Fishery Management Report No. 06-21

2002 Chignik Management Area Annual Management Report

by

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and

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April 2006

Alaska Department of Fish and Game **Divisions of Sport Fish and Commercial Fisheries**

Symbols and Abbreviations

The following symbols and abbreviations, and others approved for the Système International d'Unités (SI), are used without definition in the following reports by the Divisions of Sport Fish and of Commercial Fisheries: Fishery Manuscripts, Fishery Data Series Reports, Fishery Management Reports, and Special Publications. All others, including deviations from definitions listed below, are noted in the text at first mention, as well as in the titles or footnotes of tables, and in figure or figure captions.

Weights and measures (metric)

centimeter	cm
deciliter	dL
gram	g
hectare	ha
kilogram	kg
kilometer	km
liter	L
meter	m
milliliter	mL
millimeter	mm

Weights and measures (English)

cubic feet per second	ft^3/s
foot	ft
gallon	gal
inch	in
mile	mi
nautical mile	nmi
ounce	oz
pound	lb
quart	qt
yard	yd

Time and temperature

day	d
degrees Celsius	°C
degrees Fahrenheit	°F
degrees kelvin	K
hour	h
minute	min
second	s

Physics and chemistry

all atomic symbols	
alternating current	AC
ampere	A
calorie	cal
direct current	DC
hertz	Hz
horsepower	hp
hydrogen ion activity (negative log of)	pH
parts per million	ppm
parts per thousand	ppt, ‰
volts	V
watts	W

General

Alaska Administrative Code	AAC
all commonly accepted abbreviations	e.g., Mr., Mrs., AM, PM, etc.
all commonly accepted professional titles	e.g., Dr., Ph.D., R.N., etc.
at	@
compass directions:	
east	E
north	N
south	S
west	W
copyright	©
corporate suffixes:	
Company	Co.
Corporation	Corp.
Incorporated	Inc.
Limited	Ltd.
District of Columbia	D.C.
et alii (and others)	et al.
et cetera (and so forth)	etc.
exempli gratia (for example)	e.g.
Federal Information Code	FIC
id est (that is)	i.e.
latitude or longitude	lat. or long.
monetary symbols (U.S.)	$, ¢
months (tables and figures): first three letters	Jan,...,Dec
registered trademark	®
trademark	™
United States (adjective)	U.S.
United States of America (noun)	USA
U.S.C.	United States Code
U.S. state	use two-letter abbreviations (e.g., AK, WA)

Measures (fisheries)

fork length	FL
mideye-to-fork	MEF
mideye-to-tail-fork	METF
standard length	SL
total length	TL

Mathematics, statistics

all standard mathematical signs, symbols and abbreviations	
alternate hypothesis	H_A
base of natural logarithm	*e*
catch per unit effort	CPUE
coefficient of variation	CV
common test statistics	(F, t, χ^2, etc.)
confidence interval	CI
correlation coefficient (multiple)	R
correlation coefficient (simple)	r
covariance	cov
degree (angular)	°
degrees of freedom	df
expected value	*E*
greater than	>
greater than or equal to	≥
harvest per unit effort	HPUE
less than	<
less than or equal to	≤
logarithm (natural)	ln
logarithm (base 10)	log
logarithm (specify base)	$\log_2$, etc.
minute (angular)	'
not significant	NS
null hypothesis	H_O
percent	%
probability	P
probability of a type I error (rejection of the null hypothesis when true)	α
probability of a type II error (acceptance of the null hypothesis when false)	β
second (angular)	"
standard deviation	SD
standard error	SE
variance	
population	Var
sample	var

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The Division of Sport Fish Fishery Management Reports series was established in 1989 for the publication of an overview of Division of Sport Fish management activities and goals in a specific geographic area. Since 2004, the Division of Commercial Fisheries has also used the Fishery Management Report series. Fishery Management Reports are intended for fishery and other technical professionals, as well as lay persons. Fishery Management Reports are available through the Alaska State Library and on the Internet: http://www.sf.adfg.state.ak.us/statewide/divreports/html/intersearch.cfm. This publication has undergone regional peer review.

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ABSTRACT

This report summarizes the 2002 commercial Pacific herring *Clupea pallasi* 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. All 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. In 2002, the Chinook salmon escapement to the Chignik River of 3,541 was average, although it still exceeded the escapement goal. The Chignik River early-run sockeye salmon escapement goal of 350,000 to 400,000 was met with an early-run escapement of 380,701. The late-run goal of 200,000 to 250,000 sockeye salmon was exceeded with an escapement of 343,616 sockeye salmon. A total of 77 Chignik CFEC permit holders chose to join the cooperative fleet in 2002, while 22 permit holders chose to fish competitively. The majority of the fishing effort in the 2002 season was by the cooperative fleet. The majority of the CMA salmon harvest took place within the Chignik Bay and Central Districts. The 2002 CMA sockeye salmon harvest of 1,050,553 was approximately 600,000 salmon fewer than the recent 5-, 10-, and 20-year average harvests. The cooperative fleet harvested a total of 721,428 sockeye salmon, or 69.3% (allocation = 69.3%) of the CMA sockeye salmon harvest. The competitive fleet harvested a total of 320,024 sockeye salmon, or 30.7% (allocation = 30.7%) of the CMA sockeye salmon harvest. The harvest of other salmon species was minimal.

Key words: Chignik, salmon, Alaska Board of Fisheries, 2002 commercial fisheries management, harvest statistics, escapement statistics.

INTRODUCTION

The Alaska Department of Fish and Game (ADF&G) manages all Pacific herring *Clupea pallasi* 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 Districts. 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 (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 2002 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 December 15, 2005.

JANUARY 2002 ALASKA BOARD OF FISHERIES MEETING

The Alaska Board of Fisheries (BOF) met in January of 2002 to consider proposals concerning the Chignik area finfish fisheries. A total of seven commercial salmon and one subsistence salmon proposals were submitted. There were no proposals submitted concerning herring in the CMA.

COMMERCIAL SALMON

The BOF amended the Chignik Area Salmon Management Plan (5 AAC 15.357) by placing a 60,000 coho salmon harvest cap during the July 22 to 31 period to the majority of the Western and Perryville Districts to protect coho salmon stocks. Certain areas were exempted from the cap.

A cooperative salmon fishery was proposed by several Chignik salmon permit holders. Proponents of the cooperative fishery maintained that a cooperative-style fishery would reduce overhead, increase product quality, and allow commercial salmon fishermen to compete in a global market. Opponents to a cooperative fishery argued for a traditional and competitive fishery. The proposal was amended by the BOF and adopted as the Chignik Area Cooperative Purse Seine Salmon Fishery Management Plan (5 AAC 15.359).

SUBSISTENCE SALMON

The BOF amended the customary and traditional amounts of fish necessary to support the subsistence fisheries in the Chignik area (5 AAC 01.466; Table 1).

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 2). Each individual area is managed on a maximum exploitation rate of 20%, given that a threshold biomass is available for harvest.

Historical Data

Before the mid-1930s, a limited commercial herring harvest occurred in conjunction with a saltery in Lake Bay. Commercial herring harvests were not recorded until 1980 (Nicholson et al. 1980). In years that harvests occurred, herring harvests ranged from a maximum of 587 tons in 1980 to 6 tons in 1996 (Table 3). The last commercial herring harvest in the CMA occurred in 1996 (Table 3; Pappas et al. 2003). Recently there has been no interest in herring fishing in the CMA due to poor market conditions and low reported herring biomass. The herring biomass has not been systematically surveyed by ADF&G in the CMA in recent years.

2002 Herring Fishery

There was no herring fishery in the CMA in 2002; no guideline harvest levels were set due to lack of industry interest.

COMMERCIAL SALMON

OVERVIEW OF MANAGEMENT PLANS

The 2002 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 allocated in two additional management plans in other management areas: 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 (Black Lake) and late (Chignik Lake) Chignik River sockeye salmon. Chinook, pink, and chum salmon were also managed against 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 100-225 fathoms in length in all other districts. Leads up to 75 fathoms in length were allowed. The management plan was organized by district 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 fishery in the Chignik area. The plan contained several components:

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 April 1, 2002 to fish as a cooperative. Any other Chignik CFEC permit holders who wished to join the cooperative were given until April 15, 2002 to join this cooperative group. Those who elected to join the cooperative after the April 1 deadline were, by regulation, given the same terms as those who applied prior to April 1. In the years after 2002, the deadlines were changed to March 1 and March 15. 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 an allocation between the cooperative and competitive (non-cooperative members) fleets was necessary for the cooperative fishery to achieve its goals of reducing overhead expenses associated with commercial fishing and increasing product quality. The Chignik Area CFEC permit holders were allocated a percentage of the annual Chignik Area commercial sockeye salmon harvestable surplus, by fleet, based on the number of permit holders participating in the cooperative as follows:

- 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 Fishery Management Plan gave the ADF&G the charge of managing the fishery so 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 2002 CMA salmon fishery was also affected by the Cape Igvak Salmon Management Plan (5 AAC 18.360). The Cape Igvak Section is northeast of the CMA and is the westernmost component of Area K (Kodiak Management Area), located directly to the east of the CMA (Figure 1). In short, if the harvestable surplus of sockeye salmon in the CMA is above or expected to be above certain thresholds, then 15% of the total Chignik sockeye salmon harvest (including sockeye salmon caught at Cape Igvak and within certain portions of Area M; Alaska Peninsula Management Area) 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 in the eastern portion of Area M, located 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, 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 during specific times 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.

2002 SALMON MANAGEMENT

The Chignik salmon fishery was managed under Emergency Order (EO) authority, utilizing 42 EOs in 2002 (Appendix A.1). Limnology data from 2000 and 2001 suggested that the forage base for sockeye salmon has been depressed in Chignik Lake (Finkle and Bouwens 2001). ADF&G recommended targeting the lower bound of the escapement goals in 2002 to relieve grazing pressure on the zooplankton in Chignik Lake in hopes of improving juvenile sockeye salmon production (Table 4; Appendix B1).

A total of 77 Chignik CFEC permit holders chose to join the cooperative fleet in 2002, while 22 permit holders chose to fish independently. The cooperative fleet shared 69.3% of the

harvestable surplus of sockeye salmon while 30.7% was allocated to the competitive fleet (Table 5). The first commercial fishing period began on June 3, and the last commercial fishing period ended on September 8. Commercial salmon fishing was allowed during 98 days in 2002 (Figure 3).

Four processors purchased Chignik salmon in 2002: Norquest Seafoods Inc., Trident Seafoods Corp., Alaska Catch LLC, and Flagship Fisheries Ltd. Norquest and Trident are both shore-based processors located in Anchorage Bay. Norquest operated a freezer plant, while Trident operated a canning facility. Alaska Catch operated a floating processor that was located in Anchorage Bay. They processed the majority of their salmon through a boneless fillet machine and then froze the product. Flagship Fisheries bought salmon during a few days in June and tendered the fish to Surrey, British Colombia for processing. The cooperative fleet also contracted local processors to custom process fish for them and then they marketed the product themselves.

The Chignik Area Salmon Management Task Force (CHASM) was established to provide a mechanism for local ADF&G staff to discuss management options with the stakeholders. It is an informal group of fishermen from both fleets, the processors, and ADF&G. CHASM meetings were held on June 4 and July 18. Minutes from these meetings are located in Appendices C1 and C2.

Cooperative Fleet

The majority of the fishing effort during the 2002 season was by the cooperative fleet. After limited commercial test fishing the first week in June, commercial salmon fishing began in earnest for the cooperative fleet on June 12 and ended for the season on September 8 (Figure 3) The Chignik Management Area was open to commercial salmon fishing for the cooperative fleet for at least portions of 86 days in 2002.

The cooperative fleet was placed on harvest limits on 16 separate days over the season. The limits for the cooperative fleet ranged from a low of 1,000 sockeye salmon to a high of 15,000 sockeye salmon per day (Table 6). 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 only 0.6% more than the sum of the harvest limits (Table 6).

Competitive Fleet

A total of 22 Chignik CFEC permit holders were eligible to fish competitively in 2002. After limited commercial test fishing the first week in June, commercial salmon fishing began in earnest for the competitive fleet on June 10 and ended for the season on August 24 (Figure 3) The Chignik Management Area was open to commercial salmon fishing for the competitive fleet for at least portions of 37 days in 2002.

Chignik Bay and Central Districts Commercial Salmon Fishery

The Chignik Bay and Central Districts were generally managed as a single unit. The first commercial fishing period in these districts can commence when:

1) A minimum escapement of 40,000 sockeye salmon have passed the Chignik River weir by June 12, or if a subsequent interim escapement objective (Table 4) has been met, and;
2) There is a strong build-up of sockeye salmon in Chignik Lagoon, as determined by ADF&G's test fishery program.

The commercial salmon fishery was managed by EO to allow harvest of early-run sockeye salmon excess to interim escapement objectives from the initial fishing period to the transition period between the early and late runs. Beginning in late-June and continuing through mid-July, the department managed the fishery more conservatively to ensure late-run sockeye salmon escapement objectives were met. The Chignik Bay and Central Districts management was based on late-run sockeye salmon interim escapement objectives and escapement objectives to local pink, chum, and coho salmon streams from mid-July through September 14. Beginning September 15, by regulation these districts may open to commercial salmon fishing for a maximum of 48 hours per week, based on the strength of the late sockeye salmon run and the needs of subsistence users.

The 2002 commercial salmon fishery in the CMA opened in the Chignik Bay and Central Districts beginning June 3 on a commercial test fishery basis (Figure 3). There was concern from CHASM members and ADF&G that the reduced number of vessels would not be able to stop a large run. Therefore, it was desirable to monitor the buildup of the early run closely. It was decided the cooperative and competitive fleets would conduct test fishery sets on separate days at locations specified by the department. A lottery system was used to choose the vessels to participate in the fishery, and a department representative was onboard each vessel to monitor harvests. The revenues from the test fishery harvests went to the boats conducting the test fisheries, and all sockeye salmon harvested were to count towards each fleets' allocations. Only the cooperative fleet chose to participate in this fishery.

The first unrestricted commercial salmon fishing activity began on June 10 with a 48 hour period for the competitive fleet (Figure 3). The Chignik Lagoon markers were placed at Humes Point for the first 36 hours of this fishing period, after which they were moved to Mensis Point (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. Sockeye salmon occasionally spent a considerable amount of time in Chignik Lagoon, which degraded the quality of the fish caught in the upper lagoon. Using the Humes Point markers allowed these older fish to escape the fishery. Commercial salmon fishing began for the cooperative fleet in the Chignik Bay and Central Districts on June 12, with the closed waters again expanded to Humes Point. After 48 hours, closed waters were reduced to Mensis Point. This fishing period continued through June 17. No harvest limits were imposed on the cooperative fleet during this fishing period. The Chignik Bay and Central Districts were opened to commercial salmon fishing for the competitive fleet for 48 hours beginning June 17 and continuing through June 19. The Chignik Lagoon markers remained at Mensis Point. These districts reopened to the cooperative fleet on June 19 with the Chignik Lagoon markers at Mensis Point. This commercial salmon fishing period extended until July 5 in the Chignik Bay and Central Districts, although harvest limits were imposed on the cooperative fleet from June 19 to June 30 (Table 6).

The Chignik Bay and Central Districts were again opened for the competitive fleet for 48 hours beginning July 5 (Figure 3). On July 7, the Chignik Bay and Central Districts opened for the cooperative fleet through July 19. The lagoon markers were located at Mensis Point for this entire fishery, and no harvest limits were necessary. The competitive fleet was again provided 48 hours of fishing time in the Chignik Bay and Central Districts beginning July 19. The fleets were then switched with a cooperative fishery taking place from July 21 to July 24. Harvest limits were necessary on all of these days to allow adequate numbers of sockeye salmon to escape into the Chignik River. A competitive fishery took place for 24 hours on July 25. The Chignik Bay

and Central Districts reopened to the cooperative fleet again from July 26 through the morning of August 1 (Table 6; Figure 3).

The Chignik Bay and Central Districts were again opened to the competitive fleet for 48 hours from the morning of August 2 to the morning of August 4; this period was then extended for 24 additional hours until 9:00 AM on August 5 (Figure 3). Commercial fishing time was then allowed for the cooperative fleet from 10:00 AM on August 5 until 1:00 PM on August 19. The competitive fleet fished again from the afternoon of August 19 until the morning of August 24. This was the last competitive fleet fishery for 2002. Commercial salmon fishing was opened for the cooperative fleet on August 19, and was open continuously through September 8, when commercial salmon fishing was closed for the 2002 season (Figure 3).

Eastern District Commercial Salmon Fishery

By regulation, the Eastern District opens concurrently with the Chignik Bay and Central Districts during June (5 AAC 15.357). ADF&G manages the Eastern District conservatively during the transition period to allow assessment of the Chignik sockeye salmon late run. After the transition period, the commercial fishery in the Eastern District is managed based on late-run Chignik sockeye salmon and pink, chum, and coho salmon spawning in local Eastern District streams.

The Eastern District was first opened to commercial salmon fishing on June 10 in 2002 for the competitive fleet (Figure 3). The Eastern District was opened concurrently with the Chignik Bay and Central Districts through July 2. The Eastern District was also opened concurrently with the Western and Perryville Districts to both fleets simultaneously from July 26 through July 28 (Figure 3).

Western and Perryville Districts Commercial Salmon Fishery

By regulation, the Western and Perryville Districts may open to commercial salmon fishing beginning on July 6 (5 AAC 15.357). Until mid-July, commercial salmon fishing in these districts is required to be managed conservatively to ensure Chignik late-run sockeye salmon escapement objectives are met. After the transition period, until approximately August 20, commercial salmon fishing in these districts is then managed based ADF&G's evaluation of local pink and chum salmon stocks and the strength of the late Chignik sockeye salmon run. After August 20, the Western and Perryville Districts are managed based on local coho salmon and the late Chignik sockeye salmon run.

The Western and Perryville Districts opened to commercial salmon fishing for both fleets from July 12 through July 14 (Figure 3). Open waters in the Western and Perryville Districts were 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 bays north of this line were closed to protect milling pink and chum salmon. The Western and Perryville Districts were again opened to both fleets, with the same closed waters, on July 26 through July 28 (Figure 3).

The Western District opened to commercial salmon fishing for 48 hours on August 16 and August 17 (Figure 3). Open waters in the Western District were 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. This fishery opening was warranted because aerial survey information indicated that pink and chum salmon escapement goals were met and excess pink and chum salmon were available for harvest.

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 discriminant 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 the Chignik Lagoon to estimate the age composition of the catch and subsequent run apportionment. Complete methods are reported in Witteveen and Botz (2003).

Escapement Information

All salmon and Dolly Varden *Salvelinus malma* escapement to the Chignik River was enumerated through the use of a weir. There were two gates in the weir, which were generally always open. Underwater video equipment was utilized 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 number 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 summed to provide an estimate of daily fish passage. The first count of the 2002 season was on June 2, and the last full count of the season was on September 3. A post-weir sockeye salmon escapement estimate was produced using time series analysis for the September 4-15 and the September 16-30 periods. Aerial surveys were flown to assess sockeye salmon spawning escapement levels within the Chignik watershed. Peak counts should be considered an estimate of minimum escapement levels, especially in 2002 because few aerial surveys of the Chignik watershed spawning grounds were flown.

The majority of the Chignik River Chinook, sockeye, pink, and chum salmon escapements were counted through the weir. However, the coho salmon run is generally still building when the weir is removed, and therefore the coho salmon counts are considered incomplete and it was not possible to estimate the post-weir coho salmon escapement. Therefore, there are 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 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 mid-June, peaked in mid-July, and was over by late-August (Table 7; Figure 5). The 2002 Chignik River Chinook salmon escapement of 3,541 was similar to the most recent 5-, 10-, and 20-year averages (Table 8; Figure 6) substantially exceeding the Chignik River Chinook Biological Escapement Goal (BEG) of 1,300 to 2,700 (Nelson and Lloyd 2001). The Chignik River is the only stream with substantial Chinook salmon production within the CMA.

Sockeye Salmon

The Chignik River sockeye salmon early run peaks in late-June and the late run peaks in July (Figure 7). The sockeye salmon BEGs for the early run (350,000 to 400,000) and late run (200,000 to 250,000) were established in the 1960s (Nelson and Lloyd 2001). The 2002 estimated Chignik River sockeye salmon escapement was 724,317 (Table 9). Based on inseason SPA, the early-run escapement was 383,360 and the late-run escapement was 340,957 with a 50/50 date (the date in which the run was composed of half early- and half late-run fish) of July 15. However, based on postseason SPA analysis, the early-run escapement was estimated at 380,701 and the late-run escapement was estimated at 343,616 with a 50/50 date of July 8 (Table 10; Witteveen and Botz 2003). Based on postseason SPA, the 2002 early-run escapement was below, and the late-run escapement was above, the recent 5-, 10-, and 20- year averages (Table 11). The early-run escapement met, and the late-run escapement exceeded, their respective BEGs (Figure 8).

Peak Black Lake (Table 12) and Chignik Lake and Black River (Table 13) spawning escapements were generally lower than the recent 5-, 10-, and 20-year averages. 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 10,000 fish) in several other CMA streams.

Coho Salmon

Coho salmon begin to enter CMA drainages in mid-August and continue through November. The 2002 Chignik River coho salmon escapement estimate through September 4 was 9,262 (Table 7). Coho salmon escapement levels to other CMA streams were monitored via aerial survey.

Pink Salmon

Pink salmon enter the Chignik River in July and August. The 2002 Chignik River pink salmon escapement was 3,417 salmon (Table 7), which was below the recent 5-year average (Table 8).

The 2002 pink salmon Sustainable Escapement Goals (SEGs), were organized by district (Nelson and Lloyd 2001). The SEG for the Chignik Bay District was 6,500 pink salmon. The SEG for the Central District was 119,500 pink salmon. The SEG for the Eastern District was 488,000 pink salmon. The SEG for the Western District was 61,500 pink salmon. The SEG for the Perryville District was 104,000, for a combined goal of 779,500 pink salmon (Nelson and Lloyd 2001). The SEGs for the Chignik Bay, Eastern, and Western districts were met, but the SEGs for the Central and Perryville Districts were not met (Table 14). However, the overall combined escapement of approximately 1.03 million pink salmon exceeded the sum of the district SEGs.

Chum Salmon

A limited number of Chum salmon return to the Chignik River, mainly in August (Table 7). The 2002 Chignik River chum salmon escapement was 67 salmon, which was below the recent 5-year average (Table 8).

