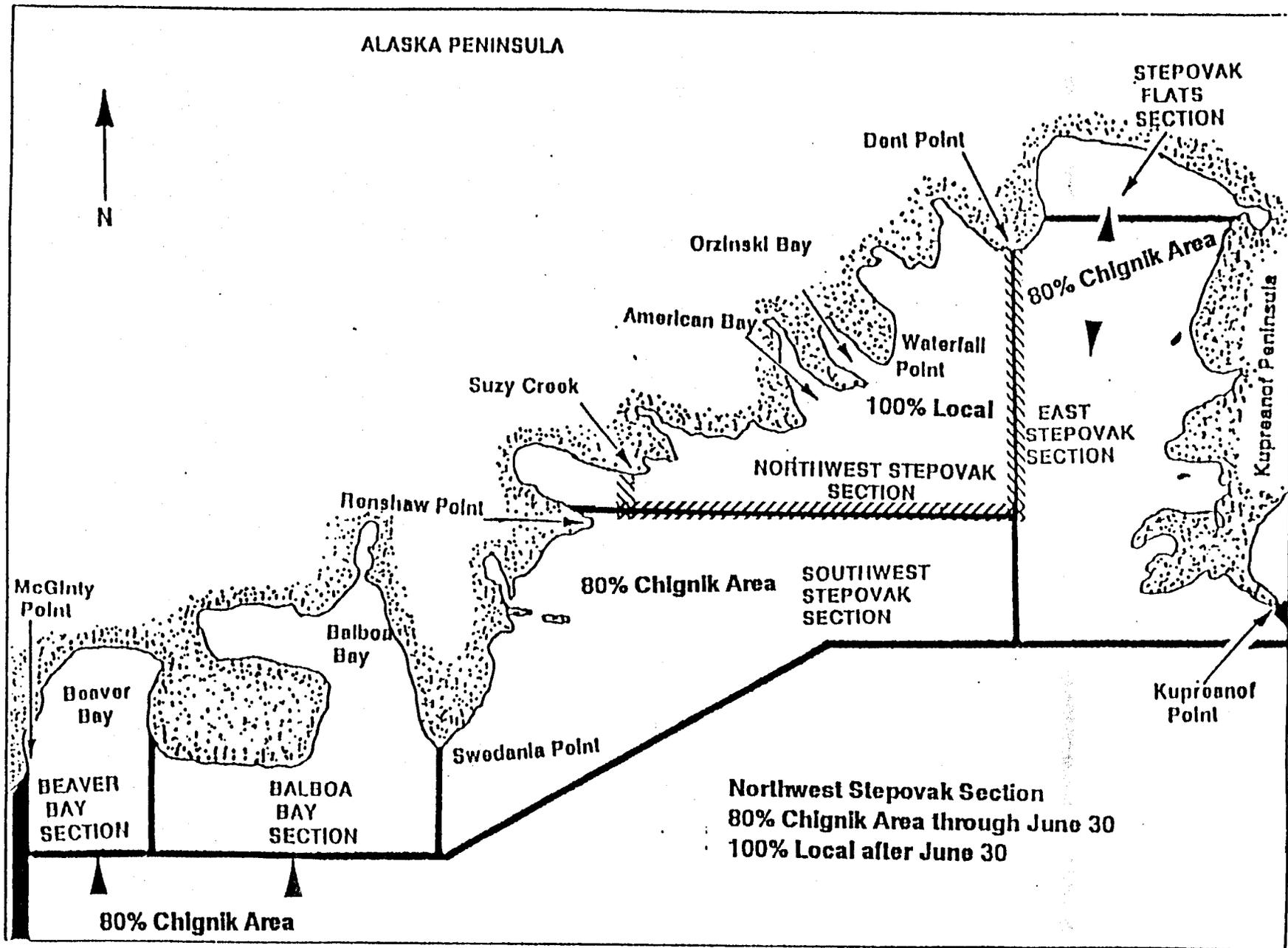


Figure 2. Map of the Southeastern District Mainland Fishery from Kupreanof Point to McGinty Point with the salmon sections defined.

