

Fishery Management Report No. 15-28

**Chignik Management Area Salmon Annual
Management Report, 2014**

by

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May 2015

Alaska Department of Fish and Game

Divisions of Sport Fish and Commercial Fisheries



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Weights and measures (metric)		General		Mathematics, statistics	
centimeter	cm	Alaska Administrative Code	AAC	<i>all standard mathematical signs, symbols and abbreviations</i>	
deciliter	dL	all commonly accepted abbreviations	e.g., Mr., Mrs., AM, PM, etc.	alternate hypothesis	H_A
gram	g	all commonly accepted professional titles	e.g., Dr., Ph.D., R.N., etc.	base of natural logarithm	e
hectare	ha	at	@	catch per unit effort	CPUE
kilogram	kg	compass directions:		coefficient of variation	CV
kilometer	km	east	E	common test statistics	(F, t, χ^2 , etc.)
liter	L	north	N	confidence interval	CI
meter	m	south	S	correlation coefficient (multiple)	R
milliliter	mL	west	W	correlation coefficient (simple)	r
millimeter	mm	copyright	©	covariance	cov
		corporate suffixes:		degree (angular)	°
Weights and measures (English)		Company	Co.	degrees of freedom	df
cubic feet per second	ft ³ /s	Corporation	Corp.	expected value	E
foot	ft	Incorporated	Inc.	greater than	>
gallon	gal	Limited	Ltd.	greater than or equal to	≥
inch	in	District of Columbia	D.C.	harvest per unit effort	HPUE
mile	mi	et alii (and others)	et al.	less than	<
nautical mile	nmi	et cetera (and so forth)	etc.	less than or equal to	≤
ounce	oz	exempli gratia (for example)	e.g.	logarithm (natural)	ln
pound	lb	Federal Information Code	FIC	logarithm (base 10)	log
quart	qt	id est (that is)	i.e.	logarithm (specify base)	log ₂ , etc.
yard	yd	latitude or longitude	lat. or long.	minute (angular)	'
		monetary symbols (U.S.)	\$, ¢	not significant	NS
Time and temperature		months (tables and figures): first three letters	Jan,...,Dec	null hypothesis	H_0
day	d	registered trademark	®	percent	%
degrees Celsius	°C	trademark	™	probability	P
degrees Fahrenheit	°F	United States (adjective)	U.S.	probability of a type I error (rejection of the null hypothesis when true)	α
degrees kelvin	K	United States of America (noun)	USA	probability of a type II error (acceptance of the null hypothesis when false)	β
hour	h	U.S.C.	United States Code	second (angular)	"
minute	min	U.S. state	use two-letter abbreviations (e.g., AK, WA)	standard deviation	SD
second	s			standard error	SE
Physics and chemistry				variance	
all atomic symbols				population sample	Var
alternating current	AC			sample	var
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				

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ABSTRACT

This report is a summary of the 2014 commercial 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. All 5 species of North American Pacific salmon were commercially harvested in the CMA during 2014: Chinook *O. tshawytscha*, sockeye *O. nerka*, coho *O. kisutch*, pink *O. gorbuscha*, and chum *O. keta* salmon. In 2014, the Chinook salmon escapement of 2,895 fish to the Chignik River was slightly above the escapement goal range of 1,300 to 2,700 fish. The 2014 Chignik River early-run sockeye salmon escapement of 360,381 fish was within the early-run escapement goal range of 350,000 to 450,000 fish. The late-run sockeye salmon escapement of 291,228 fish was within the late-run escapement goal range of 250,000 to 400,000 fish. Both early- and late-run escapements were below the recent 5-, 10-, and 20-year averages. The 2014 total CMA sockeye salmon harvest of 620,339 fish was well below the recent 5-, 10-, and 20-year average harvests. The CMA total coho salmon harvest of 132,459 fish was above recent 5-, 10-, and 20-year average harvests. The 2014 area wide peak pink salmon peak escapement estimate of 235,159 fish was within the even-year sustainable escapement goal range of 200,000 to 600,000 fish and was below the recent 5-, 10-, and 20-year average escapement averages. The CMA harvest of 352,115 pink salmon was also below the recent 5-, 10-, and 20-year average harvests. The areawide chum salmon peak escapement estimate of 101,378 fish exceeded the lower bound sustainable escapement goal of 57,400 fish. In 2014, 55,152 chum salmon were harvested which was well below recent 5-, 10-, and 20-year average harvests. A total of 70 CMA permit holders made deliveries in 2014. The majority of the fishing effort in the 2014 season occurred in the Chignik Bay and Western districts. The exvessel value for the 2014 salmon harvest in the CMA totaled approximately \$7.01 million.

Key words: Chignik Management Area (CMA), Chignik River, *Oncorhynchus*, salmon, Alaska Board of Fisheries, 2014 commercial fisheries management, Fisheries Management Plan, harvest statistics, escapement

INTRODUCTION

The Alaska Department of Fish and Game (ADF&G) manages all 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 5 fishing districts: Eastern, Central, Chignik Bay, Western, and Perryville districts. Each district is further broken down into sections and statistical reporting areas (Figure 2).

There are 5 species of Pacific salmon that are commercially harvested in the CMA: Chinook *Oncorhynchus tshawytscha*, 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 (Appendix A). The majority of fishing effort is concentrated on salmon returning to the Chignik River watershed. Commercial salmon fishing is the economic mainstay for 5 villages: Chignik Bay, Chignik Lagoon, Chignik Lake, Perryville, and Ivanof Bay (Figure 1).

This report provides a summary of the 2014 commercial salmon management plan, fishing activity, escapements, and harvests in the CMA. 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 10, 2015. Data published in this report supersede any data previously published.

COMMERCIAL SALMON

OVERVIEW OF MANAGEMENT PLANS

Several management plans have been used to manage the CMA commercial salmon fishery in the last decade. The 2014 CMA 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 2 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; Figure 1).

Chignik Salmon Management Plan

The *Chignik Salmon Management Plan* (5 AAC 15.357) was originally adopted in 1999. The goal of this plan is 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 are the only legal commercial salmon fishing gear within the CMA. Legal seine gear ranges 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 is 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 are allocatively considered to be Chignik-bound (5 AAC 18.360(d)). 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 is above or expected to be above certain thresholds (5 AAC 18.360 (a-c)), then 15% of the total Chignik sockeye salmon harvest (total includes sockeye salmon caught at Cape Igvak and within certain portions of SEDM) is allocated to Area K fishermen. After July 25, there are no allocative ties between the CMA and Area K.

Southeastern District Mainland Salmon Management Plan

From June 1 through July 25, 80% of the sockeye salmon harvested within certain SEDM sections during specific times are 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 is above or expected to be above certain thresholds (5 AAC 09.360 (a-g)), then 7.6% of the total estimated CMA sockeye salmon harvest is allocated to SEDM fishermen. After July 25, there are no allocative ties between the CMA and Area M.

2014 CHIGNIK SALMON MANAGEMENT

ADF&G targeted the lower bounds of the sockeye salmon escapement goals during the 2014 season (Table 1) based on limnology data from 2000 through 2007 that suggested the forage base for juvenile sockeye salmon was depressed in Chignik Lake (Bouwens and Finkle 2003a-b; Finkle 2005; Finkle 2006a-b; Finkle and Bouwens 2001). ADF&G first adopted this practice in

2002 to improve juvenile sockeye salmon production by relieving grazing pressure on zooplankton in Chignik Lake (Bouwens and Finkle 2003b).

The first commercial salmon fishing period began on July 12, and the last commercial fishing period ended on August 28. The commercial salmon fishery was open for a total of 42 days during 2014 (Figure 3). A total of 70 CMA commercial salmon permit holders (excluding the ADF&G test fishery permit) participated in the 2014 commercial salmon season (Table 2).

Salmon were delivered to 3 locations in 2014: a floating processor operated by Trident Seafoods located in Chignik Bay, Trident Seafoods shore based processor in Sand Point, and International Seafoods of Alaska in Kodiak. Processors filleted or headed and gutted the majority of Chignik salmon.

Chignik Bay and Central Districts Commercial Salmon Fishery

The Chignik weir was completed on May 24 at approximately 3:00 p.m., with the first full day of escapement estimates (54 sockeye salmon) on May 25. Sockeye salmon escapement into the Chignik River was below average and did not meet minimum escapement objectives during the month of June (Tables 1 and 3). Results from 3 test fisheries conducted on June 10, 15, and 18 in Chignik Lagoon also indicated that there was no buildup of sockeye salmon in the lagoon. The Chignik Bay and Central districts remained closed to commercial salmon fishing throughout June and the first part of July due to the test fish results and weak early-run Chignik River sockeye salmon escapement.

The 2014 commercial salmon fishery in the Chignik Bay and Central districts opened at 5:00 p.m. July 12 after several days of strong escapement and when it was apparent that the lower bound of the early-run sockeye salmon escapement goal was achieved. The initial fishing period was extended for a total of 72 hours then closed for 49 hours (July 19–July 21) to increase escapement into the Chignik River (Tables 1 and 3; Figure 3). After reopening the commercial salmon fishery on July 21, sockeye salmon escapement into the Chignik River watershed remained relatively consistent allowing the fishery to remain open through August 10. After a closure of approximately 4.5 days (August 11–August 14) to allow escapement into the Chignik River, the Chignik Bay and Central districts reopened to commercial salmon fishing until August 28, when the 2 processors in the area ceased operations. In total, the Chignik Bay and Central districts were open for 42 days during 2014.

The Chignik Lagoon closed waters markers alternated between Humes Point and Mensis Point during the 2014 salmon season (Figure 5). Generally, the Humes Point markers were used when sockeye salmon escapement was at or just above the lower bound of the late run escapement objectives. This helped increase escapement into the Chignik River and also allowed ADF&G to assess the number of salmon entering the lagoon by concentrating the effort in the lower lagoon. A summary of emergency orders outlining the commercial salmon fisheries in the Chignik Bay and Central districts is located in Appendix A.

Eastern District Commercial Salmon Fishery

The Eastern District, by regulation (5 AAC 15.357 (c)(1)), can open concurrently with the Chignik Bay and Central districts during June (Figures 2 and 3). However, in 2014 no commercial fishing openers occurred in the CMA during June due to a weak early-run sockeye salmon return to Chignik River. The first 2014 commercial salmon fishing period in the Eastern District occurred concurrently with the Chignik Bay and Central districts on July 12. Except for

one 49-hour closure (July 19–July 21) to increase escapement into Chignik River, the Eastern District remained open until August 6. After August 6, the Eastern District remained closed except for one 48-hour fishing period (August 20–August 21).

Inseason aerial surveys indicated that pink salmon escapement in 2014 was low to moderate compared to historical averages and chum salmon escapement was similar to recent averages.

In total, the Eastern District was open to commercial salmon fishing for 26 days during 2014 (Figure 3). A summary of emergency orders outlining the commercial salmon fisheries in the Eastern District is found in Appendix A.

Western and Perryville Districts Commercial Salmon Fishery

The Inner Castle Cape Subsection of the Western District, by regulation (5 AAC 15.357 (b)), can open concurrently with the Chignik Bay and Central districts in June (Figures 2, 3, and 4). Also by regulation (5 AAC 15.357 (e)), the Western District, excluding the Inner Castle Cape Subsection, can open to commercial salmon fishing for two 48-hour periods with a mandatory 48-hour closure between fishing periods through July 5. However, due to a weak Chignik River sockeye salmon early-run, all sections in the CMA remained closed to commercial salmon fishing during June and early-July.

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 are managed based on the run strength of late-run sockeye salmon until the end of the transition period which occurs in mid-July. Once the transition period ends these districts are managed based on local pink and chum salmon escapements, as well as late-run sockeye salmon escapement into the Chignik River.

The first 2014 commercial salmon fishing period in the Western and Perryville districts began at 5:00 p.m. July 12 based on achieving the lower bound of the early-run sustainable escapement goal and adequate late-run sockeye salmon escapement. At that time, catch rates and aerial surveys indicated that few local pink and chum salmon had arrived in the CMA. The initial fishing period was extended for a total of 72 hours then closed for 49 hours (July 19–July 21) to increase escapement into the Chignik River (Tables 1 and 3; Figure 3). The commercial salmon fishery reopened on July 21, at which time aerial surveys indicated that adequate escapement of local pink and chum salmon stocks were present in the Western and Perryville districts (Figure 3). With the exception of one 4.5-day (August 11–August 14) closure, the Western and Perryville districts remained open to commercial salmon fishing until the districts closed for the season on August 28.

In total, the Western and Perryville districts were open to commercial salmon fishing for 42 days during 2014 (Figure 3). A summary of emergency orders outlining the commercial salmon fisheries in the Western and Perryville districts is found in Appendix A.

ESCAPEMENT AND HARVEST DATA

Stock Separation Techniques and Genetic Stock Identification

There are 2 distinct sockeye salmon runs (an early and late run) that 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). The Chignik SPA 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. From 2004 to 2013, the fishery was managed based on this date, so that through July 4, fishing periods were based on achieving early-run escapement objectives, and beginning July 5, fishing periods were based on achieving late-run escapement objectives.

Beginning in 2010, through 2012, as part of an Alaska Sustainable Salmon Fund (AKSSF) project, sockeye salmon genetic samples were collected at the Chignik River weir approximately every 4–6 days before, during, and after the overlap period. Genetic tissue (axillary process) was clipped from approximately 190 sockeye salmon and, along with age and sex data, was sent to ADF&G's Gene Conservation Lab where genomic DNA was extracted and assayed for 96 sockeye salmon single nucleotide polymorphisms. The goal was to provide quantifiable inseason estimates of the contribution of both Black and Chignik lakes sockeye salmon stocks to Chignik River escapement estimates (Russell and Foster 2014). In 2013 and 2014, sampling intensity was reduced to 6 samples per season, with effort focused during the critical overlap period only. In 2013 and 2014, funding was jointly provided by Chignik Regional Aquaculture Association (CRAA) and ADF&G.

The 2014 samples were analyzed inseason and available within 30–48 hours after the samples were taken. As a result, the stock proportions obtained from genetic sampling were used inseason by ADF&G to attribute escapement simultaneously to the early- and late-run sockeye salmon escapement objectives instead of the July 4 date (Table 4). Using the genetics proportions, Black and Chignik lakes run timing was modeled using methods similar to SPA modeling (Witteveen and Botz 2004). The 2014 logistic model estimates show run timing of Chignik Lake sockeye salmon to be later than 2012 and 2013 but earlier than 2010 and 2011 (Figure 6). The 5 years of genetic stock proportions (Table 5; Figure 6) highlight the variable nature of the timing of entry for both stocks into Chignik River and suggest that any set cutoff date (i.e., July 4) may not promote biologically sound management (Anderson et al. 2013).

To estimate the total sockeye salmon run size after the season, daily commercial catch information was adjusted to the date when the harvested fish would have passed the weir and then the appropriate stock composition estimate was applied to those harvested fish. Stock-specific harvest estimates were added to daily escapement to create total daily run size estimates. The early- and late-run sockeye salmon escapement and harvest results can be found in the *2014 Escapement Information and 2014 Harvest Information* sections of this document.

Escapement Goals

In 2013, 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 (Sagalkin et al. 2013). The team recommended changing the Chignik River sockeye salmon early-run sustainable escapement goal (SEG) of 350,000–400,000 fish to a biological escapement goal (BEG) of 350,000–450,000 fish (Table 1). There were no changes recommended to any of the other established CMA salmon escapement goals, which remain as follows: the Chignik River Chinook salmon BEG range of 1,300–2,700 fish; the late-run sockeye salmon SEG of 250,000–400,000 fish, which includes an inriver run goal of 50,000 fish added to the lower bound of the late-run sockeye salmon SEG range of 200,000–400,000 fish for late season subsistence needs; the pink salmon even-year SEG range of 200,000–600,000 fish; the

odd-year pink salmon SEG range of 500,000–800,000 fish; and the areawide aggregate chum salmon lower bound SEG of 57,400 fish.

2014 Escapement Information

In 2014, the majority of salmon escapements to the Chignik River were enumerated through the use of a weir. There were 2 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 6 to obtain hourly escapement estimates. Hourly estimates were summed to provide an estimate of daily fish passage. Video 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 2014 season was on May 25, and the last full count of the season was on September 3, after which the weir was removed (Tables 3 and 6). A post-weir sockeye salmon estimate was produced using data collected with Dual frequency Identification Sonar (DIDSON) between September 4 and September 26. Species apportionment was applied based on fish caught in the lagoon by the DIDSON crew using a variable mesh gillnet and 1 report of subsistence catch by a local user. These post-weir results were grouped into 2 reporting periods: September 4 to September 15 and September 16 to September 26 (Appendix B).

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

The Chignik River is the only stream with substantial Chinook salmon escapement within the CMA. Chinook salmon began entering the Chignik River in mid-June. The run peaked by mid-July and was over by mid-August (Table 6; Figure 7). The 2014 Chignik River Chinook salmon escapement of 2,895 fish was below the recent 5- and 10-year averages while slightly above the 20-year average escapements (Table 7). Chinook salmon escapement in 2014 was also slightly above the BEG range of 1,300–2,700 fish (Figure 8; Sagalkin et al. 2013).

Sockeye Salmon

Chignik River watershed sockeye salmon are managed based on daily escapement objectives by run (Table 1). The Chignik River sockeye salmon early run peaked in mid-June and the late run peaked in late-July (Table 4; Figure 9). The 2014 estimated total Chignik River watershed sockeye salmon escapement of 651,609 fish was below the 5-, 10-, and 20-year average escapement (Table 8). The early-run escapement was estimated at 360,381 sockeye salmon, which was within the early-run SEG range of 350,000–450,000 fish (Table 8; Figure 10). The late-run escapement was estimated at 291,228 sockeye salmon, which was within the late-run escapement goal range of 250,000–400,000 fish (Table 8; Figure 10). Because 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 grouped into 2 reporting periods, September 4 to September 15 (12,910 fish) and September 16 to September 26 (10,257 fish), which are included in the late-run estimate of total escapement (Table 2; Appendix B).

