

Fishery Management Report No. 06-63

2003 Chignik Management Area Annual Management Report

by

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and

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December 2006

Alaska Department of Fish and Game

Divisions of Sport Fish and Commercial Fisheries



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ABSTRACT

This report summarizes the 2003 commercial Pacific herring *Clupea pallasii* and Pacific salmon *Oncorhynchus sp.* fisheries within the Chignik Management Area (CMA; Area L). The CMA encompasses all coastal waters and inland drainages of the northwest Gulf of Alaska between Kilokak Rocks and Kupreanof Point. There was no commercial herring fishery in the CMA in 2003. All five species of Pacific salmon were commercially harvested in the CMA in 2003: Chinook *O. tshawytscha*, sockeye *O. nerka*, coho *O. kisutch*, pink *O. gorbuscha*, and chum *O. keta* salmon. In 2003, the Chinook salmon escapement to the Chignik River of 6,412 was well above average, exceeding the minimum escapement goal of 1450 Chinook salmon. The Chignik River early-run sockeye salmon escapement of 350,004 matched the lower end of the escapement goal range of 350,000 to 400,000 sockeye salmon. The late-run sockeye salmon escapement of 334,119 exceeded the escapement goal range of 200,000 to 250,000 sockeye salmon. A total of 77 Chignik Commercial Fisheries Entry Commission (CFEC) permit holders chose to join the cooperative fleet in 2003, while 24 permit holders chose to fish competitively. The majority of the fishing effort in the 2003 season was by the cooperative fleet. The majority of the CMA salmon harvest took place within the Chignik Bay and Central districts. The 2003 CMA sockeye salmon harvest of 1,100,297 was approximately 500,000 salmon fewer than the 5-, 10-, and 20-year average harvests. The cooperative fleet harvested a total of 760,331 sockeye salmon, or 69.5% (allocation = 69.3%) of the CMA sockeye salmon harvest. The competitive fleet harvested a total of 334,384 sockeye salmon, or 30.5% (allocation = 30.7%) of the CMA sockeye salmon harvest.

Key words: Chignik, salmon, Alaska Board of Fisheries, 2003 commercial fisheries management, harvest statistics, escapement statistics, Chignik cooperative salmon fishery.

INTRODUCTION

The Alaska Department of Fish and Game (ADF&G) manages all Pacific herring *Clupea pallasii* and commercial salmon *Oncorhynchus sp.* fisheries within the Chignik Management Area (CMA; Area L). Five species of Pacific salmon are commercially harvested in the CMA: Chinook *Oncorhynchus tshawytscha*, sockeye *O. nerka*, coho *O. kisutch*, pink *O. gorbuscha*, and chum *O. keta* salmon. The ADF&G manages the salmon fisheries within the CMA to achieve established escapement goals while allowing harvest of surplus production.

The CMA encompasses all coastal waters and inland drainages of the northwest Gulf of Alaska between Kilokak Rocks and Kupreanof Point (Figure 1). The CMA is divided into five fishing districts: Eastern, Central, Chignik Bay, Western, and Perryville. These districts are further broken down into sections and statistical reporting areas (Figure 2). Commercial salmon fishing within the CMA is the economic mainstay for five villages: Chignik Bay (Anchorage Bay), Chignik Lagoon, Chignik Lake, Perryville, and Ivanof Bay (Figure 1). The shoreside processing plants are located near the village of Chignik Bay.

This report provides a summary of the 2003 commercial herring and salmon fishing activity, harvests, and escapements in the CMA. The current Westward Region electronic fish ticket and escapement databases contain historical data from 1970 to present, and is updated as required. Most tables in this report have been verified against these databases and, therefore, the data published in this report supersede data previously published. The salmon harvest estimates reported in this document were summarized from the Westward Region fish ticket database on February 15, 2006.

DECEMBER 2002 ALASKA BOARD OF FISHERIES MEETING

The Alaska Board of Fisheries (BOF) met in December of 2002 to review the Chignik Cooperative Purse Seine Salmon Fishery Management Plan (5 AAC 15.359). At that meeting, a summary of the first cooperative season was presented to the BOF (Pappas 2002). Fifteen

proposals regarding the cooperative fishery were reviewed by the BOF. Some proposals requested the removal of the cooperative plan or the removal of the allocation between the fleets. One proposal asked for multiple cooperatives and allocations based on historic catch. Another proposal asked for a stipulation requiring all Chignik Commercial Fisheries Entry Commission (CFEC) permit holders to participate in the cooperative. These proposals either failed or no action was taken on them by the BOF.

One proposal called for changes in the escapement requirements for the first June fishery. At that time, the Chignik Area Management Plan (5 AAC 15.357) required a minimum escapement of 40,000 sockeye salmon past the Chignik River weir and a significant build-up of salmon in Chignik Lagoon for the first fishery to commence. There was a desire by the ADF&G and industry to remove the escapement and lagoon build-up criteria for opening the initial fishery in the Chignik Bay and Central districts because there was concern that the harvesting power of the smaller fleets might not be able to stop a large run. Language was added to the cooperative plan that amended the escapement and build-up requirements in the Chignik Area Management Plan (5 AAC 15.357 (b)(1)) in years when there is a cooperative fishery.

The Chignik Seafood Producer's Alliance (CSPA) submitted several proposals to modify gear and fish ticket requirements to increase their efficiency. However, the BOF did make any changes concerning gear types or reporting requirements in regulation. Instead, the BOF delegated the authority to the ADF&G to draft Commissioner's permits to allow fixed leads in Chignik Lagoon, to relax fish ticketing practices to reduce paperwork, and to allow the use of net pens to facilitate the delivery of live salmon to the processor (Appendices A1 through A4).

The BOF also directed the ADF&G to increase subsistence fishing opportunity for commercial salmon fishermen. In response, through special provisions of the subsistence permit, the CMA was opened to subsistence salmon fishing for commercial fishing license holders during the commercial salmon season. All commercial fishing license holders who participated in the subsistence salmon fishery were required to obtain a 2003 Chignik salmon subsistence permit at the Chignik ADF&G office prior to harvesting fish (Appendix B1).

COMMERCIAL HERRING

HERRING MANAGEMENT OVERVIEW

Herring may be harvested in the CMA from April 15 through June 30 (sac roe season) and from August 15 through February 28 (food and bait season), although specific commercial herring fishing periods and areas are allowed only by emergency order (5 AAC 27.560). Herring may be taken only by purse seines not more than 1,000 meshes in depth and 100 fathoms in length (5 AAC 27.565).

There are several distinct fishing grounds within the CMA where the herring are managed as separate stocks (Table 1). Each individual area is managed on a maximum exploitation rate of 20%, given that a threshold biomass is available for harvest. Threshold biomass levels are determined prior to the fishing season after aerial survey estimates are made and potential effort levels are determined.

Historical Data

Commercial herring harvests were not recorded in the CMA until 1980 (Nicholson et al. 1980). In years that harvests were recorded, herring harvests ranged from a maximum of 587 tons in 1980 to 6 tons in 1996 (Table 2). The last commercial herring harvest in the CMA occurred in 1996 (Table 2; Bouwens and Poetter 2006). Recently there has been no interest in herring fishing in the CMA due to poor market conditions and low herring biomass. The CMA herring biomass has not been systematically surveyed by the ADF&G since 1996.

2003 Herring Fishery

There was no 2003 herring fishery in the CMA; no guideline harvest levels were set due to the lack of industry interest.

COMMERCIAL SALMON

OVERVIEW OF MANAGEMENT PLANS

The 2003 Chignik commercial salmon fishery was managed based on two management plans; the Chignik Salmon Management Plan, 5 AAC 15.357, and the Chignik Area Cooperative Purse Seine Salmon Fishery Management Plan, 5 AAC 15.359. Sockeye salmon bound for the Chignik watershed were also allocated in two additional management plans; the Cape Igvak Salmon Management Plan 5 AAC 18.360 in the Kodiak Management Area (Area K), and the Southeastern District Mainland (SEDM) Salmon Management Plan 5 AAC 09.360 in the Alaska Peninsula Management Area (Area M).

Chignik Salmon Management Plan

The Chignik Salmon Management Plan (5 AAC 15.357) was originally adopted in 1999. The goal of the plan was to allow traditional salmon fisheries in the CMA while achieving the biological escapement goals (BEGs) for both the early-run (Black Lake) and late-run (Chignik Lake) Chignik River sockeye salmon. Pink, chum, and Chinook salmon were also managed to meet established escapement goals. Purse seines and hand purse seines were the only legal commercial salmon fishing gear within the CMA. Legal seine gear ranged between 100 and 125 fathoms in length in the Chignik Bay District and 100 and 225 fathoms in length in all other districts. Leads up to 75 fathoms in length were allowed. The management plan was organized into four districts or groups of districts: the Chignik Bay and Central Districts, the Eastern District, and the Western and Perryville Districts.

Chignik Area Cooperative Purse Seine Salmon Fishery Management Plan

The Chignik Area Cooperative Purse Seine Salmon Fishery Management Plan (5 AAC 15.359), was adopted prior to the 2002 commercial salmon fishing season to facilitate a cooperative salmon fishery in the CMA. This plan also defined the criteria and management measures for the cooperative.

Conditions Required to Form a Cooperative

At least 51 Chignik Area CFEC permit holders had to apply together, to the commissioner of the ADF&G, by March 1, 2003 to fish as a cooperative. Any other Chignik CFEC permit holders who wished to join the cooperative were given until March 15, 2003 to join this cooperative. The CFEC permit holders that elected to join the cooperative were only allowed to participate in the

Chignik cooperative fishery, and were not allowed to participate in any other salmon fishery statewide from June 1 to August 31.

Allocation Criteria

The BOF determined that a harvest allocation between the cooperative and competitive fleets was necessary for the cooperative fishery to achieve its goals of reducing overhead expenses associated with commercial fishing and increasing product quality. The annual Chignik Area commercial sockeye salmon harvestable surplus was allocated by fleet based on the number of permit holders participating in the cooperative.

- If participation in the cooperative was less than 85% of the registered Chignik Area CFEC purse seine permit holders, the allocation to the annual cooperative fishery would be nine-tenths of one percent of the harvestable surplus for each participant in the cooperative.
- If participation in the cooperative was 85% or more of the registered Chignik Area CFEC purse seine permit holders, the allocation to the annual cooperative fishery would be one prorated share of the harvestable surplus for each participant in the cooperative.

Management of Allocation

The Chignik Area Cooperative Purse Seine Salmon Fishery Management Plan gave the ADF&G the charge of managing the fishery such that the two fleets would achieve their sockeye salmon harvest allocations as closely as possible. It was noted that the allocations were secondary to escapement and overall harvest objectives.

Cape Igvak Salmon Management Plan

The 2003 CMA salmon fishery was also affected by the Cape Igvak Salmon Management Plan (5 AAC 18.360). The Cape Igvak Section is located northeast of the CMA in the westernmost component of Area K (Figure 1). If the harvestable surplus of sockeye salmon in the CMA is above or expected to be above certain thresholds (5 AAC 18.360 (a-c)), then 15% of the total Chignik sockeye salmon harvest (including sockeye salmon caught at Cape Igvak and within certain portions of Area M) is allocated to Area K fishermen. Based on this management plan, 90% of the sockeye salmon harvested within the Cape Igvak Section are considered to be Chignik-bound. This management plan is in effect from the beginning of the fishing season through July 25. After July 25, there are no allocative ties between the CMA and Area K.

Southeastern District Mainland Salmon Management Plan

Some of the sockeye salmon harvested by Area M fishermen under the Southeastern District Mainland (SEDM) Salmon Management Plan (5 AAC 09.360) are also allocatively considered Chignik-bound. The SEDM is composed of a group of sections on the eastern end of Area M, located directly southwest of the CMA (Figure 1). The allocation is calculated similarly to the Cape Igvak plan; if the harvestable surplus of sockeye salmon in the CMA is or will exceed certain thresholds (5 AAC 09.360 (a-g)), then 6% of the total Chignik sockeye salmon harvest (including sockeye salmon caught at Cape Igvak and sockeye salmon caught within certain portions of the SEDM during specific times) is allocated to SEDM fishermen. Based on this management plan, 80% of the sockeye salmon harvested within certain SEDM sections are considered to be Chignik-bound. This management plan is in effect from the beginning of the fishing season through July 25. After July 25, there are no allocative ties between the CMA and Area M.

2003 SALMON MANAGEMENT

The Chignik salmon fishery was managed under Emergency Order (EO) authority, utilizing 45 EOs in 2003 (Appendix C1). Limnology data suggested that the forage base for sockeye salmon has been depressed in Chignik Lake from 2000 through 2002 (Bouwens and Finkle 2003a,b; Finkle and Bouwens 2001). ADF&G recommended targeting the lower bound of the escapement goal range in 2003 to relieve grazing pressure on the zooplankton in Chignik Lake in hopes of improving juvenile sockeye salmon production (Table 3; Appendix D1).

A total of 77 Chignik CFEC permit holders chose to join the cooperative fleet in 2002, while 24 permit holders chose to fish competitively. The cooperative fleet shared 69.3% of the harvestable surplus of sockeye salmon while 30.7% was allocated to the competitive fleet (Table 4). The first commercial fishing period began on June 4, and the last commercial fishing period ended on September 16. Commercial salmon fishing was allowed during 105 days in 2003 (Figure 3).

Norquest Seafoods and Trident Seafoods were the two processors that purchased Chignik salmon in 2003. Norquest and Trident are both shore-based processors located in Anchorage Bay. Norquest operated a freezer plant, while Trident operated a canning facility. However, Norquest employed a floating processor to custom process fish through a boneless fillet machine and then froze the product. The cooperative fleet contracted local processors to custom process their catch and marketed the product themselves.

The Chignik Area Salmon Management Task Force (CHASM) was established at the BOFs direction to provide a mechanism for the ADF&G to discuss management options with the stakeholders without contacting the entire fleet. The group was composed of fishermen from both fleets, the processors, and the department. CHASM meetings were held on June 2 and August 15. Notes from these meetings are located in Appendices E1 and E2.

Cooperative Fleet

The majority of the fishing effort during the 2003 season was by the cooperative fleet. Commercial salmon fishing for the cooperative fleet started on June 4 and ended for the season on September 16 (Figure 3). The Chignik Management Area was open to commercial salmon fishing for the cooperative fleet for at least portions of 96 days in 2003.

The cooperative fleet was placed on harvest limits on 28 separate days over the season. The limits for the cooperative fleet ranged from a low of 0 sockeye salmon to a high of 20,000 sockeye salmon per day (Table 5). The cooperative fleet catches typically remained under the harvest limits. Some days the harvest was substantially over or under the limit, but over the season the cooperative harvest was 2.1% less than the sum of the harvest limits (Table 5).

The cooperative fleet used fixed-leads for approximately 60 days in 2003, mostly in July and August. Generally, the leads were attached to the shore and installed perpendicular to the flow of the stream for about half of their length. An anchor was set at the point near mid-channel, and the remainder of the net was stretched downstream parallel to the shore, and then hooked back upstream in a “J” shape. At or near high tide, a seine vessel made a “round haul” downstream of the leads to harvest the fish that had accumulated behind the leads. ADF&G conducted a study investigating the impacts of the fixed-leads on fish and wildlife during 2003 and found that the leads did not cause any unforeseen impacts on birds, mammals, or resident fishes (Clark and Bouwens 2003).

A portion of the salmon harvested by the cooperative fleet in 2003 was delivered alive to the processors. The fish were either brailed or transferred alive with a fish pump from the seine into the tanks of a tender vessel. These tenders were equipped with oxygenation units to maintain water quality in the tanks. The fish were then delivered alive to the holding pens located at the processor in Chignik Bay.

In the cases when dead salmon were to be delivered to the processor (traditional delivery method), the salmon were brailed directly from the seines of the catcher boats into tenders equipped with refrigerated seawater (RSW) holds. This eliminated two handling steps in the delivery process; once from the seine to the hold of the catcher boat and once from the hold of the catcher boat to the hold of a tender. After processing, the actual catch numbers and weights, by species, were assigned back to the fish tickets that contributed to each tender load.

Competitive Fleet

A total of 24 Chignik CFEC permit holders were eligible to fish competitively in 2003. Commercial salmon fishing began for the competitive fleet on June 9 and ended for the season on September 5 (Figure 3) The Chignik Management Area was open to commercial salmon fishing for the competitive fleet for at least portions of 38 days in 2003.

Season Chronology

The first commercial salmon fishing activity began at 6:00 PM June 4 with a 48-hour period for the cooperative fleet in the Chignik Bay, Central, and Eastern districts (Figure 3). The Chignik Lagoon markers were placed at Humes Point for the first 11 hours of this fishing period, after which they were moved to Mensis Point on the morning of June 5 (Figure 4). Generally, the Humes Point markers were used after an extended closure to commercial salmon fishing to allow the salmon above these markers to escape the fishery. On the evening of June 5 the Chignik Lagoon markers were again moved upstream to Pillar Rock. The BOF directed ADF&G to use these markers for the cooperative fleet only so they could employ the fixed leads. This first fishing period was then extended for 63 more hours until 9:00 AM June 9.

Commercial salmon fishing began for the competitive fleet at 10:00 AM June 9 with a 24-hour fishing period in the Chignik Bay, Central and Eastern districts (Figure 3). The upper Chignik Lagoon markers were moved to Mensis Point for this fishery (Figure 4). This fishing period was extended for 12 hours and ended at 10:00 PM on June 10.

Commercial salmon fishing was then opened for the cooperative fleet at 11:00 PM June 10 with a 48-hour fishing period in the Chignik Bay, Central and Eastern districts (Figure 3). The upper Chignik Lagoon markers were moved to Pillar Rock for this fishery (Figure 4). This fishing period was extended for 15 hours and ended at 2:00 PM on June 13.

Commercial salmon fishing was opened for the competitive fleet at 3:00 PM June 13 with a 24 hour fishing period in the Chignik Bay, Central and Eastern districts (Figure 3). The upper Chignik Lagoon markers were moved to Mensis Point for this fishery (Figure 4). At this point, the commercial fishery was allowed to close for 28 hours to provide subsistence salmon fishing opportunity for local users.

Commercial salmon fishing was opened for the cooperative fleet at 7:00 PM June 15 with a 24-hour fishing period in the Chignik Bay, Central and Eastern districts (Figure 3). The upper Chignik Lagoon remained at Mensis Point for this fishery (Figure 4). This fishing period was

extended for a total of 234 hours and ended at 1:00 PM on June 26. Daily harvest limits, ranging from an allowed harvest of 10,000 to 15,000 sockeye salmon, were imposed on the cooperative fleet from June 18 to 26 (Table 5).

A 48-hour commercial salmon fishing period was then announced for the competitive fleet beginning at 2:00 PM June 26 in the Chignik Bay, Central and Eastern districts (Figure 3). The upper Chignik Lagoon markers remained at Mensis Point (Figure 4).

Commercial salmon fishing was opened for the cooperative fleet at 3:00 PM June 28 with a 72-hour fishing period in the Chignik Bay, Central and Eastern districts (Figure 3). The upper Chignik Lagoon markers were moved to Pillar Rock for this fishery (Figure 4). This fishing period was extended for 12 hours and ended at 3:00 AM on July 2.

Commercial salmon fishing was then opened for the competitive fleet at 5:00 AM July 2 with a 24-hour fishing period in the Chignik Bay, Central and Eastern districts (Figure 3). The upper Chignik Lagoon markers were moved to Mensis Point for this fishery (Figure 4).

A 66-hour commercial salmon fishing period for the cooperative fleet began at 6:00 AM July 3 in the Chignik Bay, Central and Eastern districts (Figure 3). The upper Chignik Lagoon markers were moved to Pillar Rock for this fishery (Figure 4). This fishing period was extended for the cooperative fleet in the Chignik Bay District only for a total of 182 hours and ended at 2:00 PM on July 13. Daily harvest limits, ranging from an allowed harvest of 2,500 to 20,000 sockeye salmon, were imposed on the cooperative fleet from July 3 to July 6, and limits ranging from 7,000 to 10,000 sockeye salmon were imposed from July 9 to July 13 (Table 5).

The Western and Perryville districts south of a line drawn 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. (the Cape Ikti line), as well as those portions of the Chignik Bay District east of 158° 15.36' W. long. and those waters of the Central District east of 158° 15.36' W. long., south of 56° 20' N. lat., and west of 158° 10' W. long. (Jack's Box) were opened to commercial salmon fishing for both fleets for 48 hours beginning at 12:01 AM July 12.

A 33-hour fishing period for the competitive fleet in the Chignik Bay and Central districts began at 3:00 pm on July 13 (Figure 3). The upper Chignik Lagoon markers were moved to Mensis Point for this fishery (Figure 4). This fishery closed as scheduled.

The Chignik Bay District was opened to commercial salmon fishing for 72 hours for the cooperative fleet beginning 1:00 AM on July 15 (Figure 3). The upper Chignik Lagoon markers were moved to Pillar Rock for this fishery (Figure 4). This fishing period was extended for a total of 129 hours and ended at 10:00 AM on July 23. Daily harvest limits, ranging from an allowed harvest of 10,000 to 15,000 sockeye salmon, were imposed on the cooperative fleet from July 18 to 22 (Table 5).

The Western and Perryville districts south of the Cape Ikti line and those portions of the Chignik Bay and Central districts known as Jack's Box were opened to commercial salmon fishing for both fleets for two 24-hour periods, one beginning at 12:01 AM on July 17 and the other beginning at 12:00 NOON on July 18. The second fishing period was subsequently extended for 60 hours and ended at 12:00 MIDNIGHT on July 21 (Figure 3).

The Chignik Bay, Central and Eastern districts were opened to commercial salmon fishing for the competitive fleet for 48 hours beginning 11:00 AM on July 23 (Figure 3). The upper Chignik

Lagoon markers were moved to Mensis Point for this fishery (Figure 4). This period was extended for 19 hours in the Chignik Bay and Central districts until 6:00 AM on July 26.

A 48-hour commercial salmon fishing period was announced for the cooperative fleet beginning at 7:00 AM on July 26 (Figure 3) in the Chignik Bay District. The upper Chignik Lagoon markers were again moved to Pillar Rock (Figure 4). The Chignik Bay District was closed for 26 hours, and then reopened for the cooperative fleet for 48 additional hours beginning at 9:00 AM on July 29. This period was extended for a total of 251 hours and finally closed at 2:00 PM on August 10. Harvest limits, ranging from 1,000 to 10,000 sockeye salmon, were imposed on 6 days during this period (Table 5).

Six 24-hour commercial salmon fishing periods were provided to members of both fleets in the Western and Perryville districts south of the Cape Itki line and in those portions of the Chignik Bay and Central districts known as Jack's Box beginning on July 28 and continuing through August 7. Salmon fishing was allowed on a 24-hours on 24 hours-off basis (Figure 3). These were the last commercial salmon fishing periods in the Western and Perryville districts in 2003.

A 48-hour commercial salmon fishing period for the competitive fleet in the Chignik Bay and Central districts began at 3:00 PM on August 10. The upper Chignik Lagoon markers were moved to Mensis Point (Figure 4). This period was extended for 24 hours and ended at 3:00 PM on August 13.

The cooperative fleet was provided a 72-hour commercial salmon fishing period in the Chignik Bay District beginning at 4:00 PM on August 13, using the Pillar Rock markers in upper Chignik Lagoon (Figures 3 and 4). This fishing period was extended for 38 hours and ended at 6:00 AM on August 18.

A 48-hour commercial salmon fishing period for the competitive fleet in the Chignik Bay and Central districts began at 7:00 AM on August 18 (Figure 3). The upper Chignik Lagoon markers were again moved to Mensis Point for this fishery. This period was extended for 33 additional hours and ended at 4:00 PM on August 21.

The Chignik Bay District was opened to commercial salmon fishing for 96 hours for the cooperative fleet beginning at 5:00 PM on August 21 (Figure 3). This period was eventually extended for a total of 433 hours until the commercial salmon fishery ended in the CMA at 11:59 PM on September 16. The competitive fleet was provided 48 hours commercial salmon fishing time in the Chignik Bay and Central districts from 12:01 AM on September 4 until 12:01 AM on September 6 (Figure 3). This was the only time both fleets were given overlapping time and areas in the Chignik Bay District. The Chignik Lagoon markers were moved to, and remained at, Pillar Rock for this entire fishery for the cooperative fleet. The markers were at Mensis Point for the competitive fleet.

ESCAPEMENT AND HARVEST DATA

Stock Separation Techniques

Two distinct sockeye salmon runs enter the Chignik River system and temporally overlap during late June and July. The overlap creates a need to differentiate between the runs to effectively manage the commercial salmon fishery. Scale pattern analysis (SPA) was performed and applied to a discriminate analysis model to separate both the catch and escapement of the early and late runs. A common logistic function was used to smooth the model output. The run apportionment

was used both inseason for commercial fisheries management purposes and postseason for run reconstruction and run forecasting. Scale samples were collected from commercial catches in Chignik Lagoon to estimate the age composition of the catch and subsequent run apportionment. Complete methods are reported in Witteveen and Botz (2004).

Escapement Information

All salmon and Dolly Varden *Salvelinus malma* escapements to the Chignik River were enumerated through the use of a weir. There were two gates in the weir, which were generally always open to allow for unrestricted passage. Underwater video equipment was used to count the fish passing through the gates in the weir. At night, lights allowed fish to be counted. Video recordings of the escapement were made 24 hours a day and archived. The numbers of fish passing the weir, by species, were counted for the first 10 minutes of each hour, and these counts were multiplied by six to obtain hourly escapement estimates. These hourly estimates were then summed to provide an estimate of daily fish passage. The first count of the 2003 season was on May 28, and the last full count of the season was on September 4. A post-weir sockeye salmon escapement estimate was produced using time series analysis and the results were reported grouping the data into the periods of September 5-15 and September 16-30. Aerial surveys were flown to assess sockeye salmon spawning escapement levels within the Chignik watershed. Peak counts were considered an estimate of minimum escapement levels.

The majority of the Chignik River Chinook, sockeye, pink, and chum salmon escapements were counted through the weir. However, the weir was removed before the coho salmon run was complete. Thus, coho salmon counts were considered incomplete and it was not possible to estimate the post-weir coho salmon escapement. As a result, there were no coho salmon escapement goals established for the CMA (Nelson and Lloyd 2001).

Escapements to other CMA streams were estimated via aerial survey. Surveys were flown at regular intervals, and total escapement for each species was estimated using the area-under-the-curve (AUC) methods of Johnson and Barrett (1988). All aerial survey data were documented in the Westward Region Stream Survey Database.

Chinook Salmon

The Chinook salmon run began entering the Chignik River in early-June, peaked during mid-July, and ended by late-August (Table 6; Figure 5). The 2003 Chignik River Chinook salmon escapement of 6,412 was almost double the most recent 5-, 10-, and 20-year averages (Table 7; Figure 6) which substantially exceeded the Chignik River Chinook BEG range of 1,300 to 2,700 (Figure 6; Nelson and Lloyd 2001). The Chignik River is the only stream with substantial Chinook salmon production within the CMA.

Sockeye Salmon

The 2003 Chignik River sockeye salmon early-run peaked in late June and the late-run peaked mid-July (Figure 7). Based on inseason SPA, the early-run escapement 50/50 date (the date in which the run was composed of half early- and half late-run fish) was July 5. However, based on postseason SPA, the early-run escapement 50/50 date was corrected to July 4 (Table 8; Witteveen and Botz 2004).

The total 2003 estimated Chignik River sockeye salmon escapement was 684,123 (Table 9). Based on postseason SPA, the 2003 early-run escapement was estimated at 350,004 matching the

lower end of the early-run sockeye salmon BEG range (350,000 to 400,000) (Nelson and Lloyd 2001). The late-run escapement was estimated at 334,119 sockeye salmon exceeding the late-run BEG range (200,000 to 250,000). The early-run escapement was below, and the late-run escapement was above, the recent 5-, 10-, and 20- year averages (Table 10). The total escapement (684,123) exceeded the combined BEG range of 550,000 to 650,000 sockeye salmon (Figure 8).

Peak aerial survey counts of spawning sockeye salmon in the Chignik River watershed were generally lower than the recent 5-, 10-, and 20-year averages (Tables 11 and 12). However, aerial surveys of these streams were not flown as often or as thoroughly as in some other years, and the actual peaks may not have been documented.

Sockeye salmon escapements were documented, via aerial survey, in low numbers (generally less than 5,000 fish) in several other CMA streams. Due to small run sizes, escapement goals for these streams have not been established (Nelson and Lloyd 2001).

Coho Salmon

Coho salmon begin to enter CMA drainages in mid-August and continue through November. The 2003 Chignik River coho salmon escapement estimate through September 4 (weir removed September 5) was 7,635 (Table 6), which was about 1,000 fish more than the most recent 5-year average escapement (Table 7). Coho salmon escapements were monitored, via aerial survey, in low numbers (generally less than 5,000 fish) in several other CMA streams.

Due to late season run timing and limited directed effort, escapement goals for coho salmon have not been established in the CMA (Nelson and Lloyd 2001).

Pink Salmon

Pink salmon enter the Chignik River in July and August. The 2003 Chignik River pink salmon escapement was 1,897 salmon (Table 6), which was less than half of the recent 10-year average pink salmon escapements (Table 7).

Escapements into other CMA streams were monitored via aerial survey and summed for each district. District escapement totals were then compared to the district Sustainable Escapement Goals (SEGs) to evaluate 2003 pink salmon run strength (Nelson and Lloyd 2001). The SEGs for the Chignik Bay, Central, Eastern, and Western districts were exceeded in 2003 (Table 13). The Perryville District was 4,500 fish below its established SEG. However, the overall combined escapement of approximately 2.35 million pink salmon greatly exceeded the sum of the combined district SEGs (779,500; Table 13).

Chum Salmon

A limited number of chum salmon return to the Chignik River, mainly in August (Table 6). The 2003 Chignik River chum salmon escapement was 68 fish, which was slightly below the recent 10-year average (Table 7).

Escapements into other CMA streams were monitored via aerial survey and summed for each district. District escapement totals were then compared to the district Sustainable Escapement Goals (SEGs) to evaluate 2003 chum salmon run strength (Nelson and Lloyd 2001). The SEGs for the Central, Eastern, Western, and Perryville districts were exceeded in 2003 (Table 14). The Chignik Bay District was approximately 1,100 fish below its established SEG. However, the

overall combined escapement of approximately 300,000 chum salmon exceeded the sum of the combined district SEGs (206,700; Table 14).

Harvest Information

The CMA commercial salmon harvest is organized into several categories. Home pack fish are commercially harvested salmon that are retained for personal consumption. These salmon are not sold and categorized as “personal use” on ADF&G fish tickets. ADF&G also harvests and sells salmon as part of a test fishery program. The BOF has determined that specific portions of the sockeye salmon commercially harvested under the SEDM and Cape Igvak plans are bound for the CMA.

Salmon harvested under subsistence regulations are not included in any of the allocations. The Chignik test fishery harvests are also not considered part of any allocations. Home pack fish are included in the within-CMA sockeye salmon allocation scheme, but are not included in the SEDM and Cape Igvak allocations.

Chinook Salmon

A total of 3,068 Chinook salmon were harvested in 2003, which was about twice the 2002 harvest but still below 10- and 20-year averages (Table 15). Two of these salmon were harvested as part of the ADF&G test fishery program, and 309 were retained as home pack (Table 16). The majority of the CMA Chinook salmon harvest in 2003 took place in the Chignik Bay District (Table 17). Most Chinook salmon were harvested from late June to July in 2003 (Table 18).

Sockeye Salmon

A total of 1,100,297 sockeye salmon were harvested in the CMA during 2003, which was approximately 500,000 sockeye salmon less than the average harvests since 1983 (Table 15). ADF&G test fishery program harvested 5,582 of these salmon. Additionally, 2,411 fish were retained as home pack (Table 19). The vast majority of the CMA sockeye salmon harvest in 2003 came from the Chignik Bay District (Table 20). Most sockeye salmon were harvested during June and July in 2003 (Table 21).

An additional 191,931 sockeye salmon considered Chignik-bound were harvested as part of the SEDM and Cape Igvak fisheries during 2003 (Tables 19 and 22). The Chignik-bound component of the SEDM harvest was 70,044 and totaled 6.7% of the total Chignik-bound harvest (allocation 6.0%; Table 22). The Chignik-bound portion of the Cape Igvak harvest was 121,887 and totaled 11.6% of the total Chignik-bound harvest (allocation 15.0%; Table 22).

The cooperative fleet was allocated 69.3% and the competitive fleet was allocated 30.7% of the within-CMA sockeye salmon harvest (Table 4). The cooperative fleet harvested a total (including home pack) of 760,331 sockeye salmon, or 1,694 sockeye salmon over their allocation of the CMA sockeye salmon harvest (Table 23; Appendix F1). The competitive fleet harvested a total (including home pack) of 334,384 sockeye salmon, or 1,694 sockeye salmon under their allocation of the CMA sockeye salmon harvest (Table 23; Appendix F2).

Both the early- and late- sockeye salmon runs were below average in 2003 (Table 24; Figure 9). Overall, the 2003 forecast was much less accurate than the recent 10-year average forecast accuracy (Table 25). The early run was over forecasted by approximately 40%, while the late run was over forecasted by approximately 17%.

Coho Salmon

A total of 103,896 coho salmon were harvested in 2003, which was less than the prior 5- and 10-year, and about 60,000 less than the prior 20-year average harvest (Tables 15 and 26). A total of 44 coho salmon were harvested as part of the department's test fishery and 74 coho salmon were retained as home pack (Table 26). The majority of the coho salmon harvested in 2003 took place in the Chignik Bay and Western districts, and most were harvested during August and September (Tables 27 and 28).

Pink Salmon

A total of 502,638 pink salmon were harvested in 2003, which was slightly more than half of the prior 5-, 10-, and 20-year average harvests (Tables 15 and 29). Five hundred seventy of these salmon were harvested as part of the department's test fishery program and 407 of these salmon were retained as home pack (Table 29). The majority of the 2003 pink salmon harvest took place in the Western District, and most were harvested between mid July and mid August (Tables 30 and 31).

Chum Salmon

A total of 64,044 chum salmon were harvested in 2003, which was less than half of the prior 5-, 10-, and 20-year average harvests (Tables 15 and 32). One hundred thirty seven of these salmon were harvested as part of the department's test fishery program (Table 32). The majority of the chum salmon harvest in 2003 took place in the Western District, and most were harvested during late July and early August (Tables 33 and 34).

Economic Value

The economic value of the 2003 CMA salmon harvest was about \$5.7 million, or approximately \$57,000 per permit holder, which was an increase from 2002 (Table 35). The vast majority of the revenue was from the sale of sockeye salmon.

CHIGNIK LAGOON TEST FISHERIES

The ADF&G conducts test fisheries in Chignik Lagoon for multiple purposes. Early season test fisheries are used to determine any build-up of salmon prior to the first commercial fishery, collect sockeye salmon scale samples for early season SPA run partitioning, and generate revenue to pay for the vessels chartered to conduct the test fisheries. Mid- to late-season ADF&G test fisheries are conducted to collect sockeye salmon scale samples during fishery closures, generate revenue to conduct the test fisheries, and offset operational costs associated with the scale sampling program.

The 2003 early season escapement objectives were met or surpassed, which allowed for early season commercial salmon harvests. The harvest from the early-June commercial fishery provided the opportunity to sample the sockeye salmon scales necessary to meet ADF&G early-season data collecting needs. Therefore, no pre-season test fisheries were necessary. The cooperative fleet volunteered to commercially fish in a manner that represented historic ADF&G test fisheries on June 22, as requested by the department. The cooperative fleet conducted seven sets to provide an index of the daily entrance of salmon into Chignik Lagoon. The results of the test fishery appeared to be comparable to the historic Chignik Lagoon test fishery database. These results aided the ADF&G with pending fishery management decisions. The cooperative fleet volunteered to harvest additional salmon in Chignik Lagoon to meet ADF&G revenue

requirements without charge. Under the ADF&Gs tests fish authority, the cooperative fleet harvested 2 Chinook, 5,582 sockeye, 44 coho, 570 pink, and 137 chum salmon (Tables 16, 19, 26, 29, and 32).

CHIGNIK AREA SUBSISTENCE SALMON FISHERIES

Early season subsistence fishing opportunities were limited by the slow movement of fish and the early start of the commercial fishery in 2003. Due to the cooperative fishery harvest and management strategies, large pulses of salmon did not build in Chignik Lagoon or pass through the weir. Subsistence users reported they had a difficult time harvesting enough salmon to meet their needs. In response to these concerns, the ADF&G closed the CMA to commercial salmon fishing for 28 hours on June 14-15 to provide an uninterrupted opportunity for subsistence fishermen to harvest salmon.