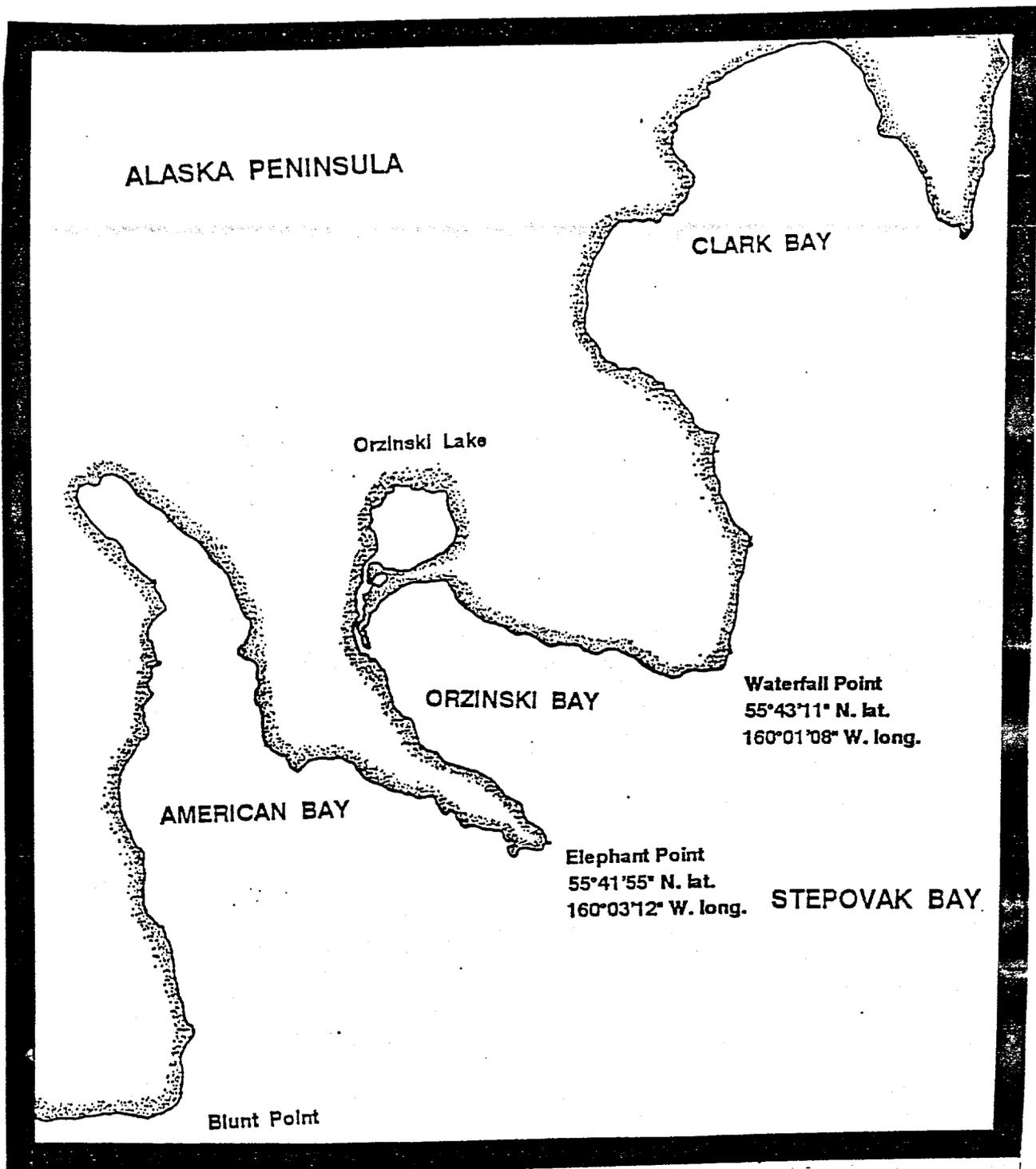


Figure 3. Map of Orzinski Bay with Elephant and Waterfall Points defined.