The 2002 chum salmon SEGs were organized by district (Nelson and Lloyd 2001). The SEG for the Chignik Bay District was 2,000 chum salmon. The SEG for the Central District was 39,500 chum salmon. The SEG for the Eastern District was 93,700 chum salmon. The SEG for the Western District was 21,500 chum salmon. The SEG for the Perryville District was 59,000, for a

combined goal of 206,700 chum salmon (Nelson and Lloyd 2001). The SEGs for the Eastern and Western districts were met, but the SEGs for the Chignik Bay, Central and Perryville districts were not met. However, the overall combined escapement of approximately 236,000 chum salmon exceeded the sum of the district SEGs (Table 15).

Harvest Information

The CMA commercial salmon harvest is organized into several categories. Home pack fish are salmon caught during commercial fishing activities and are not sold but retained for personal consumption; these salmon are 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 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 1,521 Chinook salmon were harvested in 2002, which was the lowest catch since 1977 (Table 16). Three of these salmon were harvested as part of ADF&G's test fishery program, and 77 were retained as home pack (Table 17). The majority of the CMA Chinook salmon harvest in 2002 took place in the Chignik Bay District (Table 18). Most Chinook salmon were harvested during July in 2002 (Table 19).

Sockeye Salmon

A total of 1,050,553 sockeye salmon were harvested in the CMA during 2002, which was approximately 600,000 sockeye salmon less than the average harvests since 1982 (Table 16). ADF&G's test fishery program harvested 9,101 of these salmon and 1,371 were retained as home pack (Table 20). The vast majority of the CMA sockeye salmon harvest in 2002 came from the Chignik Bay District (Table 21). Most sockeye salmon were harvested between June and mid-July in 2002 (Table 22).

An additional 199,514 sockeye salmon considered Chignik-bound were harvested as part of the SEDM and Cape Igvak fisheries during 2002 (Table 23). The Chignik-bound component of the SEDM harvest was 63,026 and totaled 6.0% of the total Chignik-bound harvest (allocation 6.0%; Table 23). The Chignik-bound portion of the Cape Igvak harvest was 136,488 and totaled 13.0% of the total Chignik-bound harvest (allocation 15.0%; Table 23).

The cooperative fleet was allocated 69.3% and the competitive fleet was allocated 30.7% of the within-CMA sockeye salmon harvest (Table 5). The cooperative fleet harvested a total (including home pack) of 721,726 sockeye salmon, or 298 sockeye salmon under their allocation of the CMA sockeye salmon harvest. The competitive fleet harvested a total (including home pack) of 319,726 sockeye salmon, or 298 sockeye salmon over their allocation of the CMA sockeye salmon harvest (Table 24; Appendices D1 and D2).

Both the early- and late-sockeye salmon runs materialized below average in 2002 (Table 25; Figure 9). Overall, the 2002 forecast was much more accurate than the recent 10-year average

forecast accuracy (Table 26). The early run was under forecasted by approximately 4%, while the late run was over forecasted by approximately 17%.

Coho Salmon

A total of 49,372 coho salmon were harvested in 2002, which was less half of the prior 5-, 10-, and 20-year average harvests (Tables 16 and 27). The coho salmon harvests were low because of a lack of effort later in the season. A total of 164 of these coho salmon were not sold but instead retained as home pack (Table 27). The majority of the coho salmon harvest in 2002 took place in the Western District, and most were harvested during August (Tables 28 and 29).

Pink Salmon

A total of 66,050 pink salmon were harvested in 2002, which was only a fraction the prior 5-, 10-, and 20-year average harvests (Tables 16 and 30). The pink salmon harvests were low because of a reduction in commercial effort targeting this species. Sixty-six of these salmon were harvested as part of ADF&G's test fishery program (Table 30). The majority of the pink salmon harvest in 2002 took place in the Chignik Bay, Central, and Western Districts, and most were harvested after mid-July (Tables 31 and 32).

Chum Salmon

A total of 54,559 chum salmon were harvested in 2002, which was approximately one-third the size of the prior 5-, 10-, and 20-year average harvests (Tables 16 and 33). Forty-six of these salmon were harvested as part of ADF&G's test fishery program (Table 33). The majority of the chum salmon harvest in 2002 took place in the Western District, and most were harvested during July (Tables 34 and 35).

Economic Value

The economic value of the 2002 CMA salmon harvest was about $4.7 million, or approximately $47,000 per permit holder, which was the lowest value since 1975 (Table 36). The vast majority of the value was from the sale of sockeye salmon. On average, the sale of Chinook, coho, pink, and chum salmon provided less than $915 for each individual permit holder in 2002.

CHIGNIK LAGOON TEST FISHERIES

By regulation, the first commercial fishery of the season could occur when a strong build up of sockeye salmon, as indicated by ADF&G test fishery, was present in the Chignik Lagoon and 40,000 sockeye salmon had passed through the Chignik River weir (5 AAC 15.357). Sometimes, approximately 100,000 to 300,000 sockeye salmon have schooled in Chignik Lagoon prior to 40,000 sockeye salmon passing through the weir. There was concern that the reduced fleet size associated with the advent of the cooperative fishery would not be able to harvest a large amount of fish in a short period of time. ADF&G agreed to start the 2002 fishing season with a Chignik Lagoon commercial test fishery in an attempt to prevent large escapements to the Chignik River early in the season. A limited number of fishing vessels were deployed to fish seven stations in Chignik Lagoon. Each vessel was assigned a harvest limit of 1,000-1,500 sockeye salmon per day. Each vessel was required to carry a department employee to direct the test fishery and record data. Due to adverse weather, these commercial test fisheries took place on June 5 and then again on June 9. Only the cooperative fleet chose to participate in these fisheries. All proceeds of the harvested salmon went to the vessel and the harvested sockeye salmon were counted against the cooperative fleet's allocation.

ADF&G conducted traditional test fisheries on two occasions in 2002 on July 24 and July 30. This information was used to plan subsequent commercial fishing activity and to generate revenue to support the management of the Chignik commercial salmon fishery. A total of 3 Chinook, 9,101 sockeye, 66 pink, and 46 chum salmon were harvested and sold by the department in 2002, generating approximately $39,000.

CHIGNIK AREA SUBSISTENCE SALMON FISHERIES

Early season subsistence opportunities were reduced by the slow movement of fish, adverse weather conditions, and the shift in management strategy with the early start of the commercial fishery. By regulation, commercial fishing license holders were not allowed to fish for subsistence salmon from 48-hours prior to the first commercial fishery through September 30 (5 AAC 01.485). To provide a subsistence opportunity for commercial fishing license holders, the CMA opened to subsistence salmon fishing for commercial fishing license holders from 8:00 AM until 8:00 PM from June 26 to June 29 through EO. All license holders who participated in the subsistence salmon fishery were required to register with the ADF&G Chignik office. This mid-season subsistence fishing period was based on the recommendations and requests of local subsistence users. A total of eleven fishers registered and harvested 2,050 sockeye salmon.

Additional subsistence fishing opportunities for commercial operators were made available beginning September 2. Because the competitive fleet could not secure a commercial market after August 31, commercial fishing license holders requested the CMA subsistence salmon fishing season be opened in early September rather than waiting until October 1. ADF&G accommodated this request by starting the subsistence CMA fishery for all commercial fishing license holders September 2. Subsistence fishers were required to contact the department throughout September prior to beginning subsistence fishing.

There have been ongoing discussions about the difficulty of obtaining subsistence fish very late in the season from Chignik Lake. During 2002 the United States Fish and Wildlife Service (USFWS), in cooperation with the department, implanted radio transmitters in sockeye salmon passing the Chignik weir in August and early-September to determine when sockeye salmon harvested in this late season subsistence fishery passed the Chignik weir. Generally, it was determined that sockeye salmon that spawn in the areas that subsistence users harvest fish do not pass the Chignik River weir before late-August. The results of the 2002 study are described in Anderson (2003).

The overall 2002 estimated subsistence salmon harvest of 11,980 fish was approximately equal the prior 20-year average harvest, but slightly less than the most recent 5- and 10- year average harvests (Table 37). The vast majority of the 2002 subsistence salmon harvest was sockeye salmon.

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TABLES AND FIGURES

Table 1.-Amounts of finfish reasonably necessary for subsistence use in the Chignik Management Area, as determined by the Alaska Board of Fisheries.

Area	Species	Amount
Western and Perryville Districts, combined:		
	Coho salmon	1,400 to 2,600 fish
	Other salmon	1,400 to 2,600 fish
Chignik Bay, Central, and Eastern Districts, combined:		
	Early-run sockeye salmon	5,200 to 9,600 fish
	Late-run sockeye salmon	2,000 to 3,800 fish
	Chinook Salmon	100 to 150 fish
	Other salmon	400 to 700 fish
Total Chignik Management Area:		
	Rainbow/Steelhead trout	200 to 300 fish
	Finfish other than salmon	15,000 to 22,800 useable pounds

Table 2.-List of Chignik Management Area herring management units.

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
Mitrofania	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	

Note: No herring surveys were flown in 2002.

Table 3.-Chignik Management Area commercial herring harvest, 1980 through 2002.

Year	Harvest (tons)
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

Table 4.-Chignik River sockeye salmon interim escapement objectives, 2002.

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

Table 5.-Chignik Management Area fleet membership and allocations, 2002.

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

Table 6.-Daily cooperative fleet sockeye salmon harvest limits, actual catch, difference, and percent difference, 2002.

Day	Limit	Actual Catch	Difference	% Difference
June 5[a]	1,000	320	-680	-68.0
June 9[a]	1,500	1,050	-450	-30.0
June 19	5,000	4,553	-447	-8.9
June 20	5,000	4,215	-785	-15.7
June 21	6,000	6,438	438	7.3
June 22	5,000	3,188	-1,812	-36.2
June 23	10,000	11,620	1,620	16.2
June 24	3,000	2,426	-574	-19.1
June 25	10,000	10,252	252	2.5
June 26	2,000	1,993	-7	-0.4
June 27	1,000	1,000	0	0.0
June 28	10,000	10,009	9	0.1
June 29	5,000	4,629	-371	-7.4
June 30	15,000	18,350	3,350	22.3
July 23	5,000	5,370	370	7.4
July 24	5,000	4,638	-362	-7.2
	89,500	90,051	551	0.6

[a] Commercial test fishery.

Table 7.-Daily estimated Chignik River Chinook, pink, chum, and coho salmon and Dolly Varden escapement, 2002.

	Chinook		Pink		Chum		Coho		Dolly Varden	
Date	Daily	Total	Daily	Total	Daily	Total	Daily	Total	Daily	Total
First count on 6/2										
6/2	0	0	0	0	0	0	0	0	0	0
6/3	0	0	0	0	0	0	0	0	0	0
6/4	0	0	0	0	0	0	0	0	0	0
6/5	0	0	0	0	0	0	0	0	0	0
6/6	0	0	0	0	0	0	0	0	0	0
6/7	0	0	0	0	0	0	0	0	0	0
6/8	0	0	0	0	0	0	0	0	0	0
6/9	0	0	0	0	0	0	0	0	0	0
6/10	0	0	0	0	0	0	0	0	0	0
6/11	0	0	0	0	0	0	0	0	0	0
6/12	0	0	0	0	0	0	0	0	0	0
6/13	0	0	0	0	0	0	0	0	0	0
6/14	0	0	0	0	0	0	0	0	0	0
6/15	0	0	0	0	0	0	0	0	0	0
6/16	6	6	0	0	0	0	0	0	0	0
6/17	6	12	0	0	0	0	0	0	0	0
6/18	0	12	0	0	0	0	0	0	60	60
6/19	24	36	0	0	0	0	0	0	60	120
6/20	6	42	0	0	0	0	0	0	6	126
6/21	0	42	0	0	0	0	0	0	48	174
6/22	25	67	0	0	0	0	0	0	54	228
6/23	12	79	0	0	0	0	0	0	0	228
6/24	6	85	0	0	0	0	0	0	180	408
6/25	37	122	0	0	0	0	0	0	36	444
6/26	104	226	0	0	0	0	0	0	96	540
6/27	30	256	0	0	0	0	0	0	300	840
6/28	49	305	0	0	0	0	0	0	60	900
6/29	84	389	0	0	0	0	0	0	222	1,122
6/30	162	551	0	0	0	0	0	0	0	1,122
7/1	48	599	0	0	0	0	0	0	432	1,554
7/2	60	659	0	0	0	0	0	0	258	1,812
7/3	19	678	0	0	0	0	0	0	216	2,028
7/4	165	843	0	0	0	0	0	0	0	2,028

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Table 7.-Page 2 of 3.

	Chinook		Pink		Chum		Coho		Dolly Varden	
Date	Daily	Total	Daily	Total	Daily	Total	Daily	Total	Daily	Total
7/5	48	891	0	0	0	0	0	0	66	2,094
7/6	67	958	0	0	0	0	0	0	408	2,502
7/7	102	1,060	0	0	0	0	0	0	228	2,730
7/8	84	1,144	0	0	0	0	0	0	438	3,168
7/9	84	1,228	0	0	0	0	0	0	354	3,522
7/10	96	1,324	0	0	0	0	0	0	1,206	4,728
7/11	84	1,408	0	0	0	0	0	0	114	4,842
7/12	171	1,579	0	0	0	0	0	0	237	5,079
7/13	96	1,675	0	0	0	0	0	0	150	5,229
7/14	54	1,729	0	0	0	0	0	0	298	5,527
7/15	138	1,867	0	0	0	0	0	0	486	6,013
7/16	68	1,935	0	0	0	0	0	0	120	6,133
7/17	186	2,121	6	6	0	0	0	0	186	6,319
7/18	150	2,271	6	12	0	0	0	0	30	6,349
7/19	91	2,362	7	19	0	0	0	0	132	6,481
7/20	102	2,464	48	67	0	0	0	0	126	6,607
7/21	62	2,526	12	79	6	6	0	0	378	6,985
7/22	114	2,640	30	109	0	6	0	0	144	7,129
7/23	132	2,772	12	121	0	6	0	0	42	7,171
7/24	132	2,904	96	217	0	6	0	0	48	7,219
7/25	78	2,982	6	223	0	6	0	0	12	7,231
7/26	72	3,054	30	253	0	6	0	0	12	7,243
7/27	30	3,084	6	259	0	6	0	0	6	7,249
7/28	24	3,108	0	259	0	6	0	0	6	7,255
7/29	36	3,144	12	271	0	6	0	0	6	7,261
7/30	12	3,156	12	283	0	6	0	0	6	7,267
7/31	24	3,180	0	283	6	12	0	0	12	7,279
8/1	12	3,192	12	295	0	12	0	0	54	7,333
8/2	6	3,198	18	313	0	12	0	0	0	7,333
8/3	36	3,234	12	325	0	12	0	0	0	7,333
8/4	24	3,258	24	349	0	12	0	0	18	7,351
8/5	12	3,270	6	355	0	12	0	0	78	7,429
8/6	24	3,294	6	361	0	12	0	0	18	7,447
8/7	18	3,312	12	373	0	12	0	0	6	7,453
8/8	25	3,337	12	385	6	18	0	0	0	7,453
8/9	36	3,373	72	457	0	18	0	0	24	7,477
8/10	18	3,391	78	535	0	18	0	0	24	7,501
8/11	24	3,415	162	697	18	36	0	0	18	7,519

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Table 7.-Page 3 of 3.

	Chinook		Pink		Chum		Coho		Dolly Varden	
Date	Daily	Total	Daily	Total	Daily	Total	Daily	Total	Daily	Total
8/12	6	3,421	30	727	6	42	0	0	6	7,525
8/13	12	3,433	126	853	0	42	0	0	18	7,543
8/14	6	3,439	30	883	0	42	0	0	0	7,543
8/15	6	3,445	72	955	0	42	0	0	0	7,543
8/16	24	3,469	42	997	0	42	0	0	18	7,561
8/17	6	3,475	66	1,063	0	42	0	0	24	7,585
8/18	12	3,487	104	1,167	1	43	0	0	30	7,615
8/19	18	3,505	90	1,257	6	49	0	0	24	7,639
8/20	18	3,523	236	1,493	12	61	0	0	42	7,681
8/21	6	3,529	150	1,643	0	61	0	0	42	7,723
8/22	6	3,535	336	1,979	0	61	6	6	60	7,783
8/23	6	3,541	120	2,099	0	61	90	96	84	7,867
8/24	0	3,541	24	2,123	0	61	66	162	24	7,891
8/25	0	3,541	162	2,285	0	61	102	264	66	7,957
8/26	0	3,541	36	2,321	0	61	191	455	36	7,993
8/27	0	3,541	198	2,519	0	61	318	773	66	8,059
8/28	0	3,541	84	2,603	0	61	172	945	12	8,071
8/29	0	3,541	168	2,771	0	61	319	1,264	30	8,101
8/30	0	3,541	130	2,901	0	61	413	1,677	12	8,113
8/31	0	3,541	48	2,949	0	61	1,691	3,368	24	8,137
9/1	0	3,541	102	3,051	0	61	1,660	5,028	12	8,149
9/2	0	3,541	96	3,147	0	61	1,689	6,717	6	8,155
9/3	0	3,541	270	3,417	6	67	2,545	9,262	24	8,179
9/4	Weir Removed									
Totals	3,541		3,417		67		9,262		8,179	

Table 8.-Estimated Chignik River Chinook, pink, chum and coho salmon and Dolly Varden escapement, 1970 through 2002.

	Escapement[a]				
Year	Chinook [b]	Pink [c]	Chum [c]	Coho[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	4,545	ND	ND	ND	ND
1992	3,806	ND	ND	ND	ND
1993	1,946	ND	ND	ND	ND
1994	3,106	ND	ND	ND	ND
1995	4,288	ND	ND	ND	ND
1996	3,488	6,030	136	16,843	54,726
1997	3,824	4,880	483	10,810	26,657
1998	3,075	11,490	156	14,124	15,235
1999	3,728	2,524	48	2,414	15,025
2000	4,285	4,284	48	7,062	ND
2001	3,028	1,464	66	103	6,416
2002	3,541	3,417	67	9,262	8,179
Averages					
1982-01	3,560	-	-	-	-
1992-01	3,457	-	-	-	-
1987-01	3,588	4,928	160	6,903	15,833

[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 where generated for pink, chum, or coho salmon or Dolly Varden from 1970 to 1996. No post-weir estimates are reported here for these species.

Table 9.-Estimated daily Chignik River sockeye salmon escapement, 2002.

Date	Daily	Total	Date	Daily	Total
6/2	335	335	7/20	3,140	484,648
6/3	430	765	7/21	3,642	488,290
6/4	1,661	2,426	7/22	5,656	493,946
6/5	1,204	3,630	7/23	9,789	503,735
6/6	2,457	6,087	7/24	22,373	526,108
6/7	1,019	7,106	7/25	10,804	536,912
6/8	22,642	29,748	7/26	13,202	550,114
6/9	13,181	42,929	7/27	5,031	555,145
6/10	17,865	60,794	7/28	6,841	561,986
6/11	13,955	74,749	7/29	4,796	566,782
6/12	8,014	82,763	7/30	3,705	570,487
6/13	5,153	87,916	7/31	3,350	573,837
6/14	7,346	95,262	8/1	3,760	577,597
6/15	11,384	106,646	8/2	3,220	580,817
6/16	9,760	116,406	8/3	1,351	582,168
6/17	8,079	124,485	8/4	1,791	583,959
6/18	7,677	132,162	8/5	2,908	586,867
6/19	11,061	143,223	8/6	1,519	588,386
6/20	22,782	166,005	8/7	1,876	590,262
6/21	27,394	193,399	8/8	3,050	593,312
6/22	30,769	224,168	8/9	5,018	598,330
6/23	8,933	233,101	8/10	2,959	601,289
6/24	22,132	255,233	8/11	4,023	605,312
6/25	12,653	267,886	8/12	2,611	607,923
6/26	15,975	283,861	8/13	2,930	610,853
6/27	27,232	311,093	8/14	926	611,779
6/28	17,118	328,211	8/15	2,225	614,004
6/29	16,822	345,033	8/16	2,206	616,210
6/30	12,553	357,586	8/17	2,463	618,673
7/1	13,597	371,183	8/18	3,081	621,754
7/2	9,613	380,796	8/19	2,262	624,016
7/3	6,808	387,604	8/20	2,244	626,260
7/4	4,774	392,378	8/21	1,791	628,051
7/5	4,640	397,018	8/22	2,376	630,427
7/6	2,175	399,193	8/23	2,235	632,662
7/7	1,999	401,192	8/24	1,935	634,597
7/8	3,433	404,625	8/25	3,322	637,919
7/9	2,927	407,552	8/26	2,605	640,524
7/10	5,885	413,437	8/27	3,113	643,637
7/11	7,164	420,601	8/28	2,212	645,849
7/12	7,949	428,550	8/29	2,624	648,473
7/13	4,293	432,843	8/30	2,812	651,285
7/14	7,893	440,736	8/31	3,410	654,695
7/15	10,656	451,392	9/1	4,380	659,075
7/16	5,787	457,179	9/2	4,879	663,954
7/17	9,071	466,250	9/3[a]	4,763	668,717
7/18	8,007	474,257	9/4-9/15 estimate	38,900	707,617
7/19	7,251	481,508	9/16-9/30 estimate	16,700	724,317

[a] The weir was removed after the completion of the 9/3 count.

Table 10.-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 2002.

	Inseason[a]			Postseason SPA			
Year	Early run	Late run	50/50 date	Early run	Late run	50/50 date	Total Escapement
1986	ND	ND	ND	566,088	207,231	7/15	773,319
1987	ND	ND	ND	589,291	214,452	7/26	803,743
1988[a]	421,823	253,934	7/5	420,577	255,180	6/29	675,757
1989[a]	417,437	523,738	7/7	384,004	557,171	8/2	941,175
1990[a]	470,998	299,412	7/9	434,543	335,867	6/26	770,410
1991[a]	722,138	317,960	7/15	672,871	367,227	6/24	1,040,098
1992[a]	488,504	278,099	7/15	360,681	405,922	7/15	766,603
1993	398,582	298,795	7/4	364,261	333,116	7/5	697,377
1994	682,459	284,450	7/15	769,462	197,447	7/28	966,909
1995	405,664	334,256	7/5	366,163	373,757	7/8	739,920
1996	419,185	329,952	7/14	464,461	284,676	7/20	749,137
1997	434,492	341,126	7/6	396,667	378,951	7/9	775,618
1998	393,731	307,307	7/8	410,659	290,379	7/5	701,038
1999	394,536	321,430	7/10	457,429	258,537	7/9	715,966
2000	512,649	292,576	7/14	536,141	269,084	7/14	805,225
2001	826,652	310,266	7/16	744,013	392,905	7/6	1,136,918
2002	383,360	340,957	7/15	380,701	343,616	7/8	724,317

[a] From 1988 to 1992 average time of entry curves were used for inseason management; after 1992 inseason scale pattern analysis (SPA) was used to manage the commercial fishery.