Peak aerial survey counts of spawning sockeye salmon in Black Lake tributaries were above the 5-, 10-, and 20-year averages (Table 9). Total peak aerial survey counts of spawning sockeye salmon in the Chignik Lake and its tributaries were also well above the 5-, 10-, and 20-year averages (Table 10).

Sockeye salmon escapements were documented, via aerial survey, in low numbers (generally fewer than 3,000 fish) in several other CMA streams. Due to small run sizes and limited effort, escapement goals for these streams have not been established (Sagalkin et al. 2013).

Coho Salmon

Coho salmon enter CMA drainages in mid-August and generally continue through November. The 2014 Chignik River coho salmon escapement estimate through September 3 was 15,572 fish (Table 6), which was above the recent 5-, 10-, and 20-year average escapements (Table 7). A DIDSON unit was installed upstream of the weir site to estimate sockeye and coho salmon escapements after the weir was removed. The 2014 estimates of coho salmon escapement from September 4 until September 26 was 93,383 fish, for a total estimated escapement of 108,955 coho salmon. In several other CMA streams, coho salmon escapements were observed in low numbers (generally fewer than 1,000 fish) via aerial survey.

Due to late season run timing and limited directed effort, escapement goals for coho salmon have not been established in the CMA (Sagalkin et al. 2013).

Pink Salmon

In 2014, pink salmon began entering the Chignik River in mid-July and peaked in mid-August with a total escapement of 3,171 salmon (Table 6). The 2014 pink salmon escapement into the Chignik River was well below the 5- and 10-year average escapements (Table 11).

Escapements into other CMA streams were monitored via aerial surveys. Aerial survey escapement estimates for all streams were summed and compared to the areawide even-year aggregate SEG for pink salmon. The 2014 overall combined escapement for the CMA was approximately 235,159 pink salmon, which was within the area wide aggregate even-year SEG range of 200,000–600,000 fish but well below the 5-, 10-, and 20-even year average escapement estimates (Table 11).

Chum Salmon

A limited number of chum salmon return to the Chignik River, mainly in late-July and August (Table 6). The 2014 Chignik River chum salmon escapement was 58 fish, which was below the recent 5-year and 10-year average escapements (Table 7).

Escapements into other CMA streams were monitored via aerial surveys and compared to the areawide aggregate SEG for chum salmon (Sagalkin et al. 2013). The total 2014 CMA chum salmon escapement of 101,378 fish was above the lower bound SEG of 57,400 fish and below the 5-, 10-, and 20-year escapement averages (Table 12).

Harvest Information

Commercial salmon harvest information for 2014 was organized into 4 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 ADF&G's 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 ADF&G's Chignik Lagoon test fishery were not included in any of the harvest allocations. Similarly, 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 2014 commercial salmon harvest and effort can be found in Table 2.

Chinook Salmon

A total of 8,846 Chinook salmon were harvested from the CMA in 2014, which was well above the 5-, 10-, and 20-year average Chinook salmon harvests (Table 13). During ADF&G's test fishery program, 2 Chinook salmon were harvested and 35 fish were retained as home pack (Table 14). Most of the CMA Chinook salmon harvest in 2014 came from the Central and Western districts (4,302 and 4,054 fish respectively; Table 15). In 2014, Chinook salmon were primarily harvested from mid-July through early August (Table 16).

Sockeye Salmon

A total of 620,339 sockeye salmon were harvested in the CMA during 2014, which was well below the 5-, 10-, and 20-year average sockeye salmon harvests (Tables 13 and 17). ADF&G's test fishery program harvested 3,454 of these salmon, and a total of 6 fish were reported as retained for home pack (Table 17). Most of the CMA sockeye salmon harvest in 2014 occurred in the Chignik Bay, Central, and Western districts (Table 18). The majority of sockeye salmon were harvested from mid-July through early-August (Table 19).

The Cape Igvak and SEDM fisheries were not opened during the allocation period (June 1–July 25) due to low sockeye salmon harvests in the CMA. Therefore, no sockeye salmon allocatively considered Chignik-bound were harvested as part of the Cape Igvak or SEDM fisheries (Table 20).

The 2014 Chignik River early-run sockeye salmon harvest of 49,753 fish was well below the 5-, 10-, and 20-year average harvests (Table 21; Figure 11). The 2014 late-run harvest of 570,586 sockeye salmon was also below the 5-, 10-, and 20-year average harvests (Table 22; Figure 12). The total Chignik-bound commercial sockeye salmon harvest was 620,339 fish for a total run estimate (harvest plus escapement) of 1,271,948 sockeye salmon, which was well below the 5-, 10-, and 20-year average (Table 21; Figure 13).

In 2014, the Chignik early-run was approximately 380,000 sockeye salmon below the forecast, while the late-run was approximately 50,000 fish below the forecast (Table 22).

Coho Salmon

A total of 132,459 coho salmon were harvested in the CMA during 2014, which was well above the 5-, 10-, and 20-year average harvests (Tables 13 and 23). All commercially-harvested coho salmon were sold to processors by fishermen (Table 23). The majority of the 2014 coho salmon harvest occurred in the Western District during July and August (Tables 24 and 25).

Pink Salmon

A total of 352,099 pink salmon were harvested during 2014, which was well below the 5-, 10-, and 20-year average harvests (Tables 13 and 26). All commercially-harvested pink salmon were sold to processors by fishermen, which includes 16 salmon harvested during ADF&G's Chignik Lagoon test fishery (Table 26). The majority of the 2014 pink salmon harvest occurred in the Western District from late July through August (Table 27 and 28).

Chum Salmon

A total of 55,152 chum salmon were harvested from the CMA during the 2014 season, which was well below the 5-, 10-, and 20-year average harvests (Tables 13 and 29). All of the commercially harvested chum salmon were sold to processors by fishermen, including 3 salmon harvested during ADF&G's Chignik Lagoon test fishery (Table 29). The 2014 chum salmon harvest occurred mostly in the Central and Western districts from mid-July until mid-August (Tables 30 and 31).

Economic Value

In 2014, 70 CMA permit holders (77% of CMA permits) made deliveries (Table 32). The exvessel value of the 2014 CMA salmon harvest was about \$7.0 million, or approximately \$100,200 per active permit holder, which was well below the 5-, 10-, and 20-year average exvessel values (Table 32; Figure 14). The vast majority (86%) of exvessel revenue was from the sale of sockeye salmon (\$86,293 per active permit holder). The 2014 Chinook, coho, pink, and chum salmon harvest provided \$955, \$6,206, \$4,099, and \$2,643, respectively, per active permit holder (Table 32).

CHIGNIK LAGOON TEST FISHERY

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 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 the costs of operations at the Chignik weir (Anderson 2014).

ADF&G conducted 4 test fisheries during 2014, with a total harvest of 3,454 sockeye salmon (Table 17). The first test fishery occurred on June 10, when 399 sockeye salmon were harvested. Subsequent test fisheries conducted on June 15, June 18, and July 11 harvested 1,027, 662, and 1,372 sockeye salmon, respectively.

CHIGNIK AREA SUBSISTENCE SALMON FISHERIES

The 2014 CMA subsistence harvest will not be available until after subsistence permits are returned and tabulated in the spring of 2015. Historical subsistence harvests can be found in Table 33.

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TABLES AND FIGURES

Table 1.–Chignik River sockeye salmon escapement objectives, 2014.

Date ^a	Black Lake		Chignik Lake		Date	Chignik Lake	
	Lower	Upper	Lower	Upper		Lower	Upper
June 2	2,000	– 3,500			August 1	160,000	– 297,000
June 4	7,000	– 9,000			August 3	167,000	– 306,000
June 6	14,000	– 19,000			August 5	173,000	– 314,000
June 8	25,000	– 33,000			August 7	179,000	– 321,000
June 10	40,000	– 51,000			August 9	184,000	– 327,000
June 12	54,000	– 70,000			August 11	189,000	– 332,000
June 14	71,000	– 92,000			August 13	194,000	– 337,000
June 16	97,000	– 124,000			August 15	199,000	– 343,000
June 18	126,000	– 162,000			August 17	204,000	– 348,000
June 20	155,000	– 200,000	1,000	– 2,000	August 19	207,000	– 350,000
June 22	183,000	– 235,000	1,500	– 3,500	August 21	211,000	– 358,000
June 24	209,000	– 268,000	3,000	– 6,000	August 23	214,000	– 362,000
June 26	242,000	– 311,000	5,500	– 10,000	August 25	217,000	– 366,000
June 28	268,000	– 344,000	8,000	– 16,000	August 27	220,000	– 369,000
June 30	285,000	– 365,000	11,500	– 22,000	August 29	223,000	– 373,000
July 2	300,000	– 385,000	16,000	– 30,000	August 31	225,000	– 375,000
July 4	312,000	– 401,000	21,000	– 40,000			
July 6	321,000	– 413,000	27,000	– 51,000	September 3	228,000	– 378,000
July 8	329,000	– 422,000	34,000	– 65,000	September 5	231,000	– 381,000
July 10	334,000	– 430,000	43,000	– 81,000	September 7	235,000	– 385,000
July 12	340,000	– 436,000	53,000	– 98,000	September 9	239,000	– 389,000
July 14	343,000	– 440,000	63,000	– 118,000	September 11	243,000	– 393,000
July 16	345,000	– 443,000	75,000	– 142,000	September 13	247,000	– 397,000
July 18	347,000	– 446,000	88,000	– 168,000	September 15	250,000	– 400,000
July 20	348,000	– 448,000	100,000	– 192,000			
July 22	349,000	– 449,000	113,000	– 212,000			
July 24	349,000	– 449,000	123,000	– 230,000			
July 26	349,000	– 449,000	134,000	– 251,000			
July 28	349,000	– 449,000	143,000	– 269,000			
July 30	350,000	– 450,000	151,000	– 284,000			
					Escapement Goals		
					Black Lake	350,000	– 450,000
					Chignik Lake	250,000	– 400,000 ^a

Note: Historically, the estimate of the total escapement for early run sockeye salmon was based on Chignik River weir counts through July 4, based on scale pattern analysis studies. After July 4, sockeye salmon through the weir was considered late-run escapement. Beginning in 2014, in-season genetic samples were used to determine the apportionment of the 2 runs during late June and mid-July when the runs overlap instead of the July 4 date and new interim escapement objectives were established for both runs.

^a 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 2.—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, 2014.

Date	Effort		Chinook		Sockeye		Coho		Pink		Chum		Total	
	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
12-Jul	46	50	100	1,143	28,400	204,882	483	3,766	2,116	12,125	715	5,273	31,814	227,189
13-Jul	46	52	245	2,528	29,107	194,872	1,204	9,200	4,107	12,145	1,186	9,065	35,849	227,810
14-Jul	50	52	350	4,549	31,978	209,337	796	5,842	3,618	11,641	1,388	9,404	38,130	240,773
15-Jul	47	50	474	4,780	26,444	174,856	861	6,815	5,961	17,431	1,424	10,576	35,164	214,458
16-Jul	50	55	464	5,407	41,176	268,339	702	5,339	4,654	14,691	1,613	12,567	48,609	306,343
17-Jul	39	39	327	3,898	26,817	187,850	3,127	24,705	6,243	15,942	2,034	15,357	38,548	247,752
18-Jul	57	62	819	6,705	21,970	149,247	5,009	44,063	7,433	23,043	3,905	30,307	39,136	253,365
19-Jul														
20-Jul														
21-Jul	54	55	304	2,214	23,046	155,968	3,640	25,724	7,036	22,640	2,179	15,826	36,206	222,372
22-Jul	58	58	402	4,167	39,601	269,008	5,178	47,694	12,052	36,750	2,278	21,610	59,511	379,229
23-Jul	53	54	245	2,403	19,127	133,020	1,528	13,662	6,838	21,369	1,500	13,060	29,238	183,514
24-Jul	55	57	206	1,708	27,939	198,503	5,871	54,995	13,148	41,030	1,962	16,707	49,126	312,943
25-Jul	35	35	223	1,906	14,697	89,098	3,973	30,148	8,786	24,051	1,266	10,210	28,945	155,413
26-Jul	50	51	461	3,536	22,243	147,476	6,240	53,719	10,835	34,397	2,409	20,616	42,188	259,744
27-Jul	46	48	155	1,455	20,917	139,499	4,302	32,191	14,446	45,176	2,774	21,667	42,594	239,988
28-Jul	54	54	109	1,113	23,344	162,364	3,940	33,432	15,275	51,108	2,555	21,477	45,223	269,494
29-Jul	46	48	77	336	16,270	104,106	1,559	11,458	7,804	24,432	1,297	11,221	28,554	159,868
30-Jul	53	53	45	491	21,756	143,723	4,033	38,618	20,361	64,968	1,848	19,103	48,043	266,903
31-Jul	51	51	181	1,745	24,044	160,876	4,705	40,307	26,577	81,936	2,757	24,266	58,264	309,130
1-Aug	47	47	167	1,357	17,561	112,681	5,340	48,014	20,323	69,129	1,786	15,893	45,179	247,074
2-Aug	44	44	215	2,140	13,985	93,387	3,954	29,956	16,063	49,515	1,870	14,872	36,087	189,870
3-Aug	45	45	143	1,365	21,530	142,265	6,689	54,731	26,576	95,019	2,512	21,144	57,450	314,524
4-Aug	44	44	195	2,153	14,149	100,052	6,096	53,372	24,529	80,334	2,025	18,740	46,994	254,651
5-Aug	36	36	17	189	7,292	47,850	4,285	34,053	8,300	27,272	1,517	13,701	21,411	123,065
6-Aug	39	39	96	1,136	9,002	59,524	6,111	53,228	16,748	51,875	1,688	14,896	33,645	180,659
7-Aug	19	19	16	240	2,506	15,832	503	4,262	1,310	5,116	242	1,986	4,577	27,436
8-Aug	46	48	392	3,884	13,077	94,433	11,527	94,830	26,595	87,174	2,540	22,671	54,131	302,992
9-Aug	37	37	57	652	9,218	54,056	6,652	48,554	10,186	36,157	1,361	11,779	27,474	151,198
10-Aug	37	37	393	2,321	7,842	50,939	7,318	56,826	13,210	41,071	1,395	12,047	30,158	163,204
11-Aug														

-continued-

Table 2.–Page 2 of 2.

Date	Effort		Chinook		Sockeye		Coho		Pink		Chum		Total	
	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
12-Aug														
13-Aug														
14-Aug														
15-Aug	28	28	104	916	4,673	27,962	2,093	15,622	1,791	6,648	462	3,363	9,123	54,511
16-Aug	31	34	1,594	7,042	6,882	40,116	2,622	20,124	3,150	11,569	786	5,618	15,034	84,469
17-Aug	19	19	63	403	4,791	27,689	1,727	12,600	1,124	4,135	482	2,977	8,187	47,804
18-Aug	19	19	123	1,360	6,146	39,524	2,448	19,942	1,709	6,570	398	3,356	10,845	70,752
19-Aug	20	20	4	47	7,367	47,692	2,292	19,507	1,770	6,879	403	3,489	11,836	77,614
20-Aug	18	18			2,545	15,596	122	881	47	157	28	218	2,742	16,852
21-Aug	16	16	46	458	2,743	17,027	831	6,366	504	1,828	162	1,184	4,286	26,863
22-Aug	16	16			2,369	14,201	327	1,955	59	178	18	96	2,773	16,430
23-Aug	3	3			371	2,369	130	778	10	30			511	3,177
24-Aug	6	6			382	2,489	77	624	21	63	7	49	487	3,225
25-Aug	7	7			403	2,569	385	2,830	54	163	3	21	845	5,583
26-Aug	5	5			1,847	10,992	2,442	19,007	641	1,923	223	1,564	5,153	33,486
27-Aug	10	11			1,322	7,864	1,337	11,570	89	561	151	499	2,899	20,494
Total	70	1,522	8,809	75,747	616,879	4,120,133	132,459	1,091,310	352,099	1,138,241	55,149	458,475	1,165,395	6,883,906

Table 3.–Page 2 of 2.

- ^a The weir was removed after the completion of the 9/3 count.
- ^b Historically, the estimate of the total escapement for early run sockeye salmon was based on Chignik River weir counts through July 4, based on scale pattern analysis studies. After July 4, sockeye salmon through the weir was considered late-run escapement. Beginning in 2014, in-season genetic samples were used to determine the apportionment of the 2 runs during late-June and mid-July when the runs overlap instead of the July 4 date.
- ^c 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.–Genetic stock proportions of estimated Chignik River sockeye salmon escapement by day, 2014.

Date	Daily escapement	Cumulative escapement	% Late run	Early run	Late run
5/25	54	54	0%	54	0
5/26	97	151	0%	97	0
5/27	42	193	0%	42	0
5/28	120	313	0%	120	0
5/29	179	492	0%	179	0
5/30	231	723	0%	231	0
5/31	303	1,026	0%	303	0
6/1	477	1,503	0%	477	0
6/2	1,793	3,296	0%	1,791	2
6/3	106	3,402	0%	106	0
6/4	1,435	4,837	0%	1,433	2
6/5	451	5,288	0%	450	1
6/6	2,006	7,294	0%	2,002	4
6/7	5,624	12,918	0%	5,609	15
6/8	7,039	19,957	0%	7,016	23
6/9	10,834	30,791	0%	10,791	43
6/10	8,278	39,069	0%	8,239	39
6/11	2,054	41,123	1%	2,042	12
6/12	3,224	44,347	1%	3,201	23
6/13	10,640	54,987	1%	10,550	90
6/14	8,718	63,705	1%	8,629	89
6/15	17,079	80,784	1%	16,867	212
6/16	10,501	91,285	2%	10,343	158
6/17	17,384	108,669	2%	17,068	316
6/18	11,611	120,280	2%	11,356	255
6/19	17,109	137,389	3%	16,656	453
6/20	11,833	149,222	3%	11,455	378
6/21	17,112	166,334	4%	16,453	659
6/22	8,712	175,046	5%	8,309	403
6/23	12,935	187,981	6%	12,216	719
6/24	18,252	206,233	7%	17,035	1,217
6/25	13,695	219,928	8%	12,603	1,092
6/26	12,375	232,303	10%	11,198	1,177
6/27	9,912	242,215	11%	8,792	1,120
6/28	6,227	248,442	13%	5,393	834
6/29	9,900	258,342	16%	8,337	1,563
6/30	13,196	271,538	19%	10,751	2,445
7/1	10,253	281,791	22%	8,036	2,217
7/2	8,099	289,890	25%	6,069	2,030
7/3	9,912	299,802	29%	7,051	2,861
7/4	9,669	309,471	33%	6,480	3,189
7/5	14,691	324,162	37%	9,199	5,492
7/6	12,562	336,724	42%	7,286	5,276
7/7	18,724	355,448	47%	9,969	8,755

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Table 4.–Page 2 of 3.