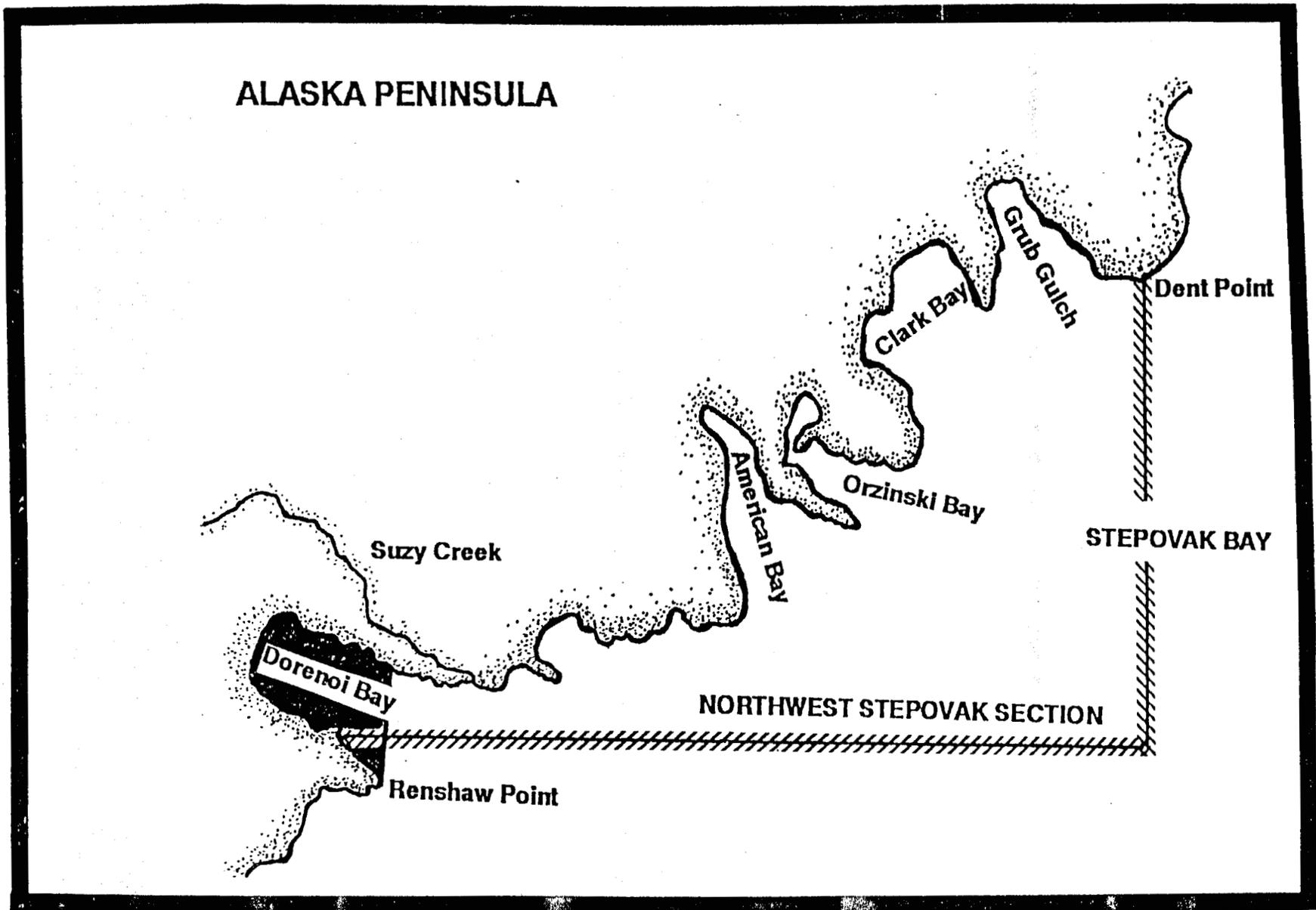


Figure 4. Map of the Northwest Stepovak Section.