Previous subsistence regulations stated commercial fishing license holders may not fish for subsistence salmon from 48-hours prior to the first commercial fishery through September 30. To provide subsistence opportunities for commercial fishing license holders, the conditions of the CMA subsistence permit were significantly liberalized for the 2003 season (Appendix B1). The CMA was opened to subsistence salmon fishing for commercial fishing license holders for the entire season. All commercial fishing license holders who participated in the subsistence salmon fishery were required to obtain a subsistence permit at the ADF&G Chignik office prior to harvesting fish.

The 2003 estimated subsistence salmon harvest of 15,395 fish was slightly higher than historical harvest estimates (Table 36). The vast majority of the 2003 subsistence salmon harvest was sockeye salmon.

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TABLES AND FIGURES

Table 1.-List of Chignik Management Area herring management units. ^a

Area	Stat. Area(s)
Chignik Lagoon and Bay	271-10 to 272-40
Kujulik	272-50
Big River	272-60 to 272-70
Cape Kumlik	272-62 to 272-64
Yantarni	272-72 to 272-80
Chiginagak	272-90
Agripina	272-92 to 272-96
Mitrofanina	273-70 to 273-74
Dorner Bay	273-82 to 273-84
Castle Cape	273-90 to 273-94
Perryville	275-60
Humpback Bay	275-50
Ivanof Bay	275-40
Total CMA	

^a No herring surveys were flown in 2003.

Table 2.-Chignik Management Area commercial herring harvest, 1980 through 2003.

<u>Year</u>	<u>Harvest (tons)</u>
1980	587
1981	441
1982	190
1983	88
1984	66
1985	0
1986	11
1987	75
1988	59
1989	66
1990	0
1991	0
1992	0
1993	0
1994	0
1995	77
1996	6
1997	0
1998	0
1999	0
2000	0
2001	0
2002	0
2003	0

Table 3.-Chignik River sockeye salmon interim escapement objectives, 2003.

Early Run			Late Run				
Date	Lower	Upper	Date	If early run is achieved		If early run is not achieved	
				Lower	Upper	Lower	Upper
2-Jun	500	1,000	3-Jul	-	10,000		
4-Jun	2,000	3,000	6-Jul	10,000	20,000	20,000	40,000
6-Jun	5,000	7,000	8-Jul	20,000	30,000	45,000	50,000
8-Jun	10,000	14,000	10-Jul	30,000	40,000	55,000	65,000
10-Jun	20,000	25,000	12-Jul	50,000	60,000	70,000	75,000
12-Jun	30,000	40,000	14-Jul	65,000	75,000	75,000	80,000
14-Jun	50,000	65,000	16-Jul	80,000	90,000	80,000	90,000
16-Jun	75,000	100,000	19-Jul	100,000	115,000	100,000	115,000
18-Jun	125,000	150,000	21-Jul	125,000	135,000	125,000	135,000
20-Jun	175,000	200,000	23-Jul	145,000	160,000	150,000	160,000
22-Jun	225,000	250,000	26-Jul	170,000	180,000	170,000	180,000
25-Jun	275,000	325,000	29-Jul	185,000	195,000	190,000	195,000
30-Jun	350,000	400,000	31-Jul	195,000	200,000	195,000	200,000
			3-Aug	2,000	5,000	2,000	5,000
			6-Aug	5,000	10,000	5,000	10,000
			9-Aug	10,000	15,000	10,000	15,000
			12-Aug	15,000	20,000	15,000	20,000
			15-Aug	20,000	25,000	20,000	25,000
			18-Aug	25,000	30,000	25,000	30,000
			12-Aug	30,000	35,000	30,000	35,000
			24-Aug	35,000	40,000	35,000	40,000
			27-Aug	40,000	45,000	40,000	45,000
			31-Aug	45,000	50,000	45,000	50,000
			3-Sep	2,000	4,000	2,000	4,000
			5-Sep	4,000	8,000	4,000	8,000
			7-Sep	8,000	12,000	8,000	12,000
			9-Sep	12,000	15,000	12,000	15,000
			11-Sep	15,000	18,000	15,000	18,000
			13-Sep	18,000	21,000	18,000	21,000
			15-Sep	21,000	25,000	21,000	25,000

Table 4.-Chignik Management Area fleet membership and allocations, 2003.

Year	Number of CFEC permit holders			Allocation (Percent)	
	Cooperative	Competitive	Total	Cooperative	Competitive
2002	77	22	99	69.3	30.7
2003	77	24	101	69.3	30.7

Table 5.-Daily cooperative fleet sockeye salmon harvest limits, actual catch, difference, and percent difference, 2003.

Day	Limit	Actual Catch	Difference	% Difference
June 18	15,000	16,656	1,656	11.0
June 19	10,000	10,492	492	4.9
June 20	5,000	3,034	-1,966	-39.3
June 21	5,000	4,581	-419	-8.4
June 22	5,000	6,354	1,354	27.1
June 23	0	0	0	0.0
June 24	1,000	413	-587	-58.7
June 25	15,000	15,845	845	5.6
July 3	5,000	4,303	-697	-13.9
July 4	2,500	2,750	250	10.0
July 5	10,000	9,813	-187	-1.9
July 6	20,000	19,382	-618	-3.1
July 9	10,000	9,518	-482	-4.8
July 10	10,000	10,128	128	1.3
July 11	10,000	9,565	-435	-4.4
July 12	10,000	10,620	620	6.2
July 13	7,000	9,226	2,226	31.8
July 18	10,000	9,008	-992	-9.9
July 19	10,000	9,746	-254	-2.5
July 20	10,000	10,064	64	0.6
July 21	10,000	10,718	718	7.2
July 22	15,000	14,226	-774	-5.2
July 26	5,000	4,126	-874	-17.5
July 27	1,000	1,112	112	11.2
July 29	1,500	1,387	-113	-7.5
July 31	10,000	9,101	-899	-9.0
August 1	10,000	6,448	-3,552	-35.5
August 7	3,000	2,555	-445	-14.8
Total	226,000	221,171	-4,829	-2.1

Table 6.-Daily estimated Chignik River Chinook, coho, pink, and chum salmon and Dolly Varden escapement, 2003.

Date	Chinook		Coho		Pink		Chum		Dolly Varden	
	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative
First count on 5/28										
5/28	0	0	0	0	0	0	0	0	6	6
5/29	0	0	0	0	0	0	0	0	12	18
5/30	0	0	0	0	0	0	0	0	0	18
5/31	0	0	0	0	0	0	0	0	6	24
6/1	0	0	0	0	0	0	0	0	0	24
6/2	0	0	0	0	0	0	0	0	0	24
6/3	0	0	0	0	0	0	0	0	6	30
6/4	0	0	0	0	0	0	0	0	6	36
6/5	0	0	0	0	0	0	0	0	0	36
6/6	0	0	0	0	0	0	0	0	6	42
6/7	0	0	0	0	0	0	0	0	6	48
6/8	6	6	0	0	0	0	0	0	18	66
6/9	6	12	0	0	0	0	0	0	54	120
6/10	0	12	0	0	0	0	0	0	6	126
6/11	0	12	0	0	0	0	0	0	24	150
6/12	0	12	0	0	0	0	0	0	66	216
6/13	1	13	0	0	0	0	0	0	96	312
6/14	6	19	0	0	0	0	0	0	72	384
6/15	6	25	0	0	0	0	0	0	84	468
6/16	1	26	0	0	0	0	0	0	90	558
6/17	1	27	0	0	0	0	0	0	48	606
6/18	6	33	0	0	0	0	0	0	42	648
6/19	36	69	0	0	0	0	0	0	48	696
6/20	0	69	0	0	0	0	0	0	48	744
6/21	36	105	0	0	0	0	0	0	144	888
6/22	30	135	0	0	0	0	0	0	84	972
6/23	24	159	0	0	0	0	0	0	96	1,068
6/24	24	183	0	0	0	0	0	0	144	1,212
6/25	36	219	0	0	0	0	0	0	346	1,558
6/26	60	279	0	0	0	0	0	0	142	1,700
6/27	109	388	0	0	0	0	0	0	282	1,982
6/28	60	448	0	0	0	0	0	0	168	2,150
6/29	37	485	0	0	0	0	0	0	384	2,534
6/30	49	534	0	0	0	0	0	0	214	2,748
7/1	18	552	0	0	0	0	0	0	366	3,114
7/2	60	612	0	0	0	0	0	0	1792	4,906
7/3	56	668	0	0	6	6	0	0	-332	4,574
7/4	180	848	0	0	6	12	0	0	1840	6,414

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Table 6.-Page 2 of 3.

Date	Chinook		Coho		Pink		Chum		Dolly Varden	
	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative
7/5	223	1,071	0	0	12	24	0	0	1350	7,764
7/6	183	1,254	0	0	6	30	0	0	1169	8,933
7/7	42	1,296	0	0	6	36	0	0	1020	9,953
7/8	306	1,602	0	0	48	84	0	0	2034	11,987
7/9	330	1,932	0	0	18	102	6	6	2004	13,991
7/10	229	2,161	0	0	48	150	0	6	1588	15,579
7/11	403	2,564	0	0	42	192	0	6	1801	17,380
7/12	517	3,081	0	0	12	204	0	6	4830	22,210
7/13	327	3,408	0	0	48	252	0	6	4650	26,860
7/14	241	3,649	0	0	96	348	0	6	3248	30,108
7/15	272	3,921	0	0	30	378	0	6	1401	31,509
7/16	164	4,085	0	0	6	384	0	6	1914	33,423
7/17	196	4,281	0	0	42	426	0	6	916	34,339
7/18	88	4,369	0	0	24	450	0	6	582	34,921
7/19	91	4,460	0	0	78	528	0	6	222	35,143
7/20	140	4,600	0	0	6	534	0	6	60	35,203
7/21	152	4,752	0	0	24	558	0	6	84	35,287
7/22	144	4,896	0	0	24	582	0	6	60	35,347
7/23	109	5,005	0	0	0	582	0	6	72	35,419
7/24	6	5,011	0	0	6	588	0	6	0	35,419
7/25	138	5,149	0	0	24	612	0	6	288	35,707
7/26	54	5,203	0	0	18	630	0	6	114	35,821
7/27	168	5,371	0	0	66	696	0	6	102	35,923
7/28	124	5,495	0	0	36	732	0	6	264	36,187
7/29	115	5,610	0	0	54	786	0	6	66	36,253
7/30	84	5,694	0	0	48	834	20	26	54	36,307
7/31	72	5,766	0	0	6	840	6	32	18	36,325
8/1	42	5,808	0	0	18	858	0	32	12	36,337
8/2	12	5,820	0	0	24	882	0	32	6	36,343
8/3	54	5,874	0	0	36	918	0	32	0	36,343
8/4	6	5,880	0	0	0	918	0	32	0	36,343
8/5	48	5,928	0	0	42	960	0	32	0	36,343
8/6	0	5,928	0	0	30	990	0	32	0	36,343
8/7	6	5,934	0	0	30	1,020	6	38	6	36,349
8/8	54	5,988	0	0	48	1,068	0	38	0	36,349
8/9	36	6,024	0	0	24	1,092	0	38	0	36,349
8/10	78	6,102	0	0	54	1,146	0	38	24	36,373
8/11	42	6,144	0	0	12	1,158	0	38	0	36,373

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Table 6.-Page 3 of 3.

Date	Chinook		Coho		Pink		Chum		Dolly Varden	
	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative
8/12	48	6,192	0	0	12	1,170	0	38	6	36,379
8/13	15	6,207	24	24	40	1,210	12	50	6	36,385
8/14	36	6,243	18	42	36	1,246	6	56	12	36,397
8/15	18	6,261	12	54	18	1,264	6	62	0	36,397
8/16	18	6,279	0	54	30	1,294	0	62	ND	ND
8/17	6	6,285	0	54	12	1,306	0	62	ND	ND
8/18	36	6,321	18	72	30	1,336	0	62	ND	ND
8/19	30	6,351	18	90	0	1,336	0	62	ND	ND
8/20	18	6,369	18	108	48	1,384	0	62	ND	ND
8/21	0	6,369	10	118	0	1,384	0	62	ND	ND
8/22	18	6,387	108	226	6	1,390	0	62	ND	ND
8/23	0	6,387	54	280	24	1,414	0	62	ND	ND
8/24	0	6,387	56	336	48	1,462	0	62	ND	ND
8/25	0	6,387	54	390	24	1,486	0	62	ND	ND
8/26	12	6,399	173	563	42	1,528	0	62	ND	ND
8/27	0	6,399	314	877	12	1,540	0	62	ND	ND
8/28	0	6,399	486	1,363	60	1,600	6	68	ND	ND
8/29	6	6,405	988	2,351	90	1,690	0	68	ND	ND
8/30	0	6,405	796	3,147	54	1,744	0	68	ND	ND
8/31	6	6,411	851	3,998	108	1,852	0	68	ND	ND
9/1	0	6,411	398	4,396	18	1,870	0	68	ND	ND
9/2	0	6,411	833	5,229	24	1,894	0	68	ND	ND
9/3	1	6,412	252	5,481	3	1,897	0	68	ND	ND
9/4	0	6,412	2,154	7,635	0	1,897	0	68	ND	ND
9/5	Weir Removed									
Totals	6,412		7,635		1,897		68		36,397	

Table 7.-Estimated Chignik River Chinook, coho, pink, and chum salmon and Dolly Varden escapement, 1970 through 2003.

Year	Escapement ^a				
	Chinook ^b	Coho ^c	Pink ^c	Chum ^c	Dolly Varden ^c
1970	2,500	ND	ND	ND	ND
1971	2,000	ND	ND	ND	ND
1972	1,500	ND	ND	ND	ND
1973	822	ND	ND	ND	ND
1974	672	ND	ND	ND	ND
1975	877	ND	ND	ND	ND
1976	700	ND	ND	ND	ND
1977	798	ND	ND	ND	ND
1978	1,197	ND	ND	ND	ND
1979	1,050	ND	ND	ND	ND
1980	876	ND	ND	ND	ND
1981	1,603	ND	ND	ND	ND
1982	2,412	ND	ND	ND	ND
1983	1,943	ND	ND	ND	ND
1984	5,806	ND	ND	ND	ND
1985	3,144	ND	ND	ND	ND
1986	3,612	ND	ND	ND	ND
1987	2,624	ND	ND	ND	ND
1988	4,868	ND	ND	ND	ND
1989	3,316	ND	ND	ND	ND
1990	4,364	ND	ND	ND	ND
1991	4,531	ND	ND	ND	ND
1992	3,806	ND	ND	ND	ND
1993	1,946	ND	ND	ND	ND
1994	2,963	ND	ND	ND	ND
1995	4,288	ND	ND	ND	ND
1996	3,488	16,843	6,030	136	54,726
1997	3,824	10,810	4,880	483	26,657
1998	3,075	14,124	11,490	156	15,235
1999	3,728	2,414	2,524	48	15,025
2000	4,285	7,062	4,284	48	ND
2001	3,028	103	1,464	66	6,416
2002	3,541	9,262	3,417	67	8,179
2003	6,412	7,635	1,897	68	36,397
Averages					
1983-02	3,609	-	-	-	-
1993-02	3,417	-	-	-	-
1998-02	3,531	6,593	4,636	77	16250 ^d

^a A video monitoring system was installed at the Chignik weir in 1994.

^b No escapement adjustments are made for Chinook salmon that spawn below the weir, or those removed by the sport fishery. Only large fish enumerated for escapement estimates from 1970 to 1993.

^c No reliable escapement estimates were generated for pink, chum, or coho salmon or Dolly Varden from 1970 to 1996. No post-weir estimates are reported here for these species.

^d Calculation does not include years with partial (ND) data.

Table 8.-Estimated early- and late-run sockeye salmon escapements and estimated 50/50 dates to the Chignik River, based on inseason and postseason run apportionment models, 1986 through 2003.

Year	Inseason	Postseason			Total
	50/50 date	Early run	Late run	50/50 date	Escapement
1986	ND	566,088	207,231	7/15	773,319
1987	ND	589,291	214,452	7/26	803,743
1988 ^a	7/5	420,577	255,180	6/29	675,757
1989 ^a	7/7	384,004	557,171	8/2	941,175
1990 ^a	7/9	434,543	335,867	6/26	770,410
1991 ^a	7/15	657,511	382,587	6/24	1,040,098
1992 ^a	7/15	360,681	405,922	7/15	766,603
1993	7/4	364,261	333,116	7/5	697,377
1994	7/15	769,462	197,447	7/28	966,909
1995	7/5	366,163	373,757	7/8	739,920
1996	7/14	464,461	284,676	7/20	749,137
1997	7/6	396,667	378,951	7/9	775,618
1998	7/8	410,659	290,379	7/5	701,038
1999	7/10	457,429	258,537	7/9	715,966
2000	7/14	536,141	269,084	7/14	805,225
2001	7/16	744,013	392,905	7/6	1,136,918
2002	7/15	380,701	343,616	7/8	724,317
2003	7/5	350,004	334,119	7/4	684,123

^a From 1988 to 1992 average time of entry curves were used for inseason management; after 1992 inseason SPA was used to manage the commercial fishery.

Table 9.-Estimated daily Chignik River sockeye salmon escapement, 2003.

Date	Daily	Total	Date	Daily	Total
Pre-weir Estimate	100	100	7/18	4,011	463,188
5/28	198	298	7/19	10,564	473,752
5/29	806	1,104	7/20	10,213	483,965
5/30	1,180	2,284	7/21	8,193	492,158
5/31	947	3,231	7/22	14,107	506,265
6/1	1,829	5,060	7/23	6,341	512,606
6/2	3,679	8,739	7/24	1,631	514,237
6/3	5,445	14,184	7/25	1,908	516,145
6/4	3,371	17,555	7/26	1,640	517,785
6/5	5,780	23,335	7/27	4,637	522,422
6/6	8,883	32,218	7/28	10,381	532,803
6/7	6,001	38,219	7/29	10,469	543,272
6/8	8,285	46,504	7/30	9,085	552,357
6/9	7,114	53,618	7/31	2,857	555,214
6/10	5,486	59,104	8/1	1,486	556,700
6/11	5,120	64,224	8/2	1,028	557,728
6/12	10,864	75,088	8/3	796	558,524
6/13	12,539	87,627	8/4	888	559,412
6/14	10,208	97,835	8/5	763	560,175
6/15	9,769	107,604	8/6	377	560,552
6/16	10,023	117,627	8/7	1,784	562,336
6/17	15,476	133,103	8/8	3,739	566,075
6/18	11,022	144,125	8/9	3,540	569,615
6/19	19,951	164,076	8/10	5,640	575,255
6/20	18,168	182,244	8/11	2,058	577,313
6/21	29,482	211,726	8/12	1,685	578,998
6/22	16,037	227,763	8/13	715	579,713
6/23	15,827	243,590	8/14	1,037	580,750
6/24	31,819	275,409	8/15	1,392	582,142
6/25	42,627	318,036	8/16	1,734	583,876
6/26	14,008	332,044	8/17	781	584,657
6/27	15,555	347,599	8/18	1,763	586,420
6/28	2,992	350,591	8/19	1,129	587,549
6/29	1,284	351,875	8/20	632	588,181
6/30	1,390	353,265	8/21	1,233	589,414
7/1	1,577	354,842	8/22	2,150	591,564
7/2	4,101	358,943	8/23	2,402	593,966
7/3	2,926	361,869	8/24	857	594,823
7/4	2,796	364,665	8/25	939	595,762
7/5	11,639	376,304	8/26	1,351	597,113
7/6	10,251	386,555	8/27	1,181	598,294
7/7	3,651	390,206	8/28	2,062	600,356
7/8	3,606	393,812	8/29	2,798	603,154
7/9	3,334	397,146	8/30	1,873	605,027
7/10	8,473	405,619	8/31	1,948	606,975
7/11	8,459	414,078	9/1	1,540	608,515
7/12	11,160	425,238	9/2	1,227	609,742
7/13	18,801	444,039	9/3	817	610,559
7/14	8,215	452,254	9/4 ^a	1,430	611,989
7/15	3,425	455,679	9/5-9/15 estimate	39,993	651,982
7/16	2,370	458,049	9/16-9/30 estimate	32,141	684,123
7/17	1,128	459,177			

^a The weir was removed after the completion of the 9/4 count.

Table 10.-Total Chignik River sockeye salmon escapement, based on postseason analysis, by run, 1970 through 2003.

Year	Early Run	Late Run	Total
1970	536,257	119,952	656,209
1971	671,668	232,501	904,169
1972	326,320	231,270	557,590
1973	533,047	249,144	782,191
1974	351,701	326,245	677,946
1975	308,914	268,734	577,648
1976	551,254	279,509	830,763
1977	482,247	251,753	734,000
1978	458,660	223,887	682,547
1979	385,694	352,122	737,816
1980	311,332	352,729	664,061
1981	438,540	392,909	831,449
1982	616,117	221,601	837,718
1983	426,177	409,458	835,635
1984	597,712	267,862	865,574
1985	376,576	369,262	745,838
1986	566,088	207,231	773,319
1987	589,291	214,452	803,743
1988	420,577	255,180	675,757
1989	384,004	557,171	941,175
1990	434,543	335,867	770,410
1991	672,871	367,227	1,040,098
1992	360,681	405,922	766,603
1993	364,261	333,116	697,377
1994	769,462	197,447	966,909
1995	366,163	373,757	739,920
1996	464,461	284,676	749,137
1997	396,667	378,951	775,618
1998	410,659	290,469	701,128
1999	457,429	258,537	715,966
2000	536,141	269,084	805,225
2001	744,013	392,905	1,136,918
2002	380,701	343,616	724,317
2003	350,004	334,119	684,123
Averages			
1983-02	485,924	325,610	811,533
1993-02	488,996	312,256	801,252
1998-02	505,789	310,922	816,711

Table 11.-Peak sockeye salmon aerial survey escapement counts for the Black Lake tributaries, 1960 through 2003.

Year	Fan Creek	Milk Creek	Boulevard Creek	Alec River	Conglomerate Creek	Broad Creek	Total
1960	38,500	8,000	40,000	30,000	3,000	30,000	149,500
1961	27,000	5,000	28,700	25,000	800	17,000	103,500
1962	18,000	7,000	13,000	60,000	200	15,000	113,200
1963	39,000	ND	36,000	85,000	1,000	61,000	-
1964	19,500	3,050	23,850	17,900	9,300	9,500	83,100
1967	20,000	1,000	9,000	156,000	10,000	10,000	206,000
1968	32,000	2,400	20,000	60,000	2,000	4,100	120,500
1969	103,000	2,100	33,000	50,000	4,000	5,000	197,100
1970	146,000	9,000	55,500	198,000	5,000	ND	-
1971	105,000	14,000	85,000	158,000	0	ND	-
1972	18,000	3,500	19,000	74,000	400	ND	-
1973	115,000	4,000	76,000	74,000	5,000	ND	-
1974	90,000	5,000	50,000	93,000	5,000	ND	-
1975	40,000	4,500	25,000	87,000	0	ND	-
1976	78,000	8,900	100,000	119,000	2,000	ND	-
1977	88,000	20,000	127,000	133,000	1,000	ND	-
1978	114,000	3,300	74,000	83,300	500	ND	-
1979	37,000	11,800	32,000	105,100	400	26,100	212,400
1980	127,000	16,000	75,000	70,500	1,500	68,000	358,000
1981	93,000	4,700	59,000	76,500	20,000	27,000	280,200
1982	50,000	5,500	60,000	43,000	20,000	32,000	210,500
1983	ND	ND	ND	ND	ND	ND	-
1984	50,000	22,200	70,000	30,500	31,000	36,000	239,700
1985	28,000	5,500	36,000	65,000	5,500	17,000	157,000
1986	60,000	15,300	47,000	76,000	39,000	27,000	264,300
1987	52,000	12,200	133,000	88,400	45,900	32,500	364,000
1988	54,000	71,000	83,700	106,500	2,300	26,500	344,000
1989	19,300	21,000	64,000	133,000	1,000	7,500	245,800
1990	32,600	7,400	35,900	49,800	2,200	18,000	145,900
1991	14,600	19,500	48,000	ND	2,000	13,000	-
1992	ND	ND	ND	392,000	ND	ND	-
1993	40,900	12,600	97,600	8,000	77,000	18,200	254,300
1994	70,000	25,000	125,000	350,000	20,000	51,000	641,000
1995	23,000	10,000	60,000	200,000	40,000	60,000	393,000
1996	40,000	24,000	51,000	100,000	50,000	45,000	310,000
1997	60,000	5,000	48,000	166,000	8,000	20,000	307,000
1998	90,000	14,000	100,000	50,000	9,000	62,000	325,000
1999	70,000	8,100	50,000	226,000	1,000	22,000	377,100
2000	41,000	29,000	126,000	210,000	26,000	93,000	525,000
2001	77,000	19,000	265,000	207,000	4,000	89,000	661,000
2002	43,000	ND	20,000	21,000	11,000	7,000	-
2003	17,600	400	2,500	188,000	ND	1,000	-
Averages							
1983-02	48,078	18,871	81,122	137,733	20,828	35,817	347,131 ^a
1993-02	55,490	16,300	94,260	153,800	24,600	46,720	421,489 ^a
1998-02	64,200	17,525	112,200	142,800	10,200	54,600	472,025 ^a

^a Calculations do not include years with partial (-) data.

Table 12.-Chignik Lake and Black River peak aerial sockeye salmon survey escapement estimates, 1960 through 2003.

Year	Black River				Chignik Lake			Total
	Bearskin Creek	West Fork	Chiaktuak Creek	Total	Clark River	Home Creek	Hatchery Beach	
1960	11,600	23,000	19,000	53,600	ND	ND	ND	-
1961	2,500	17,100	20,700	40,300	ND	ND	ND	-
1962	3,000	13,000	24,000	40,000	ND	ND	ND	-
1963	900	5,000	9,000	14,900	ND	ND	ND	-
1964	500	4,500	7,000	12,000	ND	ND	ND	-
1967	10,000	25,000	31,000	66,000	ND	ND	ND	-
1968	1,200	10,500	10,000	21,700	ND	ND	ND	-
1969	50	800	1,500	2,350	ND	ND	ND	-
1970	450	4,000	4,000	8,450	ND	ND	ND	-
1971	3,500	5,500	47,000	56,000	ND	ND	ND	-
1972	1,400	4,300	23,000	28,700	ND	ND	ND	-
1973	13	4,100	1,500	5,613	ND	ND	ND	-
1974	450	8,000	7,000	15,450	ND	ND	ND	-
1975	65	2,500	2,500	5,065	ND	ND	ND	-
1976	2,650	23,700	7,700	34,050	ND	ND	ND	-
1977	200	13,600	6,900	20,700	ND	ND	ND	-
1978	410	9,600	8,500	18,510	ND	ND	ND	-
1979	918	7,610	29,000	37,528	ND	ND	ND	-
1980	3,600	33,000	40,400	77,000	ND	ND	ND	-
1981	950	1,500	18,700	21,150	ND	ND	ND	-
1982	1,066	10,791	5,000	16,857	ND	ND	ND	-
1983	ND	ND	6,000	6,000	ND	ND	ND	-
1984	ND	ND	ND	-	ND	ND	ND	-
1985	350	450	1,200	2,000	ND	ND	ND	-
1986	ND	ND	8,300	8,300	ND	ND	ND	-
1987	ND	ND	1,000	1,000	ND	ND	ND	-
1988	ND	ND	4,600	4,600	ND	ND	ND	-
1989	ND	ND	2,100	2,100	ND	ND	ND	-
1990	300	ND	50	350	ND	ND	ND	-
1991	ND	ND	ND	-	ND	ND	ND	-
1992	ND	ND	ND	-	ND	ND	ND	-
1993	ND	ND	16,000	16,000	ND	ND	ND	-
1994	5,000	ND	31,000	36,000	18,000	9,200	ND	27,200
1995	7,100	18,000	31,000	56,100	13,000	6,000	150,000	169,000
1996	1,800	22,000	22,000	45,800	13,000	5,500	70,000	88,500
1997	9,000	9,000	23,500	41,500	25,000	8,000	35,000	68,000
1998	4,700	71,000	27,500	103,200	21,000	6,000	62,000	89,000
1999	8,300	17,500	13,000	38,800	8,500	1,620	15,000	25,120
2000	2,600	3,700	10,600	16,900	18,000	19,700	2,000	39,700
2001	ND	ND	9,500	9,500	23,000	11,000	25,000	59,000
2002	ND	15,000	2,300	17,300	ND	ND	ND	-
2003	ND	ND	2,000	2,000	ND	ND	ND	-
Averages								
1983-02	4,350	19,581	12,332	35,076 ^a	ND	ND	ND	-
1993-02	5,500	22,314	18,640	38,110	ND	ND	ND	-
1998-02	5,200	26,800	12,580	37,140	17,625	9,580	26,000	53205 ^a

^a Calculations do not include years with partial (-) data.

Table 13.-Estimated pink salmon escapement in the Chignik Management Area, by district and year, 1970 to 2003.

Year ^a	District					Total ^b
	Chignik Bay ^b	Central ^b	Eastern ^b	Western ^b	Perryville ^b	
1970	43,600	60,700	201,700	202,000	72,600	580,600
1971	5,500	74,800	23,000	268,800	45,000	417,100
1972	5,800	3,100	15,900	8,600	7,800	41,200
1973	2,200	50,200	12,800	62,400	31,500	159,100
1974	4,000	9,800	76,200	77,400	60,200	227,600
1975	1,200	26,400	23,500	141,700	45,300	238,100
1976	12,300	66,000	228,800	114,200	89,300	510,600
1977	3,000	199,900	76,000	355,500	115,400	749,800
1978	10,700	101,200	309,300	333,400	157,500	912,100
1979	1,200	297,000	194,300	185,000	181,300	858,800
1980	3,000	99,400	425,500	139,500	74,800	742,200
1981	1,400	76,500	154,700	249,300	116,000	597,900
1982	2,400	26,100	301,500	45,900	13,400	389,300
1983	1,000	11,000	46,300	36,000	64,500	158,800
1984	123,200	94,000	486,500	188,000	109,800	1,001,500
1985	N/A	7,400	212,100	67,500	235,200	522,200
1986	N/A	121,900	580,700	43,800	180,500	926,900
1987	N/A	65,700	215,600	38,300	65,700	385,300
1988	22,400	216,400	1,005,400	232,400	181,300	1,657,900
1989	13,500	215,000	881,000	57,900	267,400	1,434,800
1990	6,000	131,900	811,400	44,300	88,400	1,082,000
1991	12,200	201,100	125,000	96,800	343,500	778,600
1992	55,800	223,800	1,318,100	38,800	190,400	1,826,900
1993	2,000	160,900	524,700	45,800	448,400	1,181,800
1994	75,800	178,900	863,300	111,600	153,900	1,383,500
1995	180,500	715,500	1,399,300	554,700	582,100	3,432,100
1996	43,100	237,100	1,059,600	220,800	395,700	1,956,300
1997	59,400	594,600	1,287,700	306,300	221,500	2,469,500
1998	24,400	210,900	1,273,200	150,400	222,800	1,881,700
1999	37,300	374,300	615,100	137,900	179,700	1,344,300
2000	27,400	146,100	810,700	130,100	98,700	1,213,000
2001	19,700	460,400	1,470,200	263,000	150,200	2,363,500
2002	16,917	85,755	777,710	85,501	62,170	1,028,053
2003	143,897	576,510	1,408,060	117,650	99,500	2,345,617
District SEG	6,500	119,500	488,000	61,500	104,000	779,500
Averages						
1983-02	42,389	222,633	788,181	142,495	212,094	1,401,433
1993-02	48,652	316,446	1,008,151	200,610	251,517	1,825,375
1998-02	25,143	255,491	989,382	153,380	142,714	1,566,111

^a From 1984 to 2003 aerial survey escapement estimates were computed by area-under-the-curve methods using a 15.0 day average stream life (Johnson and Barrett 1988).

^b All estimates were via aerial survey, with the exception of Chignik River which was included in the Chignik Bay District estimate.

Table 14.-Estimated Chignik Management Area chum salmon escapement, by district and year, 1970 through 2003.

Year ^a	District					Total ^b
	Chignik Bay ^b	Central ^b	Eastern ^b	Western ^b	Perryville ^b	
1970	21,000	23,400	126,000	49,700	13,000	233,100
1971	7,100	29,100	219,200	184,100	30,000	469,500
1972	3,300	14,200	107,400	59,000	11,500	195,400
1973	700	12,200	59,100	35,600	9,300	116,900
1974	2,100	18,100	76,300	39,400	12,500	148,400
1975	2,100	18,800	41,300	43,400	20,500	126,100
1976	2,400	17,800	122,300	55,000	8,900	206,400
1977	2,000	9,300	54,500	70,400	15,400	151,600
1978	2,100	13,800	55,800	27,300	5,300	104,300
1979	1,600	44,800	79,500	42,500	12,800	181,200
1980	300	34,200	107,000	56,500	29,100	227,100
1981	500	26,100	126,000	70,300	19,300	242,200
1982	1,400	49,400	145,400	35,400	23,600	255,200
1983	100	17,000	50,200	20,100	8,200	95,600
1984	300	35,400	214,700	73,800	46,000	370,200
1985	0	9,600	4,900	34,600	12,900	62,000
1986	0	31,000	8,500	5,300	7,700	52,500
1987	100	17,500	38,300	19,700	9,800	85,400
1988	15,300	55,800	221,900	27,400	41,400	361,800
1989	4,200	34,700	74,300	7,400	15,900	136,500
1990	1,500	28,000	139,700	28,800	55,800	253,800
1991	0	18,000	70,400	38,100	343,200	469,700
1992	100	173,100	306,900	53,300	40,300	573,700
1993	300	39,400	135,200	14,000	66,800	255,700
1994	1,500	102,600	129,200	23,000	126,000	382,300
1995	10,300	44,500	112,800	45,700	134,600	347,900
1996	16,400	45,100	130,500	44,500	132,000	368,500
1997	18,500	65,700	290,000	60,500	152,800	587,500
1998	4,500	32,000	97,700	30,600	214,500	379,300
1999	2,300	32,400	167,100	16,300	117,300	335,400
2000	100	22,700	216,000	12,700	51,900	303,400
2001	4,100	36,500	406,900	35,500	67,800	550,800
2002	67	11,615	174,850	17,082	32,020	235,634
2003	899	43,191	152,854	39,050	64,331	300,325
District SEG	2,000	39,500	93,700	12,500	59,000	206,700
Averages						
1983-02	3,983	42,631	149,503	30,419	83,846	310,382
1993-02	5,807	43,252	186,025	29,988	109,572	374,643
1998-02	2,213	27,043	212,510	22,436	96,704	360,907

^a From 1984 to 2003 aerial survey escapement estimates were computed by area-under-the-curve methods using a 15.0 day average stream life (Johnson and Barrett 1988).

^b All estimates were via aerial survey, with the exception of Chignik River which was included in the Chignik Bay District estimate.

Table 15.-Total commercial salmon harvests, including home pack and ADF&G test fishery harvests, from the Chignik Management Area by species and year, 1970 through 2003.