Date	Daily	Cumulative	%		
	escapement	escapement	Late run	Early run	Late run
7/10	18,109	413,668	61%	7,054	11,055
7/11	21,741	435,409	66%	7,495	14,246
7/12	11,995	447,404	70%	3,629	8,366
7/13	12,865	460,269	74%	3,389	9,476
7/14	9,128	469,397	77%	2,078	7,050
7/15	3,206	472,603	80%	627	2,579
7/16	2,627	475,230	83%	439	2,188
7/17	2,467	477,697	86%	350	2,117
7/18	2,528	480,225	88%	303	2,225
7/19	6,068	486,293	90%	613	5,455
7/20	20,764	507,057	92%	1,760	19,004
7/21	18,998	526,055	93%	1,347	17,651
7/22	5,095	531,150	94%	302	4,793
7/23	1,300	532,450	95%	64	1,236
7/24	1,911	534,361	96%	78	1,833
7/25	1,576	535,937	97%	54	1,522
7/26	2,248	538,185	97%	64	2,184
7/27	2,970	541,155	98%	70	2,900
7/28	2,034	543,189	98%	39	1,995
7/29	2,460	545,649	98%	39	2,421
7/30	2,073	547,722	99%	27	2,046
7/31	3,289	551,011	99%	36	3,253
8/1	1,493	552,504	100%	0	1,493
8/2	2,310	554,814	100%	0	2,310
8/3	1,994	556,808	100%	0	1,994
8/4	2,041	558,849	100%	0	2,041
8/5	4,048	562,897	100%	0	4,048
8/6	1,888	564,785	100%	0	1,888
8/7	1,213	565,998	100%	0	1,213
8/8	1,057	567,055	100%	0	1,057
8/9	1,561	568,616	100%	0	1,561
8/10	2,360	570,976	100%	0	2,360
8/11	2,354	573,330	100%	0	2,354
8/12	2,313	575,643	100%	0	2,313
8/13	6,147	581,790	100%	0	6,147
8/14	6,445	588,235	100%	0	6,445
8/15	3,333	591,568	100%	0	3,333
8/16	3,135	594,703	100%	0	3,135
8/17	3,631	598,334	100%	0	3,631
8/18	3,039	601,373	100%	0	3,039
8/19	2,710	604,083	100%	0	2,710
8/20	2,276	606,359	100%	0	2,276
8/21	2,414	608,773	100%	0	2,414

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Table 4.–Page 3 of 3.

Date	Daily escapement	Cumulative escapement	% Late run	Early run	Late run
8/22	1,409	610,182	100%	0	1,409
8/23	1,807	611,989	100%	0	1,807
8/24	3,198	615,187	100%	0	3,198
8/25	1,249	616,436	100%	0	1,249
8/26	1,419	617,855	100%	0	1,419
8/27	1,382	619,237	100%	0	1,382
8/28	1,356	620,593	100%	0	1,356
8/29	1,611	622,204	100%	0	1,611
8/30	1,412	623,616	100%	0	1,412
8/31	1,805	625,421	100%	0	1,805
9/1	1,396	626,817	100%	0	1,396
9/2	1,008	627,825	100%	0	1,008
9/3	617	628,442	100%	0	617
9/4–9/15	12,910	641,352	100%	0	12,910
9/16–					
9/30	10,257	651,609	100%	0	10,257
Total	651,609			360,381	291,228

Table 5.—Sampling dates, final sample sizes, estimates of stock composition, upper and lower 90% credibility intervals, and standard deviations for samples of the escapement through the Chignik River weir in 2010–2014 using the program BAYES with a sequential prior.

Year	Stratum	n	Black Lake				Chignik Lake			
			Proportion	Lower	Upper	SD	Proportion	Lower	Upper	SD
2010	June 14	190	0.959	0.894	1.000	0.036	0.041	0.000	0.106	0.036
	June 21	189	0.995	0.966	1.000	0.014	0.005	0.000	0.034	0.014
	June 27	189	0.924	0.794	1.000	0.075	0.076	0.000	0.206	0.075
	July 1	189	0.823	0.724	0.912	0.057	0.177	0.088	0.276	0.057
	July 5	190	0.788	0.699	0.871	0.052	0.212	0.129	0.301	0.052
	July 8-9	190	0.784	0.687	0.870	0.056	0.216	0.130	0.313	0.056
	July 11	190	0.519	0.409	0.625	0.066	0.481	0.375	0.591	0.066
	July 14	188	0.227	0.154	0.306	0.046	0.773	0.694	0.846	0.046
	July 18-19	188	0.293	0.214	0.377	0.050	0.707	0.623	0.786	0.050
	July 23	186	0.108	0.052	0.173	0.037	0.892	0.827	0.948	0.037
July 30	190	0.013	0.000	0.062	0.022	0.987	0.938	1.000	0.022	
2011	June 10	188	0.998	0.988	1.000	0.005	0.002	0.000	0.012	0.005
	June 17	188	1.000	1.000	1.000	0.002	0.000	0.000	0.000	0.002
	June 24	188	0.976	0.888	1.000	0.040	0.024	0.000	0.112	0.040
	June 28	190	0.832	0.744	0.918	0.054	0.168	0.082	0.256	0.054
	July 2	190	0.953	0.886	1.000	0.036	0.047	0.000	0.114	0.036
	July 5	190	0.785	0.696	0.866	0.052	0.215	0.134	0.304	0.052
	July 9-10	187	0.719	0.625	0.807	0.055	0.281	0.193	0.375	0.055
	July 12-13	190	0.297	0.214	0.384	0.052	0.703	0.616	0.786	0.052
	July 14	190	0.308	0.217	0.402	0.056	0.692	0.598	0.783	0.056
	July 21	186	0.123	0.062	0.192	0.039	0.877	0.808	0.938	0.039
July 28	189	0.036	0.000	0.088	0.029	0.964	0.912	1.000	0.029	
2012	June 11	188	0.976	0.904	1.000	0.034	0.024	0.000	0.096	0.034
	June 18	190	0.964	0.882	1.000	0.042	0.036	0.000	0.118	0.042
	June 25	189	0.993	0.955	1.000	0.017	0.007	0.000	0.045	0.017
	July 1	190	0.644	0.544	0.733	0.058	0.356	0.267	0.456	0.058
	July 5	187	0.485	0.396	0.574	0.054	0.515	0.426	0.604	0.054
	July 8-9 ^a	187	0.099	0.005	0.235	0.071	0.901	0.765	0.995	0.071
	July 11	189	0.225	0.147	0.306	0.048	0.775	0.694	0.853	0.048
	July 14	190	0.070	0.011	0.132	0.036	0.930	0.868	0.989	0.036
	July 17	189	0.003	0.000	0.020	0.009	0.997	0.980	1.000	0.009
	July 21	190	0.006	0.000	0.049	0.018	0.994	0.951	1.000	0.018
July 28	170	0.000	0.000	0.000	0.001	1.000	1.000	1.000	0.001	

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Table 5.–Page 2 of 2.

Year	Stratum	n	Black Lake				Chignik Lake			
			Proportion	Lower	Upper	SD	Proportion	Lower	Upper	SD
2013	June 27	188	0.911	0.838	1.000	0.045	0.089	0.000	0.162	0.024
	July 1	189	0.858	0.761	0.942	0.055	0.142	0.058	0.239	0.055
	July 5	169	0.612	0.515	0.705	0.058	0.388	0.295	0.485	0.058
	July 8-9	187	0.429	0.338	0.519	0.055	0.571	0.481	0.662	0.055
	July 14	190	0.288	0.196	0.384	0.057	0.712	0.616	0.804	0.057
2014	June 28	189	0.825	0.745	0.896	0.046	0.175	0.104	0.255	0.046
	July 2	189	0.785	0.690	0.874	0.056	0.215	0.126	0.310	0.056
	July 6	189	0.618	0.519	0.714	0.059	0.382	0.286	0.481	0.059
	July 10	188	0.357	0.258	0.460	0.062	0.643	0.540	0.742	0.062
	July 14	188	0.220	0.139	0.307	0.051	0.780	0.693	0.861	0.051
	July 18	189	0.143	0.064	0.227	0.050	0.857	0.773	0.936	0.050

^a Note these estimates were associated with a Gelman-Rubin shrink factor of 1.4.

Table 6.–Estimated Chignik River Chinook, coho, pink, and chum salmon, and Dolly Varden escapement, by day, 2014.

Date	Chinook		Coho		Pink		Chum		Dolly Varden	
	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative
5/25	0		0	0	0	0	0	0	0	0
5/26	0	0	0	0	0	0	0	0	12	12
5/27	0	0	0	0	0	0	0	0	0	12
5/28	0	0	0	0	0	0	0	0	0	12
5/29	0	0	0	0	0	0	0	0	0	12
5/30	0	0	0	0	0	0	0	0	12	24
5/31	0	0	0	0	0	0	0	0	30	54
6/1	0	0	0	0	0	0	0	0	42	96
6/2	0	0	0	0	0	0	0	0	30	126
6/3	0	0	0	0	0	0	0	0	7	133
6/4	0	0	0	0	0	0	0	0	0	133
6/5	0	0	0	0	0	0	0	0	25	158
6/6	0	0	0	0	0	0	0	0	72	230
6/7	0	0	0	0	0	0	0	0	157	387
6/8	0	0	0	0	0	0	0	0	174	561
6/9	0	0	0	0	0	0	0	0	156	717
6/10	0	0	0	0	0	0	0	0	216	933
6/11	0	0	0	0	0	0	0	0	126	1,059
6/12	0	0	0	0	0	0	0	0	464	1,523
6/13	0	0	0	0	0	0	0	0	914	2,437
6/14	6	6	0	0	0	0	1	1	1,095	3,532
6/15	6	12	0	0	0	0	0	1	1,285	4,817
6/16	0	12	0	0	0	0	0	1	1,228	6,045
6/17	24	36	0	0	0	0	0	1	868	6,913
6/18	6	42	0	0	0	0	0	1	679	7,592
6/19	18	60	0	0	0	0	0	1	1,116	8,708
6/20	6	66	0	0	0	0	0	1	474	9,182
6/21	6	72	0	0	0	0	0	1	998	10,180
6/22	18	90	0	0	0	0	0	1	2,106	12,286
6/23	13	103	0	0	0	0	0	1	1,576	13,862
6/24	24	127	0	0	0	0	0	1	864	14,726
6/25	38	165	0	0	0	0	0	1	2,373	17,099
6/26	30	195	0	0	0	0	0	1	1,507	18,606
6/27	72	267	0	0	0	0	0	1	1,891	20,497
6/28	24	291	0	0	0	0	0	1	874	21,371
6/29	48	339	0	0	0	0	0	1	1,584	22,955
6/30	66	405	0	0	7	7	0	1	1,519	24,474
7/1	60	465	0	0	0	7	0	1	1,602	26,076
7/2	96	561	0	0	0	7	0	1	571	26,647
7/3	72	633	0	0	0	7	0	1	1,053	27,700
7/4	90	723	0	0	0	7	0	1	1,158	28,858
7/5	152	875	0	0	0	7	0	1	3,350	32,208
7/6	192	1,067	0	0	0	7	0	1	1,094	33,302
7/7	132	1,199	0	0	18	25	0	1	1,273	34,575

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Table 6.–Page 2 of 3.

Date	Chinook		Coho		Pink		Chum		Dolly Varden	
	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative
7/8	84	1,283	0	0	0	25	0	1	2,121	36,696
7/9	152	1,435	0	0	6	31	0	1	3,124	39,820
7/10	119	1,554	0	0	34	65	6	7	1,498	41,318
7/11	168	1,722	0	0	12	77	0	7	1,163	42,481
7/12	67	1,789	0	0	0	77	0	7	251	42,732
7/13	90	1,879	0	0	0	77	0	7	270	43,002
7/14	55	1,934	0	0	6	83	6	13	230	43,232
7/15	36	1,970	0	0	0	83	0	13	216	43,448
7/16	24	1,994	0	0	0	83	0	13	78	43,526
7/17	120	2,114	0	0	0	83	0	13	96	43,622
7/18	76	2,190	0	0	1	84	1	14	43	43,665
7/19	122	2,312	0	0	12	96	0	14	128	43,793
7/20	85	2,397	0	0	0	96	0	14	242	44,035
7/21	78	2,475	0	0	0	96	6	20	126	44,161
7/22	18	2,493	0	0	18	114	0	20	102	44,263
7/23	59	2,552	0	0	8	122	0	20	26	44,289
7/24	57	2,609	0	0	6	128	0	20	36	44,325
7/25	19	2,628	0	0	12	140	0	20	15	44,340
7/26	2	2,630	0	0	31	171	0	20	49	44,389
7/27	42	2,672	0	0	42	213	6	26	36	44,425
7/28	14	2,686	0	0	25	238	0	26	8	44,433
7/29	30	2,716	0	0	36	274	0	26	12	44,445
7/30	6	2,722	0	0	9	283	0	26	6	44,451
7/31	13	2,735	0	0	12	295	0	26	24	44,475
8/1	7	2,742	0	0	0	295	0	26	24	44,499
8/2	13	2,755	0	0	8	303	0	26	25	44,524
8/3	6	2,761	0	0	18	321	0	26	12	44,536
8/4	16	2,777	0	0	10	331	0	26	12	44,548
8/5	14	2,791	0	0	165	496	1	27	24	44,572
8/6	0	2,791	0	0	49	545	0	27	6	44,578
8/7	8	2,799	6	6	7	552	0	27	1	44,579
8/8	0	2,799	0	6	72	624	0	27	0	44,579
8/9	9	2,808	1	7	14	638	0	27	6	44,585
8/10	12	2,820	0	7	62	700	0	27	18	44,603
8/11	18	2,838	7	14	138	838	7	34	12	44,615
8/12	6	2,844	0	14	43	881	0	34	0	44,615
8/13	6	2,850	12	26	187	1,068	0	34	0	44,615
8/14	12	2,862	24	50	204	1,272	6	40	24	44,639
8/15	19	2,881	31	81	181	1,453	1	41	12	44,651
8/16	0	2,881	44	125	214	1,667	2	43	36	44,687
8/17	6	2,887	31	156	242	1,909	7	50	12	44,699
8/18	0	2,887	48	204	103	2,012	1	51	0	44,699
8/19	0	2,887	30	234	162	2,174	0	51	12	44,711
8/20	0	2,887	79	313	278	2,452	0	51	12	44,723

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Table 6.–Page 3 of 3.

Date	Chinook		Coho		Pink		Chum		Dolly Varden	
	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative
8/21	0	2,887	145	458	121	2,573	0	51	0	44,723
8/22	0	2,887	186	644	94	2,667	0	51	0	44,723
8/23	0	2,887	597	1,241	90	2,757	0	51	13	44,736
8/24	2	2,889	751	1,992	56	2,813	1	52	6	44,742
8/25	0	2,889	588	2,580	56	2,869	0	52	12	44,754
8/26	0	2,889	761	3,341	67	2,936	0	52	13	44,767
8/27	6	2,895	934	4,275	63	2,999	0	52	12	44,779
8/28	0	2,895	1,209	5,484	45	3,044	0	52	6	44,785
8/29	0	2,895	1,217	6,701	38	3,082	0	52	18	44,803
8/30	0	2,895	1,346	8,047	18	3,100	0	52	18	44,821
8/31	0	2,895	2,035	10,082	13	3,113	0	52	12	44,833
9/1	0	2,895	1,680	11,762	24	3,137	0	52	6	44,839
9/2	0	2,895	2,269	14,031	32	3,169	6	58	48	44,887
9/3	0	2,895	1,541	15,572	2	3,171	0	58	12	44,899
9/4–9/26 ^a	0	2,895	93,383	108,955	0	3,171	0	58	0	44,899
Total		2,895		108,955		3,171		58		44,899

^a A post weir estimate for coho salmon from 9/4–9/26 was done using DIDSON sonar.

Table 7.—Estimated Chignik River Chinook, coho, pink, and chum salmon, and Dolly Varden escapement, 1980 through 2014.

Year	Escapement ^a				
	Chinook ^b	Coho ^c	Pink ^c	Chum ^c	Dolly Varden
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
2010	3,679	5,152	3,670	95	17,578
2011	2,728	5,293	16,298	145	14,133
2012	1,449	2,663	2,849	73	18,032
2013	1,253	16,783	7,231	72	17,230
2014	2,895	108,955	3,171	58	44,899
Averages					
1994–2013	3,551	11,344	8,666	144	17,415
2004–2013	3,238	13,595	12,001	152	13,342
2009–2013	2,158	7,512	8,584	99	15,118

^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 1980 to 1993.

^c No reliable escapement (ND) estimates were generated for pink, chum, or coho salmon or Dolly Varden from 1980 to 1996. No post-weir estimates are reported here for these species.