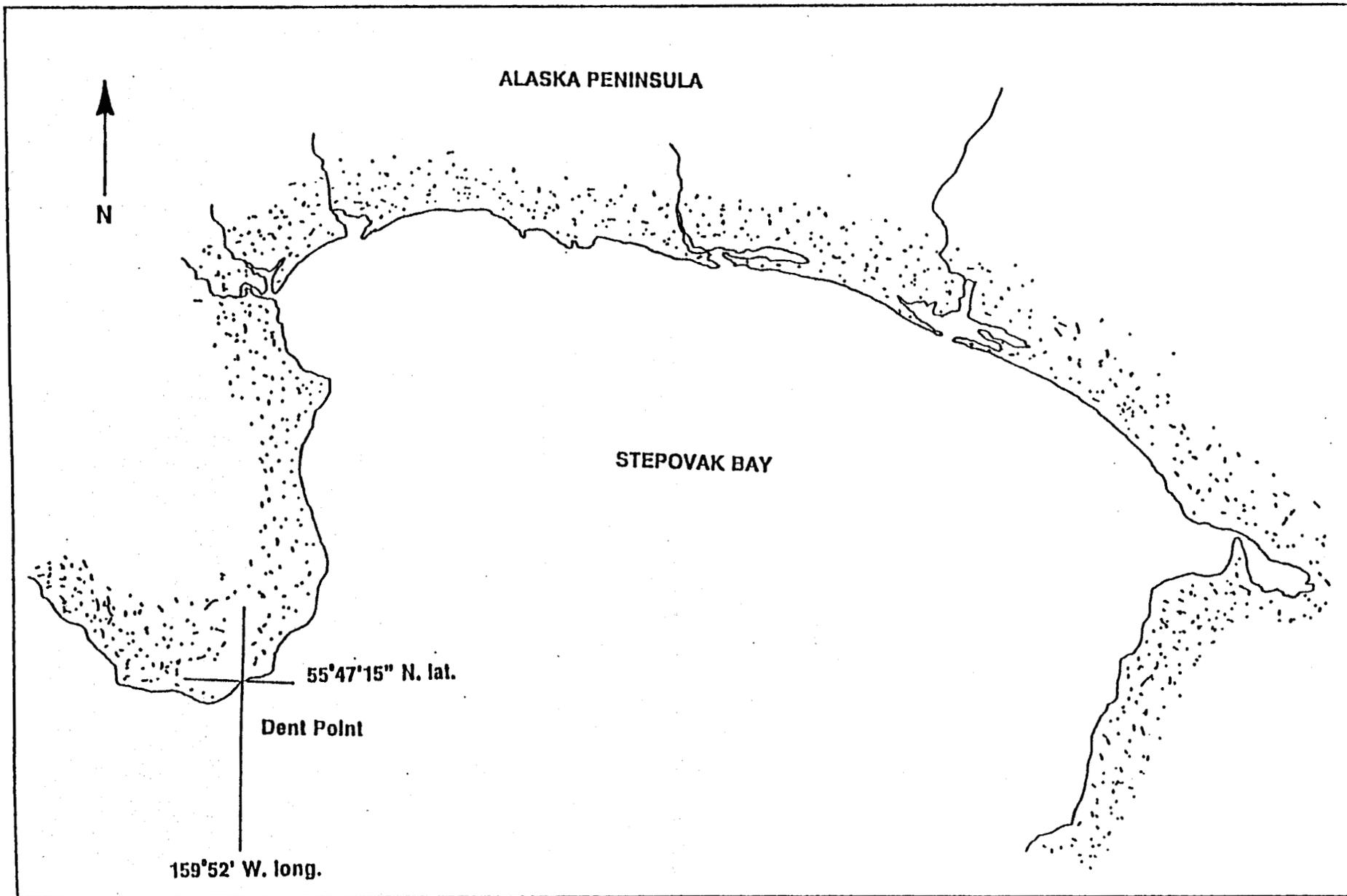


Figure 5. Map of Stepovak Bay with Dent Point defined.