Year	Permits Making		Chignik Management Area Harvest					Total
	Deliveries	Landings	Chinook	Sockeye	Coho	Pink	Chum	
1970	80	2,343	1,226	1,325,734	15,348	1,157,172	437,252	2,936,732
1971	77	2,383	2,010	1,016,136	14,557	612,290	353,952	1,998,945
1972	80	1,626	464	378,218	19,615	72,161	78,298	548,756
1973	80	2,187	525	870,354	22,322	25,472	8,717	927,390
1974	94	2,286	255	662,905	12,245	69,515	34,312	779,232
1975	86	1,844	549	399,593	53,283	66,165	25,161	544,751
1976	77	2,407	2,290	1,163,728	35,167	395,287	81,403	1,677,875
1977	88	2,426	710	1,972,207	17,430	604,806	110,452	2,705,605
1978	95	3,005	1,603	1,576,283	20,212	985,114	120,889	2,704,101
1979	103	3,009	1,253	1,049,691	99,129	1,905,198	188,907	3,244,178
1980	104	3,134	2,344	859,966	119,573	1,093,184	252,521	2,327,588
1981	105	4,222	2,694	1,839,469	78,805	1,162,613	580,332	3,663,913
1982	103	3,606	5,236	1,521,686	300,273	873,384	390,096	3,090,675
1983	102	4,357	5,488	1,824,175	61,927	321,178	159,412	2,372,180
1984	100	3,927	4,318	2,660,619	110,128	444,804	63,303	3,283,172
1985	107	3,392	1,887	921,502	191,162	160,128	22,805	1,297,484
1986	102	4,178	3,037	1,645,834	116,633	647,125	176,640	2,589,269
1987	104	3,856	2,651	1,898,838	150,414	246,775	127,261	2,425,939
1988	102	3,895	7,296	795,841	370,420	2,997,159	267,775	4,438,491
1989	101	3,183	3,542	1,159,287	68,233	27,712	1,624	1,260,398
1990	102	5,405	9,901	2,093,650	130,131	550,008	270,004	3,053,694
1991	103	3,856	3,157	1,895,665	165,625	1,169,248	261,096	3,494,791
1992	102	4,172	10,832	1,277,449	310,943	1,554,073	222,134	3,375,431
1993	103	4,241	19,515	1,697,351	229,459	1,648,377	122,360	3,717,062
1994	100	3,707	3,919	1,618,973	237,204	431,063	227,276	2,518,435
1995	101	5,113	5,493	1,724,045	281,518	2,057,998	380,954	4,450,008
1996	101	4,565	3,145	1,958,393	193,246	189,068	120,891	2,464,743
1997	100	3,394	3,120	770,347	90,908	844,431	155,905	1,864,711
1998	86	3,348	4,503	1,054,439	129,539	776,988	128,996	2,094,465
1999	91	4,382	3,507	3,116,527	89,610	1,698,651	140,597	5,048,892
2000	100	3,268	2,612	1,775,225	123,222	428,064	120,957	2,450,080
2001	93	2,906	2,939	1,511,587	131,448	1,281,767	199,003	3,126,744
2002	42	2,432	1,521	1,050,553	49,372	66,050	54,559	1,222,055
2003	44	2,073	3,068	1,100,297	103,896	502,638	64,044	1,773,943
Averages								
1983-02	97	3,879	5,119	1,622,515	161,557	877,033	161,178	2,827,402
1993-02	92	3,736	5,027	1,627,744	155,553	942,246	165,150	2,895,720
1998-02	82	3,267	3,016	1,701,666	104,638	850,304	128,822	2,788,447

Table 16.-Annual Chignik Management Area Chinook salmon harvest (including home pack and ADF&G test fishery catches), 1970 through 2003.

Year	Testfish		Commercial Catch		Home Pack		Total	
	Number	Pounds	Number	Pounds	Number	Pounds ^a	Number	Pounds
1970	ND	ND	1,226	28,507	ND	ND	1,226	28,507
1971	ND	ND	2,010	25,887	ND	ND	2,010	25,887
1972	ND	ND	464	8,091	ND	ND	464	8,091
1973	ND	ND	525	17,001	ND	ND	525	17,001
1974	ND	ND	255	5,997	ND	ND	255	5,997
1975	ND	ND	549	14,108	ND	ND	549	14,108
1976	ND	ND	2,290	29,229	ND	ND	2,290	29,229
1977	ND	ND	710	21,176	ND	ND	710	21,176
1978	ND	ND	1,603	42,439	ND	ND	1,603	42,439
1979	ND	ND	1,253	18,998	ND	ND	1,253	18,998
1980	ND	ND	2,344	32,255	ND	ND	2,344	32,255
1981	ND	ND	2,694	50,832	ND	ND	2,694	50,832
1982	ND	ND	5,236	59,753	ND	ND	5,236	59,753
1983	ND	ND	5,488	96,159	ND	ND	5,488	96,159
1984	ND	ND	4,318	99,567	ND	ND	4,318	99,567
1985	10	249	1,877	44,625	ND	ND	1,887	44,874
1986	ND	ND	3,037	66,772	ND	ND	3,037	66,772
1987	0	0	2,651	49,482	ND	ND	2,651	49,482
1988	0	0	7,296	128,880	ND	ND	7,296	128,880
1989	0	0	3,542	76,698	ND	ND	3,542	76,698
1990	0	0	9,901	134,265	ND	ND	9,901	134,265
1991	3	37	3,154	66,666	ND	ND	3,157	66,703
1992	2	8	10,830	138,082	ND	ND	10,832	138,090
1993	14	65	19,501	234,188	ND	ND	19,515	234,253
1994	16	245	3,903	71,620	ND	ND	3,919	71,865
1995	0	0	5,261	111,187	232	4,903	5,493	116,090
1996	0	0	3,105	62,603	40	806	3,145	63,409
1997	7	149	3,025	47,075	88	1,369	3,120	48,593
1998	21	450	4,374	66,080	108	1,632	4,503	68,162
1999	0	0	3,296	56,706	211	3,630	3,507	60,336
2000	0	0	2,592	34,757	20	268	2,612	35,025
2001	4	120	2,845	39,252	90	1,242	2,939	40,614
2002	3	25	1,441	13,725	77	733	1,521	14,483
2003	2	13	2,757	39,716	309	3,993	3,068	43,722
Averages								
1983-02	5	79	5,072	81,919	-	-	5,119	82,716
1993-02	7	105	4,934	73,719	-	-	5,027	75,283
1998-02	6	119	2,910	42,104	101	1,501	3,016	43,724

^a Weights of home pack fish are not reported on fish tickets; therefore, they were calculated from the average weight of the commercial harvest.

Table 17.-Chignik Management Area Chinook salmon harvest (including home pack and ADF&G test fishery catches), by district and year, 1970 through 2003.

Year	District					Total
	Chignik Bay	Central	Eastern	Western	Perryville	
1970	867	5	55	230	69	1,226
1971	656	23	134	266	931	2,010
1972	226	0	24	72	142	464
1973	520	0	5	0	0	525
1974	200	27	0	28	0	255
1975	542	7	0	0	0	549
1976	2,135	15	3	60	77	2,290
1977	692	12	0	1	5	710
1978	1,386	49	19	130	19	1,603
1979	856	101	6	181	109	1,253
1980	929	148	169	739	359	2,344
1981	2,006	302	188	99	99	2,694
1982	3,269	41	38	1,354	534	5,236
1983	3,560	161	260	1,390	117	5,488
1984	3,696	63	72	487	0	4,318
1985	1,809	50	7	21	0	1,887
1986	2,592	58	14	350	23	3,037
1987	1,931	60	6	512	142	2,651
1988	4,331	1,094	190	1,216	465	7,296
1989	3,532	9	1	0	0	3,542
1990	3,719	2,175	175	3,190	642	9,901
1991	1,996	775	165	197	24	3,157
1992	3,181	2,010	181	4,300	1,160	10,832
1993	5,240	6,865	2,568	3,113	1,729	19,515
1994	1,808	1,303	43	452	313	3,919
1995	3,219	845	108	897	424	5,493
1996	1,590	1,022	263	162	108	3,145
1997	1,384	1,609	60	60	7	3,120
1998	1,805	1,798	79	567	254	4,503
1999	2,270	852	147	216	22	3,507
2000	598	530	53	1,421	10	2,612
2001	1,235	770	302	627	5	2,939
2002	920	17	0	584	0	1,521
2003	2,834	189	0	45	0	3,068
Averages						
1983-02	2,521	1,103	235	988	272	5,119
1993-02	2,007	1,561	362	810	287	5,027
1998-02	1,366	793	116	683	58	3,016

Table 18.-Chignik Management Area Chinook salmon harvest (including home pack and ADF&G test fishery catches), by district and day, 2003.

Date	District					Total
	Chignik Bay	Central	Eastern	Western	Perryville	
6/4	0	0	0	closed	closed	0
6/5	2	0	0	closed	closed	2
6/6	0	0	0	closed	closed	0
6/7	0	0	0	closed	closed	0
6/8	3	0	0	closed	closed	3
6/9	1	0	0	closed	closed	1
6/10	0	4	0	closed	closed	4
6/11	3	0	0	closed	closed	3
6/12	7	0	0	closed	closed	7
6/13	7	0	0	closed	closed	7
6/14	0	10	0	closed	closed	10
6/15	1	0	0	closed	closed	1
6/16	31	0	0	closed	closed	31
6/17	4	0	0	closed	closed	4
6/18	15	0	0	closed	closed	15
6/19	5	0	0	closed	closed	5
6/20	11	0	0	closed	closed	11
6/21	3	0	0	closed	closed	3
6/22	4	0	0	closed	closed	4
6/23	0	0	0	closed	closed	0
6/24	0	0	0	closed	closed	0
6/25	34	0	0	closed	closed	34
6/26	62	5	0	closed	closed	67
6/27	71	0	0	closed	closed	71
6/28	92	20	0	closed	closed	112
6/29	102	0	0	closed	closed	102
6/30	76	0	0	closed	closed	76
7/1	83	0	0	closed	closed	83
7/2	200	3	0	closed	closed	203
7/3	158	4	0	closed	closed	162
7/4	0	0	0	closed	closed	0

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Table 18.-Page 2 of 3.

Date	District					Total
	Chignik Bay	Central	Eastern	Western	Perryville	
7/5	69	0	0	closed	closed	69
7/6	64	closed	closed	closed	closed	64
7/7	122	closed	closed	closed	closed	122
7/8	168	closed	closed	closed	closed	168
7/9	195	1	0	14	0	210
7/10	55	23	0	7	0	85
7/11	75	closed	closed	closed	closed	75
7/12	13	closed	closed	closed	closed	13
7/13	86	6	closed	closed	closed	92
7/14	74	20	closed	closed	closed	94
7/15	5	closed	closed	closed	closed	5
7/16	89	closed	closed	closed	closed	89
7/17	116	0	0	0	0	116
7/18	5	0	0	0	0	5
7/19	58	0	0	13	0	71
7/20	40	0	0	3	0	43
7/21	49	0	0	2	0	51
7/22	96	closed	closed	closed	closed	96
7/23	46	14	0	closed	closed	60
7/24	44	21	0	closed	closed	65
7/25	35	17	0	closed	closed	52
7/26	53	0	0	closed	closed	53
7/27	3	closed	closed	closed	closed	3
7/28	0	0	0	1	0	1
7/29	5	closed	closed	closed	closed	5
7/30	15	0	0	3	0	18
7/31	6	closed	closed	closed	closed	6
8/1	38	0	closed	1	0	39
8/2	49	closed	closed	closed	closed	49
8/3	27	0	closed	1	0	28
8/4	26	closed	closed	closed	closed	26
8/5	31	0	closed	0	0	31
8/6	31	closed	closed	closed	closed	31
8/7	2	0	closed	0	0	2
8/8	2	closed	closed	closed	closed	2
8/9	2	closed	closed	closed	closed	2
8/10	6	0	closed	closed	closed	6
8/11	5	32	closed	closed	closed	37
8/12	0	2	closed	closed	closed	2
8/13	1	0	closed	closed	closed	1
8/14	7	closed	closed	closed	closed	7

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Table 18.-Page 3 of 3.

Date	District					Total
	Chignik Bay	Central	Eastern	Western	Perryville	
8/15	8	closed	closed	closed	closed	8
8/16	6	closed	closed	closed	closed	6
8/17	8	closed	closed	closed	closed	8
8/18	2	4	closed	closed	closed	6
8/19	1	3	closed	closed	closed	4
8/20	0	0	closed	closed	closed	0
8/21	1	0	closed	closed	closed	1
8/22	0	closed	closed	closed	closed	0
8/23	3	closed	closed	closed	closed	3
8/24	5	closed	closed	closed	closed	5
8/25	2	closed	closed	closed	closed	2
8/26	1	closed	closed	closed	closed	1
8/27	3	closed	closed	closed	closed	3
8/28	0	closed	closed	closed	closed	0
8/29	1	closed	closed	closed	closed	1
8/30	0	closed	closed	closed	closed	0
8/31	1	closed	closed	closed	closed	1
9/1	2	closed	closed	closed	closed	2
9/2	0	closed	closed	closed	closed	0
9/3	0	closed	closed	closed	closed	0
9/4	1	0	closed	closed	closed	1
9/5	1	0	closed	closed	closed	1
9/6	0	closed	closed	closed	closed	0
9/7	0	closed	closed	closed	closed	0
9/8	0	closed	closed	closed	closed	0
9/9	0	closed	closed	closed	closed	0
9/10	0	closed	closed	closed	closed	0
9/11	0	closed	closed	closed	closed	0
9/12	0	closed	closed	closed	closed	0
9/13	0	closed	closed	closed	closed	0
9/14	0	closed	closed	closed	closed	0
9/15	0	closed	closed	closed	closed	0
9/16	0	closed	closed	closed	closed	0
Total	2,834	189	0	45	0	3,068

Table 19.-Annual Chignik Management Area sockeye salmon harvest, 1970 through 2003.

Year	Testfish		Commercial Catch		Home Pack		Total CMA Harvest		Cape Igvak ^a		SEDM ^b		Total Chignik-bound	
	Number	Pounds	Number	Pounds	Number	Pounds ^c	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
1970	ND	ND	1,325,734	9,210,127	ND	ND	1,325,734	9,210,127	ND	ND	ND	ND	1,325,734	9,210,127
1971	ND	ND	1,016,136	7,534,367	ND	ND	1,016,136	7,534,367	ND	ND	ND	ND	1,016,136	7,534,367
1972	ND	ND	378,218	2,863,742	ND	ND	378,218	2,863,742	ND	ND	ND	ND	378,218	2,863,742
1973	ND	ND	870,354	7,023,294	ND	ND	870,354	7,023,294	ND	ND	ND	ND	870,354	7,023,294
1974	ND	ND	662,905	4,756,653	ND	ND	662,905	4,756,653	ND	ND	ND	ND	662,905	4,756,653
1975	ND	ND	399,593	2,773,725	ND	ND	399,593	2,773,725	ND	ND	ND	ND	399,593	2,773,725
1976	ND	ND	1,163,728	8,562,989	ND	ND	1,163,728	8,562,989	ND	ND	ND	ND	1,163,728	8,562,989
1977	ND	ND	1,972,207	17,247,659	ND	ND	1,972,207	17,247,659	ND	ND	ND	ND	1,972,207	17,247,659
1978	ND	ND	1,576,283	12,451,982	ND	ND	1,576,283	12,451,982	225,078	1,583,809	ND	ND	1,801,361	14,035,791
1979	ND	ND	1,049,691	7,862,600	ND	ND	1,049,691	7,862,600	13,950	96,507	ND	ND	1,063,641	7,959,107
1980	ND	ND	859,966	5,795,098	ND	ND	859,966	5,795,098	32	147	63,724	442,601	923,722	6,237,846
1981	ND	ND	1,839,469	13,486,031	ND	ND	1,839,469	13,486,031	282,727	1,876,246	122,198	888,410	2,244,394	16,250,687
1982	ND	ND	1,521,686	11,340,439	ND	ND	1,521,686	11,340,439	166,756	1,162,053	62,789	463,729	1,751,231	12,966,221
1983	ND	ND	1,824,175	11,926,829	ND	ND	1,824,175	11,926,829	318,048	1,926,770	227,392	1,631,668	2,369,615	15,485,267
1984	ND	ND	2,660,619	18,536,287	ND	ND	2,660,619	18,536,287	449,372	2,820,646	423,292	3,053,430	3,533,283	24,410,363
1985	4,875	30,480	916,627	5,415,817	ND	ND	921,502	5,446,297	123,627	637,207	51,421	337,919	1,096,550	6,421,423
1986	ND	ND	1,645,834	11,254,860	ND	ND	1,645,834	11,254,860	188,017	1,153,092	118,006	841,446	1,951,857	13,249,398
1987	679	4,637	1,898,159	13,997,077	ND	ND	1,898,838	14,001,714	321,506	2,146,841	146,886	1,121,094	2,367,230	17,269,649
1988	3,425	24,287	792,416	5,690,165	ND	ND	795,841	5,714,452	10,520	63,641	19,320	140,708	825,681	5,918,801
1989	6,433	46,532	1,152,854	7,922,748	ND	ND	1,159,287	7,969,280	0	0	4,485	32,262	1,163,772	8,001,542
1990	5,522	33,915	2,088,128	13,775,854	ND	ND	2,093,650	13,809,769	107,706	665,309	117,065	783,670	2,318,421	15,258,748
1991	8,106	54,892	1,887,559	12,889,560	ND	ND	1,895,665	12,944,452	324,195	1,886,494	152,714	1,037,726	2,372,574	15,868,672
1992	12,423	80,326	1,265,026	8,292,576	ND	ND	1,277,449	8,372,902	150,434	896,108	93,845	608,765	1,521,728	9,877,775
1993	5,444	34,231	1,691,907	10,228,401	ND	ND	1,697,351	10,262,632	300,055	1,639,082	128,608	847,879	2,126,014	12,749,593
1994	9,139	54,433	1,609,834	10,091,402	ND	ND	1,618,973	10,145,835	250,230	1,423,150	142,350	934,493	2,011,553	12,503,478
1995	9,023	57,674	1,715,022	11,464,647	0	0	1,724,045	11,522,321	169,530	899,572	89,086	547,563	1,982,661	12,969,456
1996	4,317	36,511	1,954,036	14,866,234	40	304	1,958,393	14,903,049	308,327	1,954,430	127,201	884,305	2,393,921	17,741,784
1997	11,299	77,874	758,384	4,782,715	664	4,187	770,347	4,864,776	0	0	0	0	770,347	4,864,776
1998	12,374	66,040	1,041,798	6,372,010	267	1,633	1,054,439	6,439,683	8,813	39,133	66,893	408,902	1,130,145	6,887,718
1999	5,994	42,216	3,110,507	20,527,837	26	172	3,116,527	20,570,225	456,039	2,469,213	173,621	1,086,186	3,746,187	24,125,624

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Table 19.-Page 2 of 2.

Year	Testfish		Commercial Catch		Home pack		Total CMA Harvest		Cape Igvak ^a		SEDM ^b		Total Chignik-bound	
	Number	Pounds	Number	Pounds	Number	Pounds ^c	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
2000	11,604	88,790	1,763,621	13,577,434	0	0	1,775,225	13,666,224	271,344	1,703,875	103,419	737,462	2,149,988	16,107,561
2001 ^d	14,011	98,197	1,497,359	10,972,234	217	1,590	1,511,587	11,072,021	215,214	1,287,154	51,141	368,970	1,777,942	12,728,145
2002	9,101	61,656	1,040,081	7,176,261	1,371	9,460	1,050,553	7,247,377	136,488	727,894	63,026	502,353	1,250,067	8,477,624
2003	5,582	36,334	1,092,304	7,137,591	2,411	15,755	1,100,297	7,189,680	121,887	599,342	70,044	466,153	1,292,228	8,255,175
Averages														
1983-02	-	-	1,615,697	10,988,047	-	-	1,622,515	11,033,549	205,473	1,216,981	114,989	795,340	1,942,977	13,045,870
1993-02	9,231	61,762	1,618,255	11,005,918	-	-	1,627,744	11,069,414	211,604	1,214,350	94,535	631,811	1,933,883	12,915,576
1998-02	10,617	71,380	1,690,673	11,725,155	376	2,571	1,701,666	11,799,106	217,580	1,245,454	91,620	620,775	2,010,866	13,665,334

^a The Cape Igvak allocation began in 1978. From 1978 to 2002, 80% of the Cape Igvak sockeye salmon harvest was considered Chignik River-bound. Beginning in 2002, that percentage was changed to 90%.

^b Beginning in 1980, 80% of the SEDM harvest in specific areas during specific times was considered Chignik River-bound.

^c Weights of home pack fish are not reported on fish tickets; therefore, the weights were calculated from the average weight of the commercial harvest for that year.

^d Due to a strike by Alaska Peninsula fishermen, forgone harvest of 27,896 sockeye salmon was added to the SEDM catch for management purposes; this forgone harvest is not included in this table.

Table 20.-Total annual Chignik Management Area sockeye salmon harvest (including home pack and ADF&G test fishery catches), by district, 1970 through 2003.

Year	District					Total
	Chignik Bay	Central	Eastern	Western	Perryville	
1970	1,122,993	10,252	187,210	3,751	1,528	1,325,734
1971	885,632	41,958	81,155	6,403	988	1,016,136
1972	354,912	2,429	15,985	4,734	158	378,218
1973	845,079	8,039	17,234	2	0	870,354
1974	539,196	120,412	199	3,098	0	662,905
1975	387,128	12,448	0	17	0	399,593
1976	1,112,533	48,327	1,254	425	1,189	1,163,728
1977	1,851,733	119,484	0	909	81	1,972,207
1978	1,474,673	89,826	7,161	4,482	141	1,576,283
1979	909,056	104,892	12,558	20,319	2,866	1,049,691
1980	708,828	74,628	60,947	9,227	6,336	859,966
1981	1,355,524	426,159	36,618	14,751	6,417	1,839,469
1982	1,413,806	66,278	10,209	30,279	1,114	1,521,686
1983	1,597,059	123,590	73,824	25,246	4,456	1,824,175
1984	1,942,822	517,653	184,495	15,470	179	2,660,619
1985	811,956	77,314	18,720	13,175	337	921,502
1986	1,389,172	182,884	6,424	44,362	22,992	1,645,834
1987	1,559,757	255,118	14,498	56,524	12,941	1,898,838
1988	529,540	124,103	25,699	93,070	23,429	795,841
1989	1,156,782	2,473	32	0	0	1,159,287
1990	1,400,069	566,601	51,443	53,192	22,345	2,093,650
1991	1,487,421	315,570	59,751	19,766	13,157	1,895,665
1992	792,889	332,860	12,327	30,004	109,369	1,277,449
1993	762,730	557,020	186,364	54,051	137,186	1,697,351
1994	908,042	573,484	20,041	64,325	53,081	1,618,973
1995	1,083,707	415,436	48,842	79,874	96,186	1,724,045
1996	1,003,683	743,658	145,668	47,529	17,855	1,958,393
1997	407,427	295,084	20,650	44,768	2,418	770,347
1998	622,005	286,643	30,555	87,940	27,296	1,054,439
1999	2,356,146	612,589	79,717	57,859	10,216	3,116,527
2000	1,327,249	358,985	71,572	15,034	2,385	1,775,225
2001	1,082,291	382,172	28,377	17,673	1,074	1,511,587
2002	993,756	44,368	2,835	9,425	169	1,050,553
2003	1,000,247	64,440	1,701	29,069	4,840	1,100,297
Averages						
1983-02	1,160,725	338,380	54,092	41,464	27,854	1,622,515
1993-02	1,054,704	426,944	63,462	47,848	34,787	1,627,744
1998-02	1,276,289	336,951	42,611	37,586	8,228	1,701,666

Table 21.-Chignik Management Area sockeye salmon harvest (including home pack and ADF&G test fishery catches), by district and day, 2003.

Date	District					Total
	Chignik Bay	Central	Eastern	Western	Perryville	
4-Jun	506	0	0	closed	closed	506
5-Jun	16,918	0	0	closed	closed	16,918
6-Jun	24,265	0	0	closed	closed	24,265
7-Jun	10,949	0	0	closed	closed	10,949
8-Jun	23,178	0	0	closed	closed	23,178
9-Jun	27,130	1,554	0	closed	closed	28,684
10-Jun	23,667	8,941	0	closed	closed	32,608
11-Jun	20,596	0	0	closed	closed	20,596
12-Jun	31,204	0	0	closed	closed	31,204
13-Jun	21,583	2,830	0	closed	closed	24,413
14-Jun	15,330	6,938	0	closed	closed	22,268
15-Jun	16,614	0	0	closed	closed	16,614
16-Jun	35,535	0	0	closed	closed	35,535
17-Jun	26,721	0	0	closed	closed	26,721
18-Jun	16,656	0	0	closed	closed	16,656
19-Jun	10,492	0	0	closed	closed	10,492
20-Jun	5,489	0	0	closed	closed	5,489
21-Jun	4,581	0	0	closed	closed	4,581
22-Jun	6,354	0	0	closed	closed	6,354
23-Jun	0	0	0	closed	closed	0
24-Jun	413	0	0	closed	closed	413
25-Jun	15,845	0	0	closed	closed	15,845
26-Jun	23,911	6,255	570	closed	closed	30,736
27-Jun	10,728	2,018	596	closed	closed	13,342
28-Jun	12,574	3,841	459	closed	closed	16,874
29-Jun	16,210	0	0	closed	closed	16,210
30-Jun	19,564	0	0	closed	closed	19,564
1-Jul	17,869	0	0	closed	closed	17,869
2-Jul	14,421	4,408	76	closed	closed	18,905
3-Jul	6,156	782	0	closed	closed	6,938
4-Jul	2,750	0	0	closed	closed	2,750
5-Jul	9,813	0	0	closed	closed	9,813
6-Jul	19,382	closed	closed	closed	closed	19,382
7-Jul	20,146	closed	closed	closed	closed	20,146
8-Jul	18,423	closed	closed	closed	closed	18,423
9-Jul	9,518	434	0	7,138	1,792	18,882
10-Jul	10,288	607	0	7,889	1,384	20,168
11-Jul	9,565	closed	closed	closed	closed	9,565
12-Jul	10,620	closed	closed	closed	closed	10,620
13-Jul	17,433	2,252	closed	closed	closed	19,685
14-Jul	17,484	4,176	closed	closed	closed	20,984
15-Jul	18,209	closed	closed	closed	closed	18,885
16-Jul	21,993	closed	closed	closed	closed	21,993
17-Jul	18,508	0	0	0	0	18,508
18-Jul	9,008	0	0	0	0	9,008

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Table 21.-Page 2 of 3.

Date	District					Total
	Chignik Bay	Central	Eastern	Western	Perryville	
19-Jul	9,746	72	0	4,195	0	14,013
20-Jul	10,064	371	0	980	0	11,415
21-Jul	10,718	45	0	865	0	11,628
22-Jul	14,226	closed	closed	closed	closed	14,226
23-Jul	14,078	2,862	0	closed	closed	16,940
24-Jul	16,602	4,379	0	closed	closed	20,981
25-Jul	14,372	2,100	0	closed	closed	16,472
26-Jul	5,071	0	0	closed	closed	5,071
27-Jul	1,112	closed	closed	closed	closed	1,112
28-Jul	0	169	0	2,789	163	3,121
29-Jul	1,387	closed	closed	closed	closed	1,387
30-Jul	6,304	0	0	798	295	7,397
31-Jul	9,101	closed	closed	closed	closed	9,101
1-Aug	6,448	0	closed	1,177	429	8,054
2-Aug	8,282	closed	closed	closed	closed	8,282
3-Aug	6,824	0	closed	1,171	397	8,392
4-Aug	6,855	closed	closed	closed	closed	6,855
5-Aug	8,388	3	closed	1,442	380	10,213
6-Aug	8,333	closed	closed	closed	closed	8,333
7-Aug	2,555	201	closed	625	0	3,381
8-Aug	2,885	closed	closed	closed	closed	2,885
9-Aug	3,012	closed	closed	closed	closed	3,012
10-Aug	6,883	1,531	closed	closed	closed	8,414
11-Aug	7,045	2,434	closed	closed	closed	9,479
12-Aug	4,448	327	closed	closed	closed	4,775
13-Aug	5,358	0	closed	closed	closed	5,358
14-Aug	5,057	closed	closed	closed	closed	5,057
15-Aug	4,190	closed	closed	closed	closed	4,190
16-Aug	7,008	closed	closed	closed	closed	7,008
17-Aug	7,238	closed	closed	closed	closed	7,238
18-Aug	8,973	863	closed	closed	closed	9,836
19-Aug	8,001	2,679	closed	closed	closed	10,680
20-Aug	4,670	623	closed	closed	closed	5,293
21-Aug	4,929	589	closed	closed	closed	5,518
22-Aug	4,152	closed	closed	closed	closed	4,152
23-Aug	6,751	closed	closed	closed	closed	6,751
24-Aug	6,650	closed	closed	closed	closed	6,650
25-Aug	6,373	closed	closed	closed	closed	6,373
26-Aug	3,987	closed	closed	closed	closed	3,987
27-Aug	4,053	closed	closed	closed	closed	4,053
28-Aug	1,491	closed	closed	closed	closed	1,491
29-Aug	3,851	closed	closed	closed	closed	3,851
30-Aug	5,222	closed	closed	closed	closed	5,222
31-Aug	4,437	closed	closed	closed	closed	4,437

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Table 21.-Page 3 of 3.

Date	District					Total
	Chignik Bay	Central	Eastern	Western	Perryville	
1-Sep	4,309	closed	closed	closed	closed	4,309
2-Sep	3,265	closed	closed	closed	closed	3,265
3-Sep	4,434	closed	closed	closed	closed	4,434
4-Sep	3,336	92	closed	closed	closed	3,428
5-Sep	4,462	64	closed	closed	closed	4,526
6-Sep	257	closed	closed	closed	closed	257
7-Sep	171	closed	closed	closed	closed	171
8-Sep	193	closed	closed	closed	closed	193
9-Sep	669	closed	closed	closed	closed	669
10-Sep	679	closed	closed	closed	closed	679
11-Sep	916	closed	closed	closed	closed	916
12-Sep	0	closed	closed	closed	closed	0
13-Sep	559	closed	closed	closed	closed	559
14-Sep	534	closed	closed	closed	closed	534
15-Sep	734	closed	closed	closed	closed	734
16-Sep	0	closed	closed	closed	closed	0
Total	1,000,247	64,440	1,701	29,069	4,840	1,100,297

Table 22.-Harvest of sockeye salmon considered by regulation to be Chignik bound in the Chignik, Cape Igvak, and Southeastern District Mainland commercial salmon fisheries from June 1 to July 25, 1978 through 2003.

Year	Chignik ^a		Cape Igvak ^a		Southeastern District Mainland ^a		Total
	Catch ^b	Percent	Catch ^b	Percent	Catch ^c	Percent	
1978	1,454,389	86.6	225,078	13.4	ND	ND	1,679,467
1979	794,504	98.3	13,950	1.7	ND	ND	808,454
1980	670,001	91.3	32	0.0	63,724	8.7	733,757
1981	1,606,300	79.9	282,727	14.1	122,198	6.1	2,011,225
1982	1,250,768	84.5	166,756	11.3	62,789	4.2	1,480,313
1983	1,450,832	72.7	318,048	15.9	227,392	11.4	1,996,272
1984	2,474,405	73.9	449,372	13.4	423,292	12.6	3,347,069
1985	690,698	79.8	123,627	14.3	51,421	5.9	865,746
1986	1,456,729	82.6	188,017	10.7	118,006	6.7	1,762,752
1987	1,659,236	78.0	321,506	15.1	146,886	6.9	2,127,628
1988	675,487	95.8	10,520	1.5	19,320	2.7	705,327
1989	496,044	99.1	0	0.0	4,485	0.9	500,529
1990	1,205,575	84.3	107,706	7.5	117,065	8.2	1,430,346
1991 ^d	1,962,583	80.5	324,195	13.3	152,714	6.3	2,439,492
1992	1,054,309	81.2	150,434	11.6	93,845	7.2	1,298,588
1993	1,495,098	77.7	300,055	15.6	128,608	6.7	1,923,761
1994 ^e	1,632,435	80.6	250,230	12.4	142,350	7.0	2,025,015
1995	1,024,785	79.8	169,530	13.2	89,086	6.9	1,283,401
1996	1,710,249	79.7	308,327	14.4	127,201	5.9	2,145,777
1997	443,892	100.0	0	0.0	0	0.0	443,892
1998 ^f	786,466	91.2	8,813	1.0	66,893	7.8	862,172
1999	2,326,811	78.7	456,039	15.4	173,621	5.9	2,956,471
2000	1,509,652	80.1	271,344	14.4	103,419	5.5	1,884,415
2001 ^g	1,134,991	79.4	215,214	15.1	79,037	5.5	1,429,242
2002	849,980	81.0	136,488	13.0	63,026	6.0	1,049,494
2003	855,179	81.7	121,887	11.6	70,044	6.7	1,047,110
Averages							
1983-02	1,302,013	82.8	205,473	10.9	116,383	6.3	1,623,870
1993-02	1,291,436	82.8	211,604	11.5	97,324	5.7	1,600,364
1998-02	1,321,580	82.1	217,580	11.8	97,199	6.1	1,636,359

^a Through 2001, the Cape Igvak and Southeastern District Mainland figures represent 80% of the total sockeye salmon catch for those areas through July 25, based on the regulations in effect during those years. In 2002 the BOF increased the percentage of sockeye salmon harvest considered Chignik bound from 80% to 90% in the Cape Igvak fishery. The figures reported in this table are the portion of the catches considered Chignik-bound. These figures do not include Chignik test fishery harvests or fish retained for home pack as they are not included in the allocation scheme.

^b Beginning in 1978 the Cape Igvak Salmon Management Plan allocated up to 15% of the total catch of Chignik-bound sockeye salmon to the Cape Igvak fishery.

^c Beginning in 1985 the Southeastern District Mainland was allowed an allocation of 6.2% of the total harvest of Chignik bound sockeye salmon through July 25. Certain areas (which changed frequently) were excluded from the allocation and managed for local (Orzinski Lake) stocks (see regulations from the individual years). After July 25 the entire Southeast District Mainland was managed based on local stock abundance. The allocation level changed to 6.0% beginning in 1988. Beginning in 1992, the allocation of Chignik bound sockeye to the Southeastern District Mainland fishery was increased to 7.0%. Prior to the 1996 season, the BOF decreased the allocation from 7.0% to 6.0%.

^d Includes a forgone harvest of 278,305 sockeye salmon during a Chignik area strike (June 23 to July 4).

^e Includes a forgone harvest of 208,921 sockeye salmon during a Chignik area strike (June 2 to June 25).

^f Includes a forgone harvest of 52,131 sockeye salmon during a Chignik area strike (June 16 to June 29).

^g Includes a forgone harvest of 389,887 sockeye salmon in Chignik during a Chignik area strike (June 16 to 29), and foregone harvest of 27,896 sockeye salmon in the SEDM during a strike on the South Peninsula (June 14 to July 2).

Table 23.-Chignik Management Area sockeye salmon allocations and actual harvests, 2002 through 2003.

Year	Fleet	Percentage			Number of Sockeye Salmon		
		Allocation	Actual ^{ab}	Difference	Allocation	Actual ^{ab}	Difference
2002	Cooperative	69.3	69.3	-0.03	721,726	721,428	-298
	Competitive	30.7	30.7	0.03	319,726	320,024	298
	Total	100.0	100.0		1,041,452	1,041,452	
2003	Cooperative	69.3	69.5	0.15	758,637	760,331	1,694
	Competitive	30.7	30.5	-0.15	336,078	334,384	-1,694
	Total	100.0	100.0		1,094,715	1,094,715	

^a Commercially harvested fish retained as home pack included in calculations.

^b Commercial test fishery harvests not included in calculations.

Table 24.-Chignik sockeye salmon escapement, total catch considered Chignik-bound, and total run, 1970 through 2003.

