

CHIGNIK MANAGEMENT AREA COMMERCIAL SALMON FISHERY
MANAGEMENT PLAN, 2004



By

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ABSTRACT

Management of the commercial salmon fisheries in the Chignik Management Area (CMA) will promote maximum production opportunities for future CMA salmon runs by achieving salmon escapement goals. The Alaska Department of Fish and Game will provide for orderly fisheries while maximizing harvest opportunities on the highest quality salmon and will adhere to the biological and allocative requirements of the two management plans (5 AAC 15.357 and 5 AAC 15.359) adopted by the Alaska Board of Fisheries for the CMA.

Commercial fishing periods will be established inseason by emergency order based on salmon abundance and achievement of the interim escapement objectives. News releases will be issued prior to all commercial fishing periods. Department test fisheries may be conducted to determine Chignik Lagoon salmon abundance. The results from all department test fisheries will be announced on single side band radio (SSB) frequency 3230 MHz and VHF radio channel 06.

The 2004 total sockeye salmon *Oncorhynchus nerka* forecasted run for the Chignik River watershed is 2.34 million fish and the forecasted harvest is an estimated 1.77 million fish. The 2004 projected chinook *O. tshawytscha*, coho *O. kisutch*, pink *O. gorbuscha*, and chum salmon *O. keta* commercial harvests are expected to be minor compared to sockeye salmon and will be dependent on market conditions and the commercial salmon fishing effort.

In 2004, there are 100 CMA Commercial Fisheries Entry Commission (CFEC) purse seine permits available for commercial salmon fishing. Of these, 87 CFEC permit holders elected to form a cooperative. The cooperative fleet and the competitive fleet are allocated 87% and 13% of the total CMA sockeye salmon commercial harvest respectively (5 AAC 15.359).

INTRODUCTION

Area Description

The Chignik Salmon Management Area (CMA, Area L) 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 watershed and over 100 other salmon producing streams and tributaries.

The CMA 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 the CMA to achieve escapement goals for all salmon species while allowing for the harvest of fish surplus to the escapement goals (Nelson and Lloyd 2001).

Closed water areas applicable to the 2004 commercial salmon fishing season are described in 5 AAC 15.350.

In 2004, there are 100 CMA Commercial Fisheries Entry Commission (CFEC) purse seine permits available for commercial salmon fishing. Of these, 87 CFEC permit holders elected to form a cooperative. The cooperative fleet and the competitive fleet are allocated 87% and 13% of the total CMA sockeye salmon commercial harvest respectively (5 AAC 15.359).

Legal Gear Description

Purse and hand purse seines are the only legal commercial salmon gear in the CMA. 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 in the Eastern, Central, Western, and Perryville Districts. In all districts, no seine may be less than three fathoms or more than 375 meshes in depth; in addition, up to 25 meshes of chafing gear with a maximum mesh size of seven inches may be used (5AAC 15.332). In the Chignik Bay District cooperative seines east of a line from 56° 20.528' N lat., 158° 32.176' W long. and 56° 19.365' N lat., 158° 30.851' W long., may not be less than 50 fathoms or more than 225 fathoms in length. Cooperative seines in Chignik Lagoon west of a line from 56° 20.528' N lat., 158° 32.176' W long. and 56° 19.365' N lat., 158° 30.851' W long., seines may not be less than 50 fathoms or more than 125 fathoms in length, except in the Mensis Point to Pillar Rock reach of the Chignik River: seines may not be less than 50 fathoms or more than 175 fathoms west of a line from Mensis Point at 56° 16.90' N lat., 158° 38.51' W long. to a point on the opposite shore of the Chignik River at 56° 16.56' N lat., 158° 38.40' W long. and east of a line from Pillar Rock (north shore) at 56° 16.74' N lat., 158° 39.01' W long. and to a point on the opposite shore of the Chignik River (Pillar Rock south shore) at 56° 16.57' N lat., 158° 38.84' W long. (Appendix A). Competitive fleet seines in the Chignik Bay District may not be less than 100 fathoms or more than 125 fathoms in length. In the Chignik Bay District leads are also

restricted to the cooperative fleet and are only allowed by a Commissioner's Permit (Appendix B).

Net Pens

Net pens, used to hold live cooperative harvested salmon, are allowed in the CMA only under provisions of a Commissioner's Permit issued by ADF&G (Appendices C.1 and C.2). Competitive fishermen may combine their live salmon in a net pen under provisions of a Commercial Fish Transport Permit which is also issued by the ADF&G (AS 16.05.671). Live salmon may not be transported outside of the Chignik Bay District of the CMA. Fishing and tendering vessels may contain live fish for up to three days without the need of a Commissioner's Permit.

A total of up to 10 net pens will be allowed in the Chignik Bay District (Appendices C.1 and C.2). Individual net pens may be up to 40 feet in length, 40 feet in width, and 100 meshes deep. The net pen mesh size may be no greater than 4-inch stretched mesh. Decks, fences, and other structural supports may be attached to the net pens and pens may be attached to each other. ADF&G personnel will have access to all catch and bycatch in the net pens for sampling purposes. The net pen operator and crew must exercise patience and slow the pace of processing, if required, to accommodate the accurate collection of all data required by the ADF&G.

Fixed Leads in the Chignik Lagoon

The Alaska Board of Fisheries (BOF) authorized the cooperative fleet to use fixed leads, to increase the efficiency of their harvesting efforts in hopes of reducing overhead costs, under provisions of a Commissioner's Permit issued by the ADF&G (Appendix B). The Commissioner's Permit allows for the use of two fixed leads in the Mensis Point to Pillar Rock reach of the Chignik River. The Commissioner's Permit contains a legal description of the construction, operation, and location of the leads. Each lead may be up to 125 fathoms in length and no more than 100 meshes in depth. Each lead shall be constructed of seine webbing with no greater than 4-inch stretched mesh. Each lead must have a corkline and a leadline and be anchored at both ends and at appropriate intervals along the leadline. A distance of at least 100 feet of open space must be provided between the two leads to allow for navigation. At night, each lead corkline must have operating white lights every 10 fathoms along the entire length of the corkline, and have appropriate operating port (red) and starboard (green) lights on the seaward end of the leads to mark the navigable channel between the leads.

CRITERIA FOR THE ISSUANCE OF EMERGENCY ORDERS AND NEWS RELEASES

Fishing periods will be established by emergency order when salmon escapements are surplus to escapement objectives (Table 1; Nelson and Lloyd 2001). News releases will be issued prior to openings to notify the fleets and processors of any impending commercial fishing period.

TENDER AND PROCESSOR REPORTING REQUIREMENTS

The tender and processor requirements are detailed in the Chignik Area commercial fishing regulations (5 AAC 15.355). In addition, processors are required to report daily catch information to ADF&G by 10:00 AM, by radio (SSB or VHF), fax, e-mail, or telephone. Personnel at the Chignik ADF&G office will stand by on SSB frequency 3.230 MHz and VHF channel 06 from 8:30 AM to 7:00 PM. The SSB call sign is “WON 29 Chignik Weir”, and the telephone number is 845-2243. If you are unable to contact ADF&G at the Chignik weir, catch information must be given to ADF&G Cold Bay (532-2419) or Kodiak (486-1830) via telephone or single SSB. The SSB call sign for Kodiak is “WON 32” (frequency 3.230 MHz) and for Cold Bay is “KXP 78” (frequency 3.261 MHz). Failure to report daily catch information is a violation of commercial fishing regulations (5 AAC 15.355). This regulation will be strictly enforced.

The BOF amended the fish ticket reporting requirements for the cooperative fleet to allow a CFEC permit holder to maintain one open fish ticket per day per tender per processor through a Commissioner’s Permit (5 AAC 15.359; Appendix D). Recording multiple deliveries for one fisherman on one fish ticket simplifies the process of totaling all daily harvests, thus improving the catch reporting process. Visual estimates of fish numbers, by species, shall be recorded on a fish ticket when salmon are delivered to tenders. Processors that purchase these salmon shall obtain accurate weights and the total number of salmon by species when the fish are processed. Processors are required to report catch numbers and weights, by species and area, to ADF&G in Chignik daily by 10:00 AM the day after receiving deliveries.