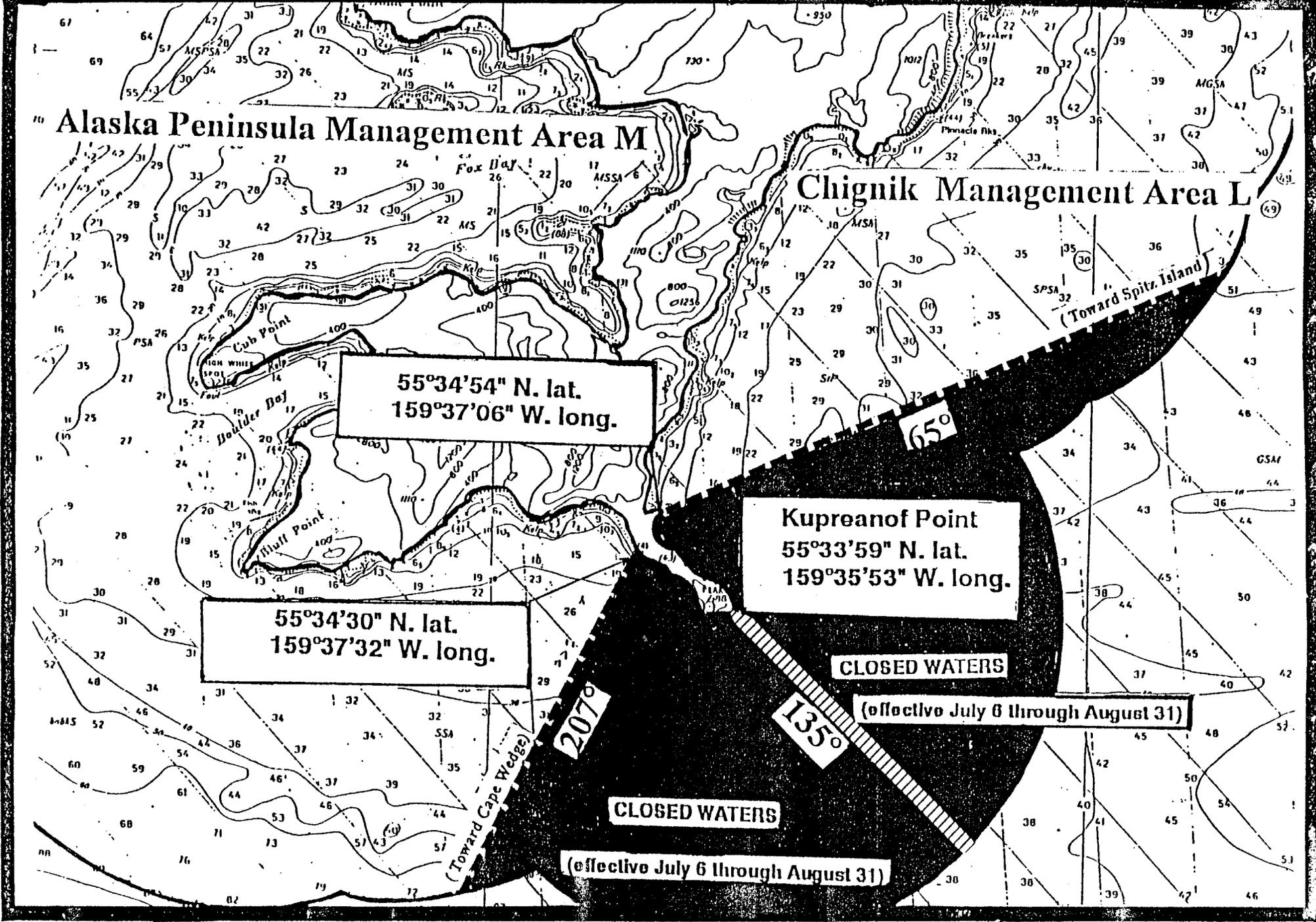


Figure 6. Map of Kupreanof Point area with closed waters defined.

APPENDIX

APPENDIX A: SOUTHEASTERN DISTRICT MAINLAND SALMON MANAGEMENT PLAN

5 AAC 09.360. SOUTHEASTERN DISTRICT MAINLAND SALMON MANAGEMENT PLAN

(a) This plan pertains to the management of the interception of Chignik River sockeye salmon caught in the Southeastern District Mainland fishery: East Stepovak, Stepovak Flats, Northwest Stepovak, Southwest Stepovak, Balboa Bay, and Beaver Bay Sections. Before July 11, only set gill net gear may be used in these sections. For the purpose of this plan, local runs include only those salmon in the waters:

- 1) beginning July 1, in the Northwest Stepovak Section described 5AAC 09.200(f):
- 2) the Stepovak Flats Section as described in 5 AAC 09.200(f).