Year	Early Run			Late Run			Total Run ^{abc}		
	Esc.	Catch	Run	Esc.	Catch	Run	Esc.	Catch	Run
1970	536,257	1,566,065	2,102,322	119,952	262,244	382,196	656,209	1,828,309	2,484,518
1971	671,668	555,832	1,227,500	232,501	709,190	941,691	904,169	1,265,022	2,169,191
1972	326,320	43,220	369,540	231,270	386,615	617,885	557,590	429,835	987,425
1973 ^d	533,047	610,488	1,143,535	249,144	355,195	604,339	782,191	965,683	1,747,874
1974	351,701	204,722	556,423	326,245	648,283	974,528	677,946	853,005	1,530,951
1975	308,914	7,873	316,787	268,734	417,560	686,294	577,648	425,433	1,003,081
1976	551,254	599,341	1,150,595	279,509	727,043	1,006,552	830,763	1,326,384	2,157,147
1977	482,247	534,198	1,016,445	251,753	1,602,363	1,854,116	734,000	2,136,561	2,870,561
1978	458,660	940,188	1,398,848	223,887	885,173	1,109,060	682,547	1,825,361	2,507,908
1979	385,694	186,537	572,231	352,122	933,788	1,285,910	737,816	1,120,325	1,858,141
1980	311,332	73,742	385,074	352,729	849,980	1,202,709	664,061	923,722	1,587,783
1981	438,540	800,364	1,238,904	392,909	1,444,030	1,836,939	831,449	2,244,394	3,075,843
1982	616,117	1,324,396	1,940,513	221,601	426,835	648,436	837,718	1,751,231	2,588,949
1983	426,177	1,128,246	1,554,423	409,458	1,241,369	1,650,827	835,635	2,369,615	3,205,250
1984	597,712	2,919,984	3,517,696	267,862	613,299	881,161	865,574	3,533,283	4,398,857
1985	376,576	654,431	1,031,007	369,262	442,119	811,381	745,838	1,096,550	1,842,388
1986	566,088	1,364,295	1,930,383	207,231	587,562	794,793	773,319	1,951,857	2,725,176
1987	589,291	1,947,088	2,536,379	214,452	420,142	634,594	803,743	2,367,230	3,170,973
1988	420,577	271,377	691,954	255,180	554,304	809,484	675,757	825,681	1,501,438
1989	384,004	234,237	618,241	557,171	929,535	1,486,706	941,175	1,163,772	2,104,947
1990	434,543	582,520	1,017,063	335,867	1,735,901	2,071,768	770,410	2,318,421	3,088,831
1991	657,511	1,711,549	2,384,420	382,587	661,025	1,028,252	1,040,098	2,372,574	3,412,672
1992	360,681	744,417	1,105,098	405,922	777,311	1,183,233	766,603	1,521,728	2,288,331
1993	364,261	926,892	1,291,153	333,116	1,199,122	1,532,238	697,377	2,126,014	2,823,391
1994	769,462	1,595,176	2,364,638	197,447	416,377	613,824	966,909	2,011,553	2,978,462
1995	366,163	666,799	1,032,962	373,757	1,315,862	1,689,619	739,920	1,982,661	2,722,581
1996	464,461	1,688,264	2,152,725	284,676	705,657	990,333	749,137	2,393,921	3,143,058
1997	396,667	234,824	631,491	378,951	535,523	914,474	775,618	770,347	1,545,965
1998	410,659	313,158	723,817	290,469	816,987	1,107,456	701,128	1,130,145	1,831,273
1999	457,429	2,022,272	2,479,701	258,537	1,723,915	1,982,452	715,966	3,746,187	4,462,153
2000	536,141	1,574,391	2,110,532	269,084	575,597	844,681	805,225	2,149,988	2,955,213
2001	744,013	563,539	1,307,552	392,905	1,214,403	1,607,308	1,136,918	1,777,942	2,914,860
2002	380,701	684,728	1,065,428	343,616	565,339	908,955	724,317	1,250,067	1,974,383
2003	350,004	640,084	990,088	334,119	652,144	986,263	684,123	1,292,228	1,976,351
Averages									
1983-02	485,156	1,091,409	1,577,333	326,378	851,567	1,177,177	811,533	1,942,977	2,754,510
1993-02	488,996	1,027,004	1,516,000	312,256	906,878	1,219,134	801,252	1,933,883	2,735,134
1998-02	505,789	1,031,618	1,537,406	310,922	979,248	1,290,170	816,711	2,010,866	2,827,576

^a Includes Cape Igvak and SEDM harvests considered Chignik-bound as defined in regulation. However, portions of the harvests from Cape Igvak and SEDM from 1970 to 1979 were not considered Chignik-bound by regulation, but were included in this table for comparison purposes.

^b Does not include subsistence-caught fish.

^c Includes catches from the Chignik Lagoon test fishery and fish retained for home pack.

Table 25.-Chignik sockeye salmon forecasts and actual runs, by run and year, 1992 through 2003.

Year	Early Run (millions)			Late Run (millions)			Total Run (millions)		
	Forecast	Actual	% Error	Forecast	Actual	% Error	Forecast	Actual	% Error
1993	1.60	1.29	19	0.95	1.53	-61	2.55	2.82	-11
1994	1.80	2.36	-31	1.30	0.61	53	3.10	2.98	4
1995	1.90	1.03	46	0.90	1.69	-88	2.80	2.72	3
1996	1.40	2.15	-54	1.60	0.99	38	3.00	3.14	-5
1997	1.00	0.63	37	1.60	0.91	43	2.60	1.55	41
1998	0.90	0.72	20	1.10	1.11	-1	2.00	1.83	8
1999	1.05	2.48	-136	1.29	1.98	-54	2.34	4.46	-91
2000	3.90	2.11	46	1.09	0.84	23	4.99	2.96	41
2001	1.00	1.31	-31	0.91	1.61	-77	1.91	2.91	-53
2002	1.03	1.07	-4	1.09	0.91	17	2.12	1.98	7
2003	1.64	0.99	40	1.19	0.99	17	2.83	1.98	30
Averages									
1993 to 2002	1.56	1.52	-9	1.18	1.22	-11	2.74	2.74	-6
1998 to 2002	1.58	1.54	-21	1.10	1.29	-18	2.67	2.83	-17

Table 26.-Annual Chignik Management Area coho salmon harvest, 1970 through 2003.

Year	Testfish		Commercial Catch		Home Pack		Total	
	Number	Pounds	Number	Pounds	Number	Pounds ^a	Number	Pounds
1970	ND	ND	15,348	103,879	ND	ND	15,348	103,879
1971	ND	ND	14,557	96,832	ND	ND	14,557	96,832
1972	ND	ND	19,615	138,345	ND	ND	19,615	138,345
1973	ND	ND	22,322	172,190	ND	ND	22,322	172,190
1974	ND	ND	12,245	97,037	ND	ND	12,245	97,037
1975	ND	ND	53,283	467,912	ND	ND	53,283	467,912
1976	ND	ND	35,167	294,954	ND	ND	35,167	294,954
1977	ND	ND	17,430	156,418	ND	ND	17,430	156,418
1978	ND	ND	20,212	158,270	ND	ND	20,212	158,270
1979	ND	ND	99,129	725,035	ND	ND	99,129	725,035
1980	ND	ND	119,573	771,392	ND	ND	119,573	771,392
1981	ND	ND	78,805	602,603	ND	ND	78,805	602,603
1982	ND	ND	300,273	2,373,268	ND	ND	300,273	2,373,268
1983	ND	ND	61,927	488,203	ND	ND	61,927	488,203
1984	ND	ND	110,128	949,965	ND	ND	110,128	949,965
1985	0	0	191,162	1,709,637	ND	ND	191,162	1,709,637
1986	ND	ND	116,633	867,195	ND	ND	116,633	867,195
1987	0	0	150,414	1,189,803	ND	ND	150,414	1,189,803
1988	0	0	370,420	2,889,427	ND	ND	370,420	2,889,427
1989	0	0	68,233	559,140	ND	ND	68,233	559,140
1990	0	0	130,131	933,745	ND	ND	130,131	933,745
1991	42	253	165,583	1,182,704	ND	ND	165,625	1,182,957
1992	1	8	310,942	2,362,683	ND	ND	310,943	2,362,691
1993	356	2,024	229,103	1,459,220	ND	ND	229,459	1,461,244
1994	103	506	237,101	1,996,320	ND	ND	237,204	1,996,826
1995	0	0	280,605	2,062,086	913	6,709	281,518	2,068,795
1996	0	0	193,226	1,485,947	20	154	193,246	1,486,101
1997	0	0	90,908	756,509	0	0	90,908	756,509
1998	0	0	129,512	1,045,823	27	218	129,539	1,046,041
1999	0	0	89,410	617,320	200	1,381	89,610	618,701
2000	0	0	123,222	943,536	0	0	123,222	943,536
2001	0	0	131,441	1,012,153	7	54	131,448	1,012,207
2002	0	0	49,208	360,781	164	1,202	49,372	361,983
2003	44	287	103,778	857,097	74	611	103,896	857,995
Averages								
1983-02	-	-	161,465	1,243,610	-	-	161,557	1,244,235
1993-02	46	253	155,374	1,173,970	-	-	155,553	1,175,194
1998-02	0	0	104,559	795,923	80	571	104,638	796,494

^a Weights of home pack fish are not reported on fish tickets; therefore, the weights were calculated from the average weight of the commercial harvest for that year.

Table 27.-Chignik Management Area coho salmon harvest (including home pack and ADF&G test fishery catches), by district and year, 1970 through 2003.

Year	District					Total
	Chignik Bay	Central	Eastern	Western	Perryville	
1970	4,578	62	399	9,745	564	15,348
1971	10,928	62	301	2,297	969	14,557
1972	17,692	2	160	1,579	182	19,615
1973	22,304	6	12	0	0	22,322
1974	11,056	414	0	775	0	12,245
1975	52,407	260	0	0	616	53,283
1976	34,426	173	109	32	427	35,167
1977	16,810	189	7	378	46	17,430
1978	14,467	24	21	3,848	1,852	20,212
1979	52,966	3,556	3,869	31,300	7,438	99,129
1980	49,784	7,167	13,872	34,631	14,119	119,573
1981	35,578	8,693	6,222	22,047	6,265	78,805
1982	132,262	6,564	31,476	122,707	7,264	300,273
1983	29,519	330	441	27,173	4,464	61,927
1984	72,722	1,705	403	33,263	2,035	110,128
1985	156,553	7,111	3,203	23,357	938	191,162
1986	60,197	3,027	1,033	33,726	18,650	116,633
1987	77,333	3,806	7	58,688	10,580	150,414
1988	94,292	21,628	6,167	207,086	41,247	370,420
1989	68,231	2	0	0	0	68,233
1990	61,260	27,659	32	23,422	17,758	130,131
1991	56,574	9,294	1,187	57,373	41,197	165,625
1992	80,946	19,612	4,260	140,560	65,565	310,943
1993	48,808	36,421	4,240	84,056	55,934	229,459
1994	70,541	19,794	176	110,476	36,217	237,204
1995	54,646	46,975	458	88,116	91,323	281,518
1996	45,361	35,440	33	91,587	20,825	193,246
1997	32,847	45,878	1,801	9,139	1,243	90,908
1998	23,070	32,743	1,227	55,359	17,140	129,539
1999	23,144	24,308	3,095	36,405	2,658	89,610
2000	11,620	37,943	2,555	69,599	1,505	123,222
2001	10,007	31,062	2,303	86,580	1,496	131,448
2002	8,461	4,442	0	36,283	186	49,372
2003	37,800	7,632	0	55,225	3,239	103,896
Averages						
1983-02	54,307	20,459	1,631	63,612	21,548	161,557
1993-02	32,851	31,501	1,589	66,760	22,853	155,553
1998-02	15,260	26,100	1,836	56,845	4,597	104,638

Table 28.-Chignik Management Area coho salmon harvest (including home pack and ADF&G test fishery catches), by district and day, 2003.

Date	District					Total
	Chignik Bay	Central	Eastern	Western	Perryville	
6/4	0	0	0	closed	closed	0
6/5	0	0	0	closed	closed	0
6/6	0	0	0	closed	closed	0
6/7	0	0	0	closed	closed	0
6/8	0	0	0	closed	closed	0
6/9	0	0	0	closed	closed	0
6/10	0	1	0	closed	closed	1
6/11	0	0	0	closed	closed	0
6/12	0	0	0	closed	closed	0
6/13	1	0	0	closed	closed	1
6/14	0	0	0	closed	closed	0
6/15	0	0	0	closed	closed	0
6/16	0	0	0	closed	closed	0
6/17	0	0	0	closed	closed	0
6/18	0	0	0	closed	closed	0
6/19	0	0	0	closed	closed	0
6/20	0	0	0	closed	closed	0
6/21	0	0	0	closed	closed	0
6/22	0	0	0	closed	closed	0
6/23	0	0	0	closed	closed	0
6/24	0	0	0	closed	closed	0
6/25	0	0	0	closed	closed	0
6/26	1	0	0	closed	closed	1
6/27	0	0	0	closed	closed	0
6/28	0	0	0	closed	closed	0
6/29	0	0	0	closed	closed	0
6/30	1	0	0	closed	closed	1
7/1	0	0	0	closed	closed	0
7/2	1	17	0	closed	closed	18
7/3	3	0	0	closed	closed	3
7/4	0	0	0	closed	closed	0
7/5	1	0	0	closed	closed	1
7/6	3	closed	closed	closed	closed	3
7/7	3	closed	closed	closed	closed	3
7/8	2	closed	closed	closed	closed	2
7/9	1	193	0	3,196	1,200	4,590
7/10	54	376	0	5,183	400	6,013
7/11	2	closed	closed	closed	closed	2
7/12	0	closed	closed	closed	closed	0
7/13	6	110	closed	closed	closed	116
7/14	7	231	closed	closed	closed	229
7/15	0	closed	closed	closed	closed	9

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Table 28.-Page 2 of 3.

Date	District					Total
	Chignik Bay	Central	Eastern	Western	Perryville	
7/16	55	closed	closed	closed	closed	55
7/17	7	0	0	0	0	7
7/18	0	0	0	0	0	0
7/19	1	115	0	3,378	0	3,494
7/20	2	664	0	3,308	0	3,974
7/21	3	0	0	3,418	0	3,421
7/22	18	closed	closed	closed	closed	18
7/23	2	310	0	closed	closed	312
7/24	2	154	0	closed	closed	156
7/25	0	112	0	closed	closed	112
7/26	1	0	0	closed	closed	1
7/27	0	closed	closed	closed	closed	0
7/28	0	510	0	5,146	43	5,699
7/29	0	closed	closed	closed	closed	0
7/30	0	0	0	3,828	799	4,627
7/31	4	closed	closed	closed	closed	4
8/1	8	0	closed	7,039	272	7,319
8/2	1	closed	closed	closed	closed	1
8/3	21	0	closed	7,675	170	7,866
8/4	19	closed	closed	closed	closed	19
8/5	11	200	closed	7,186	355	7,752
8/6	38	closed	closed	closed	closed	38
8/7	5	1,262	closed	5,868	0	7,135
8/8	3	closed	closed	closed	closed	3
8/9	1	closed	closed	closed	closed	1
8/10	24	503	closed	closed	closed	527
8/11	25	935	closed	closed	closed	960
8/12	8	130	closed	closed	closed	138
8/13	25	0	closed	closed	closed	25
8/14	76	closed	closed	closed	closed	76
8/15	62	closed	closed	closed	closed	62
8/16	145	closed	closed	closed	closed	145
8/17	124	closed	closed	closed	closed	124
8/18	96	314	closed	closed	closed	410
8/19	161	836	closed	closed	closed	997
8/20	699	237	closed	closed	closed	936
8/21	305	154	closed	closed	closed	459
8/22	416	closed	closed	closed	closed	416
8/23	567	closed	closed	closed	closed	567
8/24	480	closed	closed	closed	closed	480
8/25	504	closed	closed	closed	closed	504
8/26	777	closed	closed	closed	closed	777
8/27	801	closed	closed	closed	closed	801
8/28	279	closed	closed	closed	closed	279
8/29	1,309	closed	closed	closed	closed	1,309
8/30	1,789	closed	closed	closed	closed	1,789
8/31	1,784	closed	closed	closed	closed	1,784

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Table 28.-Page 3 of 3.

Date	District					Total
	Chignik Bay	Central	Eastern	Western	Perryville	
9/1	2,305	closed	closed	closed	closed	2,305
9/2	2,094	closed	closed	closed	closed	2,094
9/3	3,295	closed	closed	closed	closed	3,295
9/4	2,641	85	closed	closed	closed	2,726
9/5	3,254	183	closed	closed	closed	3,437
9/6	1,021	closed	closed	closed	closed	1,021
9/7	804	closed	closed	closed	closed	804
9/8	1,000	closed	closed	closed	closed	1,000
9/9	1,472	closed	closed	closed	closed	1,472
9/10	1,758	closed	closed	closed	closed	1,758
9/11	1,794	closed	closed	closed	closed	1,794
9/12	0	closed	closed	closed	closed	0
9/13	1,703	closed	closed	closed	closed	1,703
9/14	1,788	closed	closed	closed	closed	1,788
9/15	2,127	closed	closed	closed	closed	2,127
9/16	0	closed	closed	closed	closed	0
Totals	37,800	7,632	0	55,225	3,239	103,896

Table 29.-Annual Chignik Management Area pink salmon harvest, 1970 through 2003.

Year	Testfish		Commercial Catch		Home Pack		Total	
	Number	Pounds	Number	Pounds	Number	Pounds ^a	Number	Pounds
1970	ND	ND	1,157,172	4,104,927	ND	ND	1,157,172	4,104,927
1971	ND	ND	612,290	2,291,832	ND	ND	612,290	2,291,832
1972	ND	ND	72,161	278,778	ND	ND	72,161	278,778
1973	ND	ND	25,444	104,457	ND	ND	25,444	104,457
1974	ND	ND	69,515	290,712	ND	ND	69,515	290,712
1975	ND	ND	66,165	260,631	ND	ND	66,165	260,631
1976	ND	ND	395,287	1,749,923	ND	ND	395,287	1,749,923
1977	ND	ND	604,806	2,435,862	ND	ND	604,806	2,435,862
1978	ND	ND	985,114	3,454,877	ND	ND	985,114	3,454,877
1979	ND	ND	1,905,198	7,154,954	ND	ND	1,905,198	7,154,954
1980	ND	ND	1,093,184	3,635,145	ND	ND	1,093,184	3,635,145
1981	ND	ND	1,162,613	4,479,368	ND	ND	1,162,613	4,479,368
1982	ND	ND	873,384	2,916,671	ND	ND	873,384	2,916,671
1983	ND	ND	321,178	1,200,888	ND	ND	321,178	1,200,888
1984	ND	ND	444,804	1,651,249	ND	ND	444,804	1,651,249
1985	0	0	160,128	643,731	ND	ND	160,128	643,731
1986	ND	ND	647,125	2,374,311	ND	ND	647,125	2,374,311
1987	0	0	246,775	899,560	ND	ND	246,775	899,560
1988	0	0	2,997,159	10,723,505	ND	ND	2,997,159	10,723,505
1989	0	0	27,712	94,269	ND	ND	27,712	94,269
1990	0	0	550,008	1,675,644	ND	ND	550,008	1,675,644
1991	2,660	9,237	1,166,588	3,348,394	ND	ND	1,169,248	3,357,631
1992	114	536	1,553,959	5,798,623	ND	ND	1,554,073	5,799,159
1993	1,826	5,539	1,646,551	5,308,258	ND	ND	1,648,377	5,313,797
1994	14	55	431,049	1,494,604	ND	ND	431,063	1,494,659
1995	0	0	2,057,998	7,350,386	0	0	2,057,998	7,350,386
1996	0	0	183,806	536,218	5,262	15,351	189,068	551,569
1997	0	0	844,431	2,784,333	0	0	844,431	2,784,333
1998	0	0	776,988	2,586,026	0	0	776,988	2,586,026
1999	0	0	1,698,651	4,845,435	0	0	1,698,651	4,845,435
2000	0	0	428,064	1,183,004	0	0	428,064	1,183,004
2001	0	0	1,281,760	4,077,814	7	22	1,281,767	4,077,836
2002	66	276	65,984	206,385	0	0	66,050	206,661
2003	570	2,167	501,661	1,951,928	407	1,584	502,638	1,955,679
Averages								
1983-02	-	-	876,536	2,939,132	-	-	877,033	2,940,683
1993-02	191	587	941,528	3,037,246	-	-	942,246	3,039,371
1998-02	13	55	850,289	2,579,733	1	4	850,304	2,579,792

^a Weights of home pack fish are not reported on fish tickets; therefore, they were calculated from the average weight of the commercial harvest.

Table 30.-Chignik Management Area pink salmon harvest (including home pack and ADF&G test fishery catches), by district and year, 1970 through 2003.

Year	District					Total
	Chignik Bay	Central	Eastern	Western	Perryville	
1970	46,297	27,919	268,857	442,684	371,415	1,157,172
1971	65,281	20,518	28,959	285,447	212,085	612,290
1972	31,606	766	12,928	14,880	11,981	72,161
1973	22,674	293	2,477	28	0	25,472
1974	33,484	22,084	568	13,379	0	69,515
1975	27,377	31,342	0	7,446	0	66,165
1976	108,827	16,583	28,828	135,803	105,246	395,287
1977	60,932	120,018	239	379,038	44,579	604,806
1978	137,074	61,224	86,778	419,280	280,758	985,114
1979	312,406	284,414	292,364	744,613	271,401	1,905,198
1980	180,912	108,682	472,510	216,460	114,620	1,093,184
1981	121,380	210,023	173,293	433,605	224,312	1,162,613
1982	82,973	80,606	89,074	602,408	18,323	873,384
1983	27,284	7,861	7,817	164,338	113,878	321,178
1984	165,178	47,250	57,715	173,820	841	444,804
1985	14,429	16,087	6,570	80,577	42,465	160,128
1986	191,264	44,127	49,635	200,793	161,306	647,125
1987	13,887	7,769	2,079	187,701	35,339	246,775
1988	119,794	318,370	1,006,366	1,141,382	411,247	2,997,159
1989	27,691	21	0	0	0	27,712
1990	94,528	233,677	40,574	135,810	45,419	550,008
1991	76,163	173,967	27,979	419,264	471,875	1,169,248
1992	178,105	205,750	183,119	628,900	358,199	1,554,073
1993	55,909	205,037	52,755	685,605	649,071	1,648,377
1994	59,425	99,149	12,952	174,641	84,896	431,063
1995	106,939	469,745	8,572	791,718	681,024	2,057,998
1996	1,804	20,717	7,201	100,871	58,475	189,068
1997	39,461	603,575	72,347	118,003	11,045	844,431
1998	26,054	233,732	66,725	343,187	107,290	776,988
1999	59,001	664,208	40,571	771,411	163,460	1,698,651
2000	28,067	271,417	10,500	106,147	11,933	428,064
2001	75,142	641,438	97,438	424,537	43,212	1,281,767
2002	10,253	17,580	0	36,918	1,299	66,050
2003	56,042	88,736	267	326,239	31,354	502,638
Averages						
1983-02	68,519	214,074	87,546	334,281	172,614	877,033
1993-02	46,206	322,660	36,906	355,304	181,171	942,246
1998-02	39,703	365,675	43,047	336,440	65,439	850,304

Table 31.-Chignik Management Area pink salmon harvest (including home pack and ADF&G test fishery catches), by district and day, 2003.

Date	District					Total
	Chignik Bay	Central	Eastern	Western	Perryville	
6/4	0	0	0	closed	closed	0
6/5	0	0	0	closed	closed	0
6/6	0	0	0	closed	closed	0
6/7	0	0	0	closed	closed	0
6/8	0	0	0	closed	closed	0
6/9	0	3,372	0	closed	closed	3,372
6/10	0	95	0	closed	closed	95
6/11	0	0	0	closed	closed	0
6/12	0	0	0	closed	closed	0
6/13	9	143	0	closed	closed	152
6/14	72	203	0	closed	closed	275
6/15	0	0	0	closed	closed	0
6/16	0	0	0	closed	closed	0
6/17	0	0	0	closed	closed	0
6/18	50	0	0	closed	closed	50
6/19	12	0	0	closed	closed	12
6/20	5	0	0	closed	closed	5
6/21	4	0	0	closed	closed	4
6/22	11	0	0	closed	closed	11
6/23	0	0	0	closed	closed	0
6/24	1	0	0	closed	closed	1
6/25	30	0	0	closed	closed	30
6/26	158	721	122	closed	closed	1,001
6/27	68	404	38	closed	closed	510
6/28	32	500	49	closed	closed	581
6/29	44	0	0	closed	closed	44
6/30	173	0	0	closed	closed	173
7/1	270	0	0	closed	closed	270
7/2	295	2,064	58	closed	closed	2,417
7/3	463	125	0	closed	closed	588
7/4	0	0	0	closed	closed	0
7/5	133	0	0	closed	closed	133
7/6	419	closed	closed	closed	closed	419
7/7	285	closed	closed	closed	closed	285
7/8	468	closed	closed	closed	closed	468
7/9	591	881	0	20,465	2,660	24,597
7/10	478	1,112	0	18,372	1,136	21,098
7/11	447	closed	closed	closed	closed	447
7/12	0	closed	closed	closed	closed	0
7/13	892	1,416	closed	closed	closed	2,308
7/14	1,046	4,249	closed	closed	closed	5,295
7/15	124	758	closed	closed	closed	882

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Table 31.-Page 2 of 3.

Date	District					Total
	Chignik Bay	Central	Eastern	Western	Perryville	
7/16	541	0	closed	closed	closed	541
7/17	750	0	0	0	0	750
7/18	15	0	0	0	0	15
7/19	81	155	0	21,964	0	22,200
7/20	340	2,408	0	19,498	0	22,246
7/21	348	175	0	21,172	0	21,695
7/22	666	closed	closed	closed	closed	666
7/23	2,073	11,389	0	closed	closed	13,462
7/24	2,476	15,369	0	closed	closed	17,845
7/25	2,365	7,696	0	closed	closed	10,061
7/26	1,445	0	0	closed	closed	1,445
7/27	120	closed	closed	closed	closed	120
7/28	0	3,967	0	45,563	1,057	50,587
7/29	338	closed	closed	closed	closed	338
7/30	1,036	0	0	35,145	11,225	47,406
7/31	1,619	closed	closed	closed	closed	1,619
8/1	1,172	0	closed	40,858	4,945	46,975
8/2	2,994	closed	closed	closed	closed	2,994
8/3	2,543	0	closed	39,723	5,201	47,467
8/4	2,599	closed	closed	closed	closed	2,599
8/5	2,590	1,146	closed	39,971	5,130	48,837
8/6	4,909	closed	closed	closed	closed	4,909
8/7	605	6,349	closed	23,508	0	30,462
8/8	771	closed	closed	closed	closed	771
8/9	801	closed	closed	closed	closed	801
8/10	4,105	7,514	closed	closed	closed	11,619
8/11	2,147	9,748	closed	closed	closed	11,895
8/12	1,252	2,203	closed	closed	closed	3,455
8/13	1,354	0	closed	closed	closed	1,354
8/14	901	closed	closed	closed	closed	901
8/15	647	closed	closed	closed	closed	647
8/16	1,258	closed	closed	closed	closed	1,258
8/17	1,132	closed	closed	closed	closed	1,132
8/18	0	1,225	closed	closed	closed	1,225
8/19	0	2,310	closed	closed	closed	2,310
8/20	225	467	closed	closed	closed	692
8/21	146	572	closed	closed	closed	718
8/22	351	closed	closed	closed	closed	351
8/23	331	closed	closed	closed	closed	331
8/24	202	closed	closed	closed	closed	202
8/25	308	closed	closed	closed	closed	308
8/26	450	closed	closed	closed	closed	450
8/27	366	closed	closed	closed	closed	366
8/28	108	closed	closed	closed	closed	108
8/29	237	closed	closed	closed	closed	237
8/30	251	closed	closed	closed	closed	251
8/31	245	closed	closed	closed	closed	245

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Table 31.-Page 3 of 3.

Date	District					Total
	Chignik Bay	Central	Eastern	Western	Perryville	
9/1	72	closed	closed	closed	closed	72
9/2	88	closed	closed	closed	closed	88
9/3	31	closed	closed	closed	closed	31
9/4	41	0	closed	closed	closed	41
9/5	17	0	closed	closed	closed	17
9/6	0	closed	closed	closed	closed	0
9/7	0	closed	closed	closed	closed	0
9/8	0	closed	closed	closed	closed	0
9/9	0	closed	closed	closed	closed	0
9/10	0	closed	closed	closed	closed	0
9/11	0	closed	closed	closed	closed	0
9/12	0	closed	closed	closed	closed	0
9/13	0	closed	closed	closed	closed	0
9/14	0	closed	closed	closed	closed	0
9/15	0	closed	closed	closed	closed	0
9/16	0	closed	closed	closed	closed	0
Totals	56,042	88,736	267	326,239	31,354	502,638

Table 32.-Annual Chignik Management Area chum salmon harvest, 1970 through 2003.

Year	Testfish		Commercial Catch		Home Pack		Total	
	Number	Pounds	Number	Pounds	Number	Pounds ^a	Number	Pounds
1970	ND	ND	437,252	3,004,113	ND	ND	437,252	3,004,113
1971	ND	ND	353,952	2,420,446	ND	ND	353,952	2,420,446
1972	ND	ND	78,298	603,726	ND	ND	78,298	603,726
1973	ND	ND	8,701	67,812	ND	ND	8,701	67,812
1974	ND	ND	34,312	246,288	ND	ND	34,312	246,288
1975	ND	ND	25,161	176,046	ND	ND	25,161	176,046
1976	ND	ND	81,403	678,545	ND	ND	81,403	678,545
1977	ND	ND	110,452	937,365	ND	ND	110,452	937,365
1978	ND	ND	120,889	984,141	ND	ND	120,889	984,141
1979	ND	ND	188,907	1,378,938	ND	ND	188,907	1,378,938
1980	ND	ND	252,521	1,765,287	ND	ND	252,521	1,765,287
1981	ND	ND	580,332	4,502,632	ND	ND	580,332	4,502,632
1982	ND	ND	390,096	3,231,403	ND	ND	390,096	3,231,403
1983	ND	ND	159,412	1,205,266	ND	ND	159,412	1,205,266
1984	ND	ND	63,303	485,967	ND	ND	63,303	485,967
1985	0	0	22,805	145,276	ND	ND	22,805	145,276
1986	ND	ND	176,640	1,304,418	ND	ND	176,640	1,304,418
1987	0	0	127,261	943,941	ND	ND	127,261	943,941
1988	0	0	267,775	2,196,377	ND	ND	267,775	2,196,377
1989	0	0	1,624	11,888	ND	ND	1,624	11,888
1990	0	0	270,004	1,757,019	ND	ND	270,004	1,757,019
1991	607	4,260	260,489	1,671,939	ND	ND	261,096	1,676,199
1992	16	140	222,118	1,592,186	ND	ND	222,134	1,592,326
1993	57	300	122,303	735,747	ND	ND	122,360	736,047
1994	521	3,437	226,755	1,627,574	ND	ND	227,276	1,631,011
1995	0	0	380,949	2,814,987	5	37	380,949	2,815,024
1996	0	0	99,791	779,840	21,100	164,891	120,891	944,731
1997	0	0	155,905	1,196,999	0	0	155,905	1,196,999
1998	0	0	128,841	917,648	155	1,104	128,996	918,752
1999	0	0	140,594	1,064,433	3	0	140,597	1,064,433
2000	0	0	120,957	1,033,665	0	0	120,957	1,033,665
2001	0	0	198,874	1,609,533	129	1,044	199,003	1,610,577
2002	46	334	54,513	406,382	0	0	54,559	406,716
2003	137	1,394	63,907	447,921	0	0	64,044	449,315
Averages								
1983-02	-	-	160,046	1,175,054	-	-	161,177	1,183,832
1993-02	62	407	162,948	1,218,681	-	-	165,149	1,235,795
1998-02	9	67	128,756	1,006,332	57	430	128,822	1,006,829

^a Weights of home pack fish are not reported on fish tickets; therefore, they were calculated from the average weight of the commercial harvest.

Table 33.-Chignik Management Area chum salmon harvest (including home pack and ADF&G test fishery catches), by district and year, 1970 through 2003.

Year	District					Total
	Chignik Bay	Central	Eastern	Western	Perryville	
1970	1,660	28,628	241,108	139,551	26,305	437,252
1971	19,449	13,723	102,344	177,534	40,902	353,952
1972	18,178	1,566	27,723	18,535	12,296	78,298
1973	7,254	229	1,218	16	0	8,717
1974	17,317	13,516	255	3,224	0	34,312
1975	21,137	3,225	0	799	0	25,161
1976	19,237	3,358	10,020	33,051	15,737	81,403
1977	8,621	8,888	1,507	88,027	3,409	110,452
1978	15,020	10,317	17,451	45,991	32,110	120,889
1979	32,176	11,427	36,090	82,326	26,888	188,907
1980	19,944	38,902	56,805	91,868	45,002	252,521
1981	38,061	160,730	108,668	221,579	51,294	580,332
1982	16,034	33,669	64,513	253,299	22,581	390,096
1983	16,747	9,815	8,250	101,959	22,641	159,412
1984	8,173	8,150	21,134	25,364	482	63,303
1985	4,905	5,242	864	10,704	1,090	22,805
1986	18,167	29,502	17,880	74,070	37,021	176,640
1987	5,163	9,437	8,890	86,898	16,873	127,261
1988	7,013	39,316	77,511	102,730	41,205	267,775
1989	1,587	34	3	0	0	1,624
1990	11,460	113,741	27,463	91,603	25,737	270,004
1991	17,545	51,429	4,925	98,603	88,594	261,096
1992	12,711	45,569	61,209	65,466	37,179	222,134
1993	8,116	43,306	21,157	25,045	24,736	122,360
1994	25,250	69,552	4,333	94,116	34,025	227,276
1995	14,588	107,066	8,074	158,273	92,953	380,954
1996	782	46,993	19,837	36,303	16,976	120,891
1997	20,978	104,259	11,397	16,280	2,991	155,905
1998	7,352	43,191	5,180	41,425	31,848	128,996
1999	12,150	75,495	11,332	37,089	4,531	140,597
2000	8,389	66,904	8,045	34,823	2,796	120,957
2001	11,534	84,132	50,911	37,466	14,960	199,003
2002	3,949	9,643	513	40,337	117	54,559
2003	10,891	11,071	50	39,883	1,916	64,044
Averages						
1983-02	10,828	48,139	18,445	58,928	24,838	161,178
1993-02	11,309	65,054	14,078	52,116	22,593	165,150
1998-02	8,675	55,873	15,196	38,228	10,850	128,822

Table 34.-Chignik Management Area chum salmon harvest (including home pack and ADF&G test fishery catches), by district and day, 2003.

Date	District					Total
	Chignik Bay	Central	Eastern	Western	Perryville	
6/4	0	0	0	closed	closed	0
6/5	0	0	0	closed	closed	0
6/6	0	0	0	closed	closed	0
6/7	0	0	0	closed	closed	0
6/8	0	0	0	closed	closed	0
6/9	0	51	0	closed	closed	51
6/10	0	267	0	closed	closed	267
6/11	0	0	0	closed	closed	0
6/12	0	0	0	closed	closed	0
6/13	1	63	0	closed	closed	64
6/14	5	147	0	closed	closed	152
6/15	0	0	0	closed	closed	0
6/16	0	0	0	closed	closed	0
6/17	0	0	0	closed	closed	0
6/18	1	0	0	closed	closed	1
6/19	0	0	0	closed	closed	0
6/20	0	0	0	closed	closed	0
6/21	0	0	0	closed	closed	0
6/22	0	0	0	closed	closed	0
6/23	0	0	0	closed	closed	0
6/24	0	0	0	closed	closed	0
6/25	4	0	0	closed	closed	4
6/26	14	847	16	closed	closed	877
6/27	7	347	19	closed	closed	373
6/28	5	1,280	15	closed	closed	1,300
6/29	9	0	0	closed	closed	9
6/30	9	0	0	closed	closed	9
7/1	5	0	0	closed	closed	5
7/2	30	744	0	closed	closed	774
7/3	15	68	0	closed	closed	83
7/4	0	0	0	closed	closed	0
7/5	8	0	0	closed	closed	8
7/6	18	closed	closed	closed	closed	18
7/7	15	closed	closed	closed	closed	15
7/8	8	closed	closed	closed	closed	8
7/9	25	197	0	3,781	248	4,251
7/10	74	264	0	3,996	297	4,631
7/11	17	closed	closed	closed	closed	17
7/12	0	closed	closed	closed	closed	0
7/13	39	0	closed	closed	closed	272
7/14	22	913	closed	closed	closed	815
7/15	4	closed	closed	closed	closed	124

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Table 34.-Page 2 of 3.

Date	District					Total
	Chignik Bay	Central	Eastern	Western	Perryville	
7/16	37	closed	closed	closed	closed	37
7/17	45	0	0	0	0	45
7/18	0	0	0	0	0	0
7/19	2	96	0	3,669	0	3,767
7/20	77	327	0	3,179	0	3,583
7/21	18	0	0	3,129	0	3,147
7/22	73	closed	closed	closed	closed	73
7/23	119	689	0	closed	closed	808
7/24	194	870	0	closed	closed	1,064
7/25	167	403	0	closed	closed	570
7/26	187	0	0	closed	closed	187
7/27	27	closed	closed	closed	closed	27
7/28	0	366	0	4,149	73	4,588
7/29	95	closed	closed	closed	closed	95
7/30	226	0	0	5,388	600	6,214
7/31	475	closed	closed	closed	closed	475
8/1	326	0	closed	4,015	224	4,565
8/2	447	closed	closed	closed	closed	447
8/3	367	0	closed	3,410	147	3,924
8/4	446	closed	closed	closed	closed	446
8/5	792	120	closed	3,450	327	4,689
8/6	914	closed	closed	closed	closed	914
8/7	237	741	closed	1,717	0	2,695
8/8	208	closed	closed	closed	closed	208
8/9	326	0	closed	closed	closed	326
8/10	626	567	closed	closed	closed	1,193
8/11	404	803	closed	closed	closed	1,207
8/12	286	184	closed	closed	closed	470
8/13	257	0	closed	closed	closed	257
8/14	459	closed	closed	closed	closed	459
8/15	206	closed	closed	closed	closed	206
8/16	223	closed	closed	closed	closed	223
8/17	340	closed	closed	closed	closed	340
8/18	129	169	closed	closed	closed	298
8/19	140	341	closed	closed	closed	481
8/20	65	91	closed	closed	closed	156
8/21	74	110	closed	closed	closed	184
8/22	208	closed	closed	closed	closed	208
8/23	244	closed	closed	closed	closed	244
8/24	191	closed	closed	closed	closed	191
8/25	161	closed	closed	closed	closed	161
8/26	174	closed	closed	closed	closed	174
8/27	149	closed	closed	closed	closed	149
8/28	49	closed	closed	closed	closed	49
8/29	68	closed	closed	closed	closed	68
8/30	57	closed	closed	closed	closed	57
8/31	53	closed	closed	closed	closed	53

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Table 34.-Page 3 of 3.