2004 SALMON FORECASTS

Sockeye Salmon

Total Run

The 2004 total sockeye salmon *Oncorhynchus nerka* forecasted run for the Chignik River watershed is 2,340,000 fish (Appendix E). The early run peaks in late June and returns primarily to Black Lake. The late run peaks in late July and returns primarily to Chignik Lake. The total projected commercial harvest for both runs is 1,770,000 sockeye salmon, of which approximately 1,440,000 sockeye salmon are expected to be harvested in the CMA, the remainder are expected to be harvested in the Southeastern District Mainland and Cape Igvak fisheries (5 AAC 09.360 and 5 AAC 18.360).

Black Lake (Early Run)

The early run is projected to be 1,260,000 sockeye salmon (Appendix E). The escapement goal range for the early run is from 350,000 to 400,000 sockeye salmon (Table 1). In 2004, the lower

end of the escapement goal will be targeted and the total early-run commercial harvest is projected to be 910,000 sockeye salmon.

Chignik Lake (Late Run)

The late run is projected to be 1,080,000 sockeye salmon (Appendix E). The escapement goal range for the late run is from 225,000 to 275,000 sockeye salmon through September 15 (Table 1). In 2004, the lower end of the escapement goal will be targeted and late-run commercial harvest is projected to be 855,000 sockeye salmon.

Cape Igvak and Southeastern District Mainland

Fisheries in the Cape Igvak Section (Figure 1) of the Kodiak Management Area (KMA) and the Southeastern District Mainland (SEDM; Figure 1) of the Alaska Peninsula Management Area (Area M) harvest sockeye salmon bound for the Chignik River watershed. The Cape Igvak Salmon Management Plan (5 AAC 18.360) and the SEDM Salmon Management Plan (5 AAC 09.360) are used to manage these fisheries. If biological and harvest criteria are met in the CMA, the Cape Igvak commercial fishery is allocated 15% and the SEDM commercial fishery is allocated 6% of the total commercial harvest of sockeye salmon considered to be bound for the CMA.

Chinook Salmon

The CMA 2004 projected chinook salmon *O. tshawytscha* commercial harvest is 3,260 fish; this projection is based on the 10-year (1994-2003) average harvest in the CMA. However, the CMA chinook salmon harvest is mostly dependent upon the amount of commercial fishing time for sockeye salmon in July. The Chignik River watershed's chinook salmon minimum escapement goal is 1,450 spawners, above subsistence and sport fishing harvests. If escapement in early July is weak and the escapement goal is unlikely to be met, the Humes Point markers may be used to improve chinook escapement by removing commercial fishing pressure from areas where chinook salmon may mill in the Chignik Lagoon before entering the Chignik River. Historically, over 50% of the chinook salmon escapement pass through the weir by July 11.

Coho Salmon

The CMA 2004 projected coho salmon *O. kisutch* commercial harvest is 143,000 fish, based on the 10-year (1994-2003) average commercial harvest. The coho salmon commercial harvest may vary depending on the commercial fishing effort directed on the Chignik Lake sockeye run or local pink *O. gorbuscha* and chum *O. keta* salmon runs in the outside districts. Subsistence concerns in the Western and Perryville Districts and market conditions may also limit coho salmon commercial fishing effort.

Pink Salmon

The CMA 2004 projected pink salmon commercial harvest is 827,000 fish, based on the 10-year (1994-2003) average commercial harvest. Historically, the Western and Perryville Districts provided the largest proportion of the commercial harvest. Low prices or limited market interest in pink salmon from the outside districts may greatly reduce commercial efforts.

Chum Salmon

The CMA 2004 projected chum salmon commercial harvest is 157,000 fish, based on the 10-year (1994-2003) average commercial harvest. Historically, the Western and Perryville Districts provided the largest proportion of the commercial harvest. Low price or limited market interest in chum salmon from the outside districts may greatly reduce commercial efforts.

2004 SOCKEYE SALMON MANAGEMENT

Chignik Lagoon Regulatory Markers

Beginning in 1996, ADF&G began initial commercial fishing periods with closed waters in the Chignik Lagoon from a line southwest of Humes Point to Chignik Island (5 AAC 15.350 (1) (A and B)). After 24 hours, the closed waters were usually reduced by moving them to Mensis Point. Processors indicated an overall increase in the quality of the commercial harvest as a result of this management strategy. Quality likely improved because salmon holding between Humes and Mensis Points were given an extra day to migrate upriver and escape the fishery while fish migrating into the lagoon were harvested. During the 2004 salmon season, opening and closing commercial fishing between the Humes and Mensis Points markers may be utilized as a management tool for providing quality salmon.

The BOF approved an area upstream of the Mensis Point markers to be used exclusively by the cooperative fleet for the operation of fixed leads (Appendix B). These markers are located at approximately 56° 16.74' N lat., 158° 39.01' W long. and at approximately 56° 16.57' N lat., 158° 38.84' W long. These locations will be marked with a department closed waters regulatory marker prior to the commercial fishing season.

June and Early July Fisheries

By regulation, the first commercial fishing period can occur on June 1 (5AAC 15.310). Regulations mandating a minimum escapement of 40,000 sockeye salmon by June 12 and a strong build-up of salmon in the lagoon is repealed if a cooperative fishery permit is issued (5AAC 15.357 (b) (1) (A and B)). In 2004, the first anticipated commercial fishing period may

begin on June 4, to prevent a build-up of sockeye salmon in the Chignik Lagoon and to keep the escapement within the interim objectives.

The ADF&G may place harvest limits on the cooperative fleet to allow a limited commercial salmon harvest while ensuring interim salmon escapement objectives are being met (Table 1). Harvest limits allow fishing opportunity when escapement concerns may otherwise preclude a commercial fishing period.

Subsequent commercial fishing periods will be determined through the evaluation of several factors, including commercial and subsistence catches, test fishing results, and the achievement of interim escapement objectives (Table 1). During June, commercial salmon fishing may only be allowed in the Chignik Bay, Central, and Eastern Districts. Through approximately June 26, these districts are required to open and close concurrently (5 AAC 15.357 (c)(1)). During late June and early July (transition period), the Eastern District may close or be restricted to evaluate the run strength of the late run to the Chignik River watershed.

Early-run sockeye salmon run timing and strength will affect commercial fishing periods in the Eastern, Western, and Perryville Districts. If the early sockeye salmon run is weaker than forecasted, and the 350,000 to 400,000 sockeye salmon escapement goal is not expected to be achieved, then early July CMA commercial fishing periods may be reduced. The commercial catch during the transition period between the two sockeye salmon runs (June 26 through July 8) will be closely monitored to evaluate the late-run strength to try to achieve the 225,000 to 275,000 late-run salmon escapement goal through September 15 (Nelson and Lloyd 2001).

Pink and chum salmon commercial fishing periods in the Western and Perryville Districts (beginning July 6) and the Eastern District (beginning July 9) may be permitted on a commercial “test fishery” basis. In early July, the duration of the fishing periods will be based on inseason fishery performance (catch per unit effort, CPUE), as compared to historical catch records, and market limitations.

Sockeye Escapement Objective from September 1 through September 14

During the 1960s, the Fisheries Research Institute (FRI) of the University of Washington suggested a sockeye salmon escapement goal of 250,000 for Chignik Lake (late run) through August 31. FRI recommended an escapement goal of 200,000 sockeye salmon by July 31 and 50,000 sockeye salmon for August, with no recommendations for September. September goals were not suggested because of the limited commercial fishing effort after mid-August in the late 1960s and early 1970s. Since the early 1970s, September commercial fishing effort has increased and this has resulted in increased commercial harvests after August 31. The increased effort trend continued until recently, when commercial fishery restrictions were implemented because of subsistence concerns (5 AAC 15.357(b)(4)). Other reductions in September commercial fishing activity may be attributed to market conditions.