(b) In years when a harvestable surplus for the first (Black Lake) and second (Chignik Lake) runs of Chignik River system sockeye salmon is expected to be less than 600,000, no commercial salmon fishery is allowed in the East Stepovak, Southwest Stepovak, Balboa Bay, and Beaver Bay Sections, and before July 1 in the Northwest Stepovak Section, as described in 5 AAC 09.200(f), until a harvest of 300,000 sockeye salmon in the Chignik Area, as described in 5 AAC 15.100, is achieved. After July 8, if at least 300,000 sockeye salmon have been harvested in the Chignik Area, and if escapement goals are being met, the department shall manage the fishery so that the number of sockeye salmon harvested in the Chignik Area will be at least 600,000 and the East Stepovak, Stepovak Flats, Southwest Stepovak, Balboa Bay, and Beaver Bay Sections and before July 1 in the Northwest Stepovak Section, approaches as near as possible six percent of the total Chignik sockeye salmon catch.

(c) In years when a harvestable surplus beyond escapement goals for the first and second runs of Chignik River system sockeye salmon is expected to be more than 600,000 but the first run fails to develop as predicted and it is determined that a total sockeye salmon harvest in the Chignik Area of 600,000 or more may not be achieved, the commercial salmon fishery in the East Stepovak, Stepovak Flats, Southwest Stepovak, Balboa Bay, and Beaver Bay Sections and before July 1 in the Northwest Stepovak Section, must be curtailed in order to allow at least a minimum harvest in the Chignik Area of 300,000 sockeye salmon through July 8 if that number of fish are determined to be surplus to the escapement goals of the Chignik River system. After July 8, if at least 300,000 sockeye salmon have been harvested in the Chignik Area, and if escapement goals are being met, the department shall manage the fishery so that the number of sockeye salmon harvested in the Chignik Area is at least 600,000 and the East Stepovak, Stepovak Flats, Southwest Stepovak, Balboa Bay, and Beaver Bay Sections and before July 1 in the Northwest Stepovak Section, approaches as near as possible six percent of the total Chignik sockeye salmon catch.

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APPENDIX A: (page 2 of 2)

(d) In years when a harvestable surplus beyond the escapement goals for the first and second runs of Chignik River system sockeye salmon is expected to be more than 600,000 and the department determines that the runs are as strong as expected, the department shall manage the fishery so that the number of sockeye salmon taken in the East Stepovak, Stepovak Flats, Southwest Stepovak, Balboa Bay, and Beaver Bay Sections and before July 1 in the Northwest Stepovak Section, approaches as near as possible six percent of the total Chignik sockeye salmon catch.

(e) The estimate of sockeye salmon destined for the Chignik River has been determined to be 80 percent of the sockeye salmon harvested in the East Stepovak, Stepovak Flats, Southwest Stepovak, Balboa Bay, and Beaver Bay Sections and before July 1 in the Northwest Stepovak Section. The sockeye salmon taken in the Northwest Stepovak Section beginning July 1 are considered to be destined for Orzinski Bay.

(f) The total Chignik sockeye salmon catch constitutes those sockeye salmon caught within the Chignik Area, plus 80 percent of the sockeye salmon caught in the East Stepovak, Stepovak Flats, Southwest Stepovak, Balboa Bay, and Beaver Bay Sections, and before July 1 in the Northwest Stepovak Section, as described in 5 AAC 09.200(f), plus 80 percent of the sockeye salmon caught in the Cape Igvak Section of the Kodiak Area. The percentage of Chignik sockeye salmon may be permitted to fluctuate above or below six percent at any time before July 25.

(g) This allocation method is in effect through July 25. The first fishing period of the commercial salmon fishing season in the East Stepovak, Southwest Stepovak, Balboa Bay, and Beaver Bay Sections and before July 1 in the Northwest Stepovak Section, may not occur before the first fishing period of the commercial salmon fishing season in the Chignik Area. After July 25, commercial salmon fishing in the entire Southeastern District Mainland area may be allowed on local stocks.