Table 11.-Total Chignik River sockeye salmon escapement, based on postseason analysis, by run, 1970 through 2002.

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
Averages			
1982-01	497,695	319,509	817,203
1992-01	486,994	318,486	805,480
1997-01	508,982	317,989	826,971

Table 12.-Peak sockeye salmon aerial survey escapement counts for the Black Lake tributaries, 1960 through 2002.

Year	Fan Creek	Milk Creek	Boulevard Creek	Alec River	Conglomerate Creek	Broad Creek	Total
1960	38,500	8,000	40,000	30,000	3000	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	1000	61,000	-
1964	19,500	3,050	23,850	17,900	9300	9,500	83,100
1967	20,000	1,000	9,000	156,000	10000	10,000	206,000
1968	32,000	2,400	20,000	60,000	2000	4,100	120,500
1969	103,000	2,100	33,000	50,000	4000	5,000	197,100
1970	146,000	9,000	55,500	198,000	5000	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	5000	ND	-
1974	90,000	5,000	50,000	93,000	5000	ND	-
1975	40,000	4,500	25,000	87,000	0	ND	-
1976	78,000	8,900	100,000	119,000	2000	ND	-
1977	88,000	20,000	127,000	133,000	1000	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	1500	68,000	358,000
1981	93,000	4,700	59,000	76,500	20000	27,000	280,200
1982	50,000	5,500	60,000	43,000	20000	32,000	210,500
1983	ND	ND	ND	ND	ND	ND	ND
1984	50,000	22,200	70,000	30,500	31000	36,000	239,700
1985	28,000	5,500	36,000	65,000	5500	17,000	157,000
1986	60,000	15,300	47,000	76,000	39000	27,000	264,300
1987	52,000	12,200	133,000	88,400	45900	32,500	364,000
1988	54,000	71,000	83,700	106,500	2300	26,500	344,000
1989	19,300	21,000	64,000	133,000	1000	7,500	245,800
1990	32,600	7,400	35,900	49,800	2200	18,000	145,900
1991	14,600	19,500	48,000	ND	2000	13,000	97,100
1992	ND	ND	ND	392,000	ND	ND	-
1993	40,900	12,600	97,600	8,000	77000	18,200	254,300
1994	70,000	25,000	125,000	350,000	20000	51,000	641,000
1995	23,000	10,000	60,000	200,000	40000	60,000	393,000
1996	40,000	24,000	51,000	100,000	50000	45,000	310,000
1997	60,000	5,000	48,000	166,000	8000	20,000	307,000
1998	90,000	14,000	100,000	50,000	9000	62,000	325,000
1999	70,000	8,100	50,000	226,000	1000	22,000	377,100
2000	41,000	29,000	126,000	210,000	26000	93,000	525,000
2001	77,000	19,000	265,000	207,000	4000	89,000	661,000
2002	43,000	ND	20,000	21,000	11,000	7,000	-
Averages							
1982-01	48,500	18,100	83,300	139,000	21,300	37,200	325,700
1992-01	56,900	16,300	102,500	190,900	26,100	51,100	421,500
1997-01	67,600	15,000	117,800	171,800	9,600	57,200	439,000

Table 13.-Chignik Lake and Black River peak aerial sockeye salmon survey escapement estimates, 1960 through 2002.

	Black River				Chignik Lake			
Year	Bearskin Creek	West Fork	Chiaktuak Creek	Total	Clark River	Home Creek	Hatchery Beach	Total
1960	11,600	23,000	19,000	53,600	ND	ND	ND	ND
1961	2,500	17,100	20,700	40,300	ND	ND	ND	ND
1962	3,000	13,000	24,000	40,000	ND	ND	ND	ND
1963	900	5,000	9,000	14,900	ND	ND	ND	ND
1964	500	4,500	7,000	12,000	ND	ND	ND	ND
1967	10,000	25,000	31,000	66,000	ND	ND	ND	ND
1968	1,200	10,500	10,000	21,700	ND	ND	ND	ND
1969	50	800	1,500	2,350	ND	ND	ND	ND
1970	450	4,000	4,000	8,450	ND	ND	ND	ND
1971	3,500	5,500	47,000	56,000	ND	ND	ND	ND
1972	1,400	4,300	23,000	28,700	ND	ND	ND	ND
1973	13	4,100	1,500	5,613	ND	ND	ND	ND
1974	450	8,000	7,000	15,450	ND	ND	ND	ND
1975	65	2,500	2,500	5,065	ND	ND	ND	ND
1976	2,650	23,700	7,700	34,050	ND	ND	ND	ND
1977	200	13,600	6,900	20,700	ND	ND	ND	ND
1978	410	9,600	8,500	18,510	ND	ND	ND	ND
1979	918	7,610	29,000	37,528	ND	ND	ND	ND
1980	3,600	33,000	40,400	77,000	ND	ND	ND	ND
1981	950	1,500	18,700	21,150	ND	ND	ND	ND
1982	1,066	10,791	5,000	16,857	ND	ND	ND	ND
1983	ND	ND	6,000	-	ND	ND	ND	ND
1984	ND	ND	ND	8,200	ND	ND	ND	ND
1985	350	450	1,200	2,000	ND	ND	ND	ND
1986	ND	ND	8,300	-	ND	ND	ND	ND
1987	ND	ND	1,000	-	ND	ND	ND	ND
1988	ND	ND	4,600	-	ND	ND	ND	ND
1989	ND	ND	2,100	-	ND	ND	ND	ND
1990	300	0	50	350	ND	ND	ND	ND
1991	ND	ND	ND	ND	ND	ND	ND	ND
1992	ND	ND	ND	ND	ND	ND	ND	ND
1993	ND	ND	16,000	-	ND	ND	ND	ND
1994	5,000	ND	31,000	-	18,000	9,200	ND	-
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	-	23,000	11,000	25,000	59,000
2002	ND	15,000	2,300	-	ND	100	ND	-
Averages								
1982-01	-	-	-	-	-	-	-	-
1992-01	-	-	-	-	-	-	-	-
1997-01	6,200	25,300	16,800	50,100	19,100	9,300	27,800	56,200

Table 14.-Estimated pink salmon escapement in the Chignik Management Area, by district and year, 1970 to 2002.

	District					
Year [a]	Chignik Bay	Central	Eastern	Western	Perryville	Total
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	ND	7,400	212,100	67,500	235,200	-
1986	ND	121,900	580,700	43,800	180,500	-
1987	ND	65,700	215,600	38,300	65,700	-
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
Averages						
1982-01	41,535	219,650	764,370	140,515	209,655	-
1992-01	52,540	330,250	1,062,190	195,940	264,340	1,905,260
1997-01	33,640	357,260	1,091,380	197,540	174,580	1,854,400

[a] From 1984 to 2002 aerial survey escapement estimates were computed by area-under-the-curve methods using a 15.0 day average stream life (Johnson and Barrett 1988).

Table 15.-Estimated Chignik Management Area chum salmon escapement, by district and year, 1970 through 2002.

	District					
Year [a]	Chignik Bay	Central	Eastern	Western	Perryville	Total
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
Averages						
1982-01	4,050	44,520	148,030	31,335	83,425	311,360
1992-01	5,810	59,400	199,230	33,610	110,400	408,450
1997-01	5,900	37,860	235,540	31,120	120,860	431,280

[a] From 1984 to 2002 aerial survey escapement estimates were computed by area-under-the-curve methods using a 15.0 day average stream life (Johnson and Barrett 1988).

Table 16.-Total commercial salmon harvests, including home pack and ADF&G's test fishery harvests, from the Chignik Management Area by species and year, 1970 through 2002.

	Permits Making		Chignik Management Area Harvest					
Year	Deliveries	Landings	Chinook	Sockeye	Coho	Pink	Chum	Total
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
Averages								
1982-01	100	3,938	5,305	1,646,072	174,102	917,400	177,954	2,920,833
1992-01	98	3,910	5,959	1,650,434	181,710	1,091,048	181,907	3,111,057
1997-01	94	3,460	3,336	1,645,625	112,945	1,005,980	149,092	2,916,978

Table 17.-Annual Chignik Management Area Chinook salmon harvest (including home pack and ADF&G's test fishery catches), 1970 through 2002.

	Testfish		Commercial Catch		Home Pack		Total	
Year	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
Averages								
1982-01	-	-	5,262	84,221	-	-	5,305	84,980
1992-01	6	104	5,873	86,155	-	-	5,959	87,644
1997-01	6	144	3,226	48,774	103	1,628	3,336	50,546

[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 18.-Chignik Management Area Chinook salmon harvest (including home pack and ADF&G's test fishery catches), by district and year, 1970 through 2002.

	District					
Year	Chignik Bay	Central	Eastern	Western	Perryville	Total
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
Averages						
1982-01	2,638	1,105	237	1,027	299	5,305
1992-01	2,233	1,760	380	1,182	403	5,959
1997-01	1,458	1,112	128	578	60	3,336

Table 19.-Chignik Management Area Chinook salmon harvest (including home pack and ADF&G's test fishery catches), by district and day, 2002.

	District					
Date	Chignik Bay	Central	Eastern	Western	Perryville	Total
6/3	0	0	closed	closed	closed	0
6/4	0	0	closed	closed	closed	0
6/5	0	0	closed	closed	closed	0
6/6	0	0	closed	closed	closed	0
6/7	0	0	closed	closed	closed	0
6/8	0	0	closed	closed	closed	0
6/9	0	0	closed	closed	closed	0
6/10	0	0	0	closed	closed	0
6/11	0	0	0	closed	closed	0
6/12	1	3	0	closed	closed	4
6/13	0	0	0	closed	closed	0
6/14	2	0	0	closed	closed	2
6/15	0	0	0	closed	closed	0
6/16	0	0	0	closed	closed	0
6/17	12	2	0	closed	closed	14
6/18	12	0	0	closed	closed	12
6/19	1	0	0	closed	closed	1
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	8	0	0	closed	closed	8
6/26	1	0	0	closed	closed	1
6/27	0	0	0	closed	closed	0
6/28	27	0	0	closed	closed	27
6/29	0	0	0	closed	closed	0
6/30	4	0	0	closed	closed	4
7/1	20	0	0	closed	closed	20
7/2	9	0	0	closed	closed	9
7/3	54	0	closed	closed	closed	54
7/4	14	0	closed	closed	closed	14

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	District					
Date	Chignik Bay	Central	Eastern	Western	Perryville	Total
7/5	51	4	closed	closed	closed	55
7/6	12	3	closed	closed	closed	15
7/7	46	0	closed	closed	closed	46
7/8	73	0	closed	closed	closed	73
7/9	78	0	closed	closed	closed	78
7/10	19	0	closed	closed	closed	19
7/11	4	0	closed	closed	closed	4
7/12	50	0	closed	72	0	122
7/13	66	0	closed	70	0	136
7/14	18	0	closed	99	0	117
7/15	32	0	closed	closed	closed	32
7/16	59	0	closed	closed	closed	59
7/17	31	0	closed	closed	closed	31
7/18	14	0	closed	closed	closed	14
7/19	51	2	closed	closed	closed	53
7/21	7	0	closed	closed	closed	7
7/22	5	0	closed	closed	closed	5
7/23	3	0	closed	closed	closed	3
7/24	1	0	closed	closed	closed	1
7/25	2	0	closed	closed	closed	2
7/26	13	0	0	58	0	71
7/27	8	0	0	229	0	237
7/28	1	0	0	45	0	46
7/29	12	0	0	0	0	12
7/30	39	0	closed	closed	closed	39
7/31	0	0	closed	closed	closed	0
8/1	5	0	closed	closed	closed	5
8/2	26	0	closed	closed	closed	26
8/3	1	0	closed	closed	closed	1
8/4	6	0	closed	closed	closed	6
8/5	0	0	closed	closed	closed	0
8/6	1	0	closed	closed	closed	1
8/7	0	0	closed	closed	closed	0
8/8	2	0	closed	closed	closed	2
8/9	0	0	closed	closed	closed	0
8/10	0	0	closed	closed	closed	0
8/11	1	0	closed	closed	closed	1
8/12	0	0	closed	closed	closed	0
8/13	0	0	closed	closed	closed	0
8/14	0	0	closed	closed	closed	0

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	District					
Date	Chignik Bay	Central	Eastern	Western	Perryville	Total
8/15	0	0	closed	closed	closed	0
8/16	2	0	closed	3	closed	5
8/17	1	0	closed	8	closed	9
8/18	0	0	closed	closed	closed	0
8/19	2	1	closed	closed	closed	3
8/20	0	0	closed	closed	closed	0
8/21	0	0	closed	closed	closed	0
8/22	0	0	closed	closed	closed	0
8/23	0	0	closed	closed	closed	0
8/24	0	0	closed	closed	closed	0
8/25	0	0	closed	closed	closed	0
8/26	1	0	closed	closed	closed	1
8/27	0	0	closed	closed	closed	0
8/28	1	0	closed	closed	closed	1
8/29	0	0	closed	closed	closed	0
8/30	0	0	closed	closed	closed	0
8/31	0	0	closed	closed	closed	0
9/1	0	0	closed	closed	closed	0
9/2	0	0	closed	closed	closed	0
9/3	0	0	closed	closed	closed	0
9/4	0	0	closed	closed	closed	0
9/5	0	0	closed	closed	closed	0
9/6	0	0	closed	closed	closed	0
9/7	0	0	closed	closed	closed	0
9/8	0	0	closed	closed	closed	0
Total	920	17	0	584	0	1,521

Table 20.-Annual Chignik Management Area sockeye salmon harvest, 1970 through 2002.

	Testfish		Commercial Catch		Home Pack		Total CMA Harvest		Cape Igvak[a]		SEDM[b]		Total Chignik-bound	
Year	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 20.-Page 2 of 2.

	Testfish		Commercial Catch		Home Pack		Total CMA Harvest		Cape Igvak[a]		SEDM[b]		Total Chignik-bound	
Year	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
Averages														
1982-01	-	-	1,639,778	11,196,256	-	-	1,646,072	11,238,202	206,987	1,238,689	112,503	793,409	1,968,035	13,270,300
1992-01	9,563	63,629	1,640,749	11,117,549	-	-	1,650,434	11,181,967	212,999	1,231,172	97,616	642,453	1,961,049	13,055,591
1997-01	11,056	74,623	1,634,334	11,246,446	235	1,516	1,645,625	11,322,586	190,282	1,099,875	79,015	520,304	1,914,922	12,942,765

[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] Because of 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 21.-Total annual Chignik Management Area sockeye salmon harvest (including home pack and ADF&G's test fishery catches), by district, 1970 through 2002.

	District					
Year	Chignik Bay	Central	Eastern	Western	Perryville	Total
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
Averages						
1982-01	1,181,728	339,476	54,460	42,507	27,901	1,646,072
1992-01	1,034,617	455,793	64,411	49,906	45,707	1,650,434
1997-01	1,159,024	387,095	46,174	44,655	8,678	1,645,625

Table 22.-Chignik Management Area sockeye salmon harvest (including home pack and ADF&G's test fishery catches), by district and day, 2002.

	District					
Date	Chignik Bay	Central	Eastern	Western	Perryville	Total
6/3	0	0	closed	closed	closed	0
6/4	0	0	closed	closed	closed	0
6/5	320	0	closed	closed	closed	320
6/6	0	0	closed	closed	closed	0
6/7	0	0	closed	closed	closed	0
6/8	0	0	closed	closed	closed	0
6/9	1,050	0	closed	closed	closed	1,050
6/10	16,145	0	0	closed	closed	16,145
6/11	26,926	2,971	0	closed	closed	29,897
6/12	28,123	911	0	closed	closed	29,034
6/13	33,687	0	0	closed	closed	33,687
6/14	36,637	0	0	closed	closed	36,637
6/15	50,139	0	0	closed	closed	50,139
6/16	39,658	0	0	closed	closed	39,658
6/17	30,905	4,504	0	closed	closed	35,409
6/18	30,959	4,793	2,835	closed	closed	38,587
6/19	19,689	1,537	0	closed	closed	21,226
6/20	4,215	0	0	closed	closed	4,215
6/21	6,438	0	0	closed	closed	6,438
6/22	3,188	0	0	closed	closed	3,188
6/23	11,620	0	0	closed	closed	11,620
6/24	2,426	0	0	closed	closed	2,426
6/25	10,252	0	0	closed	closed	10,252
6/26	1,993	0	0	closed	closed	1,993
6/27	1,000	0	0	closed	closed	1,000
6/28	10,009	0	0	closed	closed	10,009
6/29	4,629	0	0	closed	closed	4,629
6/30	18,350	0	0	closed	closed	18,350
7/1	13,033	0	0	closed	closed	13,033
7/2	17,136	0	0	closed	closed	17,136
7/3	19,863	0	closed	closed	closed	19,863
7/4	25,197	0	closed	closed	closed	25,197
7/5	21,555	3,347	closed	closed	closed	24,902
7/6	17,045	4,486	closed	closed	closed	21,531
7/7	22,184	2,453	closed	closed	closed	24,637
7/8	14,828	0	closed	closed	closed	14,828
7/9	14,824	0	closed	closed	closed	14,824
7/10	13,173	0	closed	closed	closed	13,173
7/11	18,816	0	closed	closed	closed	18,816
7/12	16,273	0	closed	1,326	0	17,599
7/13	19,378	0	closed	1,847	0	21,225
7/14	13,266	0	closed	3,334	0	16,600
7/15	21,090	0	closed	closed	closed	21,090
7/16	22,839	0	closed	closed	closed	22,839
7/17	22,054	0	closed	closed	closed	22,054
7/18	19,361	0	closed	closed	closed	19,361

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Table 22.-Page 2 of 3.

Date	District					Total
	Chignik Bay	Central	Eastern	Western	Perryville	
7/19	28,614	1,140	closed	closed	closed	29,754
7/20	16,466	2,642	closed	closed	closed	19,108
7/21	16,728	974	closed	closed	closed	17,702
7/22	14,075	0	closed	closed	closed	14,075
7/23	5,370	0	closed	closed	closed	5,370
7/24	8,498	0	closed	closed	closed	8,498
7/25	5,722	0	closed	closed	closed	5,722
7/26	15,711	0	0	748	0	16,459
7/27	9,687	0	0	754	0	10,441
7/28	10,972	0	0	421	169	11,562
7/29	9,557	0	0	0	0	9,557
7/30	9,129	0	closed	closed	closed	9,129
7/31	7,880	0	closed	closed	closed	7,880
8/1	6,757	0	closed	closed	closed	6,757
8/2	6,913	1,404	closed	closed	closed	8,317
8/3	4,771	5,235	closed	closed	closed	10,006
8/4	6,740	2,028	closed	closed	closed	8,768
8/5	6,236	353	closed	closed	closed	6,589
8/6	5,118	0	closed	closed	closed	5,118
8/7	4,951	0	closed	closed	closed	4,951
8/8	3,749	0	closed	closed	closed	3,749
8/9	3,618	0	closed	closed	closed	3,618
8/10	4,630	0	closed	closed	closed	4,630
8/11	2,677	0	closed	closed	closed	2,677
8/12	4,183	0	closed	closed	closed	4,183
8/13	5,140	0	closed	closed	closed	5,140
8/14	4,636	0	closed	closed	closed	4,636
8/15	3,826	0	closed	closed	closed	3,826
8/16	3,540	0	closed	221	closed	3,761
8/17	2,632	0	closed	774	closed	3,406
8/18	2,860	0	closed	closed	closed	2,860
8/19	4,217	849	closed	closed	closed	5,066
8/20	2,388	1,467	closed	closed	closed	3,855
8/21	2,502	1,857	closed	closed	closed	4,359
8/22	1,471	1,395	closed	closed	closed	2,866
8/23	2,113	22	closed	closed	closed	2,135
8/24	1,374	0	closed	closed	closed	1,374
8/25	1,341	0	closed	closed	closed	1,341
8/26	1,747	0	closed	closed	closed	1,747
8/27	1,638	0	closed	closed	closed	1,638
8/28	1,793	0	closed	closed	closed	1,793
8/29	2,308	0	closed	closed	closed	2,308
8/30	2,805	0	closed	closed	closed	2,805
8/31	3,152	0	closed	closed	closed	3,152

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Table 22.- Page 3 of 3.

	District					
Date	Chignik Bay	Central	Eastern	Western	Perryville	Total
9/1	1,151	0	closed	closed	closed	1,151
9/2	758	0	closed	closed	closed	758
9/3	300	0	closed	closed	closed	300
9/4	759	0	closed	closed	closed	759
9/5	280	0	closed	closed	closed	280
9/6	0	0	closed	closed	closed	0
9/7	0	0	closed	closed	closed	0
9/8	0	0	closed	closed	closed	0
Total	993,756	44,368	2,835	9,425	169	1,050,553

Table 23.-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 2002.

	Chignik[a]		Cape Igvak[a]		Southeastern District Mainland[a]		
Year	Catch[b]	Percent	Catch[b]	Percent	Catch[c]	Percent	Total
1978	1,454,389	86.6	225,078	13.4	n/a	n/a	1,679,467
1979	794,504	98.3	13,950	1.7	n/a	n/a	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
Averages							
1982-01	1,322,052	83.0	206,987	10.8	116,372	6.2	1,645,410
1992-01	1,311,869	82.8	212,999	11.3	100,406	5.8	1,625,273
1997-01	1,240,362	85.9	190,282	9.2	84,594	4.9	1,515,238

[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 24.-Chignik Management Area sockeye salmon allocations and actual harvests, 2002. Commercial test fishery harvests are not included in the calculations, but fish retained as home pack are included.

		Percentage			Number of Sockeye Salmon		
Year	Fleet	Allocation	Actual	Difference	Allocation	Actual	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	

Table 25.-Chignik sockeye salmon escapement, total catch considered Chignik-bound, and total run, 1970 through 2002.

	Early Run			Late Run			Total Run [abc]		
Year	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	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	672,871	1,711,549	2,384,420	367,227	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	684,727	1,065,428	343,616	565,339	908,955	724,317	1,250,066	1,974,383
Averages									
1982-01	497,695	1,123,393	1,621,087	319,509	844,642	1,164,151	817,203	1,968,035	2,785,238
1992-01	486,994	1,032,973	1,519,967	318,486	928,075	1,246,562	805,480	1,961,049	2,766,529
1997-01	508,982	941,637	1,450,619	317,989	973,285	1,291,274	826,971	1,914,922	2,741,893

[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 26.-Chignik sockeye salmon forecasts and actual runs, by run and year, 1992 through 2002.