In the early 1990s, Chignik Lake subsistence users stated that they were able to meet their late season subsistence needs. Since the mid 1990s some subsistence fishers have indicated an inability to satisfy their needs. The August sockeye salmon escapement goal of 50,000 fish has been achieved or exceeded for most years. However, from 1990-1994, the average estimated September sockeye salmon escapement was 10,000 sockeye salmon or less (Watchers 2003). Based on these data and local knowledge, the department concluded that the September sockeye salmon escapement might be a significant contributor to the fall Chignik Lake subsistence fishery. In 2003, using commercial harvest data, subsistence reports, and local knowledge, an interim escapement objective of 25,000 sockeye salmon from September 1 to September 15 was established to meet spawning requirements and subsistence needs (Table 1).

Post September 14 Sockeye Salmon Commercial Fisheries

Background

In 1994, the BOF directed ADF&G, industry, and subsistence users to devise a plan that addressed concerns over the late season sockeye salmon subsistence needs. BOF action was in response to testimony from subsistence users that indicated that they were unable to meet their subsistence needs from Clark River and Home Creek in Chignik Lake. During the December 1996 Chignik Regional Planning Team (RPT) meeting, several members expressed their view that future late season closures should be determined from objective criteria developed by ADF&G combined with input from commercial and subsistence fishers.

Objective criteria were developed by the ADF&G to assist in evaluating escapement and run strength after the weir is removed (about September 5). These criteria were discussed at a June 1997 RPT/Chignik Seiners Association meeting and resulted in a post September 14 sockeye salmon management strategy for the commercial fishery.

Criteria Used to Determine Late Sockeye Salmon Run Strength

ADF&G determines the strength of the late season Chignik River system sockeye salmon run by using the following methods:

- 1) Comparing aerial surveys in early September in the Clark River drainage and Hatchery Beach to aerial survey estimates from previous years.
- 2) Using catch/escapement ratios from late August to early September and post-weir catches to project escapement, and comparing these data to previous years' estimates.
- 3) Comparing the commercial harvest (total catch and CPUE) from September 1-14 to previous years as an indicator of run strength.
- 4) Comparing age-class data from the commercial fishery with historic databases. For the Chignik Lake (late) sockeye salmon run, a strong age 2.3 component appears to indicate a strong late run. High proportions of other age sockeye salmon appear to indicate a weak late run.

- 5) Interviewing commercial and subsistence users regarding the late season sockeye salmon run strength.

Sockeye Salmon Management Options

Beginning September 15, commercial fishing periods in the Chignik Bay and Central Districts shall be a maximum of 48-hours per week, and shall be based on the evaluation of the sockeye salmon run strength and the Chignik Lake late season sockeye salmon subsistence needs (5 AAC 15.357).

Post September 14 fisheries management options include:

- 1) Allow the maximum fishing time of 48 hours per week to be divided into one, two, three, or four commercial fishing periods, depending upon sockeye and/or coho salmon escapements. For example, the fishing time could be distributed over 4 days with 12-hour fishing periods per day within a floating 7-day period.
- 2) Allow a weekly fishing schedule of less than 48 hours, if the sockeye and or coho salmon run strength is determined to be weak.
- 3) Allow for a complete closure.

Interviews of late season subsistence fishermen have indicated that an average of about 3,500 “red fish” (heavily water marked sockeye salmon harvested on the spawning grounds) were typically harvested in late fall and early winter in Chignik Lake. If projections indicate that this harvest level is not attainable, then actions restricting the commercial fishery shall occur.

2004 COHO SALMON MANAGEMENT

Western and Perryville Coho Salmon Management Plan

Background

The Chignik Fish and Game Advisory Committee held a teleconference in April 1997 to discuss coho salmon subsistence concerns expressed by residents in the Perryville Village. Residents testified that coho salmon escapements in recent years had diminished in the Kametlook River and other streams in the Western and Perryville Districts. Responding to the advisory committee’s request, ADF&G drafted a coho management strategy that was discussed during the Regional Plan Team and Chignik Seiners Association meetings, attended primarily by fishermen who fish in the Western and Perryville Districts. As a result of these discussions and meetings, a coho management plan for the Western and Perryville Districts was first drafted and implemented in 1997. A modified plan remains in effect today (5 AAC 15.357 (d)(2)). From the end of the transition period until approximately August 20, fishing periods in the Western and Perryville Districts shall be based upon the department’s evaluation of local pink and chum

salmon runs and the Chignik River watershed sockeye salmon late run. During this time, ADF&G will also manage these districts based upon local coho salmon run strength. In 2004, coho salmon harvests will likely be limited by market conditions.

Management From July 22-31

During the January 2002 BOF meetings, a coho salmon harvest cap of 60,000 fish was adopted for the Western and Perryville Districts of the CMA. The cap was adopted to address interception concerns of coho salmon transiting the CMA destined for other management areas. From July 22 to 31, the non-terminal harvest areas in the CMA Western and Perryville Districts will be managed to prevent the commercial harvest from exceeding 60,000 coho salmon. If it appears that the harvest cap will be surpassed, ADF&G will restrict or close the non-terminal harvest areas until August 1. The terminal harvest areas within the Western and Perryville Districts are defined as those portions of the Western and Perryville Districts north of a line from Cape Ikti at 56° 00.32' N lat., 158° 32.02' W long., to Coal Cape at 55° 53.42' N lat., 159° 00.45' W long. to Cape Alexander at 55° 47.22' N lat., 159° 24.57' W long., and waters in the Ivanof Bay Section of the Perryville District that are north of the latitude from Alexander Point at 55° 47.37' N lat., 159° 24.37' W long., to the Kupreanof Peninsula. The terminal harvest areas may be opened to commercial salmon fishing by emergency order if the salmon escapement objectives for the local systems are being met. ADF&G will require timely and accurate catch reporting from the fleet to assure the harvest cap is not exceeded.

Management on or About August 20

The Western and Perryville Districts fisheries are managed more conservatively beginning about August 20 to address subsistence concerns voiced by residents of Ivanof Bay and Perryville. In 1999, the BOF approved a regulation that promoted the conservation of coho salmon. Beginning on or about August 20, openings in the Western and Perryville Districts shall be based on the evaluation of local coho salmon runs, in addition to the evaluation of the Chignik River watershed sockeye salmon late run.

2004 PINK AND CHUM SALMON MANAGEMENT

Criteria for Establishing Fishery Openings and Closures

After mid July, aerial surveys are conducted to monitor pink and chum salmon escapements. If escapement objectives are met, commercial fishing periods may occur. The management of the pink and chum salmon fisheries in the Eastern, Western, Central, and Perryville Districts will be independent of the sockeye salmon cooperative fishery allocative plan (5 AAC 15.359). However, all sockeye salmon commercially harvested in all CMA districts will be applied towards the sockeye salmon allocation plan. The pink and chum salmon fisheries in these districts will also be influenced by the strength of the Chignik River watershed sockeye salmon runs.

Openings in the Western and Perryville Districts

First Opening Date

The first pink and chum salmon commercial fishing period in the Western and Perryville Districts can occur as early as July 6. The department recognizes that high quality fish are desired and management strategies will be adjusted to harvest fish prior to their migration to natal streams, if a harvestable surplus is available.

Openings on a Commercial Test Fishery Basis

In early July, initial fishing periods in the Western and Perryville Districts will occur on a commercial “test fishery” basis which will provide an early indication of the pink and chum salmon run strength. Test fishery CPUE will be used to adjust the duration of subsequent commercial fishing periods. In the case where harvests are weak and escapement objectives are not being met, restrictive management action shall be required. Because pink and chum salmon runs returning to CMA streams may have different run timing, each of these species will be evaluated by their individual run characteristics.