Date	District					Total
	Chignik Bay	Central	Eastern	Western	Perryville	
9/1	60	closed	closed	closed	closed	60
9/2	32	closed	closed	closed	closed	32
9/3	39	closed	closed	closed	closed	39
9/4	38	6	closed	closed	closed	44
9/5	19	0	closed	closed	closed	19
9/6	0	closed	closed	closed	closed	0
9/7	0	closed	closed	closed	closed	0
9/8	0	closed	closed	closed	closed	0
9/9	0	closed	closed	closed	closed	0
9/10	0	closed	closed	closed	closed	0
9/11	0	closed	closed	closed	closed	0
9/12	0	closed	closed	closed	closed	0
9/13	0	closed	closed	closed	closed	0
9/14	0	closed	closed	closed	closed	0
9/15	0	closed	closed	closed	closed	0
9/16	0	closed	closed	closed	closed	0
Totals	38,579	11,071	50	39,883	1,916	64,044

Table 35.-Value of the commercial salmon harvest, by species, and average value per active permit, in dollars, in the Chignik Management Area, 1970 through 2003.

Year	Chinook		Sockeye		Coho		Pink		Chum		Total Value	Number of Permits ^a	Value per Permit
	Total	Average	Total	Average	Total	Average	Total	Average	Total	Average			
1970	6,129	77	2,190,272	27,378	18,397	230	635,673	7,946	376,025	4,700	3,226,496	80	40,331
1971	6,472	84	2,034,279	26,419	23,240	302	366,693	4,762	326,760	4,244	2,757,444	77	35,811
1972	2,028	25	825,498	10,319	35,699	446	48,401	605	87,759	1,097	999,385	80	12,492
1973	5,255	67	3,030,057	38,355	73,663	932	20,610	261	10,180	129	3,139,765	79	39,744
1974	2,941	31	3,618,781	38,498	31,933	340	64,069	682	51,125	544	3,768,849	94	40,094
1975	6,561	76	1,384,271	16,096	213,539	2,483	104,115	1,211	61,704	717	1,770,190	86	20,584
1976	13,800	179	4,751,000	61,701	138,000	1,792	568,300	7,381	183,600	2,384	5,654,700	77	73,438
1977	18,828	214	14,553,720	165,383	104,819	1,191	920,881	10,465	368,066	4,183	15,966,314	88	181,435
1978	56,700	597	15,653,500	164,774	116,400	1,225	1,131,500	11,911	404,500	4,258	17,362,600	95	182,764
1979	32,050	311	11,345,503	110,151	710,192	6,895	2,622,269	25,459	126,866	1,232	14,836,880	103	144,047
1980	67,657	651	5,532,290	53,195	520,655	5,006	1,477,060	14,203	1,061,963	10,211	8,659,625	104	83,266
1981	75,231	716	17,262,119	164,401	439,900	4,190	1,881,334	17,917	2,431,421	23,156	22,090,005	105	210,381
1982	75,276	731	13,038,510	126,587	1,782,027	17,301	578,184	5,613	1,356,597	13,171	16,830,594	103	163,404
1983	96,159	943	10,728,088	105,177	219,650	2,153	240,171	2,355	421,713	4,134	11,705,781	102	114,763
1984	114,502	1,145	20,402,076	204,021	759,972	7,600	330,916	3,309	146,024	1,460	21,753,490	100	217,535
1985	67,088	633	7,997,834	75,451	1,471,418	13,881	140,076	1,321	59,475	561	8,735,891	106	82,414
1986	84,800	831	16,882,290	165,513	667,740	6,546	356,147	3,492	456,546	4,476	18,447,523	102	180,858
1987	72,739	706	24,783,033	240,612	1,035,129	10,050	269,868	2,620	339,819	3,299	26,500,588	103	257,287
1988	286,740	2,839	14,350,354	142,083	4,153,424	41,123	6,771,266	67,042	2,189,293	21,676	27,751,077	101	274,763
1989	78,999	790	13,047,378	130,474	436,892	4,369	32,994	330	4,745	47	13,601,008	100	136,010
1990	185,256	1,834	22,509,923	222,871	700,309	6,934	502,693	4,977	878,510	8,698	24,776,691	101	245,314
1991	50,027	490	11,002,784	107,870	650,626	6,379	402,916	3,950	502,860	4,930	12,609,213	102	123,620
1992	193,326	1,914	12,552,025	124,277	1,323,107	13,100	811,882	8,038	414,005	4,099	15,294,345	101	151,429
1993	175,690	1,722	8,210,106	80,491	730,622	7,163	637,666	6,252	184,012	1,804	9,938,096	102	97,432
1994	38,096	385	10,046,245	101,477	1,094,415	11,055	226,504	2,288	430,888	4,352	11,836,148	99	119,557
1995	60,174	602	11,969,210	119,692	834,337	8,343	977,811	9,778	634,780	6,348	14,476,312	100	144,763
1996	25,041	250	12,640,560	126,406	447,228	4,472	24,827	248	32,279	323	13,169,935	100	131,699
1997	20,642	211	4,860,589	49,598	453,905	4,632	348,042	3,551	239,400	2,443	5,922,577	98	60,434
1998	31,934	376	6,631,192	78,014	397,413	4,675	310,323	3,651	137,647	1,619	7,508,509	85	88,335
1999	27,212	302	21,132,550	234,806	170,931	1,899	578,861	6,432	118,547	1,317	22,028,101	90	244,757

-continued-

Table 35.-Page 2 of 2.

Year	Chinook		Sockeye		Coho		Pink		Chum		Total Value	Number of Permits ^a	Value per Permit
	Total	Average	Total	Average	Total	Average	Total	Average	Total	Average			
2000	16,336	165	11,812,368	119,317	283,061	2,859	106,470	1,075	93,030	940	12,311,264	99	124,356
2001	12,205	133	7,419,339	80,645	263,160	2,860	366,714	3,986	209,239	2,274	8,270,657	92	89,898
2002	3,516	36	4,564,214	46,103	36,078	364	10,333	104	40,671	411	4,654,812	99	47,018
2003 ^b	20,212	202	5,283,962	52,840	173,625	1,736	182,100	1,821	71,140	711	5,731,039	100	57,310
Averages													
1983-02	79,871	797	12,345,742	125,296	813,165	8,142	773,698	7,770	403,108	4,036	14,415,583	98	146,042
1993-02	18,641	204	9,403,375	101,414	267,425	2,882	286,791	3,133	139,756	1,501	10,115,987	94	109,133
1998-02	10,686	111	7,931,974	82,022	194,100	2,028	161,172	1,722	114,313	1,208	8,412,244	97	87,091

^a Includes the number of commercial permits that received income from the harvest. These figures do not include ADF&G test fishery harvests.

^b The 2003 average exvessel values per pound were: Chinook- \$0.51, sockeye- \$0.74, coho- \$0.20, pink- \$0.09, chum- \$0.16.

Table 36.-Number of subsistence permits issued and returned and estimated subsistence salmon harvest, by species and year, 1980 through 2003.

Year	Permits		Estimated Salmon Harvest					
	Issued	Returned	Chinook	sockeye	Coho	Chum	Pink	Total
1980	82	37	6	12,475	32	169	478	13,160
1981	29	7	0	2,049	0	0	0	2,049
1982	59	15	3	8,532	12	0	2	8,549
1983	32	21	0	3,078	1,319	850	1,250	6,497
1984	77	64	23	8,747	464	204	330	9,768
1985	59	48	1	7,177	50	25	26	7,279
1986	74	38	4	10,347	205	77	98	10,731
1987	2	1	0	400	0	0	0	400
1988	80	34	9	9,073	1,455	142	54	10,733
1989	68	23	24	7,551	384	147	81	8,187
1990	72	23	103	8,099	210	115	470	8,997
1991	95	58	42	11,483	13	81	275	11,894
1992	98	19	55	8,648	709	145	305	9,862
1993	201	141	122	14,710	3,765	642	1,265	20,504
1994	219	122	165	13,978	4,055	382	1,720	20,300
1995	111	95	98	9,563	1,191	150	723	11,725
1996	119	104	48	7,357	2,126	355	2,204	12,090
1997	126	103	28	13,442	2,678	840	2,035	19,023
1998	104	72	91	7,750	1,390	186	1,007	10,424
1999	106	88	243	9,040	1,679	136	1,191	12,289
2000	130	112	163	9,561	1,802	517	1,185	13,228
2001	135	122	171	8,633	1,859	213	2,787	13,663
2002	120	86	74	10,092	1,401	23	390	11,980
2003	146	127	267	10,989	2,256	286	1,597	15,395
Averages								
1983-02	112	75	90	9,336	1,545	255	981	12,206
1993-02	120	97	128	9,753	1,802	319	1,433	13,435
1998-02	128	107	136	9,429	1,687	251	1,454	12,957

Source: Alaska Department of Fish and Game, Division of Subsistence, Alaska Subsistence Fisheries Database, Version 3.5 (1/3/2006)

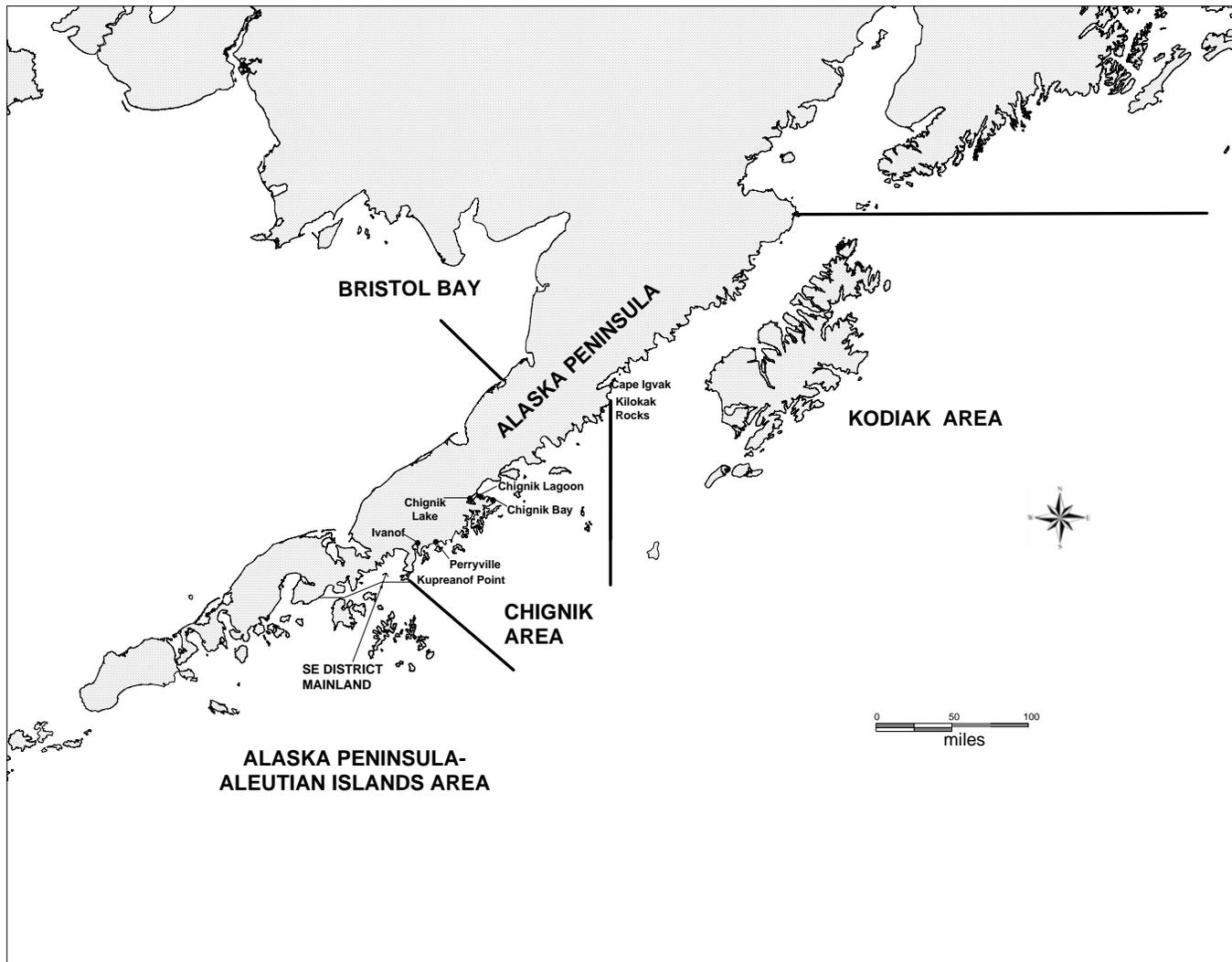


Figure 1.-Map of the Alaska Peninsula illustrating the relative locations of the Chignik, Kodiak, and Alaska Peninsula and Aleutian Islands Management Areas.

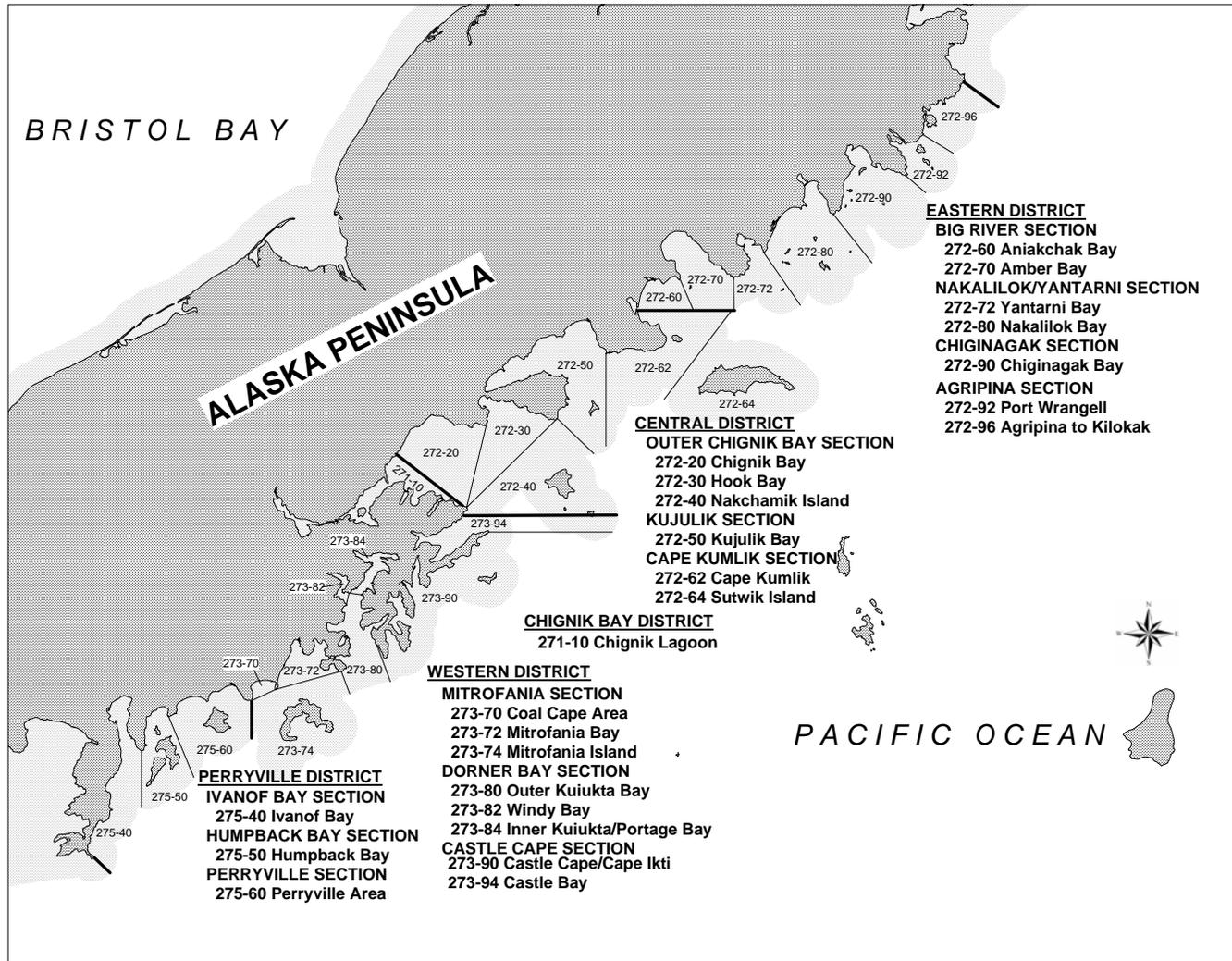


Figure 2.-Map of the Chignik Management Area illustrating district boundaries and statistical areas.

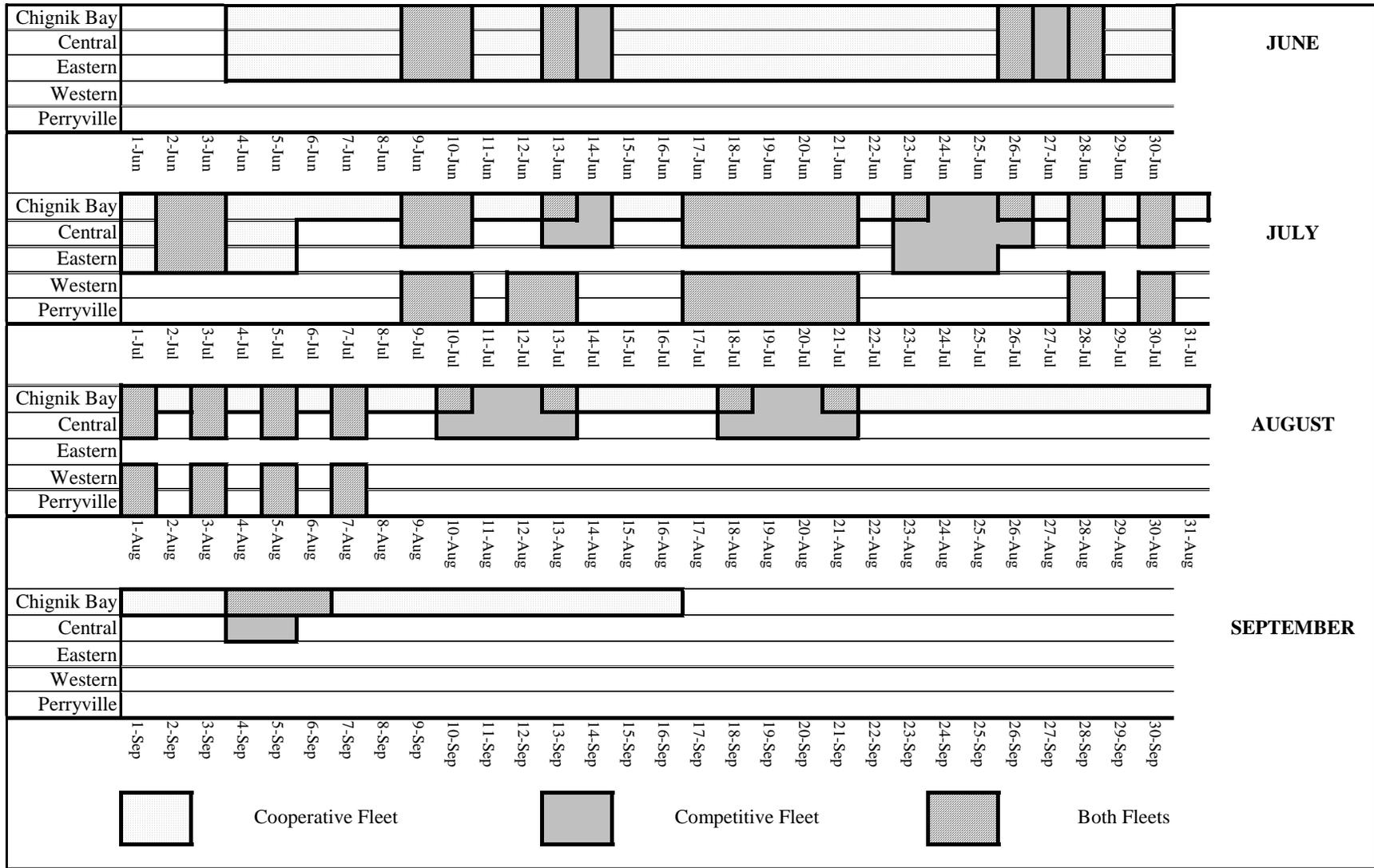


Figure 3.-Representation of days open to commercial salmon fishing, by district and fleet, by month, 2003.

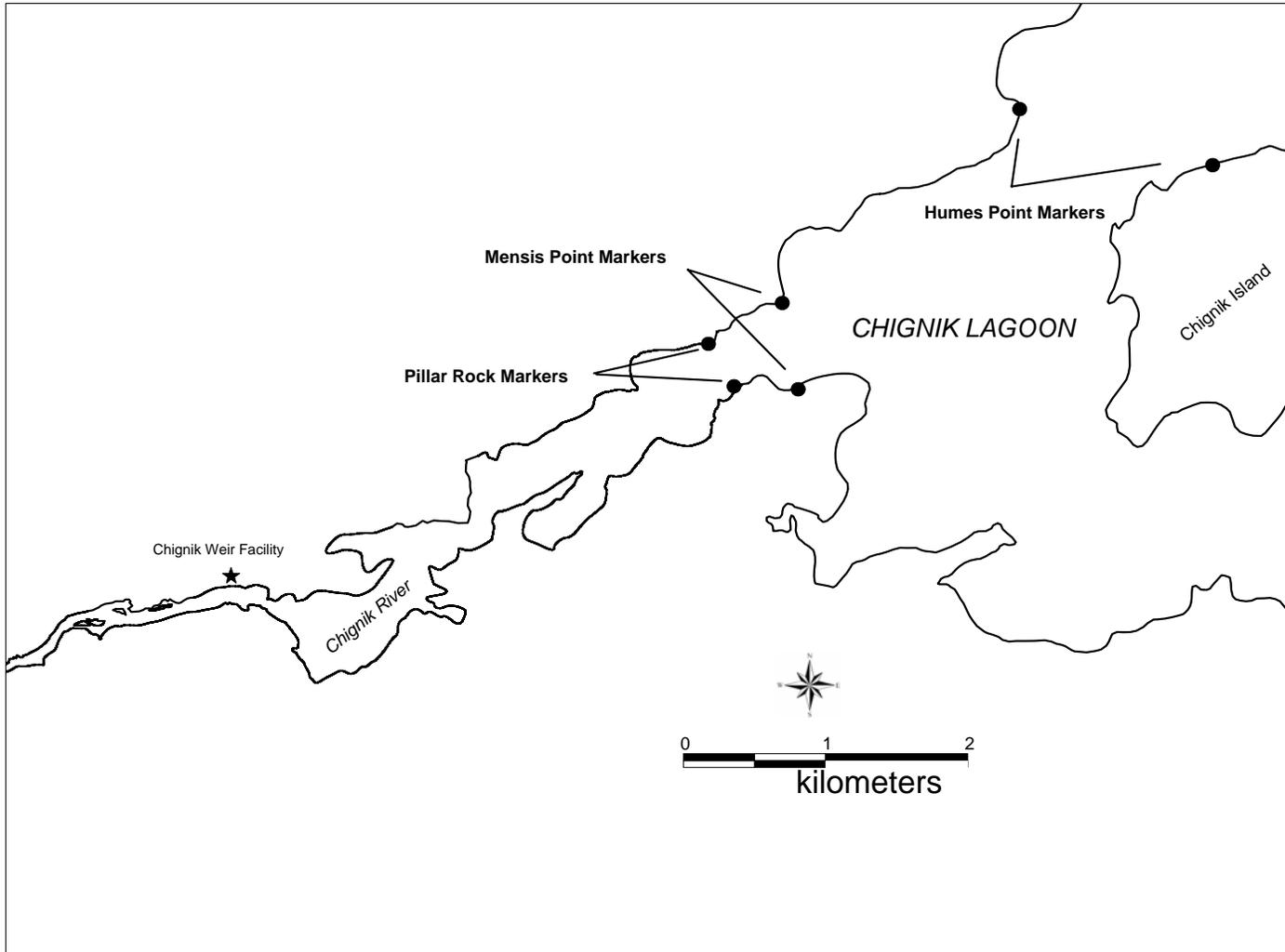


Figure 4.-Map of upper Chignik Lagoon showing the location of the Pillar Rock, Mensis Point, and Humes Point marker locations.

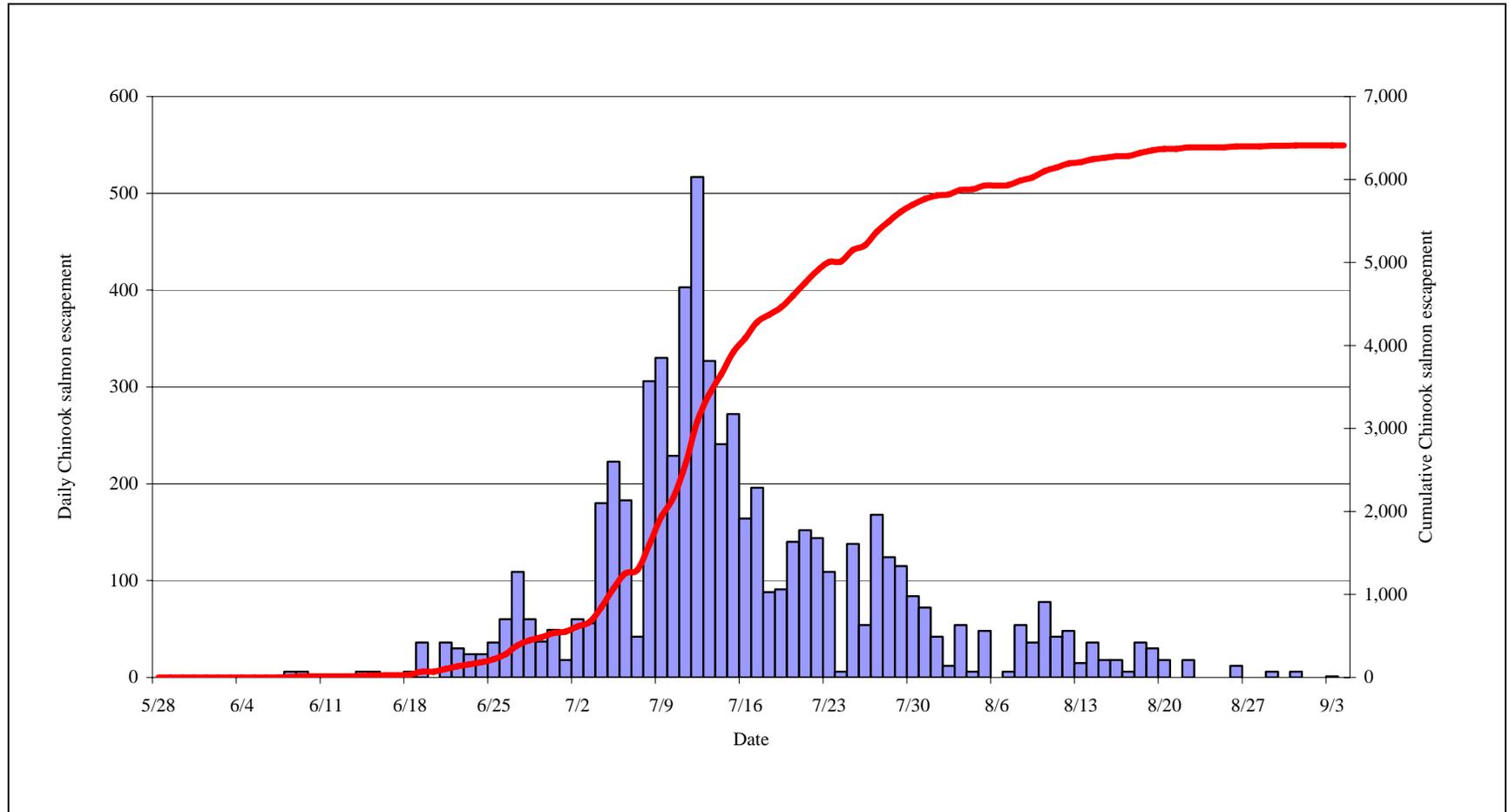


Figure 5.-Chignik River estimated daily (bars) and cumulative (line) Chinook salmon escapement, 2003.

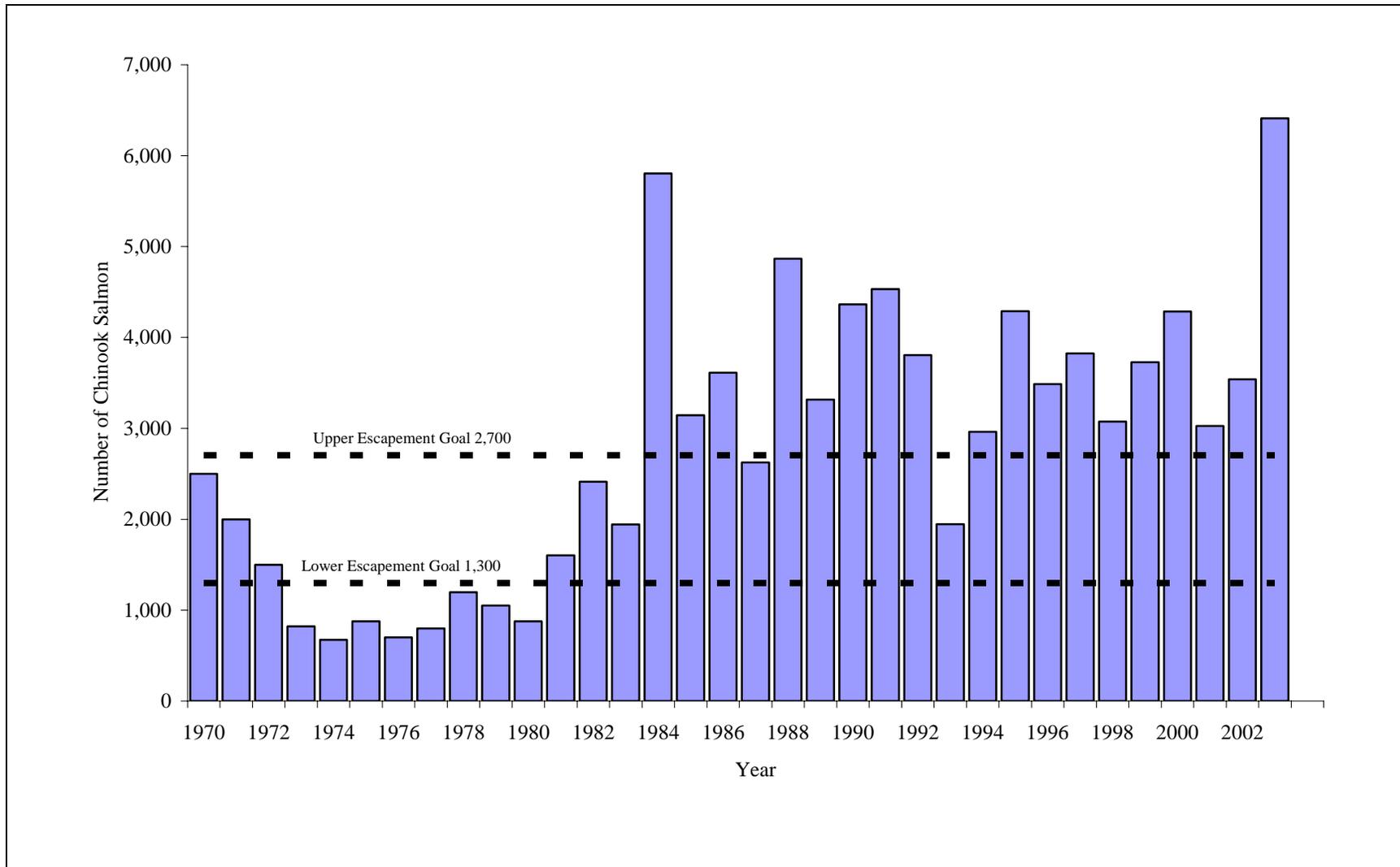


Figure 6.-Chignik River Chinook salmon escapement by year, 1970 through 2003, as compared to the 2003 escapement goal.

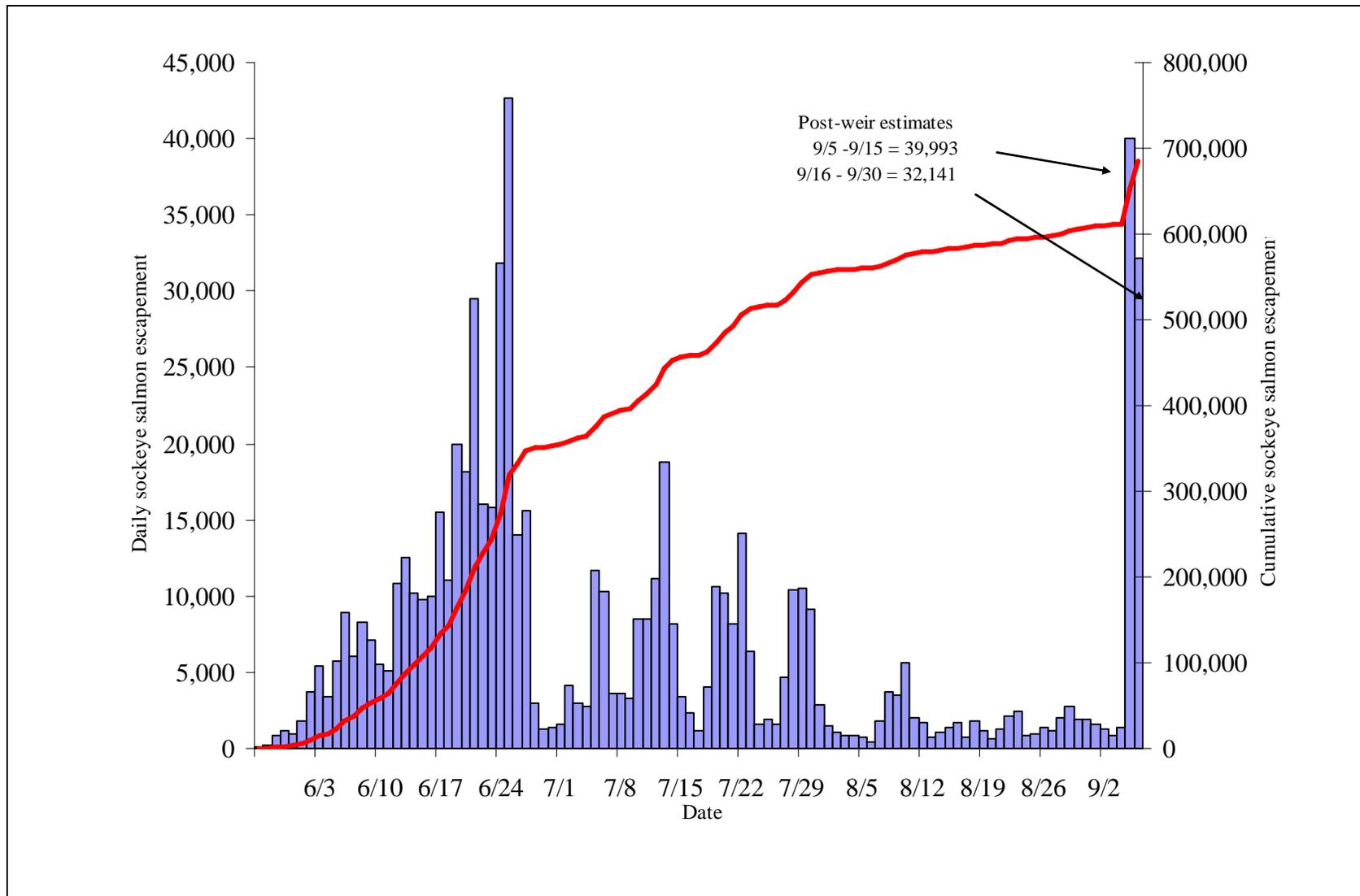


Figure 7.-Chignik River sockeye salmon daily (bars) and cumulative (line) escapement, 2003.