	Early Run (millions)			Late Run (millions)			Total Run (millions)		
Year	Forecast	Actual	% Error	Forecast	Actual	% Error	Forecast	Actual	% Error
1992	2.76	1.11	60	1.14	1.18	-4	3.90	2.29	41
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
Averages									
1992 to 2001	1.73	1.52	-2	1.19	1.25	-13	2.92	2.77	-2
1997 to 2001	1.57	1.45	-13	1.20	1.29	-13	2.77	2.74	-11

Table 27.-Annual Chignik Management Area coho salmon harvest, 1970 through 2002.

	Testfish		Commercial Catch		Home Pack		Total	
Year	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
Averages								
1982-01	-	-	174,019	1,344,234	-	-	174,102	1,344,800
1992-01	46	254	181,547	1,374,160	-	-	181,710	1,375,265
1997-01	0	0	112,899	875,068	47	331	112,945	875,399

[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 28.-Chignik Management Area coho salmon harvest (including home pack and ADF&G's test fishery catches), by district and year, 1970 through 2002.

	District					
Year	Chignik Bay	Central	Eastern	Western	Perryville	Total
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
Averages						
1982-01	60,497	20,565	3,205	67,934	21,902	174,102
1992-01	40,099	33,018	2,015	77,188	29,391	181,710
1997-01	20,138	34,387	2,196	51,416	4,808	112,945

Table 29.-Chignik Management Area coho salmon harvest (including home pack and ADF&G's test fishery catches), by district and day, 2002.

	District					
Date	Chignik Bay	Central	Eastern	Western	Perryville	Total
6/3	0	0	closed	closed	closed	0
6/4	0	0	closed	closed	closed	0
6/5	0	0	closed	closed	closed	0
6/6	0	0	closed	closed	closed	0
6/7	0	0	closed	closed	closed	0
6/8	0	0	closed	closed	closed	0
6/9	0	0	closed	closed	closed	0
6/10	0	0	0	closed	closed	0
6/11	0	0	0	closed	closed	0
6/12	0	8	0	closed	closed	8
6/13	0	0	0	closed	closed	0
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	0	0	0	closed	closed	0
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	0	0	0	closed	closed	0
7/1	0	0	0	closed	closed	0
7/2	0	0	0	closed	closed	0
7/3	0	0	closed	closed	closed	0
7/4	0	0	closed	closed	closed	0
7/5	1	0	closed	closed	closed	1
7/6	0	0	closed	closed	closed	0
7/7	0	3	closed	closed	closed	3
7/8	0	0	closed	closed	closed	0
7/9	0	0	closed	closed	closed	0
7/10	0	0	closed	closed	closed	0
7/11	0	0	closed	closed	closed	0
7/12	0	0	closed	3,044	0	3,044
7/13	0	0	closed	3,296	0	3,296
7/14	0	0	closed	5,727	0	5,727
7/15	0	0	closed			0

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Table 29.-Page 2 of 3.

Date	District					Total
	Chignik Bay	Central	Eastern	Western	Perryville	
7/16	0	0	closed	closed	closed	0
7/17	0	0	closed	closed	closed	0
7/18	0	0	closed	closed	closed	0
7/19	104	179	closed	closed	closed	283
7/20	17	224	closed	closed	closed	241
7/21	0	108	closed	closed	closed	108
7/22	0	0	closed	closed	closed	0
7/23	0	0	closed	closed	closed	0
7/24	0	0	closed	closed	closed	0
7/25	0	0	closed	closed	closed	0
7/26	0	0	0	5,758	0	5,758
7/27	0	0	0	7,500	0	7,500
7/28	0	0	0	4,067	186	4,253
7/29	0	0	closed	closed	closed	0
7/30	2	0	closed	closed	closed	2
7/31	0	0	closed	closed	closed	0
8/1	0	0	closed	closed	closed	0
8/2	57	251	closed	closed	closed	308
8/3	5	1,110	closed	closed	closed	1,115
8/4	4	245	closed	closed	closed	249
8/5	1	52	closed	closed	closed	53
8/6	0	0	closed	closed	closed	0
8/7	2	0	closed	closed	closed	2
8/8	0	0	closed	closed	closed	0
8/9	0	0	closed	closed	closed	0
8/10	13	0	closed	closed	closed	13
8/11	0	0	closed	closed	closed	0
8/12	0	0	closed	closed	closed	0
8/13	0	0	closed	closed	closed	0
8/14	0	0	closed	closed	closed	0
8/15	0	0	closed	closed	closed	0
8/16	16	0	closed	1,302	closed	1,318
8/17	29	0	closed	5,589	closed	5,618
8/18	48	0	closed	closed	closed	48
8/19	77	317	closed	closed	closed	394
8/20	62	649	closed	closed	closed	711
8/21	170	855	closed	closed	closed	1,025
8/22	164	411	closed	closed	closed	575
8/23	198	30	closed	closed	closed	228
8/24	173	0	closed	closed	closed	173
8/25	217	0	closed	closed	closed	217
8/26	364	0	closed	closed	closed	364
8/27	423	0	closed	closed	closed	423
8/28	482	0	closed	closed	closed	482
8/29	1,026	0	closed	closed	closed	1,026
8/30	1,158	0	closed	closed	closed	1,158
8/31	1,787	0	closed	closed	closed	1,787

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Table 29.-Page 3 of 3.

	District					
Date	Chignik Bay	Central	Eastern	Western	Perryville	Total
9/1	721	0	closed	closed	closed	721
9/2	435	0	closed	closed	closed	435
9/3	142	0	closed	closed	closed	142
9/4	296	0	closed	closed	closed	296
9/5	267	0	closed	closed	closed	267
9/6	0	0	closed	closed	closed	0
9/7	0	0	closed	closed	closed	0
9/8	0	0	closed	closed	closed	0
Total	8,461	4,442	0	36,283	186	49,372

Table 30.-Annual Chignik Management Area pink salmon harvest, 1970 through 2002.

	Testfish		Commercial Catch		Home Pack		Total	
Year	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
Averages								
1982-01	-	-	916,906	3,074,646	-	-	917,400	3,076,183
1992-01	195	613	1,090,326	3,596,470	-	-	1,091,048	3,598,620
1997-01	0	0	1,005,979	3,095,322	1	4	1,005,980	3,095,327

[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 31.-Chignik Management Area pink salmon harvest (including home pack and ADF&G's test fishery catches), by district and year, 1970 through 2002.

	District					
Year	Chignik Bay	Central	Eastern	Western	Perryville	Total
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
Averages						
1982-01	72,155	217,225	91,999	362,556	173,465	917,400
1992-01	62,991	341,477	55,218	414,502	216,861	1,091,048
1997-01	45,545	482,874	57,516	352,657	67,388	1,005,980

Table 32.-Chignik Management Area pink salmon harvest (including home pack and ADF&G's test fishery catches), by district and day, 2002.

	District					
Date	Chignik Bay	Central	Eastern	Western	Perryville	Total
6/3	0	0	closed	closed	closed	0
6/4	0	0	closed	closed	closed	0
6/5	0	0	closed	closed	closed	0
6/6	0	0	closed	closed	closed	0
6/7	0	0	closed	closed	closed	0
6/8	0	0	closed	closed	closed	0
6/9	0	0	closed	closed	closed	0
6/10	0	0	0	closed	closed	0
6/11	0	0	0	closed	closed	0
6/12	0	0	0	closed	closed	0
6/13	0	0	0	closed	closed	0
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	2	0	closed	closed	2
6/18	0	4	0	closed	closed	4
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	0	0	0	closed	closed	0
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	0	0	0	closed	closed	0
7/1	0	0	0	closed	closed	0
7/2	0	0	0	closed	closed	0
7/3	0	0	closed	closed	closed	0
7/4	0	0	closed	closed	closed	0
7/5	6	80	closed	closed	closed	86
7/6	11	114	closed	closed	closed	125
7/7	55	127	closed	closed	closed	182
7/8	0	0	closed	closed	closed	0
7/9	0	0	closed	closed	closed	0
7/10	0	0	closed	closed	closed	0
7/11	0	0	closed	closed	closed	0
7/12	0	0	closed	2,062	0	2,062
7/13	0	0	closed	3,747	0	3,747
7/14	1	0	closed	6,157	0	6,158
7/15	2	0	closed	closed	closed	2

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Table 32.-Page 2 of 3.

Date	District					Total
	Chignik Bay	Central	Eastern	Western	Perryville	
7/16	0	0	closed	closed	closed	0
7/17	0	0	closed	closed	closed	0
7/18	0	0	closed	closed	closed	0
7/19	434	421	closed	closed	closed	855
7/20	199	1,305	closed	closed	closed	1,504
7/21	67	203	closed	closed	closed	270
7/22	0	0	closed	closed	closed	0
7/23	0	0	closed	closed	closed	0
7/24	39	0	closed	closed	closed	39
7/25	66	0	closed	closed	closed	66
7/26	152	0	0	8,615	0	8,767
7/27	49	0	0	5,883	0	5,932
7/28	95	0	0	5,990	1,299	7,384
7/29	27	0	closed	closed	closed	27
7/30	199	0	closed	closed	closed	199
7/31	12	0	closed	closed	closed	12
8/1	377	0	closed	closed	closed	377
8/2	667	1,204	closed	closed	closed	1,871
8/3	375	7,754	closed	closed	closed	8,129
8/4	814	3,100	closed	closed	closed	3,914
8/5	591	493	closed	closed	closed	1,084
8/6	719	0	closed	closed	closed	719
8/7	338	0	closed	closed	closed	338
8/8	327	0	closed	closed	closed	327
8/9	390	0	closed	closed	closed	390
8/10	558	0	closed	closed	closed	558
8/11	443	0	closed	closed	closed	443
8/12	426	0	closed	closed	closed	426
8/13	290	0	closed	closed	closed	290
8/14	267	0	closed	closed	closed	267
8/15	79	0	closed	closed	closed	79
8/16	165	0	closed	1,031	0	1,196
8/17	210	0	closed	3,433	0	3,643
8/18	189	0	closed	closed	closed	189
8/19	214	473	closed	closed	closed	687
8/20	175	777	closed	closed	closed	952
8/21	203	951	closed	closed	closed	1,154
8/22	84	552	closed	closed	closed	636
8/23	114	20	closed	closed	closed	134
8/24	104	0	closed	closed	closed	104
8/25	108	0	closed	closed	closed	108
8/26	116	0	closed	closed	closed	116
8/27	140	0	closed	closed	closed	140
8/28	92	0	closed	closed	closed	92
8/29	92	0	closed	closed	closed	92
8/30	84	0	closed	closed	closed	84
8/31	35	0	closed	closed	closed	35

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Table 32.-Page 3 of 3.

	District					
Date	Chignik Bay	Central	Eastern	Western	Perryville	Total
9/1	11	0	closed	closed	closed	11
9/2	15	0	closed	closed	closed	15
9/3	1	0	closed	closed	closed	1
9/4	20	0	closed	closed	closed	20
9/5	6	0	closed	closed	closed	6
9/6	0	0	closed	closed	closed	0
9/7	0	0	closed	closed	closed	0
9/8	0	0	closed	closed	closed	0
Total	10,253	17,580	0	36,918	1,299	66,050

Table 33.-Annual Chignik Management Area chum salmon harvest, 1970 through 2002.

	Testfish		Commercial Catch		Home Pack		Total	
Year	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	0	380,949	2,814,987
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	23	140,597	1,064,456
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
Averages								
1982-01	-	-	176,825	1,316,305	-	-	177,954	1,325,065
1992-01	59	388	179,709	1,337,261	-	-	181,907	1,354,355
1997-01	0	0	149,034	1,164,456	57	434	149,092	1,164,890

[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 34.-Chignik Management Area chum salmon harvest (including home pack and ADF&G's test fishery catches), by district and year, 1970 through 2002.

	District					
Year	Chignik Bay	Central	Eastern	Western	Perryville	Total
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
Averages						
1982-01	11,432	49,340	21,645	69,576	25,961	177,954
1992-01	12,185	68,647	20,148	54,629	26,300	181,907
1997-01	12,081	74,796	17,373	33,417	11,425	149,092

Table 35.-Chignik Management Area chum salmon harvest (including home pack and ADF&G's test fishery catches), by district and day, 2002.

	District					
Date	Chignik Bay	Central	Eastern	Western	Perryville	Total
6/3	0	0	closed	closed	closed	0
6/4	0	0	closed	closed	closed	0
6/5	0	0	closed	closed	closed	0
6/6	0	0	closed	closed	closed	0
6/7	0	0	closed	closed	closed	0
6/8	0	0	closed	closed	closed	0
6/9	0	0	closed	closed	closed	0
6/10	1	0	0	closed	closed	1
6/11	0	548	0	closed	closed	548
6/12	1	156	0	closed	closed	157
6/13	0	0	0	closed	closed	0
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	1	347	0	closed	closed	348
6/18	0	246	513	closed	closed	759
6/19	2	134	0	closed	closed	136
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	0	0	0	closed	closed	0
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	0	0	0	closed	closed	0
7/1	0	0	0	closed	closed	0
7/2	0	0	0	closed	closed	0
7/3	0	0	closed	closed	closed	0
7/4	0	0	closed	closed	closed	0
7/5	16	452	closed	closed	closed	468
7/6	40	614	closed	closed	closed	654
7/7	188	201	closed	closed	closed	389
7/8	0	0	closed	closed	closed	0
7/9	0	0	closed	closed	closed	0
7/10	57	0	closed	closed	closed	57
7/11	1	0	closed	closed	closed	1
7/12	2	0	closed	5,559	0	5,561
7/13	0	0	closed	9,392	0	9,392
7/14	2	0	closed	11,137	0	11,139
7/15	17	0	closed	closed	closed	17

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Table 35.-Page 2 of 3.

	District					
Date	Chignik Bay	Central	Eastern	Western	Perryville	Total
7/16	2	0	closed	closed	closed	2
7/17	0	0	closed	closed	closed	0
7/18	0	0	closed	closed	closed	0
7/19	578	412	closed	closed	closed	990
7/20	128	1,276	closed	closed	closed	1,404
7/21	18	196	closed	closed	closed	214
7/22	0	0	closed	closed	closed	0
7/23	0	0	closed	closed	closed	0
7/24	39	0	closed	closed	closed	39
7/25	18	0	closed	closed	closed	18
7/26	6	0	0	3,958	0	3,964
7/27	94	0	0	4,605	0	4,699
7/28	0	0	0	2,398	117	2,515
7/29	7	0	closed	closed	closed	7
7/30	230	0	closed	closed	closed	230
7/31	29	0	closed	closed	closed	29
8/1	125	0	closed	closed	closed	125
8/2	95	862	closed	closed	closed	957
8/3	125	2,139	closed	closed	closed	2,264
8/4	139	524	closed	closed	closed	663
8/5	210	92	closed	closed	closed	302
8/6	61	0	closed	closed	closed	61
8/7	37	0	closed	closed	closed	37
8/8	83	0	closed	closed	closed	83
8/9	71	0	closed	closed	closed	71
8/10	208	0	closed	closed	closed	208
8/11	186	0	closed	closed	closed	186
8/12	81	0	closed	closed	closed	81
8/13	136	0	closed	closed	closed	136
8/14	103	0	closed	closed	closed	103
8/15	92	0	closed	closed	closed	92
8/16	24	0	closed	908	0	932
8/17	70	0	closed	2,380	0	2,450
8/18	47	0	closed	closed	closed	47
8/19	140	237	closed	closed	closed	377
8/20	60	402	closed	closed	closed	462
8/21	80	505	closed	closed	closed	585
8/22	70	293	closed	closed	closed	363
8/23	40	7	closed	closed	closed	47
8/24	25	0	closed	closed	closed	25
8/25	15	0	closed	closed	closed	15
8/26	27	0	closed	closed	closed	27
8/27	13	0	closed	closed	closed	13
8/28	16	0	closed	closed	closed	16
8/29	21	0	closed	closed	closed	21
8/30	20	0	closed	closed	closed	20
8/31	20	0	closed	closed	closed	20

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Table 35.-Page 3 of 3.

	District					
Date	Chignik Bay	Central	Eastern	Western	Perryville	Total
9/1	8	0	closed	closed	closed	8
9/2	9	0	closed	closed	closed	9
9/3	1	0	closed	closed	closed	1
9/4	13	0	closed	closed	closed	13
9/5	1	0	closed	closed	closed	1
9/6	0	0	closed	closed	closed	0
9/7	0	0	closed	closed	closed	0
9/8	0	0	closed	closed	closed	0
Total	3,949	9,643	513	40,337	117	54,559

Table 36.-Value of the commercial salmon harvest, by species, and average value per active permit, in dollars, in the Chignik Management Area, 1970 through 2002.

	Chinook		Sockeye		Coho		Pink		Chum			Number of	Value per
Year	Total	Average	Total	Average	Total	Average	Total	Average	Total	Average	Total Value	Permits[a]	Permit
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

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Table 36.-Page 2 of 2.

	Chinook		Sockeye		Coho		Pink		Chum			Number of	Value per
Year	Total	Average	Total	Average	Total	Average	Total	Average	Total	Average	Total Value	Permits[a]	Permit
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[b]	3,516	36	4,564,214	46,103	36,078	364	10,333	104	40,671	411	4,654,812	99	47,018
Averages													
1982-01	85,612	850	13,100,823	131,769	893,768	8,870	700,717	7,015	442,470	4,399	15,173,390	99	152,431
1992-01	60,066	606	10,727,418	111,472	599,818	6,106	438,910	4,530	249,383	2,552	12,075,594	97	125,266
1997-01	21,666	237	10,371,207	112,476	313,694	3,385	342,082	3,739	159,573	1,719	11,208,222	93	121,556

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

[b] The 2002 average exvessel values per pound, by species, were: Chinook- $0.25, sockeye- $0.63, coho- $0.10, pink- $0.05, chum- $0.10.

Table 37.-Number of subsistence permits issued and returned and estimated subsistence salmon harvest, by species and year, 1980 through 2002.

	Permits		Estimated Salmon Harvest					
Year	Issued	Returned	Chinook	Sockeye	Coho	Pink	Chum	Total
1980	82	37	6	12,475	32	478	169	12,991
1981	29	7	0	2,049	0	0	0	2,049
1982	59	15	3	8,532	12	2	0	8,549
1983	32	21	0	3,078	1,319	1,250	850	5,647
1984	77	64	23	8,747	464	330	204	9,564
1985	59	48	1	7,177	50	26	25	7,254
1986	74	38	4	10,347	205	98	77	10,654
1987	2	1	0	400	0	0	0	400
1988	80	34	9	9,073	1,455	54	142	10,591
1989	68	23	24	7,551	384	81	147	8,040
1990	72	23	103	8,099	210	470	115	8,882
1991	95	58	42	11,483	13	275	81	11,813
1992	98	19	55	8,648	709	305	145	9,717
1993	201	141	122	14,710	3,765	1,265	642	19,862
1994	219	122	165	13,978	4,055	1,720	382	19,918
1995	111	95	98	9,563	1,191	723	150	11,575
1996	119	104	48	7,357	2,126	2,204	355	11,735
1997	126	103	28	13,442	2,678	2,035	840	18,183
1998	104	72	91	7,750	1,390	1,007	186	10,238
1999	106	88	243	9,040	1,679	1,191	136	12,153
2000	130	112	163	9,561	1,802	1,185	517	12,711
2001	135	122	171	8,633	1,859	2,787	213	13,450
2002	120	86	74	10,092	1,401	390	23	11,957
Averages								
1982-01	98	65	70	8,858	1,268	850	260	11,047
1992-01	135	98	118	10,268	2,125	1,442	357	13,954
1997-01	120	99	139	9,685	1,882	1,641	378	13,347

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

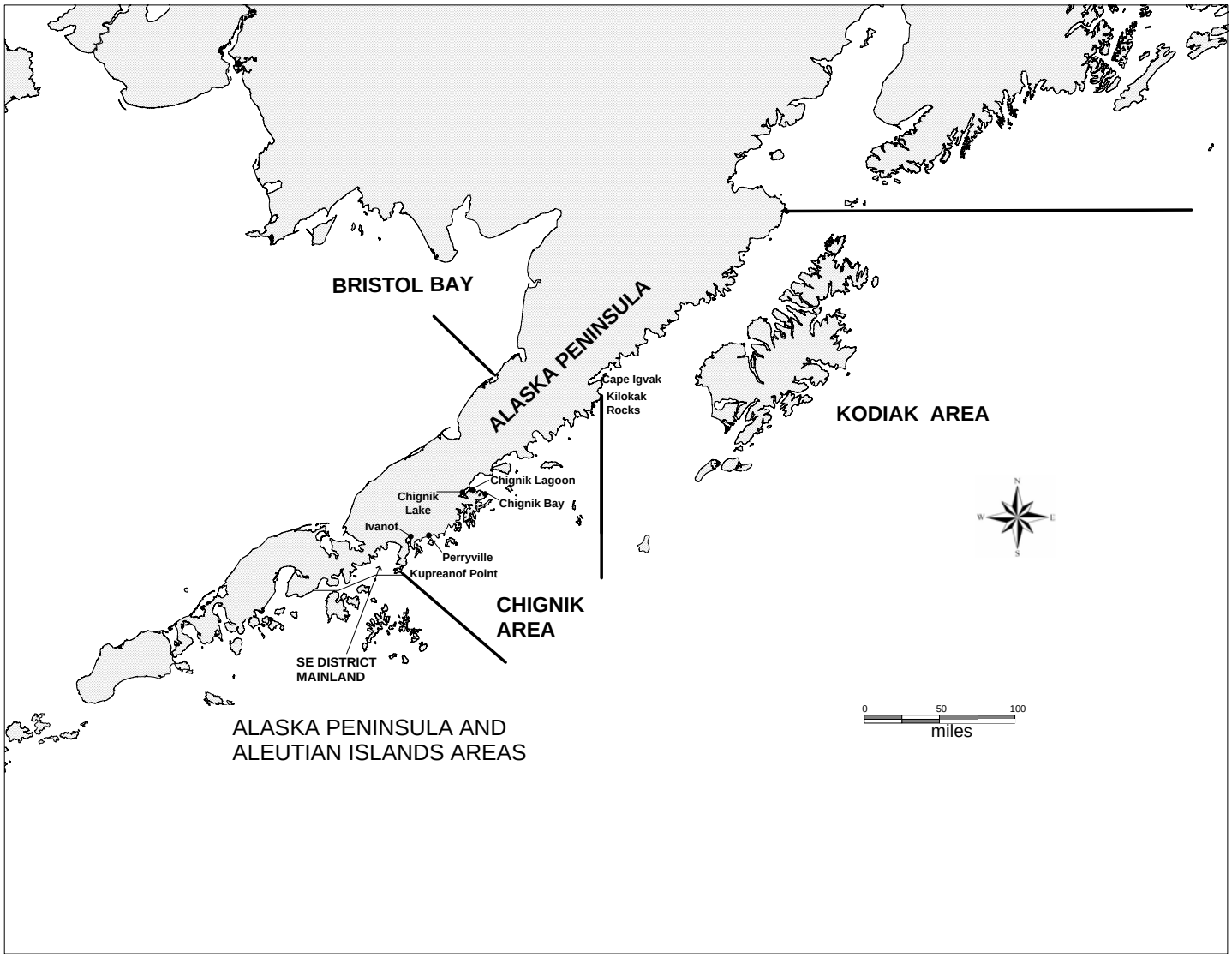

Figure 1.-Map of the Alaska Peninsula illustrating the relative locations of the Chignik, Kodiak, and Alaska Peninsula and Aleutian Islands Management Areas.

