Fishery Management Report No. 11-31

Chignik Management Area Salmon and Herring Annual Management Report, 2009

by

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May 2011

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)

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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May 2011

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This document should be cited as:
T. J. Anderson. 2011. Chignik Management Area salmon and herring annual management report, 2009. Alaska Department of Fish and Game, Fishery Management Report No. 11-31, Anchorage.

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ABSTRACT

This report summarizes the 2009 commercial Pacific herring *Clupea pallasii* and Pacific salmon *Oncorhynchus spp.* fisheries within the Chignik Management Area (CMA; Area L). The CMA encompasses all coastal waters and inland drainages of the northwest Gulf of Alaska between Kilokak Rocks and Kupreanof Point. There was no commercial herring fishery in the CMA during 2009. All five species of North American Pacific salmon were commercially harvested in the CMA: Chinook *O. tshawytscha*, sockeye *O. nerka*, coho *O. kisutch*, pink *O. gorbuscha*, and chum *O. keta* salmon. In 2009, the Chinook salmon escapement of 1,680 fish to the Chignik River was below recent averages but was within the escapement goal range of 1,300 to 2,700 fish. The 2009 Chignik River early-run sockeye salmon escapement of 391,476 was within the early-run escapement goal range of 350,000 to 400,000 fish. The late-run sockeye salmon escapement of 328,586 was within the late-run escapement goal range of 250,000 to 400,000 fish. The early run was above the recent 5-, but below the 10-, and 20-year escapement averages. The late run was above the recent 5-, 10-, and 20-year escapement averages. A total of 55 CMA permit holders made deliveries in 2009. The majority of the fishing effort in the 2009 season occurred in the Chignik Bay District. The 2009 total (including department test fishery harvests and fish retained as home pack) Chignik-bound sockeye salmon harvest of 1,198,105 fish was above the recent 5-, but below the 10-, and 20-year average harvests.

Key words: Chignik Management Area (CMA), Chignik River, *Oncorhynchus*, *Clupea pallasii*, salmon, herring, Alaska Board of Fisheries (BOF), 2009 commercial fisheries management, Fisheries Management Plan (FMP), harvest statistics, escapement statistics, Annual Management Report (AMR).

INTRODUCTION

The Alaska Department of Fish and Game (ADF&G) manages all Pacific herring *Clupea pallasii* and commercial salmon *Oncorhynchus spp.* 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 (Figure 1). For management purposes, these waters are divided into five fishing districts: Eastern, Central, Chignik Bay, Western, and Perryville districts. Each district is further broken down into sections and statistical reporting areas (Figure 2).

Five species of North American Pacific salmon are commercially harvested in the CMA: Chinook *O. tschawytscha*, sockeye *O. nerka*, coho *O. kisutch*, pink *O. gorbuscha*, and chum *O. keta* salmon. Of these, sockeye salmon are the primary species targeted and the most important commercial and subsistence salmon species in the CMA. ADF&G manages all CMA commercial salmon resources by emergency order based on inseason evaluation of local stock abundance and escapement objectives. The majority of fishing effort is concentrated on salmon returning to the Chignik River watershed. Commercial salmon fishing is the economic mainstay for five villages: Chignik Bay, Chignik Lagoon, Chignik Lake, Perryville, and Ivanof Bay (Figure 1).

This report provides a summary of commercial herring and salmon management plans, fishing activity, harvests, and escapements in the CMA. This report also provides a chronology of significant regulatory changes that influenced the 2009 commercial salmon season. Most tables in this report have been verified against the Westward Region electronic fish ticket (1970 to present) and historical escapement databases (1960 to present). The salmon harvest estimates reported in this document were summarized from the fish ticket database on January 15, 2010. Data published in this report supersede any data previously published.

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 27.575).

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

Historical Data

Commercial herring harvests in the CMA were not recorded in the CMA until 1980 (Nicholson et al. 1980). In years when fisheries occurred, herring harvests ranged from a minimum of 6 tons in 1996 to a maximum of 587 tons in 1980 (Table 2). Due to poor market conditions, there has been limited interest in CMA herring fisheries in recent years. The last herring biomass survey and commercial fishery occurred in 1996 (Table 2; Stichert 2007).

2009 Herring Fishery

There was no 2009 herring fishery in the CMA; no guideline harvest levels were set due to the lack of industry interest.

COMMERCIAL SALMON

OVERVIEW OF MANAGEMENT PLANS

Several management plans have been used to manage the Chignik commercial salmon fishery in the last decade. The 2009 Chignik commercial salmon fishery was managed based on the Chignik Salmon Management Plan (5 AAC 15.357). Sockeye salmon bound for the Chignik River watershed were also allocated under two additional management plans: the Cape Igvak Salmon Management Plan (5 AAC 18.360) in the Kodiak Management Area (Area K), and the Southeastern District Mainland (SEDM) Salmon Management Plan (5 AAC 09.360) in the Alaska Peninsula Management Area (Area M).

Chignik Salmon Management Plan

The Chignik Salmon Management Plan (5 AAC 15.357) was originally adopted in 1999. The goal of this plan was to allow traditional salmon fisheries in the CMA while achieving the established escapement goals for both early-run (Black Lake), and late-run (Chignik Lake) sockeye salmon. Purse seines and hand purse seines were the only legal commercial salmon fishing gear within the CMA. Legal seine gear ranged from 100 to 125 fathoms in length in the Chignik Bay District and from 100 to 225 fathoms in length in all other districts (5 AAC 15.332). To assist management efforts, the management plan was organized into districts or

groups of districts: the Chignik Bay and Central districts, the Eastern District, and the Western and Perryville districts (Figure 2).

Cape Igvak Salmon Management Plan

From June 1 through July 25, 90% of the sockeye salmon harvested within the Cape Igvak Section were allocatively considered to be Chignik-bound (5 AAC 18.360). The Cape Igvak Section is the westernmost section of Area K, located directly northeast of the CMA (Figure 1). If the harvestable surplus of sockeye salmon in the CMA was above or expected to be above certain thresholds (5 AAC 18.360 (a-c)), then 15 percent of the total Chignik sockeye salmon harvest (including sockeye salmon caught at Cape Igvak and within certain portions of SEDM) was allocated to Area K fishermen. After July 25, there were no allocative ties between the CMA and Area K.

Southeastern District Mainland Salmon Management Plan

From June 1 through July 25, 80 percent of the sockeye salmon harvested within certain Southeastern District Mainland (SEDM) sections during specific time were allocatively considered to be Chignik-bound (5 AAC 09.360). The SEDM is composed of a group of sections at the eastern end of Area M, located directly southwest of the CMA (Figure 1). If the harvestable surplus of sockeye salmon in the CMA was above or expected to be above certain thresholds (5 AAC 09.360 (a-g)), then 7.6 percent of the total estimated CMA sockeye salmon harvest was allocated to SEDM fisherman. After July 25, there were no allocative ties between the CMA and Area M.

2009 CHIGNIK SALMON MANAGEMENT

During the 2009 season, ADF&G targeted the lower bound of the sockeye salmon escapement goal (Table 3; Appendix A) based on limnology data from 2000 through 2007 that suggested the forage base for sockeye salmon was depressed in Chignik Lake (Bouwens and Finkle 2003a, b; Finkle 2005; Finkle 2006a, b; Finkle and Bouwens 2001). The ADF&G first adopted this practice in 2002 to improve juvenile sockeye salmon production by relieving grazing pressure on zooplankton in Chignik Lake (Finkle and Bowens 2003b).

The first commercial fishing period began on June 20, and the last commercial fishing period ended on September 25th. The commercial salmon fishery was open for a total of 86 days during 2009 (Figure 4). A total of 55 CMA commercial salmon permit holders (excluding the ADF&G test fish permit) participated in the 2009 commercial salmon season.

Salmon were delivered at three locations in 2009. Trident Seafoods located in Chignik Bay, Trident Seafoods in Sand Point, and International Seafoods of Alaska in Kodiak. Processors generally filleted or headed and gutted the majority of Chignik salmon. Due to the 2008 fire that destroyed the Trident Cannery, Trident Seafoods utilized floating processors in Chignik Bay.

CHIGNIK BAY AND CENTRAL DISTRICTS COMMERCIAL SALMON FISHERY

After conducting department test fisheries in Chignik Lagoon and assessing the sockeye salmon run strength at the Chignik weir, the 2009 commercial salmon fishery began in the Chignik Bay and Central districts on June 20. The first fishing period was extended for a total of 48 hours then closed for approximately 39 hours to achieve interim sockeye salmon escapement objectives (Figure 4). The second fishing period began on June 26, and was then extended up to 192 hours

(Figure 4). Between the second and third openings, the Central and Chignik Bay districts were closed for 78 hours to achieve interim sockeye salmon escapement objectives.

On July 10, the Chignik Bay and Central districts opened to commercial salmon fishing. This fishing period was extended up to 84 hours followed by a closure of approximately five days to achieve interim sockeye salmon escapement objectives.

After this period, sockeye salmon escapement into the Chignik River watershed remained relatively consistent throughout the remaining commercial salmon season. As a result, the Chignik Bay and Central districts reopened on July 22 and largely remained open until the end of the commercial salmon season on September 25. In total, the Chignik Bay and Central districts were open for 85 days during 2009.

The Chignik Lagoon markers alternated between Humes Point and Mensis Point during the 2009 salmon season (Figure 5). Generally, the Humes Point markers were used for the first 24 to 48 hours of a commercial fishing period to allow the salmon above these markers to escape the fishery. The Humes Point markers were also used when sockeye salmon escapement was at or just above the lower bound of the interim escapement objectives. This increased escapement into the Chignik River and also allowed the department to assess the magnitude of salmon entering the lagoon by concentrating the effort in the lower lagoon. During periods when sockeye salmon abundance exceeded the upper bounds of the interim escapement objectives the closed waters in Chignik Lagoon were reduced to Mensis Point to control escapement and provide for additional harvest opportunities. A summary of emergency orders outlining the commercial salmon fisheries in the Chignik Bay and Central districts is located in Appendix B.

EASTERN DISTRICT COMMERCIAL SALMON FISHERY

The Eastern District, by regulation (5 AAC 15.357 (c)(1)) opened concurrently with the Chignik Bay and Central districts during June (Figures 2 and 4). In 2009, the Eastern District was also opened concurrently with the Chignik Bay and Central districts throughout much of July. After a short closure in early August to ensure pink salmon escapement, the Eastern District largely remained open until the end of the fishing season.

Inseason aerial survey flights indicated that both local pink and chum salmon stocks were strong in the Eastern District. This combined with higher prices for both pink and chum salmon resulted in increased effort from fishermen.

In total, the Eastern District was open to commercial salmon fishing for 72 days during 2009 (Figure 4). A summary of emergency orders outlining the commercial salmon fisheries in the Eastern District is found in Appendix B.

WESTERN AND PERRYVILLE DISTRICTS COMMERCIAL SALMON FISHERY

The Inner Castle Cape Subsection of the Western District, by regulation (5 AAC 15.357 (b)) opened concurrently with the Chignik Bay and Central districts in June (Figure 2, 3, and 4). Also by regulation (5 AAC 15.357 (e)), the Western District, excluding the Inner Castle Cape Subsection, opened to commercial salmon fishing for two 48-hour periods with a mandatory 48-hour closure between fishing periods through July 5. Both of these fishing periods were opened concurrently with the Chignik Bay and Central districts in June.

Excluding the Inner Castle Cape Section of the Western District, and the two 48 hour fishing periods, the Western and Perryville districts are closed to commercial salmon fishing through July 5 (5 AAC 15.357 (d)). Beginning July 6, these districts can be opened on a catch per unit effort basis targeting migrating pink and chum salmon. Once fish enter local streams, management shifts to an escapement-based strategy.

On July 10, the Western and Perryville districts opened to commercial salmon fishing for a period of 72 hours and was extended for an additional 84 hours due to adequate Chignik late-run sockeye salmon escapement. On July 21, the Western and Perryville districts reopened to commercial salmon fishing for a 168-hour period.

After a series of short closures in early August, the districts mostly remained open for the remainder of the salmon season (Figure 4). In total, the Western District was open to commercial salmon fishing for 67 days, and the Perryville District for 63 days during 2009 (Figure 4). A summary of emergency orders outlining the commercial salmon fisheries in the Western and Perryville districts is found in Appendix B.

ESCAPEMENT AND HARVEST DATA

Stock Separation Techniques

Two distinct sockeye salmon runs (an early- and late-run) enter the Chignik River watershed and temporally overlap during late June and early July (Templin et al. 1999). Prior to 2004, scale pattern analysis (SPA) was used to differentiate stock composition during this time, and the fishery was managed inseason based on the results of this analysis (Witteveen and Botz 2004). This program was discontinued prior to the 2004 season due to funding limitations. However, examination of SPA data revealed that, on average, the number of early run sockeye salmon that passed the Chignik River weir after July 4 was approximately equal to the number of late run sockeye salmon that passed the weir prior to July 4. The 2009 fishery was managed based on this date such that through July 4, fishing periods were based on achieving interim early run escapement objectives and beginning July 5, fishing periods were based on achieving interim late run escapement objectives (Table 3).

Escapement Information

In 2007, a salmon escapement goal review team, including staff from the Division of Commercial Fisheries and the Sport Fish Division, was formed to review salmon escapement goals in the CMA (Witteveen et. al. 2007). The team recommended no change to the Chignik River Chinook salmon biological escapement goal (BEG) range of 1,300–2,700 fish.

The team additionally recommended no change for the early-run sustainable escapement goal (SEG) range of 350,000–400,000 fish (Table 3). However, the team recommended changing the late-run goal range from an SEG of 200,000–250,000, to an SEG of 200,000–400,000 fish. For subsistence fishermen an inriver run goal of 50,000 sockeye salmon (25,000 sockeye salmon in August and 25,000 in September) was added to the late-run SEG and yielded a total late-run escapement objective range of 250,0000–400,000 sockeye salmon (Witteveen et al. 2007).

The team also recommended revising the (even- and odd-year) pink salmon aggregate BEG's to an aggregate SEG (Witteveen et al. 2007). The team recommended changing the even-year BEG to an SEG range of 200,000–600,000 pink salmon, and the odd-year BEG to an SEG range of 500,000–800,000 pink salmon.

The team similarly recommended changing the area-wide aggregate chum salmon SEG from a threshold of 50,400 to a threshold of 57,400. The Directors of the Division of Commercial Fisheries and Sport Fish approved the team's escapement goal recommendations, which were implemented for the 2008 season.

In 2009, salmon escapements to the Chignik River were enumerated through the use of a weir. There were two gates in the weir, which were generally always open to allow for unrestricted fish passage. Underwater video equipment was used to count fish passing through the weir gates. At night, lights allowed fish to be counted. The number of fish passing the weir, by species, were counted for the first 10 minutes of each hour and then multiplied by six to obtain hourly escapement estimates. Hourly estimates were then summed to provide an estimate of daily fish passage. Camera footage from each 10 minute escapement count was recorded and archived.

The majority of the Chignik River Chinook, sockeye, pink, and chum salmon escapements were counted through the weir. Since Dolly Varden *Salvelinus malma* were not commercially harvested or actively managed in the CMA, their escapements are noted in the tables of this document for historical comparisons but not discussed in detail in the escapement section below. The first count of the 2009 season was on May 29, and the last full count of the season was on August 31 after which the weir was removed. A post-weir sockeye salmon escapement estimate was produced using time series analysis and the results were grouped into two reporting periods: September 1 to 15 and September 16 to 30. The 2009 coho salmon counts were still building when the weir was pulled precluding a post weir analysis and the run was considered incomplete.

Aerial surveys were flown over the spawning grounds of the Chignik River watershed to assess sockeye salmon spawning escapement levels and distribution. Escapements to other CMA streams were also estimated via aerial surveys.

Chinook Salmon

Chinook salmon began entering the Chignik River during mid-June. The run peaked by mid-July, and was over by late August (Table 4; Figure 6). The 2009 Chignik River Chinook salmon escapement of 1,680 fish was below recent 5-, 10-, and 20-year average escapements (Table 5) but was within the Chignik River Chinook BEG range of 1,300 to 2,700 fish (Figure 7; Witteveen et. al. 2007). The Chignik River is the only stream with substantial Chinook salmon production within the CMA.

Sockeye Salmon

Chignik River watershed sockeye salmon are managed based on interim escapement objectives, by run (Table 3, Witteveen et al. 2007). The Chignik River sockeye salmon early run peaked in mid-to-late June while the late run peaked during mid July (Table 6; Figure 8). The 2009 estimated total Chignik River watershed sockeye salmon escapement was 720,062 fish, which was above the 5-year escapement average but below the 10- and 20-year escapement averages (Table 7). The early-run escapement was estimated at 391,476 sockeye salmon, which was within the early-run SEG range of 350,000 to 400,000 fish (Table 7; Figure 9). The late-run escapement was estimated at 328,586 sockeye salmon, which was within the late-run management objective range of 250,000 to 400,000 fish (Table 7; Figure 9). Since the weir was removed before the late-run was complete, a post-weir sockeye salmon escapement estimate was produced using time series analysis. These results were reported grouped into periods from

September 1 to 15 (18,829 fish) and September 16 to 30 (1,900 fish) and included in the late-run total estimate of total escapement (Table 6).

Peak aerial survey counts of spawning sockeye salmon in Black Lake tributaries were higher than the 5- and 10-year average but below the 20-year average (Table 8). Total peak aerial survey counts of spawning sockeye salmon in the Chignik Lake tributaries were similar to the 5-, 10-, and 20-year averages (Table 9).

Sockeye salmon escapements were documented, via aerial survey, in low numbers (generally less than 1,000 fish) in several other CMA streams. Due to small run sizes and limited commercial fishing effort, escapement goals for these streams have not been established (Witteveen et. al. 2007).

Coho Salmon

Coho salmon enter CMA drainages in mid-August and generally continue through November. The 2009 Chignik River coho salmon escapement estimate through August 31 was 7,670 (Table 4), which was lower than the recent 5- and 10-year average escapements (Table 5). Coho salmon escapements were monitored, via aerial survey, in low numbers (generally less than 2,000 fish) in several other CMA streams.

Due to late season run timing and limited directed commercial fishing effort, escapement goals for coho salmon have not been established in the CMA (Witteveen et al. 2007).

Pink Salmon

During 2009, pink salmon began entering the Chignik River during late June and peaked in both mid-July and late August with a total escapement of 12,873 salmon (Table 5). The 2009 pink salmon escapement into the Chignik River was below the 5-year and above the 10-year average escapement (Table 5).

Escapements into other CMA streams were monitored via aerial surveys. Aerial survey escapement estimates for all streams were summed and compared to the area-wide even-year aggregate SEG for pink salmon. The 2009 overall combined escapement for the CMA was approximately 869,063 pink salmon, which exceeded the areawide aggregate even-year SEG range of 500,000 to 800,000 fish (Table 10).

Chum Salmon

A limited number of chum salmon return to the Chignik River, mainly in August (Table 4). The 2009 Chignik River chum salmon escapement was 109 fish, which was below recent 5- and 10-year average escapements (Table 5).

Escapements into other CMA streams were monitored via aerial surveys and compared to the area-wide aggregate SEG for chum salmon (Witteveen et al. 2007). The total 2009 CMA chum salmon escapement of 214,959 was over three times the areawide aggregate SEG threshold of 57,400 (Table 11).

Harvest Information

Commercial salmon harvest information for 2009 was organized into four categories. The first category included salmon that were commercially harvested but retained for private use (home pack). The second category included salmon that were harvested and sold as part of the ADF&G test fishery program. The third category included sockeye salmon commercially harvested within

the CMA. The final category included sockeye salmon commercially harvested under the Cape Igvak and SEDM management plans; for allocative purposes, the Board of Fisheries has determined that specific portions of these harvests were considered bound for the Chignik River.

Salmon harvested under subsistence regulations or the ADF&G Chignik test fishery were not included in any of the current harvest allocations. Home pack fish were not included in the Cape Igvak and SEDM allocations. All harvest information in this report was calculated from the ADF&G fish ticket database and supersedes any previously published data. A complete summary of 2009 commercial salmon harvest and effort is found in Appendix C.

Chinook Salmon

A total of 3,319 Chinook salmon were harvested from the CMA in 2009, which was more than the recent 5-, 10-year average Chinook salmon harvests but below the 20-year average harvest (Table 12). No Chinook salmon were harvested as part of the department's test fishery program, and 75 fish were retained as home pack (Table 13). Most of the CMA Chinook salmon harvest in 2009 came from the Western District (1,987), but a substantial portion of the total harvest also occurred in the Chignik Bay and Central districts (552 and 552 respectively; Table 14). In 2009, Chinook salmon were primarily harvested from late June through the first week of August (Table 15).

Sockeye Salmon

A total of 1,198,105 sockeye salmon were harvested in the CMA during 2009, which was above the 5- year average, but below the 10-, and 20-year average sockeye salmon harvests (Tables 12 and 16). The department's test fishery program harvested 1,687 of these salmon and a total of 93 fish were reported as retained for home pack (Table 16). The vast majority of the CMA sockeye salmon harvest in 2009 occurred in the Chignik Bay District (Table 17), and most sockeye salmon were harvested from mid-June through the end of July (Table 18).

An additional 175,290 sockeye salmon allocatively considered Chignik-bound were harvested as part of the SEDM and Cape Igvak fisheries during 2009 (Table 16). The Chignik-bound component of the SEDM harvest was 48,322 fish and totaled 5.5 percent of the total Chignik-bound harvest (allocation 7.6 percent; Tables 16 and 19). The Chignik-bound portion of the Cape Igvak harvest was 126,968 fish and totaled 12.1 percent of the total Chignik-bound harvest (allocation 15.0 percent; Tables 16 and 19).

The Chignik River early-run harvest of 520,630 sockeye salmon was below 5-, 10- and 20-year average harvests (Table 20; Figure 10). The 2009 late-run harvest of 852,765 sockeye salmon was above 5-, 10- and 20-year average harvests (Table 20; Figure 11). The 2009 total Chignik-bound commercial sockeye salmon harvest was 1,373,395 fish for a total run estimate (harvest + escapement) of 2,093,457 sockeye salmon (Table 20; Figure 12).

The early run was above the 2009 forecast by approximately 7 percent while the late run was above the projected forecast by 54 percent (Table 21).

Coho Salmon

A total of 110,373 coho salmon were harvested in the CMA during 2009, which was above the 5-, 10-year average harvest but below the 20-year average harvest (Tables 12 and 22). All coho salmon were sold to processors by fishermen (Table 22). The majority of the 2009 coho salmon

harvest occurred in the Chignik Bay, and Western districts during July and August (Tables 23 and 24).

Pink Salmon

A total of 1,408,339 pink salmon were harvested during 2009, which was above the 5-, 10-, and 20-year average harvests (Tables 12 and 25). All commercially harvested pink salmon were sold to processors by fishermen (Table 25). The majority of pink salmon harvest occurred in the Western District although notable harvests also occurred in the Central and Eastern districts (Table 26). Most pink salmon were harvested between late-June and mid-August (Tables 27).

Chum Salmon

A total of 256,425 chum salmon were harvested from the CMA during the 2009 season, higher than the 5-, 10- and 20-year harvest averages (Tables 12 and 28). Nearly all chum salmon were sold to processors by fishermen (Table 28). The majority of the 2009 chum salmon harvest occurred in the Central, Eastern, and Western districts during late-July and August (Tables 29 and 30).