Table 8.—Total Chignik River sockeye salmon escapement and escapement goals, based on post-season analysis, by run, 1980 through 2014.

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
2010	432,535	311,291	743,826
2011	488,930	264,887	753,817
2012	353,441	358,948	712,389
2013	386,782	369,319	756,101
2014	360,381	291,228	651,609
Year	Early run	Late run	Total
SEG	350,000–450,000	250,000–400,000	600,000–850,000
Averages			
1994–2013	437,646	309,389	747,035
2004–2013	387,722	306,421	694,144
2009–2013	410,633	326,606	737,239

Table 9.–Peak sockeye salmon aerial survey escapement estimates for Black Lake tributaries, 1980 through 2014.

Year	Fan Creek	Milk Creek	Boulevard Creek	Alec River	Conglomerate Creek	Broad Creek	Total
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
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
2010	10,000	1,700	24,000	100,000	2,100	7,000	144,800
2011	45,000	5,000	65,000	215,000	12,000	ND	342,000
2012	47,000	4,000	55,000	80,000	5,000	5,000	196,000
2013	25,000	ND	3,000	250,000	0	0	278,000
2014	28,400	ND	41,000	210,000	6,600	41,000	327,000
Averages							
1994–2013	40,095	10,299	59,182	165,100	11,268	28,712	297,027
2004–2013	27,029	5,074	30,773	157,656	4,510	5,443	208,994
2009–2013	32,300	5,550	37,500	165,500	4,820	3,525	247,380

Table 10.—Peak sockeye salmon aerial survey escapement estimates for Chignik Lake and Black River tributaries, 1980 through 2014.

Year	Black River				Chignik Lake			Total
	Bearskin Creek	West Fork	Chiaktuak Creek	Total	Clark River	Home Creek	Hatchery Beach	
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	8,200	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	-
1992	ND	ND	ND	-	ND	ND	ND	-
1993	ND	ND	16,000	16,000	ND	ND	ND	-
1994	5,000	ND	31,000	36,000	18,000	9,200	ND	27,200
1995	7,100	18,000	31,000	56,100	13,000	6,000	150,000	169,000
1996	1,800	22,000	22,000	45,800	13,000	5,500	70,000	88,500
1997	9,000	9,000	23,500	41,500	25,000	8,000	35,000	68,000
1998	4,700	71,000	27,500	103,200	21,000	6,000	62,000	89,000
1999	8,300	17,500	13,000	38,800	8,500	1,620	15,000	25,120
2000	2,600	3,700	10,600	16,900	18,000	19,700	2,000	39,700
2001	ND	ND	9,500	9,500	23,000	11,000	25,000	59,000
2002	ND	15,000	2,300	17,300	ND	ND	ND	-
2003	ND	ND	2,000	2,000	ND	ND	ND	-
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
2010	1,700	3,500	5,800	11,000	7,600	0	31,000	38,600
2011	1,000	11,000	11,000	23,000	35,000	2,000	28,000	65,000
2012	150	750	7,500	8,400	57,000	2,500	170,000	229,500
2013	100	1,100	15,000	18,213	55,800	2,300	30,000	88,100
2014	3,100	12,400	41,200	56,700	24,900	3,800	102,000	130,700
Averages								
1994–2013	3,432	13,009	15,773	29,848	24,847	6,142	56,571	77,578
2004–2013	1,985	6,495	14,305	22,986	31,433	4,156	61,857	83,700
2009–2013	710	5,490	12,220	18,823	33,680	2,060	64,750	87,540

Table 11.—Estimated pink salmon escapement and objectives in the Chignik Management Area, by district and year, 1980 through 2014.

Year ^a	District ^b					Total
	Chignik Bay	Central	Eastern	Western	Perryville	
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
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
2010	8,020	52,650	228,500	22,000	19,400	330,570

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Table 11.–Page 2 of 2.

Year ^a	District ^b					Total
	Chignik Bay	Central	Eastern	Western	Perryville	
2011	32,348	223,500	504,000	86,650	139,750	986,248
2012	11,849	63,950	155,500	35,700	35,700	302,699
2013	24,131	223,900	411,060	63,200	141,700	863,991
2014	7,669	30,500	132,050	46,850	18,090	235,159
Even Year SEG						200,000– 600,000
Averages						
1994–2013	54,037	272,540	750,283	150,585	169,145	1,396,589
2004–2013	45,233	187,073	404,078	93,375	121,662	851,420
2009–2013	21,064	138,940	352,380	67,530	90,600	670,514
Even Year Averages						
1994–2012	33,203	138,618	636,924	98,170	137,939	1,044,854
2004–2012	28,882	105,485	316,946	56,660	89,224	597,197
2008–2012	29,903	78,083	262,293	52,387	76,100	498,767

^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 in 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.—Estimated chum salmon escapement and objectives in the Chignik Management Area, by district and year, 1980 through 2014.

Year ^b	District ^a					Total
	Chignik Bay	Central	Eastern	Western	Perryville	
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
2009	10,809	20,550	138,900	9,200	35,500	214,959
2010	1,095	17,000	60,525	19,400	79,200	177,220
2011	4,145	32,500	177,000	9,000	55,500	278,145
2012	1,173	35,000	103,000	25,500	46,300	210,973
2013	672	53,600	63,935	20,200	197,500	335,907
2014	658	21,100	27,620	11,800	40,200	101,378
Area Management Goal						57,400
Averages						
1994–2013	6,589	41,543	145,196	24,354	92,085	309,766
2004–2013	7,311	39,456	102,601	16,214	74,845	240,427
2009–2013	3,579	31,730	108,672	16,660	82,800	243,441

^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 in 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 13.—Total commercial salmon harvests (including home pack and the department's test fishery harvests) from the Chignik Management Area by species and year, 1980 through 2014.

Year	Permits making deliveries	Landings	Chignik management area harvest					Total
			Chinook	Sockeye	Coho	Pink	Chum	
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	710,094
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	383,574	61,630	1,389,390
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
2010	66	2,532	10,380	1,379,785	159,198	489,781	581,329	2,620,473
2011	65	2,617	6,586	2,497,004	76,792	905,166	269,503	3,755,051
2012	70	2,915	3,687	1,800,121	33,316	137,706	171,112	2,145,942
2013	77	3,144	2,959	2,398,066	32,282	871,597	154,679	3,459,583
2014	71	1,521	8,846	620,339	132,459	352,115	55,152	1,168,911
Averages								
1994–2013	74	2,898	3,584	1,461,739	106,148	853,951	169,253	2,594,675
2004–2013	62	2,278	3,786	1,355,439	69,299	880,229	179,188	2,487,941
2009–2013	67	2,676	5,386	1,854,616	82,392	762,518	286,610	2,991,522

Table 14.—Annual Chignik Management Area Chinook salmon harvest, 1980 through 2014.

Year	Test fish		Commercial catch		Home pack		Total	
	Number	Pounds	Number	Pounds	Number	Pounds ^a	Number	Pounds
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
2010	0	0	10,262	102,684	118	1,708	10,380	104,392
2011	4	45	6,440	72,305	142	2,486	6,586	74,836
2012	0	0	3,636	48,850	51	1,053	3,687	49,903
2013	2	25	2,872	35,587	85	1,644	2,959	37,256
2014	2	6	8,809	75,747	35	417	8,846	76,170
Averages								
1994–2013	4	70	3,471	50,723	116	2,035	3,584	52,726
2004–2013	2	40	3,682	47,173	102	1,963	3,786	49,176
2009–2013	1	14	5,291	58,043	94	1,611	5,386	59,669

^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 15.—Chignik Management Area Chinook salmon harvest (including home pack and the department’s test fishery catches), by district and year, 1980 through 2014.

Year	District					Total
	Chignik Bay	Central	Eastern	Western	Perryville	
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
2010	1,564	2,420	834	5,476	86	10,380
2011	1,462	2,154	639	2,118	213	6,586
2012	330	1,878	185	1,284	10	3,687
2013	592	1,249	398	668	52	2,959
2014	363	4,302	75	4,054	52	8,846
Averages						
1994–2013	1,515	918	174	899	79	3,584
2004–2013	1,263	943	243	1,294	43	3,786
2009–2013	900	1,651	451	2,307	78	5,386

Table 16.–Chignik Management Area Chinook salmon harvest (including home pack and the department’s test fishery catches), by district and day, 2014.

Date	District					Total
	Chignik Bay	Central	Eastern	Western	Perryville	
6/2						
6/10	3	Closed	Closed	Closed	Closed	3
6/11	Closed	Closed	Closed	Closed	Closed	Closed
6/12	Closed	Closed	Closed	Closed	Closed	Closed
6/13	Closed	Closed	Closed	Closed	Closed	Closed
6/14	Closed	Closed	Closed	Closed	Closed	Closed
6/15	1	Closed	Closed	Closed	Closed	1
6/16	Closed	Closed	Closed	Closed	Closed	Closed
6/17	Closed	Closed	Closed	Closed	Closed	Closed
6/18	4	Closed	Closed	Closed	Closed	4
6/19–7/10	Closed	Closed	Closed	Closed	Closed	Closed
7/11	2	Closed	Closed	Closed	Closed	2
7/12	13	10	0	77	0	100
7/13	15	228	0	2	0	245
7/14	48	274	0	28	0	350
7/15	11	335	0	128	0	474
7/16	4	297	0	163	0	464
7/17	5	203	0	119	0	327
7/18	11	430	75	303	0	819
7/19	Closed	Closed	Closed	Closed	Closed	Closed
7/20	Closed	Closed	Closed	Closed	Closed	Closed
7/21	1	176	0	128	0	305
7/22	10	254	0	138	0	402
7/23	19	145	0	81	0	245
7/24	15	42	0	139	10	206
7/25	1	190	0	32	0	223
7/26	5	372	0	84	0	461
7/27	25	37	0	81	12	155
7/28	1	34	0	74	0	109
7/29	11	43	0	23	0	93
7/30	6	18	0	21	0	45
7/31	1	165	0	15	0	181
8/1	3	81	0	80	5	169

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Table 16.–Page 2 of 2.

Date	District					Total
	Chignik Bay	Central	Eastern	Western	Perryville	
8/2	10	180	0	25	0	215
8/3	8	123	0	12	0	143
8/4	7	160	0	28	0	195
8/5	7	8	0	2	0	17
8/6	3	70	0	22	1	96
8/7	9	0	Closed	0	7	16
8/8	4	231	Closed	153	4	392
8/9	0	8	Closed	45	4	57
8/10	3	0	Closed	381	9	393
8/11	Closed	Closed	Closed	Closed	Closed	Closed
8/12	Closed	Closed	Closed	Closed	Closed	Closed
8/13	Closed	Closed	Closed	Closed	Closed	Closed
8/14	Closed	Closed	Closed	Closed	Closed	Closed
8/15	0	0	Closed	104	Closed	104
8/16	24	188	Closed	1,382	0	1,594
8/17	56	0	Closed	7	0	63
8/18	0	0	Closed	144	0	144
8/19	0	0	Closed	4	0	4
8/20	0	0	0	0	0	0
8/21	17	0	0	29	0	46
8/22	0	0	Closed	0	0	0
8/23	0	0	Closed	0	0	0
8/24	0	0	Closed	0	0	0
8/25	0	0	Closed	0	0	0
8/26	0	0	Closed	0	0	0
8/27	0	0	Closed	0	0	0
8/28	-processors stopped buying -					
Total	363	4,302	75	4,054	52	8,846

Table 17.—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 2014.

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

Year	Testfish		Commercial catch		Home pack		Total CMA harvest		Cape Igvaka		SEDMb		Total Chignik-bound	
	Number	Pounds	Number	Pounds	Number	Pounds ^c	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
2001 ^d	14,011	98,197	1,497,359	10,972,234	217	1,590	1,511,587	11,072,021	215,214	1,287,154	51,141	368,970	1,777,942	12,728,145
2002	9,101	61,656	1,040,081	7,176,261	1,371	9,460	1,050,553	7,247,377	136,488	727,894	63,026	502,353	1,250,067	8,477,624
2003	5,582	36,334	1,092,304	7,137,591	2,411	15,755	1,100,297	7,189,680	121,887	599,342	70,044	466,153	1,292,228	8,255,175
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
2010	6,545	34,237	1,372,267	8,940,207	973	6,490	1,379,785	8,980,934	185,193	1,035,324	85,267	559,226	1,650,245	10,575,484
2011	6,556	48,184	2,490,125	17,841,056	323	1,977	2,497,004	17,891,217	494,538	3,224,966	156,637	1,123,768	3,148,179	22,239,951
2012	2,089	15,102	1,797,519	12,247,564	513	3,564	1,800,121	12,266,230	324,895	1,884,391	126,083	838,838	2,251,099	14,989,459
2013	4,970	35,474	2,392,509	17,016,502	587	3,928	2,398,066	17,055,904	354,179	2,326,956	169,029	1,109,867	2,921,274	20,492,727
2014	3,454	20,637	616,879	4,120,133	6	40	620,339	4,140,810	0	0	0	0	630,339	4,120,133
Averages														
1994–2013	7,212	48,183	1,453,972	9,975,026	584	3,809	1,461,739	10,026,827	197,650	1,172,101	87,996	586,247	1,747,385	11,767,389
2004–2013	5,180	34,394	1,349,650	9,253,216	610	3,926	1,355,439	9,291,535	201,513	1,233,825	87,313	578,854	1,644,265	11,068,645
2009–2013	4,369	29,166	1,849,749	12,858,800	498	3,318	1,854,616	12,891,284	297,155	1,856,651	117,068	789,182	2,268,838	15,537,116

^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, foregone harvest of 27,896 sockeye salmon harvested in 2001 was added to the SEDM catch for management purposes; this foregone harvest is not included in this table.

Table 18.—Total annual Chignik Management Area sockeye salmon harvest (including home pack and the department’s test fishery catches), by district, 1980 through 2014.

Year	District					Total
	Chignik Bay	Central	Eastern	Western	Perryville	
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
2010	846,823	371,090	102,587	56,736	2,549	1,379,785
2011	1,649,846	670,348	113,760	40,252	22,798	2,497,004
2012	1,122,595	522,184	61,922	93,270	150	1,800,121
2013	1,602,826	583,329	149,437	56,248	6,226	2,398,066
2014	208,056	100,375	86	302,614	9,208	620,339
Averages						
1994–2013	1,020,965	326,289	47,142	54,402	12,940	1,461,739
2004–2013	963,476	274,893	49,289	63,455	4,327	1,355,439
2009–2013	1,218,399	467,712	91,521	69,862	7,122	1,854,616

Table 19.—Chignik Management Area sockeye salmon harvest (including home pack and the department’s test fishery catches), by district and day, 2014.

Date	District					Total
	Chignik Bay	Central	Eastern	Western	Perryville	
6/10	399	Closed	Closed	Closed	Closed	399
6/11–6/14	Closed	Closed	Closed	Closed	Closed	Closed
6/15	1,027	Closed	Closed	Closed	Closed	1,027
6/16	Closed	Closed	Closed	Closed	Closed	Closed
6/17	Closed	Closed	Closed	Closed	Closed	Closed
6/18	662	Closed	Closed	Closed	Closed	662
6/19–7/10	Closed	Closed	Closed	Closed	Closed	Closed
7/11	1,372	Closed	Closed	Closed	Closed	1,372
7/12	14,053	1,863	0	12,484	0	28,400
7/13	13,689	10,077	0	5,341	0	29,107
7/14	9,369	7,982	0	14,627	0	31,978
7/15	7,647	12,472	0	6,325	0	26,444
7/16	9,703	9,086	0	22,387	0	41,176
7/17	8,306	4,916	0	13,595	0	26,817
7/18	8,801	6,497	46	6,626	0	21,970
7/19	Closed	Closed	Closed	Closed	Closed	Closed
7/20	Closed	Closed	Closed	Closed	Closed	Closed
7/21	12,515	4,628	0	5,903	0	23,046
7/22	10,247	9,886	0	19,468	0	39,601
7/23	6,402	6,554	0	6,171	0	19,127
7/24	7,744	4,392	0	14,777	1,026	27,939
7/25	5,125	2,486	0	7,086	0	14,697
7/26	6,006	2,638	0	13,599	0	22,243
7/27	7,400	613	0	11,531	1,373	20,917
7/28	6,041	2,625	33	14,645	0	23,344
7/29	7,859	1,395	0	7,016	0	16,642
7/30	5,709	670	0	15,377	0	21,756
7/31	3,529	3,268	0	17,247	0	24,044

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Table 19.–Page 2 of 2.

Date	District					Total
	Chignik Bay	Central	Eastern	Western	Perryville	
8/1	3,944	1,181	0	10,608	1,828	17,561
8/2	3,833	2,175	0	7,865	112	13,985
8/3	4,080	666	0	16,784	0	21,530
8/4	2,911	584	0	9,720	934	14,149
8/5	2,708	113	7	3,562	902	7,292
8/6	3,351	786	0	4,021	844	9,002
8/7	2,077	56	Closed	35	338	2,506
8/8	1,848	1,635	Closed	8,736	858	13,077
8/9	1,879	318	Closed	6,412	609	9,218
8/10	2,008	249	Closed	5,201	384	7,842
8/11	Closed	Closed	Closed	Closed	Closed	Closed
8/12	Closed	Closed	Closed	Closed	Closed	Closed
8/13	Closed	Closed	Closed	Closed	Closed	Closed
8/14	Closed	Closed	Closed	Closed	Closed	Closed
8/15	2,922	0	Closed	1,751	Closed	4,673
8/16	4,058	564	Closed	2,260	0	6,882
8/17	2,280	0	Closed	2,511	0	4,791
8/18	2,925	0	Closed	3,221	0	6,146
8/19	3,452	0	Closed	3,915	0	7,367
8/20	2,545	0	0	0	0	2,545
8/21	2,083	0	0	660	0	2,743
8/22	2,369	0	Closed	0	0	2,369
8/23	371	0	Closed	0	0	371
8/24	382	0	Closed	0	0	382
8/25	304	0	Closed	99	0	403
8/26	1,216	0	Closed	631	0	1,847
8/27	905	0	Closed	417	0	1,322
8/28	- Processors Stopped Buying -					
Total	208,056	100,375	86	302,614	9,208	620,711

Table 20.—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 through July 25, 1978–2014.