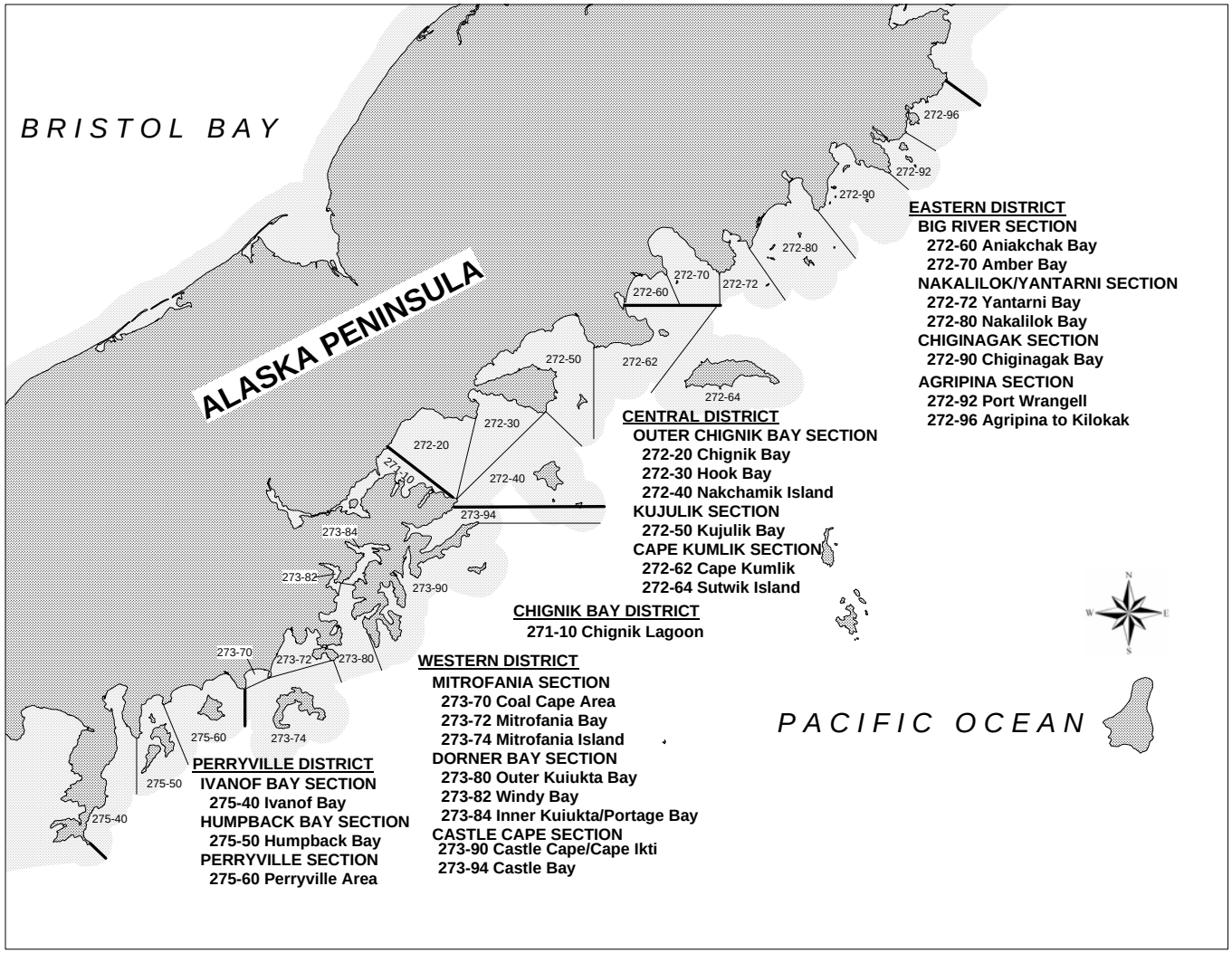

Figure 2.-Map of the Chignik Management Area illustrating district boundaries and statistical areas.

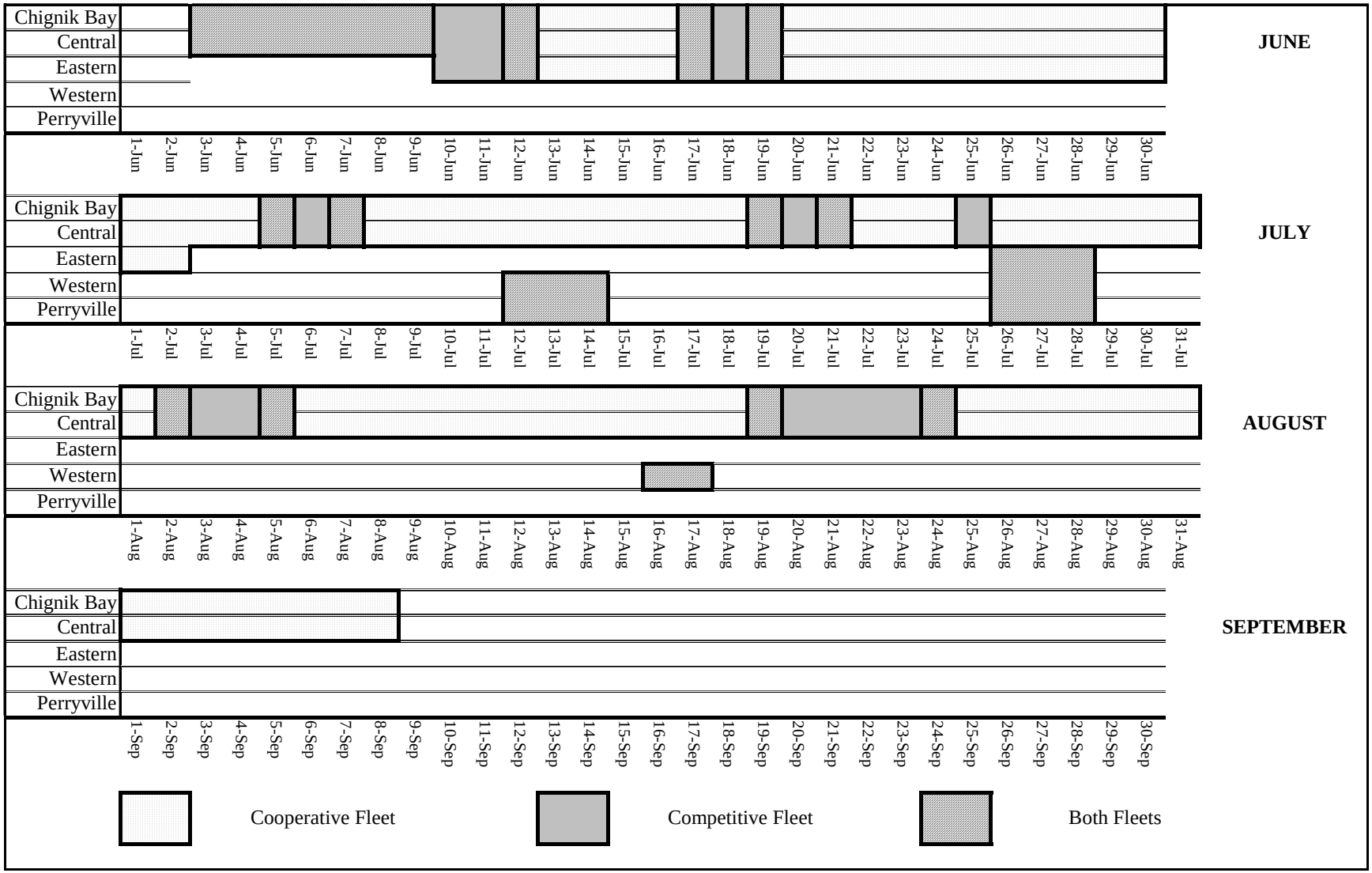

Figure 3.-Representation of days open to commercial salmon fishing, by district and fleet, by month, 2002.

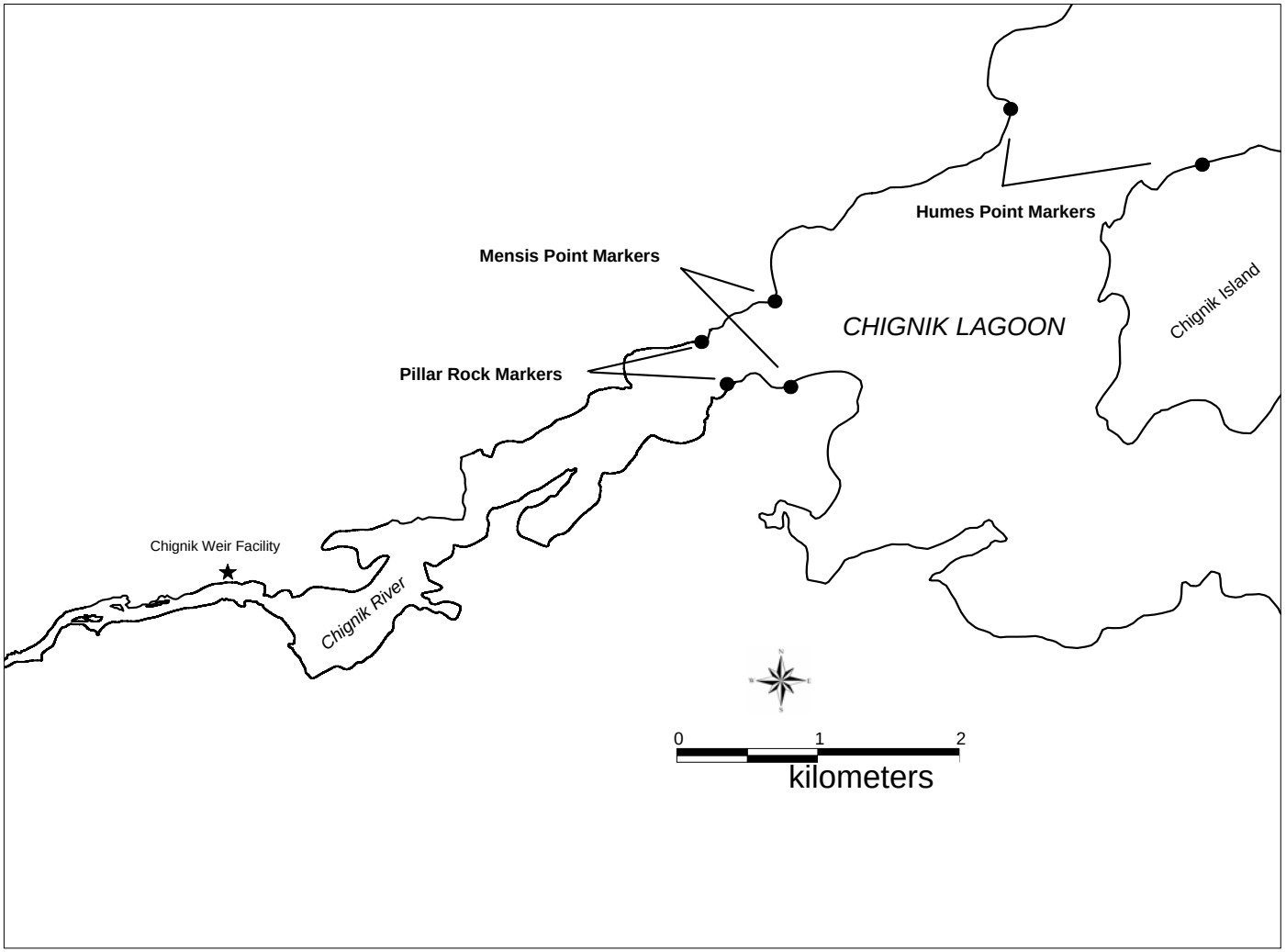

Figure 4.-Map of upper Chignik Lagoon showing the location of the Pillar Rock, Mensis Point, and Humes Point marker locations.

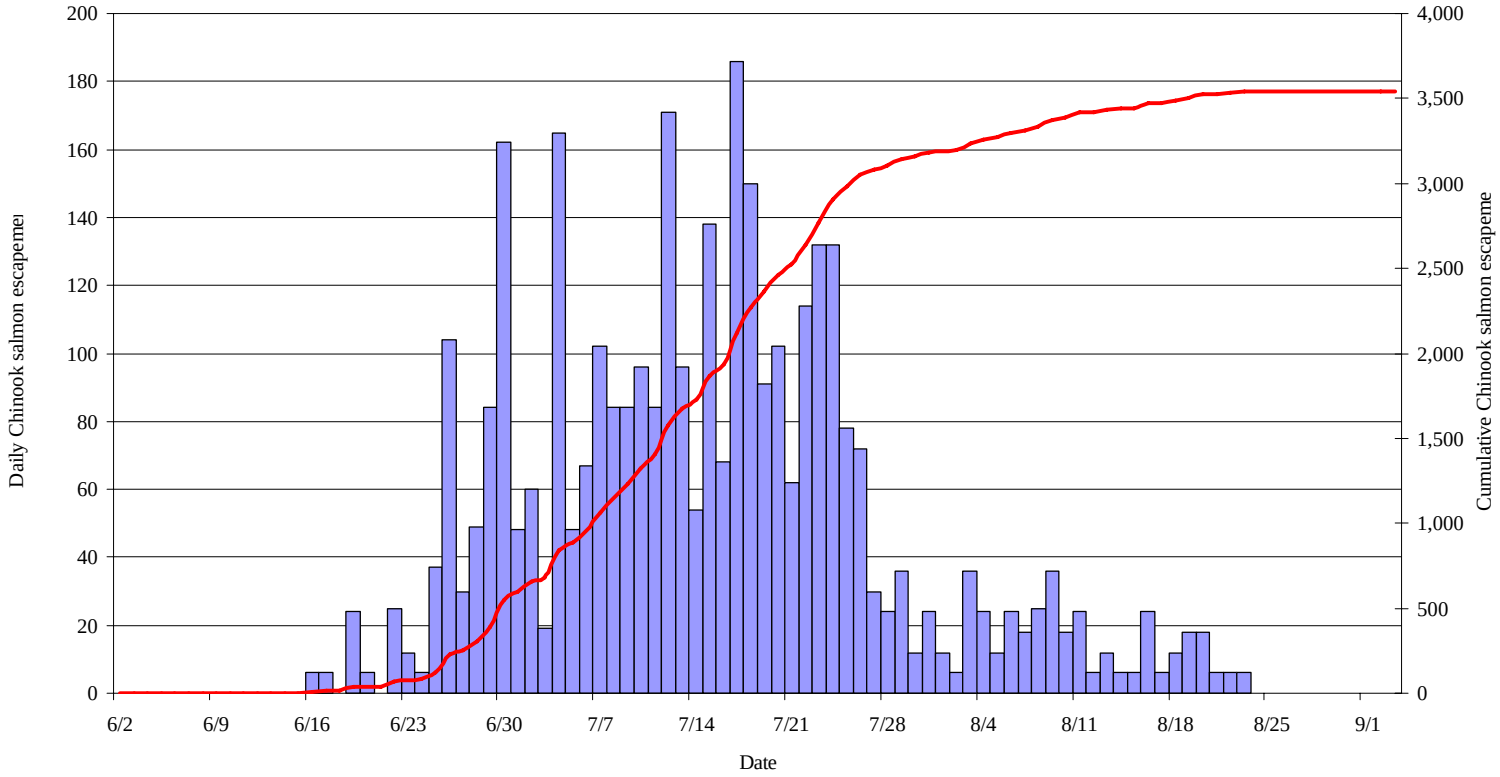

Figure 5.-Chignik River estimated daily and cumulative Chinook salmon escapement, 2002.

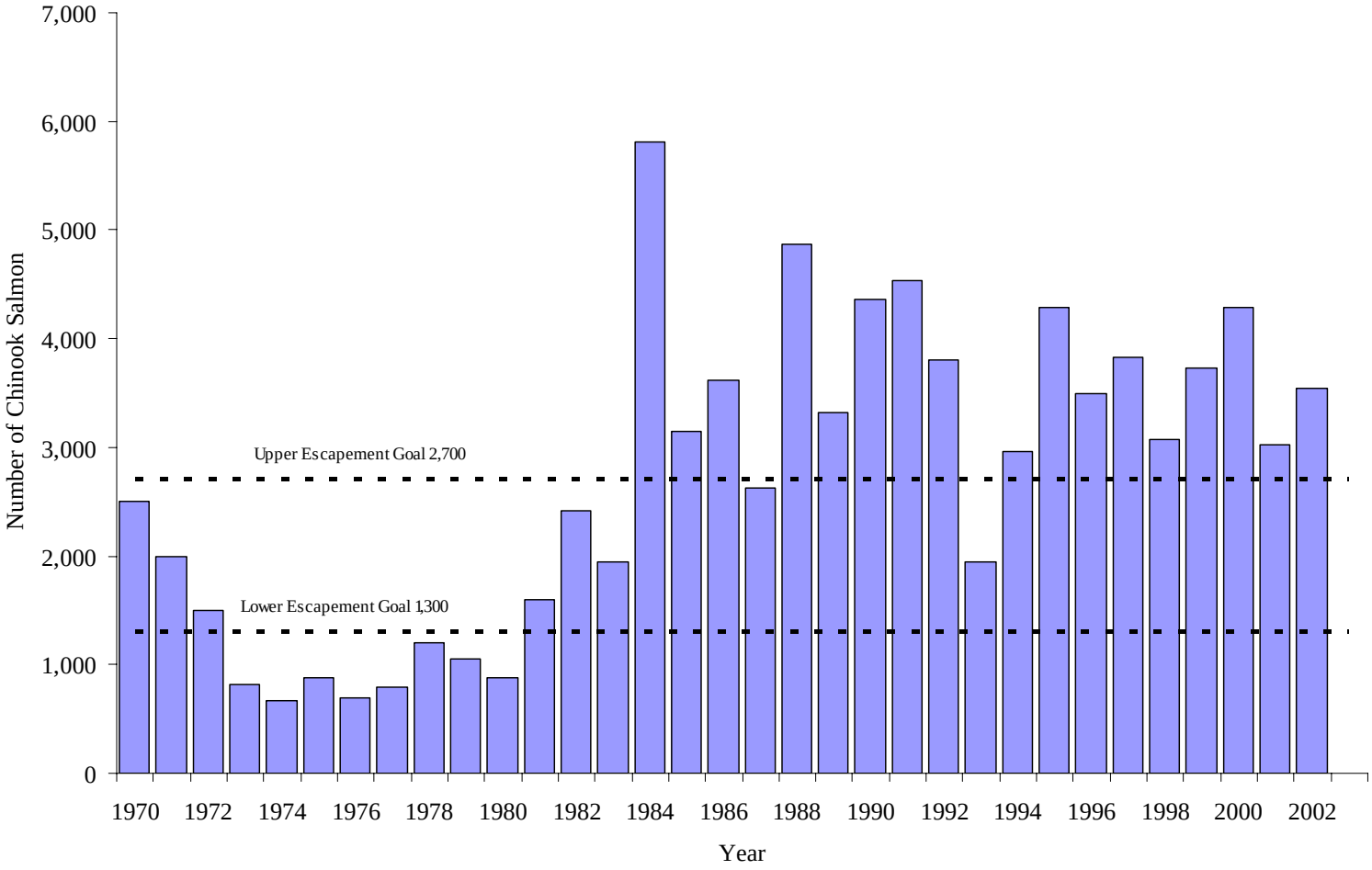

Figure 6.-Chignik River Chinook salmon escapement by year, 1970 through 2002, as compared to the 2002 escapement goal.

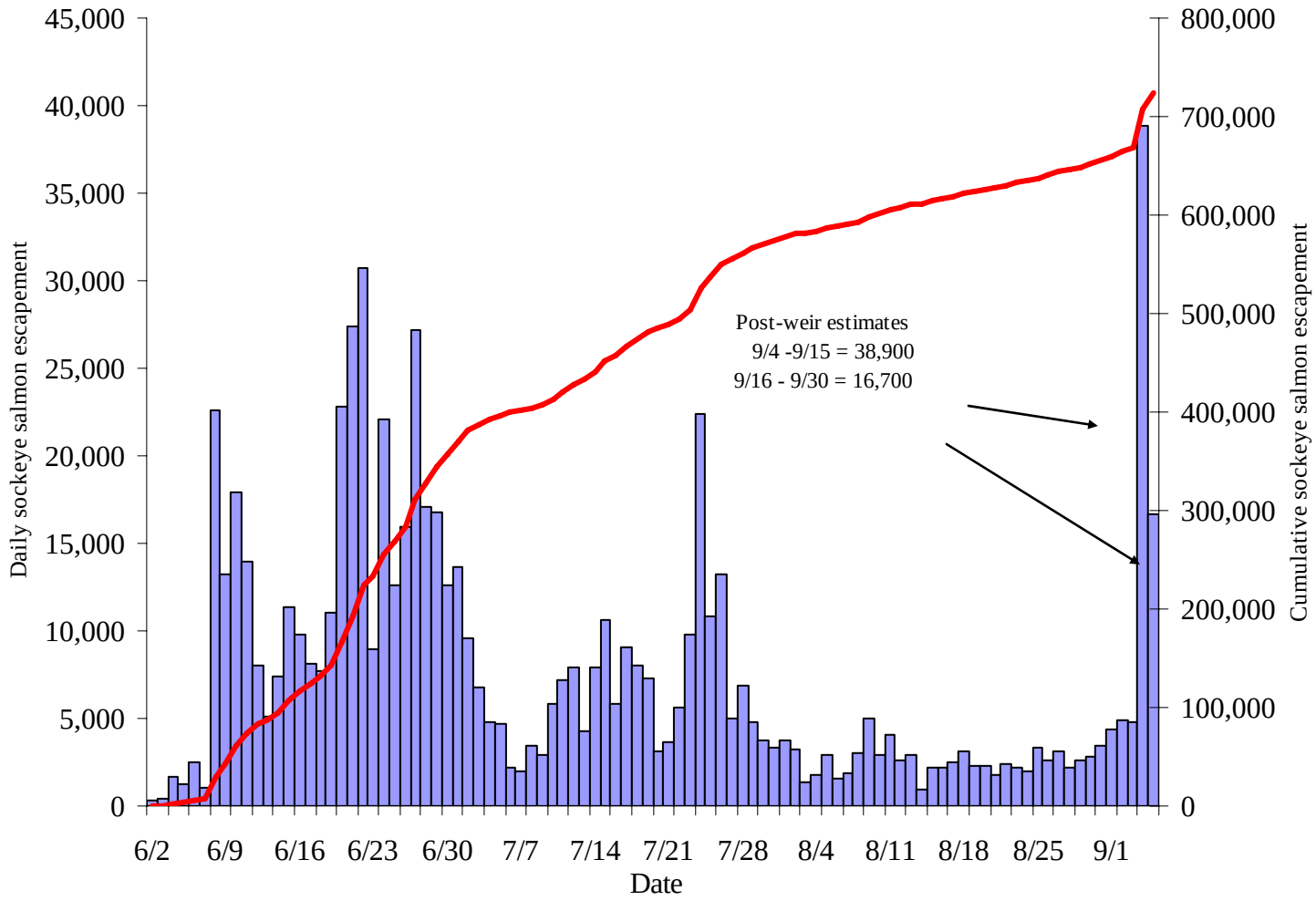

Figure 7.-Chignik River sockeye salmon daily and cumulative escapement, 2002.