Economic Value

Since the end of the Chignik cooperative in 2005–2006, approximately half of Chignik's 101 purse seine permits have been active. In 2009, only 55 CMA permit holders made deliveries (Table 31). The exvessel value of the 2009 CMA salmon harvest was about $8.63 million, or approximately $156,926 per permit holder, which was above the prior 5-, 10-, and 20-year exvessel value averages (Table 31; Figure 12). The vast majority of exvessel revenue was from the sale of sockeye salmon ($128,328 per active permit holder). The larger than average pink salmon harvest in 2009 provided $14,555 per permit holder while, chum, coho, and Chinook salmon provided $9,469, $4,015, and $558 respectively, per active permit holder (Table 31).

CHIGNIK LAGOON TEST FISHERIES

ADF&G conducts test fisheries in Chignik Lagoon for multiple purposes. Early-season test fisheries are used to determine buildup of salmon prior to the first commercial fishery, to collect sockeye salmon scale samples to determine age composition, and to generate revenue to pay for the vessels chartered to conduct the test fisheries. Subsequent test fisheries are conducted to assess salmon abundance in Chignik Lagoon during fishery closures, and offset operational costs associated with the scale sampling program (Jackson 2009).

The department conducted two test fisheries during 2009 for a total harvest of 1,687 salmon. The first test fishery occurred on June 12, when 280 sockeye salmon were harvested. The second test fishery was conducted on June 15, when 1,407 sockeye salmon were harvested.

CHIGNIK AREA SUBSISTENCE SALMON FISHERIES

In 2009, the ADF&G issued 95 subsistence fishing permits in the CMA. Based on the 82 permits returned to the ADF&G Division of Subsistence, the estimated subsistence harvest totaled 6,785 sockeye salmon. This harvest was lower than the previous 5-, and 10-year subsistence harvest averages (Table 32). Sockeye salmon comprised the majority of the 2009 subsistence harvest.

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TABLES AND FIGURES

Table 1.–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

Table 2.–Chignik Management Area commercial herring harvest, 1980 through 2009.

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
2003	0
2004	0
2005	0
2006	0
2007	0
2008	0
2009	0

Table 3.–Chignik River sockeye salmon interim escapement objectives, 2009.

Date	Escapement Lower	Upper	Date	Escapement Lower	Upper
June 2	1,200 -	1,400	August 3	172,500 -	295,700
June 4	4,000 -	4,500	August 6	178,700 -	306,300
June 6	9,800 -	11,200	August 9	184,600 -	316,300
June 8	17,900 -	20,400	August 12	190,600 -	326,600
June 10	29,500 -	33,700	August 15	196,200 -	336,200
June 12	51,200 -	58,500	August 18	201,900 -	346,000
June 14	83,000 -	94,800	August 21	207,400 -	355,400
June 16	116,000 -	132,600	August 24	213,300 -	365,600
June 18	145,300 -	166,100	August 27	218,800 -	374,900
June 20	170,900 -	195,400	August 31	225,000 -	385,700
June 22	202,100 -	231,000			
June 25	248,900 -	284,600	September 3	228,000 -	391,100
June 28	282,900 -	323,300	September 5	231,000 -	393,000
July 1	323,600 -	369,900	September 7	235,000 -	395,000
July 4	350,000 -	400,000 [a]	September 9	239,000 -	396,800
			September 11	243,000 -	398,100
July 6	7,000 -	11,900	September 13	247,000 -	399,000
July 8	19,900 -	34,100	September 15	250,000 -	400,000
July 10	32,600 -	56,000			
				Escapement	
July 12	44,400 -	76,100		**Objectives**	
July 14	58,900 -	101,000			
July 16	76,400 -	131,000	**Through July 4:**	**350,000 -**	**400,000**
July 19	96,600 -	165,700			
			July 5 - September		
July 23	122,200 -	209,500	**15:**	**250,000 -**	**400,000** [b]
July 26	141,800 -	243,100			
July 29	158,200 -	271,100			
July 31	165,500 -	283,700			

[a] July 4 is historically the date on which the cumulative inseason escapement most closely approximated the early-run escapement as estimated by post-season scale pattern analysis.

[b] The late-run escapement objective (July 5–September 15) includes the late-run sockeye salmon sustainable escapement goal (SEG; 200,000–400,000) plus an additional 50,000 sockeye salmon inriver run goal (25,000 in August and 25,000 in September) to meet late season subsistence needs.

Table 4.–Estimated Chignik River Chinook, coho, pink, and chum salmon, and Dolly Varden escapement, by day, 2009.

	Chinook		Coho		Pink		Chum		Dolly Varden	
Date	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative
5/29	0	0	0	0	0	0	0	0	6	6
5/30	0	0	0	0	0	0	0	0	6	12
5/31	0	0	0	0	0	0	0	0	0	12
6/1	0	0	0	0	0	0	0	0	18	30
6/2	0	0	0	0	0	0	0	0	6	36
6/3	0	0	0	0	0	0	0	0	0	36
6/4	0	0	0	0	0	0	0	0	12	48
6/5	0	0	0	0	0	0	0	0	30	78
6/6	0	0	0	0	0	0	0	0	0	78
6/7	0	0	0	0	0	0	0	0	0	78
6/8	0	0	0	0	0	0	0	0	0	78
6/9	0	0	0	0	0	0	0	0	6	84
6/10	0	0	0	0	0	0	0	0	12	96
6/11	0	0	0	0	0	0	0	0	0	96
6/12	0	0	0	0	0	0	0	0	30	126
6/13	0	0	0	0	0	0	0	0	24	150
6/14	0	0	0	0	0	0	0	0	6	156
6/15	0	0	0	0	0	0	0	0	48	204
6/16	0	0	0	0	0	0	0	0	30	234
6/17	0	0	0	0	0	0	0	0	78	312
6/18	0	0	0	0	0	0	0	0	24	336
6/19	18	18	0	0	0	0	0	0	126	462
6/20	0	18	0	0	0	0	0	0	114	576
6/21	0	18	0	0	0	0	0	0	36	612
6/22	0	18	0	0	0	0	0	0	120	732
6/23	0	18	0	0	0	0	0	0	42	774
6/24	0	18	0	0	0	0	0	0	162	936
6/25	0	18	0	0	0	0	0	0	252	1,188
6/26	24	42	0	0	0	0	0	0	174	1,362
6/27	6	48	0	0	0	0	0	0	102	1,464
6/28	0	48	0	0	8	8	0	0	108	1,572
6/29	0	48	0	0	12	20	0	0	50	1,622
6/30	24	72	0	0	0	20	0	0	156	1,778
7/1	12	84	0	0	6	26	0	0	198	1,976
7/2	36	120	0	0	6	32	0	0	84	2,060
7/3	42	162	0	0	6	38	0	0	78	2,138
7/4	18	180	0	0	36	74	0	0	78	2,216
7/5	57	237	0	0	36	110	0	0	138	2,354
7/6	16	253	0	0	6	116	0	0	150	2,504
7/7	92	345	0	0	49	165	0	0	162	2,666
7/8	42	387	0	0	36	201	0	0	222	2,888
7/9	42	429	0	0	72	273	0	0	210	3,098
7/10	114	543	0	0	78	351	0	0	276	3,374
7/11	54	597	0	0	96	447	0	0	204	3,578
7/12	109	706	0	0	54	501	0	0	90	3,668
7/13	7	713	0	0	24	525	0	0	101	3,769
7/14	42	755	0	0	96	621	0	0	300	4,069
7/15	18	773	0	0	168	789	0	0	252	4,321
7/16	6	779	0	0	132	921	0	0	156	4,477

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Table 4.–Page 2 of 2.

	Chinook		Coho		Pink		Chum		Dolly Varden	
Date	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative
7/17	48	827	0	0	408	1,329	6	6	312	4,789
7/18	36	863	0	0	620	1,949	0	6	444	5,233
7/19	126	989	0	0	932	2,881	0	6	511	5,744
7/20	66	1,055	0	0	390	3,271	0	6	294	6,038
7/21	102	1,157	0	0	471	3,742	0	6	408	6,446
7/22	72	1,229	0	0	299	4,041	12	18	228	6,674
7/23	30	1,259	0	0	232	4,273	0	18	132	6,806
7/24	24	1,283	0	0	296	4,569	0	18	210	7,016
7/25	18	1,301	0	0	526	5,095	0	18	60	7,076
7/26	30	1,331	0	0	379	5,474	0	18	210	7,286
7/27	6	1,337	0	0	311	5,785	0	18	108	7,394
7/28	30	1,367	0	0	394	6,179	0	18	48	7,442
7/29	18	1,385	0	0	516	6,695	0	18	102	7,544
7/30	18	1,403	0	0	455	7,150	0	18	72	7,616
7/31	0	1,403	0	0	358	7,508	0	18	36	7,652
8/1	6	1,409	0	0	361	7,869	0	18	0	7,652
8/2	12	1,421	0	0	481	8,350	0	18	30	7,682
8/3	36	1,457	0	0	507	8,857	0	18	42	7,724
8/4	31	1,488	0	0	333	9,190	0	18	96	7,820
8/5	18	1,506	0	0	219	9,409	0	18	12	7,832
8/6	12	1,518	0	0	75	9,484	6	24	6	7,838
8/7	11	1,529	0	0	-2	9,482	0	24	12	7,850
8/8	18	1,547	6	6	84	9,566	6	30	30	7,880
8/9	24	1,571	0	6	67	9,633	7	37	48	7,928
8/10	0	1,571	0	6	54	9,687	6	43	24	7,952
8/11	0	1,571	0	6	110	9,797	0	43	24	7,976
8/12	6	1,577	6	12	156	9,953	0	43	42	8,018
8/13	0	1,577	0	12	101	10,054	0	43	18	8,036
8/14	0	1,577	0	12	61	10,115	0	43	18	8,054
8/15	0	1,577	0	12	30	10,145	0	43	18	8,072
8/16	1	1,578	6	18	75	10,220	0	43	30	8,102
8/17	6	1,584	0	18	132	10,352	0	43	18	8,120
8/18	12	1,596	20	38	162	10,514	6	49	18	8,138
8/19	6	1,602	12	50	66	10,580	0	49	0	8,138
8/20	12	1,614	18	68	165	10,745	0	49	18	8,156
8/21	6	1,620	110	178	152	10,897	0	49	42	8,198
8/22	0	1,620	150	328	139	11,036	0	49	24	8,222
8/23	0	1,620	186	514	138	11,174	18	67	24	8,246
8/24	6	1,626	308	822	166	11,340	6	73	12	8,258
8/25	0	1,626	300	1,122	172	11,512	12	85	12	8,270
8/26	18	1,644	375	1,497	156	11,668	6	91	90	8,360
8/27	18	1,662	588	2,085	241	11,909	6	97	36	8,396
8/28	6	1,668	1,330	3,415	249	12,158	0	97	24	8,420
8/29	6	1,674	1,152	4,567	116	12,274	0	97	36	8,456
8/30	0	1,674	1,941	6,508	347	12,621	6	103	48	8,504
8/31	6	1,680	1,162	7,670	252	12,873	6	109	114	8,618

Table 5.–Estimated Chignik River Chinook, coho, pink, and chum salmon, and Dolly Varden escapement, 1970 through 2009.

	Escapement [a]				
Year	Chinook[b]	Coho[c]	Pink[c]	Chum[c]	Dolly Varden[c]
1970	2,500	ND	ND	ND	ND
1971	2,000	ND	ND	ND	ND
1972	1,500	ND	ND	ND	ND
1973	822	ND	ND	ND	ND
1974	672	ND	ND	ND	ND
1975	877	ND	ND	ND	ND
1976	700	ND	ND	ND	ND
1977	798	ND	ND	ND	ND
1978	1,197	ND	ND	ND	ND
1979	1,050	ND	ND	ND	ND
1980	876	ND	ND	ND	ND
1981	1,603	ND	ND	ND	ND
1982	2,412	ND	ND	ND	ND
1983	1,943	ND	ND	ND	ND
1984	5,806	ND	ND	ND	ND
1985	3,144	ND	ND	ND	ND
1986	3,612	ND	ND	ND	ND
1987	2,624	ND	ND	ND	ND
1988	4,868	ND	ND	ND	ND
1989	3,316	ND	ND	ND	ND
1990	4,364	ND	ND	ND	ND
1991	4,531	ND	ND	ND	ND
1992	3,806	ND	ND	ND	ND
1993	1,946	ND	ND	ND	ND
1994	2,963	ND	ND	ND	ND
1995	4,288	ND	ND	ND	ND
1996	3,488	16,843	6,030	136	54,726
1997	3,824	10,810	4,880	483	26,657
1998	3,075	14,124	11,490	156	15,235
1999	3,728	2,414	2,524	48	15,025
2000	4,285	7,062	4,284	48	ND
2001	3,028	103	1,464	66	6,416
2002	3,541	9,262	3,417	67	8,179
2003	6,412	7,635	1,897	68	36,397
2004	7,840	18,810	2,243	276	20,086
2005	6,486	18,206	13,637	408	13,940
2006	3,535	37,113	18,401	99	2,031
2007	2,000	10,299	20,464	118	6,993
2008	1,730	13,958	22,341	124	14,776
2009	1,680	7,670	12,873	109	8,618
Averages					
1989-08	3,909	-	-	-	-
1999-08	4,259	12,486	9,067	132	-
2004-08	4,318	19,677	15,417	205	11,565

[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 Chinook salmon larger than approximately 650 mm were 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 6.–Estimated Chignik River sockeye salmon escapement, by day, and management objective period, 2009.

Early Run			Late Run					
Through July 4			July 5-July 31			August		
Date	Daily	Total	Date	Daily	Total	Date	Daily	Total
5/29	42	42	7/5	2,229	2,229	8/1	1,194	1,194
5/30	42	84	7/6	1,843	4,072	8/2	1,039	2,233
5/31	42	126	7/7	7,158	11,230	8/3	7,012	9,245
6/1	72	198	7/8	10,227	21,457	8/4	6,270	15,515
6/2	302	500	7/9	16,313	37,770	8/5	5,236	20,751
6/3	181	681	7/10	21,786	59,556	8/6	1,827	22,578
6/4	412	1,093	7/11	9,529	69,085	8/7	2,018	24,596
6/5	1,027	2,120	7/12	4,345	73,430	8/8	2,982	27,578
6/6	774	2,894	7/13	2,451	75,881	8/9	1,670	29,248
6/7	804	3,698	7/14	2,524	78,405	8/10	1,417	30,665
6/8	2,278	5,976	7/15	3,996	82,401	8/11	1,734	32,399
6/9	3,576	9,552	7/16	910	83,311	8/12	1,429	33,828
6/10	2,916	12,468	7/17	3,303	86,614	8/13	1,872	35,700
6/11	15,465	27,933	7/18	3,453	90,067	8/14	1,289	36,989
6/12	8,538	36,471	7/19	20,101	110,168	8/15	2,075	39,064
6/13	14,344	50,815	7/20	8,917	119,085	8/16	2,402	41,466
6/14	19,402	70,217	7/21	10,092	129,177	8/17	2,226	43,692
6/15	9,208	79,425	7/22	29,653	158,830	8/18	1,627	45,319
6/16	11,875	91,300	7/23	18,320	177,150	8/19	1,770	47,089
6/17	24,477	115,777	7/24	4,529	181,679	8/20	1,672	48,761
6/18	35,410	151,187	7/25	3,051	184,730	8/21	3,044	51,805
6/19	39,994	191,181	7/26	6,516	191,246	8/22	2,854	54,659
6/20	40,650	231,831	7/27	7,185	198,431	8/23	4,174	58,833
6/21	11,440	243,271	7/28	4,475	202,906	8/24	5,444	64,277
6/22	5,454	248,725	7/29	6,726	209,632	8/25	4,421	68,698
6/23	6,421	255,146	7/30	4,102	213,734	8/26	4,109	72,807
6/24	6,007	261,153	7/31	1,920	215,654	8/27	3,396	76,203
6/25	21,033	282,186	**July 5-31 total:**		**215,654**	8/28	4,425	80,628
6/26	53,689	335,875				8/29	3,094	83,722
6/27	9,540	345,415				8/30	4,641	88,363
6/28	12,779	358,194				8/31	3,840	92,203
6/29	10,221	368,415				**August total:**		**92,203**
6/30	7,984	376,399						
7/1	3,619	380,018				**September**		
7/2	4,674	384,692				**Date**		**Total**
7/3	3,908	388,600				9/1-9/15 estimate		18,829
7/4	2,876	391,476				9/16-9/30 estimate		1,900
May 25-July 4 total:		**391,476**						**20,729**
					Early run total:			**391,476**
					Late run total:			**328,586**
					Season total:			**720,062**

[a] The weir was removed after the completion of the 8/31 count.

Table 7.–Total Chignik River sockeye salmon escapement and escapement goals, based on postseason analysis, by run, 1980 through 2009.

Year	Early Run	Late Run	Total
1980	311,332	352,729	664,061
1981	438,540	392,909	831,449
1982	616,117	221,601	837,718
1983	426,177	409,458	835,635
1984	597,712	267,862	865,574
1985	376,576	369,262	745,838
1986	566,088	207,231	773,319
1987	589,291	214,452	803,743
1988	420,577	255,180	675,757
1989	384,004	557,171	941,175
1990	434,543	335,867	770,410
1991	672,871	367,227	1,040,098
1992	360,681	405,922	766,603
1993	364,261	333,116	697,377
1994	769,462	197,447	966,909
1995	366,163	373,757	739,920
1996	464,461	284,676	749,137
1997	396,667	378,951	775,618
1998	410,659	290,469	701,128
1999	457,429	258,537	715,966
2000	536,141	269,084	805,225
2001	744,013	392,905	1,136,918
2002	380,701	343,616	724,317
2003	350,004	334,119	684,123
2004	363,800	214,459	578,259
2005	355,091	225,366	580,457
2006	366,497	368,996	735,493
2007	361,091	293,883	654,974
2008	377,579	328,479	706,058
2009	391,476	328,586	720,062
Year	Early Run	Late Run	Total
SEG	350,000-400,000	250,000-400,000	600,000-800,000
Averages			
1989-08	445,806	327,702	773,508
1999-08	429,235	302,944	732,179
2004-08	364,812	286,237	651,048

Table 8.–Peak sockeye salmon aerial survey escapement estimates for Black Lake tributaries, 1960 through 2009.

Year	Fan Creek	Milk Creek	Boulevard Creek	Alec River	Conglomerate Creek	Broad Creek	Total
1960	38,500	8,000	40,000	30,000	3,000	30,000	149,500
1961	27,000	5,000	28,700	25,000	800	17,000	103,500
1962	18,000	7,000	13,000	60,000	200	15,000	113,200
1963	39,000	ND	36,000	85,000	1,000	61,000	222,000
1964	19,500	3,050	23,850	17,900	9,300	9,500	83,100
1967	20,000	1,000	9,000	156,000	10,000	10,000	206,000
1968	32,000	2,400	20,000	60,000	2,000	4,100	120,500
1969	103,000	2,100	33,000	50,000	4,000	5,000	197,100
1970	146,000	9,000	55,500	198,000	5,000	ND	413,500
1971	105,000	14,000	85,000	158,000	0	ND	362,000
1972	18,000	3,500	19,000	74,000	400	ND	114,900
1973	115,000	4,000	76,000	74,000	5,000	ND	274,000
1974	90,000	5,000	50,000	93,000	5,000	ND	243,000
1975	40,000	4,500	25,000	87,000	0	ND	156,500
1976	78,000	8,900	100,000	119,000	2,000	ND	307,900
1977	88,000	20,000	127,000	133,000	1,000	ND	369,000
1978	114,000	3,300	74,000	83,300	500	ND	275,100
1979	37,000	11,800	32,000	105,100	400	26,100	212,400
1980	127,000	16,000	75,000	70,500	1,500	68,000	358,000
1981	93,000	4,700	59,000	76,500	20,000	27,000	280,200
1982	50,000	5,500	60,000	43,000	20,000	32,000	210,500
1983	ND	ND	ND	ND	ND	ND	-
1984	50,000	22,200	70,000	30,500	31,000	36,000	239,700
1985	28,000	5,500	36,000	65,000	5,500	17,000	157,000
1986	60,000	15,300	47,000	76,000	39,000	27,000	264,300
1987	52,000	12,200	133,000	88,400	45,900	32,500	364,000
1988	54,000	71,000	83,700	106,500	2,300	26,500	344,000
1989	19,300	21,000	64,000	133,000	1,000	7,500	245,800
1990	32,600	7,400	35,900	49,800	2,200	18,000	145,900
1991	14,600	19,500	48,000	ND	2,000	13,000	97,100
1992	ND	ND	ND	392,000	ND	ND	392,000
1993	40,900	12,600	97,600	8,000	77,000	18,200	254,300
1994	70,000	25,000	125,000	350,000	20,000	51,000	641,000
1995	23,000	10,000	60,000	200,000	40,000	60,000	393,000
1996	40,000	24,000	51,000	100,000	50,000	45,000	310,000
1997	60,000	5,000	48,000	166,000	8,000	20,000	307,000
1998	90,000	14,000	100,000	50,000	9,000	62,000	325,000
1999	70,000	8,100	50,000	226,000	1,000	22,000	377,100
2000	41,000	29,000	126,000	210,000	26,000	93,000	525,000

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Table 8.–Page 2 of 2.

Year	Fan Creek	Milk Creek	Boulevard Creek	Alec River	Conglomerate Creek	Broad Creek	Total
2001	77,000	19,000	265,000	207,000	4,000	89,000	661,000
2002	43,000	ND	20,000	21,000	11,000	7,000	102,000
2003	17,600	400	2,500	188,000	ND	1,000	209,500
2004	4,290	1,490	15,560	137,700	200	ND	159,240
2005	4,300	ND	ND	ND	7,700	ND	12,000
2006	16,000	500	15,500	46,700	2,500	19,800	101,000
2007	40,200	8,800	23,600	199,000	4,000	1,000	276,600
2008	44,000	7,600	34,800	208,000	6,600	3,200	304,200
2009	34,500	11,500	40,500	182,500	5,000	2,100	276,100
Averages							
1989-08	39,357	12,552	65,692	160,678	15,122	31,218	293,927
1999-08	35,739	9,361	61,440	160,378	7,000	29,500	272,764
2004-08	21,758	4,598	22,365	147,850	4,200	8,000	170,608

Table 9.–Peak sockeye salmon aerial survey escapement estimates for Chignik Lake and Black River tributaries, 1960 through 2009.