Actual Opening Time for All CMA Districts

From July 6 to the end of the season, any CMA district that warrants a terminal commercial salmon fishing period may be opened concurrently with, or independently from, fishing periods in the Chignik Bay District. If Chignik River watershed interim sockeye salmon escapement objectives are not being met, restricted terminal fisheries within bays, targeting pink or chum salmon runs, may occur only if the systems are achieving their escapement objectives. These fishery restrictions will confine harvest efforts to areas where sockeye salmon returning to the Chignik River watershed are less likely to be harvested.

CMA COOPERATIVE PURSE SEINE SALMON FISHERY MANAGEMENT PLAN

During the January 2002 BOF meeting, a new sockeye salmon allocative plan was adopted into regulation. This plan was reviewed and modified by the BOF in the fall of 2002 and again in 2003. The plan provides the criteria and management measures for the salmon purse seine cooperative fishery in the CMA (5 AAC 15.359). This cooperative fishery plan requires that at least 51 Chignik Commercial Fisheries Entry Commission (CFEC) salmon permit holders to elect annually to form a “cooperative fleet”.

The allocation between the cooperative and competitive fleets was modified in 2003 (5 AAC 15.359(d)(1-3)). The modified plan states that if participation in the cooperative is less than 80% of the registered CMA CFEC salmon permit holders, the allocation to the cooperative will be 0.9% of the available CMA commercial sockeye salmon harvest for each participant in the

cooperative. Thus, the competitive fleet would be allocated 1.1% of the available CMA commercial sockeye salmon harvest. If participation in the cooperative is at least 80%, but less than 85% of the registered CMA CFEC salmon permit holders, the allocation to the annual cooperative fishery will be 0.95% of the available CMA commercial sockeye salmon harvest for each participant in the cooperative. If participation in the cooperative is 85% or more of the registered CMA CFEC salmon permit holders, the allocation to the annual cooperative fishery will be one prorated share of the harvestable surplus for each participant in the cooperative. Thus, each competitive fleet member would also be allocated 1% of the available CMA commercial sockeye salmon harvest.

The CMA allocative salmon fishery may require the ADF&G to develop new management actions, fishing schedules, and area closures. The ADF&G will manage the CMA sockeye salmon commercial fisheries to achieve, as close as possible, the established sockeye salmon allocation percentages between the cooperative and competitive fleets by the conclusion of the season. Ideally, the CMA salmon fisheries will be managed to keep the allocations “on track” throughout the entire season. The ADF&G may manage the fishery by opening and closing separate, or concurrent, fishing periods and areas for the two fleets. Allocations are secondary to conservation concerns.

In accordance with 5AAC 15.359 (c), Chignik Area cooperative purse seine permit holders must register with the Division of Commercial Fisheries staff in Kodiak in order to participate in the cooperative commercial salmon fishery. By the end of the registration period, 87 CMA CFEC salmon permit holders had signed up as members of the 2004 cooperative. Therefore, in 2004 the cooperative will be allocated 87% and the competitive fleet will be allocated 13% of any CMA sockeye salmon harvestable surplus.

LITERATURE CITED

- Nelson, P.A. and D. Lloyd. 2001. Escapement goals for Pacific salmon in the Kodiak, Chignik, and Alaska Peninsula/Aleutian Islands areas of Alaska. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report 4K01-66, Kodiak.
- Gregory M. Watchers. 2003. Chignik, Alaska Peninsula, and Aleutian Islands Management Areas salmon daily and cumulative escapement counts for rivers systems with weirs, 1992-2002 and available air and water temperature data. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report 4K03-44, Kodiak.

Table 1. Interim sockeye salmon escapement objectives for the Chignik River watershed, 2004.

Escapement			Escapement		
Date	Lower	Upper	Date	Lower	Upper
June 2	500	1,000	August 3	3,000	5,000
June 4	2,000	3,000	August 6	5,000	10,000
June 6	5,000	7,000	August 9	10,000	15,000
June 8	10,000	14,000	August 12	15,000	20,000
June 10	20,000	25,000	August 15	20,000	25,000
June 12	30,000	40,000	August 18	25,000	30,000
June 14	50,000	70,000	August 21	30,000	35,000
June 16	75,000	110,000	August 24	36,000	40,000
June 18	125,000	160,000	August 27	43,000	45,000
June 20	175,000	220,000	August 31	50,000	50,000
June 22	225,000	275,000			
June 25	275,000	325,000	September 3	3,000	4,000
June 28	300,000	350,000	September 5	6,000	8,000
July 1	325,000	375,000	September 7	10,000	12,000
July 4	350,000	400,000 ^a	September 9	14,000	16,000
			September 11	18,000	20,000
July 6	5,000	10,000	September 13	22,000	23,000
July 8	15,000	20,000	September 15	25,000	25,000
July 10	30,000	40,000			
July 12	45,000	60,000	Goals through		
July 14	56,000	75,000	July 4: 350,000 - 400,000		
July 16	67,000	90,000			
July 19	86,000	115,000	July 5 through		
July 21	101,000	135,000	Sept. 15 Goals: 225,000 - 275,000		
July 23	120,000	160,000			
July 26	135,000	180,000			
July 29	146,000	195,000			
July 31	150,000	200,000			

^a Escapements through July 4 represent the best date to use to separate the Black and Chignik Lakes escapement (personal communication, Alaska Department of Fish and Game, Kodiak, Mark Witteveen).