(h) During the period from approximately June 26 through July 8, the strength of the second run of the Chignik River system sockeye salmon cannot be evaluated. In order to prevent over-harvest of the second run, the department may disallow or severely restrict commercial salmon fishing in the East Stepovak, Stepovak Flats, Southwest Stepovak, Balboa Bay, and Beaver Bay Sections during this period, and from June 26 through June 30 in the Northwest Stepovak Section

(i) The department shall announce all commercial salmon fishing periods by emergency order. The department shall give at least 24 hour notice before the opening of a commercial salmon fishing period, unless it is an extension of a fishing period in progress.

APPENDIX B: CHIGNIK MANAGEMENT AREA PRELIMINARY SOCKEYE FORECAST

FORECAST AREA: Chignik Management Area

SPECIES: Sockeye salmon

PRELIMINARY FORECAST OF THE 1996 RUN:

	Forecast Estimate	Forecast Range
TOTAL PRODUCTION:		
<i>Early Run (Black Lake)</i>		
Total Run	1,400,000	900,000
Escapement	400,000	-1,900,000
Commercial Common Property Harvest	1,000,000	
<i>Late Run (Chignik Lake)</i>		
Total Run	1,600,000	1,300,000
Escapement	250,000	-1,900,000
Commercial Common Property Harvest	1,350,000	
<i>Total Chignik Run</i>		
Total Run	2,800,000	2,200,000
Escapement	650,000	-3,800,000
Commercial Common Property Harvest	2,350,000	

FORECAST METHODS

The estimated run to Black Lake is the sum of a regression estimate (1966-95) for two major age classes (ages 1.3 and 2.3) and the most recent 10-year average for minor age classes, while the Chignik Lake run is based on recruit per spawner relationships. The Black Lake forecast is based on the historical relationship between the number and length of prior year age-1.2 fish. All other age classes are predicted from a 10-year average. The Chignik Lake forecast accuracy has historically been quite variable, and developing a model such as the one used for the Black Lake run has been unsuccessful. The 1996 Chignik Lake run forecast was derived using post-1969 average return per spawner relationships for each year class.

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DISCUSSION OF THE 1996 FORECAST

Early Run: The 1996 Black Lake sockeye salmon run is expected to be 1.4 million fish. This is approximately 0.1 million fish more than the 1985–94 average run of 1.5 million fish and 500,000 fish less than the 1995 forecast. This sockeye salmon run is expected to be average, even though in 1995 age, 1.2 fish were about 12% less abundant than the most recent 10-year average.

Late Run: The estimated 1996 Chignik Lake sockeye run is 1.6 million fish, 0.4 million more than the 1985–94 average of 1.2 million fish. The Chignik Lake run forecast accuracy has historically been quite poor when compared to actual returns. For the 6-year-olds (age 2.3) which typically dominate the run, the parent year (1990) escapement is 335,867. Lake runs have been low.

Prepared By:
David Owen
Area Management Biologist
Chignik Area ADF&G

Ivan Vining
Westward Biometrician
Kodiak

APPENDIX C: APPLICATION OF FISHERY MANAGEMENT PLANS

5 AAC 39.200 APPLICATION OF FISHERY MANAGEMENT PLANS

(a) The Board of Fisheries has implemented by regulation fishery management plans that provide the Department of Fish and Game with guidelines to be followed when making management decisions regarding the state's subsistence, commercial, sport and personal use fisheries. The primary goal of these management plans is to protect the sustained yield of the state's fishery resources while at the same time providing an equitable distribution of the available harvest between various users. The regulations contained in this section are intended to aid in the achievement of that goal and therefore will apply to all fishery management plans contained in 5 AAC 03-5 AAC 39.

(b) In some fishery management plans, the distribution of harvestable fish between various users is determined by the harvest that occurs during a specific time period, at a specific location, or by a specific group or groups of users. At times fishermen, due to circumstances that are beyond the control of the department, such as weather or price disputes, will not harvest fish. When this happens in a fishery governed by a management plan, the goals of the plan may not be achieved. Therefore, when a fishery is open to the taking of fish and the group or groups of users whose catch determines the distribution of the harvest as set out in the applicable management plan are not taking the harvestable fish available to them, the department shall manage the fishery as if the available harvest is being taken. When determining the available harvest, the department shall consider the number of fish needed to meet spawning requirements, the number of fish present in the fishery and in spawning areas that are in excess to spawning requirements, and the estimated harvesting capacity of the group or groups of users that would normally participate in the fishery.

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