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	-
1961	2,500	17,100	20,700	40,300	ND	ND	ND	-
1962	3,000	13,000	24,000	40,000	ND	ND	ND	-
1963	900	5,000	9,000	14,900	ND	ND	ND	-
1964	500	4,500	7,000	12,000	ND	ND	ND	-
1967	10,000	25,000	31,000	66,000	ND	ND	ND	-
1968	1,200	10,500	10,000	21,700	ND	ND	ND	-
1969	50	800	1,500	2,350	ND	ND	ND	-
1970	450	4,000	4,000	8,450	ND	ND	ND	-
1971	3,500	5,500	47,000	56,000	ND	ND	ND	-
1972	1,400	4,300	23,000	28,700	ND	ND	ND	-
1973	13	4,100	1,500	5,613	ND	ND	ND	-
1974	450	8,000	7,000	15,450	ND	ND	ND	-
1975	65	2,500	2,500	5,065	ND	ND	ND	-
1976	2,650	23,700	7,700	34,050	ND	ND	ND	-
1977	200	13,600	6,900	20,700	ND	ND	ND	-
1978	410	9,600	8,500	18,510	ND	ND	ND	-
1979	918	7,610	29,000	37,528	ND	ND	ND	-
1980	3,600	33,000	40,400	77,000	ND	ND	ND	-
1981	950	1,500	18,700	21,150	ND	ND	ND	-
1982	1,066	10,791	5,000	16,857	ND	ND	ND	-
1983	ND	ND	6,000	6,000	ND	ND	ND	-
1984	ND	ND	ND	8,200	ND	ND	ND	-
1985	350	450	1,200	2,000	ND	ND	ND	-
1986	ND	ND	8,300	8,300	ND	ND	ND	-
1987	ND	ND	1,000	1,000	ND	ND	ND	-
1988	ND	ND	4,600	4,600	ND	ND	ND	-
1989	ND	ND	2,100	2,100	ND	ND	ND	-
1990	300	0	50	350	ND	ND	ND	-
1991	ND	ND	ND	ND	ND	ND	ND	-
1992	ND	ND	ND	ND	ND	ND	ND	-
1993	ND	ND	16,000	16,000	ND	ND	ND	-
1994	5,000	ND	31,000	36,000	18,000	9,200	ND	27,200
1995	7,100	18,000	31,000	56,100	13,000	6,000	150,000	169,000
1996	1,800	22,000	22,000	45,800	13,000	5,500	70,000	88,500
1997	9,000	9,000	23,500	41,500	25,000	8,000	35,000	68,000
1998	4,700	71,000	27,500	103,200	21,000	6,000	62,000	89,000
1999	8,300	17,500	13,000	38,800	8,500	1,620	15,000	25,120
2000	2,600	3,700	10,600	16,900	18,000	19,700	2,000	39,700

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Table 9.–Page 2 of 2.

Year	Bearskin Creek	West Fork	Chiaktuak Creek	Total	Clark River	Home Creek	Hatchery Beach	Total
2001	ND	ND	9,500	9,500	23,000	11,000	25,000	59,000
2002	ND	15,000	2,300	17,300	ND	ND	ND	-
2003	ND	ND	2,000	2000	ND	ND	ND	-
2004	100	600	750	1,450	2,500	2,000	ND	4,500
2005	900	900	5,100	6,900	ND	ND	ND	-
2006	1,400	3,500	6,200	11,100	13,500	3,000	3,000	19,500
2007	400	14,500	30,300	45,200	59,000	9,800	65,000	133,800
2008	13,500	18,000	39,600	71,100	39,500	12,300	106,000	157,800
2009	600	11,100	21,800	33,500	13,000	3,500	ND	16,500
Averages								
1989-08	4,238	14,900	15,139	28,961	21,167	7,843	53,300	73,427
1999-08	3,886	9,213	11,935	22,025	23,429	8,489	36,000	62,774
2004-08	3,260	7,500	16,390	27,150	28,625	6,775	58,000	78,900

Table 10.–Estimated pink salmon escapement and objectives in the Chignik Management Area, by district and year, 1960 through 2009.

	District[b]					
Year[a]	Chignik Bay	Central	Eastern	Western	Perryville	Total
1960	ND	28,000	130,000	48,600	123,800	330,400
1961	ND	4,650	9,500	60,100	34,750	109,000
1962	30,000	83,900	401,700	242,000	155,500	913,100
1963	20,700	92,600	126,200	305,000	162,000	706,500
1964	20,000	131,100	605,700	165,000	72,000	993,800
1965	11,000	65,800	64,800	152,000	82,000	375,600
1966	71,300	62,600	302,200	179,300	90,000	705,400
1967	5,700	18,500	56,100	104,400	155,300	340,000
1968	81,400	66,100	390,300	151,300	128,700	817,800
1969	11,700	69,600	46,000	422,000	218,600	767,900
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	522,200
1986	ND	121,900	580,700	43,800	180,500	926,900
1987	ND	65,700	215,600	38,300	65,700	385,300
1988	22,400	216,400	1,005,400	232,400	181,300	1,657,900
1989	13,500	215,000	881,000	57,900	267,400	1,434,800
1990	6,000	131,900	811,400	44,300	88,400	1,082,000
1991	12,200	201,100	125,000	96,800	343,500	778,600
1992	55,800	223,800	1,318,100	38,800	190,400	1,826,900
1993	2,000	160,900	524,700	45,800	448,400	1,181,800
1994	75,800	178,900	863,300	111,600	153,900	1,383,500
1995	180,500	715,500	1,399,300	554,700	582,100	3,432,100
1996	43,100	237,100	1,059,600	220,800	395,700	1,956,300
1997	59,400	594,600	1,287,700	306,300	221,500	2,469,500
1998	24,400	210,900	1,273,200	150,400	222,800	1,881,700
1999	37,300	374,300	615,100	137,900	179,700	1,344,300

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Table 10.–Page 2 of 2.

Year[a]	District[b] Chignik Bay	Central	Eastern	Western	Perryville	Total
2000	27,400	146,100	810,700	130,100	98,700	1,213,000
2001	19,700	460,400	1,470,200	263,000	150,200	2,363,500
2002	16,917	85,755	777,710	85,501	62,170	1,028,053
2003	143,897	576,510	1,408,060	117,650	99,500	2,345,617
2004	27,300	257,000	601,900	94,340	134,320	1,114,860
2005	160,000	473,400	512,350	257,500	188,600	1,591,850
2006	27,401	36,175	195,950	31,800	83,500	374,826
2007	62,464	291,800	565,800	113,000	184,000	1,217,064
2008	69,841	117,650	402,880	99,460	173,200	863,031
2009	28,973	130,700	462,840	130,100	116,450	869,063
Management Goal						500,000 to 800,000
Averages						
1989-08	53,246	284,440	845,198	147,883	213,400	1,544,165
1999-08	59,222	281,909	736,065	133,025	135,389	1,345,610
2004-08	69,401	235,205	455,776	119,220	152,724	1,032,326
Odd Year Averages						
1989-07	69,096	406,351	878,921	195,055	266,490	1,815,913
1999-07	84,672	435,282	914,302	177,810	160,400	1,772,466
2003-07	122,120	447,237	828,737	162,717	157,367	1,718,177

[a] From 1984 to 2003 aerial survey escapement estimates were computed by area-under-the-curve methods using a 15.0 day average stream life (Johnson and Barrett 1988). Starting 2004, estimates were computed using peak counts (Witteveen et al. 2005).

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

Table 11.–Estimated chum salmon escapement and objectives in the Chignik Management Area, by district and year, 1970 through 2009.

	District[a]					
Year[b]	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
2003	899	43,191	152,854	39,050	64,331	300,325
2004	376	30,310	277,240	3,100	38,492	349,518
2005	30,000	159,100	36,350	22,000	61,250	308,700
2006	1,099	3,450	53,940	6,000	29,000	93,489
2007	6,118	25,200	58,000	26,500	122,280	238,098
2008	17,624	17,850	57,120	21,240	83,425	197,259

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Table 11.–Page 2 of 2.

	District[a]					
Year[b]	Chignik Bay	Central	Eastern	Western	Perryville	Total
2009	10,809	20,550	138,900	9,200	35,500	214,959
Area Management Goal						57,400
Averages						
1989-08	5,999	48,271	154,353	27,269	97,485	333,376
1999-08	6,268	38,232	160,035	19,947	66,780	291,262
2004-08	11,043	47,182	96,530	15,768	66,889	237,413

[a] From 1984 to 2003 aerial survey escapement estimates were computed by area-under-the-curve methods using a 15.0 day average stream life (Johnson and Barrett 1988). Starting 2004, estimates were computed using peak counts (Witteveen et al. 2005).

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

Table 12.–Total commercial salmon harvests, including home pack and the department's test fishery harvests, from the Chignik Management Area by species and year, 1970 through 2009.

Year	Permits Making Deliveries	Landings	Chignik Management Area Harvest					
			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
2003	44	2,073	3,068	1,100,297	103,896	502,638	64,044	1,773,943
2004	33	1,346	2,520	704,652	37	2,380	505	711,473
2005	97	1,669	3,408	1,152,133	6,956	194,045	8,821	1,365,363
2006	49	2,066	2,256	902,709	39,221	383,547	61,630	1,389,363
2007	56	2,101	1,773	834,547	73,277	2,019,748	78,553	3,007,898
2008	55	2,217	970	687,270	161,536	2,389,958	209,325	3,449,059
2009	56	2,172	3,319	1,198,105	110,373	1,408,339	256,425	2,976,561
Averages								
1989-08	83	3,272	4,585	1,404,255	130,769	910,791	141,462	2,591,930
1999-08	66	2,446	2,457	1,283,550	77,858	896,685	93,799	2,354,487
2004-08	58	1,880	2,185	856,262	56,205	997,936	71,767	1,984,631

Table 13.–Annual Chignik Management Area Chinook salmon harvest, 1970 through 2009.

	Test fish		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
2003	2	13	2,757	39,716	309	4,451	3,068	44,180
2004	4	57	2,337	43,652	179	3,343	2,520	47,052
2005	1	23	3,137	55,638	271	6,157	3,409	61,818
2006	1	21	2,187	38,015	68	1,536	2,256	39,572
2007	11	228	1,746	29,745	16	308	1,773	30,281
2008	0	0	955	14,463	15	227	970	14,690
2009	0	0	3,244	30,791	75	1,166	3,319	31,957
Averages								
1989-08	4	72	4,494	68,707	123	2,186	4,585	70,309
1999-08	3	49	2,329	36,567	126	2,190	2,458	38,805
2004-08	3	66	2,072	36,303	110	2,314	2,186	38,683

[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 14.–Chignik Management Area Chinook salmon harvest (including home pack and the department's test fishery catches), by district and year, 1970 through 2009.

	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
2003	2,834	189	0	45	0	3,068
2004	2,520	0	0	0	0	2,520
2005	2,714	391	0	297	6	3,408
2006	2,009	165	3	79	0	2,256
2007	667	421	152	532	1	1,773
2008	219	195	16	503	37	970
2009	552	552	199	1,987	29	3,319
Averages						
1989-08	2,173	1,097	216	862	237	4,585
1999-08	1,599	353	67	430	8	2,457
2004-08	1,626	234	34	282	9	2,185

Table 15.–Chignik Management Area Chinook salmon harvest (including home pack and the department's test fishery catches), by district and day, 2009.

	District					
Date	Chignik Bay	Central	Eastern	Western	Perryville	Total
6/12	0	Closed	Closed	Closed	Closed	0
6/13	Closed	Closed	Closed	Closed	Closed	Closed
6/14	Closed	Closed	Closed	Closed	Closed	Closed
6/15	0	Closed	Closed	Closed	Closed	0
6/16	Closed	Closed	Closed	Closed	Closed	Closed
6/17	Closed	Closed	Closed	Closed	Closed	Closed
6/18	Closed	Closed	Closed	Closed	Closed	Closed
6/19	Closed	Closed	Closed	Closed	Closed	Closed
6/20	1	0	0	Closed	Closed	1
6/21	10	12	0	Closed	Closed	22
6/22	7	3	0	6	Closed	16
6/23	2	0	0	74	Closed	76
6/24	4	0	0	49	Closed	53
6/25	Closed	Closed	Closed	Closed	Closed	0
6/26	14	7	0	Closed	Closed	21
6/27	6	12	0	85	Closed	103
6/28	23	20	0	51	Closed	94
6/29	24	7	0	Closed	Closed	31
6/30	27	34	0	Closed	Closed	61
7/1	27	36	20	Closed	Closed	83
7/2	18	17	0	Closed	Closed	35
7/3	21	18	0	Closed	Closed	39
7/4	6	15	4	Closed	Closed	25
7/5	20	20	7	Closed	Closed	47
7/6	28	27	8	Closed	Closed	63
7/7	Closed	Closed	Closed	Closed	Closed	0
7/8	Closed	Closed	Closed	Closed	Closed	0
7/9	Closed	Closed	Closed	Closed	Closed	0
7/10	21	18	0	80	0	119
7/11	14	15	0	152	0	181
7/12	31	21	0	39	10	101
7/13	27	7	4	29	0	67
7/14	18	7	17	2	0	44
7/15	24	0	0	123	0	147
7/16	21	59	0	98	0	178
7/17	Closed	Closed	Closed	Closed	Closed	0
7/18	Closed	Closed	Closed	Closed	Closed	0
7/19	Closed	Closed	Closed	Closed	Closed	0
7/20	Closed	Closed	Closed	Closed	Closed	0
7/21	3	0	0	38	0	41
7/22	13	20	0	112	0	145
7/23	22	3	5	385	11	426

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Table 15.–Page 2 of 2.

	District					
Date	Chignik Bay	Central	Eastern	Western	Perryville	Total
7/24	11	10	0	62	1	84
7/25	9	0	0	11	7	27
7/26	10	23	1	48	0	82
7/27	17	0	Closed	0	0	17
7/28	11	4	Closed	94	0	109
7/29	4	9	Closed	Closed	Closed	13
7/30	9	82	121	105	0	317
7/31	5	13	7	244	0	269
8/1	9	4	0	Closed	Closed	13
8/2	5	0	0	Closed	Closed	5
8/3	1	0	Closed	Closed	Closed	1
8/4	2	0	Closed	0	0	2
8/5	9	10	Closed	80	0	99
8/6	2	7	Closed	6	0	15
8/7	2	0	0	Closed	Closed	2
8/8	3	0	4	Closed	Closed	7
8/9	2	0	1	6	0	9
8/10	1	0	0	0	0	1
8/11	2	1	0	0	0	3
8/12	1	0	0	1	0	2
8/13	0	0	0	Closed	Closed	0
8/14	1	2	0	Closed	Closed	3
8/15	3	0	0	3	0	6
8/16	0	6	0	1	0	7
8/17	0	2	0	0	0	2
8/18	0	0	0	3	0	3
8/19	0	0	0	0	0	0
8/20	0	1	0	0	0	1
8/21	0	0	0	0	0	0
8/22	0	0	0	0	0	0
8/23	0	0	0	0	0	0
8/24	0	0	0	0	0	0
8/25	0	0	0	0	0	0
8/26	0	0	0	0	0	0
8/27	0	0	0	0	0	0
8/28	1	0	0	0	0	1
8/29	0	0	0	0	0	0
8/30	0	0	0	0	0	0
8/31	0	0	0	0	0	0
9/1	0	0	0	0	0	0
9/2	0	0	0	0	0	0
9/3	0	0	0	0	0	0
9/4-9/25	0	0	0	0	0	0
Total	552	552	199	1,987	29	3,319

Table 16.–Total harvest of sockeye salmon considered by regulation to be Chignik-bound in the Chignik, Cape Igvak, and Southeastern District Mainland commercial salmon fisheries, 1970 through 2009.

	Test fish		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
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

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Table 16.–Page 2 of 2.

	Test fish		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
2001	14,011	98,197	1,497,359	10,972,234	217	1,590	1,511,587	11,072,021	215,214	1,287,154	51,141	368,970	1,777,942	12,728,145
2002	9,101	61,656	1,040,081	7,176,261	1,371	9,460	1,050,553	7,247,377	136,488	727,894	63,026	502,353	1,250,067	8,477,624
2003	5,582	36,334	1,092,304	7,137,591	2,411	15,755	1,100,297	7,189,680	121,887	599,342	70,044	466,153	1,292,228	8,255,175
2004	5,919	38,317	697,043	4,460,437	1,690	10,998	704,652	4,509,752	160,665	781,265	55,123	355,703	920,440	5,291,017
2005	7,076	43,988	1,143,693	7,468,609	1,364	8,702	1,152,133	7,521,299	274,328	1,681,630	170,662	1,088,207	1,597,123	10,291,136
2006	6,641	42,420	895,801	5,804,939	267	1,625	902,709	5,848,984	41,834	266,483	62,010	398,724	1,006,553	6,514,191
2007	5,152	38,112	829,110	5,769,736	285	1,346	834,547	5,809,194	52,527	325,619	0	0	887,074	6,134,813
2008	5,166	35,271	682,104	4,734,436	0	0	687,270	4,769,707	0	0	0	0	687,270	4,769,707
2009	1,687	12,833	1,196,325	8,248,669	93	631	1,198,105	8,262,133	126,968	811,617	48,322	314,210	1,373,395	9,387,960
Averages														
1989-08	8,016	53,386	1,395,809	9,415,783	-	-	1,404,255	9,471,958	167,481	962,288	83,565	554,466	1,655,300	10,970,927
1999-08	7,625	52,530	1,275,162	8,762,951	763	4,965	1,283,550	8,820,446	173,033	984,248	74,905	500,376	1,531,487	10,269,499
2004-08	5,991	39,622	849,550	5,647,631	721	4,534	856,262	5,691,787	105,871	610,999	57,559	368,527	1,019,692	6,600,173

[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 are not reported on fish tickets; therefore, the weights were calculated from the average weight of the commercial harvest for that year.

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

Table 17.–Total annual Chignik Management Area sockeye salmon harvest (including home pack and the department's test fishery catches), by district, 1970 through 2009.

	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
2003	1,000,247	64,440	1,701	29,069	4,840	1,100,297
2004	704,471	181	0	0	0	704,652
2005	1,039,076	84,879	2	27,927	249	1,152,133
2006	726,749	103,272	3,118	69,570	0	902,709
2007	545,438	138,922	29,882	119,489	816	834,547
2008	527,026	83,111	2,279	68,257	6,597	687,270
2009	869,906	191,611	29,900	102,803	3,885	1,198,105
Averages						
1989-08	996,360	298,087	39,758	44,788	25,262	1,404,255
1999-08	1,030,245	187,292	21,948	41,430	2,635	1,283,550
2004-08	708,552	82,073	7,056	57,049	1,532	856,262

Table 18.–Chignik Management Area sockeye salmon harvest (including home pack and the department's test fishery catches), by district and day, 2009.

	District					
Date	Chignik Bay	Central	Eastern	Western	Perryville	Total
6/12	280	Closed	Closed	Closed	Closed	280
6/13	Closed	Closed	Closed	Closed	Closed	0
6/14	Closed	Closed	Closed	Closed	Closed	0
6/15	1,407	Closed	Closed	Closed	Closed	1,407
6/16	Closed	Closed	Closed	Closed	Closed	0
6/17	Closed	Closed	Closed	Closed	Closed	0
6/18	Closed	Closed	Closed	Closed	Closed	0
6/19	Closed	Closed	Closed	Closed	Closed	0
6/20	19,885	39	0	Closed	Closed	19,924
6/21	28,224	6,421	0	Closed	Closed	34,645
6/22	28,023	1,983	0	5,015	Closed	35,021
6/23	34,782	2,633	0	15,322	Closed	52,737
6/24	33,486	1,740	0	22,594	Closed	57,820
6/25	Closed	Closed	Closed	Closed	Closed	0
6/26	44,668	4,378	0	Closed	Closed	49,046
6/27	33,424	4,340	0	16,024	Closed	53,788
6/28	35,230	2,574	0	5,889	Closed	43,693
6/29	33,402	3,559	0	Closed	Closed	36,961
6/30	24,521	6,363	0	Closed	Closed	30,884
7/1	13,769	9,849	4,946	Closed	Closed	28,564
7/2	16,498	7,795	8,744	Closed	Closed	33,037
7/3	14,603	8,525	0	Closed	Closed	23,128
7/4	10,120	7,561	2,014	Closed	Closed	19,695
7/5	13,327	7,446	3,620	Closed	Closed	24,393
7/6	13,749	8,085	2,038	Closed	Closed	23,872
7/7	Closed	Closed	Closed	Closed	Closed	0
7/8	Closed	Closed	Closed	Closed	Closed	0
7/9	Closed	Closed	Closed	Closed	Closed	0
7/10	18,185	5,740	0	3,765	0	27,690
7/11	14,760	4,547	0	5,862	0	25,169
7/12	15,313	4,950	0	3,631	1,518	25,412
7/13	11,876	5,941	770	3,210	561	22,358
7/14	10,994	3,813	3,666	2,482	0	20,955
7/15	11,609	0	0	3,872	0	15,481
7/16	12,928	6,892	0	1,500	0	21,320
7/17	Closed	Closed	Closed	Closed	Closed	0
7/18	Closed	Closed	Closed	Closed	Closed	0
7/19	Closed	Closed	Closed	Closed	Closed	0
7/20	Closed	Closed	Closed	Closed	Closed	0
7/21	16,160	0	0	408	0	16,568
7/22	21,959	13,377	0	1,195	0	36,531
7/23	29,451	7,237	2,363	3,935	984	43,970

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Table 18.–Page 2 of 3.

Date	District					Total
	Chignik Bay	Central	Eastern	Western	Perryville	
7/24	28,679	2,700	0	891	634	32,904
7/25	16,245	0	0	58	34	16,337
7/26	15,692	10,245	1,056	2,056	0	29,049
7/27	26,824	1,070	Closed	0	0	27,894
7/28	26,198	7,728	Closed	292	0	34,218
7/29	19,930	4,823	Closed	Closed	Closed	24,753
7/30	18,577	5,050	287	457	0	24,371
7/31	16,106	2,738	0	365	0	19,209
8/1	14,124	2,798	0	Closed	Closed	16,922
8/2	14,725	0	357	Closed	Closed	15,082
8/3	7,575	0	Closed	Closed	Closed	7,575
8/4	9,191	1,737	Closed	0	0	10,928
8/5	8,632	1,956	Closed	148	0	10,736
8/6	10,728	2,191	Closed	108	0	13,027
8/7	7,876	1,747	0	Closed	Closed	9,623
8/8	5,877	471	0	Closed	Closed	6,348
8/9	3,808	0	37	455	0	4,300
8/10	4,239	0	0	202	4	4,445
8/11	5,112	662	0	386	150	6,310
8/12	4,442	494	0	813	0	5,749
8/13	5,039	1,412	0	Closed	Closed	6,451
8/14	2,972	865	0	Closed	Closed	3,837
8/15	5,778	779	2	420	0	6,979
8/16	3,739	1,279	0	462	0	5,480
8/17	3,175	1,803	0	516	0	5,494
8/18	3,307	1,201	0	356	0	4,864
8/19	2,833	41	0	100	0	2,974
8/20	1,175	1,696	0	0	0	2,871
8/21	1,170	337	0	14	0	1,521
8/22	0	0	0	0	0	0
8/23	0	0	0	0	0	0
8/24	0	0	0	0	0	0
8/25	0	0	0	0	0	0
8/26	0	0	0	0	0	0
8/27	0	0	0	0	0	0
8/28	1,299	0	0	0	0	1,299
8/29	0	0	0	0	0	0
8/30	0	0	0	0	0	0
8/31	1,385	0	0	0	0	1,385
9/1	2,369	0	0	0	0	2,369
9/2	2,736	0	0	0	0	2,736
9/3	1,555	0	0	0	0	1,555
9/4	1,214	0	0	0	0	1,214
9/5	941	0	0	0	0	941
9/6	550	0	0	0	0	550
9/7	621	0	0	0	0	621

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Table 18.–Page 3 of 3.

Date	District					Total
	Chignik Bay	Central	Eastern	Western	Perryville	
9/8	0	0	0	0	0	0
9/9	0	0	0	0	0	0
9/10	0	0	0	0	0	0
9/11	0	0	0	0	0	0
9/12	0	0	0	0	0	0
9/13	153	0	0	0	0	153
9/14	0	0	0	0	0	0
9/15	0	0	0	0	0	0
9/16	Closed	Closed	Closed	Closed	Closed	0
9/17	Closed	Closed	Closed	Closed	Closed	0
9/18	0	Closed	Closed	0	0	0
9/19	0	Closed	Closed	0	0	0
9/20	Closed	Closed	Closed	0	0	0
9/21	0	Closed	Closed	0	0	0
9/22	0	Closed	Closed	0	0	0
9/23	682	Closed	Closed	0	0	682
Total	869,906	191,611	29,900	102,803	3,885	1,198,105

Table 19.–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 2009.