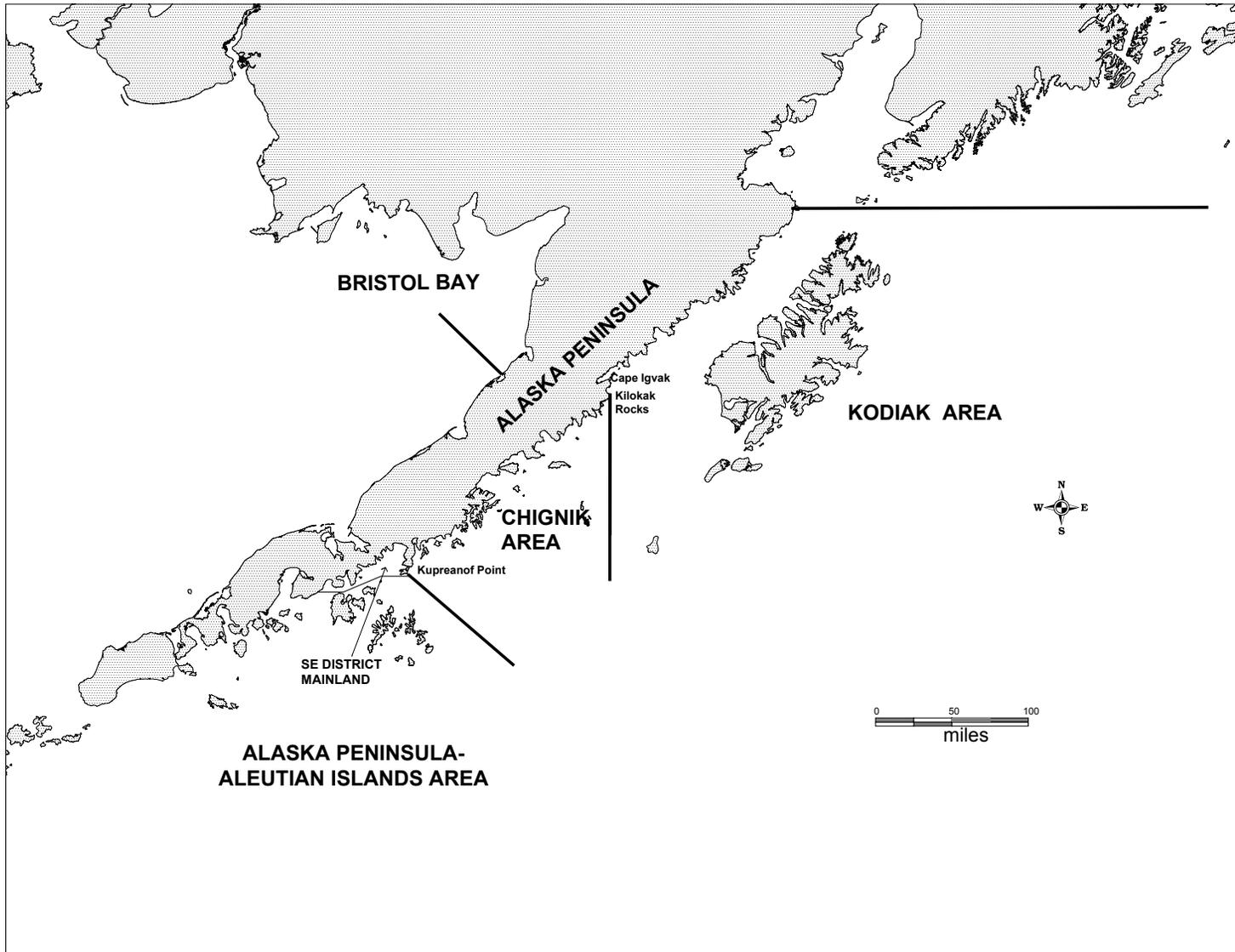


Figure 1. Map of the Alaska Peninsula illustrating the relative locations of the Chignik, Kodiak, and Alaska Peninsula Management Areas.

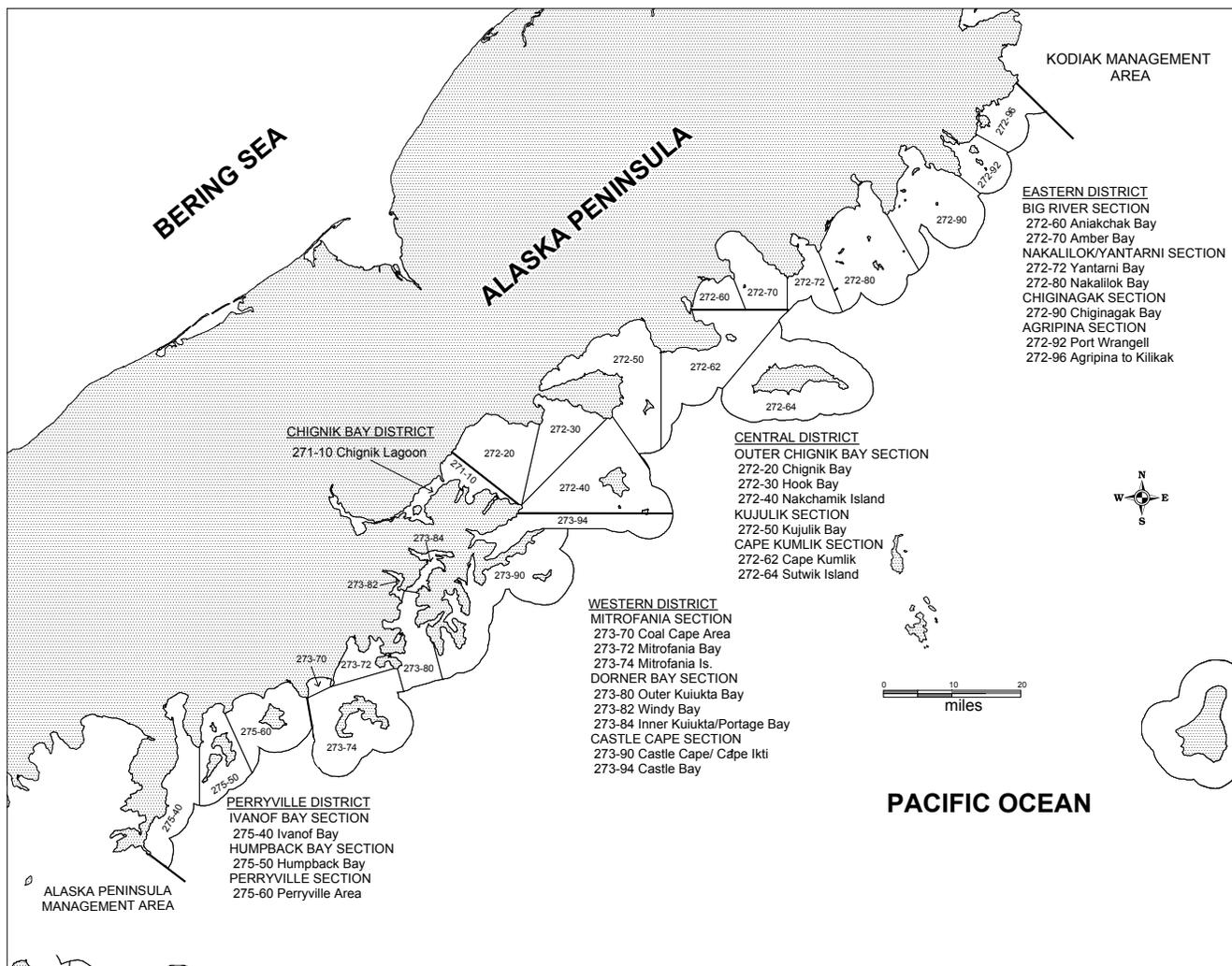


Figure 2. Map of the Chignik Management Area illustrating district boundaries and statistical areas.

APPENDIX

2004 CHIGNIK MANAGEMENT AREA COMMISSIONER'S PERMIT
COOPERATIVE SALMON PURSE SEINE SPECIFICATIONS

NAME: Chignik Seafood Producers Alliance (CSPA) ADF&G # 2004-5

OPERATOR: Axel Kopun, President CSPA

ADDRESS: Summer: P.O. Box 30 Winter: PO Box 773173
Chignik Bay, AK 99564 Eagle River, AK 99577
phone: (907) 749-2204 phone: (907) 622-6226

In addition to current Chignik Management Area salmon commercial fishing regulations, participants agree to the following conditions for seine specifications and operations:

- 1) Permit is valid from 8:00 A.M. June 1, 2004 to NOON September 30, 2004.
- 2) 5 AAC 15.359 (c) allows, through a commissioner's permit, for the CSPA to operate purse seines and hand purse seines in the Chignik Bay District: a) east of a line in Chignik Lagoon from 56° 20.528' N lat., 158° 32.176' W long. and 56° 19.365' N lat., 158° 30.851' W long., seines may not be less than 50 fathoms or more than 225 fathoms in length, and b) west of a line in Chignik Lagoon from 56° 20.528' N lat., 158° 32.176' W long. and 56° 19.365' N lat., 158° 30.851' W long., seines may not be less than 50 fathoms or more than 125 fathoms in length, except c) in the Mensis Point to Pillar Rock reach of the Chignik River: west of a line from Mensis Point at 56° 16.90' N lat., 158° 38.51' W long. to a point on the opposite shore of the Chignik River at 56° 16.56' N lat., 158° 38.40' W long. and east of a line from Pillar Rock (north shore) at 56° 16.74' N lat., 158° 39.01' W long. and to a point on the opposite shore of the Chignik River (Pillar Rock south shore) at 56° 16.57' N lat., 158° 38.84' W long. seines may not be less than 50 fathoms or more than 175 fathoms.
- 3) No seine may be less than three fathoms stretch measure in depth nor more than 375 meshes in depth, including meshes used as chafing gear. The depth shall be determined by using a stretch measure of the web from the cork line to the bottom of the net, including any lines that hang below the lead line.
- 4) Seine mesh may not be more than four and one-half inches stretch measure, except the first 25 meshes above the lead line may not be more than seven inches stretch measure.