Year	Chignik ^a		Cape Igvak ^a		Southeastern District Mainland ^a		Total
	Catch ^b	Percent	Catch ^b	Percent	Catch ^c	Percent	
1978	1,454,389	86.6	225,078	13.4	ND	ND	1,679,467
1979	794,504	98.3	13,950	1.7	ND	ND	808,454
1980	670,001	91.3	32	0.0	63,724	8.7	733,757
1981	1,606,300	79.9	282,727	14.1	122,198	6.1	2,011,225
1982	1,250,768	84.5	166,756	11.3	62,789	4.2	1,480,313
1983	1,450,832	72.7	318,048	15.9	227,392	11.4	1,996,272
1984	2,474,405	73.9	449,372	13.4	423,292	12.6	3,347,069
1985	690,698	79.8	123,627	14.3	51,421	5.9	865,746
1986	1,456,729	82.6	188,017	10.7	118,006	6.7	1,762,752
1987	1,659,236	78.0	321,506	15.1	146,886	6.9	2,127,628
1988	675,487	95.8	10,520	1.5	19,320	2.7	705,327
1989	496,044	99.1	0	0.0	4,485	0.9	500,529
1990	1,205,575	84.3	107,706	7.5	117,065	8.2	1,430,346
1991 ^d	1,962,583	80.5	324,195	13.3	152,714	6.3	2,439,492
1992	1,054,309	81.2	150,434	11.6	93,845	7.2	1,298,588
1993	1,495,098	77.7	300,055	15.6	128,608	6.7	1,923,761
1994 ^e	1,632,435	80.6	250,230	12.4	142,350	7.0	2,025,015
1995	1,024,785	79.8	169,530	13.2	89,086	6.9	1,283,401
1996	1,710,249	79.7	308,327	14.4	127,201	5.9	2,145,777
1997	443,892	100.0	0	0.0	0	0.0	443,892
1998 ^f	786,466	91.2	8,813	1.0	66,893	7.8	862,172
1999	2,326,811	78.7	456,039	15.4	173,621	5.9	2,956,471
2000	1,509,652	80.1	271,344	14.4	103,419	5.5	1,884,415
2001 ^g	1,134,991	79.4	215,214	15.1	79,037	5.5	1,429,242
2002	849,980	81.0	136,488	13.0	63,026	6.0	1,049,494
2003	855,179	81.7	121,887	11.6	70,044	6.7	1,047,110
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
2010	1,125,135	80.6	185,193	13.3	85,267	7.6	1,395,595

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Table 20.–Page 2 of 2.

Year	Chignik ^a		Cape Igvak ^a		Southeastern District Mainland ^a		Total
	Catch ^b	Percent	Catch ^b	Percent	Catch ^c	Percent	
2011	2,277,681	77.8	494,538	16.9	156,637	6.9	2,928,856
2012	1,640,517	78.4	324,895	15.5	126,083	7.7	2,091,495
2013	2,246,339	81.1	354,179	12.8	169,029	7.5	2,769,547
2014	330,302	100.0	0	0.0	0	0.0	330,302
Averages ^h							
1994–2013	1,200,207	81.1	197,650	12.8	89,753	6.5	1,487,610
2004–2013	1,172,970	80.8	201,513	13.2	88,038	6.7	1,462,520
2009–2013	1,632,312	80.2	297,155	14.1	117,068	7.0	2,046,535

^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 Alaska Board of Fisheries 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 Alaska Board of Fisheries 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 foregone harvest of 278,305 sockeye salmon during a Chignik area strike (June 23–July 4).

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

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

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

^h Recent averages do not include years in which the Cape Igvak and SEDM remained closed.

Table 21.—Chignik sockeye salmon escapement, total harvest considered Chignik-bound, and total run, 1970 through 2014.

Year	Early run			Late run			Total run ^{a,b,c}		
	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
2010	432,535	833,713	1,266,248	311,291	816,532	1,127,823	743,826	1,650,245	2,394,071

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Table 21.–Page 2 of 2.

Year	Early run			Late run			Total run ^{a,b,c}		
	Esc.	Harvest	Run	Esc.	Harvest	Run	Esc.	Harvest	Run
2011	488,930	2,594,291	3,083,221	264,887	553,888	818,775	753,817	3,148,179	3,901,996
2012	353,441	1,283,858	1,637,299	358,948	967,241	1,326,189	712,389	2,251,099	2,963,488
2013	386,782	2,030,579	2,417,361	369,319	890,695	1,260,014	756,101	2,921,274	3,677,375
2014 ^d	360,381	49,753	410,134	291,228	570,586	861,814	651,609	620,339	1,271,948
Averages									
1994–2013	437,646	1,002,074	1,439,720	309,389	745,310	1,054,699	747,035	1,747,385	2,494,419
2004–2013	387,722	1,005,825	1,393,547	306,421	638,440	944,862	694,144	1,644,265	2,338,409
2009–2013	410,633	1,452,614	1,863,247	326,606	816,224	1,142,830	737,239	2,268,838	3,006,077

^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.

^d Benning in 2014, information from in-season genetic samples taken from the escapement at Chignik weir were used to determine the apportionment of the 2 runs during late-June and mid-July for escapement and harvest instead of using the traditional July 4 cutoff date.

Table 22.—Chignik sockeye salmon forecasts and actual runs, by run and year, 1994 through 2014, in millions of fish.

Year	Early run			Late run			Total run		
	Forecast	Actual	Difference	Forecast	Actual	Difference	Forecast	Actual	Difference
1994	1.80	2.36	0.56	1.30	0.61	-0.69	3.10	2.98	-0.12
1995	1.90	1.03	-0.87	0.90	1.69	0.79	2.80	2.72	-0.08
1996	1.40	2.15	0.75	1.60	0.99	-0.61	3.00	3.14	0.14
1997	1.00	0.63	-0.37	1.60	0.91	-0.69	2.60	1.55	-1.05
1998	0.90	0.72	-0.18	1.10	1.11	0.01	2.00	1.83	-0.17
1999	1.05	2.48	1.43	1.29	1.98	0.69	2.34	4.46	2.12
2000	3.90	2.11	-1.79	1.09	0.84	-0.25	4.99	2.96	-2.03
2001	1.00	1.31	0.31	0.91	1.61	0.70	1.91	2.91	1.00
2002	1.03	1.06	0.03	1.09	0.91	-0.18	2.12	1.97	-0.15
2003	1.64	0.99	-0.65	1.19	1.00	-0.19	2.83	1.99	-0.84
2004	1.26	1.09	-0.17	1.08	0.41	-0.67	2.34	1.50	-0.84
2005	1.84	1.46	-0.38	0.55	0.71	0.16	2.39	2.17	-0.22
2006	1.21	0.78	-0.43	0.28	0.96	0.68	1.49	1.74	0.25
2007	1.02	0.60	-0.42	0.90	0.95	0.05	1.92	1.55	-0.37
2008	1.07	0.60	-0.47	0.65	0.79	0.14	1.72	1.39	-0.33
2009	0.85	0.87	0.02	0.54	1.23	0.69	1.39	2.10	0.71
2010	1.08	1.20	0.12	1.11	1.19	0.08	2.19	2.39	0.20
2011	1.30	3.08	1.78	1.02	0.82	-0.20	2.32	3.90	1.58
2012	1.08	1.64	0.56	1.20	1.33	0.13	2.28	2.96	0.68
2013	2.77	2.42	-0.35	1.05	1.26	0.21	3.82	3.68	-0.14
2014	0.79	0.41	-0.38	0.91	0.86	-0.05	1.70	1.27	-0.43
Averages									
2004–2013	1.35	1.37	0.03	0.84	0.96	0.13	2.19	2.34	0.15
2009–2013	1.42	1.84	0.43	0.98	1.17	0.18	2.40	3.01	0.61

Table 23.–Chignik Management Area coho salmon harvest, by year, 1980 through 2014.

Year	Testfish		Commercial catch		Home pack		Total	
	Number	Pounds	Number	Pounds	Number	Pounds ^a	Number	Pounds
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
2010	0	0	159,198	1,137,878	0	0	159,198	1,137,878
2011	0	0	76,776	519,422	16	147	76,792	519,569
2012	0	0	33,316	225,799	0	0	33,316	225,799
2013	0	0	32,254	225,985	28	277	32,282	226,262
2014	0	0	132,459	1,091,310	0	0	132,549	1,091,310
Averages								
1994–2013	7	40	106,056	807,551	89	658	106,148	808,216
2004–2013	0	0	69,271	501,344	28	218	69,299	501,562
2009–2013	0	0	82,383	568,286	9	85	82,392	568,371

^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 24.—Chignik Management Area coho salmon harvest (including home pack and the department’s test fishery catches), by district and year, 1980 through 2014.

Year	District					Total
	Chignik Bay	Central	Eastern	Western	Perryville	
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
2010	17,469	27,982	3,109	104,886	5,752	159,198
2011	1,801	12,915	354	50,504	11,218	76,792
2012	6,545	4,667	36	22,037	31	33,316
2013	4,146	8,208	521	16,770	2,637	32,282
2014	6,550	17,584	653	98,345	9,327	132,459
Averages						
1994–2013	21,141	18,832	1,002	54,654	10,518	106,148
2004–2013	10,533	9,043	839	45,431	3,454	69,299
2009–2013	7,906	13,410	1,382	54,918	4,776	82,392

Table 25.–Chignik Management Area coho salmon harvest (including home pack and the department’s test fishery catches), by district and day, 2014.

Date	District					Total
	Chignik Bay	Central	Eastern	Western	Perryville	
6/10	0	Closed	Closed	Closed	Closed	0
6/11–6/14	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	0	Closed	Closed	Closed	Closed	0
6/19–7/10	Closed	Closed	Closed	Closed	Closed	Closed
7/11	0	Closed	Closed	Closed	Closed	0
7/12	0	134	0	349	0	483
7/13	4	1,090	0	110	0	1,204
7/14	169	497	0	130	0	796
7/15	2	698	0	161	0	861
7/16	0	330	0	372	0	702
7/17	3	306	0	2,818	0	3,127
7/18	83	402	650	3,874	0	5,009
7/19	Closed	Closed	Closed	Closed	Closed	Closed
7/20	Closed	Closed	Closed	Closed	Closed	Closed
7/21	11	406	0	3,223	0	3,640
7/22	1	1,016	0	4,161	0	5,178
7/23	57	829	0	642	0	1,528
7/24	1	322	0	5,014	534	5,871
7/25	0	409	0	3,564	0	3,973
7/26	11	405	0	5,824	0	6,240
7/27	199	298	0	2,844	961	4,302
7/28	30	874	3	3,033	0	3,940
7/29	60	469	0	1,030	0	1,649
7/30	74	126	0	3,833	0	4,033
7/31	20	1,246	0	3,439	0	4,705
8/1	287	346	0	3,007	1,700	5,340
8/2	857	866	0	2,155	76	3,954
8/3	711	1,103	0	4,875	0	6,689
8/4	238	918	0	3,735	1,205	6,096
8/5	190	24	0	2,716	1,355	4,285
8/6	19	1,214	0	3,771	1,107	6,111

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Table 25.–Page 2 of 2.

Date	District					Total
	Chignik Bay	Central	Eastern	Western	Perryville	
8/7	12	37	Closed	43	411	503
8/8	478	2,203	Closed	7,871	975	11,527
8/9	13	316	Closed	6,039	284	6,652
8/10	0	515	Closed	6,084	719	7,318
8/11	Closed	Closed	Closed	Closed	Closed	Closed
8/12	Closed	Closed	Closed	Closed	Closed	Closed
8/13	Closed	Closed	Closed	Closed	Closed	Closed
8/14	Closed	Closed	Closed	Closed	Closed	Closed
8/15	6	0	Closed	2,087	Closed	2,093
8/16	33	185	Closed	2,404	0	2,622
8/17	67	0	Closed	1,660	0	1,727
8/18	66	0	Closed	2,382	0	2,448
8/19	89	0	Closed	2,203	0	2,292
8/20	122	0	0	0	0	122
8/21	286	0	0	545	0	831
8/22	327	0	Closed	0	0	327
8/23	130	0	Closed	0	0	130
8/24	77	0	Closed	0	0	77
8/25	128	0	Closed	257	0	385
8/26	1,248	0	Closed	1,194	0	2,442
8/27	441	0	Closed	896	0	1,337
8/28	-processors stopped buying-					
Total	6,550	17,584	653	98,345	9,327	132,549

Table 26.—Chignik Management Area pink salmon harvest, by year, 1980 through 2014.

Year	Testfish		Commercial catch		Home pack		Total	
	Number	Pounds	Number	Pounds	Number	Pounds ^a	Number	Pounds
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
2010	0	0	489,774	1,663,961	7	24	489,781	1,663,985
2011	58	154	905,108	2,882,546	0	0	905,166	2,882,700
2012	0	0	137,684	452,160	22	65	137,706	452,225
2013	3	6	871,594	2,610,076	0	0	871,597	2,610,082
2014	16	60	352,099	1,138,241	0	0	352,115	1,138,301
Averages								
1994–2013	36	135	853,618	2,836,497	313	940	853,951	2,837,525
2004–2013	7	21	880,196	2,971,381	26	90	880,229	2,971,492
2009–2013	12	32	762,500	2,422,281	6	18	762,518	2,422,331

^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 27.—Chignik Management Area pink salmon harvest (including home pack and the department’s test fishery catches), by district and year, 1980 through 2014.

Year	District					Total
	Chignik Bay	Central	Eastern	Western	Perryville	
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
2010	30,683	183,008	43,264	225,716	7,110	489,781
2011	30,707	225,307	54,288	368,351	226,513	905,166
2012	10,096	55,030	4,946	67,523	111	137,706
2013	76,473	218,411	197,293	192,861	186,559	871,597
2014	11,663	98,984	2,964	226,008	12,496	352,115
Averages						
1994–2013	62,203	263,529	71,577	357,887	98,754	853,951
2004–2013	78,188	216,028	111,497	396,407	78,110	880,229
2009–2013	45,106	199,768	115,116	313,268	89,259	762,518

Table 28.—Chignik Management Area pink salmon harvest (including home pack and the department’s test fishery catches), by district and day, 2014.

Date	District					Total
	Chignik Bay	Central	Eastern	Western	Perryville	
6/2						
6/10	0	Closed	Closed	Closed	Closed	0
6/11–6/14	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	0	Closed	Closed	Closed	Closed	0
6/19–7/10	Closed	Closed	Closed	Closed	Closed	Closed
7/11	16	Closed	Closed	Closed	Closed	16
7/12	11	426	0	1,679	0	2,116
7/13	47	3,428	0	632	0	4,107
7/14	148	2,767	0	703	0	3,618
7/15	36	4,277	0	1,648	0	5,961
7/16	60	3,305	0	1,289	0	4,654
7/17	50	2,759	0	3,434	0	6,243
7/18	155	2,375	345	4,558	0	7,433
7/19	Closed	Closed	Closed	Closed	Closed	Closed
7/20	Closed	Closed	Closed	Closed	Closed	Closed
7/21	254	4,103	0	2,679	0	7,036
7/22	135	7,058	0	4,859	0	12,052
7/23	127	5,886	0	825	0	6,838
7/24	120	4,720	0	7,343	965	13,148
7/25	84	4,617	0	4,085	0	8,786
7/26	142	3,647	0	7,046	0	10,835
7/27	1,808	1,738	0	9,696	1,204	14,446
7/28	156	4,769	1,867	8,483	0	15,275
7/29	295	3,720	0	3,789	0	8,655
7/30	442	2,696	0	17,223	0	20,361
7/31	240	6,645	0	19,692	0	26,577

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Table 28.--Page 2 of 2.

Date	District					Total
	Chignik Bay	Central	Eastern	Western	Perryville	
8/1	936	2,133	0	13,379	3,875	20,323
8/2	1,259	4,441	0	10,189	174	16,063
8/3	1,387	2,646	0	22,543	0	26,576
8/4	610	3,013	0	19,792	1,114	24,529
8/5	530	233	752	5,683	1,102	8,300
8/6	381	5,008	0	10,175	1,184	16,748
8/7	160	184	Closed	92	874	1,310
8/8	219	9,007	Closed	16,250	1,119	26,595
8/9	316	1,461	Closed	7,954	455	10,186
8/10	169	1,509	Closed	11,102	430	13,210
8/11	Closed	Closed	Closed	Closed	Closed	Closed
8/12	Closed	Closed	Closed	Closed	Closed	Closed
8/13	Closed	Closed	Closed	Closed	Closed	Closed
8/14	Closed	Closed	Closed	Closed	Closed	Closed
8/15	165	0	Closed	1,626	Closed	1,791
8/16	190	413	Closed	2,547	0	3,150
8/17	197	0	Closed	927	0	1,124
8/18	110	0	Closed	1,599	0	1,709
8/19	126	0	Closed	1,644	0	1,770
8/20	47	0	0	0	0	47
8/21	157	0	0	347	0	504
8/22	59	0	Closed	0	0	59
8/23	10	0	Closed	0	0	10
8/24	21	0	Closed	0	0	21
8/25	4	0	Closed	50	0	54
8/26	268	0	Closed	373	0	641
8/27	16	0	Closed	73	0	89
8/28			-processors stopped buying-			
Total	11,663	99,984	2,964	226,008	12,496	352,966

Table 29.—Chignik Management Area chum salmon harvest, by year, 1980 through 2014.