	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	ND	ND	1,679,467
1979	794,504	98.3	13,950	1.7	ND	ND	808,454
1980	670,001	91.3	32	0.0	63,724	8.7	733,757
1981	1,606,300	79.9	282,727	14.1	122,198	6.1	2,011,225
1982	1,250,768	84.5	166,756	11.3	62,789	4.2	1,480,313
1983	1,450,832	72.7	318,048	15.9	227,392	11.4	1,996,272
1984	2,474,405	73.9	449,372	13.4	423,292	12.6	3,347,069
1985	690,698	79.8	123,627	14.3	51,421	5.9	865,746
1986	1,456,729	82.6	188,017	10.7	118,006	6.7	1,762,752
1987	1,659,236	78.0	321,506	15.1	146,886	6.9	2,127,628
1988	675,487	95.8	10,520	1.5	19,320	2.7	705,327
1989	496,044	99.1	0	0.0	4,485	0.9	500,529
1990	1,205,575	84.3	107,706	7.5	117,065	8.2	1,430,346
1991[d]	1,962,583	80.5	324,195	13.3	152,714	6.3	2,439,492
1992	1,054,309	81.2	150,434	11.6	93,845	7.2	1,298,588
1993	1,495,098	77.7	300,055	15.6	128,608	6.7	1,923,761
1994[e]	1,632,435	80.6	250,230	12.4	142,350	7.0	2,025,015
1995	1,024,785	79.8	169,530	13.2	89,086	6.9	1,283,401
1996	1,710,249	79.7	308,327	14.4	127,201	5.9	2,145,777
1997	443,892	100.0	0	0.0	0	0.0	443,892
1998[f]	786,466	91.2	8,813	1.0	66,893	7.8	862,172
1999	2,326,811	78.7	456,039	15.4	173,621	5.9	2,956,471
2000	1,509,652	80.1	271,344	14.4	103,419	5.5	1,884,415
2001[g]	1,134,991	79.4	215,214	15.1	79,037	5.5	1,429,242
2002	849,980	81.0	136,488	13.0	63,026	6.0	1,049,494
2003	855,179	81.7	121,887	11.6	70,044	6.7	1,047,110
2004	681,120	75.9	160,665	17.9	55,123	6.1	896,908
2005	1,098,718	70.8	274,328	17.7	177,906	11.5	1,550,952
2006	741,887	87.7	41,834	4.9	62,010	7.3	845,731
2007	601,213	92.0	52,527	8.0	0	0.0	653,740
2008	445,199	100.0	0	0.0	0	0.0	445,199
2009	871,890	83.3	126,968	12.1	48,322	5.5	1,047,180
Averages							
1989-08	1,102,809	84	167,481	10	85,322	6	1,355,612
1999-08	1,024,475	83	173,033	12	78,419	5	1,275,926
2004-08	713,627	85	105,871	10	59,008	5	878,506

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[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%. The allocation was increased from 6.0% to 7.6% prior to the 2007 season.

[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 20.–Chignik sockeye salmon escapement, total harvest considered Chignik-bound, and total run, 1970 through 2009.

	Early Run			Late Run			Total Run [a,b,c]		
Year	Esc.	Harvest	Run	Esc.	Harvest	Run	Esc.	Harvest	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	657,511	1,711,549	2,384,420	382,587	661,025	1,028,252	1,040,098	2,372,574	3,412,672
1992	360,681	744,417	1,105,098	405,922	777,311	1,183,233	766,603	1,521,728	2,288,331
1993	364,261	926,892	1,291,153	333,116	1,199,122	1,532,238	697,377	2,126,014	2,823,391
1994	769,462	1,595,176	2,364,638	197,447	416,377	613,824	966,909	2,011,553	2,978,462
1995	366,163	666,799	1,032,962	373,757	1,315,862	1,689,619	739,920	1,982,661	2,722,581
1996	464,461	1,688,264	2,152,725	284,676	705,657	990,333	749,137	2,393,921	3,143,058
1997	396,667	234,824	631,491	378,951	535,523	914,474	775,618	770,347	1,545,965
1998	410,659	313,158	723,817	290,469	816,987	1,107,456	701,128	1,130,145	1,831,273
1999	457,429	2,022,272	2,479,701	258,537	1,723,915	1,982,452	715,966	3,746,187	4,462,153
2000	536,141	1,574,391	2,110,532	269,084	575,597	844,681	805,225	2,149,988	2,955,213
2001	744,013	563,539	1,307,552	392,905	1,214,403	1,607,308	1,136,918	1,777,942	2,914,860
2002	380,701	684,728	1,065,428	343,616	565,339	908,955	724,317	1,250,067	1,974,383
2003	350,004	640,084	990,088	334,119	652,144	986,263	684,123	1,292,228	1,976,351
2004	363,800	727,975	1,091,775	214,459	192,465	406,924	578,259	920,440	1,498,700
2005	355,091	1,109,881	1,464,972	225,366	487,242	712,608	580,457	1,597,123	2,177,580
2006	366,497	436,028	802,525	368,996	570,525	939,521	735,493	1,006,553	1,742,046
2007	361,091	267,805	628,896	293,883	619,269	913,152	654,974	887,074	1,542,048
2008	377,579	253,490	631,069	328,479	433,780	762,259	706,058	687,270	1,393,328
2009	391,476	520,630	912,106	328,586	852,765	1,181,351	720,062	1,373,395	2,093,457
Averages									
1989-08	445,038	848,901	1,294,707	328,470	806,399	1,134,101	773,508	1,655,300	2,428,809
1999-08	429,235	828,019	1,257,254	302,944	703,468	1,006,412	732,179	1,531,487	2,263,666
2004-08	364,812	559,036	923,847	286,237	460,656	746,893	651,048	1,019,692	1,670,740

[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 harvests from the Chignik Lagoon test fishery and fish retained for home pack.

Table 21.–Chignik sockeye salmon forecasts and actual runs, by run and year, 1994 through 2009.

	Early Run			Late Run			Total Run		
Year	Forecast	Actual	% Error	Forecast	Actual	% Error	Forecast	Actual	% Error
1994	1.80	2.36	-23.88	1.30	0.61	111.79	3.10	2.98	4.08
1995	1.90	1.03	83.88	0.90	1.69	-46.72	2.80	2.72	2.84
1996	1.40	2.15	-34.97	1.60	0.99	61.61	3.00	3.14	-4.55
1997	1.00	0.63	58.44	1.60	0.91	75.03	2.60	1.55	68.25
1998	0.90	0.72	24.36	1.10	1.11	-0.66	2.00	1.83	9.23
1999	1.05	2.48	-57.66	1.29	1.98	-34.93	2.34	4.46	-47.56
2000	3.90	2.11	84.66	1.09	0.84	29.04	4.99	2.96	68.77
2001	1.00	1.31	-23.49	0.91	1.61	-43.38	1.91	2.91	-34.46
2002	1.03	1.06	-3.24	1.09	0.91	19.85	2.12	1.97	7.40
2003	1.64	0.99	65.62	1.19	1.00	19.00	2.83	1.99	42.20
2004	1.26	1.09	15.60	1.08	0.41	163.41	2.34	1.50	56.00
2005	1.84	1.46	26.03	0.55	0.71	-22.54	2.39	2.17	10.14
2006	1.21	0.78	55.13	0.28	0.96	-70.83	1.49	1.74	-14.37
2007	1.02	0.60	71.14	0.90	0.95	-5.24	1.92	1.55	24.21
2008	1.07	0.63	69.57	0.65	0.76	-14.96	1.72	1.39	23.33
2009	0.85	0.91	-6.59	0.54	1.18	-54.24	1.39	2.09	-33.49
Averages									
1999-08	1.28	0.91	47.49	0.69	0.76	9.97	1.97	1.67	19.86
2000-08	1.50	1.25	30.34	0.90	1.01	3.94	2.40	2.26	13.57

Table 22.–Chignik Management Area coho salmon harvest, by year, 1970 through 2009.

	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
2003	44	287	103,778	857,097	74	611	103,896	857,995
2004	0	0	37	283	0	0	37	283
2005	0	0	6,951	46,970	5	30	6,956	47,000
2006	0	0	39,046	290,720	175	1,312	39,221	292,032
2007	0	0	73,221	543,761	56	416	73,277	544,177
2008	0	0	161,536	1,290,277	0	0	161,536	1,290,277
2009	0	0	110,373	732,346	0	0	110,373	732,346
Averages								
1989-08	27	154	130,660	990,354	117	863	130,769	991,112
1999-08	4	29	77,785	596,290	68	501	77,858	596,819
2004-08	0	0	56,158	434,402	47	352	56,205	434,754

[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 23.–Chignik Management Area coho salmon harvest (including home pack and the department's test fishery catches), by district and year, 1970 through 2009.

	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
2003	37,800	7,632	0	55,225	3,239	103,896
2004	37	0	0	0	0	37
2005	510	730	12	5,045	659	6,956
2006	7,057	2,170	1	29,993	0	39,221
2007	11,790	12,830	420	47,525	712	73,277
2008	46,400	7,647	1,052	97,153	9,284	161,536
2009	9,570	13,276	2,888	80,395	4,244	110,373
Averages						
1989-08	34,956	20,129	1,143	56,195	18,347	130,769
1999-08	15,683	12,876	944	46,381	1,974	77,858
2004-08	13,159	4,675	297	35,943	2,131	56,205

Table 24.–Chignik Management Area coho salmon harvest (including home pack and the department's test fishery catches), by district and day, 2009.

	District					
Date	Chignik Bay	Central	Eastern	Western	Perryville	Total
6/12	0	Closed	Closed	Closed	Closed	0
6/13	Closed	Closed	Closed	Closed	Closed	0
6/14	Closed	Closed	Closed	Closed	Closed	0
6/15	0	Closed	Closed	Closed	Closed	0
6/16	Closed	Closed	Closed	Closed	Closed	0
6/17	Closed	Closed	Closed	Closed	Closed	0
6/18	Closed	Closed	Closed	Closed	Closed	0
6/19	Closed	Closed	Closed	Closed	Closed	0
6/20	0	0	0	Closed	Closed	0
6/21	0	0	0	Closed	Closed	0
6/22	0	0	0	0	Closed	0
6/23	0	0	0	0	Closed	0
6/24	0	0	0	0	Closed	0
6/25	Closed	Closed	Closed	Closed	Closed	0
6/26	0	0	0	Closed	Closed	0
6/27	0	0	0	31	Closed	31
6/28	0	7	0	0	Closed	7
6/29	0	0	0	Closed	Closed	0
6/30	2	14	0	Closed	Closed	16
7/1	10	43	76	Closed	Closed	129
7/2	1	112	168	Closed	Closed	281
7/3	17	98	0	Closed	Closed	115
7/4	8	259	41	Closed	Closed	308
7/5	2	124	0	Closed	Closed	126
7/6	1	166	0	Closed	Closed	167
7/7	Closed	Closed	Closed	Closed	Closed	0
7/8	Closed	Closed	Closed	Closed	Closed	0
7/9	Closed	Closed	Closed	Closed	Closed	0
7/10	65	560	0	4,343	0	4,968
7/11	154	431	0	8,428	0	9,013
7/12	76	659	0	4,045	2,217	6,997
7/13	107	735	115	4,882	961	6,800
7/14	67	571	1,045	2,610	0	4,293
7/15	252	12	0	8,945	0	9,209
7/16	317	1,393	0	5,504	0	7,214
7/17	Closed	Closed	Closed	Closed	Closed	0
7/18	Closed	Closed	Closed	Closed	Closed	0
7/19	Closed	Closed	Closed	Closed	Closed	0
7/20	Closed	Closed	Closed	Closed	Closed	0
7/21	3	0	0	599	0	602
7/22	380	1,033	0	1,768	0	3,181
7/23	44	186	191	8,334	595	9,350

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Table 24.–Page 2 of 3.

Date	District					Total
	Chignik Bay	Central	Eastern	Western	Perryville	
7/24	9	268	0	1,864	141	2,282
7/25	0	0	0	473	276	749
7/26	24	809	41	1,007	0	1,881
7/27	88	51	Closed	0	0	139
7/28	0	139	Closed	1,017	0	1,156
7/29	0	828	Closed	Closed	Closed	828
7/30	2	711	1,188	2,234	0	4,135
7/31	182	312	12	1,107	0	1,613
8/1	13	156	0	Closed	Closed	169
8/2	2	0	0	Closed	Closed	2
8/3	4	0	Closed	Closed	Closed	4
8/4	1	285	Closed	0	0	286
8/5	1	437	Closed	1,241	0	1,679
8/6	2	291	Closed	585	0	878
8/7	9	284	0	Closed	Closed	293
8/8	12	133	4	Closed	Closed	149
8/9	3	0	4	694	0	701
8/10	26	0	0	8,507	0	8,533
8/11	41	156	0	781	54	1,032
8/12	28	274	0	1,713	0	2,015
8/13	33	198	0	Closed	Closed	231
8/14	46	163	1	Closed	Closed	210
8/15	174	85	2	1,799	0	2,060
8/16	42	284	0	1,803	0	2,129
8/17	47	203	0	2,061	0	2,311
8/18	57	211	0	2,040	0	2,308
8/19	64	20	0	1,120	0	1,204
8/20	52	495	0	0	0	547
8/21	69	80	0	89	0	238
8/22	0	0	0	0	0	0
8/23	0	0	0	0	0	0
8/24	0	0	0	0	0	0
8/25	0	0	0	0	0	0
8/26	0	0	0	0	0	0
8/27	0	0	0	0	0	0
8/28	317	0	0	0	0	317
8/29	0	0	0	0	0	0
8/30	0	0	0	0	0	0
8/31	470	0	0	0	0	470
9/1	720	0	0	0	0	720
9/2	939	0	0	0	0	939
9/3	962	0	0	0	0	962
9/4	992	0	0	0	0	992
9/5	636	0	0	0	0	636
9/6	530	0	0	0	0	530
9/7	1,240	0	0	0	0	1,240

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Table 24.–Page 3 of 3.

	District					
Date	Chignik Bay	Central	Eastern	Western	Perryville	Total
9/8	0	0	0	0	0	0
9/9	0	0	0	0	0	0
9/10	0	0	0	0	0	0
9/11	0	0	0	0	0	0
9/12	0	0	0	0	0	0
9/13	116	0	0	0	0	116
9/14	0	0	0	771	0	771
9/15	0	0	0	0	0	0
9/16	Closed	Closed	Closed	Closed	Closed	0
9/17	Closed	Closed	Closed	Closed	Closed	0
9/18	0	Closed	Closed	0	0	0
9/19	0	Closed	Closed	0	0	0
9/20	Closed	Closed	Closed	0	0	0
9/21	0	Closed	Closed	0	0	0
9/22	0	Closed	Closed	0	0	0
9/23	111	Closed	Closed	0	0	111
Total	9,570	13,276	2,888	80,395	4,244	110,373

Table 25.–Chignik Management Area pink salmon harvest, by year, 1970 through 2009.

	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
2003	570	2,167	501,661	1,951,928	407	1,584	502,638	1,955,679
2004	0	0	2,380	7,589	0	0	2,380	7,589
2005	8	48	193,803	611,023	234	813	194,045	611,884
2006	0	0	383,574	1,403,428	0	0	383,574	1,403,428
2007	0	0	2,019,748	7,388,012	0	0	2,019,748	7,388,012
2008	0	0	2,389,958	8,192,350	0	0	2,389,958	8,192,350
2009	0	0	1,408,339	4,502,661	0	0	1,408,339	4,502,661
Averages								
1989-08	263	893	910,234	3,042,186	422	1,269	910,792	3,043,968
1999-08	64	249	896,558	2,986,697	65	242	896,688	2,987,188
2004-08	2	10	997,893	3,520,480	47	163	997,941	3,520,653

[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 26.–Chignik Management Area pink salmon harvest (including home pack and the department's test fishery catches), by district and year, 1970 through 2009.

	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
2003	56,042	88,736	267	326,239	31,354	502,638
2004	2,378	2	0	0	0	2,380
2005	71,438	99,491	21	20,952	2,143	194,045
2006	62,419	79,726	79,465	161,964	0	383,574
2007	187,670	612,921	43,379	1,152,331	23,447	2,019,748
2008	232,444	369,298	416,520	1,062,482	309,214	2,389,958
2009	77,569	317,085	275,791	711,890	26,004	1,408,339
Averages						
1989-08	72,547	254,509	58,019	373,049	152,668	910,792
1999-08	78,485	284,482	68,816	406,298	58,606	896,688
2004-08	111,270	232,288	107,877	479,546	66,961	997,941

Table 27.–Chignik Management Area pink salmon harvest (including home pack and the department's test fishery catches), by district and day, 2009.

	District					
Date	Chignik Bay	Central	Eastern	Western	Perryville	Total
6/12	0	Closed	Closed	Closed	Closed	0
6/13	Closed	Closed	Closed	Closed	Closed	0
6/14	Closed	Closed	Closed	Closed	Closed	0
6/15	0	Closed	Closed	Closed	Closed	0
6/16	Closed	Closed	Closed	Closed	Closed	0
6/17	Closed	Closed	Closed	Closed	Closed	0
6/18	Closed	Closed	Closed	Closed	Closed	0
6/19	Closed	Closed	Closed	Closed	Closed	0
6/20	6	0	0	Closed	Closed	6
6/21	1	1,473	0	Closed	Closed	1,474
6/22	5	104	0	15,615	Closed	15,724
6/23	1	587	0	56,524	Closed	57,112
6/24	26	255	0	61,046	Closed	61,327
6/25	Closed	Closed	Closed	Closed	Closed	0
6/26	61	3,349	0	Closed	Closed	3,410
6/27	248	7,120	0	81,453	Closed	88,821
6/28	846	4,730	0	41,537	Closed	47,113
6/29	1,345	4,574	0	Closed	Closed	5,919
6/30	1,861	5,197	0	Closed	Closed	7,058
7/1	1,257	12,830	11,208	Closed	Closed	25,295
7/2	3,147	23,255	6,928	Closed	Closed	33,330
7/3	1,251	14,640	0	Closed	Closed	15,891
7/4	1,321	9,509	673	Closed	Closed	11,503
7/5	1,119	3,906	1,554	Closed	Closed	6,579
7/6	1,125	6,488	1,136	Closed	Closed	8,749
7/7	Closed	Closed	Closed	Closed	Closed	0
7/8	Closed	Closed	Closed	Closed	Closed	0
7/9	Closed	Closed	Closed	Closed	Closed	0
7/10	2,668	3,943	0	63,774	0	70,385
7/11	3,043	3,054	0	63,399	0	69,496
7/12	2,378	3,480	0	24,933	10,392	41,183
7/13	1,862	5,613	680	14,382	6,085	28,622
7/14	1,355	2,337	3,985	14,089	0	21,766
7/15	1,225	34	0	26,674	0	27,933
7/16	2,059	7,321	0	14,102	0	23,482
7/17	Closed	Closed	Closed	Closed	Closed	0
7/18	Closed	Closed	Closed	Closed	Closed	0
7/19	Closed	Closed	Closed	Closed	Closed	0
7/20	Closed	Closed	Closed	Closed	Closed	0
7/21	1,255	0	0	2,828	0	4,083
7/22	3,497	9,654	0	7,116	0	20,267
7/23	2,435	2,460	3,887	32,804	3,371	44,957

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Table 27.–Page 2 of 3.

Date	District					Total
	Chignik Bay	Central	Eastern	Western	Perryville	
7/24	1,749	4,350	0	9,064	1,469	16,632
7/25	959	0	0	2,846	1,658	5,463
7/26	791	17,388	2,152	13,340	0	33,671
7/27	1,974	3,651	Closed	0	0	5,625
7/28	1,509	8,350	Closed	2,608	0	12,467
7/29	1,698	20,484	Closed	Closed	Closed	22,182
7/30	1,561	13,540	38,226	7,848	0	61,175
7/31	1,915	8,621	50,740	1,236	0	62,512
8/1	2,046	8,666	2,526	Closed	Closed	13,238
8/2	1,713	0	357	Closed	Closed	2,070
8/3	1,185	0	Closed	Closed	Closed	1,185
8/4	1,288	16,008	Closed	0	0	17,296
8/5	1,616	12,552	Closed	9,418	0	23,586
8/6	2,605	11,006	Closed	7,290	0	20,901
8/7	2,597	12,495	37,340	Closed	Closed	52,432
8/8	2,102	5,037	29,466	Closed	Closed	36,605
8/9	1,293	0	39,345	26,026	0	66,664
8/10	1,390	0	0	24,794	1,902	28,086
8/11	1,488	644	0	20,270	1,127	23,529
8/12	2,081	3,385	0	19,888	0	25,354
8/13	1,407	7,168	17,712	Closed	Closed	26,287
8/14	589	4,513	19,497	Closed	Closed	24,599
8/15	1,872	2,832	1,624	14,019	0	20,347
8/16	842	5,308	0	13,002	0	19,152
8/17	1,073	5,212	6,755	9,116	0	22,156
8/18	887	4,767	0	7,211	0	12,865
8/19	759	234	0	3,446	0	4,439
8/20	480	3,859	0	0	0	4,339
8/21	315	1,102	0	192	0	1,609
8/22	0	0	0	0	0	0
8/23	0	0	0	0	0	0
8/24	0	0	0	0	0	0
8/25	0	0	0	0	0	0
8/26	0	0	0	0	0	0
8/27	0	0	0	0	0	0
8/28	194	0	0	0	0	194
8/29	0	0	0	0	0	0
8/30	0	0	0	0	0	0
8/31	0	0	0	0	0	0
9/1	71	0	0	0	0	71
9/2	95	0	0	0	0	95
9/3	28	0	0	0	0	28
9/4	0	0	0	0	0	0
9/5	0	0	0	0	0	0
9/6	0	0	0	0	0	0
9/7	0	0	0	0	0	0

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Table 27.–Page 3 of 3.

Date	District					Total
	Chignik Bay	Central	Eastern	Western	Perryville	
9/8	0	0	0	0	0	0
9/9	0	0	0	0	0	0
9/10	0	0	0	0	0	0
9/11	0	0	0	0	0	0
9/12	0	0	0	0	0	0
9/13	0	0	0	0	0	0
9/14	0	0	0	0	0	0
9/15	0	0	0	0	0	0
9/16	Closed	Closed	Closed	Closed	Closed	0
9/17	Closed	Closed	Closed	Closed	Closed	0
9/18	0	Closed	Closed	0	0	0
9/19	0	Closed	Closed	0	0	0
9/20	Closed	Closed	Closed	0	0	0
9/21	0	Closed	Closed	0	0	0
9/22	0	Closed	Closed	0	0	0
9/23	0	Closed	Closed	0	0	0
Total	77,569	317,085	275,791	711,890	26,004	1,408,339

Table 28.–Chignik Management Area chum salmon harvest, by year, 1970 through 2009.