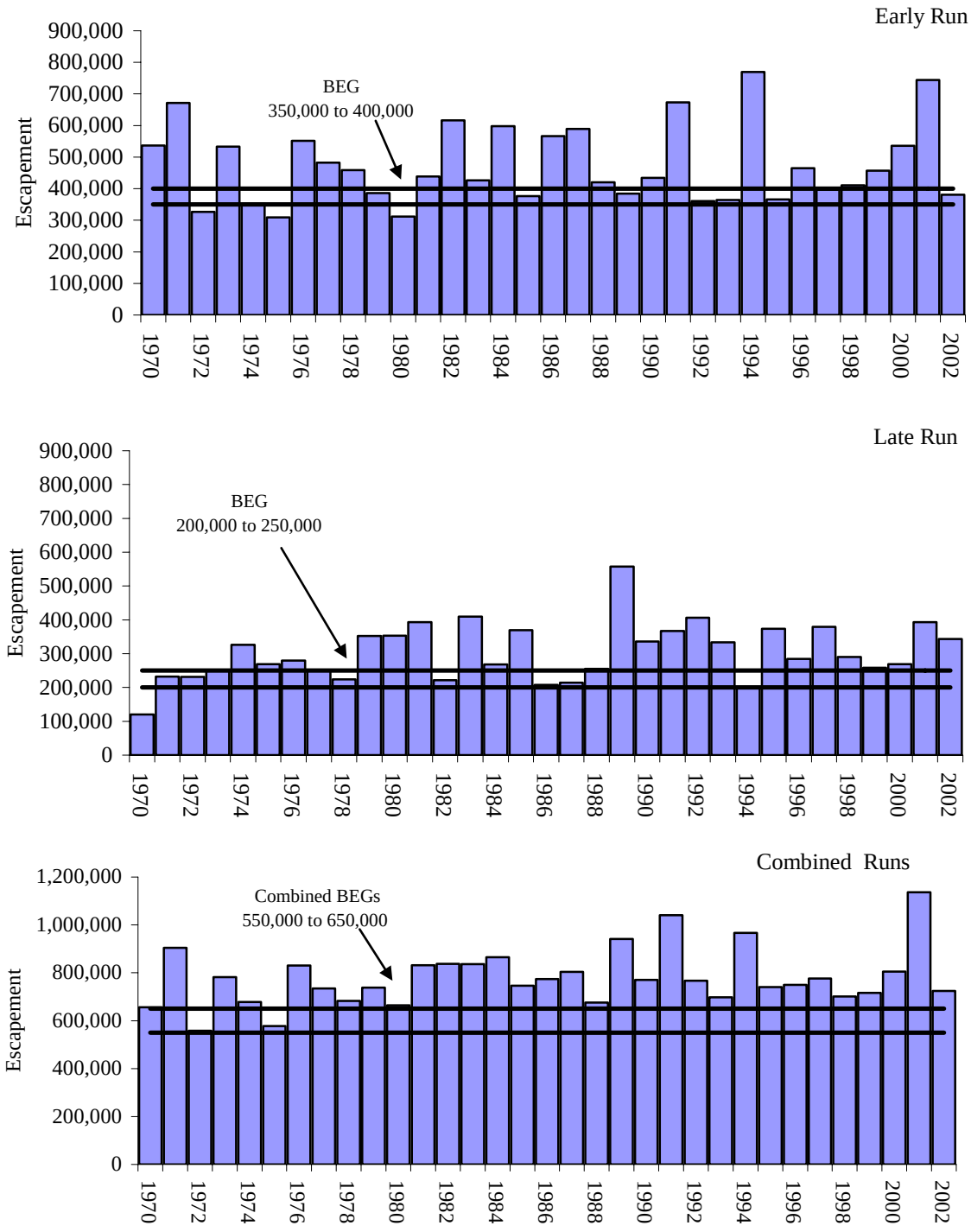

Figure 8.-Chignik River sockeye salmon early, late, and combined run escapements compared to current BEGs, 1970 through 2002.

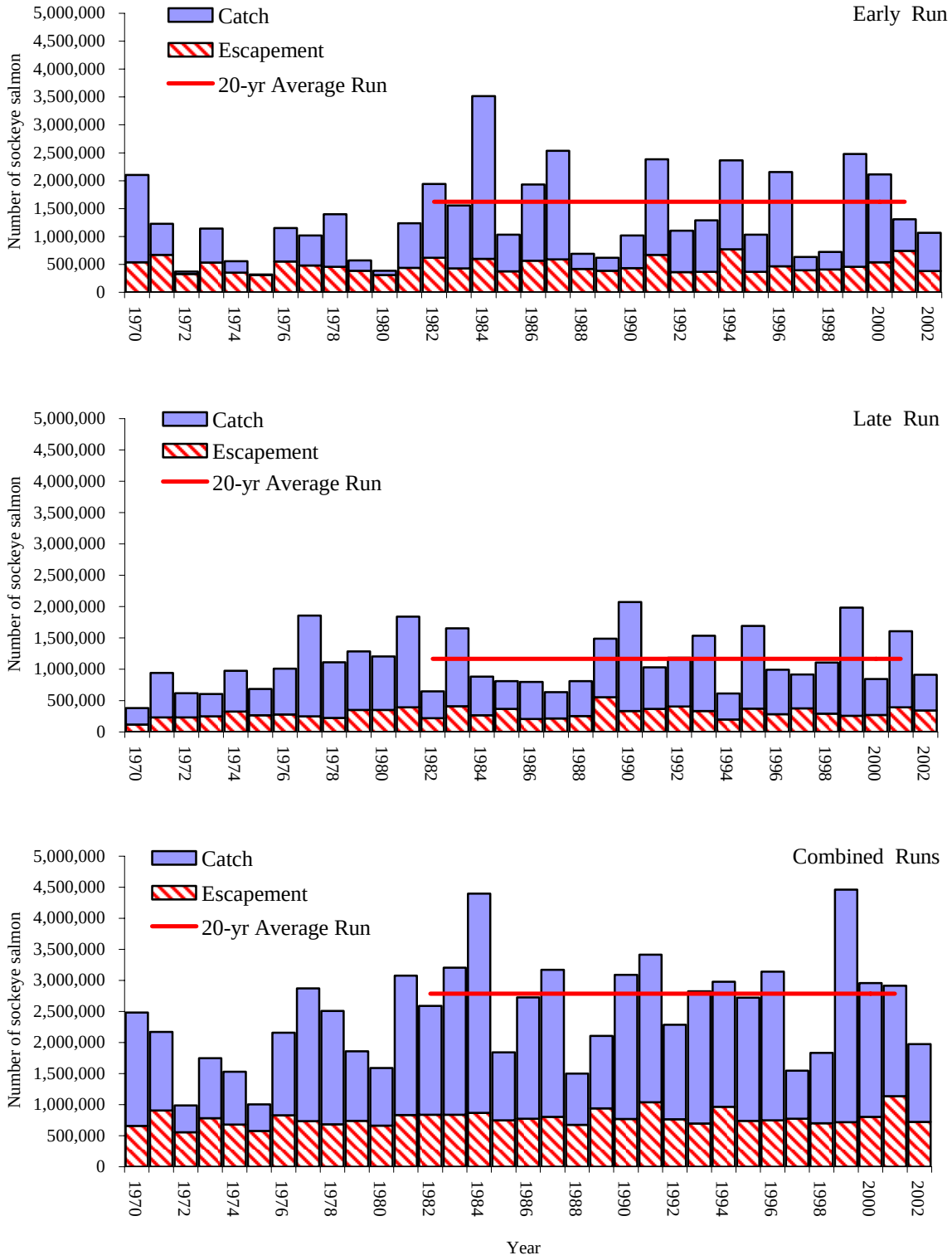

Figure 9.-Total sockeye salmon catch considered Chignik-bound by regulation including CMA commercial catch, home pack, ADF&G's test fishery harvest, and Cape Igvak and SEDM allocations, by year and run, 1970 through 2002.

APPENDIX A. 2002 CHIGNIK SALMON EMERGENCY ORDERS

Appendix A1.-Summary of the 2002 Chignik salmon emergency orders.

E.O. Number	Issued	Effective	Action taken
4-FS-L-01-02	8:00 AM 6/2/2002	8:00 AM 6/3/2002	Opens the Chignik Bay and Central Districts on a limited test fishery basis from 8:00 AM June 3 to 8:00 AM June 14.
4-FS-L-02-02	10:00 PM 6/2/2002	4:00 PM 6/10/2002	Opens the Chignik Bay, Central and Eastern Districts to commercial salmon fishing from 4:00 PM June 10 to 4:00 PM June 12 by the competitive fleet.
4-FS-L-03-02	8:00 AM 6/10/2002	4:00 AM 6/11/2002	Closed Waters Chignik Lagoon markers will move from Humes Point to Mensis Point at 4:00 AM on June 11.
4-FS-L-04-02	6:00 PM 6/11/2002	5:00 PM 6/12/2002	Opens the Chignik Bay, Central and Eastern Districts to commercial salmon fishing from 5:00 PM June 12 to 5:00 PM June 14 by the cooperative fleet. Closed Waters Chignik Lagoon markers will move from Mensis Point to Humes Point at 5:00 PM on June 12.
4-FS-L-05-02	6:15 PM 6/13/2002	5:00 PM 6/14/2002	Extends commercial salmon fishing in the Chignik Bay, Central, and Eastern Districts from 5:00 PM June 14 to 5:00 PM June 15 by the cooperative fleet. Closed Waters Chignik Lagoon markers will move from Humes Point to Mensis Point at 5:00 PM on June 14.
4-FS-L-06-02	6:15 PM 6/14/2002	5:00 PM 6/15/2002	Extends commercial salmon fishing in the Chignik Bay, Central, and Eastern Districts from 5:00 PM June 15 to 5:00 PM June 16 by the cooperative fleet.
4-FS-L-07-02	9:15 AM 6/16/2002	5:00 PM 6/16/2002	Extends commercial salmon fishing in the Chignik Bay, Central, and Eastern Districts from 5:00 PM June 16 to 6:00 AM June 17 by the cooperative fleet. Opens the Chignik Bay, Central and Eastern Districts to commercial salmon fishing from 7:00 AM June 17 to 7:00 AM June 19 by the competitive fleet.
4-FS-L-08-02	6:15 PM 6/18/2002	3:00 PM 6/19/2002	Opens the Chignik Bay, Central and Eastern Districts to commercial salmon fishing from 3:00 PM June 19 to 3:00 PM June 21 by the cooperative fleet.
4-FS-L-09-02	1:15 PM 6/21/2002	3:00 PM 6/21/2002	Extends commercial salmon fishing in the Chignik Bay, Central, and Eastern Districts from 3:00 PM June 19 to 3:00 PM June 23 by the cooperative fleet.
4-FS-L-10-02	1:00 PM 6/23/2002	3:00 PM 6/23/2002	Extends commercial salmon fishing in the Chignik Bay, Central, and Eastern Districts from 3:00 PM June 23 to 3:00 PM June 26 by the cooperative fleet.

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E.O. Number	Issued	Effective	Action taken
4-FS-L-11-02	1:00 PM 6/25/2002	8:00 AM 6/26/2002	Allows commercial salmon fishing licenese holders to subsistence fish for salmon from 8:00 AM to 8:00 PM daily beginning June 26 and ending June 29.
4-FS-L-12-02	1:15 PM 6/26/2002	3:00 PM 6/26/2002	Extends commercial salmon fishing in the Chignik Bay, Central, and Eastern Districts from 3:00 PM June 26 to 3:00 PM June 29 by the cooperative fleet.
4-FS-L-13-02	1:15 PM 6/29/2002	3:00 PM 6/29/2002	Extends commercial salmon fishing in the Chignik Bay, Central, and Eastern Districts from 3:00 PM June 29 to 3:00 PM July 2 by the cooperative fleet.
4-FS-L-14-02	2:15 PM 7/2/2002	3:00 PM 7/2/2002	Extends commercial salmon fishing in the Chignik Bay and Central Districts from 3:00 PM July 2 to 10:00 AM July 5 by the cooperative fleet. Opens the Chignik Bay and Central and Districts to commercial salmon fishing from 11:00 AM July 5 to 11:00 AM July 7 by the competitive fleet.
4-FS-L-15-02	6:15 PM 7/6/2002	12:00 PM 7/7/2002	Opens the Chignik Bay and Central and Districts to commercial salmon fishing from 12:00 PM July 7 to 12:00 PM July 10 by the cooperative fleet.
4-FS-L-16-02	6:00 PM 7/8/2002	12:01 AM 7/12/2002	Opens those waters in the Western and Perryville Districts south of a line drawn from Cape Itki to Coal Cape to Cape Alexander from 12:01 AM July 12 to 12:01 AM July 14 to members of both fleets.
4-FS-L-17-02	8:15 AM 7/10/2002	12:00 PM 7/10/2002	Extends commercial salmon fishing in the Chignik Bay and Central Districts from 12:00 PM July 10 to 12:00 PM July 13 by the cooperative fleet.
4-FS-L-18-02	8:15 AM 7/13/2002	12:00 PM 7/13/2002	Extends commercial salmon fishing in the Chignik Bay and Central Districts from 12:00 PM July 13 to 12:00 PM July 16 by the cooperative fleet.
4-FS-L-19-02	6:00 PM 7/13/2002	12:01 AM 7/14/2002	Extends commercial salmon fishing in those waters in the Western and Perryville Districts south of a line drawn from Cape Itki to Coal Cape to Cape Alexander from 12:01 AM July 12 to 12:01 AM July 14 for members of both fleets.

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E.O. Number	Issued	Effective	Action taken
4-FS-L-20-02	8:15 AM 7/16/2002	12:00 PM 7/16/2002	Extends commercial salmon fishing in the Chignik Bay and Central Districts from 12:00 PM July 16 to 12:00 PM July 18 by the cooperative fleet.
4-FS-L-21-02	12:15 PM 7/17/2002	12:00 PM 7/18/2002	Extends commercial salmon fishing in the Chignik Bay and Central Districts from 12:00 PM July 18 to 10:00 AM July 19 for the cooperative fleet. Opens the Chignik Bay and Central and Districts to commercial salmon fishing from 11:00 AM July 19 to 11:00 AM July 21 by the competitive fleet.
4-FS-L-22-02	6:15 PM 7/20/2002	12:00 PM 7/21/2002	Opens the Chignik Bay and Central and Districts to commercial salmon fishing from 12:00 PM July 21 to 12:00 PM July 24 by the cooperative fleet.
4-FS-L-23-02	11:15 AM 7/24/2002	12:00 PM 7/24/2002	Extends commercial salmon fishing in the Chignik Bay and Central Districts from 12:00 PM July 24 to 12:01 AM July 25 by the cooperative fleet. Opens the Chignik Bay and Central and Districts to commercial salmon fishing from 12:01 AM July 25 to 12:01 AM July 26 by the competitive fleet. Opens the Eastern District and those waters in the Western and Perryville Districts south of a line drawn from Cape Itki to Coal Cape to Cape Alexander from 12:01 AM July 26 to 12:01 AM July 28 to commercial fishing by members of both
4-FS-L-24-02	11:15 AM 7/25/2002	12:01 AM 7/26/2002	Opens the Chignik Bay and Central and Districts to commercial salmon fishing from 12:01 AM July 26 to 5:01 AM July 29 by the cooperative fleet.
4-FS-L-25-02	6:00 PM 7/27/2002	12:01 AM 7/28/2002	Extends commercial salmon fishing in the Eastern District and those waters in the Western and Perryville Districts south of a line drawn from Cape Itki to Coal Cape to Cape Alexander from 12:01 AM July 26 to 12:01 AM July 28 by members of
4-FS-L-26-02	6:15 PM 7/28/2002	5:01 AM 7/29/2002	Extends commercial salmon fishing in the Chignik Bay and Central Districts from 5:01 AM July 29 to 5:01 AM July 31 by the cooperative fleet.

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E.O. Number	Issued	Effective	Action taken
4-FS-L-27-02	6:15 PM 7/30/2002	5:01 AM 7/31/2002	Extends commercial salmon fishing in the Chignik Bay and Central Districts from 5:01 AM July 31 to 7:01 AM August 1 by the cooperative fleet.
4-FS-L-28-02	8:15 AM 7/31/2002	7:01 AM 8/1/2002	Extends commercial salmon fishing in the Chignik Bay and Central Districts from 7:01 AM August 1 to 8:00 AM August 2 by the cooperative fleet. Opens the Chignik Bay and Central and Districts to commercial salmon fishing from 9:00 AM August 2 to 9:00 AM August 4 by the competitive fleet.
4-FS-L-29-02	8:15 AM 8/3/2002	9:00 AM 8/4/2002	Extends commercial salmon fishing in the Chignik Bay and Central Districts from 9:00 AM August 4 to 9:00 AM August 5 by the competitive fleet.
4-FS-L-30-02	12:15 PM 8/4/2002	10:00 AM 8/5/2002	Opens the Chignik Bay and Central and Districts to commercial salmon fishing from 10:00 AM August 5 to 10:00 AM August 8 by the cooperative fleet.
4-FS-L-31-02	6:15 PM 8/7/2002	10:00 AM 8/8/2002	Extends commercial salmon fishing in the Chignik Bay and Central Districts from 10:00 AM August 8 to 10:00 AM August 11 by the cooperative fleet.
4-FS-L-32-02	9:15 PM 8/10/2002	10:00 AM 8/11/2002	Extends commercial salmon fishing in the Chignik Bay and Central Districts from 10:00 AM August 11 to 10:00 AM August 13 by the cooperative fleet.
4-FS-L-33-02	8:00 AM 8/12/2002	10:00 AM 8/13/2002	Extends commercial salmon fishing in the Chignik Bay and Central Districts from 10:00 AM August 13 to 10:00 AM August 15 by the cooperative fleet.
4-FS-L-34-02	8:00 AM 8/14/2002	10:00 AM 8/15/2002	Extends commercial salmon fishing in the Chignik Bay and Central Districts from 10:00 AM August 15 to 10:00 AM August 17 by the cooperative fleet. Opens commercial salmon fishing in those waters of the Western District south of a line drawn from Cape Itki to Coal Cape from 12:01 AM August 16 to 11:59 PM August 17 by members of both fleets.

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E.O. Number	Issued	Effective	Action taken
4-FS-L-35-02	8:00 AM 8/16/2002	10:00 AM 8/17/2002	Extends commercial salmon fishing in the Chignik Bay and Central Districts from 10:00 AM August 17 to 1:00 PM August 19 by the cooperative fleet. Opens the Chignik Bay and Central and Districts to commercial salmon fishing from 2:00 PM August 19 to 2:00 PM August 21 by the competitive fleet.
4-FS-L-36-02	8:00 AM 8/16/2002	10:00 AM 8/17/2002	Extends commercial salmon fishing in the Chignik Bay and Central Districts from 2:00 PM August 21 to 2:00 PM August 23 by the cooperative fleet.
4-FS-L-37-02	1:00 PM 8/22/2002	2:00 PM 8/23/2002	Extends commercial salmon fishing in the Chignik Bay and Central Districts from 2:00 PM August 23 to 10:00 AM August 24 by the cooperative fleet.
4-FS-L-38-02	8:00 AM 8/23/2002	11:00 AM 8/24/2002	Opens the Chignik Bay and Central and Districts to commercial salmon fishing from 11:00 AM August 24 to 11:00 AM August 28 by the cooperative fleet.
4-FS-L-39-02	8:00 AM 8/27/2002	11:00 AM 8/28/2002	Extends commercial salmon fishing in the Chignik Bay and Central Districts from 11:00 AM August 28 to 12:01 AM September 1 by the cooperative fleet.
4-FS-L-40-02	3:00 PM 8/30/2002	12:01 AM 9/1/2002	Extends commercial salmon fishing in the Chignik Bay and Central Districts from 12:01 AM September 1 to 5:00 PM September 4 by the cooperative fleet.
4-FS-L-41-02	3:00 PM 8/30/2002	9:00 AM 9/1/2002	Allows commercial salmon fishing licenese holders to subsistence fish for salmon after 9:00 AM September 1.
4-FS-L-42-02	1:00 PM 9/4/2002	5:00 PM 9/4/2002	Extends commercial salmon fishing in the Chignik Bay and Central Districts from 5:00 PM September 4 to 5:00 PM September 8 by the cooperative fleet.

APPENDIX B. MEMORANDUM RECOMMENDING TARGETING THE LOWER BOUNDS OF THE CHIGNIK SOCKEYE SALMON ESCAPEMENT GOALS DURING THE 2002 SEASON.

Appendix B1.-Memorandum recommending targeting the lower bounds of the Chignik sockeye salmon escapement goals during the 2002 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: April 17, 2002
PHONE: (907) 486-1805
FAX: (907) 486-1841

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

SUBJECT: Chignik Escapement

The purpose of this memorandum is to discuss preliminary data from the Chignik Lake Assessment Project in terms of the health of the sockeye salmon rearing habitat at Chignik.

Sockeye salmon escapements have been well in excess of escapement goals for the past 10 years. In 2000 and 2001, escapement goals were exceeded by 155 and 487 thousand sockeye salmon, respectively:

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
Goal	**350,000 - 400,000**	**200,000 - 250,000**	**550,000 - 650,000**

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Preliminary limnology data from both Black Lake and Chignik Lake in 2000 and 2001 indicate that the forage base for sockeye salmon of the system was extremely taxed. Three lines of evidence suggest that the forage base has been overgrazed in both Black and Chignik Lakes:

1) Zooplankton species composition. *Bosmina* and *Cyclops* dominated the zooplankton and *Daphnia* were nearly absent in both Black and Chignik Lakes. Both of the dominant species are inefficient grazers and are poor transmitters of energy and nutrients through the food web, and are not preferred sockeye salmon forage. Their presence indicates high grazing rates by planktiverous fish.