Year	Testfish		Commercial catch		Home pack		Total	
	Number	Pounds	Number	Pounds	Number	Pounds ^a	Number	Pounds
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	380,954	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	505	3,803	0	0	505	3,803
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
2010	0	0	581,329	4,437,042	0	0	581,329	4,437,042
2011	11	91	269,492	1,857,512	0	0	269,503	1,857,603
2012	0	0	170,872	1,533,079	240	1,780	171,112	1,534,859
2013	0	0	154,679	1,194,080	0	0	154,679	1,194,080
2014	3	24	55,149	458,475	0	0	55,152	458,499
Averages								
1994–2013	36	264	168,130	1,286,777	1,145	8,931	169,253	1,295,526
2004–2013	1	11	179,151	1,383,657	36	262	179,188	1,383,929
2009–2013	2	18	286,559	2,188,847	48	358	286,610	2,189,223

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

Table 30.—Chignik Management Area chum salmon harvest (including home pack and the department’s test fishery catches), by district and year, 1980 through 2014.

Year	District					Total
	Chignik Bay	Central	Eastern	Western	Perryville	
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
2010	27,388	226,501	116,336	204,911	6,193	581,329
2011	9,077	116,580	51,989	75,363	16,494	269,503
2012	5,523	88,120	21,227	56,125	117	171,112
2013	9,202	57,085	45,253	38,237	4,902	154,679
2014	4,329	20,750	610	26,578	2,885	55,152
Averages						
1994–2013	10,203	62,174	24,092	60,602	12,183	169,253
2004–2013	8,820	62,495	36,216	67,604	4,054	179,188
2009–2013	13,149	110,087	58,921	98,173	6,280	286,610

Table 31.—Chignik Management Area chum salmon harvest (including home pack and the department’s test fishery catches), by district and day, 2014.

Date	District					Total
	Chignik Bay	Central	Eastern	Western	Perryville	
6/10	0	Closed	Closed	Closed	Closed	0
6/11–6/14	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	0	Closed	Closed	Closed	Closed	0
6/19–7/10	Closed	Closed	Closed	Closed	Closed	Closed
7/11	3	Closed	Closed	Closed	Closed	3
7/12	39	264	0	412	0	715
7/13	55	1,015	0	116	0	1,186
7/14	150	995	0	243	0	1,388
7/15	23	948	0	453	0	1,424
7/16	28	938	0	647	0	1,613
7/17	23	419	0	1,592	0	2,034
7/18	63	1,919	27	1,896	0	3,905
7/19	Closed	Closed	Closed	Closed	Closed	Closed
7/20	Closed	Closed	Closed	Closed	Closed	Closed
7/21	59	618	0	1,502	0	2,179
7/22	34	1,253	0	991	0	2,278
7/23	59	1,287	0	154	0	1,500
7/24	52	871	0	940	99	1,962
7/25	37	900	0	329	0	1,266
7/26	58	968	0	1,383	0	2,409
7/27	745	476	0	1,080	473	2,774
7/28	67	1,199	317	972	0	2,555
7/29	91	766	0	440	0	1,515
7/30	148	595	0	1,105	0	1,848
7/31	66	1,593	0	1,098	0	2,757

-continued-

Table 31.–Page 2 of 2.

Date	District					Total
	Chignik Bay	Central	Eastern	Western	Perryville	
8/1	268	504	0	636	378	1,786
8/2	486	600	0	783	1	1,870
8/3	331	340	0	1,841	0	2,512
8/4	160	362	0	1,202	301	2,025
8/5	221	107	266	544	379	1,517
8/6	135	418	0	835	300	1,688
8/7	58	31	Closed	31	122	242
8/8	104	943	Closed	1,198	295	2,540
8/9	76	134	Closed	886	265	1,361
8/10	45	178	Closed	900	272	1,395
8/11	Closed	Closed	Closed	Closed	Closed	Closed
8/12	Closed	Closed	Closed	Closed	Closed	Closed
8/13	Closed	Closed	Closed	Closed	Closed	Closed
8/14	Closed	Closed	Closed	Closed	Closed	Closed
8/15	57	0	Closed	405	Closed	462
8/16	92	109	Closed	585	0	786
8/17	102	0	Closed	380	0	482
8/18	39	0	Closed	359	0	398
8/19	59	0	Closed	344	0	403
8/20	28	0	0	0	0	28
8/21	81	0	0	81	0	162
8/22	18	0	Closed	0	0	18
8/23	0	0	Closed	0	0	0
8/24	7	0	Closed	0	0	7
8/25	1	0	Closed	2	0	3
8/26	150	0	Closed	73	0	223
8/27	11	0	Closed	140	0	151
8/28			-processors stopped buying-			
Total	4,329	20,750	610	26,578	2,885	55,152

Table 32.—Value of the commercial salmon harvest, by species, and average value per active permit, in dollars, in the Chignik Management Area, 1970 through 2014.

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			
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 32.—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	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
2010	160,076	2,463	9,549,462	146,915	566,191	8,711	565,941	8,707	1,774,763	27,304	12,616,433	65	194,099
2011	57,524	899	21,469,153	335,456	278,391	4,350	1,040,264	16,254	919,586	14,369	23,764,918	64	371,327
2012	47,612	690	12,803,505	185,558	97,430	1,412	146,011	2,116	634,705	9,199	13,729,262	69	198,975
2013	37,620	495	21,960,018	288,948	86,953	1,144	868,071	11,422	385,172	5,068	23,337,834	76	307,077
2014 ^d	66,875	955	6,040,512	86,293	434,394	6,206	286,942	4,099	185,016	2,643	7,013,739	70	100,196
Averages													
1994-2013	35,974	486	9,603,097	122,203	324,722	4,140	479,015	7,077	351,539	5,039	10,794,348	82	138,945
2004-2013	46,412	706	9,570,172	143,516	234,030	3,991	644,832	10,860	502,315	8,004	10,997,760	68	167,076
2009-2013	66,709	1,021	14,568,039	217,041	249,958	3,926	684,163	10,611	847,003	13,082	16,415,873	66	245,681

^a Total value of commercial catch in dollars, by species. Total 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 postseason adjustments by any processor. The average 2014 exvessel prices per pound were: Chinook – \$0.88, sockeye – \$1.47, coho – \$0.40, pink – \$0.25, chum – \$0.41.

Table 33.—Historical number of subsistence permits issued and returned and estimated subsistence salmon harvest, by species and year, 1980 through 2013.

Year	Permits		Estimated salmon harvest					Total
	Issued	Returned	Chinook	Sockeye	Coho	Chum	Pink	
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	10	7,021	278	204	261	7,774
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	10,347
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
2010 ^a	124	90	188	8,148	1,820	222	656	11,034
2011	95	76	52	10,578	1,458	355	1,289	13,732
2012 ^a	106	87	116	5,607	1,488	220	810	8,241
2013	112	96	102	8,100	991	174	790	10,157
Averages								
1993–2012	125	95	131	9,345	1,929	286	1,200	12,891
2003–2012	112	85	142	8,277	1,664	227	949	11,259
2008–2012	102	81	100	7,661	1,363	198	816	10,139

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

^a From 1993–2008 and in 2011, postseason household surveys were conducted to supplement harvest data collected through returned permits. Limited budgets prevented administering the surveys for 2009, 2010, and 2012 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 and 2011 reported during postseason surveys was added to harvests from returned permits to estimate the total subsistence harvest for 2009 and 2010, 2012 and 2013.

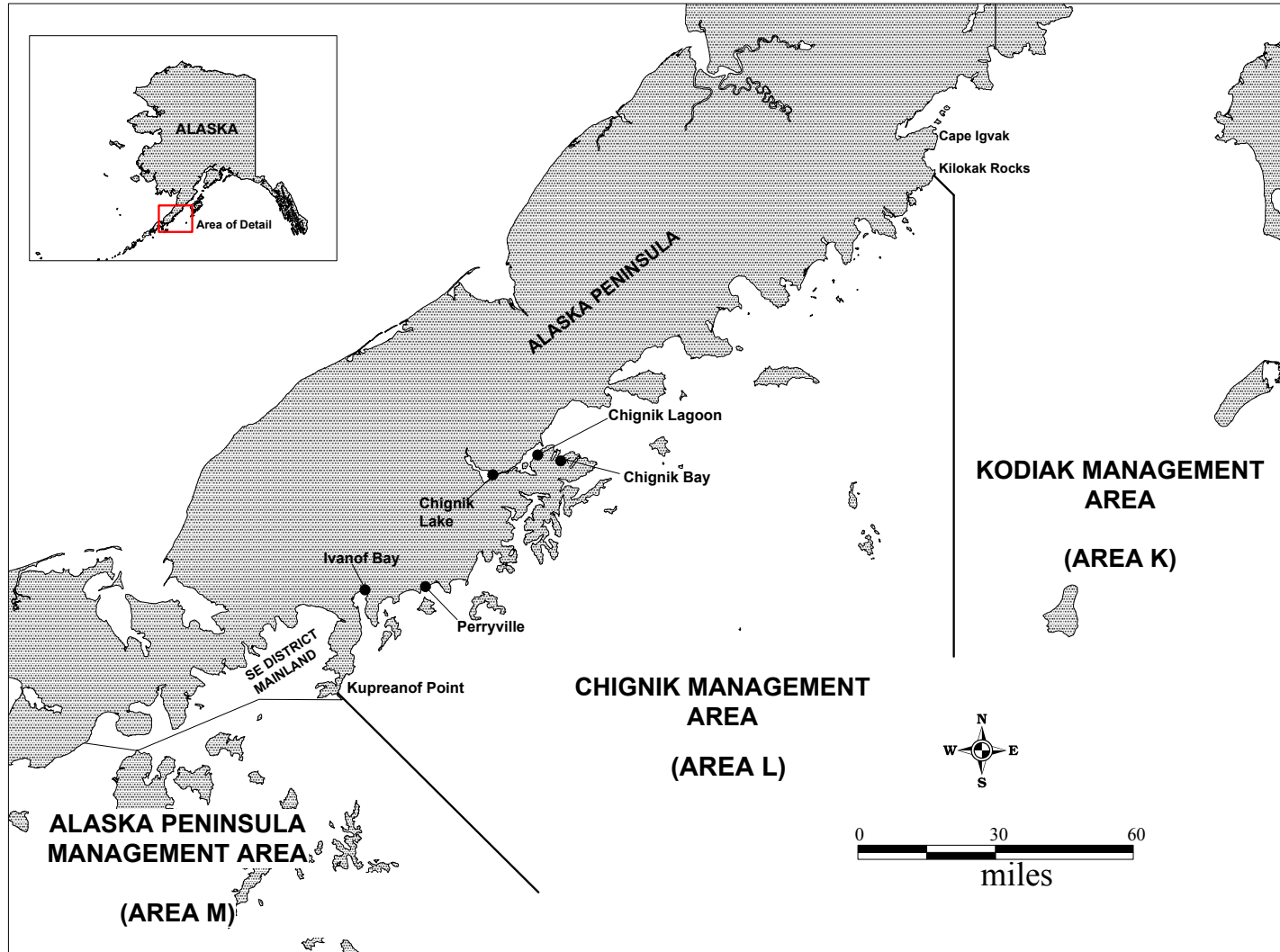


Figure 1.—Map of the Alaska Peninsula illustrating the relative locations of the Chignik, Kodiak, and Alaska Peninsula management areas.

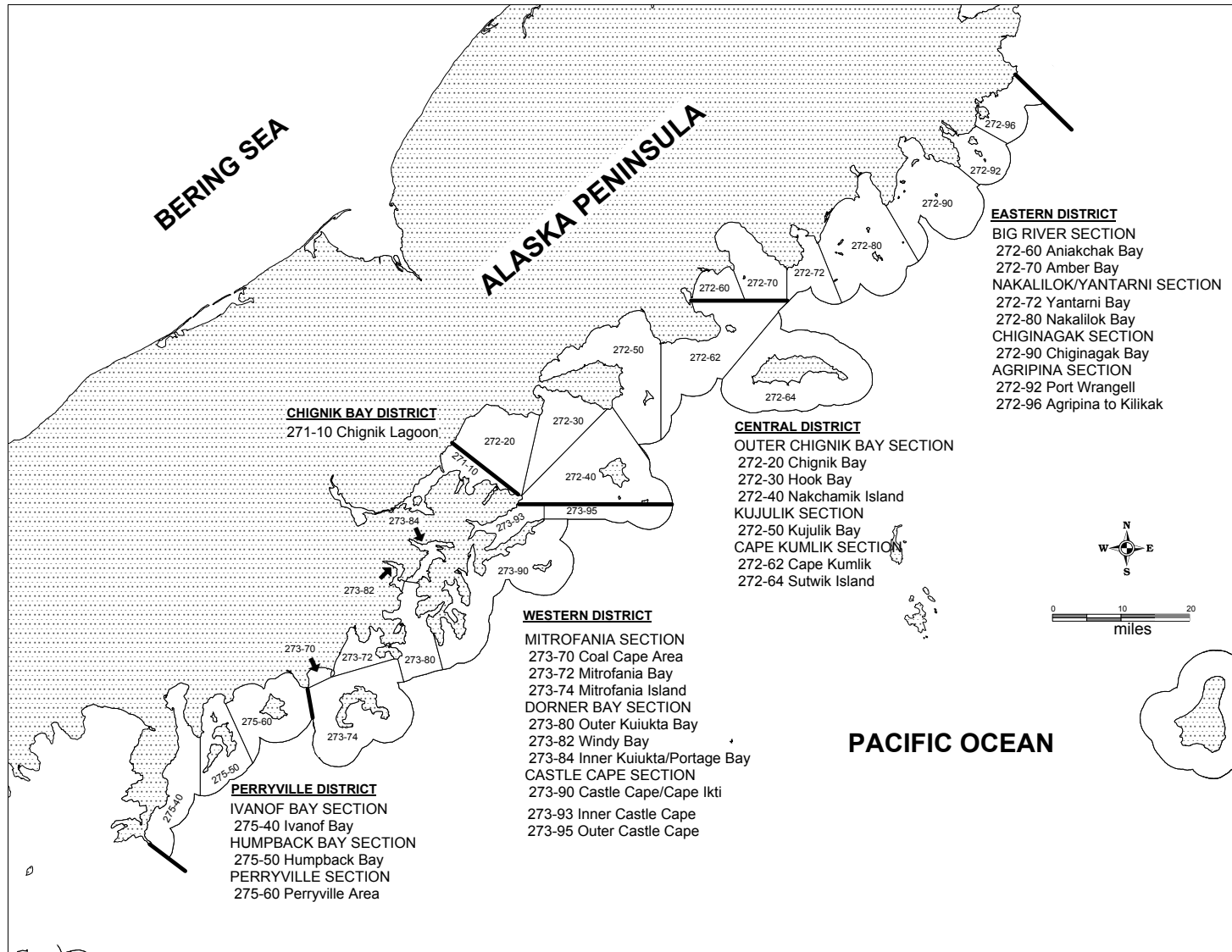


Figure 2.—Map of the Chignik Management Area illustrating district and section boundaries and statistical areas.

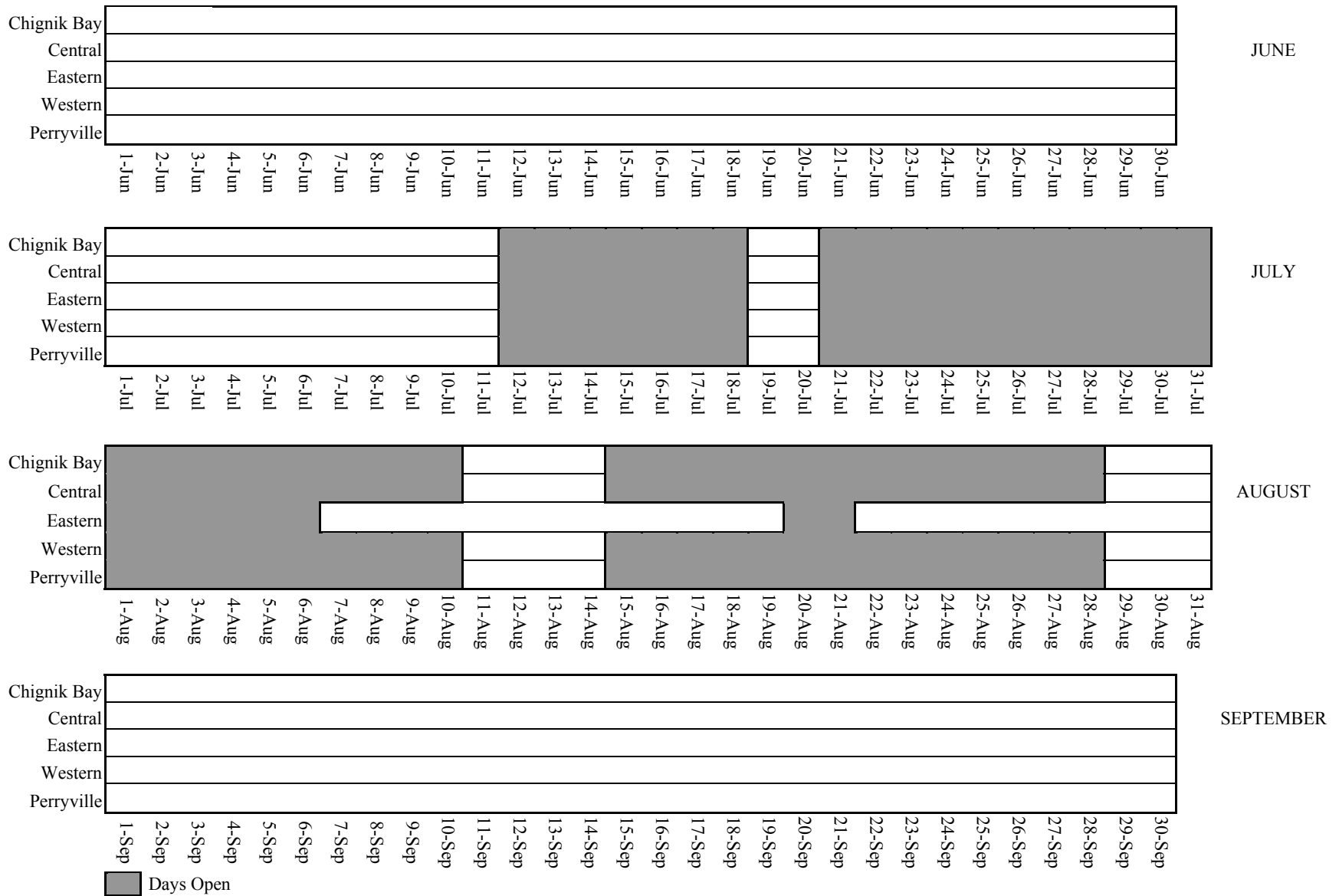


Figure 3.—Representation of days open to commercial salmon fishing, by district and month, 2014.