	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	37	380,949	2,815,024
1996	0	0	99,791	779,840	21,100	164,891	120,891	944,731
1997	0	0	155,905	1,196,999	0	0	155,905	1,196,999
1998	0	0	128,841	917,648	155	1,104	128,996	918,752
1999	0	0	140,594	1,064,433	3	0	140,597	1,064,433
2000	0	0	120,957	1,033,665	0	0	120,957	1,033,665
2001	0	0	198,874	1,609,533	129	1,044	199,003	1,610,577
2002	46	334	54,513	406,382	0	0	54,559	406,716
2003	137	1,394	63,907	447,921	0	0	64,044	449,315
2004	0	0	2,380	7,589	0	0	2,380	7,589
2005	2	15	8,704	63,379	115	825	8,821	64,219
2006	0	0	61,630	450,686	0	0	61,630	450,686
2007	0	0	78,552	648,355	1	8	78,553	648,363
2008	0	0	209,325	1,726,108	0	0	209,325	1,726,108
2009	0	0	256,424	1,922,522	1	9	256,425	1,922,531
Averages								
1989-08	69	494	140,411	1,028,194	1,536	11,993	141,555	1,037,083
1999-08	19	174	93,944	745,805	25	188	93,987	746,167
2004-08	0	3	72,118	579,223	23	167	72,142	579,393

[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 29.–Chignik Management Area chum salmon harvest (including home pack and the department's test fishery catches), by district and year, 1970 through 2009.

	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
2003	10,891	11,304	50	39,883	1,916	64,044
2004	499	6	0	0	0	505
2005	2,370	5,329	2	1,054	66	8,821
2006	2,303	9,455	776	49,096	0	61,630
2007	3,829	19,595	7,851	46,943	335	78,553
2008	13,453	40,130	58,925	88,078	8,739	209,325
2009	14,553	62,149	59,800	116,231	3,692	256,425
Averages						
1989-08	9,487	47,357	15,099	50,094	19,425	141,462
1999-08	6,937	32,199	13,841	37,477	3,346	93,799
2004-08	4,491	14,903	13,511	37,034	1,828	71,767

Table 30.–Chignik Management Area chum salmon harvest (including home pack and the department's test fishery catches), by district and day, 2009.

	District					
Date	Chignik Bay	Central	Eastern	Western	Perryville	Total
6/12	0	Closed	Closed	Closed	Closed	0
6/13	Closed	Closed	Closed	Closed	Closed	0
6/14	Closed	Closed	Closed	Closed	Closed	0
6/15	0	Closed	Closed	Closed	Closed	0
6/16	Closed	Closed	Closed	Closed	Closed	0
6/17	Closed	Closed	Closed	Closed	Closed	0
6/18	Closed	Closed	Closed	Closed	Closed	0
6/19	Closed	Closed	Closed	Closed	Closed	0
6/20	0	1	0	Closed	Closed	1
6/21	0	1,838	0	Closed	Closed	1,838
6/22	0	354	0	4,464	Closed	4,818
6/23	0	158	0	14,240	Closed	14,398
6/24	10	42	0	16,567	Closed	16,619
6/25	Closed	Closed	Closed	Closed	Closed	0
6/26	0	434	0	Closed	Closed	434
6/27	0	633	0	7,815	Closed	8,448
6/28	15	796	0	4,606	Closed	5,417
6/29	7	658	0	Closed	Closed	665
6/30	1	1,404	0	Closed	Closed	1,405
7/1	59	1,892	440	Closed	Closed	2,391
7/2	188	1,517	466	Closed	Closed	2,171
7/3	50	2,021	0	Closed	Closed	2,071
7/4	7	1,417	260	Closed	Closed	1,684
7/5	29	1,237	2,603	Closed	Closed	3,869
7/6	12	2,392	181	Closed	Closed	2,585
7/7	Closed	Closed	Closed	Closed	Closed	0
7/8	Closed	Closed	Closed	Closed	Closed	0
7/9	Closed	Closed	Closed	Closed	Closed	0
7/10	14	1,859	0	3,138	0	5,011
7/11	181	829	0	4,652	0	5,662
7/12	76	1,017	0	2,666	1,168	4,927
7/13	89	1,766	146	2,863	353	5,217
7/14	73	1,041	1,006	2,648	0	4,768
7/15	119	28	0	4,277	0	4,424
7/16	69	2,098	0	2,247	0	4,414
7/17	Closed	Closed	Closed	Closed	Closed	0
7/18	Closed	Closed	Closed	Closed	Closed	0
7/19	Closed	Closed	Closed	Closed	Closed	0
7/20	Closed	Closed	Closed	Closed	Closed	0
7/21	49	0	0	1,342	0	1,391
7/22	291	4,128	0	2,772	0	7,191
7/23	187	486	1,032	7,374	772	9,851

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Table 30.–Page 2 of 3.

Date	District					Total
	Chignik Bay	Central	Eastern	Western	Perryville	
7/24	183	2,149	0	6,004	322	8,658
7/25	244	0	0	1,272	741	2,257
7/26	275	3,132	331	6,203	0	9,941
7/27	998	273	Closed	0	0	1,271
7/28	536	1,009	Closed	2,706	0	4,251
7/29	380	2,112	Closed	Closed	Closed	2,492
7/30	409	2,303	6,820	3,057	0	12,589
7/31	513	1,162	6,990	756	0	9,421
8/1	605	1,344	150	Closed	Closed	2,099
8/2	231	0	0	Closed	Closed	231
8/3	147	0	Closed	Closed	Closed	147
8/4	695	2,529	Closed	0	0	3,224
8/5	654	1,996	Closed	2,337	0	4,987
8/6	415	3,209	Closed	1,417	0	5,041
8/7	549	2,750	8,390	Closed	Closed	11,689
8/8	563	754	9,136	Closed	Closed	10,453
8/9	382	0	3,742	1,430	0	5,554
8/10	725	0	0	984	42	1,751
8/11	667	648	0	1,203	294	2,812
8/12	493	781	0	1,817	0	3,091
8/13	349	983	4,750	Closed	Closed	6,082
8/14	307	866	11,990	Closed	Closed	13,163
8/15	494	446	0	1,036	0	1,976
8/16	346	632	0	1,708	0	2,686
8/17	500	994	1,367	1,190	0	4,051
8/18	539	622	0	1,046	0	2,207
8/19	390	42	0	360	0	792
8/20	153	1,172	0	0	0	1,325
8/21	94	195	0	34	0	323
8/22	0	0	0	0	0	0
8/23	0	0	0	0	0	0
8/24	0	0	0	0	0	0
8/25	0	0	0	0	0	0
8/26	0	0	0	0	0	0
8/27	0	0	0	0	0	0
8/28	51	0	0	0	0	51
8/29	0	0	0	0	0	0
8/30	0	0	0	0	0	0
8/31	11	0	0	0	0	11
9/1	54	0	0	0	0	54
9/2	61	0	0	0	0	61
9/3	11	0	0	0	0	11
9/4	1	0	0	0	0	1
9/5	0	0	0	0	0	0
9/6	0	0	0	0	0	0
9/7	2	0	0	0	0	2

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Table 30.–Page 3 of 3.

Date	District					Total
	Chignik Bay	Central	Eastern	Western	Perryville	
9/8	0	0	0	0	0	0
9/9	0	0	0	0	0	0
9/10	0	0	0	0	0	0
9/11	0	0	0	0	0	0
9/12	0	0	0	0	0	0
9/13	0	0	0	0	0	0
9/14	0	0	0	0	0	0
9/15	0	0	0	0	0	0
9/16	Closed	Closed	Closed	Closed	Closed	0
9/17	Closed	Closed	Closed	Closed	Closed	0
9/18	0	Closed	Closed	0	0	0
9/19	0	Closed	Closed	0	0	0
9/20	Closed	Closed	Closed	0	0	0
9/21	0	Closed	Closed	0	0	0
9/22	0	Closed	Closed	0	0	0
9/23	0	Closed	Closed	0	0	0
Total	14,553	62,149	59,800	116,231	3,692	256,425

Table 31.–Value of the commercial salmon harvest, by species, and average value per active permit, in dollars, in the Chignik Management Area, 1970 through 2009.

	Chinook		Sockeye		Coho		Pink		Chum			Number of	Value Per
Year	Total[a]	Average[b]	Total[a]	Average[b]	Total[a]	Average[b]	Total[a]	Average[b]	Total[a]	Average[b]	Total Value	Permits[c]	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 31.–Page 2 of 2.

Year	Chinook		Sockeye		Coho		Pink		Chum		Total Value	Number of Permits[c]	Value Per Permit
	Total[a]	Average[b]	Total[a]	Average[b]	Total[a]	Average[b]	Total[a]	Average[b]	Total[a]	Average[b]			
2000	16,336	165	11,812,368	119,317	283,061	2,859	106,470	1,075	93,030	940	12,311,264	99	124,356
2001	12,205	133	7,419,339	80,645	263,160	2,860	366,714	3,986	209,239	2,274	8,270,657	92	89,898
2002	3,516	36	4,564,214	46,103	36,078	364	10,333	104	40,671	411	4,654,812	99	47,018
2003	20,212	202	5,283,962	52,840	173,625	1,736	182,100	1,821	71,140	711	5,731,039	100	57,310
2004	26,191	262	3,568,350	35,684	59	1	835	8	647	6	3,596,082	100	35,961
2005	36,060	377	6,314,036	64,429	11,280	115	55,070	562	10,917	111	6,427,363	98	65,585
2006	26,895	560	4,703,317	97,986	105,132	2,190	126,309	2,631	81,123	1,690	5,042,776	48	105,058
2007	26,176	476	4,154,210	75,531	195,754	3,559	1,034,322	18,806	162,089	2,947	5,572,550	55	101,319
2008	15,249	282	4,121,611	76,326	778,282	14,413	1,810,965	33,536	533,358	9,877	7,259,465	54	134,435
2009[d]	30,714	558	7,058,058	128,328	220,824	4,015	800,530	14,555	520,791	9,469	8,630,917	55	156,926
Averages													
1989-08	53,462	568	9,327,198	101,242	454,311	5,056	427,382	5,601	238,994	2,747	10,501,347	91	115,215
1999-08	21,005	280	7,307,396	88,367	201,736	3,000	427,198	6,896	132,076	2,029	8,089,411	84	100,570
2004-08	26,114	392	4,572,305	69,991	218,101	4,056	605,500	11,109	157,627	2,926	5,579,647	71	88,472

[a] Total value of commercial catch in dollars, by species. Value does not include home pack or department test fishery.

[b] Average value of commercial catch in dollars, by species. Average value does not include home pack or department test fishery.

[c] Includes the number of commercial permits that received income from the harvest. These figures do not include department test fishery harvests.

[d] Values represent the initial price paid, and do not include any post-season adjustments by any processor. The average 2009 exvessel prices per pound were: Chinook- $1.05, sockeye- $0.88, coho- $0.60, pink- $0.22, chum- $0.31.

Table 32.–Number of subsistence permits issued and returned and estimated subsistence salmon harvest, by species and year, 1980 through 2009.

	Permits		Estimated Salmon Harvest					
Year	Issued	Returned	Chinook	Sockeye	Coho	Chum	Pink	Total
1980	82	37	6	12,475	32	169	478	13,160
1981	29	7	0	2,049	0	0	0	2,049
1982	59	15	3	8,532	12	0	2	8,549
1983	32	21	0	3,078	1,319	850	1,250	6,497
1984	77	64	23	8,747	464	204	330	9,768
1985	59	48	1	7,177	50	25	26	7,279
1986	74	38	4	10,347	205	77	98	10,731
1987	2	1	0	400	0	0	0	400
1988	80	34	9	9,073	1,455	142	54	10,733
1989	68	23	24	7,551	384	147	81	8,187
1990	72	23	103	8,099	210	115	470	8,997
1991	95	58	42	11,483	13	81	275	11,894
1992	98	19	55	8,648	709	145	305	9,862
1993	201	141	122	14,710	3,765	642	1,265	20,504
1994	219	122	165	13,978	4,055	382	1,720	20,300
1995	111	95	98	9,563	1,191	150	723	11,725
1996	119	104	48	7,357	2,126	355	2,204	12,090
1997	126	103	28	13,442	2,678	840	2,035	19,023
1998	104	72	91	7,750	1,390	186	1,007	10,424
1999	106	88	243	9,040	1,679	136	1,191	12,289
2000	130	112	163	9,561	1,802	517	1,185	13,228
2001	135	122	171	8,633	1,859	213	2,787	13,663
2002	120	86	74	10,092	1,401	23	390	11,980
2003	146	127	267	10,989	2,256	286	1,597	15,395
2004	104	57	88	7,029	1,981	202	1,047	10,357
2005	119	100	224	8,171	2,112	353	730	11,590
2006	113	79	258	8,079	1,539	275	1,035	11,186
2007	128	83	84	10,191	1,936	165	996	13,372
2008	89	69	41	7,189	877	57	619	8,783
2009[a]	95	82	104	6,785	1,174	137	707	8,907
Averages								
1989-08	120	84	119	9,578	1,698	264	1,083	12,742
1999-08	119	92	161	8,897	1,744	223	1,158	12,184
2004-08	111	78	139	8,132	1,689	210	885	11,058

Source: Alaska Department of Fish and Game, Division of Subsistence, Alaska Subsistence Fisheries Database.

[a] From 1993 through 2008, post-season household surveys were conducted to supplement harvest data collected through returned permits. Limited budgets prevented administering the surveys for 2009, likely resulting in an underestimate of subsistence harvests since not all subsistence fishing households obtained a permit. To compensate for this underestimate, the average annual harvest for the period 1999–2008 reported during post-season surveys was added to harvests from returned permits to estimate the total subsistence harvest for 2009.

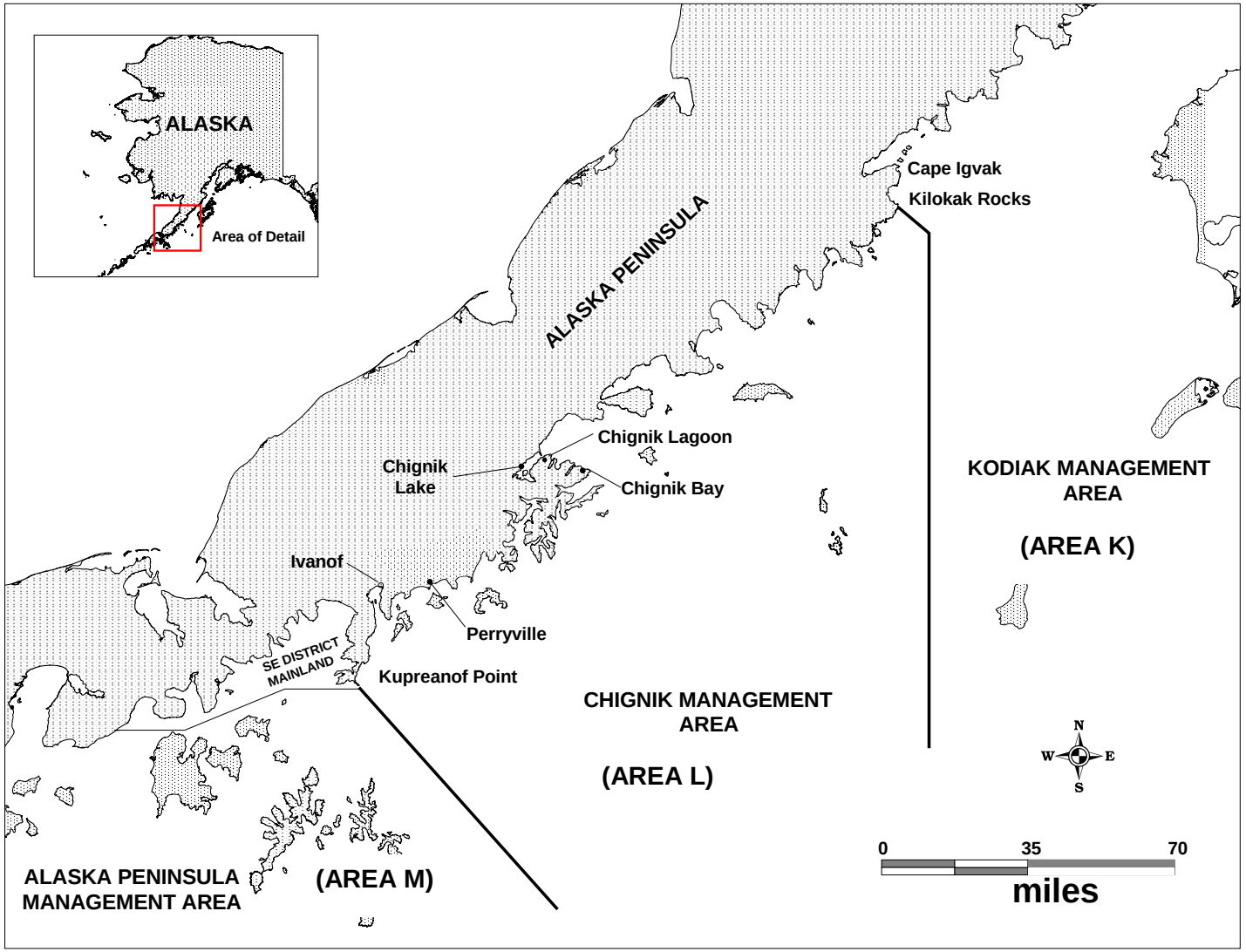

Figure 1.–Map of the Alaska Peninsula illustrating the relative locations of the Chignik, Kodiak, and Alaska Peninsula and Aleutians Islands Management Areas.

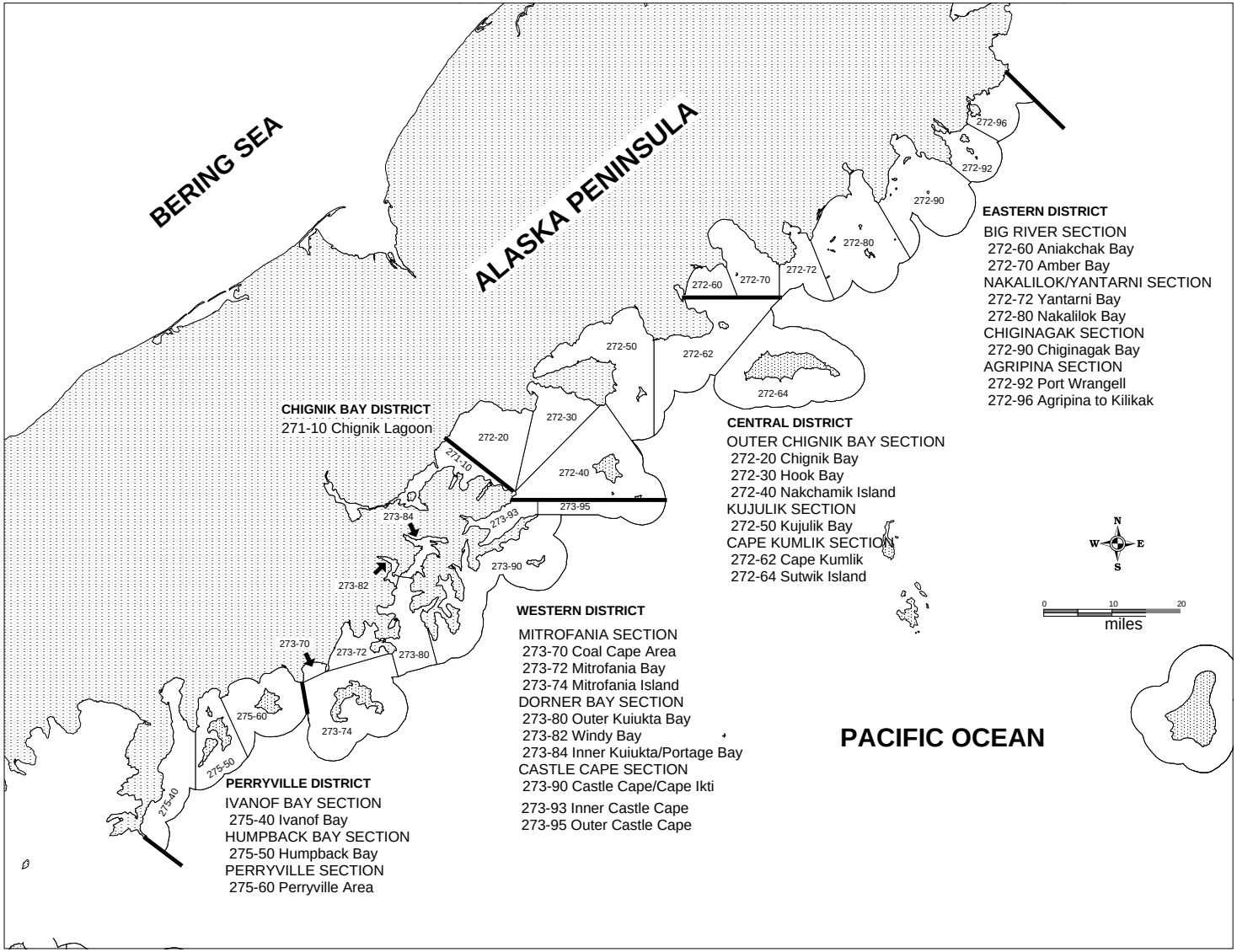

Figure 2.–Map of the Chignik Management Area illustrating district and section boundaries and statistical areas.

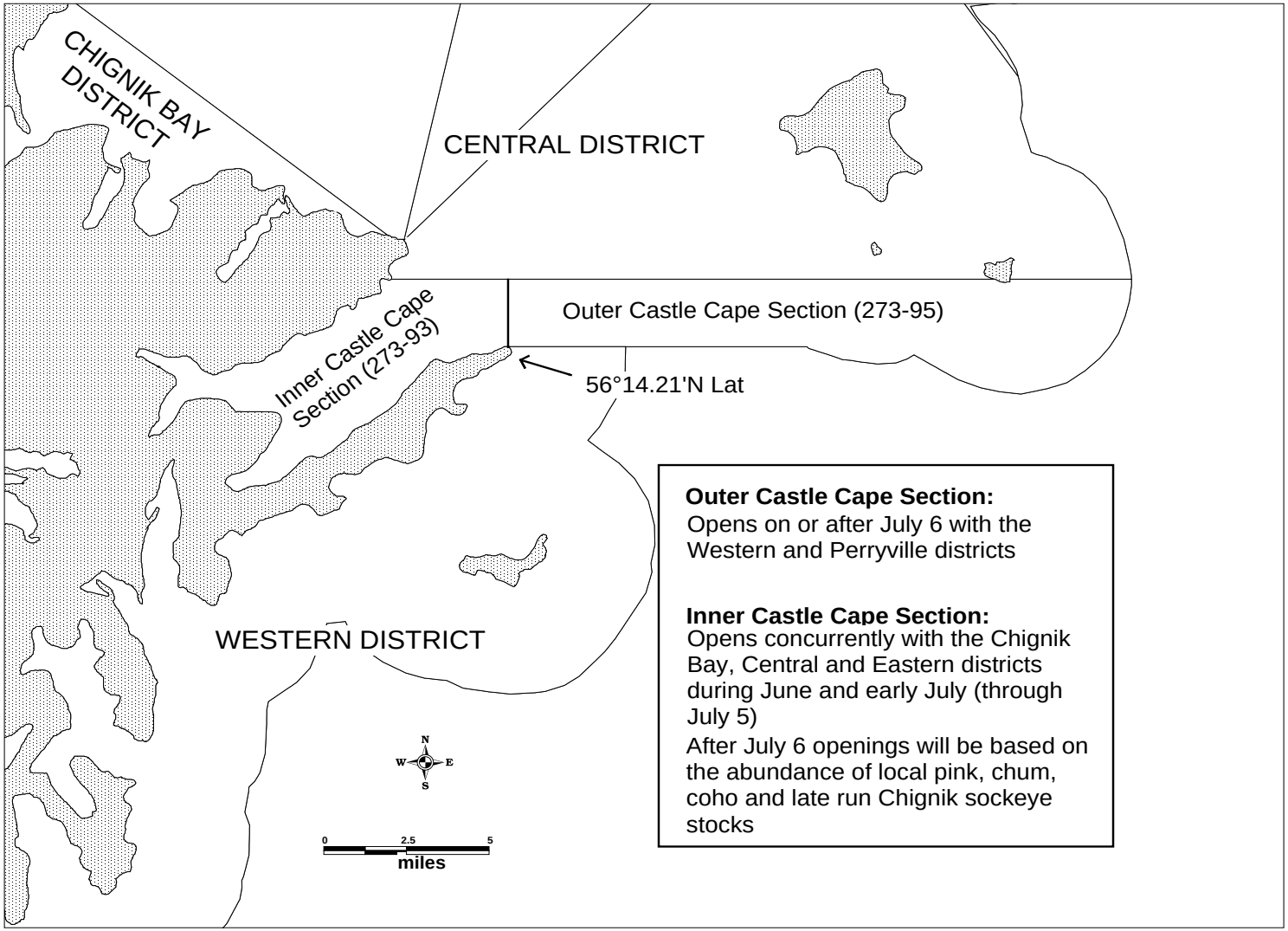

Figure 3.–Map depicting the newly established Inner (273-93), and Outer (273-95) Castle Cape Sections of the Western District.