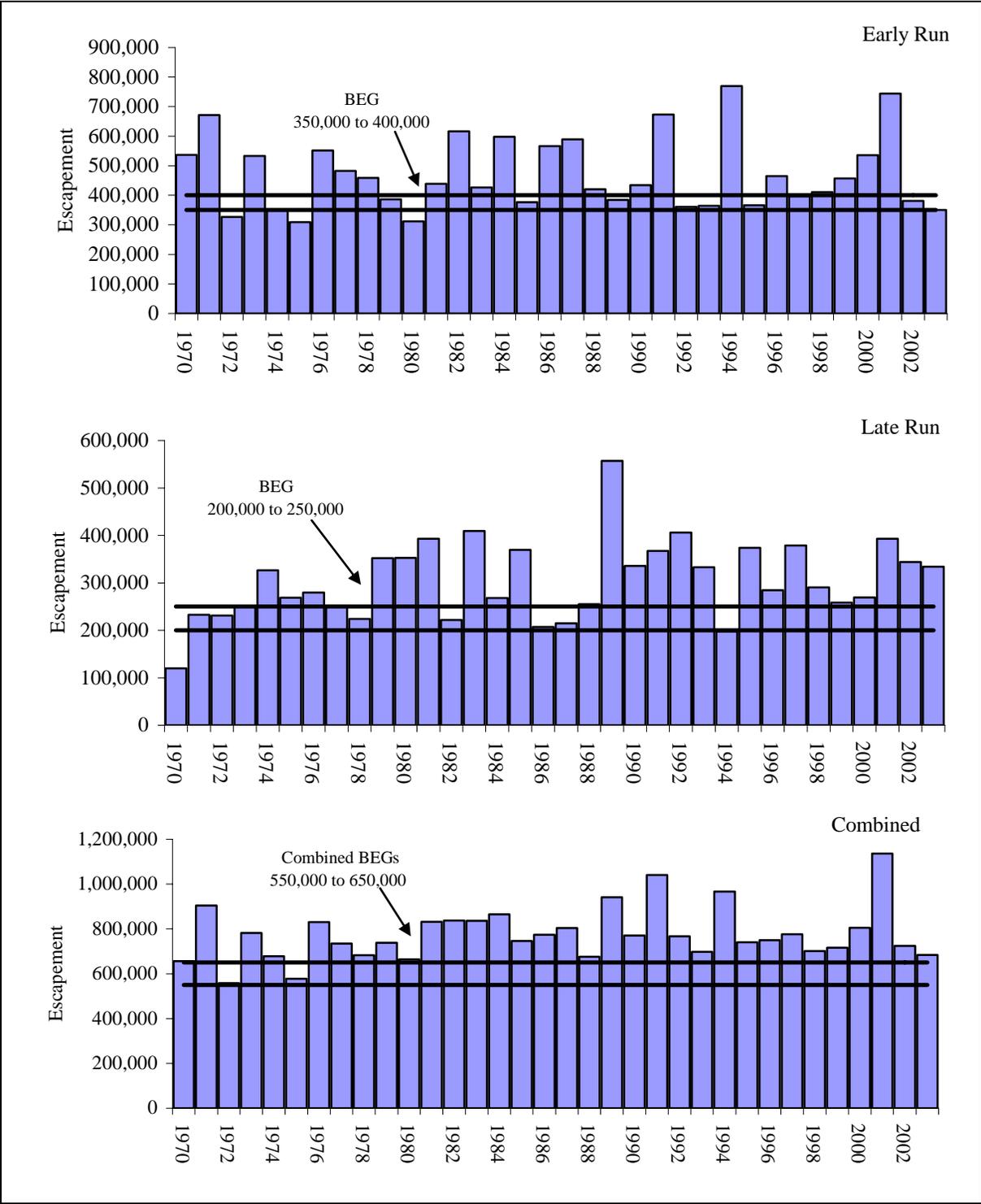


Figure 8.-Chignik River sockeye salmon early, late, and combined run escapements 1970 through 2003, compared to 2003 BEGs.

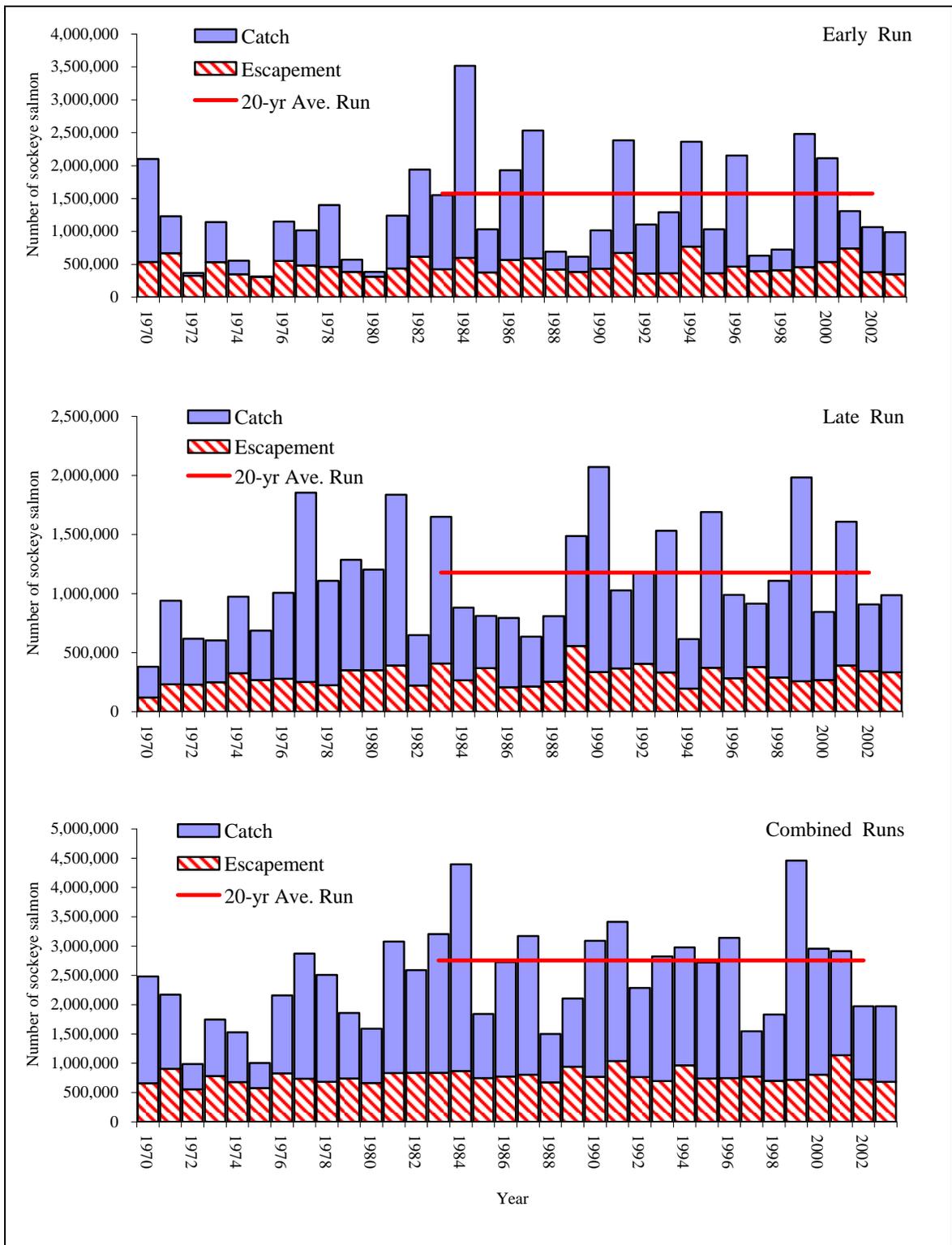


Figure 9.-Total sockeye salmon catch considered Chignik-bound by regulation including CMA commercial catch, home pack, ADF&G test fishery harvests, and Cape Igvak and SEDM allocations, by year and run, 1970 through 2003.

**APPENDIX A. 2003 CHIGNIK COOPERATIVE AND
COMMISSIONER'S PERMITS**

STATE OF ALASKA

DEPARTMENT OF FISH AND GAME
DIVISION OF COMMERCIAL FISHERIES



FRANK MURKOWSKI, GOVERNOR

211 Mission Road
Kodiak, AK 99615
PHONE: (907) 486-1825
FAX: (907) 486-1841

Or
Chignik Weir
PO 40 Chignik Lake, AK 99548
PHONE: (907) 845-2243
FAX: (907) 845-2235

**2003 CHIGNIK MANAGEMENT AREA COOPERATIVE
PURSE SEINE SALMON FISHERY PERMIT**

In accordance with 5 AAC 15.359 (attached), CHIGNIK AREA COOPERATIVE PURSE SEINE SALMON FISHERY MANAGEMENT PLAN, Chignik Management Area CFEC permit holders who intend to form an annual cooperative fishery must apply for a permit issued from the commissioner or the commissioner's designee.

By completing this form, the applicant indicates intent to form and operate a purse seine salmon cooperative fishery in the Chignik Management Area during 2003.

In addition to the provisions of 5 AAC 15.359, and current commercial salmon fishing regulations, the Cooperative agrees to the following permit terms and conditions:

1. Permit is valid from noon June 1, to noon October 1, 2003.
2. A CFEC permit holder who registers as a member of a purse seine salmon fishery cooperative may not participate in any other salmon net registration area as permit holder or crewman from June 1-August 31. Multiple salmon-permit holders must list the Chignik Area as the single area for salmon fishing for 2003.
3. Members of the cooperative may only fish as part of the cooperative fleet and only during fisheries that are open to the cooperative fleet.
4. At least one cooperative fleet CFEC permit holder (member) must be on board each purse seine vessel while fishing and delivering fish. Each member who will harvest fish for the cooperative must complete and submit a Vessel Operator Registration for the Chignik Management Area 2003 Cooperative Purse Seine Salmon Fishery.
5. This cooperative fishery permit is subject to reconsideration and possible revocation if a distribution/patronage plan other than pro rata shares is adopted by the cooperative. A total of 76 CFEC Chignik Management Area permit holders registered to join the Chignik Area cooperative purse seine fleet for the 2003 season. By regulation, each permit will add 0.9% of the total season harvest of sockeye salmon to the allocation for the cooperative. The Chignik Area cooperative purse seine fleet will be allocated harvest opportunity to take approximately 68.4% of the total sockeye salmon harvest for the 2003 Chignik Management Area commercial salmon fishing season.

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Return completed form before May 15, 2003 to: Alaska Department of Fish and Game
Division of Commercial Fisheries
James McCullough
211 Mission Road
Kodiak, AK 99615

5 AAC 15.359. CHIGNIK AREA COOPERATIVE PURSE SEINE SALMON FISHERY MANAGEMENT PLAN. (a)

The purpose of the management plan under this section is to establish the criteria and management measures for a salmon purse seine cooperative fishery in the Chignik Area.

(b) Chignik Area CFEC salmon purse seine permit holders may receive a permit issued by the commissioner, or the commissioner's designee, to form an annual cooperative fishery only under the following conditions:

- (1) at least 51 CFEC salmon purse seine permit holders must, together, apply to the commissioner for a permit to fish as a cooperative fishery each year;
- (2) an application for an annual cooperative fishery permit must be submitted to the commissioner by April 1 in 2002, or March 1 in any year after 2002; the application must contain the name and CFEC permit number of each applicant; a copy of a cooperative fishery agreement containing the contractual terms upon which the cooperative will be operated must be submitted with the application, including articles of incorporation, corporate by-laws, partnership agreements, or other similar documents that contain the contractual terms of the cooperative;
- (3) a CFEC salmon purse seine permit holder who did not apply by the deadline specified in (2) of this subsection, may elect to participate in the cooperative fishery by registering with the department by April 15 in 2002, or March 15 in any year after 2002; a CFEC salmon purse seine permit holder who does not register by the applicable date specified in this paragraph may not participate in the cooperative fishery;
- (4) the contractual terms of the annual cooperative fishery agreement must

(A) provide for participation in the cooperative fishery by registering permit holders who registered after the original deadline, as provided in (3) of this subsection, on the same terms as applicants who did apply by the original deadline;

(B) be consistent with state laws that apply to the salmon fishery resources of the state;

(5) if an annual cooperative fishery permit is approved and issued by the commissioner, or the commissioner's designee, for that year, all permit holders that applied by the original deadline or registered after the original deadline to participate in the cooperative fishery may only participate in that cooperative fishery;

(6) a CFEC permit holder who participates in the annual cooperative fishery

(A) in the Chignik Area may not participate in any other commercial salmon net registration area as either a permit holder or crew member from June 1 through August 31 of that year;

(B) and who holds salmon net gear permits for more than one commercial salmon net registration area listed in 5 AAC 39.120(d), must designate the Chignik Area as the single area for salmon net fishing for that year as specified in 5 AAC 39.115 and 20 AAC 05.1940;

(7) at least one CFEC purse seine permit holder who is a participant in the cooperative must be on board a purse seine vessel engaged in the taking and delivery of salmon for the cooperative.

(c) If an annual cooperative fishery permit application meets the qualifications and requirements of this section, the commissioner, or the commissioner's designee, will issue a permit, which may contain registration requirements, reporting requirements, and other requirements or conditions that the commissioner determines necessary for conservation and management purposes.

(d) For each year that an annual cooperative fishery permit is issued under this section, the Chignik Area cooperative fishery shall be allocated a percentage of the annual Chignik Area commercial sockeye salmon harvestable surplus based on the number of permit holders participating in the cooperative as follows:

- (1) if participation in the cooperative is less than 85 percent of the registered Chignik Area CFEC purse seine permit holders, the allocation to the annual cooperative fishery will be nine-tenths of one percent of the harvestable surplus for each participant in the cooperative; and
- (2) if participation in the cooperative is 85 percent or more of the registered Chignik Area CFEC purse seine permit holders, the allocation will be one prorated share of the harvestable surplus for each participant in the cooperative.

(e) The commissioner may, by emergency order, open and close separate fishing periods and areas for the cooperative fishery and the open fishery as necessary to achieve the allocation established in (c) of this section. The allocation established under (c) of this section is secondary to escapement and harvest objectives, and the commissioner may, by emergency order, reduce or expand fishing opportunity to ensure escapement and harvest objectives.

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(f) Notwithstanding the provisions of 5 AAC 39.999, at its first meeting in the fall of each year, the board may, consider written requests for regulation changes of the provisions of this section that are sent to the executive director of the board at least 45 days before the meeting. If the board accepts a request, it will schedule the proposed regulation change as necessary to consider the merits of the request.

(g) In this section,

- (1) "cooperative fishery" means a commercial purse seine salmon fishery in which, by agreement of the participants, the number of fishing vessels may be reduced with the intent of decreasing overhead expenses associated with commercial fishing and controlling the rate of harvest to achieve a higher quality product;
- (2) "open fishery" means a commercial purse seine fishery conducted by CFEC permit holders who do not participate in the cooperative fishery.

The Chignik Area CFEC salmon purse seine permit holders, as of March 1, 2003, approved to participate in the purse seine salmon cooperative fishery are listed below.

<u>Name of CFEC Permit Holder</u>	<u>CFEC Permit Number</u>	<u>Status of Permit</u>
1) Aaron Anderson	SO1L 56203U	Permanent
2) David Anderson	SO1L 56415U	Permanent
3) Gene Anderson	SO1L 60601G	Permanent
4) George Anderson	SO1L 57133E	Permanent
5) Gary Anderson	SO1L 57501K	Permanent
6) Julius Anderson Jr	SO1L 55433H	Permanent
7) Rodney Anderson	SO1L 56936B	Permanent
8) Mark Beck	SO1L 55925M	Permanent
9) Malcolm Brown	SO1L 55938M	Permanent
10) Don Bumpus	SO1L 61910L	Permanent
11) Allen Burkhard	SO1L 56935J	Permanent
12) Robert Cameron	SO1L 58603C	Permanent
13) Bernard Carlson	SO1L 51558C	Interim
14) Gary Carlson	SO1L 56192Z	Permanent
15) Gene Carlson	SO1L 55520P	Permanent
16) Roderick Carlson	SO1L 57704F	Permanent
17) Johnny Constantine	SO1L 57808I	Permanent
18) Bobby Erickson	SO1L 56512B	Permanent
19) Raymond Erickson	SO1L 62210Z	Permanent
20) Tony Gregorio	SO1L 58848X	Permanent
21) Randy Hansen	SO1L 55954N	Permanent
22) Arne Hatch	SO1L 60183F	Permanent
23) Raechel Hinderer	SO1L 57376O	Permanent
24) Wally Hinderer	SO1L 57085S	Permanent
25) David Horn	SO1L 55399O	Permanent
26) Archie Kalmakoff	SO1L 55361H	Permanent
27) Gustia Kalmakoff	SO1L 50123N	Interim
28) Joe Kalmakoff	SO1L 60614G	Permanent
29) Aloys Kopun Jr	SO1L 57863I	Permanent
30) Axel Kopun	SO1L 57612J	Permanent
31) Boris Kosbruk	SO1L 58206U	Permanent
32) Harry Kosbruk	SO1L 56726L	Permanent

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33) Ivan Kosbruk	SO1L 50116R	Interim
(emergency transfer from the estate of Ignatius Kosbruk)		
34) Stephen Kulin	SO1L 60113U	Permanent
35) Elliot Lind	SO1L 56872O	Permanent
36) Johnny Lind	SO1L 50223W	Interim
37) Mitchell Lind	SO1L 57384C	Permanent
38) Brett Lounsbury	SO1L 58322F	Permanent
39) Gabe McKilly	SO1L 59493O	Permanent
40) Dan Mershon	SO1L 61370V	Permanent
41) Josh Mershon	SO1L 58818F	Permanent
42) Kerry Nelson	SO1L 58425P	Permanent
43) Nick Odomin Jr	SO1L 57696L	Permanent
44) Leonard Ogle	SO1L 55311R	Permanent
45) Garrett Olsen	SO1L 58496R	Permanent
46) Jeff Olsen	SO1L 60115F	Permanent
47) Alec Pedersen	SO1L 57695S	Permanent
48) Alvin Pedersen	SO1L 55953V	Permanent
49) Hans Pedersen Jr	SO1L 57171K	Permanent
50) Sharon Pedersen	SO1L 58126H	Permanent
51) John Phillips	SO1L 50332L	Interim
(emergency transfer from the estate of Elia Phillips)		
52) Bob Pletnikoff	SO1L 58077F	Permanent
53) Daryl Rietveld	SO1L 57469C	Permanent
54) Jamie Ross	SO1L 60106Z	Permanent
55) Roger Rowland	SO1L 63976A	Permanent
56) Dennis Shangin	SO1L 58178G	Permanent
57) Edgar Shangin	SO1L 57003B	Permanent
58) Russell Shangin	SO1L 52949G	Interim
(emergency transfer from the estate of Peter Phillips)		
59) Stephen Shangin	SO1L 57296B	Permanent
60) Norma Shellgren	SO1L 51556R	Interim
(emergency transfer from the estate of Frank Battishill)		
61) Matt Siemion	SO1L 56992S	Permanent
62) Ted Siemion	SO1L 56322H	Permanent
63) Arnold Skonberg	SO1L 55477R	Permanent
64) Calvin Skonberg	SO1L 56228C	Permanent
65) Darrell Skonberg	SO1L 55546P	Permanent
66) Minnie Skonberg	SO1L 58470R	Permanent
(transfer from estate of Roy Skonberg)		
67) Ralph Skonberg	SO1L 50205L	Interim
68) Oleana Stepanoff	SO1L 58308N	Permanent
69) Walter Stepanoff Jr	SO1L 57091W	Permanent
70) Glenn Suydam	SO1L 59615J	Permanent
71) Lowell Suydam	SO1L 56680K	Permanent
72) Annette Takak	SO1L 57035F	Permanent
(transfer from the estate of Richard Takak)		

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73) Paul Teuber	SO1L 60121I	Permanent
74) Dan Veerhusen	SO1L 57662X	Permanent
75) Tim Wilkie	SO1L 64187U	Permanent
76) Jerry Yagie	SO1L 56797N	Permanent

END

Appendix A2.-Chignik Management Area commissioner's permit salmon harvest reporting requirements - 2003.

**ALASKA DEPARTMENT OF FISH AND GAME
CHIGNIK MANAGEMENT AREA COMMISSIONER'S PERMIT
SALMON HARVEST REPORTING REQUIREMENTS - 2003**

NAME: Chignik Seafood Producers Alliance (CSPA) ADF&G # 2003-13

OPERATOR: Axel Kopun, President CSPA

ADDRESS: Summer: P.O. Box 30 Winter: 16435 Nicole Way
Chignik Bay, AK 99564 Eagle River, AK 99577
phone (907) 749-2204 phone (907) 622-6226

NAME: _____

PROCESSOR: _____

ADDRESS: Summer: P.O. Winter:.
Chignik Bay, AK 99564
phone: (907) 749- phone: ()

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, 2003.
- 1) 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; one fish ticket per CFEC permit holder harvesting salmon per day per tender per processor. 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

-continued-

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 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.

- 3) 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.
- 4) Wild Alaska 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).
- 5) The Chignik Seafoods Producers Alliance (CSPA) will notify Chignik ADF&G if CSPA intends to sale salmon to any processor other than Norquest, Trident, and Wild Salmon. Notification must be received by Chignik ADF&G in a timely enough manner to issue a separate Commissioner's permit and obtain required signatures.
- 6) Catcher, tender, and processing vessels must adhere to all other commercial fishing and landing requirements.
- 7) 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 2003 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.

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CSPA OPERATOR

DATE

PROCESSOR.

DATE

ADF&G REPRESENTATIVE

DATE

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 co-op fishing period and may be installed, in the water, at the beginning of each co-op 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 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.
13. Leads shall be completely removed from the water prior to the closure of each co-op fishing period and may be installed, in the water, at the beginning of each co-op fishing period.
14. One end of a harvesting vessel's seine may be attached to the seaward end of the lead for the purpose of harvesting salmon.
15. The aggregate length of the lead and purse seine may not be more than 250 fathoms.
16. 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.
17. Participants will notify ADF&G in Chignik prior to commencement of lead operation and at the conclusion of lead operation.
18. 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.

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19. Vessels must adhere to all commercial fishing and landing requirements.

20. The Chignik Seafood Processors Alliance is responsible for the actions of contractors, agents, or other persons who perform work to accomplish the goals of the cooperative fishery management plan, 5 AAC 15.359. For any activity that significantly deviates from the approved plan and permits, the permittee shall notify ADF&G, Division of Commercial Fisheries, and obtain written approval in the form of a permit amendment before beginning the activity. Any action taken by the permittee or an agent of the permittee that increases the project's 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 plan is being considered.

21. 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.

22. 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 2003 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.

Axel Kopun, President CSPA

OPERATOR

DATE

ADF&G REPRESENTATIVE

DATE

- 3) The Chignik Seafood Producers Alliance (CSPA) will notify the Chignik ADF&G when fish pens are deployed and when they contain fish, except when fish pens are attached to the Norquest, Trident, or Wild Alaska Seafoods facilities or a mooring owned by any of these processors, in Anchorage Bay (56° 18'N.lat., 158° 24'W. long), Chignik.
- 4) Norquest Seafoods 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 by the number and pounds of salmon by species in each fish pen.
- 5) This permit allows the use of live fish pens for holding salmon for up to 3 days after being captured in the Chignik District commercial salmon fishery. The net pens may be moored in either Chignik Lagoon or Anchorage Bay, and towing pens that contain live salmon caught in the Chignik District, within the Chignik District is allowed.
- 6) A total of up to 10 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 4 inches. Decks, fences, and other structural supports may be attached to the fish pens. The fish pens may also be attached to each other.
- 7) An ADF&G observer may sample and measure all catch and bycatch 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.

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- 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. For any activity that significantly deviates from the approved plan and permits, the permittee shall notify ADF&G, Division of Commercial Fisheries, and obtain written approval in the form of a permit amendment before beginning the activity. Any action taken by the permittee or an agent of the permittee that increases the project's 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 plan 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.
- 11) 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 2003 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.

_____ OPERATOR	_____ DATE
_____ PROCESSOR	_____ DATE
_____ ADF&G REPRESENTATIVE	_____ DATE

**APPENDIX B. 2003 CHIGNIK MANAGEMENT AREA
SUBSISTENCE SALMON PERMIT**

5 AAC 01.450. DESCRIPTION OF CHIGNIK AREA. The Chignik Area includes all waters of Alaska on the south side of the Alaska Peninsula enclosed by 156°20'22" West longitude (the longitude of the southern entrance to Imuya Bay near Kilokak Rocks) and a line extending southeast (135°) from the tip of Kupreanof Point.

5 AAC 01.460. FISHING SEASONS. Fish, other than rainbow trout and steelhead trout, may be taken at any time, except as may be specified by a subsistence fishing permit. Rainbow trout and steelhead trout, taken incidentally in other finfish net fisheries, are lawfully taken and may be retained for subsistence purposes.

5 AAC 01.466. CUSTOMARY AND TRADITIONAL SUBSISTENCE USES OF FISH STOCKS. The Alaska Board of Fisheries finds that salmon and finfish other than salmon, except steelhead and rainbow trout, in the Chignik Area are customarily and traditionally taken or used for subsistence.

5 AAC.01.470. LAWFUL GEAR AND GEAR SPECIFICATIONS. (a) Salmon may be taken by seines and gillnets, or with gear specified on a subsistence fishing permit, except that in Chignik Lake salmon may not be taken with purse seines.

(b) Fish other than salmon may be taken by gear listed in sec. 10(a) of this chapter, unless restricted under the terms of a subsistence fishing permit.

(c) Halibut may be taken for subsistence purposes only by a single handheld line with no more than two hooks attached.

5 AAC 01.475. WATERS CLOSED TO SUBSISTENCE FISHING. Salmon may not be taken in the Chignik River, upstream from the department weir site or counting tower, in Black Lake, or any tributary to Black and Chignik Lakes.

5 AAC 01.480. SUBSISTENCE FISHING PERMITS. (a) Salmon, trout and char may only be taken under the authority of a subsistence fishing permit.

(b) Not more than 250 salmon may be taken for subsistence purposes unless otherwise specified on the subsistence fishing permit.

(c) A record of subsistence-caught fish must be kept on the reverse side of the permit. The record must be completed immediately upon taking subsistence-caught fish and must be returned to the local representative of the department no later than December 31.

SPECIAL PERMIT PROVISIONS

1. 24 hours before the first commercial salmon fishing opening in the Chignik Area a commercial fishing license holder may not subsistence for salmon.
 2. After the first commercial salmon-fishing opening in the Chignik Area, commercial fishing license holders may subsistence fish for salmon in the Chignik Bay District only during times approved by the department at the Chignik weir.
 3. Approval to subsistence fish may be granted by registering with the department. The department will require the vessel operators name, address, and phone number, the vessel name, gear used for subsistence fishing, area being fished, date you intend to fish, when you intend to fish, and your subsistence permit number.
 4. Commercial fishermen may always remove salmon from their commercial catch for personnel use. Mark the number of salmon taken by species for personnel use on your fish ticket.
 5. Competitive commercial license holders may subsistence fish for salmon by registering with the department, during cooperative fishery openings. An additional restriction is that when a competitive fishing period is scheduled, a competitive license holder may not subsistence fish for 24 hours before and 12 hours immediately following a competitive fishing period.
 6. Cooperative commercial license holders registered with the department to commercially fish for the coop may subsistence fish for salmon by registering with the department, during competitive fishery openings. An additional restriction is that when a cooperative fishing period is scheduled, a competitive license holder may not subsistence fish for 24 hours before and 12 hours immediately following a cooperative fishing period.
 7. Cooperative commercial license holders not registered with the department to commercially fish for the coop may subsistence fish for salmon by registering with the department, during competitive and cooperative openings. These fishermen are limited to set gillnet gear only.
 8. These special permit provisions for increased subsistence fishing opportunities will be withdrawn if they interfere with orderly commercial fishing.
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APPENDIX C. 2003 CHIGNIK SALMON EMERGENCY ORDERS

Appendix C1.-Summary of the 2003 Chignik salmon emergency orders.

E.O. Number	Issued	Effective	Action taken
4-FS-L-01-03	5:30 PM 6/3/2003	6:00 PM 6/4/2003	<u>Opens</u> the Chignik Bay, Central, and Eastern districts to commercial salmon fishing from 6:00 PM June 4 to 6:00 PM June 6 by the cooperative fleet.
4-FS-L-02-03	7:30 PM 6/4/2003	5:00 AM 6/5/2003	<u>Closed Waters</u> Effective 5:00 AM June 5, the closed waters of upper Chignik Lagoon are reduced to include only those waters above Mensis Point.
4-FS-L-03-03	6:15 PM 6/5/2003	6:00 PM 6/6/2003	<u>Extends</u> the commercial salmon fishing period in the Chignik Bay, Central, and Eastern districts from 6:00 PM June 6 to 6:00 PM June 8 for the cooperative fleet.
4-FS-L-04-03	10:00 PM 6/5/2003	10:30 PM 6/5/2003	<u>Closed Waters</u> Effective 10:30 PM June 5, the closed waters of upper Chignik Lagoon are reduced to include only those waters above Pillar Rock.
4-FS-L-05-03	10:15 AM 6/7/2003	6:00 PM 6/8/2003	<u>Extends</u> the commercial salmon fishing period in the Chignik Bay, Central, and Eastern districts from 6:00 PM June 8 to 9:00 AM June 9 for the cooperative fleet. <u>Opens</u> the Chignik Bay, Central, and Eastern districts to commercial salmon fishing from 10:00 AM June 9 to 10:00 AM June 10 by the competitive fleet. <u>Closed Waters</u> Effective 9:00 AM June 9, the closed waters of upper Chignik Lagoon are expanded to include only those waters above Mensis Point.
4-FS-L-06-03	6:15 PM 6/9/2003	10:00 AM 6/10/2003	<u>Extends</u> the commercial salmon fishing period in the Chignik Bay, Central, and Eastern districts from 10:00 AM June 10 to 10:00 PM June 10 for the competitive fleet. <u>Opens</u> the Chignik Bay, Central, and Eastern districts to commercial salmon fishing from 11:00 PM June 10 to 11:00 PM June 12 by the cooperative fleet. <u>Closed Waters</u> Effective 11:00 PM June 10, the closed waters of upper Chignik Lagoon are reduced to include only those waters above Pillar Rock.

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E.O. Number	Issued	Effective	Action taken
4-FS-L-07-03	4:15 PM 6/12/2003	11:00 PM 6/12/2003	<p><u>Extends</u> the commercial salmon fishing period in the Chignik Bay, Central, and Eastern districts from 11:00 PM June 12 to 2:00 PM June 13 for the cooperative fleet.</p> <p><u>Opens</u> the Chignik Bay, Central, and Eastern districts to commercial salmon fishing from 3:00 PM June 13 to 3:00 PM June 14 by the competitive fleet.</p> <p><u>Opens</u> the Chignik Bay, Central, and Eastern districts to commercial salmon fishing from 7:00 PM June 15 to 7:00 PM June 16 by the cooperative fleet.</p> <p><u>Closed Waters</u> Effective 2:00 PM June 13, the closed waters of upper Chignik Lagoon are reduced to include only those waters above Mensis Point.</p>
4-FS-L-08-03	10:45 AM 6/16/2003	7:00 PM 6/16/2003	<u>Extends</u> the commercial salmon fishing period in the Chignik Bay, Central, and Eastern districts from 7:00 PM June 16 to 7:00 PM June 18 for the cooperative fleet.
4-FS-L-09-03	10:30 AM 6/18/2003	7:00 PM 6/18/2003	<u>Extends</u> the commercial salmon fishing period in the Chignik Bay, Central, and Eastern districts from 7:00 PM June 18 to 7:00 AM June 21 for the cooperative fleet.
4-FS-L-10-03	10:30 AM 6/20/2003	7:00 AM 6/21/2003	<u>Extends</u> the commercial salmon fishing period in the Chignik Bay, Central, and Eastern districts from 7:00 AM June 21 to 7:00 AM June 23 for the cooperative fleet.
4-FS-L-11-03	6:00 PM 6/22/2003	7:00 AM 6/23/2003	<u>Extends</u> the commercial salmon fishing period in the Chignik Bay, Central, and Eastern districts from 7:00 AM June 23 to 7:00 AM June 25 for the cooperative fleet.
4-FS-L-12-03	6:15 PM 6/24/2003	7:00 AM 6/25/2003	<u>Extends</u> the commercial salmon fishing period in the Chignik Bay, Central, and Eastern districts from 7:00 AM June 25 to 1:00 PM June 26 for the cooperative fleet.
4-FS-L-13-03	12:00 PM 6/25/2003	2:00 PM 6/26/2003	<u>Opens</u> the Chignik Bay, Central, and Eastern districts to commercial salmon fishing from 2:00 PM June 26 to 2:00 PM June 28 by the competitive fleet.
4-FS-L-14-03	6:15 PM 6/27/2003	3:00 PM 6/28/2003	<u>Opens</u> the Chignik Bay, Central, and Eastern districts to commercial salmon fishing from 3:00 PM June 28 to 3:00 PM July 1 by the cooperative fleet.
4-FS-L-15-03	10:30 AM 6/28/2003	3:00 PM 6/28/2003	<u>Closed Waters</u> Effective 3:00 PM June 28, the closed waters of upper Chignik Lagoon are reduced to include only those waters above Pillar Rock.

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E.O. Number	Issued	Effective	Action taken
4-FS-L-16-03	3:15 PM 6/30/2003	3:00 PM 7/1/2003	<p><u>Extends</u> the commercial salmon fishing period in the Chignik Bay, Central, and Eastern districts from 3:00 PM July 1 to 3:00 AM July 2 for the cooperative fleet.</p> <p><u>Opens</u> the Chignik Bay, Central, and Eastern districts to commercial salmon fishing from 5:00 AM July 2 to 5:00 AM July 3 by the competitive fleet.</p> <p><u>Opens</u> the Chignik Bay, Central, and Eastern districts to commercial salmon fishing from 6:00 AM July 3 to 12:01 AM July 6 by the cooperative fleet.</p> <p><u>Closed Waters</u> Effective 3:00 AM July 2, the closed waters of upper Chignik Lagoon are reduced to include only those waters above Mensis Point.</p> <p><u>Closed Waters</u> Effective 6:00 AM July 3, the closed waters of upper Chignik Lagoon are reduced to include only those waters above Mensis Point.</p>
4-FS-L-17-03	6:15 PM 7/4/2003	12:01 AM 6/25/2003	<p><u>Extends</u> the commercial salmon fishing period in the Chignik Bay District from 12:01 AM July 6 to 12:01 AM July 9 for the cooperative fleet.</p>
4-FS-L-18-03	4:15 PM 7/7/2003	12:01 AM 7/9/2003	<p><u>Opens</u> those waters in the Western and Perryville Districts south of a line drawn from Cape Itki to Coal Cape to Cape Alexander and that area in the Chignik Bay and Central districts known as Jack's Box to commercial salmon fishing from 12:01 AM July 9 to 12:01 AM July 11 to members of both fleets.</p>
4-FS-L-19-03	6:15 PM 7/11/2003	12:01 AM 7/12/2003	<p><u>Extends</u> the commercial salmon fishing period in the Chignik Bay District from 12:01 AM July 12 to 2:00 PM July 13 for the cooperative fleet.</p> <p><u>Opens</u> the Chignik Bay and Central districts to commercial salmon fishing from 3:00 PM July 13 to 12:01 AM July 15 by the competitive fleet.</p> <p><u>Closed Waters</u> Effective 2:00 PM July 13, the closed waters of upper Chignik Lagoon are reduced to include only those waters above Mensis Point.</p>

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E.O. Number	Issued	Effective	Action taken
4-FS-L-20-03	11:30 PM 7/14/2003	3:00 PM 7/1/2003	<u>Opens</u> the Chignik Bay Districts to commercial salmon fishing from 1:00 AM July 15 to 1:00 AM July 18 by the cooperative fleet.
			<u>Opens</u> those waters in the Western and Perryville Districts south of a line drawn from Cape Itki to Coal Cape to Cape Alexander and that area in the Chignik Bay and Central districts known as Jack's Box to commercial salmon fishing from 12:01 AM July 17 to 12:01 AM July 18 and from 12:00 PM July 18 to 12:00 PM July 19 to members of both fleets.
			<u>Closed Waters</u> Effective 1:00 AM July 15, the closed waters of upper Chignik Lagoon are reduced to include only those waters above Pillar Rock.
4-FS-L-21-03	10:30 PM 7/17/2003	1:00 AM 7/18/2003	<u>Extends</u> the commercial salmon fishing period in the Chignik Bay District from 1:00 AM July 18 to 1:00 AM July 20 for the cooperative fleet.
4-FS-L-22-03	6:30 PM 7/18/2003	12:00 PM 7/19/2003	<u>Extends</u> the current commercial salmon fishing period in those waters of the Western and Perryville Districts south of a line drawn from Cape Itki to Coal Cape to Cape Alexander and that area in the Chignik Bay and Central districts known as Jack's Box from 12:00 PM July 19 to 12:00 PM July 20 to members of both fleets.
4-FS-L-23-03	11:30 AM 7/19/2003	1:00 AM 7/20/2003	<u>Extends</u> the commercial salmon fishing period in the Chignik Bay District from 1:00 AM July 20 to 10:00 AM July 23 for the cooperative fleet.
			<u>Extends</u> the current commercial salmon fishing period in those waters of the Western and Perryville Districts south of a line drawn from Cape Itki to Coal Cape to Cape Alexander and that area in the Chignik Bay and Central districts known as Jack's Box from 12:00 PM July 20 to 12:00 PM July 21 to members of both fleets.
4-FS-L-24-03	6:30 PM 7/20/2003	12:00 PM 7/21/2003	<u>Extends</u> the current commercial salmon fishing period in those waters of the Western and Perryville Districts south of a line drawn from Cape Itki to Coal Cape to Cape Alexander and that area in the Chignik Bay and Central districts known as Jack's Box from 12:00 NOON July 21 to 11:59 PM July 21 to members of both fleets.