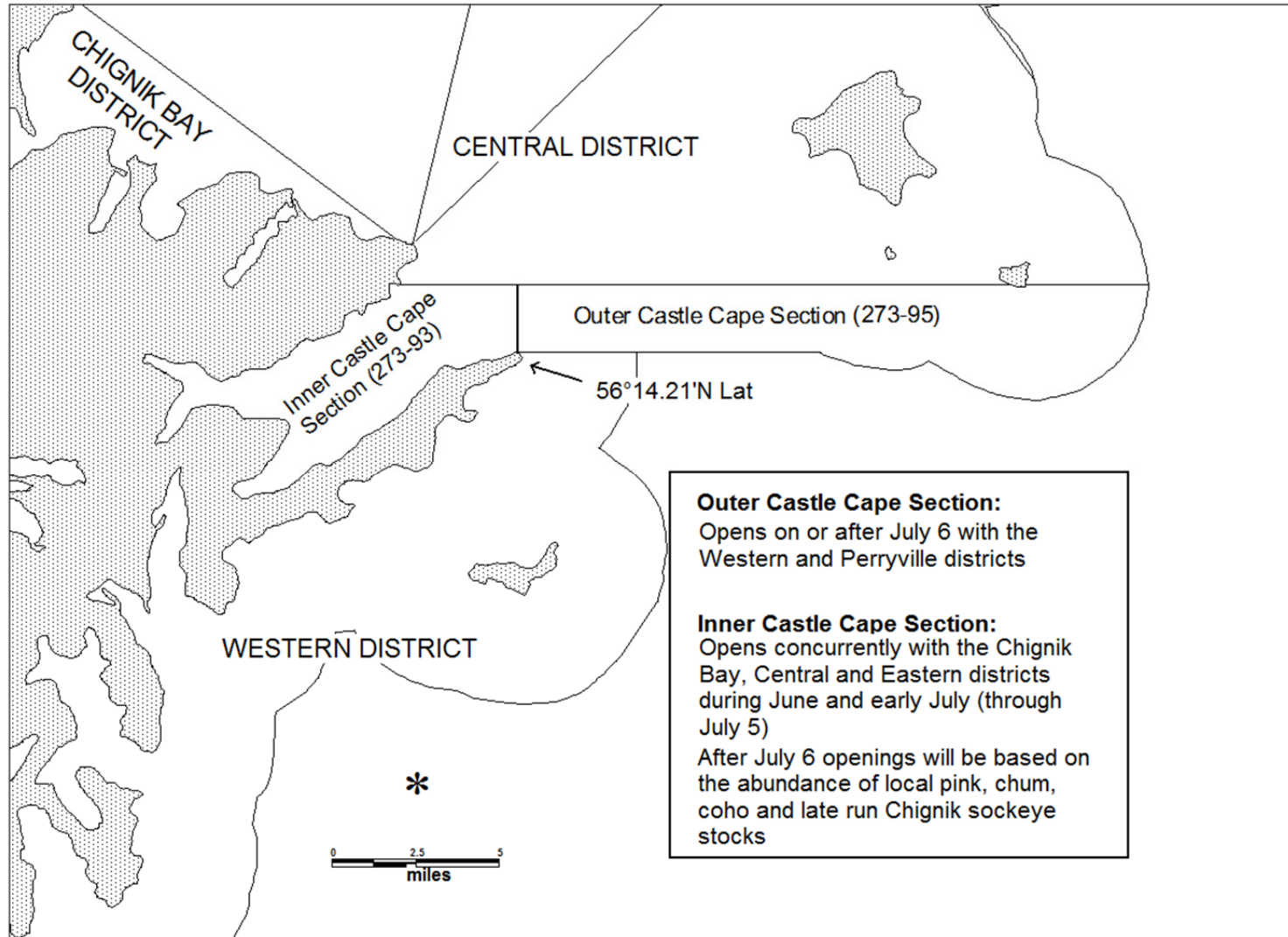


Figure 4.—Map depicting the Inner (273-93), and Outer (273-95) Castle Cape Sections of the Western District.

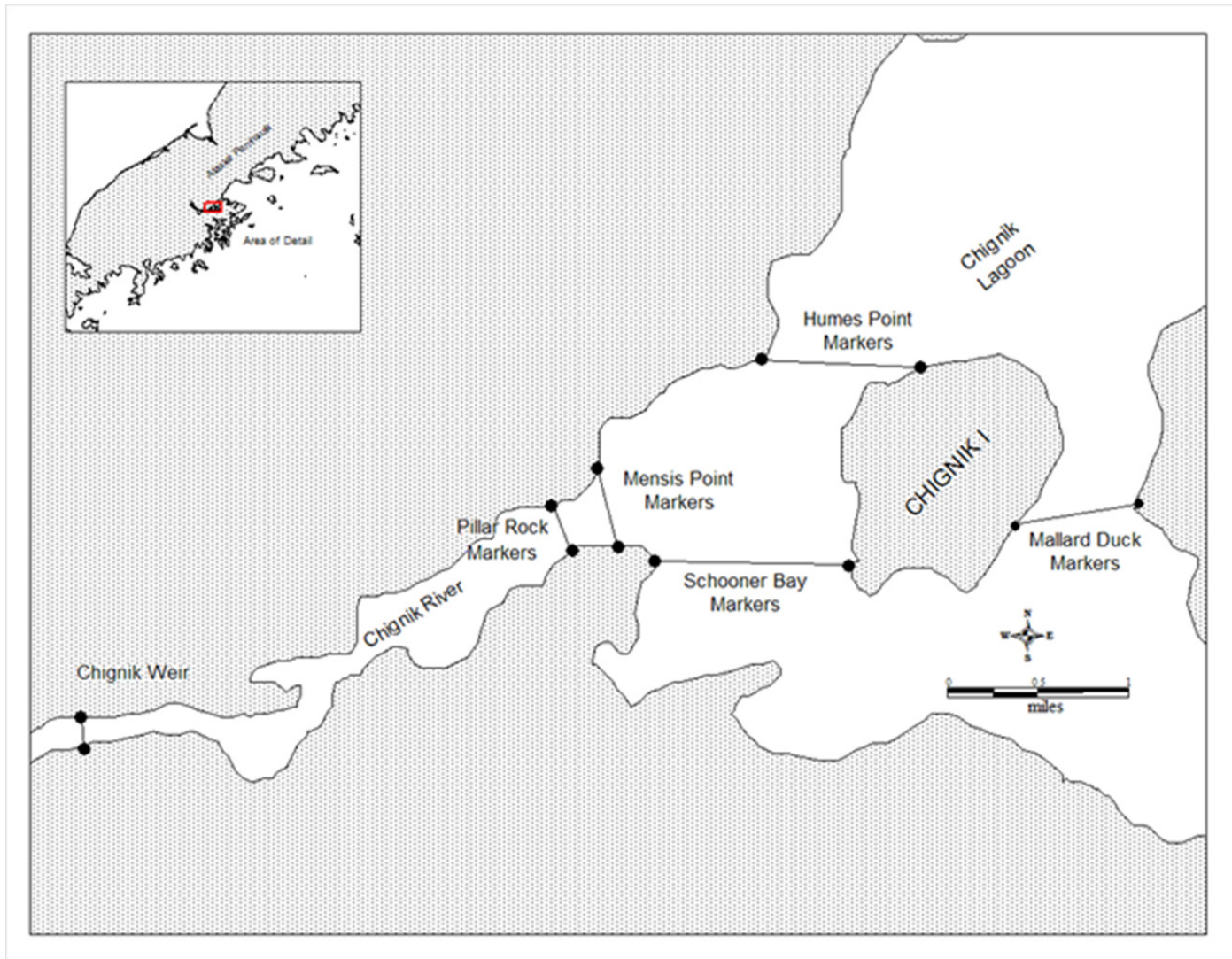


Figure 5.—Map of upper Chignik Lagoon showing the location of the Pillar Rock, Mensis Point, Humes Point, Mallard Duck, and Schooner Bay marker locations.

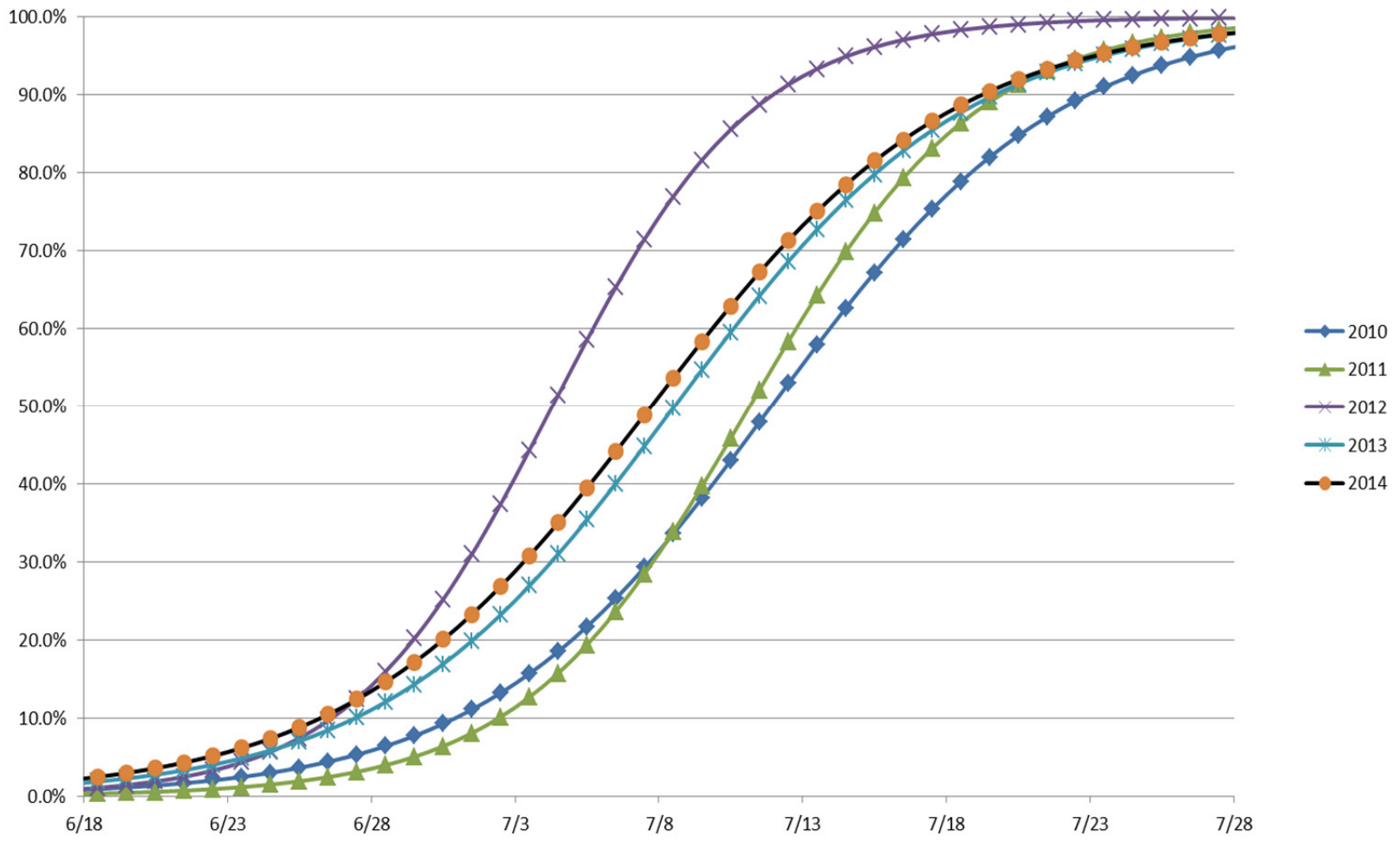


Figure 6.—Estimated proportional escapement of Black Lake and Chignik Lake from inseason mixed-stock analysis, 2010–2014.

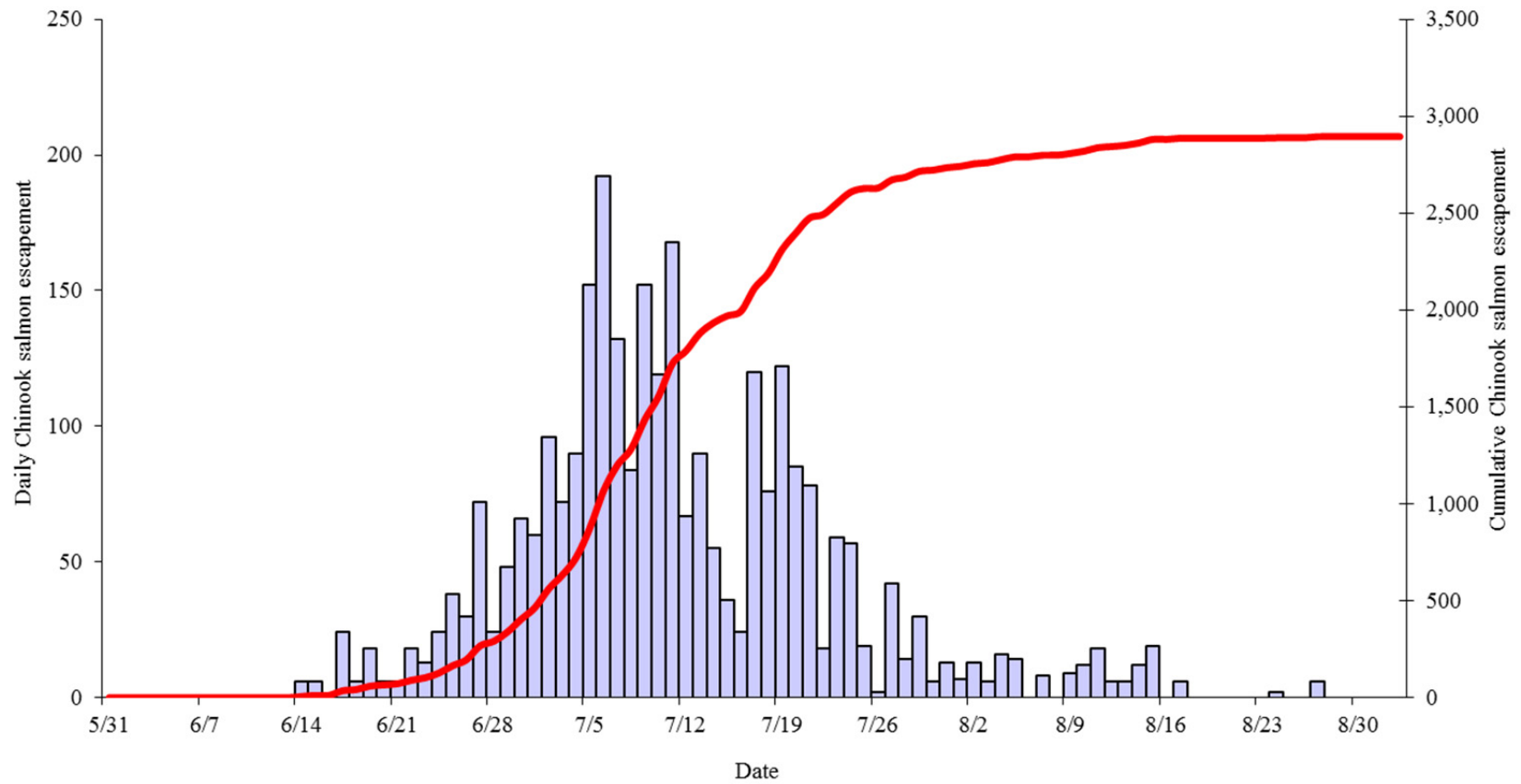


Figure 7.—Chignik River estimated daily and cumulative Chinook salmon escapement, 2014.