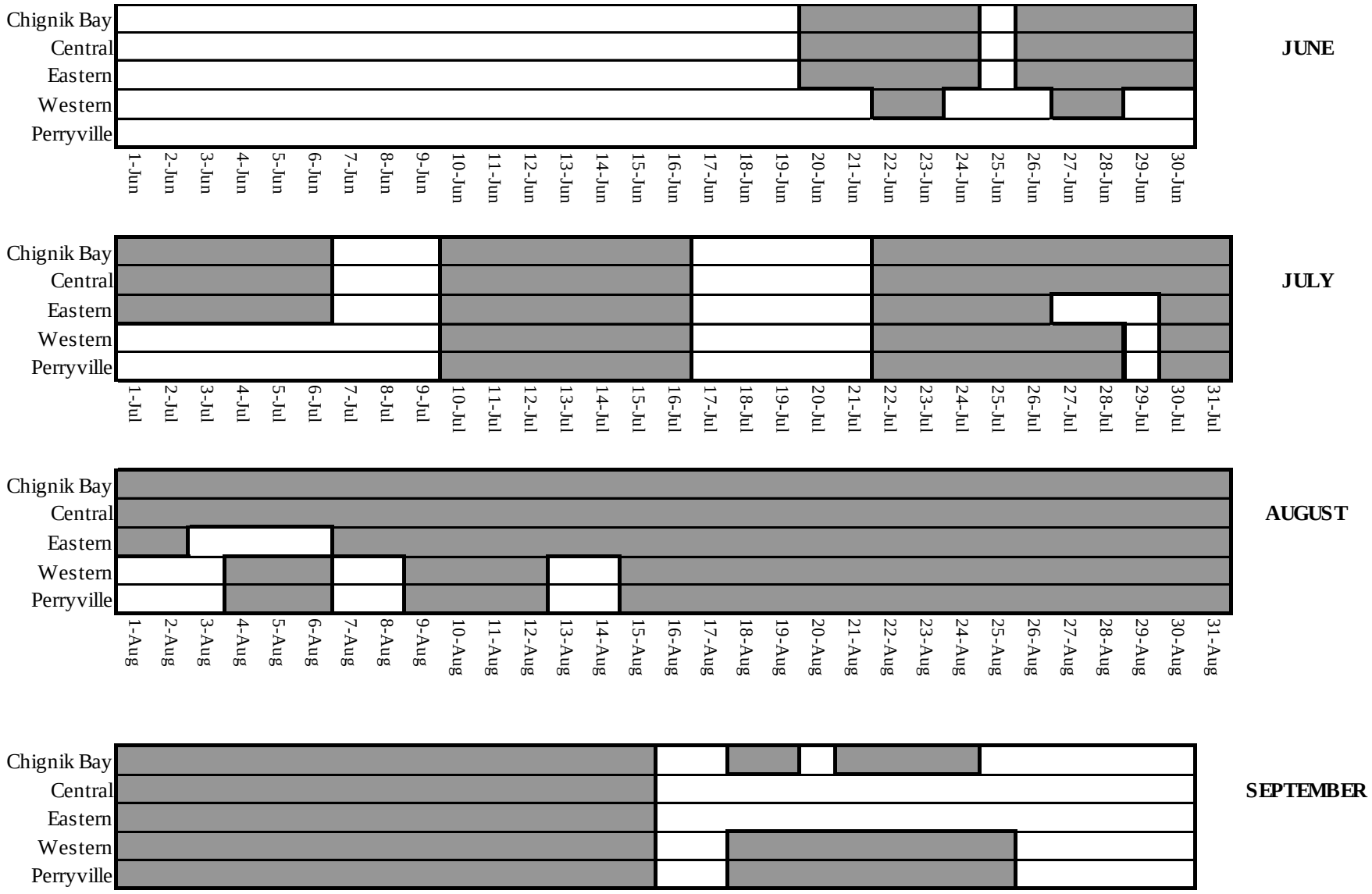

Figure 4.–Representation of days open to commercial salmon fishing, by district and month, 2009.

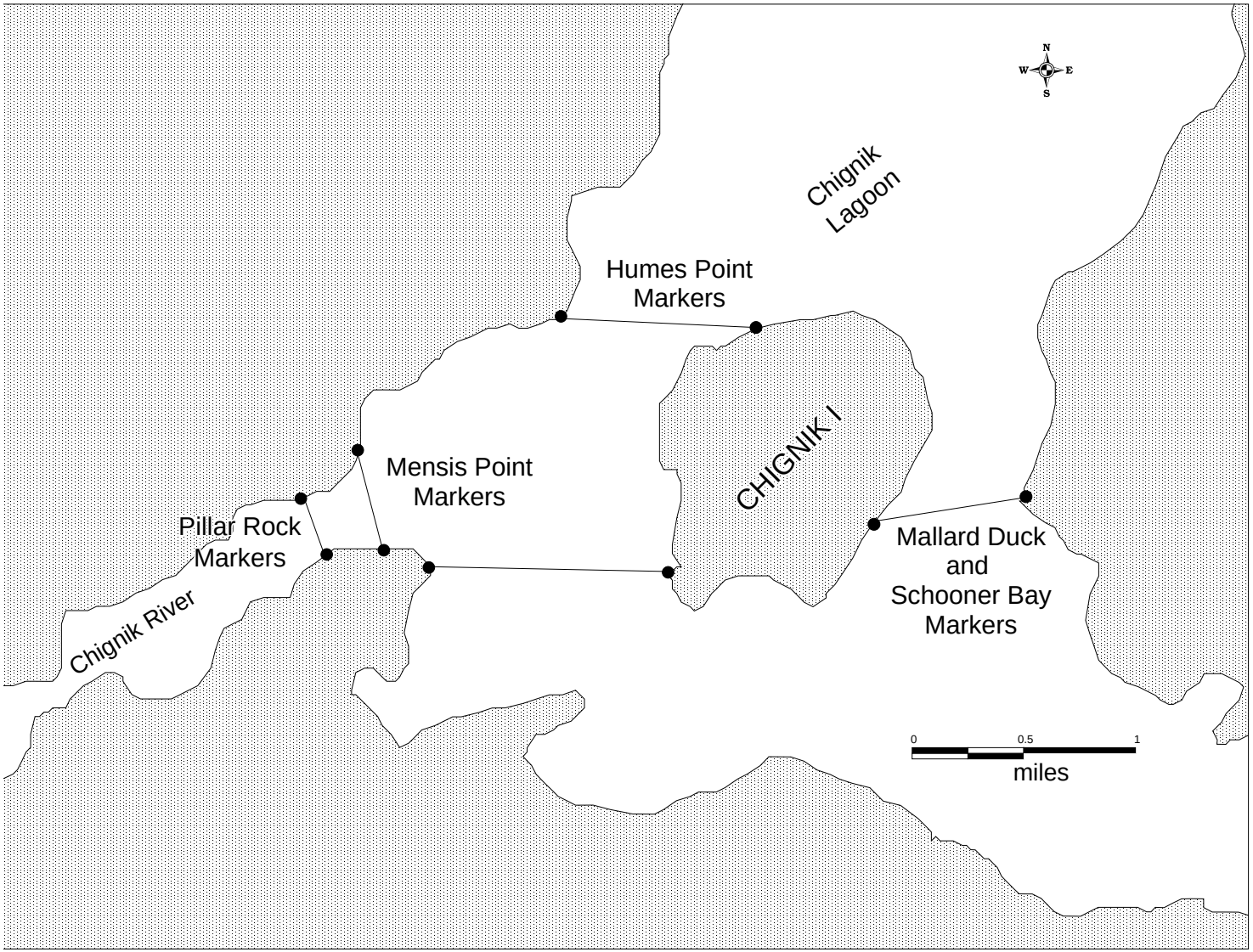

Figure 5.–Map of upper Chignik Lagoon showing the location of the Pillar Rock, Mensis Point, Humes Point, and Mallard Duck and Schooner Bay marker locations.

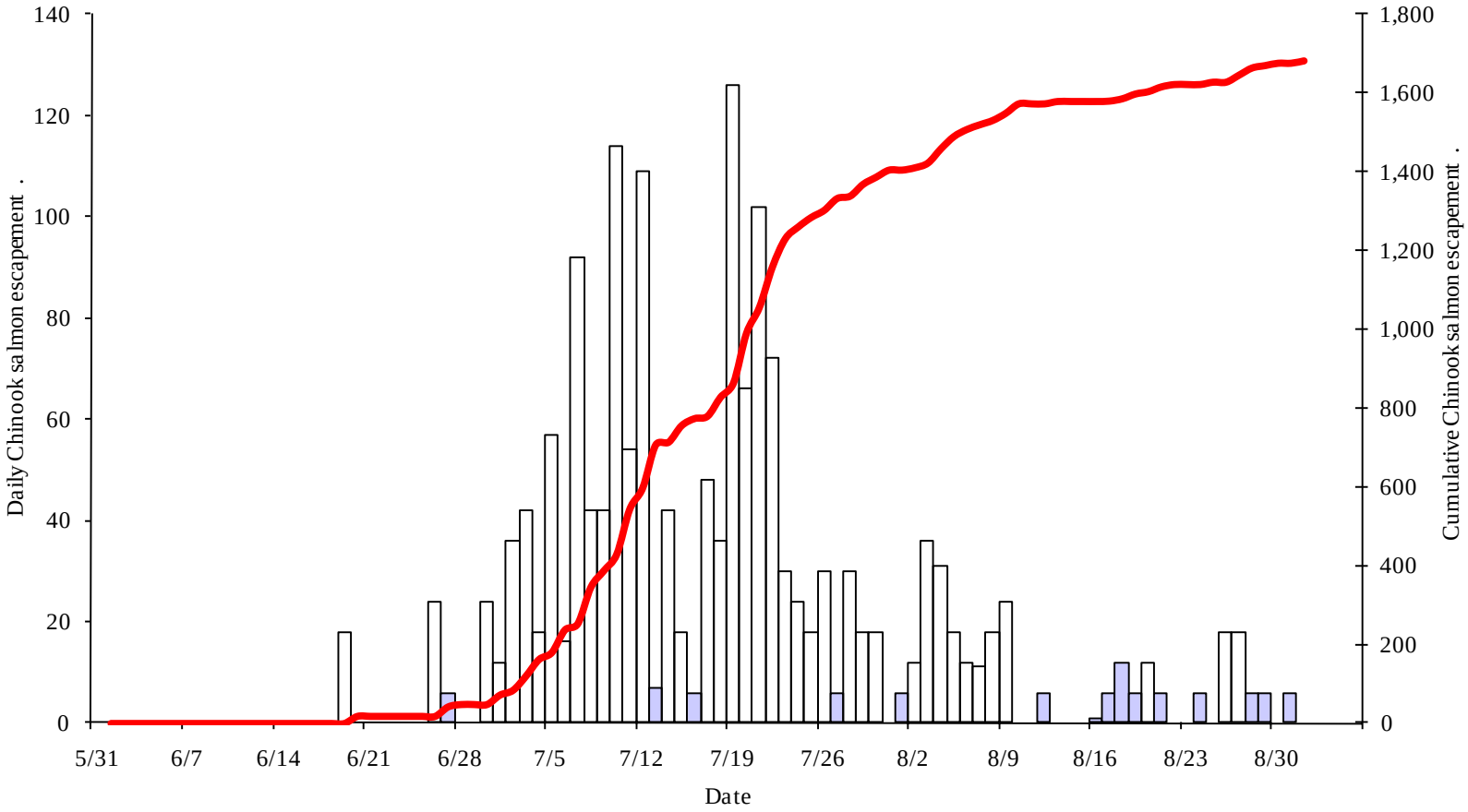

Figure 6.–Chignik River estimated daily and cumulative Chinook salmon escapement, 2009.

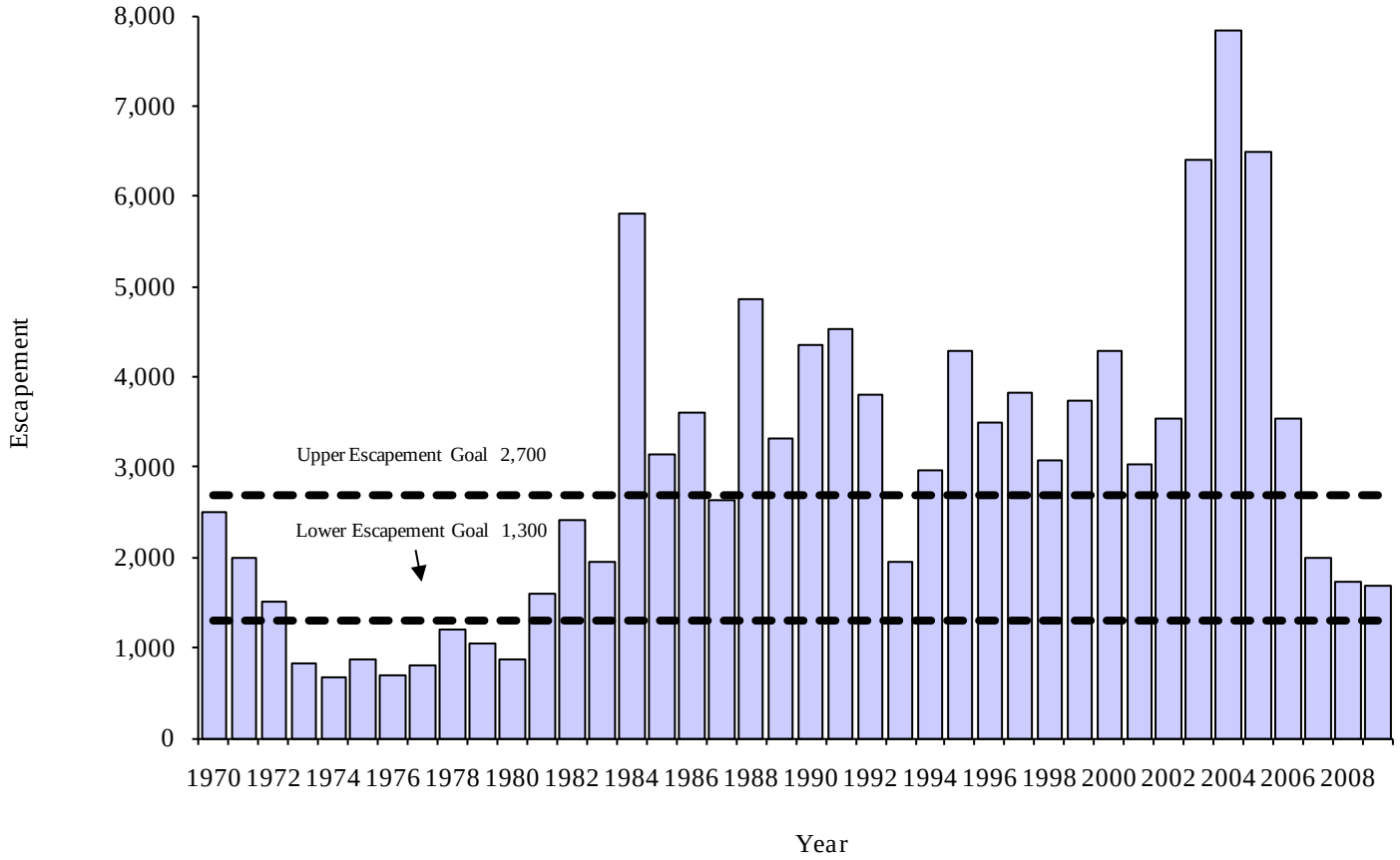

Figure 7.–Chignik River Chinook salmon escapement as compared to current escapement goals, by year, 1970 to 2009.

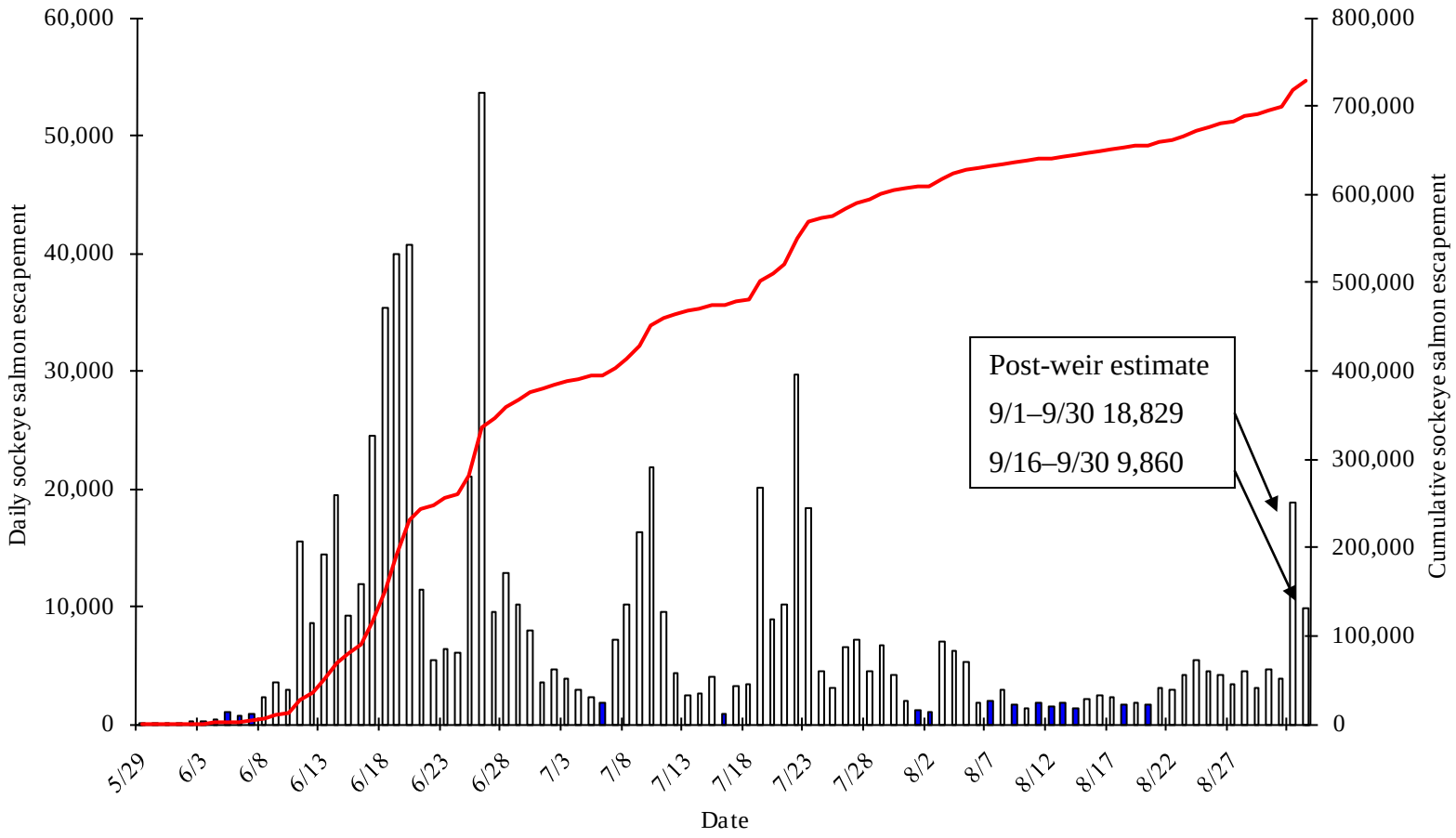

Figure 8.–Chignik River sockeye salmon daily and cumulative escapement, 2009

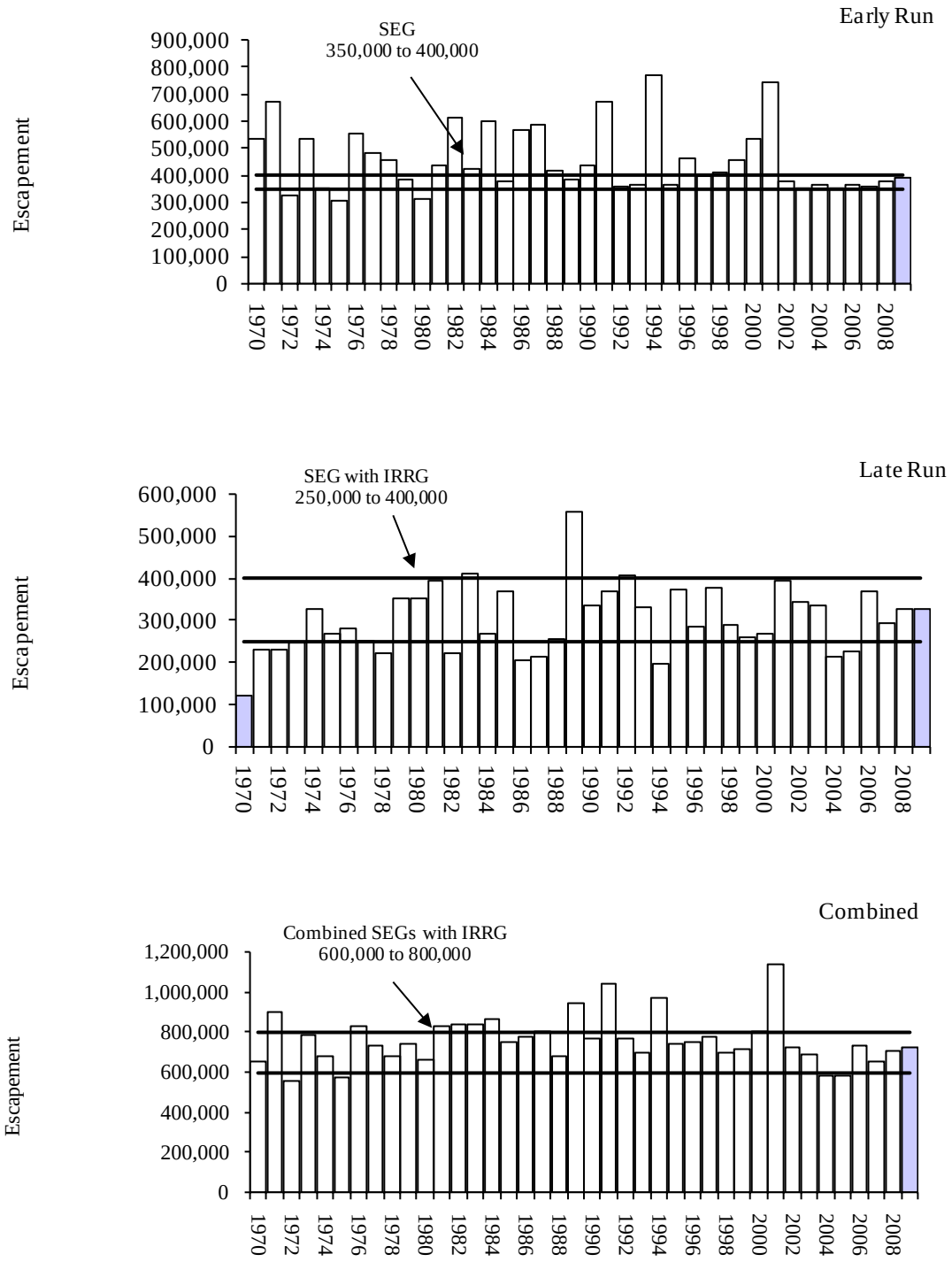

Figure 9.–Chignik River sockeye salmon early, late, and combined run escapements 1970 through 2009, compared to 2009 sustainable escapement goal.