-Continued-

- 5) In the Mensis Point to Pillar Rock reach of the Chignik River: west of a line from Mensis Point at 56° 16.90' N lat., 158° 38.51' W long. to a point on the opposite shore of the Chignik River at 56° 16.56' N lat., 158° 38.40' W long. and east of a line from Pillar Rock (north shore) at 56° 16.74' N lat., 158° 39.01' W long and to a point on the opposite shore of the Chignik River (Pillar Rock south shore) at 56° 16.57' N lat., 158° 38.84' W long., the aggregate length of seine (up to 175 fathoms) and lead (up to 125 fathoms) may not be more than 300 fathoms.
 - 6) When a purse seine or hand purse seine is in the water for the purpose of taking fish, the seine shall be attached to the licensed vessel operating the gear. Only the licensed vessel and any accompanying skiffs associated with the licensed vessel may be attached to the seine.
 - 7) A purse seine and a hand purse seine are considered to have ceased fishing when the bunt end of the seine is attached to the purse seine vessel and the tow end of the seine is attached to the vessel or moving through the power block.
 - 8) An ADF&G observer may sample and measure all catch and bycatch from the harvesting vessel's seine. The vessel operator and crew must exercise patience and slow the pace of fishing, if required, to accommodate the accurate collection of all data required from the ADF&G observer.
 - 9) Where concurrent cooperative and competitive fishery openings occur in the Chignik Bay District, then seine regulations for all Chignik purse seine permit holders will revert to 5 AAC 15.332 (in the Chignik Bay District, purse seine and hand purse seines may not be less than 100 fathoms or more than 125 fathoms in length) except for the Mensis Point to Pillar Rock reach of the Chignik River where the cooperative fishery seines may not be less than 50 fathoms or more than 175 fathoms.
 - 10) Provisions in item #9, above, will not apply in "Jacks Bay" (all waters of Chignik Bay District east of 158° 15.360 W long., south of 56°20.00' N lat., and west of 158° 10.00 W long), when "Jacks Bay" is also opened in conjunction with fishery openings in the Western and Perryville Districts.
 - 11) At all times within "Jacks Bay" (all waters of Chignik Bay District east of 158° 15.360 W long., south of 56°20.00' N lat., and west of 158° 10.00 W long), purse seine and hand purse seines may not be less than 100 fathoms or more than 125 fathoms in length).
 - 12) Vessels must adhere to all commercial fishing and landing requirements.
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-Continued-

- 13) The Chignik Seafood Processors Alliance is responsible for the actions of contractors, agents, or other persons who perform work to accomplish the goals of this permit and the cooperative fishery management plan, 5 AAC 15.359. The permittee shall notify ADF&G, Division of Commercial Fisheries, and obtain written approval in the form of a permit amendment before beginning any activity that significantly deviates from the approved plan and permits. Any action taken by the permittee or an agent of the permittee that increases the permit overall scope or that negates, alters, or minimizes the intent or effectiveness of any stipulation contained in this permit will be deemed a significant deviation from the approved plan. The final determination as to the significance of any deviation and the need for a permit amendment is the responsibility of ADF&G. Therefore, it is recommended that ADF&G, Division of Commercial Fisheries, be consulted immediately when a deviation from the approved permit is being considered.
- 14) This permit does not relieve the Chignik Seafood Processors Alliance, their contractors, agents, or other persons who perform their work from the responsibility for securing other permits: state, federal, or local.
- 15) This permit may be modified or voided by the ADF&G at any time.

I _____, for the Board of Directors of the Chignik Seafood Producers Alliance, hereby authorize the release of confidential fish ticket harvest information that results from my participation in the 2004 Chignik Management Area salmon fishery. I understand this information will be used for reporting of stock condition on Chignik Management Area salmon and any effects the lead may have on the salmon stocks and habitat in Chignik Lagoon. I also agree to abide by all permit terms stated above.

CHIGNIK SEAFOOD PRODUCERS ALLIANCE

DATE

ADF&G REPRESENTATIVE

DATE

2004 CHIGNIK MANAGEMENT AREA COMMISSIONER'S PERMIT
COOPERATIVE SALMON FIXED LEADS

NAME: Chignik Seafood Producers Alliance (CSPA) ADF&G # 2004-4

OPERATOR: Axel Kopun, President CSPA

ADDRESS: Summer: P.O. Box 30 Winter: PO Box 773173
Chignik Bay, AK 99564 Eagle River, AK 99577
phone: (907) 749-2204 phone: (907) 622-6226

In addition to current Chignik Management Area salmon commercial fishing regulations, participants agree to the following conditions:

- 1) Permit is valid from 8:00 A.M. June 1, to NOON October 1, 2004.
- 2) 5 AAC 15.359 (c) allows, through a commissioner's permit, for CSPA to operate two fixed leads in the Chignik Management Area located in Chignik Lagoon.
- 3) One lead may be attached to the beach at approximately the high tide mark at approximately 56° 16.74' N lat., 158° 39.01' W long. A second lead may be attached to the beach at approximately the high tide mark at approximately 56° 16.57' N lat., 158° 38.84' W long. These locations are upstream of the regulatory water boundary at Hume Point (5 AAC 15.350 (1)(A)), near the closed waters boundary location known as Pillar Rock.
- 4) Each lead may be up to 125 fathoms in length and no more than 100 meshes in depth.
- 5) Each lead shall be made of seine webbing, with meshes no greater than 4 inches stretch measure.
- 6) Each lead must have a corkline and a leadline and be anchored at both ends and at appropriate intervals along the leadline to hold position in essentially a straight line.

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- 7) A distance of at least 100 feet of open space must always be provided for at mid channel between the two leads, except that purse seines, either attached or not attached to the leads, may have less than 100 feet of open space between them and the leads within the Mensis Point to Pillar Rock reach of the Chignik River, provided that access for vessel traffic within the Chignik River is maintained.
- 8) Each lead corkline must have operating white lights at night every ten fathoms along the entire length of the corkline, and have appropriate operating port (red) and starboard (green) lights on the seaward end of the leads to mark the navigable channel between the leads.
- 9) The ADF&G may verbally request the removal of the leads at any time; upon the removal request by ADF&G, the operator must completely remove the leads from the water within two hours.
- 10) Leads shall be completely removed from the water prior to the closure of each cooperative fishing period and may be installed, in the water, at the beginning of each cooperative fishing period.
- 11) One end of a harvesting vessel's seine may be attached to the seaward end of the lead for the purpose of harvesting salmon.
- 12) The aggregate length of the lead and purse seine may not be more than 300 fathoms.
- 13) When a purse seine is attached to a lead, the purse seine vessel, the purse seine, and the lead may at any time go dry, provided that access for vessel traffic within the Chignik River is maintained.
- 14) When a purse seine is attached to a lead, the vessel is not required to keep its engine running and the vessel may be anchored, provided that access for vessel traffic within the Chignik River is maintained.
- 15) At night when a purse seine is attached to a lead, the vessel must display an appropriate red mast light to indicate fishing or a white light to indicate anchoring and there must be at least two white lights placed along the purse seine between the purse seine vessel and the lead.
- 16) In the Chignik Management Area, a vessel may have a purse seine or hand purse seine aboard as described in 5 AAC 15.332 and a total of two fixed leads aboard as they are described in this permit.

- 17) When the ADF&G restricts the salmon catch of the cooperative by imposing a daily harvest limit, the cooperative may fully deploy the leads at 12:01 AM of the harvest limit day. When the ADF&G daily harvest limit has been harvest, the cooperative must minimize impediments to fish migrations by tying the lead leadline to the corkline.
- 18) An ADF&G observer may sample and measure all catch and bycatch of the leads and the harvesting vessel's seine. The vessel operator and crew must exercise patience and slow the pace of fishing, if required, to accommodate the accurate collection of all data required from the ADF&G observer.
- 19) Participants will notify ADF&G in Chignik prior to commencement of lead operation and at the conclusion of lead operation.
- 20) The Chignik Seafood Producers Alliance will provide ADF&G a logbook for each lead specifying, on a daily basis, the time each lead is fishing, repairs, alterations, maintenance (cleaning), and other data as requested by ADF&G.
- 21) Vessels must adhere to all commercial fishing and landing requirements.
- 22) The Chignik Seafood Processors Alliance is responsible for the actions of contractors, agents, or other persons who perform work to accomplish the goals of this permit and the cooperative fishery management plan, 5 AAC 15.359. The permittee shall notify ADF&G, Division of Commercial Fisheries, and obtain written approval in the form of a permit amendment before beginning any activity that significantly deviates from the approved plan and permits. Any action taken by the permittee or an agent of the permittee that increases the permit overall scope or that negates, alters, or minimizes the intent or effectiveness of any stipulation contained in this permit will be deemed a significant deviation from the approved plan. The final determination as to the significance of any deviation and the need for a permit amendment is the responsibility of ADF&G. Therefore, it is recommended that ADF&G, Division of Commercial Fisheries, be consulted immediately when a deviation from the approved permit is being considered.
- 23) This permit does not relieve the Chignik Seafood Processors Alliance, their contractors, agents, or other persons who perform their work from the responsibility for securing other permits: state, federal, or local.
- 24) This permit may be modified or voided by the ADF&G at any time.