2) Zooplankton size. The mean size of the available zooplankton is very small and below the elective feeding size threshold of sockeye salmon. This is further evidence that the zooplankton was heavily grazed.

3) Phytoplankton abundance. Chlorophyll *a* levels were extremely high in both lakes in both 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.

It is noteworthy, however, that preliminary stomach content analysis suggests that insects have been a major portion of the diet of rearing sockeye salmon in the Chignik watershed. Also, Chignik Lagoon has been identified as a major rearing area for juvenile sockeye salmon. These caveats may have buffered the magnitude of the effects that overgrazing of the plankton might have had.

Given the above evidence, it is recommended that the low ends of the escapement goals for both runs to Chignik should be targeted as management objectives in 2002.

cc: Lloyd
Campbell
Pappas
Witteveen

APPENDIX C. MINUTES TO THE 2002 CHASM MEETINGS

Appendix C1.-Minutes to the June 4, 2002 CHASM meeting.

Chignik Area Salmon Management (CHASM) Task Force Meeting; 6/4/02
Co-Chairs: Chuck McCallum and George Pappas

Chuck outlines the purpose for CHASM (based on Denby Lloyd's emails) and some general ground rules for meeting format.

Ron Soule- How often will CHASM meet?
No consensus; likely will vary based on needs of fishery management.

Al Anderson- We do we even need to form CHASM and push aside the in-season fishery advisory group formed last year?

Rod Campbell- Explains that CHASM is intended to be more encompassing, has the support of Director Mecum, and is intended to be modeled after some similar fishery groups in SE AK

Task Force Formation
Jim Long (Trident); Tom Simpson (alternate)
Ron Soule (Norquest); Dean Fasnaut (alternate)
Ray Wadsworth (Wild Salmon); Grant (alternate)
Axel Kopun, Jamie Ross (Coop); Ray Erickson, Dan Mershawn (alternates)
Dean Anderson, Jason Alexander (Competitive); Ernie Carlson (alternate)
Subsistence Representatives (3 were discussed, none officially chosen; Al Anderson, Boris Kosbruk, Nick Alec)

Issue of Early Season Commercial Test Fishery
Dale Carlson- Coop seems to have prior, inside agreements with ADFG and traditional guys have been shut out.

Dean Anderson- Traditional fleet should have equal opportunity to participate in any early season test fishery.

Jamie Ross- Coop says motivation behind early season test fishery is market-driven based on discussions during BOF January meeting.

Jason Alexander- Will an ADF&G rep be on all test fish boats?

Rod/George- Likely on boats making traditional test fish sets in the lagoon, but not on any outside test fish boats; will communicate with outside boats via VHF or SSB.

Al Anderson- Stated he has subsistence concern of ADF&G announcing early commercial test fishery without considering local folks needing to put fish up before the first commercial opener.

Axel Kopun- Discussion of 1,000 fish daily harvest early in June ruining the entire first run harvest is nonsense. If traditional guys want to choose 1 or 2 boats and can agree to harvest no more that 1,000 fish daily, then let them participate in the commercial test fishery also. The coop is willing to stand down to allow traditional guys to participate.

Ernie Carlson- Why doesn't ADF&G need money from the test fishery this year? It would solve many problems if the department just kept the money.

Rod Campbell- There is a region-wide surplus in test fishery funds that can cover the money needs in Chignik for this fiscal year. Starting July 1, the department will need to conduct traditional test fisheries to cover budgetary needs.

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Ron Soule- Norquest supports receiving early season fish and is currently ready; no suggestions as to how to equitably distribute fish.

Tom Simpson- Suggests expanding the test fish program to include Perryville and Western Districts during the time of probable pink harvest to more efficiently harvest surplus pinks.

Paul Johnson- Is there something preventing the ADF&G from accepting money from these early season test fisheries?

Rod Campbell- Legislature caps region-wide test fish money; if the department makes more than the cap, considering the current region-wide surplus, any money over the region-wide cap would be transferred to the state general fund.

Frank Grunert- Has the department already set an agreement with the coop to allow coop commercial test fisheries for all of June?

George Pappas- No, there are no guarantees with any commercial test fishery as all is dependant upon escapement.

Frank Grunert- Seems like the department is bending over backwards to accommodate the coop and is purposely excluding the traditional fleet.

Al Anderson- Doesn't see the validity in adding multiple boats to the test fishery; will ruin the traditional test fish data. If department test fishes daily, outside sets will affect catch data in the lagoon. Also, if excess fish are caught in the test fishery, those fish should be given to any subsistence user that needs/wants them, considering customary and traditional harvest methods.

Jason Alexander- Why not alternate both fleets with the traditional test fishery sets?

Rod Campbell- Department is open to traditional fleet coming up with ideas on how to participate; also, the prevailing idea is that any outside sets would only be to estimate fish not to harvest them (Coop has agreed to this). Rod voiced the department's concern about allowing the traditional fleet to participate in a commercial test fishery. The regulations do not give the department the authority to prevent a competitive fisherman from fishing and "loading up" during the test fishery (which is a commercial fishery open to the entire competitive fleet). It is possible to have a competitive boat assigned to do the traditional 7 test fishery sets and have some "rogue" vessels start fishing and the only authority we have is to close the fishery by an in-period EO. It may be possible for the competitive fleet to have some type of 'gentlemen's agreement' to keep the other boats from fishing; the idea may or may not work.

John Jones- Department shouldn't test fish until we get more fish through the weir.

Rod Campbell.- Traditional threshold for starting department test fishery is approximately 20,000 fish escapement.

Aaron Anderson- We need to stop bickering about who gets a few fish here and there and focus on the point of an early season test fishery: to have a good estimate of what is coming around the corner, avoid major buildup in the lagoon, and prevent possible overescapement considering the reduced fishing power of the fleet this year.

Ernie Carlson- Suggests alternating coop and traditional fleet in commercial test fishery and possibly mixing in a traditional department test fishery.

Lowell Suydam- Suggests allowing the entire traditional fleet to open on a commercial test fish basis based on time and area restrictions and alternate with the coop test fishery.

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Al Anderson- What actual info does this new commercial test fishery provide compared to the traditional test fishery?

Rod Campbell/George Pappas- It is an early detection tool to provide a better estimate of what is around the corner.

Break to allow traditional guys to discuss how they might participate in a commercial test fishery

Dean Anderson- Traditional fleet wants an escapement threshold before test fishing begins (suggests 10,000). Traditional fleet has agreed to limit fishing in order to participate in commercial test fishery; suggest alternating between fleets, with the specifics of how the traditional fleet chooses harvesting vessels to be determined later. Suggest only sending test fish boats to outside areas if escapement threshold is met or test fish harvest suggests increased fish presence.

Glenn Suydam- Suggests allowing the coop to test fish, keep their allocation from the catch, and give the remaining fish to the traditional fleet to distribute how they want.

General crowd reaction is NO!

Jamie Ross- Agrees to work with traditional fleet on test fishing; thinks a more equitable balance would be to allow coop to fish 2 days and traditional fleet 1 day, based on allocation.

George Pappas- Department asked for input on how many sets it would take in outside areas to give a good representation of what is actually coming around the corner.

General agreement among the fleet is that six sets spread out over both high and low tides should give an indication of what is moving through the area. A word of caution: some years the cape/outside fisheries were real slow while the lagoon was getting hammered because the run was entering the lagoon right through the middle of Chignik Bay.

Discussion ceased on Commercial Test Fishery; Open up discussion on other topics.

Dean Anderson- Can a coop permit holder fish outside for pinks/chums for himself?

Jamie Ross- Regulations state allocation is only for sockeye, so legally a coop member could fish for other salmon species for themselves. However, the coop addressed this issue by passing a resolution that any coop member fishing for other salmon species will include those fish in the coop kitty and they will not keep them for themselves.

Rod Campbell- A point of clarification: the Department of Law approved the regulations with only sockeye as part of the allocation knowing that the coop bylaws included language to prevent individual coop members from harvesting other species for themselves.

Dean Anderson- Confused about the August 31st date in the regulations (5 AAC 15.359(b)(6)(A)); does this mean a Coop member can fish traditionally after August 31st.

Rod Campbell- NO. The intent of the regulation was to prevent Chignik coop members from fishing in other areas during the majority of the season. Once a permit holder joins the coop, they cannot fish traditionally in Chignik during that year. Also, the allocation does not stop as of August 31st, it continues until the end of the fishing season.

Paul Johnson- If one fleet falls behind on allocation and fish movement slows down, the other group could potentially sit on the beach for extended periods of time?

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George Pappas- Yes. The department will try to avoid this by managing the allocation closely, but it is possible.

Jason Alexander- How does the department plan to manage Western District pinks/chums if the lagoon remains closed for extended periods of time?

George P.- The belief is that the lagoon will be open more often this year, even if it is only open to limited coop boats, therefore limitations to outside districts because of lagoon closures may not be an issue. Also, the department has the authority to open terminal harvest areas for pinks/chums when the jagoon is still closed.

Al Anderson- Concerned with coop purposely harvesting sockeye slowly in the lagoon, sending boats outside for pinks and chums, knowing that they can make up on the sockeye harvest later, when in actuality the coop should be catching up on allocation.

Jamie Ross/Axel Kopun- Coop harvest focus is on sockeye because of markets and finances. Pink/chum fisheries are generally only when sockeye fishing in lagoon is slow. Also, the department has the authority to direct the coop to focus harvesting power in the lagoon if overescapement becomes an issue.

Glenn Suydam- If the situation arises where the coop is behind on allocation and is having trouble keeping fish from overescaping, would it be a problem for coop to stretch a couple seines together to create a barrier.

George Pappas- Yes, it would be a problem. A barrier seine will not occur. If more fishing power is needed, the traditional fleet would be called upon regardless of the allocation.

Dale Carlson- How will the first opener occur?

George Pappas- Department felt that a wide open flare opener would be likely; the department currently does not have an estimate of the fishing power of each fleet.

Jamie Ross- Coop fleet is willing to allow competitive fleet to fish first (12-48 hours), especially if coop will be participating in an early season test fishery. Goal of coop is to fish slowly every day.

Dale Carlson- Would like to see both fleets fish together to see what each can do.

Paul Johnson- Would also like to see both groups fish together to prevent possible overescapement.

Dan Mershawn- Doesn't think both fleets should fish together because you create a race for fish and that is not the goal of the coop (decrease quality when race for fish).

Ron Soule- Prefer a slow steady stream of fish if we know there is an early buildup. If we need to wait for 40,000 through the weir before opening, the management plan may need to be modified in order to address the issue of buildup and early overescapement.

Tom Simpson- Trident position would likely change if/when they strike a deal with the coop; currently they have not come to an agreement.

Rachel Hinderer- Advocates keeping groups separate for harvesting based on each fleets harvesting strategy; suggests having the coop go first with a department mandated daily harvest cap.

George Pappas- What does the fleet think of the strategy of starting together to gauge each fleet, then work toward a slow steady harvest?

Jamie Ross- Feels the strategy for the first opener should be based on fish buildup and data from the test fishery.

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Glenn Suydam- Suggests using a sliding scale to allow additional daily harvest in commercial test fishery based on previous day's harvest to address buildup issue or early overescapement.

*Break to reconvene with entire CHASM Task Force to reach a consensus on specifics of how to conduct an early season test fishery.

Dean Anderson- Traditional fleet feels there should be a minimum threshold of 5,000 fish through the weir before any test fishing.

Jamie Ross- The crux of the issue is how to equitably allow both fleets a crack at early season fish; based on the 40,000 escapement number in regulation, it is a quantum leap for the department to open the fishery before that escapement through the weir.

Jason Alexander- What exactly can we expect in the form of a commercial test fishery?

George Pappas- Traditional Lagoon test fish sets with some outside activity to estimate what is coming around the corner.

Dean Anderson- We shouldn't start test fishing in Hook Bay or beyond until lagoon test fishery indicates significant fish presence.

Axel Kopun/Jamie Ross- Both agree; fishing in Hook Bay should only occur later.

Jason Alexander- Is it more important to 'complete' the seven traditional test fish sets or to determine Lagoon buildup? (i.e. can we end test fishing if not catching much?)

Dean Anderson- Test fishing has not occurred on back-to-back days in the Lagoon.

Jamie Ross- Suggests test fishery only keeps 500 fish up to 5,000 fish escapement through the weir.

George Pappas- Suggests 600 fish for a scale sample.

All task force agrees.

Dean Anderson- Suggests to stand down on test fishing for a day if few fish are being caught. Also, questions why test fishing is done at high tide; if you want to know what is in the Lagoon, then make sets at low tide.

Jamie Ross- Suggests test fishing everyday, perhaps fishing on different tide stages.

George Pappas- Interested in continuing historic test fish data set and possible adding sets at other locations or during different stages of the tide.

Dean Anderson/Jamie Ross- Addressing the issue of fishing frequency: task force agrees that coop can fish two days and the traditional fleet will fish one day. Coop will get the first two test fish days, giving the traditional fleet an opportunity to decide who will harvest for that fleet.

George Pappas- The first two test fishery harvests go to Norquest, the third goes to Trident, then additional harvest will be alternated among available processors in the area. Department plans to test fish tomorrow in the lagoon with the coop; additional test fisheries will be dependent on harvest results.

*Meeting adjourned approximately 1930.

Appendix C2.-Minutes to the July 18, 2002 CHASM meeting.

CHASM Task Force meeting notes, 7/18/02

Chuck McCallum calls the meeting to order at 1000; notes that the task force members present include:

Chuck McCallum
George Pappas
Jason Alexander
Jamie Ross
Axel Kopun
Ron Soule
Jim Long
Ray Wadsworth
Virginia Alec

ADF&G Test Fishery is first topic of discussion

Chuck McCallum- Explains that CSA (Chignik Seiners Association) sent a letter to ADF&G outlining three goals for test fishery (estimate buildup, obtain scale samples, provide funding) recommending ADF&G organize with the coop to catch the necessary fish to provide for ADF&G funding needs; goals 1 and 2 above are no longer applicable with the coop style of fishing, but ADF&G still needs the test fish money. The coop has agreed to fish for free because this is the most efficient means to harvest the least amount of fish possible to obtain the needed ADF&G funds.

Jason Alexander- How will test fishing work next year if there is no coop?

Chuck McCallum- Clarifies that CSA test fish recommendation is to fish this year in July/August, so fishing next year is not an issue.

Jason Alexander- What processor will get the test fish?

George Pappas- Understand that CSA recommends that the least amount of fish be harvested form the run to provide for the test fish program. by taking advantage of the coop's offer to test fish for ADF&G. This will be accomplished because ADF&G will be able to load up on fish quickly and sell fish to the highest price processor.

Jamie Ross- Reminded the ADF&G that the coop will fish for free, therefore we will need less fish to obtain our $40,000 budget need.

Chuck McCallum- Clarified that CSA was not recommending a specific processor rather suggested that ADF&G use any processor that offered some acceptable minimum price to maximize profits.

Al Anderson- ADF&G can get first two goals of test fishery under new management scheme, therefore now ADF&G just needs the money; subsistence is a casualty of the new management scheme.

Virginia Alec- Thought the 4 days of 12 hour subsistence openings during the commercial fishery was good, but it would be better if that opportunity were earlier in the year because it is better conditions for drying/smoking fish (i.e. less flies).

Axel Kopun- Suggested altering the subsistence regulations to some set date to allow subsistence fishing later, like June 12.

Al Anderson and Virginia Alec- Both were opposed to this idea because of the variable timing in which the run arrives.

Denby Lloyd- Thinks we all want the same thing as far as subsistence fishing needs and opportunity early in the season. This is not the forum to decide how to handle subsistence needs and earlier commercial

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openings; suggests that anyone could submit a proposal for discussion before the BOF this fall. We should refocus our discussion on conflicting desires of coop early market fish and subsistence availability for fish to hang early in the season.

Jamie Ross- ADF&G has the ability to limit coop harvest early to insure subsistence fish availability.

Al Anderson- ADF&G has always checked with the Lagoon fishers to see how subsistence sets are going and therefore should continue this practice and limit the coop accordingly.

Jamie Ross- It might be helpful for subsistence and competitive fleet planning purposes for ADF&G to provide an estimate of coop fishing time based on average harvest rates.

George Pappas- That is problematic because of variability in run and harvest; currently ADF&G is releasing harvest numbers and allocation percentages and allowing people to decide what works for their plans.

Virginia Alec- Concerned with so many immature sockeye early this season; they all seemed to be males. How will this affect future runs?

George Pappas- Recognize that there is a high percentage of age 1.2 fish this year, but they are still viable reproducing fish.

Denby Lloyd- Good survival of age 1.2 fish sometimes indicates the 1.3 age class will be strong next year because of good ocean survival.

Al Anderson- The point is that smaller fish won't reproduce as much and ADF&G should alter escapement goals to account for this.

Denby Lloyd- The effect on returns in 5 years is diluted if 1.2 age composition fluctuates between 10-30% because each year the adult return has multiple brood years contributing to the return. Also, this particular variable has not had significant impacts on adult returns elsewhere based on previous research (Bristol Bay example).

Chuck McCallum- If ADF&G did adjust escapement goals this year because of fish size, they would effectively managing escapement for the number of eggs entering the system and not the number of fish, which is not necessary.

Gene Anderson- What about when we are fishing outside and we fill the seine with gilled small fish?

Chuck McCallum- This actually clouds the discussion because they are two different issues; outside gilled fish are young fish from many different areas.

Denby Lloyd- We currently have an immature test fishery in Sand Point, which is logistically possible because of the proximity to Sand Point. A proposal for a similar program did not pass the BOF this year; currently industry (processors) report to ADF&G if the fleet is catching many small fish. If the fleet thinks that immature catch is or becomes a problem, feel free to submit a proposal to the BOF.

Ernie Carlson- What about the issue of all small fish being males; is this true?

Mike Daigneault- A cursory look at the scale sampling logbook for sex ratio of small fish indicates the male:female ratio is probably close to 1:1; this could be easily quantified if necessary.

Virginia Alec- All the small fish we put up in the smoker were males.

Jamie Ross- Why don't we count jacks through the weir; all other areas count jacks (like on the North side)?

-continued-

Denby Lloyd- Other managers have specific reasons for counting jacks that might not apply in Chignik (Bear River).

George Pappas- Our current camera configuration is not conducive to counting jacks.

Topic Changed to Escapement Issue

Jamie Ross- Asks George for escapement and catch numbers to date.

George Pappas- Provides information, explaining our daily escapement and how it compares to our escapement goals.

John Jones- Why haven't the competitive guys been fishing yet if we are overescaping the system? Coop has been unlimited fishing for 7-8 days and you are still getting 7-10 thousand fish daily.

Denby Lloyd- Based on current calculations, we are not really overescaping the system. We are approximately 2 days ahead of escapement goals and not 5-6 as you suggest; we are only 17,000 fish ahead on escapement and this is as close as this fishery has been managed in most recent years.

John Jones- ADF&G seems to keep changing numbers related to overescapement; what happens when you get your July escapement goals, are the competitive guys going to fish or is ADF&G going to keep letting fish up the river?

Denby Lloyd- We are approaching a time period in July where we need 8-10 thousand sockeye daily plus we have 12 days left in the month to make up the 17,000 fish we are ahead. Therefore, we are in good shape for hitting 195,000 late-run fish by July 31. ADF&G said at the BOF it will fish both fleets if overescapement is a concern, but currently it is not an issue. Does this group want both fleets on the water, regardless of escapement? This is an item for discussion.

Gene Anderson- Doesn't think both fleets should fish together. With the pace of the run, both fleets fishing would catch all the available fish for a while and then both fleets would have to sit on the beach for two weeks to allow for escapement. The current steady fishery is OK.

Jason Alexander- hasn't seen large volumes of real small fish out west in 8-10 years. Last year's late run was stronger in August than July. How does ADF&G plan to stop fish with one fleet fishing if average daily escapement goal is less that 2,000 fish?

Denby Lloyd- ADF&G will fish both fleets if necessary to protect escapement.

Ernie Carlson- What does the ADF&G consider as overescapement? What threshold number of fish will the department use to fish both fleets?

Denby Lloyd- What would each of you consider as overescapement?

John Jones- 5 fish.

Ernie Carlson- We aren't the biologists, ADF&G is.

Denby Lloyd- It is impossible to set a hard number based on all the variables and daily escapement goals, but the department starts discussing possibilities when we get double daily escapement for multiple days; for August, this means that 3,000 fish daily escapement for multiple days will start discussion of opening both fleets.

Jamie Ross- Introduces the possibility of changing the Mensis Point markers as this would allow the coop the opportunity to harvest fish more efficiently.

-continued-

Denby Lloyd- Is the marker change really necessary?

Ernie Carlson- How long have the markers been there, 50 years? Why change them now?

George Pappas- Poll of CHASM members resulted in no consensus on the marker issue.

Jamie Ross- BOF intent of coop was to catch fish more efficiently and markers would help coop do this. Many people are just throwing up roadblocks to keep the coop from attaining allocation and making the need to fish both fleets.

Maury Jones- Current management is killing outside fishermen. The marker change will hurt outside guys more.

Al Anderson- We have seen enough change for one year. We can discuss the markers over the winter.

Paul Johnson- Instituting a marker change with no guarantee of future coop doesn't make sense.

Virginia Alec- Some customarily take subsistence fish just above the Mensis Point markers so a marker change would affect subsistence fishing. How many fish that escape the weir fall to predation and subsistence?

George Pappas- Subsistence harvest numbers could be obtained annually by contacting the Subsistence Division. Predation, however, would be difficult to quantify.

Denby Lloyd- Based on current comments, we should put marker change issue to rest for this year, but feel free to propose change to BOF.

Ernie Carlson- Agrees to the death of marker issue. We need to discuss in more depth the issue of outside fishermen and how to change management to benefit them with current coop. Maybe extra fishing time should be given outside for competitive guys versus lagoon openings?

George Pappas- Are we suggesting some additional registration for the competitive fleet for inside and outside?

Axel Kopun- Everyone makes choices on where to fish. History shows plenty of 24-48 hour outside openers.

Al Anderson- My hackles go up when we mention registration for inside/outside. Many guys do both (start opener in the lagoon then move outside).

Ernie Carlson- Registration is like another allocation within the competitive fleet allocation.

Denby Lloyd- Perhaps we could allow competitive fleet outside hours after a lagoon opener?

Ernie Carlson- Some guys don't fish outside so that would purposely be hurting them.