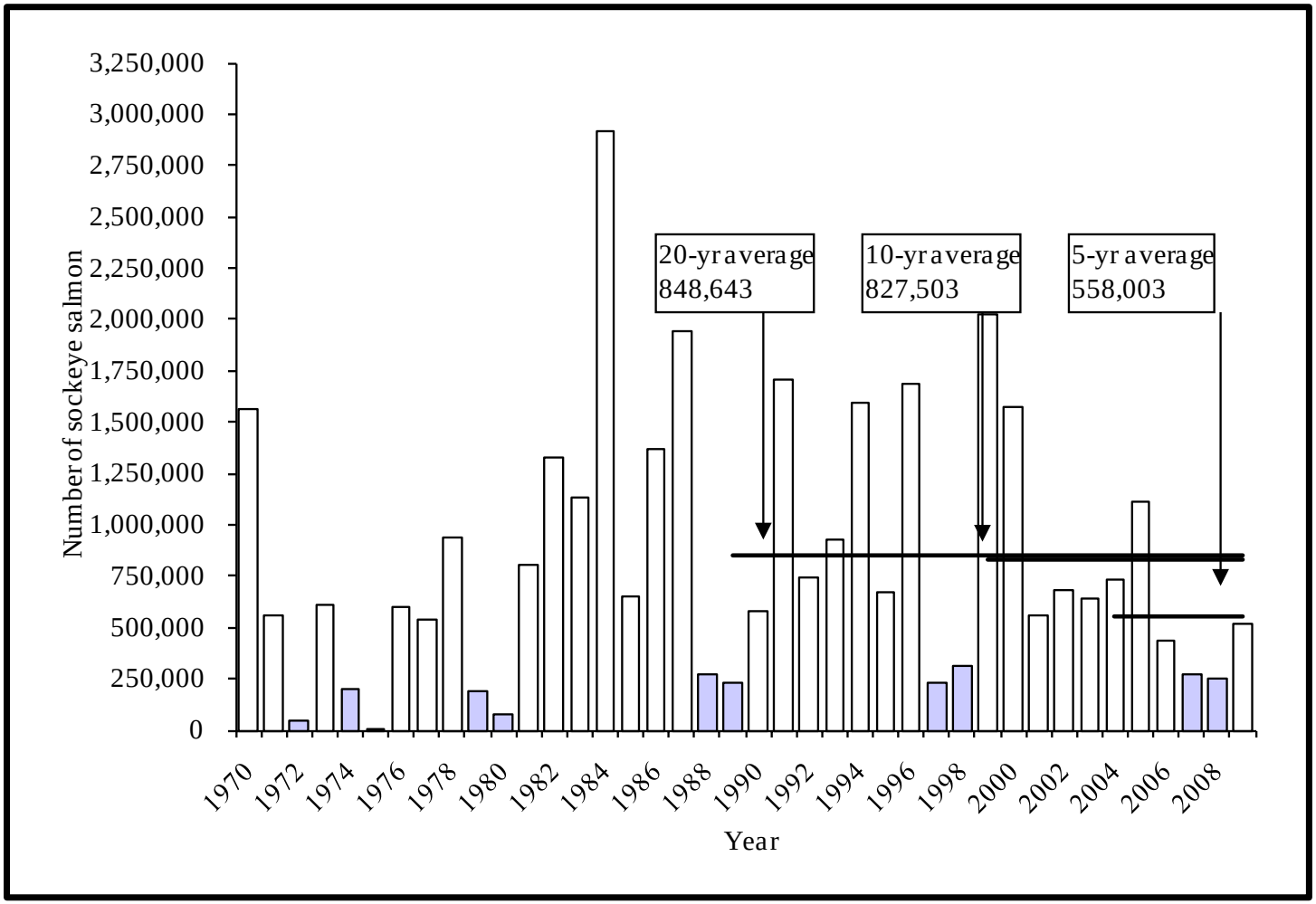

Figure 10.–Chignik-bound sockeye salmon early-run harvest, 1970 through 2009.

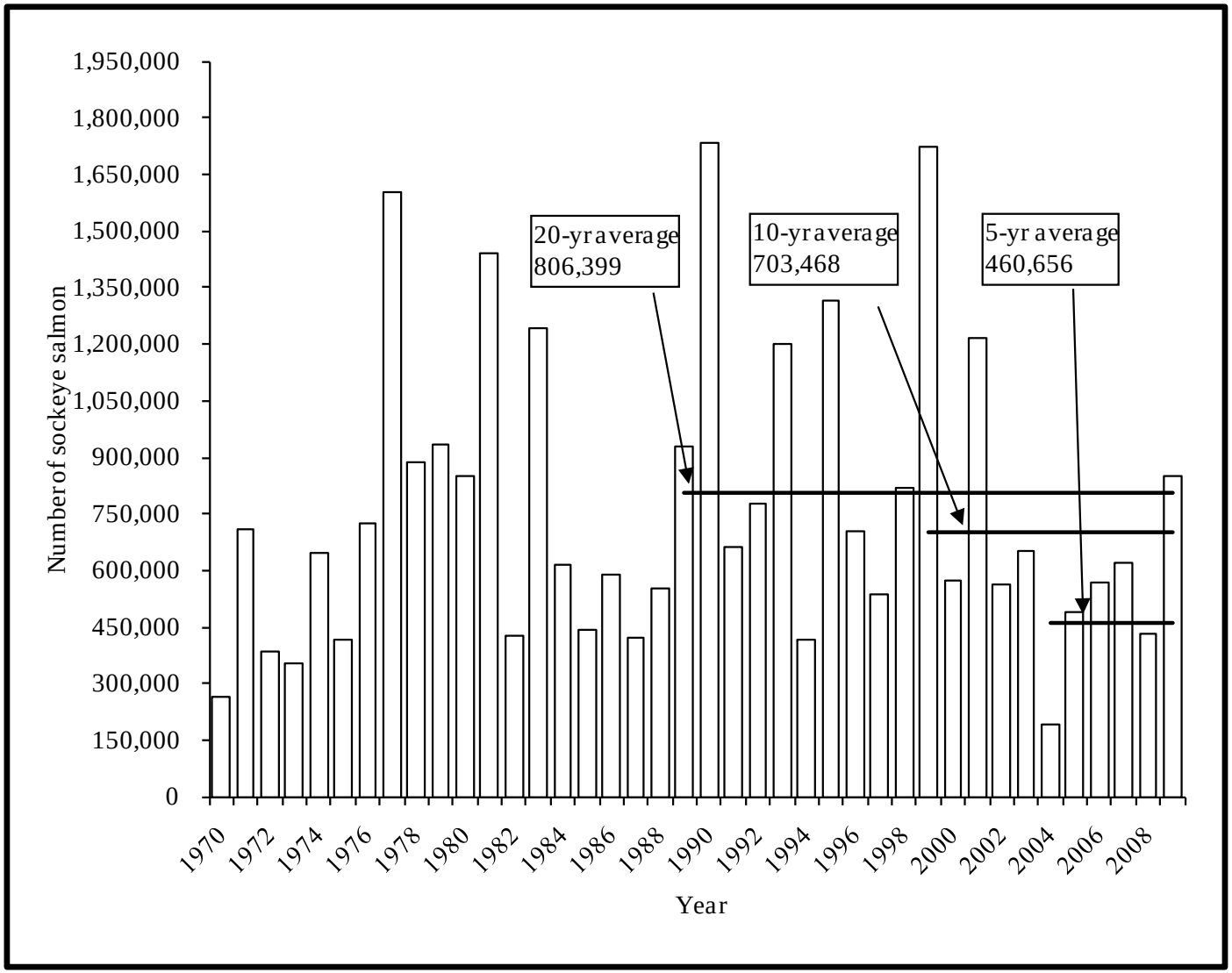

Figure 11.–Chignik-bound sockeye salmon late-run harvest, 1970 through 2009.

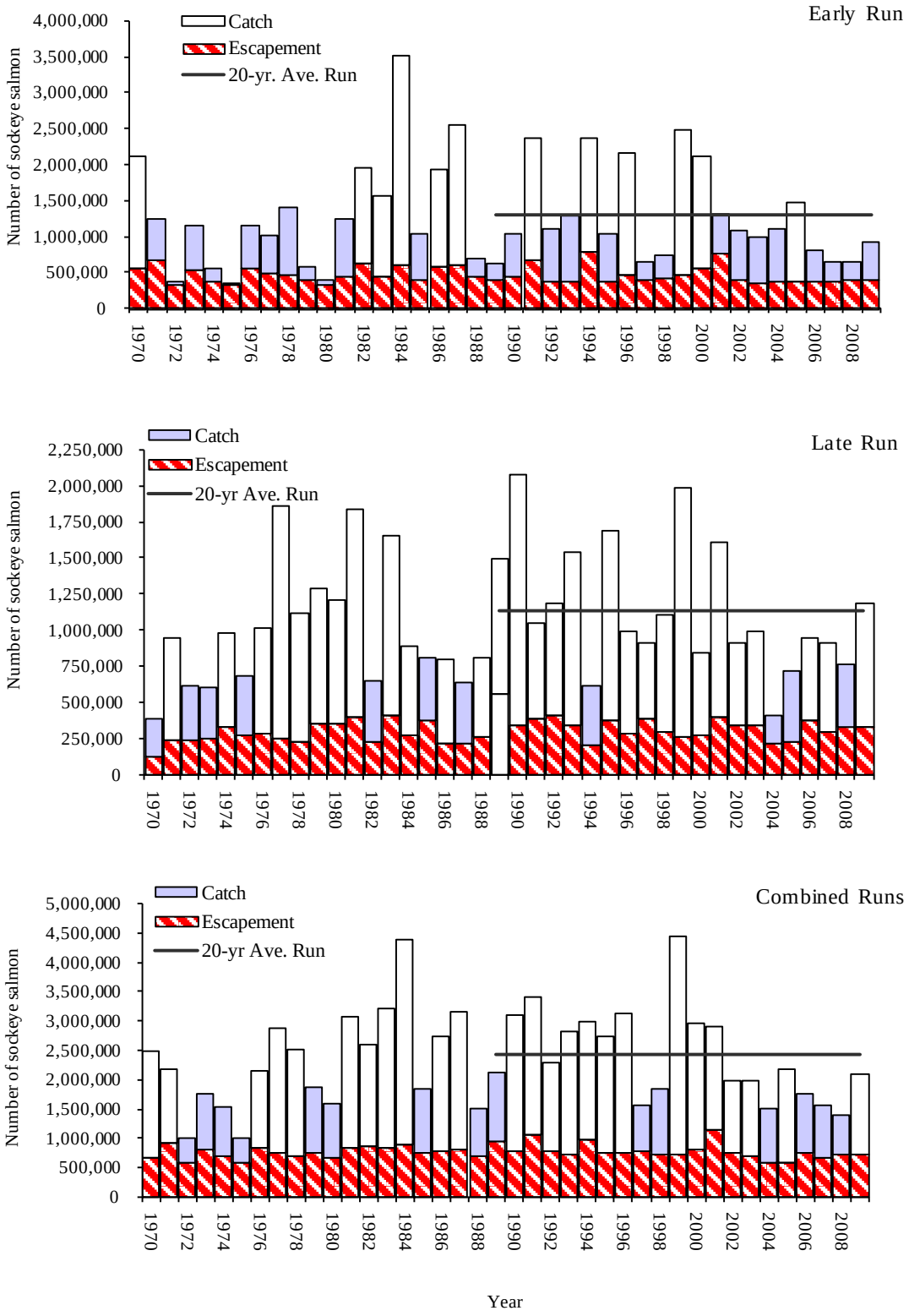

Figure 12.–Total sockeye salmon escapement and catch considered Chignik-bound including home pack, the ADF&G's test fishery harvest, and Cape Igvak and SEDM allocations, by year and run, 1970 through 2009.

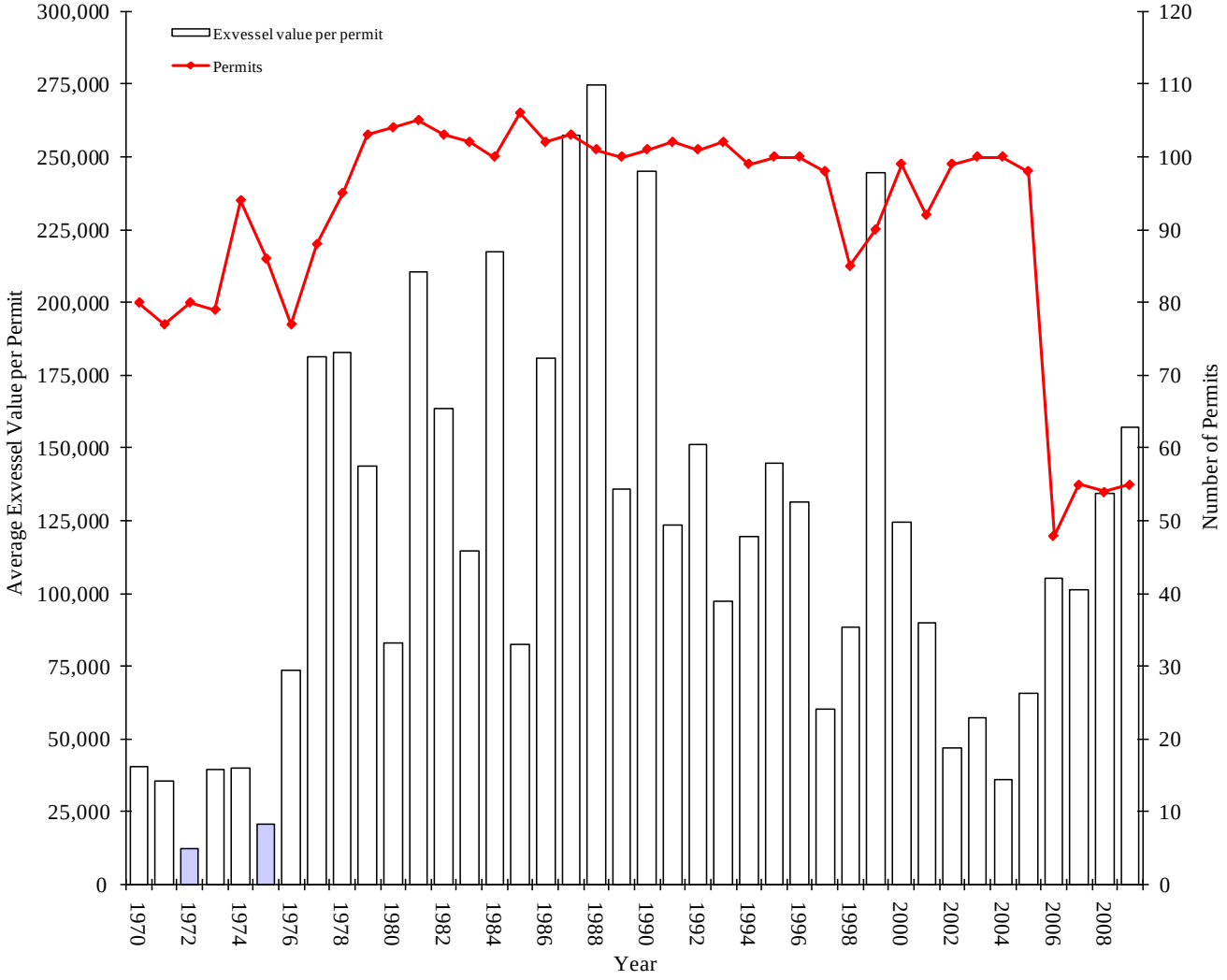

Figure 13.–Average exvessel value ($) per permit and total permits fished by year 1970 through 2009.

APPENDIX A. MEMORANDUM RECOMMENDING TARGETING THE LOWER BOUNDS OF THE CHIGNIK SOCKEYE SALMON ESCAPEMENT GOALS DURING THE 2009 SEASON

Appendix A1.–Memorandum recommending targeting the lower bounds of the Chignik sockeye salmon escapement goals during the 2009 season.

ALASKA DEPARTMENT OF FISH AND GAME

DIVISION OF COMMERCIAL FISHERIES

MEMORANDUM

TO: Steve Honnold
Regional Supervisor
Division of Commercial Fisheries
Region IV – Kodiak
and
Mark Witteveen
Acting Regional Finfish Research Supervisor
Division of Commercial Fisheries
Region IV – Kodiak
and
David Sterritt
Regional Finfish Management Supervisor
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DATE: May 20, 2009
PHONE: (907) 486-1805
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THRU: James Jackson
Chignik Area Management Biologist
Division of Commercial Fisheries
Region IV – Kodiak

FROM: Mary Beth Loewen
Finfish Research Biologist
Division of Commercial Fisheries

SUBJECT: Chignik Sockeye Salmon
Escapement Goal Range Targets
Region IV – Kodiak

The purpose of this memorandum is to discuss current escapement goals to the Chignik watershed in terms of the condition of sockeye salmon rearing habitat in Chignik and Black lakes. This discussion is based on data from the Chignik Watershed Ecological Assessment Project, the Chignik Smolt Enumeration Project, current management objectives, and recent adult return data.

The current Chignik early-run (Black Lake) sustainable escapement goal (SEG) range is 350,000 to 400,000 fish through July 4. In 2007, escapement goals for the late-run (Chignik Lake) SEG range were increased from 200,000-250,000 to 200,000 to 400,000 fish from July 5 until the end of the run. Supplemental to the late-run SEG, an Inriver Run Goal (IRRG) for subsistence fishers of 50,000 yields a total late-run escapement and inriver run goal range of 250,000 to 400,000 sockeye salmon.

Fluctuations in salmon escapements and their subsequent smolt production can greatly affect juvenile fish life history strategies and survival. A high abundance of juvenile sockeye salmon, resulting from high escapement levels, can negatively impact the zooplankton forage base because the zooplankton community is a complex, dynamic web of different species susceptible to different selective pressures. Total sockeye salmon escapement estimates have been in excess of the SEG ranges for three of the past 15 years (1994 – 2008; Table 1).

Table 1. Sockeye salmon escapements in the Chignik watershed from1994 to 2008.

	Early Run Escapement	Late Run Escapement	Total Run Escapement
Escapement Goal	350,000-400,000	200,000-400,000	550,000-800,000
Inriver Run Goal		50,000	
Year			
1994	769,465	197,444	966,909
1995	366,495	373,425	739,920
1996	464,748	284,389	749,137
1997	396,668	378,950	775,618
1998	410,659	290,469	701,128
1999	457,424	258,542	715,966
2000	536,141	269,084	805,225
2001	744,013	392,905	1,136,918
2002	380,701	344,519	725,220
2003	350,004	334,119	684,123
2004	363,800	214,459	578,259
2005	355,091	225,366	580,457
2006	366,497	368,996	735,493
2007	361,091	293,883	654,974
2008	377,579	328,479	706,058

From 1994 to 2008 the early-run escapements have exceeded the current SEG upper range six times. Although late-run escapements have fluctuated over the past 15 years, they have been within the bounds of current SEG in all years except 1994 where escapement failed to meet the lower bounds. However, since 2002, when the recommendation of targeting the lower range of the escapement goals was implemented, early- and late-run escapements have consistently been within the escapement goal range.

Beginning in 2002, management was advised to target the lower ranges of the escapement goals for the two stocks of Chignik sockeye salmon (Bouwens and Poetter 2006). This protocol was initially recommended because limnology data collected in 2000 and 2001 indicated the zooplankton forage bases in Black and Chignik lakes were overgrazed by juvenile sockeye salmon (Bouwens and Finkle 2003; Finkle and Bouwens 2001). Early-run juvenile sockeye salmon, which rear and compete in Chignik Lake (Narver 1966; Parr 1972), can deplete the forage base shared by both stocks, let alone in their natal Black Lake. In an effort to improve rearing conditions in the Chignik

watershed, and therefore juvenile sockeye salmon survival, the lower ranges of the escapement goals for both lakes were targeted. The objective was to reduce the overgrazing of zooplankton, allowing the zooplankton biomass to rebound and thereby strengthen the forage base for rearing juvenile sockeye salmon in the watershed. In 2008, to provide for stronger late-run returns and subsistence needs, the middle of the late-run escapement objective range was targeted.

In the Chignik watershed, the late-summer migration of early-run juvenile sockeye salmon to Chignik Lake can affect the Chignik Lake zooplankton forage base shared by both stocks (Finkle 2007; Narver 1966; Parr 1972). Limnology data collected from both Black and Chignik lakes indicated that the forage base was subject to top-down pressures by overgrazing from 2000 to 2007, but may be improving (Finkle and Bouwens 2001; Bouwens and Finkle 2003; Finkle 2006a; Finkle 2006b; Finkle 2007; Finkle and Ruhl 2008). Edmundson and Mazumder (2001) suggested that juvenile sockeye salmon starve when zooplankton biomass levels approach about 100 mg/m2 and are fully satiated at levels above 1,000 mg/m2. Since targeting the lower ranges of the escapement goals in 2002, the zooplankton biomass (regardless of species or size) of Chignik Lake has increased from 431 mg/m2 in 2003 to approximately 873 mg/m2 in 2007. These increases in the mean weighted biomass suggest that top-down pressures may have been reduced in Chignik Lake, improving rearing conditions. However, the mean weighted biomass in Chignik Lake was approximately 322 mg/m2 in 2008. In comparison, the 2000-2007 weighted mean zooplankton biomass of Chignik Lake was approximately 535 mg/m2.

High grazing pressure on zooplankton can also cause a shift in zooplankton abundance and species composition to fewer and less nutritional species of sockeye salmon forage (Kerfoot 1987; Koenings and Burkett 1987). Since 2000, the seasonal zooplankton species composition in both lakes has varied in abundance: the copepods *Cyclops* or *Diaptomus* have been more abundant in June and the cladoceran *Bosmina* have been more abundant in August. The mean weighted biomass of copepods in 2007 was the greatest since 2000, suggesting improved forage conditions for juvenile salmon. Although juvenile salmon do prey on *Cyclops*, *Diaptomus*, and *Bosmina*, these species are inefficient grazers on phytoplankton, and are poor transmitters of energy and nutrients through the food web (Kerfoot 1987). Between 2000 and 2007, the mean weighted biomass of the preferred prey of juvenile sockeye salmon, the cladoceran *Daphnia*, had increased to approximately 31 mg/m2 compared to the 2000-2007 mean weighted biomass of 22 mg/m2. In 2008, *Daphnia* numbers and biomass were low (only 6.9 mg/m2).