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I _____, for the Board of Directors of the Chignik Seafood Producers Alliance, hereby authorize the release of confidential fish ticket harvest information that results from my participation in the 2004 Chignik Management Area salmon fishery. I understand this information will be used for reporting of stock condition on Chignik Management Area salmon and any effects the lead may have on the salmon stocks and habitat in Chignik Lagoon. I also agree to abide by all permit terms stated above.

CHIGNIK SEAFOOD PRODUCERS ALLIANCE

DATE

ADF&G REPRESENTATIVE

DATE

Appendix C.1. Cooperative/Norquest Net Pen Permit.

2004 CHIGNIK MANAGEMENT AREA COMMISSIONER'S PERMIT
COOPERATIVE/PROCESSOR SALMON NET PEN REQUIREMENTS

NAME: Chignik Seafood Producers Alliance (CSPA) ADF&G # 2004-3

OPERATOR: Axel Kopun, President

ADDRESS: Summer: P.O. Box 30 Winter: PO Box 773173
Chignik, AK 99564 Eagle River, AK
phone (907) 749-2204 phone (907) 622-6226

NAME: Norquest Seafoods Inc., Chignik

PROCESSOR: Ron Soule, Plant Manager

ADDRESS: Summer: P.O. Box 10 Winter: 5245 Shilshole Ave. NW
Chignik, AK 99564 Seattle, WA 98107
phone: (907) 749-2276 phone: (206) 281-7022

In addition to current Chignik Management Area salmon commercial fishing regulations, participants agree to the following conditions:

- 1) Permit is valid from 8:00 A.M. June 1, to NOON October 1, 2004.
- 2) 5 AAC 15.359 (c) allows, through a commissioner's permit, the use of net pens to hold live, commercially captured salmon; thus net pens, except those in Chignik Lagoon allowed under permit ADF&G # 2004-6, will only be allowed under provisions of this permit. Fishing and tendering vessels (i.e., vessels that operate under their own power, that have a licensed skipper aboard, and with fish holds that are not directly open to the sea) may contain live fish, for up to three days after their capture, without the need of a commissioner's permit.
- 3) The Chignik Seafood Producers Alliance (CSPA) will notify the Chignik ADF&G when fish pens are deployed and when they contain fish, except for fish pens that are attached to the Norquest Seafoods Inc., facilities or a mooring owned by Norquest Seafoods Inc., in Anchorage Bay (56° 18'N lat., 158° 24'W long), Chignik. CSPA will provide Chignik ADF&G a daily estimate of the number and pounds of salmon, by species, in each fish pen.

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- 4) Norquest Seafoods Inc., will notify the Chignik ADF&G when fish pens are attached to their dock or any mooring owned by Norquest Seafoods. Norquest Seafoods will provide Chignik ADF&G a daily estimate of the number and pounds of salmon, by species, in each fish pen.
 - 5) This permit allows the use of fish pens for holding live salmon for up to three days after being captured in the Chignik District commercial salmon fishery. The net pens may be moored in Anchorage Bay. Towing pens that contain live salmon caught in the Chignik District, within the Chignik District is allowed.
 - 6) A total of up to eight fish pens will be allowed in the Chignik Bay District. Individual fish pens may be up to 40 feet in length, 40 feet in width, and 100 meshes deep. The fish pen mesh size may be no greater than four inches. Lights, decks, fences, and other structural supports may be attached to the fish pens. The fish pens may be attached to each other.
 - 7) An ADF&G observer may sample and measure all catch and bycatch contained in the fish pens. The fish pen operator and crew must exercise patience and slow the pace of processing, if required, to accommodate the accurate collection of all data required from the ADF&G observer.
 - 8) Catcher, tender, and processing vessels must adhere to all other commercial fishing and landing requirements.
 - 9) The Chignik Seafood Processors Alliance and Norquest Seafoods Inc., Chignik is responsible for the actions of contractors, agents, or other persons who perform work to accomplish the goals of this permit. The permittee shall notify ADF&G, Division of Commercial Fisheries, and obtain written approval in the form of a permit amendment before beginning any activity that significantly deviates from the approved plan and permits. Any action taken by the permittee or an agent of the permittee that increases the permit overall scope or that negates, alters, or minimizes the intent or effectiveness of any stipulation contained in this permit will be deemed a significant deviation from the approved permit. The final determination as to the significance of any deviation and the need for a permit amendment is the responsibility of ADF&G. Therefore, it is recommended that ADF&G, Division of Commercial Fisheries, be consulted immediately when a deviation from the approved permit is being considered.
 - 10) This permit does not relieve the Chignik Seafood Processors Alliance or Norquest Seafoods Inc., Chignik, their contractors, agents, or other persons who perform their work from the responsibility for securing other permits: state, federal, or local.
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- 11) All fish in a fish pen are considered harvested for all catch reporting and allocative concerns.
- 12) This permit may be modified or voided by the ADF&G at any time.

I _____, for the Board of Directors of the Chignik Seafood Producers Alliance, hereby authorize the release of confidential fish ticket harvest information that results from my participation in the 2004 Chignik Management Area salmon fishery. I understand this information will be used for reporting of stock condition on Chignik Management Area salmon. I also agree to abide by all permit terms stated above.

CHIGNIK SEAFOOD PRODUCERS ALLIANCE

DATE

PROCESSOR-NORQUEST SEAFOODS INC.

DATE

ADF&G REPRESENTATIVE

DATE

- 6) An ADF&G observer may sample and measure all catch and bycatch contained in the fish pens. The fish pen operator and crew must exercise patience and slow the pace of processing, if required, to accommodate the accurate collection of all data required from the ADF&G observer.
- 7) Catcher, tender, and processing vessels must adhere to all other commercial fishing and landing requirements.
- 8) Fish pens must not interfere with the open fishery as defined in 5 AAC 15.359 (h)(2) or with subsistence fishermen.
- 9) The Chignik Seafood Processors Alliance is responsible for the actions of contractors, agents, or other persons who perform work to accomplish the goals of this permit. The permittee shall notify ADF&G, Division of Commercial Fisheries, and obtain written approval in the form of a permit amendment before beginning any activity that significantly deviates from the approved plan and permits. Any action taken by the permittee or an agent of the permittee that increases the permit overall scope or that negates, alters, or minimizes the intent or effectiveness of any stipulation contained in this permit will be deemed a significant deviation from the approved permit. The final determination as to the significance of any deviation and the need for a permit amendment is the responsibility of ADF&G. Therefore, it is recommended that ADF&G, Division of Commercial Fisheries, be consulted immediately when a deviation from the approved permit is being considered.
- 11) This permit does not relieve the Chignik Seafood Processors Alliance their contractors, agents, or other persons who perform their work from the responsibility for securing other permits: state, federal, or local.
- 11) All fish in a fish pen are considered harvested for all catch reporting and allocative concerns.
- 12) This permit may be modified or voided by the ADF&G at any time.

I _____, for the Board of Directors of the Chignik Seafood Producers Alliance, hereby authorize the release of confidential fish ticket harvest information that results from my participation in the 2004 Chignik Management Area salmon fishery. I understand this information will be used for reporting of stock condition on Chignik Management Area salmon. I also agree to abide by all permit terms stated above.