Jason Alexander- Agree with Ernie, current management is hurting the outside guys. Historically, many outside guys do better that inside guys. He suggests the need for a specific August trigger for overescapement for fishing both fleets.

Al Anderson- Thinks Denby was put on the spot earlier to have to set the specific 3,000 fish number as August overescapement.

Axel Kopun- Historically, ADF&G has escaped many fish in early August and then fished hard to stop fish the rest of the month. Based on that practice, we would be considered overescaped.

-continued-

Denby Lloyd- Historically, we needed to get fish up river because there was only one fleet that worked as an all or nothing catch/escapement tool. The department will sit with research to establish some realistic daily August escapement objectives.

Jason Alexander- How late do processors plan to buy fish? Allocation % in late season may be determined by markets and not escapement.

Jim Long- Decision is market and volume driven. 48 hours of fishing time weekly has been difficult on Trident.

Ron Soule- We do not have a set date, but as always, it is a market decision.

Ray Wadsworth- he was late getting started, therefore he plans to stay late; will lobby for a few fish daily

Jim Long- Will New West buy fish from the competitive fleet?

Ray Wadsworth- Our processing method requires live fish and to date, only the coop has changed harvest methods to provide this. We would consider buying fish if competitive guys provide live fish.

Jason Alexander- Competitive fleet may be without a market in late August, therefore coop fleet will be able to make up their allocation in late season.

Al Anderson- Would the department manage ahead for the competitive fleet based on market conditions and allow the coop to catch up later?

George Pappas- Actual days to manage ahead would be difficult to determine, based on late season subsistence needs and unknown fish returning in late August and September.

Axel Kopun- Managing based on assumptions that certain fleets will be fishing is not sound. Typically, September has had few openings based on subsistence needs and small number of fish returning.

Chuck McCallum- What about the possibility of full 48 hour openings versus 4 12-hour openings weekly in September?

George Pappas- Regulations state that after Sept. 15, no more than 48 hrs. fishing time per week separated into up to 4 fishing periods.

Jim Long- Previous 12-hour openings have been difficult based on good tides and daylight hours.

Ernie Carlson- Typically most of the fleet is gone by late August, so there is always a small fleet fishing in September.

George Pappas- Department is focusing on keeping allocations close as possible as the end of the season approaches because each percent represents more fish.

Aaron Anderson - The competitive fleet has the ability to establish its own late season market.

Ernie Carlson- No floater will come late season based on markets.

Axel Kopun- If coop is closed and competitive fleet is open, a coop tender is available to the competitive fleet to deliver live fish to the New West if quality standards are met.

Al Anderson- What's the catch?

-continued-

Axel Kopun- Thought the realization of a coop fishery existing all season would have sunk in by now. Competitive guys can make there own decisions, there are market possibilities available if they want to take advantage of them.

Al Anderson- if competitive fleet is below allocation, the coop will be waving its flag saying it provided a market to competitive fleet but they didn't use it.

Paul Johnson- What are plans for outside openers?

George Pappas- Likely we will have a 48 hour opening out west approximately 36 hours after tomorrow's lagoon opener.

Axel Kopun- What is the possibility of opening out west the same time as the lagoon for the competitive guys? Therefore, inside and outside guys can choose where to go and you don't penalize the inside guys on outside only openings.

Aaron Anderson- Can't we manage outside based on sockeye?

George Pappas- Management is based on pinks and chums. Likely will have less sockeye harvested area-wide because of less effort outside on traveling sockeye.

Al Anderson- Department needs to focus on giving each fleet equal treatment.

George Pappas- Agree. We are trying to do this. He has asked both fleets their opinion on many issues and coop usually responds with "Give the competitive guys what they want".

Jason Alexander- Concurrent openings for competitive fleet in lagoon and outside will result in limited effort outside. The competitive fleet would likely fish for sockeye versus pinks and chums.

Al Anderson- Separate outside openings hurts competitive guys who don't fish outside.

Aaron Anderson - People choose where they fish.

Denby Lloyd- Did a test fish method for this year ever get decided?

Al Anderson- Department should get scales and data from coop catch and get no money. The department never had that money.

Denby Lloyd- Test fish money is necessary for Chignik budget so we will get our test fish funding for the year. The question still remains on how: do we do it cheaper with coop (free) or put $2,000 charter fees into pockets of a few competitive guys? Also, do we sell to the highest price or give each processor some fish?

Axel Kopun- The fish are available now, tell is where to bring them and the money can be ADF&G's.

Jim Long- Trident will pay competitive price for test fish.

Chuck McCallum- There doesn't seem to be question of coop fishing for test fish rather which processor to deliver fish.

Aaron Anderson - They are ADF&G's fish, they need to decide where to deliver fish.

Al Anderson- They are not ADF&G's fish, they are fisherman's. ADF&G is screwing the fisherman by test fishing. ADF&G needs to do its job and lobby the legislature for more money.

Axel Kopun- Fish and money are available now. The coop could wire money today to ADF&G.

-continued-

Denby Lloyd- Clarification: there is no concern with coop test fishing versus $2,000 charter fees for a few competitive guys?

Aaron Anderson - Coop for free; money to a few competitive guys is not fair.

Paul Johnson- Agree.

Denby Lloyd- So the question is how to split fish among processors. Norquest and Trident want them, does New West want them above and beyond current deliveries?

Ray Wadsworth- Unsure, need to talk with processing folks.

Jason Alexander- Didn't Norquest get first two test fish deliveries? Trident is due for next delivery.

Al Anderson- Trident should get bulk of next test fish delivery.

Axel Kopun- Recalls that Norquest took early season test fish and processed them for free for individuals under the disguise of subsistence, therefore Norquest lost money on those fish. Also, we need to make sure the department gets the same price as the coop for fish.

Jim Long- Trident will pay a competitive price.

Chuck McCallum- Agree it is the department's choice; the fleet cannot determine where to deliver fish.

George Pappas- We will discuss price with each processor and determine how many fish could be harvested and delivered to each.

Ernie Carlson- When and how will the department catch and deliver fish? A few thousand fish daily is not useful to the processors.

Jim Long- Need substantial deliveries to make opening the plant beneficial; it takes 6 hours to clean up once a fish enters the plant.

Axel Kopun- Suggests test fish delivery either just before or after a competitive opening as both plants will be fired up and don't need to open up just for test fish.

Jim Long and Ron Soule- Both agree this is good idea.

Meeting adjourned at 1240

APPENDIX D. COMMERCIAL SALMON FISHERY EFFORT

Appendix D1.-Cooperative fleet commercial salmon fishing effort and catch day in the Chignik Management Area, 2002. These data include fish retained for home pack but do not include ADF&G's test fishery harvest.

	Effort		Chinook		Sockeye		Coho		Pink		Chum		Total	
Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
6/3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6/4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6/5	1	1	0	0	320	2,528	0	0	0	0	0	0	320	2,528
6/6	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6/7	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6/8	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6/9	1	2	0	0	1,050	6,847	0	0	0	0	0	0	1,050	6,847
6/10	Fishery was open for the competitive fleet only													
6/11	Fishery was open for the competitive fleet only													
6/12	12	28	0	0	6,065	37,637	0	0	0	0	0	0	6,065	37,637
6/13	17	54	0	0	33,687	179,140	0	0	0	0	0	0	33,687	179,140
6/14	17	58	2	14	36,637	262,170	0	0	0	0	0	0	36,639	262,184
6/15	17	60	0	0	50,139	356,896	0	0	0	0	0	0	50,139	356,896
6/16	17	51	0	0	39,658	261,865	0	0	0	0	0	0	39,658	261,865
6/17	4	4	0	0	1,152	7,981	0	0	0	0	0	0	1,152	7,981
6/18	Fishery was open for the competitive fleet only													
6/19	6	8	1	13	4,553	34,313	0	0	0	0	0	0	4,554	34,326
6/20	5	8	0	0	4,215	29,014	0	0	0	0	0	0	4,215	29,014
6/21	4	4	0	0	6,438	43,701	0	0	0	0	0	0	6,438	43,701
6/22	4	4	0	0	3,188	22,381	0	0	0	0	0	0	3,188	22,381
6/23	7	13	0	0	11,620	72,546	0	0	0	0	0	0	11,620	72,546
6/24	4	4	0	0	2,426	17,602	0	0	0	0	0	0	2,426	17,602
6/25	9	16	8	110	10,252	71,864	0	0	0	0	0	0	10,260	71,974
6/26	2	2	1	10	1,993	13,831	0	0	0	0	0	0	1,994	13,841
6/27	2	2	0	0	1,000	6,975	0	0	0	0	0	0	1,000	6,975
6/28	8	15	27	183	10,009	68,682	0	0	0	0	0	0	10,036	68,865
6/29	7	13	0	0	4,629	30,053	0	0	0	0	0	0	4,629	30,053
6/30	12	26	4	29	18,350	127,540	0	0	0	0	0	0	18,354	127,569

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	Effort		Chinook		Sockeye		Coho		Pink		Chum		Total	
Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
7/1	12	30	20	137	13,033	90,133	0	0	0	0	0	0	13,053	90,270
7/2	15	44	9	119	17,136	122,600	0	0	0	0	0	0	17,145	122,719
7/3	16	45	54	360	19,863	144,578	0	0	0	0	0	0	19,917	144,938
7/4	17	57	14	140	25,197	182,990	0	0	0	0	0	0	25,211	183,130
7/5	13	24	29	221	9,944	71,163	0	0	0	0	0	0	9,973	71,384
7/6	Fishery was open for the competitive fleet only													
7/7	14	22	25	255	7,138	51,728	0	0	0	0	0	0	7,163	51,983
7/8	15	46	73	679	14,828	106,534	0	0	0	0	0	0	14,901	107,213
7/9	13	45	78	891	14,824	110,255	0	0	0	0	0	0	14,902	111,146
7/10	12	30	19	231	13,173	99,277	0	0	0	0	57	448	13,249	99,956
7/11	15	35	4	105	18,816	141,374	0	0	0	0	1	10	18,821	141,489
7/12	13	29	50	434	16,273	117,983	0	0	0	0	2	17	16,325	118,434
7/13	16	37	66	593	19,378	140,134	0	0	0	0	0	0	19,444	140,727
7/14	14	28	18	214	13,266	96,581	0	0	1	5	2	18	13,287	96,818
7/15	16	46	32	302	21,090	151,224	0	0	2	10	17	130	21,141	151,666
7/16	15	58	59	786	22,839	163,816	0	0	0	0	2	13	22,900	164,615
7/17	15	44	31	312	22,054	159,772	0	0	0	0	0	0	22,085	160,084
7/18	16	46	14	212	19,361	136,602	0	0	0	0	0	0	19,375	136,814
7/19	13	24	47	602	11,701	81,841	0	0	0	0	0	0	11,748	82,443
7/20	Fishery was open for the competitive fleet only													
7/21	12	18	7	113	7,613	50,268	0	0	0	0	0	0	7,620	50,381
7/22	14	30	5	82	14,075	95,275	0	0	0	0	0	0	14,080	95,357
7/23	5	7	3	64	5,370	36,083	0	0	0	0	0	0	5,373	36,147
7/24	7	9	1	11	4,683	31,159	0	0	0	0	0	0	4,684	31,170
7/25	Fishery was open for the competitive fleet only													
7/26	13	31	13	125	15,711	102,895	0	0	152	717	6	44	15,882	103,781
7/27	13	31	8	132	9,687	63,273	0	0	49	149	94	749	9,838	64,303
7/28	12	30	1	22	10,972	71,693	0	0	95	297	0	0	11,068	72,012
7/29	9	12	9	183	4,271	29,489	0	0	0	0	0	0	4,280	29,672
7/30	14	26	39	384	9,129	57,875	2	17	199	615	230	1,933	9,599	60,824
7/31	13	25	0	0	7,880	50,639	0	0	12	37	29	204	7,921	50,880

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	Effort		Chinook		Sockeye		Coho		Pink		Chum		Total	
Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
8/1	13	27	5	86	6,757	44,730	0	0	377	990	125	934	7,264	46,740
8/2	4	5	22	211	1,289	9,109	0	0	199	572	0	0	1,510	9,892
8/3	Fishery was open for the competitive fleet only													
8/4	Fishery was open for the competitive fleet only													
8/5	11	20	0	0	3,376	22,085	0	0	411	1,067	144	1,108	3,931	24,260
8/6	12	28	1	6	5,118	36,363	0	0	719	1,973	61	387	5,899	38,729
8/7	12	23	0	0	4,951	33,577	2	15	338	987	37	267	5,328	34,846
8/8	10	19	2	15	3,749	24,732	0	0	327	957	83	589	4,161	26,293
8/9	10	21	0	0	3,618	24,488	0	0	390	1,083	71	514	4,079	26,085
8/10	11	20	0	0	4,630	30,726	13	96	558	1,614	208	1,538	5,409	33,974
8/11	10	26	1	12	2,677	19,422	0	0	443	1,221	186	1,396	3,307	22,051
8/12	13	49	0	0	4,183	30,340	0	0	426	1,301	81	594	4,690	32,235
8/13	14	48	0	0	5,140	34,635	0	0	290	893	136	1,086	5,566	36,614
8/14	13	44	0	0	4,636	31,948	0	0	267	826	103	817	5,006	33,591
8/15	13	39	0	0	3,826	25,313	0	0	79	248	92	654	3,997	26,215
8/16	12	40	2	16	3,540	24,417	16	115	165	545	24	172	3,747	25,265
8/17	11	29	1	6	2,632	17,608	29	207	210	615	70	526	2,942	18,962
8/18	11	36	0	0	2,860	17,268	48	362	189	617	47	312	3,144	18,559
8/19	12	23	1	13	2,354	11,521	35	279	76	254	80	641	2,546	12,708
8/20	Fishery was open for the competitive fleet only													
8/21	Fishery was open for the competitive fleet only													
8/22	Fishery was open for the competitive fleet only													
8/23	Fishery was open for the competitive fleet only													
8/24	7	16	0	0	1,374	8,955	173	1,362	104	306	25	192	1,676	10,815
8/25	9	18	0	0	1,341	8,769	217	1,727	108	249	15	129	1,681	10,874
8/26	7	19	1	12	1,747	11,425	364	2,897	116	264	27	220	2,255	14,818
8/27	6	19	0	0	1,638	10,632	423	3,370	140	327	13	100	2,214	14,429
8/28	6	14	1	10	1,793	11,020	482	4,021	92	230	16	129	2,384	15,410
8/29	6	22	0	0	2,308	14,491	1,026	8,270	92	209	21	153	3,447	23,123
8/30	6	13	0	0	2,805	17,006	1,158	8,738	84	210	20	163	4,067	26,117
8/31	5	25	0	0	3,152	18,347	1,787	13,732	35	83	20	146	4,994	32,308

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	Effort		Chinook		Sockeye		Coho		Pink		Chum		Total	
Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
9/1	2	9	0	0	1,151	6,985	721	5,639	11	35	8	58	1,891	12,717
9/2	2	7	0	0	758	4,627	435	3,501	15	46	9	69	1,217	8,243
9/3	2	4	0	0	300	1,701	142	1,055	1	3	1	8	444	2,767
9/4	2	6	0	0	759	4,486	296	2,129	20	60	13	99	1,088	6,774
9/5	2	3	0	0	280	1,755	267	2,109	6	19	1	7	554	3,890
9/6	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9/7	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9/8	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	22	1,954	808	8,455	721,428	4,969,281	7,636	59,641	6,798	19,634	2,177	16,574	738,847	5,073,585

Appendix D2.-Competitive fleet commercial salmon fishing effort and catch day in the Chignik Management Area, 2002. These data include fish retained for home pack but do not include ADF&G's test fishery harvest.

	Effort		Chinook		Sockeye		Coho		Pink		Chum		Total	
Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
6/3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6/4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6/5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6/6	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6/7	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6/8	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6/9	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6/10	16	16	0	0	16,145	107,425	0	0	0	0	1	8	16,146	107,433
6/11	20	26	0	0	29,897	204,466	0	0	0	0	548	3,959	30,445	208,425
6/12	20	20	4	56	22,969	160,145	8	75	0	0	157	1,259	23,138	161,535
6/13	Fishery was open for the cooperative fleet only													
6/14	Fishery was open for the cooperative fleet only													
6/15	Fishery was open for the cooperative fleet only													
6/16	Fishery was open for the cooperative fleet only													
6/17	20	23	14	96	34,257	225,415	0	0	2	4	348	2,725	34,621	228,240
6/18	22	25	12	199	38,587	264,335	0	0	4	11	759	6,025	39,362	270,570
6/19	16	16	0	0	16,673	118,004	0	0	0	0	136	1,200	16,809	119,204
6/20	Fishery was open for the cooperative fleet only													
6/21	Fishery was open for the cooperative fleet only													
6/22	Fishery was open for the cooperative fleet only													
6/23	Fishery was open for the cooperative fleet only													
6/24	Fishery was open for the cooperative fleet only													
6/25	Fishery was open for the cooperative fleet only													
6/26	Fishery was open for the cooperative fleet only													
6/27	Fishery was open for the cooperative fleet only													
6/28	Fishery was open for the cooperative fleet only													
6/29	Fishery was open for the cooperative fleet only													
6/30	Fishery was open for the cooperative fleet only													

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	Effort		Chinook		Sockeye		Coho		Pink		Chum		Total	
Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
7/1	Fishery was open for the cooperative fleet only													
7/2	Fishery was open for the cooperative fleet only													
7/3	Fishery was open for the cooperative fleet only													
7/4	Fishery was open for the cooperative fleet only													
7/5	22	22	26	405	14,958	106,016	1	9	86	315	468	3,431	15,539	110,176
7/6	19	22	15	165	21,531	157,712	0	0	125	466	654	4,923	22,325	163,266
7/7	19	19	21	309	17,499	128,231	3	21	182	702	389	2,811	18,094	132,074
7/8	Fishery was open for the cooperative fleet only													
7/9	Fishery was open for the cooperative fleet only													
7/10	Fishery was open for the cooperative fleet only													
7/11	Fishery was open for the cooperative fleet only													
7/12	8	8	72	646	1,326	8,212	3,044	21,694	2,062	7,155	5,559	41,008	12,063	78,715
7/13	9	9	70	651	1,847	11,988	3,296	24,537	3,747	12,115	9,392	64,917	18,352	114,208
7/14	9	9	99	915	3,334	22,646	5,727	41,703	6,157	19,720	11,137	82,258	26,454	167,242
7/15	Fishery was open for the cooperative fleet only													
7/16	Fishery was open for the cooperative fleet only													
7/17	Fishery was open for the cooperative fleet only													
7/18	Fishery was open for the cooperative fleet only													
7/19	20	21	6	74	18,053	127,566	283	2,036	855	2,801	990	7,399	20,187	139,876
7/20	21	24	13	160	19,108	133,786	241	1,738	1,504	4,570	1,404	10,907	22,270	151,161
7/21	21	21	0	0	10,089	74,251	108	897	270	846	214	1,565	10,681	77,559
7/22	Fishery was open for the cooperative fleet only													
7/23	Fishery was open for the cooperative fleet only													
7/24	Fishery was open for the cooperative fleet only													
7/25	4	4	2	23	5,722	38,627	0	0	66	177	18	155	5,808	38,982
7/26	7	7	58	420	748	4,453	5,758	39,156	8,615	25,664	3,958	30,312	19,137	100,005
7/27	9	9	229	886	754	4,717	7,500	53,727	5,883	17,698	4,605	32,514	18,971	109,542
7/28	11	11	45	311	590	3,778	4,253	30,813	7,289	22,666	2,515	20,407	14,692	77,975
7/29	Fishery was open for the cooperative fleet only													
7/30	Fishery was open for the cooperative fleet only													
7/31	Fishery was open for the cooperative fleet only													

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	Effort		Chinook		Sockeye		Coho		Pink		Chum		Total	
Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
8/1	Cooperative													
8/2	20	21	4	46	7,028	47,040	308	2,311	1,672	5,425	957	7,937	9,969	62,759
8/3	18	19	1	6	10,006	66,906	1,115	7,843	8,129	25,192	2,264	18,909	21,515	118,856
8/4	19	21	6	74	8,768	58,223	249	1,844	3,914	12,497	663	5,414	13,600	78,052
8/5	16	16	0	0	3,213	21,831	53	374	673	2,341	158	1,371	4,097	25,917
8/6	Fishery was open for the cooperative fleet only													
8/7	Fishery was open for the cooperative fleet only													
8/8	Fishery was open for the cooperative fleet only													
8/9	Fishery was open for the cooperative fleet only													
8/10	Fishery was open for the cooperative fleet only													
8/11	Fishery was open for the cooperative fleet only													
8/12	Fishery was open for the cooperative fleet only													
8/13	Fishery was open for the cooperative fleet only													
8/14	Fishery was open for the cooperative fleet only													
8/15	Fishery was open for the cooperative fleet only													
8/16	6	6	3	19	221	1,554	1,302	9,974	1,031	3,733	908	7,274	3,465	22,554
8/17	8	9	8	110	774	5,250	5,589	38,908	3,433	11,575	2,380	18,178	12,184	74,021
8/18	Fishery was open for the cooperative fleet only													
8/19	13	13	2	14	2,712	19,118	359	2,659	611	2,001	297	2,136	3,981	25,928
8/20	19	20	0	0	3,855	27,431	711	5,723	952	3,041	462	3,375	5,980	39,570
8/21	15	15	0	0	4,359	30,492	1,025	8,434	1,154	3,627	585	4,431	7,123	46,984
8/22	12	12	0	0	2,866	19,781	575	4,839	636	1,942	363	2,658	4,440	29,220
8/23	10	10	0	0	2,135	14,449	228	1,825	134	467	47	342	2,544	17,083
8/24	Fishery was open for the cooperative fleet only													
8/25	Fishery was open for the cooperative fleet only													
8/26	Fishery was open for the cooperative fleet only													
8/27	Fishery was open for the cooperative fleet only													
8/28	Fishery was open for the cooperative fleet only													
8/29	Fishery was open for the cooperative fleet only													
8/30	Fishery was open for the cooperative fleet only													
8/31	Fishery was open for the cooperative fleet only													

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	Effort		Chinook		Sockeye		Coho		Pink		Chum		Total	
Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
9/1	Fishery was open for the cooperative fleet only													
9/2	Fishery was open for the cooperative fleet only													
9/3	Fishery was open for the cooperative fleet only													
9/4	Fishery was open for the cooperative fleet only													
9/5	Fishery was open for the cooperative fleet only													
9/6	Fishery was open for the cooperative fleet only													
9/7	Fishery was open for the cooperative fleet only													
9/8	Fishery was open for the cooperative fleet only													
Total	22	474	710	5,585	320,024	2,213,848	41,736	301,140	59,186	186,751	52,336	389,808	473,992	3,097,132