Flooding in the Chignik Lake and River occurred in December of 2007. The scouring and water turnover associated with strong "flush" flooding may impact zooplankton communities through alteration of nutrient exchange timing or disruption of the phytoplankton community, causing decreased zooplankton biomass (Paidere et al. 2007, Reynolds 1993). Flooding and other stochastic events can also deplete invertebrate populations or cause changes in species diversity (Reynolds 1993, Elwood and Waters 1969). Limnology samples collected in 2009 may indicate whether Chignik Lake zooplankton levels are recovering from this stochastic event, and continuing to improve in line with trends seen from 2000-2007.

Data from the Chignik Smolt Enumeration Project (Finkle and Ruhl 2008) also indicated that the past (1997 to 2002) numbers of juvenile sockeye salmon rearing in the freshwater ecosystem may have taxed the available forage base; from 2003 to 2008 an average of 5.9 million smolt per year emigrated from the watershed compared to a 1997 to 2002 average of 20 million smolt per year. The 2003 to 2008 outmigration estimates included five of the six lowest estimates of juvenile sockeye salmon outmigration from the watershed (Finkle and Ruhl 2008). Thus, the freshwater survival of juvenile sockeye salmon may have been low in recent years because of low food availability due to overgrazing from prior years of rearing juvenile sockeye salmon. The increase in age-0. fish in smolt trap catches during 2005, 2006, and 2008 may also suggest a downstream migration to Chignik Lagoon from Chignik Lake to find better rearing conditions. The importance of Chignik Lagoon as a rearing area for juvenile salmon has not been determined, but may play an important role in smolt success.

The lower-than-average 2004-2007 adult runs were the recruits of overescaped brood years (1998-2002) that were subject to poor zooplankton forage base conditions from 2000 to 2003. The effects of the targeted lower escapement goal ranges from 2003 to 2007 have begun to be realized starting in 2008, when approximately 1.4 million sockeye salmon returned, but will not be full understood until the runs are fully recruited and more years of adult salmon return information is available.

The goal of targeting the lower ranges of the escapement objectives was implemented from 2002 to 2008 to relieve the top-down pressure on the zooplankton populations from overescapement to each lake. To date, the general response to this strategy has been an apparent increase in the zooplankton forage base in both lakes. This general protocol is still relevant because the zooplankton populations are susceptible to overgrazing from large juvenile

populations as a result of large adult escapements, and also stochastic events such as flooding. Thus, it is recommended that the lower end of the early-run escapement objective (~350,000 fish) be targeted in 2009. Subsequently, this recommendation is expected to increase the overall ecological health of the system in terms of sockeye salmon production, while reducing the risk of overescaping the system and increasing competition as the forage base in nursery lakes continue to recover. It is recommended to continue to target the lower third of the late-run escapement objective range (~260,000 fish) in order to provide stronger, future late-run returns while allowing subsistence needs to be met without depleting zooplankton levels in each nursery lake.

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APPENDIX B. SUMMARY OF 2009 EMERGENCY ORDERS

Appendix B1.–Summary of the 2009 Chignik Management Area Emergency Orders.

E.O. Number	Issued	Effective	Action taken
4-FS-L-01-09	3:15 PM 6/19/2009	3:30 PM 6/20/2009	**Opens** the Chignik Bay, Central, and Eastern districts as well as the Inner Castle Cape Subsection of the Western districts for 48 hours from 3:30 PM Saturday, June 20 until 3:30 PM Monday, June 22. **Closed Waters** Effective 3:30 PM Saturday, June 20 salmon may only be taken northeast of Humes Point.
4-FS-L-02-09	6:15 PM 6/20/2009	3:30 PM 6/22/2009	**Extends** the current commercial salmon fishing period in the Chignik Bay, Central, and Eastern districts as well as the Inner Castle Cape Section of the Western District for 48 hours from 3:30 PM Monday, June 22 until 3:30 PM Wednesday, June 24. **Opens** the Western District, excluding the Inner Castle Cape Subsection, for 48 hours from 3:30 PM Monday, June 22 to 3:30 PM Wednesday, June 24. **Closed Waters** Effective 2:30 AM Sunday, June 21 the Chignik Lagoon markers will move to Mensis Point
4-FS-L-03-09	9:15 AM 6/25/2009	7:00 AM 6/26/2009	**Opens** the Chignik Bay, Central, and Eastern districts as well as the Inner Castle Cap Subsecion of the Western District for 65 hours from 7:00 AM Friday, June 26 until 12:01 AM Monday, June 29. **Opens** the Western District for 48 hours beginning at 12:01 AM Saturday, June 27 to 12:01 AM Monday, June 29. **Closed Waters** Effective 7:00 AM Friday, June 26 salmon may only be taken northeast of Humes Point.
4-FS-L-04-09	9:15 AM 6/26/2009	7:00 PM 6/26/2009	**Closed Waters** Effective 7:00 PM Friday, June 26 the Chignik Lagoon markers will move to Mensis Point.
4-FS-L-05-09	9:15 AM 6/28/2009	12:01 AM 6/28/2009	**Extends** the current commercial salmon fishing period in the Chignik Bay, Central, and Eastern districts as well as the Inner Castle Cape Subsection of the Western District for 144 hours from 12:01 AM Monday, June 29 to 12:01 AM Sunday, July 5.
4-FS-L-06-09	6:15 PM 7/3/2009	12:01 AM 7/5/2009	**Extends** the current commercial salmon fishing period in the Chignik Bay, Central, and Eastern districts as well as the Inner Castle Cape Subsection of the Western District for 48 hours from 12:01 AM Sunday, July 5 to 12:01 AM Tuesday, July 7.
4-FS-L-07-09	6:15 AM 7/9/2009	6:00 AM 7/10/2009	**Opens** the Chignik Bay, Central, Eastern, Western, and Perryville districts for 72 hours from 6:00 AM Friday, July 10 until 06:00 AM Monday, July 13. **Closed Waters** Effective 6:00 AM Friday, July 10 salmon may only be taken northeast of Humes Point.
4-FS-L-08-09	9:15 AM 7/11/2009	12:00 PM 7/11/2009	**Closed Waters** Effective 12:00 PM Saturday, July 11 the Chignik Lagoon markers will move to Mensis Point.
4-FS-L-09-09	6:15 PM 7/11/2009	6:00 AM 7/13/2009	**Extends** the current commercial salmon fishing period in the Chignik Bay, Central, Eastern, Western, and Perryville districts for 48 hours from 6:30 AM Monday, July 13 to 6:00 AM Wednesday, July 15.
4-FS-L-10-09	6:15 PM 7/13/2009	6:00 AM 7/15/2009	**Extends** Chignik Bay, Central districts, Eastern, Western, and Perryville districts for an additional 36 hours from 6:00 AM Wednesday, July 15 to 6:00 PM Thursday, July 16.
4-FS-L-11-09	12:00 PM 7/20/2009	4:30 PM 7/21/2009	**Opens** the Chignik Bay, Central, Eastern, Western, and Perryville districts for 72 hours from 4:30 PM Tuesday, July 21 to 4:30 PM Friday, July 24. **Closed Waters** Effective 4:30 PM Tuesday, July 21 salmon may only be taken northeast of Humes Point.

-continued-

Appendix B1.–Page 2 of 3.

E.O. Number	Issued	Effective	Action taken
4-FS-L-12-09	6:15 PM 7/22/2009	4:30 AM 7/23/2009	**Closed Waters** Effective 4:30 AM Thursday, July 23 the Chignik Lagoon markers will move to Mensis Point.
4-FS-L-13-09	6:15 PM 7/23/2009	4:30 AM 7/24/2009	**Extends** the Chignik Bay and Central districts for an additional 96 hours from 4:30 PM Friday, July 24 to 4:30 PM Tuesday, July 28. **Extends** the Eastern, Western, and Perryville districts for an additional 48 hours from 4:30 PM Friday, July 24 to 4:30 PM Sunday, July 26.
4-FS-L-14-09	9:15 AM 7/25/2009	4:30 PM 7/26/2009	**Extends** the Western and Perryville districts for an additional 48 hours from 4:30 PM Sunday, July 26 to 4:30 PM Tuesday, July 28.
4-FS-L-15-09	9:15AM 7/27/2009	4:30 PM 7/28/2009	**Extends** the Chignik Bay and Central districts for 96 hours from 4:30 PM Tuesday, July 28 to 4:30 PM Saturday, August 1.
4-FS-L-16-09	6:15 PM 7/28/2009	12:01 AM 7/30/2009	**Opens** the Eastern, Western, and Perryville districts for 48 hours from 12:01 AM Thursday, July 30 to 12:01 AM Saturday, August 1.
4-FS-L-17-09	9:15 AM 7/30/2009	9:15 AM 7/30/2009	**Extends** the Chignik Bay and Central districts to open until further notice.
4-FS-L-18-09	12:00 PM 7/31/2009	12:30 PM 7/31/2009	**Closed Waters** Effective 12:30 PM Friday, July 31 the Castle Cape Section (273-90, 273-93, 273-95) will close to commercial salmon fishing until further notice due to the presence of immature salmon.
4-FS-L-19-09	6:15 PM 7/31/2009	12:01 AM 8/1/2009	**Extends** the Eastern District for an additional 48 hours from 12:01 AM Saturday, August 1 to 12:01 AM Monday, August 3.
4-FS-L-20-09	6:15 PM 8/2/2009	12:01 AM 8/4/2009	**Opens** the Western and Perryville districts for 48 hours from 12:01 AM Tuesday, August 4 to 12:01 AM Thursday, August 6. **Closed Waters** Effective 6:30 AM Monday, August 3 salmon may only be
4-FS-L-21-09	9:15 AM 8/4/2009	12:01 AM 8/6/2009	**Extends** the Western and Perryville districts for 24 hours from 12:01 AM Thursday, August 6 to 12:01 AM Friday, August 7. **Closed Waters** Effective 5:00 PM Tuesday, August 4 the Chignik Lagoon markers will move to Mensis Point.
4-FS-L-22-09	6:15 PM 8/5/2009	12:01 PM 8/7/2009	**Opens** the Eastern District for 48 hours from 12:01 AM Friday, August 7 to 12:01 AM Sunday, August 9.
4-FS-L-23-09	6:15 PM 8/7/2009	12:01 PM 8/9/2009	**Extends** the Eastern District for an additional 48 hours from 12:01 AM Sunday, August 9 until 12:01 Tuesday, August 11.
4-FS-L-24-09	9:15 AM 8/10/2009	12:01 AM 8/11/2009	**Extends** the Western and Perryville districts for an additional 48 hours from 12:01 AM Tuesday, August 11 to 12:01 AM Thursday, August 13. **Closed Waters** Effective 12:01 AM Tuesday, August 11 the Perryville Section (275-60) of the Perryville District will close to commercial salmon fishing until further notice.
4-FS-L-25-09	6:15 AM 8/11/2009	12:01 AM 8/13/2009	**Opens** the Eastern District for 96 hours from 12:01 AM Thursday, August 13 to 12:01 AM Monday, August 17.

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E.O. Number	Issued	Effective	Action taken
4-FS-L-25-09	6:15 AM 8/11/2009	12:01 AM 8/13/2009	**Opens** the Eastern District for 96 hours from 12:01 AM Thursday, August 13 to 12:01 AM Monday, August 17.
4-FS-L-26-09	6:15 PM 8/13/2009	12:01 AM 8/15/2009	**Opens** the Western and Perryville districts, excluding the Perryville section (275-60) of the Perryville District, for 72 hours from 12:01 AM Saturday, August 15 to 12:01 AM Tuesday, August 18. **Extends** the Eastern District for an additional 24 hours from 12:01 AM Monday, August 17 to 12:01 AM Tuesday, August 18.
4-FS-L-27-09	6:15 PM 8/16/2009	12:01 AM 8/18/2009	**Extends** the Eastern, Western, and Perryville districts from 12:01 AM Tuesday, August 18 to 12:01 AM Sunday, August 23.
4-FS-L-28-09	5:15 PM 8/21/2009	12:01 AM 8/27/2009	**Extends** the Eastern, Western, and Perryville districts for an additional 96 hours from 12:01 AM Sunday, August 23 to 12:01 AM Thursday, August 27.
4-FS-L-29-09	6:15 PM 8/25/2009	12:01 AM 8/27/2009	**Extends** the Chignik Bay, Central, Eastern, Western, and Perryville districts for an additional 96 hours from 12:01 AM Thursday, August 27 to 12:01 AM Monday, August 31.
4-FS-L-30-09	5:15 PM 8/29/2009	12:01 AM 8/31/2009	**Extends** the Chignik Bay, Central, Eastern, Western, and Perryville districts for an additional 96 hours from 12:01 AM Monday, August 31 to 12:01 AM Friday, September 4.
4-FS-L-31-09	10:00 AM 9/1/2009	10:00 AM 9/1/2009	**Extends** the Chignik Bay, Central, Eastern, Western, and Perryville districts to open until further notice.
4-FS-L-32-09	4:15 PM 9/10/2009	11:59 PM 9/15/2009	**Closes** the current commercial salmon fishing period in the Chignik Bay, Central, Eastern, Western, and Perryville districts at 11:59 PM Tuesday, September 15.
4-FS-L-33-09	9:15 AM 9/17/2009	8:00 AM 9/18/2009	**Opens** the Chignik Bay and Central districts for two 12 hour commercial salmon fishing periods: from 8:00 AM to 8:00 PM Friday, September 18; and from 8:00 AM to 8:00PM Saturday, September 19. **Opens** the Western and Perryville districts, with the exception of the Perryville Section (275-60) of the Perryville District, will open to commercial salmon fishing for 96 hours from 12:01 AM Friday, September 18 to 12:01 AM Tuesday, September 22.
4-FS-L-34-09	4:30 AM 9/18/2009	8:00 AM 9/21/2009	**Opens** the Chignik Bay and Central districts for four 12 hour commercial salmon fishing periods: 8:00 AM to 8:00 PM Monday, September 21; 8:00 AM to 8:00 PM Tuesday, September 22; 8:00 AM to 8:00 PM Wednesday, September 23; and 8:00 AM to 8:00 PM Thursday, September 24. **Extends** the Western and Perryville districts, with the exception of the Perryville Section (275-60) in the Perryville District, for an additional 72 hours from 12:01 AM Tuesday, September 22 to 12:01 AM Friday, September 25.

APPENDIX C. COMMERCIAL SALMON FISHERY CATCH AND EFFORT, BY DAY

Appendix C1.–Commercial salmon fishing effort and harvest (including home pack but not including the department's test fishery harvest), by day in the Chignik Management Area, 2009.

	Effort		Chinook		Sockeye		Coho		Pink		Chum		Total	
Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
20-Jun	31	31	1	33	19,924	152,248	0	0	6	20	1	5	19,932	152,306
21-Jun	39	43	22	273	34,645	253,512	0	0	1,474	3,842	1,838	13,607	37,979	271,234
22-Jun	44	46	16	221	35,021	244,633	0	0	15,724	42,319	4,818	34,091	55,579	321,264
23-Jun	45	50	76	1,422	52,737	370,606	0	0	57,112	173,551	14,398	103,340	124,323	648,919
24-Jun	47	51	53	737	57,820	385,461	0	0	61,327	166,055	16,619	119,082	135,819	671,335
25-Jun							Fishery Closed							
26-Jun	38	44	21	298	49,046	352,629	0	0	3,410	13,574	434	3,544	52,911	370,045
27-Jun	44	49	103	1,109	53,788	349,795	31	201	88,821	257,284	8,448	54,885	151,191	663,274
28-Jun	45	52	94	1,093	43,693	309,518	7	55	47,113	142,433	5,417	43,316	96,324	496,415
29-Jun	44	51	31	361	36,961	259,458	0	0	5,919	18,734	665	5,009	43,576	283,562
30-Jun	48	52	61	500	30,884	220,553	16	122	7,058	26,645	1,405	11,630	39,424	259,450
1-Jul	43	46	83	960	28,564	197,979	129	903	25,295	77,327	2,391	18,187	56,462	295,356
2-Jul	46	48	35	382	33,037	228,757	281	1,990	33,330	101,852	2,171	17,716	68,854	350,697
3-Jul	43	46	39	442	23,128	161,131	115	774	15,891	59,101	2,071	15,696	41,244	237,144
4-Jul	35	38	25	353	19,695	142,645	308	2,350	11,503	35,848	1,684	14,210	33,215	195,406
5-Jul	38	41	47	587	24,393	171,524	126	579	6,579	19,502	3,869	29,978	35,014	222,170
6-Jul	42	44	63	975	23,872	166,158	167	978	8,749	28,416	2,585	19,692	35,436	216,219
7-Jul							Fishery Closed							
8-Jul							Fishery Closed							
9-Jul							Fishery Closed							
10-Jul	51	53	119	1,380	27,690	196,349	4,968	33,275	70,385	198,783	5,011	34,222	108,173	464,009
11-Jul	47	52	181	2,169	25,169	188,144	9,013	70,340	69,496	196,991	5,662	46,434	109,521	504,078
12-Jul	42	44	101	1,268	25,412	187,565	6,997	51,923	41,183	112,418	4,927	39,759	78,620	392,933
13-Jul	44	45	67	941	22,358	161,951	6,800	44,615	28,622	89,267	5,217	38,577	63,064	335,351
14-Jul	43	44	44	580	20,955	149,769	4,293	27,540	21,766	65,181	4,768	33,960	51,826	277,030
15-Jul	39	43	147	1,366	15,481	112,625	9,209	57,706	27,933	89,087	4,424	31,264	57,194	292,048
16-Jul	47	48	178	1,715	21,320	151,183	7,214	47,063	23,482	78,252	4,414	32,029	56,608	310,242
17-Jul							Fishery Closed							
18-Jul							Fishery Closed							
19-Jul							Fishery Closed							
20-Jul							Fishery Closed							
21-Jul	38	38	41	235	16,568	117,325	602	4,338	4,083	12,052	1,391	10,332	22,685	144,282
22-Jul	48	50	145	1,019	36,531	248,622	3,181	22,275	20,267	65,674	7,191	53,068	67,315	390,658

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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
23-Jul	49	52	426	2,589	43,970	297,420	9,350	62,121	44,957	128,162	9,851	73,763	108,554	564,055
24-Jul	43	48	84	880	32,904	225,799	2,282	14,281	16,632	52,619	8,658	62,954	60,560	356,533
25-Jul	23	27	27	370	16,337	115,406	749	4,304	5,463	15,097	2,257	14,385	24,833	149,562
26-Jul	35	35	82	881	29,049	191,358	1,881	11,717	33,671	99,465	9,941	69,881	74,624	373,302
27-Jul	40	41	17	306	27,894	188,455	139	973	5,625	17,799	1,271	9,808	34,946	217,341
28-Jul	44	47	109	951	34,218	226,960	1,156	7,390	12,467	45,368	4,251	28,920	52,201	309,589
29-Jul	39	39	13	167	24,753	162,911	828	5,809	22,182	70,066	2,492	18,472	50,268	257,425
30-Jul	48	51	317	2,466	24,371	163,335	4,135	28,940	61,175	205,505	12,589	90,091	102,587	490,337
31-Jul	44	53	269	886	19,209	124,998	1,613	9,878	62,512	202,993	9,421	72,221	93,024	410,976
1-Aug	42	45	13	216	16,922	111,423	169	1,113	13,238	49,420	2,099	15,745	32,441	177,917
2-Aug	33	34	5	57	15,082	98,954	2	15	2,070	6,617	231	1,733	17,390	107,376
3-Aug	17	18	1	9	7,575	49,424	4	25	1,185	3,921	147	1,131	8,912	54,510
4-Aug	33	34	2	20	10,928	70,275	286	2,006	17,296	64,953	3,224	24,631	31,736	161,885
5-Aug	41	42	99	949	10,736	67,509	1,679	11,462	23,586	79,199	4,987	34,242	41,087	193,361
6-Aug	31	33	15	212	13,027	82,895	878	5,426	20,901	72,306	5,041	35,555	39,862	196,394
7-Aug	34	34	2	24	9,623	63,423	293	1,992	52,432	200,024	11,689	91,842	74,039	357,305
8-Aug	33	35	7	54	6,348	40,798	149	1,033	36,605	143,269	10,453	89,734	53,562	274,888
9-Aug	32	32	9	122	4,300	27,841	701	4,853	66,664	254,045	5,554	43,084	77,228	329,945
10-Aug	30	31	1	5	4,445	29,559	8,533	32,291	28,086	93,773	1,751	12,871	42,816	168,499
11-Aug	31	31	3	64	6,310	41,336	1,032	7,165	23,529	80,859	2,812	20,885	33,686	150,309
12-Aug	30	30	2	15	5,749	37,892	2,015	13,300	25,354	83,433	3,091	22,167	36,211	156,807
13-Aug	25	25	0	0	6,451	42,469	231	1,583	26,287	87,079	6,082	48,214	39,051	179,345
14-Aug	24	25	3	34	3,837	24,768	210	1,259	24,599	77,172	13,163	115,531	41,812	218,764
15-Aug	21	22	6	75	6,979	44,979	2,060	16,068	20,347	65,545	1,976	15,172	31,368	141,839
16-Aug	29	29	7	61	5,480	35,660	2,129	15,863	19,152	57,361	2,686	20,210	29,454	129,155
17-Aug	23	23	2	40	5,494	35,140	2,311	16,251	22,156	81,461	4,051	30,248	34,014	163,140
18-Aug	21	21	3	54	4,864	32,983	2,308	16,067	12,865	49,791	2,207	16,241	22,247	115,136
19-Aug	20	20	0	0	2,974	19,598	1,204	8,392	4,439	16,954	792	5,782	9,409	50,726
20-Aug	12	12	1	25	2,871	19,433	547	3,815	4,339	16,607	1,325	9,540	9,083	49,420
21-Aug	11	11	0	0	1,521	9,566	238	1,617	1,609	6,173	323	2,416	3,691	19,772
22-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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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
23-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Aug	3	3	1	6	1,299	8,840	317	2,274	194	802	51	401	1,862	12,323
29-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31-Aug	5	5	0	0	1,385	8,864	470	3,161	0	0	11	88	1,866	12,113
1-Sep	4	5	0	0	2,369	14,564	720	4,961	71	194	54	385	3,214	20,104
2-Sep	6	6	0	0	2,736	18,276	939	6,535	95	318	61	448	3,831	25,577
3-Sep	5	5	0	0	1,555	10,588	962	6,755	28	103	11	82	2,556	17,528
4-Sep	4	4	0	0	1,214	7,892	992	7,930	0	0	1	9	2,207	15,831
5-Sep	4	4	0	0	941	6,108	636	5,092	0	0	0	0	1,577	11,200
6-Sep	3	3	0	0	550	3,535	530	3,677	0	0	0	0	1,080	7,212
7-Sep	3	3	0	0	621	3,816	1,240	9,856	0	0	2	16	1,863	13,688
8-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13-Sep	1	1	0	0	153	767	116	1,045	0	0	0	0	269	1,812
14-Sep	1	1	0	0	0	0	771	6,400	0	0	0	0	771	6,400
15-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-Sep							Fishery Closed							
18-Sep							Fishery Closed							
19-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23-Sep	1	1	0	0	682	3,343	111	624	0	0	0	0	793	3,967
Total		2,170	3,319	31,957	1,196,418	8,249,300	110,373	732,346	1,408,339	4,502,661	256,425	1,922,531	2,974,874	15,438,795