CHIGNIK SEAFOOD PRODUCERS ALLIANCE

DATE

ADF&G REPRESENTATIVE

DATE

2004 CHIGNIK MANAGEMENT AREA COMMISSIONER'S PERMIT
COOPERATIVE SALMON FISHERY HARVEST REPORTING REQUIREMENTS

NAME: Chignik Seafood Producers Alliance (CSPA) ADF&G # 2004-2

OPERATOR: Axel Kopun, President CSPA

ADDRESS: Summer: P.O. Box 30 Winter: PO Box 773173
Chignik Bay, AK 99564 Eagle River, AK 99577
phone (907) 749-2204 phone (907) 622-6226

NAME: Norquest Seafoods Inc., Chignik

PROCESSOR: Ron Soule, Plant Manager

ADDRESS: Summer: P.O. Box 10 Winter: 5245 Shilshole Ave. NW
Chignik Bay, AK 99564 Seattle, WA 98107
phone: (907) 749-2276 phone: (206) 281-7022

In addition to current Chignik Management Area salmon commercial fishing regulations, participants agree to the following conditions:

- 1) Permit is valid from 8:00 A.M. June 1, to NOON September 30, 2004.
- 2) Notwithstanding 5 AAC 15.355 Reporting requirements (a) and (b) and AS 16.10.270 Purchase of fish by the pound, tendermen may record multiple sets by a single CFEC permit holder on a single fish ticket (5 AAC 15.359 (c)); one fish ticket per CFEC permit holder harvesting salmon per day per tender per processor.
- 3) The number and pounds of salmon by species by day, and by delivery (set), will be estimated by the tenderman, to the best of the tenderman's ability and entered on the fish ticket (e.g., Fish Ticket Series T). During the first delivery, the tenderman will also record on the fish ticket, the processor code. In the case of a tender delivery to multiple processors, a separate fish ticket will be required that indicates the approximate number and pounds of salmon by species delivered to each processor. Also during the first

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delivery the CFEC permit holder must sign the fish ticket. The time of delivery and initials of the CFEC permit holder must also be on the fish ticket, adjacent to the estimated number of fish and pounds by species. During any subsequent deliveries by the same CFEC permit holder, the number of fish and pounds by species may be estimated and the CFEC permit holder will initial next to any estimates and provide the time of delivery.

- 4) The number of sets per vessel and the number and pounds of salmon by species by day must be estimated, on-the-grounds; the actual harvest by species by day will be corrected upon processing. The actual values must be provided to the Chignik ADF&G within 3 days of the salmon being caught.
- 5) Norquest Seafoods will notify the Chignik ADF&G of their daily commercial salmon purchases and any personal use harvest estimates prior to 10:00 AM. The estimate will include, by statistical area: the number of purse seine vessels making at least one delivery and the name of each tender that delivered the prior day and the name of each tender with salmon aboard (i.e. tied to dock or in-route but not yet offloaded).
- 6) The Chignik Seafoods Producers Alliance (CSPA) will notify Chignik ADF&G if CSPA intends to sale salmon to any processor other than Norquest. Notification must be received by Chignik ADF&G in a timely enough manner to issue a separate commissioner's permit and obtain required signatures.
- 7) Catcher, tender, and processing vessels must adhere to all other commercial fishing and landing requirements.
- 8) This permit may be modified or voided by the ADF&G at any time.

I _____, for the Board of Directors of the Chignik Seafood Producers Alliance, hereby authorize the release of confidential fish ticket harvest information that results from my participation in the 2004 Chignik Management Area salmon fishery. I understand this information will be used for reporting of stock condition on Chignik Management Area salmon. I also agree to abide by all permit terms stated above.

CHIGNIK SEAFOOD PRODUCERS ALLIANCE

DATE

PROCESSOR-NORQUEST SEAFOODS INC.

DATE

ADF&G REPRESENTATIVE

DATE

Appendix E. Chignik Management Area preliminary sockeye salmon forecast, 2004.

Forecast Area: Chignik
Species: Sockeye Salmon

Preliminary Forecast of the 2004 Run:		Forecast Estimate (thousands)	Forecast Range (thousands)
<i>Total Production:</i>			
<i>Early Run (Black Lake)</i>	Total Run Estimate	1,260	480 – 2,210
	Escapement Goal	350	350 – 400
	Harvest Estimate	910	
<i>Late Run (Chignik Lake)</i>	Total Run Estimate	1,080	498 – 1,890
	Escapement Goal	225	225 – 275
	Harvest Estimate	855	
<i>Total Chignik System</i>	Total Run Estimate	2,340	692 – 2,910
	Escapement Goal	575	575 – 675
	Harvest Estimate	1,770	

These figures include harvests of Chignik-bound sockeye salmon from the Southeastern District Mainland and the Cape Igvak fisheries; approximately 1,440 thousand sockeye salmon are projected to be harvested in the Chignik Management Area.

Forecast Methods

The forecasts for the 2004 early and late Chignik sockeye salmon runs were based on simple linear regressions using sibling relationships, escapements and subsequent year-class returns, or median estimators of age class returns from brood years since 1977. In constructing and evaluating each of the regression models, standard regression diagnostic procedures were used. Regression models were only used in cases where the slope of the regression was significantly different from zero ($P < 0.25$). The early-run age 1.3 and 2.3 returns were estimated based on the abundance of their sibling returns (1.2 and 2.2) in 2003. The late-run age 1.3 and 2.3 returns were estimated using regression relationships based on the abundance of spawners in their parent years. Following non-significant regression results, the median brood year return by total age was used to estimate all other age class components (0.2, 1.1, 0.3, 1.2, 2.1, 2.2, 1.4, 3.2, 2.4, and 3.2) of the run. When regression relationships were used, the variance of the estimate was calculated from the error structure of the regression. When the median returns by age class were used, the 10th and 90th percentiles of the data were used to describe the range of the data. The variances associated with individual estimates were summed to estimate 80 percent prediction intervals, which were then added to the percentile estimates to calculate the forecast ranges.

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Forecast Discussion

The 2004 sockeye salmon run to the Chignik River is expected to be 2.34 million fish, which is approximately 360 thousand fish greater than the estimated run of 2003 (1.98 million). The early run is expected to be approximately 270 thousand fish greater than the estimated early run in 2003 of 990 thousand fish. The late run is expected to be approximately 94 thousand fish greater than the estimated 2003 late run of 986 thousand. The 2004 sockeye salmon run to Chignik is expected to be approximately 310 thousand fish less than the recent 10-year average run (2.65 million).

The harvest estimate for the early run of 910 thousand is based on achievement of the Black Lake lower escapement goal of 350 thousand fish while the late run harvest estimate of 855 thousand is based on achievement of the Chignik Lake lower escapement goal of 225 thousand fish through September 15. Harvest estimates for both the early and late run include Chignik bound sockeye salmon harvested in the Cape Igvak Section of the Kodiak Management Area and the Southeastern District Mainland of the Alaska Peninsula Management Area.

Approximately 83 percent of the 2004 early run was estimated using sibling relationships. Using similar methods, the 2003 early run was over-estimated by approximately 40 percent. The majority of the 2004 late run (84 percent) was estimated using relationships between parent escapement and returns for the two major age classes (ages 1.3 and 2.3). Using similar methods, the 2003 late run was over-estimated by about 17 percent.

Available smolt data were analyzed and significant regression relationships were found between the total number of emigrating smolt and subsequent 3-ocean (usually about 80 percent of the run) returns. This estimate was then expanded to account for other ocean ages. In 2003, this method under-estimated the total run by about 9 percent. The smolt-based forecast of sockeye salmon returns in 2004 to Chignik is 3.10 million sockeye salmon, which is substantially (about 772 thousand) higher than that predicted from sibling relationships and median estimates.

The disparity between the smolt forecast and the sibling forecast suggest the actual return may fall in the upper half of the forecast range. Given this ancillary data, our confidence in this forecast is fair.

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