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E.O. Number	Issued	Effective	Action taken
4-FS-L-25-03	9:30 AM 7/22/2003	10:00 AM 7/23/2003	<u>Opens</u> the Chignik Bay, Central and Eastern districts to commercial salmon fishing from 11:00 AM July 23 to 11:00 AM July 25 by the competitive fleet. <u>Closed Waters</u> Effective 10:00 AM July 23, the closed waters of upper Chignik Lagoon are expanded to include only those waters above Mensis Point.
4-FS-L-26-03	6:30 PM 7/24/2003	11:00 AM 7/25/2003	<u>Extends</u> the commercial salmon fishing period in the Chignik Bay and Central districts from 11:00 AM July 25 to 6:00 AM July 26 for the competitive fleet.
4-FS-L-27-03	6:30 PM 7/25/2003	7:00 AM 7/26/2003	<u>Opens</u> the Chignik Bay district to commercial salmon fishing from 7:00 AM July 26 to 7:00 AM July 28 by the cooperative fleet. <u>Closed Waters</u> Effective 7:00 AM July 26, the closed waters of upper Chignik Lagoon are reduced to include only those waters above Pillar Rock.
4-FS-L-28-03	6:30 PM 7/26/2003	12:01 PM 7/28/2003	<u>Opens</u> those waters of the Western and Perryville Districts south of a line drawn from Cape Itki to Coal Cape to Cape Alexander and that area in the Chignik Bay and Central districts known as Jack's Box from 12:01 AM July 28 to 12:01 AM July 29 to members of both fleets.
4-FS-L-29-03	6:30 PM 7/28/2003	9:00 AM 7/29/2003	<u>Opens</u> the Chignik Bay district to commercial salmon fishing from 9:00 AM July 29 to 9:00 AM July 31 by the cooperative fleet.
4-FS-L-30-03	10:30 AM 7/29/2003	12:01 PM 7/30/2003	<u>Opens</u> those waters of the Western and Perryville Districts south of a line drawn from Cape Itki to Coal Cape to Cape Alexander and that area in the Chignik Bay and Central districts known as Jack's Box from 12:01 AM July 30 to 12:01 AM July 31 to members of both fleets.
4-FS-L-31-03	9:00 AM 7/31/2003	9:00 AM 7/31/2003	<u>Extends</u> the commercial salmon fishing period in the Chignik Bay District from 9:00 AM July 31 to 7:00 PM August 3 for the cooperative fleet. <u>Opens</u> those waters of the Western and Perryville Districts south of a line drawn from Cape Itki to Coal Cape to Cape Alexander and that area in the Chignik Bay and Central districts known as Jack's Box from 12:01 AM August 1 to 12:01 AM August 2 to members of both fleets.

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E.O. Number	Issued	Effective	Action taken
4-FS-L-32-03	2:00 PM 8/2/2003	12:01 AM 8/3/2003	<p><u>Extends</u> the commercial salmon fishing period in the Chignik Bay District from 7:00 PM August 3 to 10:00 AM August 6 for the cooperative fleet.</p> <p><u>Opens</u> those waters of the Western and Perryville Districts south of a line drawn from Cape Itki to Coal Cape to Cape Alexander and that area in the Chignik Bay and Central districts known as Jack's Box from 12:01 AM August 3 to 12:01 AM August 4 to members of both fleets.</p>
4-FS-L-33-03	12:00 PM 8/4/2003	12:01 AM 8/5/2003	<p><u>Extends</u> the commercial salmon fishing period in the Chignik Bay District from 10:00 AM August 6 to 2:00 PM August 9 for the cooperative fleet.</p> <p><u>Opens</u> those waters of the Western and Perryville Districts south of a line drawn from Cape Itki to Coal Cape to Cape Alexander and that area in the Chignik Bay and Central districts known as Jack's Box from 12:01 AM August 5 to 12:01 AM August 6 and from 12:01 AM August 7 to 12:01 AM August 8 to members of both fleets.</p>
4-FS-L-34-03	3:30 PM 8/8/2003	2:00 PM 8/9/2003	<p><u>Extends</u> the commercial salmon fishing period in the Chignik Bay District from 2:00 PM August 9 to 2:00 PM August 10 for the cooperative fleet.</p> <p><u>Opens</u> the Chignik Bay and Central districts to commercial salmon fishing from 3:00 PM August 10 to 3:00 PM August 12 by the competitive fleet.</p> <p><u>Closed Waters</u> Effective 2:00 PM August 10, the closed waters of upper Chignik Lagoon are expanded to include only those waters above Mensis Point.</p>
4-FS-L-35-03	4:30 PM 8/11/2003	3:00 PM 8/12/2003	<p><u>Extends</u> the commercial salmon fishing period in the Chignik Bay and Central districts from 3:00 PM August 12 to 3:00 PM August 13 for the competitive fleet.</p> <p><u>Opens</u> the Chignik Bay District to commercial salmon fishing from 4:00 PM August 13 to 4:00 PM August 16 by the cooperative fleet.</p> <p><u>Closed Waters</u> Effective 4:00 PM August 13, the closed waters of upper Chignik Lagoon are reduced to include only those waters above Pillar Rock.</p>
4-FS-L-36-03	10:30 AM 8/16/2003	4:00 PM 8/16/2003	<p><u>Extends</u> the commercial salmon fishing period in the Chignik Bay District from 4:00 PM August 16 to 4:00 PM August 17 for the cooperative fleet.</p>

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E.O. Number	Issued	Effective	Action taken
4-FS-L-37-03	6:30 PM 8/16/2003	4:00 PM 8/17/2003	<p><u>Extends</u> the commercial salmon fishing period in the Chignik Bay District from 4:00 PM August 17 to 6:00 AM August 13 for the cooperative fleet.</p> <p><u>Opens</u> the Chignik Bay and Central districts to commercial salmon fishing from 7:00 AM August 18 to 7:00 AM August 20 by the competitive fleet.</p> <p><u>Closed Waters</u> Effective 6:00 AM August 18, the closed waters of upper Chignik Lagoon are expanded to include only those waters above Mensis Point.</p>
4-FS-L-38-03	3:00 PM 8/19/2003	7:00 AM 8/20/2003	<p><u>Extends</u> the commercial salmon fishing period in the Chignik Bay and Central districts from 7:00 AM August 20 to 10:00 AM August 21 for the competitive fleet.</p>
4-FS-L-39-03	6:30 PM 8/16/2003	4:00 PM 8/17/2003	<p><u>Extends</u> the commercial salmon fishing period in the Chignik Bay and Central districts from 10:00 AM August 21 to 4:00 PM August 21 for the competitive fleet.</p> <p><u>Opens</u> the Chignik Bay District to commercial salmon fishing from 5:00 PM August 21 to 5:00 PM August 25 by the cooperative fleet.</p> <p><u>Closed Waters</u> Effective 5:00 PM August 21, the closed waters of upper Chignik Lagoon are reduced to include only those waters above Pillar Rock.</p>
4-FS-L-40-03	12:30 PM 8/25/2003	5:00 PM 8/25/2003	<p><u>Extends</u> the commercial salmon fishing period in the Chignik Bay District from 5:00 PM August 25 to 5:00 PM August 29 for the cooperative fleet.</p>
4-FS-L-41-03	11:15 AM 8/25/2003	5:00 PM 8/29/2003	<p><u>Extends</u> the commercial salmon fishing period in the Chignik Bay District from 5:00 PM August 29 to 6:00 PM September 2 for the cooperative fleet.</p>
4-FS-L-42-03	12:15 PM 9/2/2003	6:00 PM 9/2/2003	<p><u>Extends</u> the commercial salmon fishing period in the Chignik Bay District from 6:00 PM September 2 to 6:00 PM September 6 for the cooperative fleet.</p> <p><u>Opens</u> the Chignik Bay and Central districts to commercial salmon fishing from 12:01 AM September 4 to 12:01 AM September 6 by the competitive fleet.</p> <p><u>Closed Waters</u> Effective 12:01 AM September 4, the closed waters of upper Chignik Lagoon are expanded for the competitive fleet to include only those waters above Mensis Point.</p>

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<u>E.O. Number</u>	<u>Issued</u>	<u>Effective</u>	<u>Action taken</u>
4-FS-L-43-03	6:15 PM 9/5/2003	6:00 PM 9/6/2003	<u>Extends</u> the commercial salmon fishing period in the Chignik Bay District from 6:00 PM September 6 to 6:00 PM September 10 for the cooperative fleet.
4-FS-L-44-03	2:00 PM 9/10/2003	6:00 PM 9/10/2003	<u>Extends</u> the commercial salmon fishing period in the Chignik Bay District from 6:00 PM September 10 to 11:59 PM September 14 for the cooperative fleet.
4-FS-L-45-03	4:00 PM 9/12/2003	11:59 PM 9/14/2003	<u>Extends</u> the commercial salmon fishing period in the Chignik Bay District from 11:59 PM September 14 to 11:59 PM September 16 for the cooperative fleet.

**APPENDIX D. MEMORANDUM RECOMMENDING TARGETING
THE LOWER BOUNDS OF THE CHIGNIK SOCKEYE SALMON
ESCAPEMENT GOALS DURING THE 2003 SEASON.**

Appendix D1.-Memorandum recommending targeting the lower bounds of the Chignik sockeye salmon escapement goals during the 2003 season.



ALASKA DEPARTMENT OF FISH AND GAME

DIVISION OF COMMERCIAL FISHERIES

MEMORANDUM

TO: Patti Nelson
Regional Research Supervisor
Division of Commercial Fisheries
Region IV – Kodiak

DATE: August 11, 2003

PHONE: (907) 486-1805
FAX: (907) 486-1841

AND: Jim McCullough
Regional Management Coordinator
Division of Commercial Fisheries
Region IV – Kodiak

FROM: Kenneth A. Bouwens
Finfish Research Biologist
Division of Commercial Fisheries
Region IV - Kodiak

SUBJECT: Chignik Escapements

The purpose of this memorandum is to discuss escapement goals to the Chignik watershed in terms of the health of the sockeye salmon rearing habitat at Chignik. This discussion is based on preliminary data from the Chignik Lake Assessment Project and the Chignik Smolt Project.

Sockeye salmon escapements have been in excess of published escapement goals for the past 11 years (1992 – 2002). The escapements of the Black Lake runs have been closer to the established goals than the Chignik Lake escapements. In 2002, the lower goals were targeted. Regardless of this effort, the total escapement to the late run exceeded the upper goal of 250,000 by almost 100,000 sockeye salmon.

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Goal	350,000 - 400,000	200,000 - 250,000	550,000 - 650,000
Year	Black Lake Escapement	Chignik Lake Escapement	Total Escapement
1992	360,681	405,922	766,603
1993	364,263	333,114	697,377
1994	769,464	197,445	966,909
1995	366,163	373,757	739,920
1996	464,750	284,387	749,137
1997	396,668	378,950	775,618
1998	410,659	290,469	701,128
1999	457,425	258,541	715,966
2000	519,661	285,614	805,275
2001	744,013	392,905	1,136,918
2002	380,701	344,519	725,220

Macrozooplankton are the forage base for juvenile sockeye salmon, and too many juvenile sockeye salmon, resulting from high escapement levels, can impact their food supply. Preliminary limnology data from both Black Lake and Chignik Lake in 2000 through 2002 indicated several lines of evidence suggesting that the forage base has been overgrazed in both Black and Chignik Lakes (Finkle and Bouwens 2001; Bouwens and Finkle 2003). The zooplankton community is a complex dynamic web of different species that are susceptible to different pressures. The abundance, species composition, and even size of the macrozooplankton can change via either bottom-up pressures such as nutrient limitations and phytoplankton species composition or from top-down pressures from extensive grazing (Kerfoot 1987; Kyle 1996). In the Chignik watershed, top-down pressures appear to be regulating the zooplankton population as evidenced by:

- 1) Zooplankton species composition. High grazing pressure on macrozooplankton can cause a shift in macrozooplankton species composition to less available and less efficient species in terms of sockeye salmon forage (Kerfoot 1987; Koenings and Burkett 1987). This seems to have occurred in both Black and Chignik lakes in 2000 through 2002 when compared to data taken in 1991 (Kyle 1992). Recently, *Bosmina* and *Cyclops* predominated the macrozooplankton. Both of the dominant species are inefficient grazers on the phytoplankton, and are poor transmitters of energy and nutrients through the food web. Although juvenile sockeye do prey upon these species, they are not preferred sockeye salmon forage. *Daphnia* is the preferred species and were nearly absent in both lakes recently although they were more abundant in 1991 in Chignik Lake. Further, rotifers, another type of smaller zooplankton (microzooplankton), were very abundant in recent years. Rotifers are too small for sockeye salmon to prey upon and the energy and nutrients tied up in these organisms are unavailable for sockeye salmon.

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- 1) Zooplankton size. The size of individual zooplankton (especially *Bosmina*) can change in response to high grazing pressure. The mean size of the *Bosmina* in both lakes was very small and below the elective feeding size threshold of sockeye salmon in 2000 through 2002. The zooplankton were generally larger, by species, in 1991 (Kyle 1992).
- 2) Zooplankton Biomass. The average 2000 through 2002 weighted mean macrozooplankton biomass (regardless of species or size) in Chignik Lake was about 209 mg/m². In 2001, the weighted mean biomass in Chignik Lake was very low at about 85 mg/m². For comparison, the weighted mean biomass of Chignik Lake in 1991 was 916 mg/m². Edmundson and Mazumder (2001) suggested that juvenile sockeye salmon are starving when zooplankton biomass levels approach about 100 mg/m² and that they are fully satiated at levels above 1,000 mg/m².
- 3) Phytoplankton abundance. Chlorophyll *a* levels were extremely high in both lakes in all three years. This is an indicator of a zooplankton community that is unable to transfer the energy and nutrients from the phytoplankton to sockeye salmon, indicating a bottleneck through top-down limitation of zooplankton production. The primary production of the system was high, but it was not transferred up the food web to the juvenile sockeye salmon. A healthy system has low chlorophyll *a* standing stocks because the phytoplankton is eaten by zooplankton as soon as it appears. These high chlorophyll *a* levels (along with nutrient data) indicate that the Chignik watershed is not limited by nutrient abundance.
- 4) Stomach content analysis. Preliminary stomach content analysis suggested that prey items other than zooplankton have been a major portion of the diet of rearing sockeye salmon in the Chignik watershed. These alternative prey included insects and amphipods. These prey were less important 2002 (when there was a higher zooplankton abundance and biomass) than in 2001, indicating that they might be chosen secondarily if zooplankton are not available.
- 5) Juvenile sockeye salmon catch data. Juvenile sockeye salmon were sampled in Black Lake, Black River, Chignik Lake, Chignik River, and Chignik Lagoon in 2000 through 2002. The data are not yet fully analyzed, but preliminary analysis indicated that the majority of the young-of-the-year-juvenile sockeye salmon emigrated from Black Lake to Chignik Lake during July and August of each year. This is consistent with findings of studies over 30 years ago by Parr (1972) and Narver (1966) and more recent work by Ruggerone (1994). Therefore, it appears that Chignik Lake is an important rearing area for both stocks. We were unable to derive juvenile sockeye salmon abundance estimates; thus, catch rates were used as an indicator of abundance. During years when juvenile sockeye salmon catch rates in Chignik Lake were high (especially 2001) zooplankton biomass was low. Further, the catch rates of young-of-the-year sockeye salmon in Chignik River and Lagoon were also higher in 2001. This suggests that the juvenile sockeye salmon were forced to alternative habitats when the zooplankton population was overtaxed.

Data from the Chignik smolt project (Bouwens and Newland 2003; Newland and Bouwens *in press*) also indicate that the number of juvenile sockeye salmon rearing in the freshwater ecosystem may have been too high. About 6.75 million smolt emigrated in 2003 compared to an average of about 20 million smolt per year from 1997 through 2002. The proportion of age 2. smolt in the emigration has dropped over the last few years. The smolt that would have emigrated

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in 2003 as age 2. smolt experienced very poor feeding conditions in Chignik Lake. The freshwater survival of juvenile sockeye salmon may have been low in recent years because of low food availability due to overgrazing.

A large number of young-of-the-year fry were noticed in the smolt traps and were beach seined in the lagoon in 2001 and 2002. These data suggested that juvenile sockeye salmon may have moved out of Chignik Lake and moved into the lagoon as pre-smolt, presumably because of low food availability in the lakes. It is unclear, however, if these fish will survive into adulthood. There have never been a substantial number of adults returning to the Chignik watershed as age 0. freshwater adults. However, there is some evidence that these fish may return to Chignik Lake to overwinter, and may emigrate the following spring as age 1. smolt.

Given the above information, it was recommended that the low ends of the escapement goals for both runs to Chignik should be targeted as management objectives in 2002 and 2003. The goal of reducing the number of sockeye salmon fry in both lakes was implemented to relieve the top-down pressure on the zooplankton population and subsequently this recommendation was expected to increase the overall ecological health of the system in terms of sockeye salmon production.

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CC: Lloyd
Witteveen
Pappas
Clark
Newland
Finkle

APPENDIX E. MINUTES TO THE 2003 CHASM MEETINGS

Appendix E1.-Minutes to the June 2, 2003 CHASM meeting.

Chignik Area Salmon Management (CHASM) Task Force meeting 6/2/03.

Co-Chairs: Chuck McCallum and George Pappas

Chuck McCallum starts the meeting with an introduction and defines the mission statement for the meeting and gives the rules of conduct for the meeting, then yields the floor to George Pappas.

George Pappas gives a brief introduction and goes over the changes in the agenda.

Ken Bouwens gives an overview of the forecast contained in the FMP. He expresses his confidence in the early run projections and states his reasoning for his confidence. He states that he is less confident with his forecast of the late run and states that the forecast could be short of the actual return.

George Pappas goes over the FMP with regard to last years test fishery and the changes in the FMP for the upcoming season. George explains that the fishery will be managed on an escapement curve that will allow for the commercial harvest of salmon before the traditional 40,000 fish escapement threshold. George goes on to state that not everyone will be started at once and reiterates the escapement objectives for the early portion of the early run covered in the MP.

Ernie Carlson points out that last year the fleet was unable to fish due to weather.

George Pappas explains the test fisheries and what there function initials.

Jamie Ross inquires about the justification used by Kodiak for commercial fisheries openings.

Jim McCullough explains the returns to Kodiak and there tentative strength. Jim outlines the openings scheduled in Kodiak and terminal harvest areas.

John Jones asks how the fishery is going to be opened.

George Pappas states that the details will be covered later in the meeting. George goes on to explain where the weir is at in relation to the escapement compared to the historical information. This information seems to indicate that escapement is head of the historic run timing curve and that an early opener is being considered by the department for 6 PM on 6 June. George goes on to state that depending on escapement and subsistence concerns that the coop may open for an unlimited catch for a 48 hour period.

General crowd question as to the reason the fishery could not be opened sooner.

Jim McCullough states that in regulation there is a fair notice requirement of 48 hours. The department had placed the fleet on 24 hour notice as of 6 PM that night.

George Pappas directs the meeting to pg. 7 of the MP for clarification.

Hank Brandle asks about a possible Igvak opening.

Jim McCullough states that it is possible that there would be an Igvak opening. But it would be dependent on the fish abundance.

Ernie Carlson asks how the Igvak fishery could open until all the information had been collected.

Jim McCullough explains that if the conditions in the Chignik area remain good then Igvak would open.

Hank Brandle voiced concerns that fish migrating to the Chignik Area would get "hammered" by the fishermen in Igvak if the fishery were allowed to begin on 9 June.

Jim McCullough states that the Igvak fishery is monitored.

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Hank Brandle states that the fish should be allow to pass the Igvak area.

Jim McCullough reiterates that if thing remain good here then the Igvak area will open.

Jamie Ross ask if the Kodiak fleet will begin on 5 June in limited areas and if a Kodiak wide opener was planned for 9 June.

Jim McCullough states that it is dependent on the escapement.

Jamie Ross then asks if it will open on 4 June in Kodiak.

Jim McCullough “Not necessarily”

Chuck McCallum then reminds the group of the reasonable expectation wording in the regulations.

Jamie Ross adds the comment that the managers in the Kodiak fisheries should be a conservative as possible in conducting their fisheries.

Jim McCullough states that he doesn't know what is going to happen and that if the current trends continued then there would be an unlimited opener in the Chignik Area.

Chuck McCallum reiterates the fisherman's concern not to let the Chignik Area fisherman lose out to the Igvak fishery.

George Pappas reminds the meeting that all the indicators show that the run is early this year.

Jamie Ross asks when the Igvak fishery will open.

(I lost some of the comments here. I got behind)

Jason Alexander asked about the water temperature in the Chignik River.

Ken Bouwens indicates that the river is slightly cooler this year and ranged from 5-6° C. Ken says that the river had just recently started warming.

Jason Alexander voices his concern that opening the Igvak fishery will be detrimental to the competitive fleet that fish outside the lagoon. He expresses his concern that opening Chignik will cause the Igvak fishery to open early.

Paul ? asked when and how many times that Kodiak started fishing first.

Jim McCullough said that it had gone first.

Jason Alexander said that it happened in 1994 because of a strike in Chignik.

Paul said something about Igvak that I missed.

Jason Alexander stated that opening the Igvak fishery on 9 June did not set well with him.

Jim McCullough said that things are early this year. Chignik is no longer on the 40,000 fish threshold cap and that the Chignik Area would open before Igvak.

Virginia Alec voiced her concerns that opening the Igvak fishery would have negative impacts on the local area subsistence fishers.

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Jim McCullough offered to change subjects to the changes in the subsistence permit conditions and yielded the floor to George Pappas

George Pappas started by listing the changes in the subsistence permit conditions listed on the back of the subsistence permit. George explains how the changes in the permit conditions have been relaxed for commercial fishermen and permit holders in the Chignik Area and how this relaxation of permit conditions has increased the opportunity for subsistence fishing in the Chignik Area.

Ernie Carlson ask if there was a limit to the number of fish taken by subsistence fishers.

George Pappas relays the information contained on the subsistence permits that the limit is 250 salmon per permit per person.

Chuck McCallum at this point moved the discussion back to the ordered agenda.

Dean Anderson makes the comment that the Igvak fishery is just an allocation dispute. He suggests that the group get off the subject and move on.

Ernie Carlson states his opinion that the Chignik Area salmon fishing was better before the department and the BOF screwed it up. He stated his opinion with colorful colloquialisms.

At this point there was a minor dispute between several members over the Igvak fishery issues.

Dean Anderson points out that subsistence was not addressed.

Jim McCullough addresses the subsistence issues and points out that the changes in the permit are not regulation but are changes in the conditions of the permit.

Al Anderson states his concerns for subsistence fishers that are smaller operations and the effect of early opening to their ability to catch fish. He states that most subsistence fishers are not ready and have not started fishing and questions the department for opening the fishery early. He also expresses his fears that commercial fishers would not respect the subsistence fishers nets.

George Pappas covers the timing of the run and the escapement to that point in relation to the new fishery management plan.

Virginia Alec states that she is one of the "little guys" and has just started to subsistence fish. She states that she fears she is not going to be able to catch the fish she need this year.

George Pappas explains what may happen with the fishery and tried to quell the fear of subsistence fishers.

Jamie Ross states that 80-90% of the coop fleet are subsistence fishers and that they would indeed respect the nets used by subsistence fishers. He gave reassurances that requested fish may be given out under personal use provisions.

George Pappas covers the difference between personal use and subsistence fish. The difference being the way and timing involved in obtaining the fish. Whether from fish were caught in a commercial fishery or by people subsistence fishing.

Jim McCullough mentions the decrease in fish claim as subsistence fish and farther qualifies the difference between subsistence fish and personal use fish. He also tell the group that accurate reporting helps a great deal in run reconstruction done post season.

George Pappas states that the reporting is even important for Chinook salmon.

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John Jones ask if there is anything that can be done to stop Igvak.

George Pappas explains that as the Chignik Area Management Biologist that it is not in his power to stop the Igvak fishery. The fishery depends on escapement, subsistence concerns, etc.

John Jones continues questions about the numbers involved to get an absolute value. His main concern was to keep fishing.

George Pappas states that the department is not going to manage the fishery for pulses.

John Jones voiced his concerns that the fishery not close in August.

George Pappas indicated that the fishery was managed on a daily basis based on the most current number available.

John Jones asks if the department has plans to over escape the system.

Jim McCullough states that the department has escapement ranges, which it will try to manage for. And states that we will have to see what happens.

John Jones asks if both fleets will fish late season if there is high escapement numbers.

Jim McCullough indicates that it is dependent on escapement.

George Pappas points out that the interim escapement objectives are contained in the FMP.

Al Anderson expresses his concern with the escapement objective of 50,000 salmon through the weir in August as being too low and based on times when the weir was removed in early August. Thus not enumerating escapement after early August historically.

Jim McCullough points out that the escapement goals for the Chignik River system are being revisited and will be reviewed by the BOF at the next regularly scheduled meeting.

Al Anderson returns to his point that 50,000 fish through the weir is based on historical information that was collected during a short time period in early August.

Jim McCullough agrees and goes over a brief escapement history.

Al Anderson returns to the question of 50,000 fish being the target when there were higher numbers of fish that escaped in August historically.

Jim McCullough expresses that the department understands his concern and that the department doesn't want to have windows of escapement but a steady stream of escapement.

Al Anderson states his concern that the fishery needs to be slowed in August.

Chuck McCallum questions the validity of the 50,000 fish escapement and asks if it is healthy for the system.

Jim McCullough states that 50,000 fish may not be the right escapement objective and that number is not solely based on MSY. Jim states that both sides of the 50,000 fish debate were upset with over or under escaping that number of fish. But agrees that historically more than 50,000 fish escaped past the weir.

Al Anderson states he is upset that the coop was allowed the late escapement last year.

Virginia Alec indicated that she had to fish harder to meet her late subsistence needs last year.

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Chuck McCallum breaks the discussion to get the meeting back on track.

George Pappas mentions the tentative results of the tagging project conducted last year in the Chignik Area.

Jamie Ross states for the record that he is in agreement with Al Anderson.

Terry Stepanoff ask what percent of the escapement is subsistence fish.

George Pappas-(I missed his reply)

Terry Stepanoff voiced concerns of the abundance in the rivers for wildlife and humans.

George Pappas addressed those concerns by pointing out that the numbers of fish remained the same and only the pulse like nature of the run would be affected. George also points out that the escapement goals in August and September were obtained by a subsistence task force.

Chuck McCullough asked how mortality effected the escapement objectives.

Jim McCullough explained that the natural and human caused mortality was already built into the model used in the Chignik area.

Jason Alexander ask for a clarification on subsistence fishing for commercial fishers.

Jim McCullough goes over the new permit conditions and how they relate to commercial fishers in regard to when and how the fishers can and can not subsistence fish.

Jason Alexander states that Denby Lloyd gave an indication that the competitive fleet were going to get some kind of mechanism to trigger the fleet to fish at last years CHASM meeting. He wanted to know if there was going to be some trigger this year if the run was strong and escapement numbers high.

George Pappas said the topic had already been covered.

Jim McCullough indicated that any opening depended on the strength of the run and how the escapement and a variety of variables would determine openings.

Jason Alexander mentioned the financial effects of the weir blowing out and impacts of the Igvak fishery.

Jim McCullough defended the numbers generated at the time and agreed that the weir blowing cost the fishers money. Jim made a case for sonar back up in the Chignik system.

George Pappas (I missed his comment)

Paul ? asked if the competitive fleet and the coop would fish at the same time to stop overescapement.

Jim McCullough (I missed his comment)

George Pappas stated that there was no set trigger to do that.

Al Anderson voiced his concerns for people to get their Chinook salmon because of the coop and his not being able to fish.

George Pappas explained that there was more opportunity to subsistence fish under the new subsistence permit conditions for commercial fishers than in the past.

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Al Anderson expressed his view that he wasn't going to use his seine to subsistence fish for Chinook. "Straining reds to get kings isn't worth my time."

Dean Anderson discusses overescapement and doesn't see the point of putting the department on the spot and sees no advantage to it.

Jamie Ross agrees and says no one wants to see overescapement.

George Pappas quotes from the FMP and tells the meeting that provisions have been made to allow both fleets to fish at the same time. George also tell the group that there is no specific trigger that would make that happen.

Ernie Carlson stated that he wanted the department to get some specific trigger that would make both fleets fish or let the competitive fleet fish. He stated that overescapement cost them money and that George should call someone with the authority to give them a trigger.

Jim McCullough states that the department has no triggering mechanism at this time.

Ernie Carlson states that he does not want a repeat of the August fishery and wants triggering mechanism and goals. He vented.

Chuck McCullough tries to wrap the subject up.

Dean Anderson states that the department bares the burden and the group should let them do their job to the best of their abilities.

Jamie Ross states that the runs are variable every year.

George Pappas agrees and states that the run last year came in like "a garden hose" making managing the fishery easier.

Chuck McCallum reiterates Ernie's concern over timing and encourages good communication.

Unknown States that they would like to see the "trigger" lowered.

Jim McCullough states that the department is planning on managing the escapement for the lower end of the escapement objectives.

Unknown States that they are concerned by the politics involved and the fairness in allocations.

Chuck McCallum calls for a recess at 20:02. And the meeting goes into recess.

Chuck McCallum calls the meeting back to order at 20:20.

George ? asks if the EVOS funding for projects had ended this year.

George Pappas indicates that EVOS funding is gone. There was money to do a tagging project. But there is not another funding source at this time.

George ? states that he would hate see an early end to the weir operations.

General question is asked about the cost of running the weir through August into September.

Jim McCullough states that it takes around 45,000 to operate the weir for that time frame.

George ? suggests that CRAA take the lead in keeping the weir operational in August.

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Al Anderson asks where the money is coming from to run the leads monitoring project.

George Pappas states that that money is generated through the test fishery.

Al Anderson- “When did we pass that tax?”

Jim McCullough explains that test fish money goes to the department to manage fisheries. Concerns about the fixed leads prompted the department to establish a monitoring program for the fixed leads and gives a brief description of the project.

George Pappas point people to the test fish handout available at the meeting.

Al Anderson states that he is not against the project. But voices concerns that the monitoring project is just another pet project.

Jamie Ross-“is there a” (that is all I got)

George Pappas and Jim McCullough explain where the money goes and the cost for the monitoring project being around 4,000 to 5,000 dollars.

Jamie Ross asks if the fishers are not paying for the project then who is?

Ernie Carlson questions the use of fixed leads.

Hank ? also questioned the fixed leads.

Al Anderson asked where the money went.

George Pappas explains that the money in question had already been spent.

Jim McCullough and Ernie Carlson made comments I missed.

Jim McCullough explained that the department developed a program to answer questions about any possible affects the fixed leads may have.

George Pappas explains that no test fishery money goes to extending the length of time the weir operates.

Al Anderson states that that was the purpose of test fishing before EVOS funding became available.

George Pappas states that test fishery money was not used to extend the operational period of the weir.

Jim McCullough discusses the money issues.

Al Anderson expresses his opinion that the fishers should be asked where they want money generated from them spent.

Chuck McCallum- (I missed his comments)

Virginia Alec expresses concerns of the leads not coming out and the effect that will have on subsistence fishing. Also the safety of having the lead to boat traffic.

Chuck McCallum agrees that subsistence concerns are important to consider.

Jamie Ross indicates that he understands the concerns voiced. Jamie goes on to list the safety features of the fixed lead that is both in the commissioner’s permit and extra safety gear added to the leads.

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George Pappas points out that the conditions of the commissioner's permit are listed in the FMP.

Jamie Ross points out that at this point the coop doesn't know if the lead will work or if they will be used.

Chuck McCallum suggests that the coop offer interested parties a copy of the permits required to have the fixed leads.

Jim McCullough Explains some of the permitting process with an emphasis placed on ADF&G's requirements.

Dale Carlson indicates that if the fixed lead is fished at night and the leads have lights on them then they are attracting fish, which is illegal.

Jim McCullough points out that the fishery is allocated and that the leads are only to make the coop more efficient.

Chuck McCallum asks if the construction of the fix lead was presented to the BOF before they approved the fixed leads.

John Jones asks whom it liable for the leads and who carries the insurance on them.

Jim McCullough indicates that ADF&G has nothing to do with the leads and that the insurance and liability may lie with the coop or Axle, whose name is on the permit application.

Dale Carlson states that he doesn't want his money going to something that he is no part of.

Jim McCullough explains that the department has the option to spend those moneys were the department deems it necessary.

Dale Carlson asks about east and west openers. If the run is good can the competitive fleet fish in the Western District and went the coop is fishing can they fish outside.

George Pappas quotes from the regulation about how and when a commercial fishery can be executed. George asks if the fleet wants the department to open the inside of the lagoon to the coop and open the outside for the competitive fleet.

Jim McCullough ask if the coop is planning on fishing for pink and chum.

Jason Alexander expresses his concern that fishing for pink and chum would be a reallocation of the fish.

Ernie Carlson indicates that the area is being allocated away from the competitive fleet.

Jim McCullough indicates that if the escapement is at the lower end then-

Ernie Carlson interrupts Jim McCullough- "What"

Jim McCullough ask if the fleet want the lagoon open for smaller boats and the outside area open for the cape sieners with some directed fishing for pink and chum.

Chuck McCallum interrupts the meeting to get things back on track.

George Pappas restates Mr. Jones question and asks if fishing outside is a reallocation.

Jim R. offers the suggestion that the fishery be run the way he fished in Washington State by making sockeye salmon a by-catch species that would not be counted off the allocations of either fleet.

-continued-

Frank Grunert ask if the markers have been changed.

George Pappas points out the it was the BOF that allowed an extension for the coop fishers in regard to the placement of the leads and using them to fish.

Jim McCullough states that marker placement is a BOF discussion and that if the fleet would like the markers changed then they should submit a proposal to the BOF.

Frank Grunert asks if they could move the markers upstream.

A consensus no.

Paul ? asks what the plans are if one group get way ahead on allocation what will happen.

Chum McCallum- I missed this statement.

Jason Alexander expresses his thoughts that the inside line should be moved for the competitive fleet and agrees with Jim R. in his suggestion that sockeye in the Western and Perryville sections be counted as by-catch and not be included in the allotment. He points out that set net fishers have sockeye listed as by-catch.

Jim McCullough points out that some of these issues were covered at the BOF and that for this years fishery it is too late to make changes. The regulations regarding the allocation and the way they are to be allotted have been set already and it would take a BOF action to change it at this point.

Jason Alexander points out that the system is variable and that “nature takes over” limiting the ability to predict and expresses concern of limiting other fishing in other areas.

Jim McCullough points out that the department has no authority to override BOF in which fish are counted in allocation.

Jason Alexander and Jim McCullough say a few more words that I missed in my notes.

Jason Alexander tells the department to remember not to “pick on us”.

Jamie Ross points out the problems that may be encountered during small runs when the coop is trying to catch up on their allocation. He suggests that the coop be allowed to get ahead of the competitive fleet as a way to reduce the time between openers for the competitive fleet.

George Pappas asks the group if there was a time when fishers were able to deck load their vessels before July 15.

Jason Alexander – “We are” and I missed the rest.

George Pappas says to go to the board of fish.

Ernie Carlson questions ADF&G’s stance on allocation issues and whether the department is truly neutral.

Jason Alexander states that the department is not managing the fishery properly.

Chuck McCallum points out that the department has its hands tied for many of the issues being discussed.

Jim McCullough points out that pink and chum salmon fisheries are not exempt from the allocation of sockeye salmon, makes suggestions to open small pieces in bays to limit the harvest of salmon to pinks and chums.

-continued-

George Pappas – I missed his comments.

Ernie Carlson states his opinion that counting sockeye caught while fishing for pinks and chums in the Western and Perryville Districts is a reallocation of area for the competitive fleet.

George Pappas and Jason Alexander talk about fish caught in the Western District.

(I lost part of the conversation at this point)

Dean Anderson makes comments on the abundance of sockeye in the lagoon. Suggest that fishers that fish for pinks and chums take extra care not to catch sockeyes and points out that all the discussions relate to an allocation that is already set. He also points out that there is no perfect answer.

Jim R. states that there is a mechanism and that the department should go before the BOF on behalf of the competitive fleet. He states that he understands the BOF process. Jim goes on to state that not all the sockeye salmon caught in the Western and Perryville Districts are Chignik sockeye and that a percentage be used to proportion the sockeye caught in those districts. Jim R. states that the department has become too politicized and that a portion of the sockeye caught in other districts be viewed as by-catch and not counted as allocation.

Jim McCullough suggests taking this argument to the BOF.

George Pappas asks if the fishers would voluntarily give the department catch reports and questions what kind of by-catch is being discussed.

Jim R. restates that a proportion on the sockeye caught in the Western and Perryville Districts be managed as by-catch and not be counted towards the Chignik Area allocation.

Jim McCullough questions if the sockeye in question are a mixed stock.

Jim R. points out that there are models that could be used and compromises that could be made.

Chuck McCallum suggests that it might be more appropriate to discuss these issues in smaller groups at a later date.

George Pappas indicates that he will look up numbers for catch in the Western and Perryville Districts. George then goes on to direct attention to hand outs covering the test fishery and the set leads information. George explains the fish ticket verification procedure to be used in 2003 and the monitoring to be done on the live fish pens.

Ernie Carlson wants to know how long the processors will be allowed to process with out a check of there system regarding the use of live fish net pens.

Jim McCullough states that fish will only be allowed to be held for no more than three days. He also explains that catch from individual days can not be mixed in the live fish net pens.

Jim R. asks about possible mortality associated with fish being held in the live fish net pens and who is responsible for those fish.

George Pappas states that he did observe any significant mortality in relation to the live fish net pens used last year.

Jim McCullough stated that fish mortality associated with live fish net pens would count off the allocation of the fishers that delivered those fish. If coop fish were in the net pens the fish would count towards the coop's allocation and the same holds true for the competitive fleet.

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George Pappas talks about the set lead and the monitoring program that the department has developed as a condition of the permit.

Ernie Carlson asks when the set leads have to be pulled and if it is tied to overescapement.

George Pappas explains that the set leads are to make the coop more efficient. George also indicated that the competitive fleet is more effective at intercepting fish than the coop was during last season.

Jim McCullough gives an overview of the set leads project.

Ernie Carlson states his concern that fish that have crossed the “line” will stay there.

Jim McCullough states that the fish may mill or go “back down” and says that we will have to see how the set leads work.

Ernie Carlson asks if there is going to be an 8-10 hour window between fisheries with the leads being removed.

Jim McCullough indicates that there is a monitoring program to address the concerns about the set leads.

Chuck McCallum points out that the department has discretion in regard to the set leads.

Jim McCullough- (I missed this comment)

Jamie Ross explains that the fixed leads are required to be removed when the coop fishery is closed. He explained that the leads would be removed at high water before a closer to the coop fleet and how they intended to fish the leads during and near the end of a coop fishery.

Chuck McCallum addresses the report on the leads monitoring project being conducted by the department. He had not read it, but their biologist agreed, although they thought more information could be collected.

George Pappas addresses the Western and Perryville District pink and chum fishery. (My notes are too vague here)

Ernie Carlson states, “Are you going to cut us off at the knees?”

Jim McCullough states that allocation is allocation.

Ernie Carlson asks if the department is going to open bays or capes.

Jim McCullough states that sockeye allocation is the issue.

Ernie Carlson asks if fish caught at the lead will be pumped directly into a tender.

Jim McCullough explains that when pink and chum fishing to “Stay off the sockeye”

Jim McCullough then explains the test fish program and the basis for the program.

(I missed a discussion here)

Jason Alexander asks about the Kametlook River escapement.

Jim McCullough gives the escapement goals for the system.

Jason Alexander states that the BOF has put the department in a bad position and that nature can play tricks on you. If a mistake is made then it is the competitive fleet that will pay for those mistakes.

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Jim McCullough points out that the department has allowed fisheries early in the pink and chum runs and that the department does not have any coho enumeration projects. The department had allowed a fishery last year and the post season evaluation showed that the escapements did not warrant a fishery opening in those area. The department has to manage the fishery based on the sockeye escapement and the fisheries allocations.

Ken Bouwens makes the comment that pinks and chum overescapement do not pose the same problem as sockeye do because of the lack of a fresh water residence.

Jim McCullough states that the area is dynamic with the main spawning stream changing over the years.

Ernie Carlson asks if the enhancement work will work in glacial rivers.

Jim McCullough indicates that education and enhancement seem to be paying dividends.

Ernie Carlson ask/makes the statement “So they wont be hit so hard.”

Jim McCullough “I hope so.”

Chuck McCallum cites a USFW study that indicates that the estimated sustainable harvest is 1,500.

Ernie Carlson asks what the escapement estimate is for that harvest.

Jim McCullough states that it is 3 to 5,000.

George ? Suggest that the department allow the coop to get ahead on the allocation.

George Pappas asks if the coop is planning on targeting on pinks.

George ? indicates that there has not been a market set up and that there is no plan to do so.

George Pappas states that he wants to work out the differences between the competitive and co-op fleets.

Dale Carlson ask if the escapement is low and the department is going to try and keep the number close if the department is going to slow the competitive fleet down.

George Pappas states that the only management tool that the department has is time and area and the fish are already allocated to one fleet or the other.

Dale Carlson asks if the department opens for 24 or 48 hour openers and the competitive fleet get way ahead.

George Pappas asks if he would like 6 hour openers.

Ernie Carlson expresses his concern about windows of opportunity for harvest, in that salmon are a one way and not harvestable after they migrate through the area.

Ernie Carlson states that it is tough to put an allocation on a fishery and there is only a limited window of opportunity.

George Pappas states that allocation is allocation and that the time it takes to catch that fish is the time it takes to catch that allocation.

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Jason Alexander stated his concern that fishing for pinks and chums would shut the lagoon down for the competitive fleet because of sockeye by-catch involved in the Western and Perryville District pink and chum salmon harvest. He states that the sockeye by-catch counting towards the allocation is taking one or two days of lagoon fishing away from the competitive fleet. He points out that the competitive fleet missed out on the coho salmon run last year because the fishery was closed to the competitive fleet.

Jim McCullough states that those concerns were brought up to the board and there is no answer. The fisheries management is based on sockeye escapement and allocation.

Jason Alexander states that the way the fishery is working that the traditional fishers in the area is being displaced.

George Pappas asks the plant representatives when the plants are planning on stopping operations for the season.

Tom and Dean indicate that Trident will buy fish and that Norquest might.

Jamie Ross asks if the department is going to open the two fleets concurrently.

Jim McCullough states that he does not want to state anything on how the department is going to open things so that the department does not get its hands tied for management decisions.

Jamie Ross asks if it will open at all. (I missed what area is being mentioned)

Tom ? stated that the area was open last year for commercial fishing and no one fished there.

Dean Anderson stated that opinions had been stated strongly regarding the coho salmon and the fall fishery. He blames some of the problems on harvest and mismanagement of the area. He questions if there is a solution and asks if the meeting is ready to adjourn.

John Jones wants to make sure that George Pappas is informed on the coop catching capacity for better management of the fishery.

(Missed some comments)

Jim McCullough states that the management of the fishery last year went well when looking at the total numbers.

Unknown- Says the department made management sound like it was no problem last year.

Jim McCullough states that it was hard this year and last.

Chuck McCallum changes the subject to the test fishery fish going to the highest bidder.

Jim McCullough indicates that that option doesn't make sense in some cases. It depends on charter cost and what kind of deal could be struck. If the department only has to pay one dollar for the charter then whom has the best deal to offer.

George Pappas indicates that the local processors have had good working relationships with the department for some time.

Chuck McCallum indicates that he sees the point with a large amount of fish.

Ernie Carlson states that it is the department that owns the fish and they should do with them what they want.

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There is more discussion about the price and were the department will potentially sell the test fish harvested.

Dale Carlson asks if the department is going to push the coop to fish harder when needed.

George Pappas asks the room if the way things are done is going to change.

Jim McCullough reiterate that was part of the reason for the BOF to allow the coop to use fixed leads was to make it so they could harvest fish more efficiently.

Jamie Ross states that the intent of the fixed leads is to speed up the rate the coop catches fish.

Dale Carlson asks again if the department is going to push the coop to fish harder.

George Pappas points out the way the fishery progressed last year in regard to the escapement and allocation objectives.

Ernie Carlson asks the who, what, when, and where kind of question (I missed some of it).

George Pappas went over the newsreleases that had gone out to that point.

Igvak is discussed generally again and the meeting was adjourned at 22:34.

Appendix E2.-Minutes to the August 15, 2003 CHASM meeting.

CHASM MEETING MINUTES

Co-Chairs: Chuck McCallum and George Pappas
Location: Chignik Lake Community Center, August 15, 2003

Chuck McCallum opens meeting at 3:45 PM.

Dan Mershon was asked to take minutes. He agreed to do that.

CHASM members present: Jason Alexander, Dean Anderson, Axel Kopun, Jamie Ross, Chuck McCallum, George Pappas, Jim Long, Ron Soule, Virginia Alec

The meeting was attended in person by those assembled at the Chignik Lake Community Center and others by teleconference from the following locations: Chignik Lagoon, Chignik Bay, Trident Seafoods Chignik Office, Perryville, Kodiak ADF&G, and Bristol Bay Native Association. About 60 people in all.

At 3:55 Chuck McCallum called the meeting to order and ask for the approval of the following agenda:

- 1) Membership of CHASM, and election procedures
- 2) Discussion of the relationship that CHASM has with ADF&G
- 3) Discuss the "Bouwens memo", and August escapement goals for the Chignik system
- 4) Other business
- 5) Adjourn

Agenda passed with no further discussion.

Chuck McCallum asks Kodiak ADF&G about CHASM interactions and guidance for the CHASM process and its role in the decision making process.

Denby Lloyd states that the CHASM Task Force was created to identify preseason and in-season issues and to relate those concerns appropriately and it was not created for Board of Fish issues. The process would be informal with "co-chairs" and the membership would be representative of the competitive fishing fleet, the coop fishing fleet, the subsistence users, the processors, and the local ADF&G management team. Denby Lloyd stressed that CHASM only has an advisory role to the ADF&G.

Chuck McCallum thanks Denby Lloyd for the clarification and opens discussion on CHASM member roles and issues, and the process of changing CHASM members

John Jones brings up the issue of elections to the CHASM seats, and asks if the task force is more powerful than the individual fishermen or others in the community.

Denby Lloyd restates the informal nature of the task force and that it is not more powerful than any individual but has the role of consolidating local opinion relating to various fishing issues. Denby Lloyd further states that there is no power vested in the CHASM process.

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Chuck McCallum recognizes Jason Alexander.

Jason Alexander states his willingness to serve on the task force as a representative of the independent competitive fleet and he also wants to be sure there is equal representation on the ADF&G advisory committee, coop vs. competitive fleets.

There follows some informal discussion by Al Anderson and Dean Anderson in regard to possible equal representation issues such as the current issue of August sockeye escapement and the “Bouwens memo”.

Chuck McCallum recognizes Jamie Ross Ross.

Jamie Ross asks if there are other areas where CHASM may play a role and will CHASM have any real effect on ADF&G decisions.

Denby Lloyd responds that CHASM has no authority or power. CHASM should portray fisherman, subsistence, and processor issues accurately to ADF&G and there may be a range of reactions from ADF&G to CHASM recommendations.

Chuck McCallum asks about where the authority to change escapement goals lies.

Denby Lloyd responds that escapement goals are ADF&G’s responsibility to both establish and to amend. The BOF gets into it from time to time when “optimum” escapement goals are established for non-biological reasons, and that ADF&G does not make these kinds of escapement decisions lightly or hurriedly or from outside pressures.

A short informal discussion occurs about the August escapement goal and the Chignik weir and its historical data gathering.

Denby Lloyd states that management is based on current biology regardless of the history of the escapement goals or past weir performance

Chuck McCallum asks for comments from Chignik Bay.

Glen Suydam asks if the 50,000 fish August goal is an attempt to set a benchmark for returns in the future.

Denby Lloyd responds that it is the department’s intention to get the escapement down to that goal because they have reason to believe the system has been in a pattern of overescapement by adult sockeye, over-grazing by smolts in the lakes, and that the result is undue pressure on the whole system of Chignik sockeye production.

Chuck McCallum brings the discussion back to the selection of CHASM members and for its makeup and representation.

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Al Anderson suggests that each village in the region have a seat on the task force, in effect expanding the membership by 4 or 5 seats.

Chuck McCallum asks for Denby Lloyd to respond.

Denby Lloyd says that the task force can do what it wants in that respect, there is no formal basis, but the members should remember that regardless of size CHASM has no authority.

Chuck McCallum polls the members on this issue.

Axel Kopun suggests status quo.

Jamie Ross states that there are already overlapping aspects of representation for the villages with the current membership.

Jason Alexander comments on choosing new members.

Jim Long makes a motion to table the item until the next CHASM meeting.

Jason Alexander seconds the motion.

Motion carried.

Jamie Ross asks for a definition of the CHASM election process.

Chuck McCallum suggests the ground work for defining and setting the parameters for choosing new and confirming current members be undertaken at another meeting.

Chuck McCallum opens the next item on the agenda: the “Ken Bouwens memo”, on August escapement for the Chignik River.

Denby Lloyd points out again that CHASM has no authority to address department research which the “Ken Bouwens memo” is in reference to.

Chuck McCallum asks to hear the “memo” or “report”.

Dean Anderson expresses concern about the escapement goals and wants ADF&G to tell the CHASM members about their decisions.

Denby Lloyd states that the proper form would be to give the Department a question they can respond to in this forum.

Chuck McCallum suggests the question to the department is whether the goal should be 50,000 sockeye in August or 75,000 and then based on what criteria.

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Denby Lloyd states the August sockeye escapement goal is 50,000 and that is what ADF&G is shooting for. Further, it is not an in-season decision, the goal was set early in the preseason.

Denby Lloyd asks why CHASM is questioning ADF&G research.

Chuck McCallum responds that CHASM is reacting to local concerns.

Jamie Ross says that when he read it he found the “Bouwens memo” very informative and helpful in understanding the questions and issues of over-escapement in the Chignik system. He asks Denby Lloyd if it could be read and explained at this meeting.

Denby Lloyd introduces Ken Bouwens

Ken Bouwens gave some background and the method of organization of the material to be discussed. He then got more specific on the relationships of zooplankton and phytoplankton in there various species and the effects they have as a food source for the sockeye smolts. The data suggests that in recent years, when escapements have greatly surpassed goals, damage has been done to the balance of the food sources in the Chignik Lakes and the sockeye smolts are suffering higher stresses in the system. Therefore, because of the availability of new research, the department has made the decision to reinforce the importance of the escapement goals and to change them where necessary.

An informal discussion follows with some questioning of the data.

Chuck McCallum thanks Ken and states that CHASM was just trying to pass on some of the members’ concerns to the separtment and that the advisory committees or the BOF process may be the place to proceed if people need a response in a more authoritative forum.

Al Anderson asks someone to address the large number of Dolly Varden trout that seemed to be present this year and their potential damage to the sockeye run.

Ken Bouwens and George Pappas give a brief discussion on the Dolly Varden numbers counted at the Chignik weir, their relative size, and the expectation that it is not that big a problem.

Al Anderson talks about other predators, kings and coho.

Jamie Ross asks about ocean survival and new research into ocean conditions changing.

Chuck McCallum gives Denby Lloyd the floor.

Denby Lloyd clarifies the duties of the various organizations and advisory groups designed to bring the public into the processes of designing or changing ADF&G regulations. He states CHASM is not the forum for authoritative recommendations.

Chuck McCallum asks for members comments.

Dean Anderson comments on 2002 overescapement in August.

Al Anderson talks about the “fixed leads” and there ability to catch more Dollies if the mesh size were 3 1/2 inch instead of 4 inch.

Axel Kopun clarifies the 3 1/2 to 4 inch controversy and the CRAA position letter at the time of the “fixed lead” permitting process.

George Pappas states that although there were over 30,000 Dollies in 2003, by comparison there were over 54,000 Dollies in 1996.

Another short informal discussion occurs on various subjects that have been presented.

John Jones asks again why CHASM can't ask the department to increase its August escapement goal.

Chuck McCallum responds that CHASM is not the appropriate group to make that request. Al Anderson asks why then are we sitting here having this meeting today.

Denby Lloyd states we are here to reinforce the directives of George Pappas and the Chignik management team in managing for escapement goals.

Chuck McCallum says we are shooting for 50,000 sockeye in August then.

Ernie Carlson states that we have been killing off the September run and now with this low escapement goal for August we'll be killing it off too.

Denby Lloyd says the department will be focusing on 50,000 for August escapement.

Jim Long asks what CHASM means and why it was given no authority. He then asks that a CHASM meeting be called for tomorrow, Aug. 16, 2003.

Chuck McCallum polls the CHASM members and it is agreed to hold the meeting in the Trident Seafoods office at 3:00 PM Aug. 16, 2003.

Some discussion follows on various topics and the agenda. It is moved and seconded that the meeting be adjourned. motion carried.

Chuck McCallum thanks everyone for their attendance and especially the group from Kodiak ADF&G. The meeting is adjourned at 5:50 PM.

**APPENDIX F. 2003 COMMERCIAL SALMON FISHERY CATCH
AND EFFORT, BY DAY, BY FLEET**

Appendix F1.-Cooperative fleet commercial salmon fishing effort and catch day in the Chignik Management Area, 2003. These data include fish retained for home pack but do not include ADF&G test fishery harvest.

Date	Effort		Chinook		Sockeye		Coho		Pink		Chum		Total	
	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
6/4	4	4	0	0	506	2,897	0	0	0	0	0	0	506	2,897
6/5	11	27	2	21	16,918	97,099	0	0	0	0	0	0	16,920	97,120
6/6	13	35	0	0	24,265	143,235	0	0	0	0	0	0	24,265	143,235
6/7	12	21	0	0	10,949	65,999	0	0	0	0	0	0	10,949	65,999
6/8	12	33	3	36	23,178	137,973	0	0	0	0	0	0	23,181	138,009
6/9	10	13	0	0	8,502	49,365	0	0	0	0	0	0	8,502	49,365
6/10	4	4	0	0	1,824	11,441	0	0	0	0	0	0	1,824	11,441
6/11	18	33	3	58	20,596	124,051	0	0	0	0	0	0	20,599	124,109
6/12	17	41	7	93	31,204	187,397	0	0	0	0	0	0	31,211	187,490
6/13	17	26	6	39	12,733	77,474	1	7	8	23	1	5	12,749	77,548
6/14	Fishery open for competitive fleet only													
6/15	19	29	1	7	16,614	106,847	0	0	0	0	0	0	16,615	106,854
6/16	18	55	31	241	35,535	232,192	0	0	0	0	0	0	35,566	232,433
6/17	20	54	4	50	26,721	170,628	0	0	0	0	0	0	26,725	170,678
6/18	20	38	15	96	16,656	104,920	0	0	50	137	1	7	16,722	105,160
6/19	18	24	5	17	10,492	65,341	0	0	12	32	0	0	10,509	65,390
6/20	3	3	11	105	3,034	18,213	0	0	5	14	0	0	3,050	18,332
6/21	4	4	3	8	4,581	30,045	0	0	4	12	0	0	4,588	30,065
6/22	5	6	4	12	6,354	41,865	0	0	11	31	0	0	6,369	41,908
6/23	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6/24	1	1	0	0	413	2,767	0	0	1	3	0	0	414	2,770
6/25	17	21	34	524	15,845	104,378	0	0	30	152	4	31	15,913	105,085
6/26	15	17	34	165	10,230	65,460	0	0	57	291	4	23	10,325	65,939
6/27	Fishery open for competitive fleet only													
6/28	19	25	30	622	5,625	36,490	0	0	0	0	0	0	5,655	37,112
6/29	19	46	102	1,541	16,210	104,331	0	0	44	132	9	42	16,365	106,046
6/30	19	46	76	711	19,564	127,949	1	4	173	542	9	62	19,823	129,268

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Date	Effort		Chinook		Sockeye		Coho		Pink		Chum		Total	
	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
7/1	19	41	83	1,011	17,869	117,645	0	0	270	682	5	44	18,227	119,382
7/2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/3	7	7	126	1,194	4,303	26,968	3	20	429	1,284	14	100	4,875	29,566
7/4	2	2	0	0	2,750	17,325	0	0	0	0	0	0	2,750	17,325
7/5	9	11	69	696	9,813	65,186	1	6	133	465	8	41	10,024	66,394
7/6	14	31	64	559	19,382	128,360	3	12	419	1,072	18	119	19,886	130,122
7/7	18	41	122	1,859	20,146	138,895	3	18	285	834	15	96	20,571	141,702
7/8	17	30	168	3,463	18,423	126,861	2	15	468	1,386	8	53	19,069	131,778
7/9	17	25	195	1,857	9,518	67,307	1	8	591	2,209	25	133	10,330	71,514
7/10	7	10	55	685	10,128	72,013	2	12	77	292	10	72	10,272	73,074
7/11	8	13	75	811	9,565	66,581	2	13	447	1,436	17	110	10,106	68,951
7/12	9	13	13	287	10,620	74,023	0	0	0	0	0	0	10,633	74,310
7/13	11	13	52	753	9,226	62,947	6	36	529	1,981	24	180	9,837	65,897
7/14	Fishery open for competitive fleet only													
7/15	17	33	3	42	15,188	105,856	0	0	0	0	0	0	15,191	105,898
7/16	13	32	89	1,314	21,993	152,645	55	262	541	2,324	37	222	22,715	156,767
7/17	11	22	116	1,912	18,508	129,326	7	53	750	3,202	45	346	19,426	134,839
7/18	9	12	5	112	9,008	63,291	0	0	15	60	0	0	9,028	63,463
7/19	13	16	58	1,050	9,746	69,100	1	8	81	338	2	13	9,888	70,509
7/20	13	17	40	899	10,064	68,122	2	12	340	1,436	77	517	10,523	70,986
7/21	12	16	49	922	10,718	73,152	3	21	348	1,478	18	137	11,136	75,710
7/22	13	23	96	1,217	14,226	97,839	18	93	666	2,794	73	349	15,079	102,292
7/23	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/24	Fishery open for competitive fleet only													
7/25	Fishery open for competitive fleet only													
7/26	8	11	53	449	4,126	28,130	1	7	1,344	5,745	177	1,246	5,701	35,577
7/27	2	2	3	14	1,112	7,520	0	0	120	444	27	181	1,262	8,159
7/28	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/29	3	3	5	21	1,387	8,762	0	0	338	1,359	95	691	1,825	10,833
7/30	8	10	15	222	6,304	42,233	0	0	1,036	4,166	226	1,555	7,581	48,176
7/31	12	21	6	89	9,101	60,470	4	30	1,619	5,860	475	3,440	11,205	69,889

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Date	Effort		Chinook		Sockeye		Coho		Pink		Chum		Total	
	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
8/1	8	13	38	383	6,448	42,553	8	62	1,172	3,986	326	2,275	7,992	49,259
8/2	9	20	49	509	8,282	56,070	1	5	2,994	9,436	447	2,904	11,773	68,924
8/3	9	21	27	245	6,824	46,193	21	141	2,543	10,037	367	2,485	9,782	59,101
8/4	9	15	26	268	6,855	45,900	19	134	2,599	8,056	446	3,012	9,945	57,370
8/5	10	22	31	297	8,388	56,773	11	67	2,590	8,806	792	5,363	11,812	71,306
8/6	10	20	31	333	8,333	52,682	38	236	4,909	17,989	914	6,320	14,225	77,560
8/7	8	10	2	9	2,555	16,737	5	34	605	2,178	237	1,517	3,404	20,475
8/8	5	5	2	9	2,885	19,098	3	23	771	2,892	208	1,275	3,869	23,297
8/9	5	5	2	20	3,012	19,757	1	5	801	2,997	326	2,011	4,142	24,790
8/10	3	3	5	35	2,596	17,033	5	29	947	3,374	303	1,890	3,856	22,361
8/11	Fishery open for competitive fleet only													
8/12	Fishery open for competitive fleet only													
8/13	8	8	0	0	935	5,578	2	11	414	1,403	20	230	1,371	7,222
8/14	8	10	5	58	3,647	23,305	69	510	494	1,757	357	2,127	4,572	27,757
8/15	9	13	8	79	4,190	26,957	62	395	647	2,187	206	1,456	5,113	31,074
8/16	8	11	6	47	5,291	34,755	108	840	1,095	3,845	188	1,158	6,688	40,645
8/17	9	22	8	67	7,238	47,083	124	912	1,132	4,152	340	2,150	8,842	54,364
8/18	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8/19	Fishery open for competitive fleet only													
8/20	Fishery open for competitive fleet only													
8/21	6	9	0	0	1,401	8,763	77	602	146	600	34	266	1,658	10,231
8/22	8	14	0	0	4,152	26,285	416	3,443	351	1,330	208	1,224	5,127	32,282
8/23	8	14	3	21	6,751	42,442	567	4,361	331	1,359	244	1,465	7,896	49,648
8/24	8	12	5	62	6,650	42,044	480	3,566	202	881	191	1,118	7,528	47,671
8/25	8	14	2	14	6,373	40,385	504	4,023	308	1,275	161	941	7,348	46,638
8/26	8	17	1	7	3,987	25,186	777	6,410	450	1,827	174	1,081	5,389	34,511
8/27	8	13	3	26	4,053	24,717	801	6,012	366	1,481	149	866	5,372	33,102
8/28	7	8	0	0	1,491	9,838	279	2,176	108	461	49	322	1,927	12,797
8/29	6	6	1	5	3,851	24,455	1,309	10,865	237	968	68	378	5,466	36,671
8/30	7	10	0	0	5,222	33,574	1,789	14,510	251	1,056	57	336	7,319	49,476
8/31	7	12	1	7	4,437	28,267	1,784	14,582	245	1,032	53	312	6,520	44,200

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Date	Effort		Chinook		Sockeye		Coho		Pink		Chum		Total	
	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
9/1	6	10	2	22	4,309	26,640	2,305	18,977	72	305	60	366	6,748	46,310
9/2	6	10	0	0	3,265	20,961	2,094	16,483	88	351	32	109	5,479	37,904
9/3	6	10	0	0	4,434	27,959	3,295	31,007	31	132	39	288	7,799	59,386
9/4	5	9	1	9	2,249	14,370	1,513	14,369	34	177	24	152	3,821	29,077
9/5	6	7	1	3	3,742	23,836	2,362	22,444	17	68	19	150	6,141	46,501
9/6	1	1	0	0	257	1,617	1,021	9,183	0	0	0	0	1,278	10,800
9/7	1	1	0	0	171	1,078	804	7,235	0	0	0	0	975	8,313
9/8	1	1	0	0	193	1,220	1,000	9,006	0	0	0	0	1,193	10,226
9/9	1	1	0	0	669	3,614	1,472	13,839	0	0	0	0	2,141	17,453
9/10	1	1	0	0	679	3,666	1,758	15,635	0	0	0	0	2,437	19,301
9/11	1	1	0	0	916	5,157	1,794	16,891	0	0	0	0	2,710	22,048
9/12	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9/13	1	1	0	0	559	3,174	1,703	16,610	0	0	0	0	2,262	19,784
9/14	1	1	0	0	534	3,006	1,788	16,766	0	0	0	0	2,322	19,772
9/15	1	1	0	0	734	4,197	2,127	20,085	0	0	0	0	2,861	24,282
9/16	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	20	1,443	2,191	28,319	760,331	4,935,839	34,412	303,121	38,191	138,614	8,463	55,362	843,588	5,461,255

Appendix F2.-Competitive fleet commercial salmon fishing effort and catch day in the Chignik Management Area, 2003. These data include fish retained for home pack but do not include ADF&G test fishery harvest.

Date	Effort		Chinook		Sockeye		Coho		Pink		Chum		Total	
	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
6/4	Fishery open to cooperative fleet only													
6/5	Fishery open to cooperative fleet only													
6/6	Fishery open to cooperative fleet only													
6/7	Fishery open to cooperative fleet only													
6/8	Fishery open to cooperative fleet only													
6/9	21	25	1	20	20,182	125,528	0	0	3,372	19,940	51	414	23,606	145,902
6/10	22	35	4	100	30,784	194,809	1	4	95	290	267	1,958	31,151	197,161
6/11	Fishery open to cooperative fleet only													
6/12	Fishery open to cooperative fleet only													
6/13	17	17	1	13	11,680	74,966	0	0	144	450	63	484	11,888	75,913
6/14	22	24	10	137	22,268	144,923	0	0	275	858	152	1,212	22,705	147,130
6/15	Fishery open to cooperative fleet only													
6/16	Fishery open to cooperative fleet only													
6/17	Fishery open to cooperative fleet only													
6/18	Fishery open to cooperative fleet only													
6/19	Fishery open to cooperative fleet only													
6/20	Fishery open to cooperative fleet only													
6/21	Fishery open to cooperative fleet only													
6/22	Fishery open to cooperative fleet only													
6/23	Fishery open to cooperative fleet only													
6/24	Fishery open to cooperative fleet only													
6/25	Fishery open to cooperative fleet only													
6/26	21	24	33	426	20,506	130,847	1	7	944	3,055	873	6,839	22,357	141,174
6/27	20	26	71	941	13,342	84,065	0	0	510	1,480	373	2,802	14,296	89,288
6/28	23	23	82	1,694	11,249	72,801	0	0	581	1,889	1,300	10,102	13,212	86,486
6/29	Fishery open to cooperative fleet only													
6/30	Fishery open to cooperative fleet only													

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Date	Effort		Chinook		Sockeye		Coho		Pink		Chum		Total	
	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
7/1	Fishery open to cooperative fleet only													
7/2	21	26	203	4,374	18,905	126,503	18	116	2,417	7,307	774	5,491	22,317	143,791
7/3	9	9	36	633	2,635	17,821	0	0	159	641	69	470	2,899	19,565
7/4	Fishery open to cooperative fleet only													
7/5	Fishery open to cooperative fleet only													
7/6	Fishery open to cooperative fleet only													
7/7	Fishery open to cooperative fleet only													
7/8	Fishery open to cooperative fleet only													
7/9	18	18	15	228	9,364	64,302	4,589	36,127	24,006	81,999	4,226	29,873	42,200	212,529
7/10	17	18	30	278	10,040	68,992	6,011	46,987	21,021	75,898	4,621	32,802	41,723	224,957
7/11	Fishery open to cooperative fleet only													
7/12	Fishery open to cooperative fleet only													
7/13	17	17	40	789	10,459	72,251	110	839	1,779	7,459	248	1,782	12,636	83,120
7/14	23	34	96	1,558	24,681	170,831	238	1,799	6,177	26,332	939	6,867	32,131	207,387
7/15	Fishery open to cooperative fleet only													
7/16	Fishery open to cooperative fleet only													
7/17	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/18	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/19	11	11	13	242	4,267	28,397	3,493	27,064	22,119	81,439	3,765	27,210	33,657	164,352
7/20	12	15	3	37	1,351	8,911	3,972	30,777	21,906	80,724	3,506	24,648	30,738	145,097
7/21	9	9	2	45	910	6,120	3,418	27,593	21,347	79,404	3,129	21,937	28,806	135,099
7/22	Fishery open to cooperative fleet only													
7/23	19	20	60	1,089	16,940	117,589	312	2,490	13,462	51,320	808	5,592	31,582	178,080
7/24	22	31	65	1,136	20,981	146,139	156	1,264	17,845	69,593	1,064	7,474	40,111	225,606
7/25	22	26	52	872	16,472	113,446	112	833	10,061	39,425	570	4,093	27,267	158,669
7/26	4	4	0	0	945	6,425	0	0	101	417	10	62	1,056	6,904
7/27	Fishery open to cooperative fleet only													
7/28	17	17	1	12	3,121	21,842	5,699	45,099	50,587	202,044	4,588	32,403	63,996	301,400
7/29	Fishery open to cooperative fleet only													
7/30	15	15	3	65	1,093	7,632	4,627	36,762	46,370	185,626	5,988	41,990	58,081	272,075
7/31	Fishery open to cooperative fleet only													

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Date	Effort		Chinook		Sockeye		Coho		Pink		Chum		Total	
	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
8/1	12	13	1	13	1,606	11,268	7,311	58,520	45,803	183,225	4,239	30,531	58,960	283,557
8/2	Fishery open to cooperative fleet only													
8/3	13	13	1	11	1,568	10,889	7,845	62,795	44,924	186,833	3,557	24,929	57,895	285,457
8/4	Fishery open to cooperative fleet only													
8/5	13	13	0	0	1,825	12,798	7,741	61,874	46,247	185,438	3,897	27,395	59,710	287,505
8/6	Fishery open to cooperative fleet only													
8/7	11	11	0	0	826	5,523	7,130	56,405	29,857	114,466	2,458	17,142	40,271	193,536
8/8	Fishery open to cooperative fleet only													
8/9	Fishery open to cooperative fleet only													
8/10	16	16	1	22	5,818	38,325	522	4,168	10,672	43,227	890	5,874	17,903	91,616
8/11	19	24	37	457	9,479	62,702	960	7,673	11,895	47,679	1,207	8,182	23,578	126,693
8/12	17	18	2	32	4,775	31,280	138	1,165	3,455	13,175	470	3,227	8,840	48,879
8/13	10	10	1	6	4,423	28,924	23	158	940	4,080	237	1,551	5,624	34,719
8/14	Fishery open to cooperative fleet only													
8/15	Fishery open to cooperative fleet only													
8/16	Fishery open to cooperative fleet only													
8/17	Fishery open to cooperative fleet only													
8/18	16	16	6	74	9,836	65,973	410	3,590	1,225	4,905	298	2,015	11,775	76,557
8/19	16	16	4	65	10,680	71,224	997	8,795	2,310	9,246	481	3,272	14,472	92,602
8/20	13	16	0	0	5,293	34,655	936	7,184	692	2,768	156	1,037	7,077	45,644
8/21	11	11	1	21	4,117	26,528	382	2,819	572	2,288	150	812	5,222	32,468
8/22	Fishery open to cooperative fleet only													
8/23	Fishery open to cooperative fleet only													
8/24	Fishery open to cooperative fleet only													
8/25	Fishery open to cooperative fleet only													
8/26	Fishery open to cooperative fleet only													
8/27	Fishery open to cooperative fleet only													
8/28	Fishery open to cooperative fleet only													
8/29	Fishery open to cooperative fleet only													
8/30	Fishery open to cooperative fleet only													
8/31	Fishery open to cooperative fleet only													

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Date	Effort		Chinook		Sockeye		Coho		Pink		Chum		Total	
	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
9/1	Fishery open to cooperative fleet only													
9/2	Fishery open to cooperative fleet only													
9/3	Fishery open to cooperative fleet only													
9/4	3	3	0	0	1179	7431	1213	11452	7	23	20	87	2,419	18,993
9/5	3	3	0	0	784	4853	1075	10273	0	0	0	0	1,859	15,126
9/6	Fishery open to cooperative fleet only													
9/7	Fishery open to cooperative fleet only													
9/8	Fishery open to cooperative fleet only													
9/9	Fishery open to cooperative fleet only													
9/10	Fishery open to cooperative fleet only													
9/11	Fishery open to cooperative fleet only													
9/12	Fishery open to cooperative fleet only													
9/13	Fishery open to cooperative fleet only													
9/14	Fishery open to cooperative fleet only													
9/15	Fishery open to cooperative fleet only													
9/16	Fishery open to cooperative fleet only													
Total	23	627	875	15,390	334,384	2,217,513	69,440	554,632	463,877	1,814,943	55,444	392,559	924,020	4,995,037