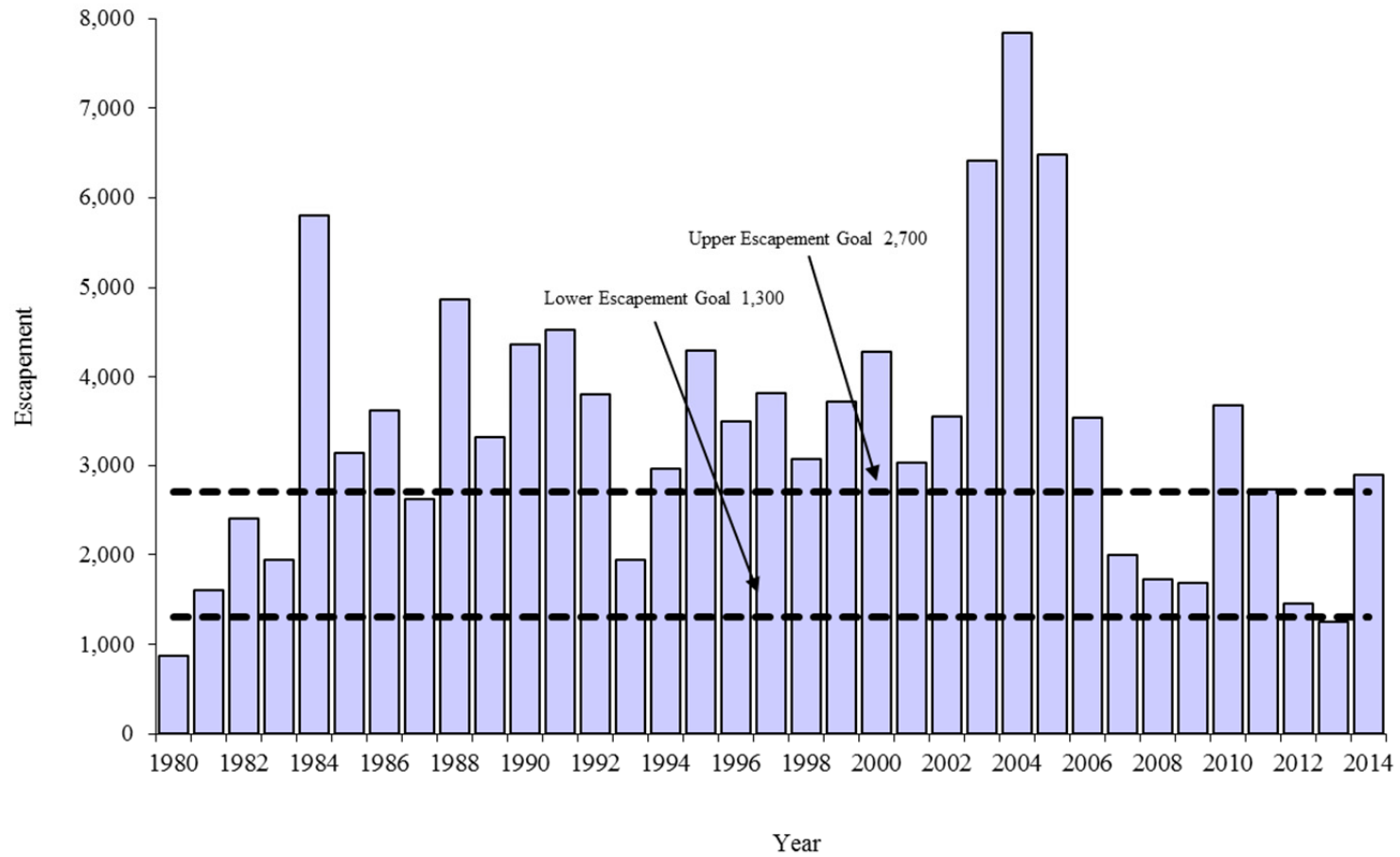


Figure 8.—Chignik River Chinook salmon escapement as compared to the current escapement goal range, by year, 1980 through 2014.

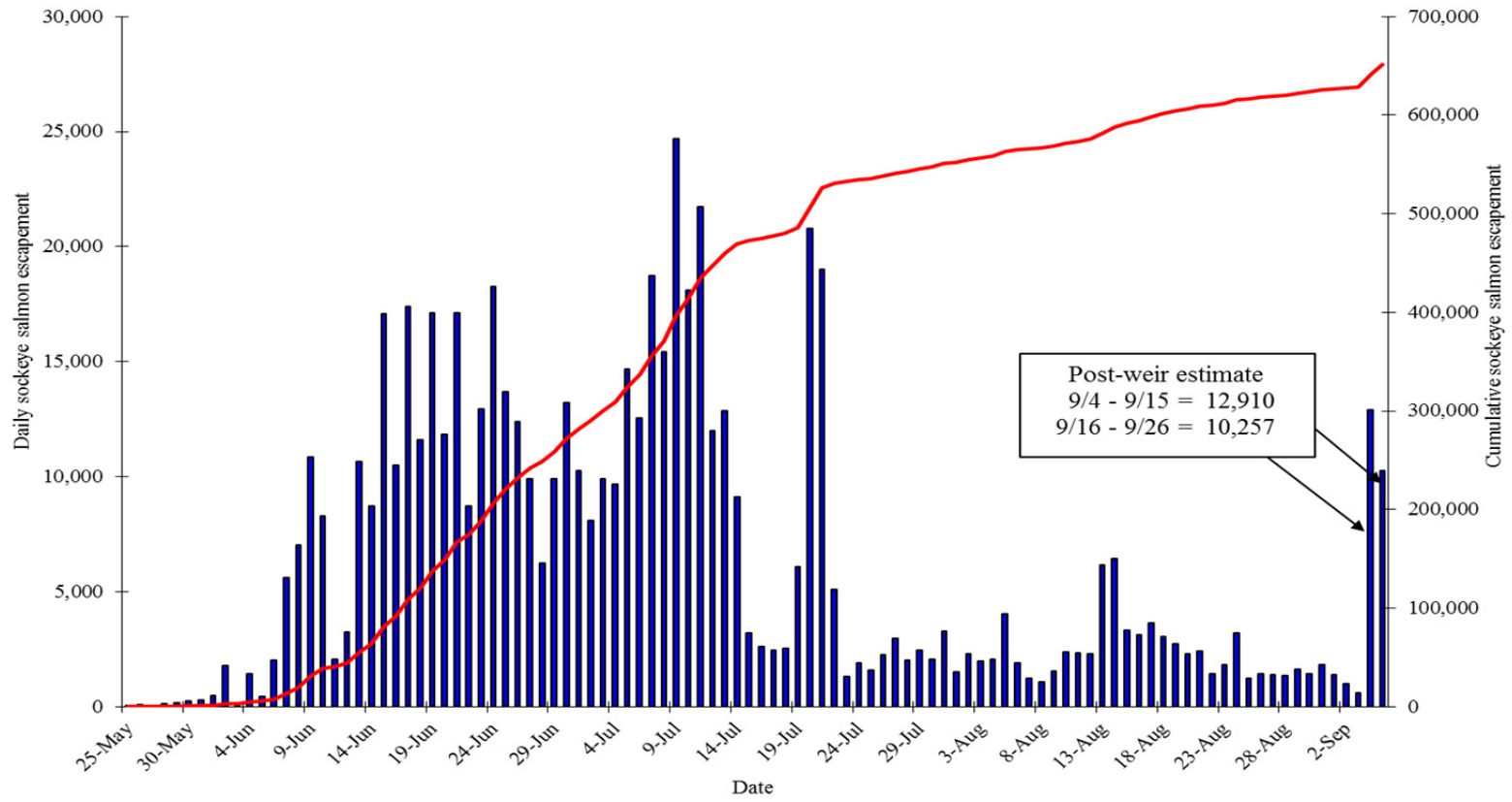


Figure 9.—Chignik River sockeye salmon daily and cumulative escapement, 2014.

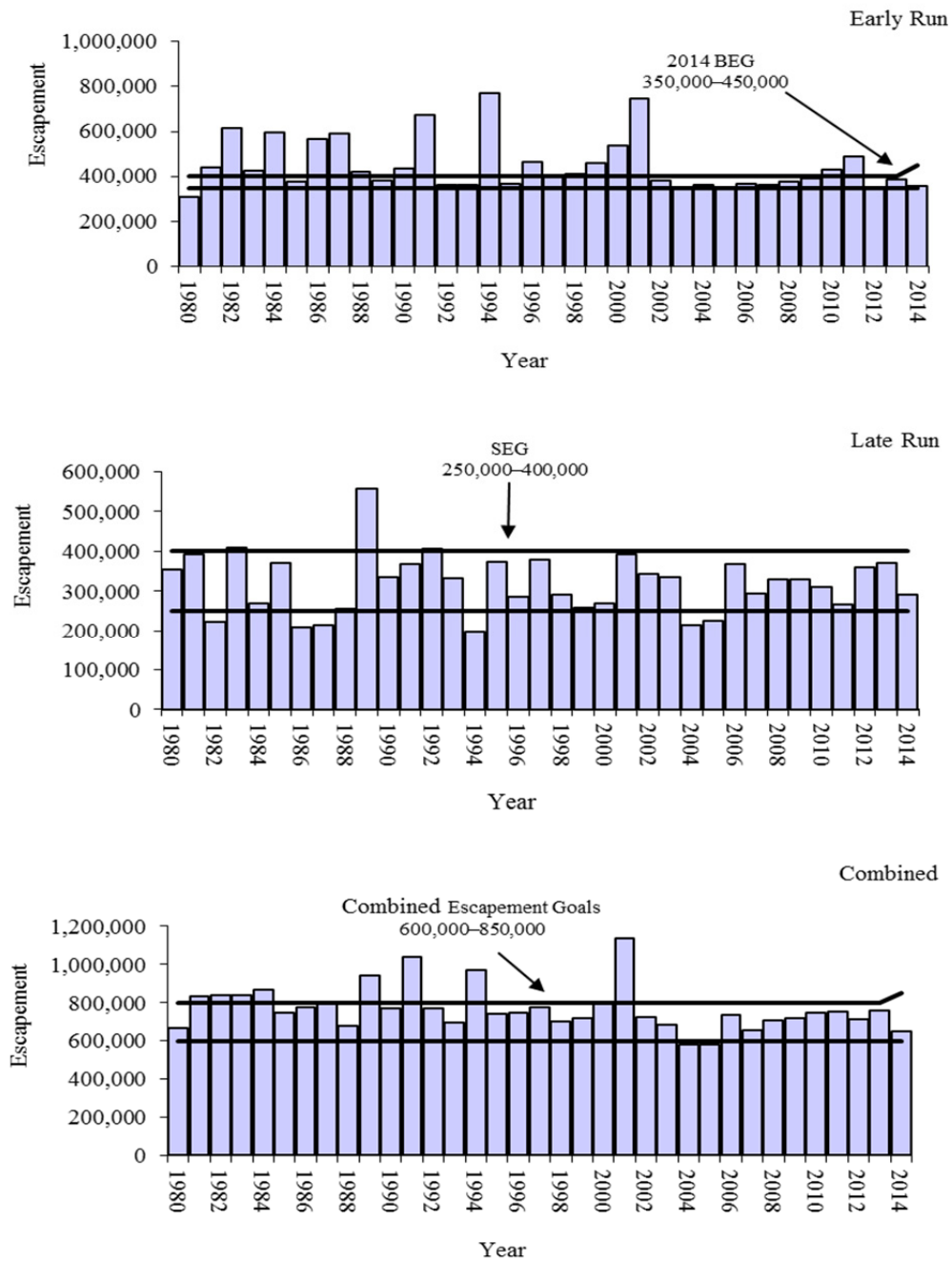


Figure 10.—Chignik River sockeye salmon early, late, and combined run escapements 1970 through 2014, compared to established escapement goals (including a late run inriver run goal of 50,000).

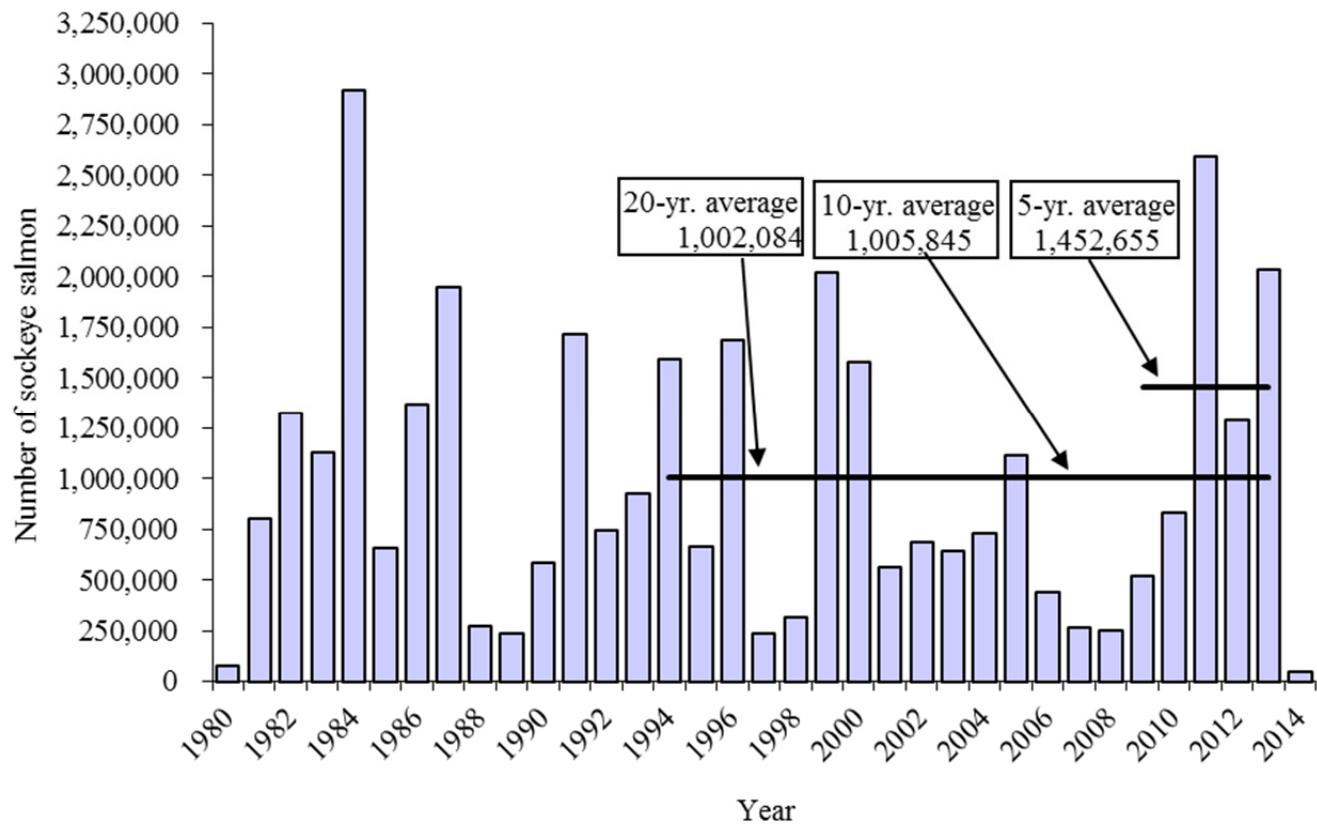


Figure 11.—Chignik-bound sockeye salmon early-run harvest, 1980 through 2014.

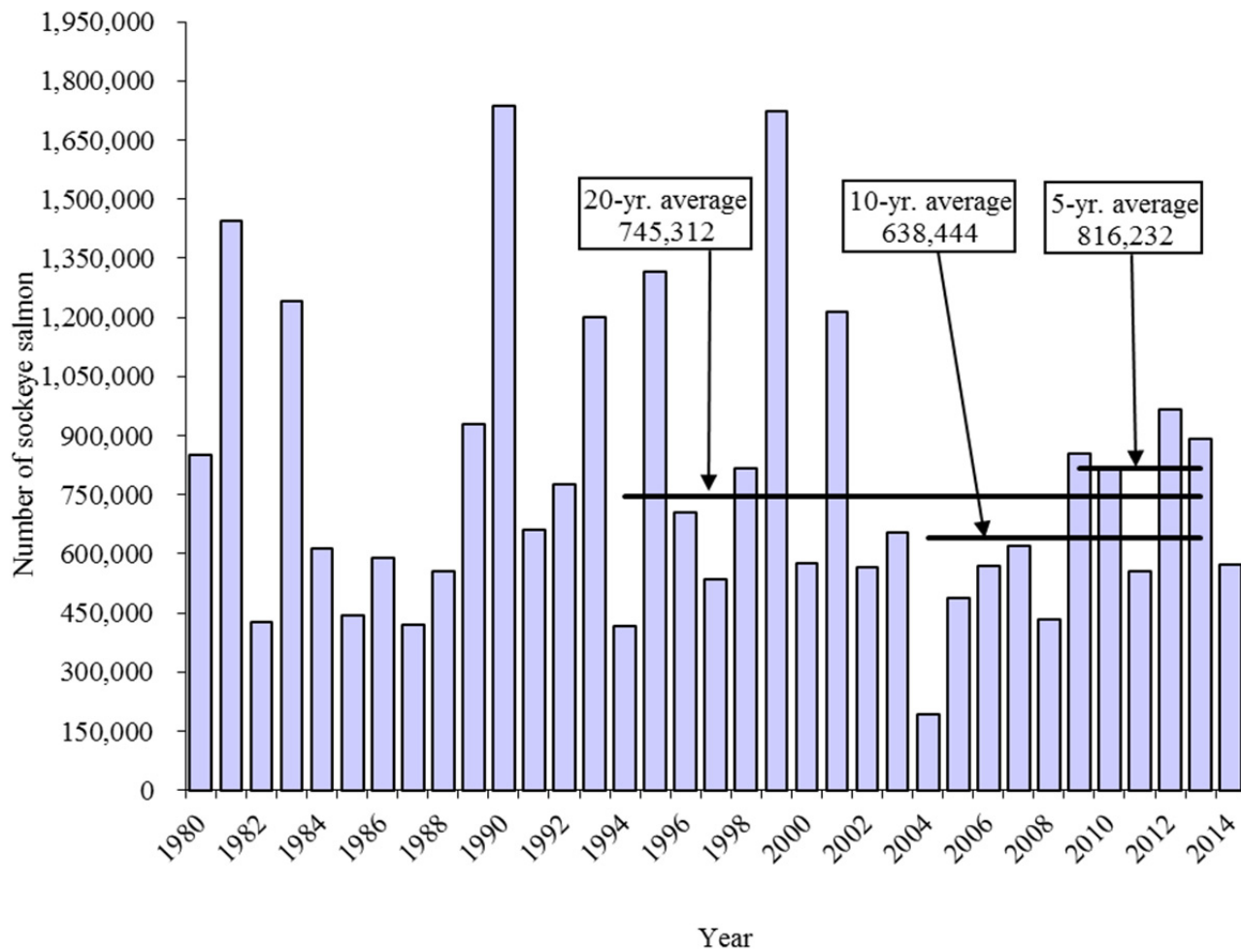


Figure 12.—Chignik-bound sockeye salmon late-run harvest, 1980 through 2014.

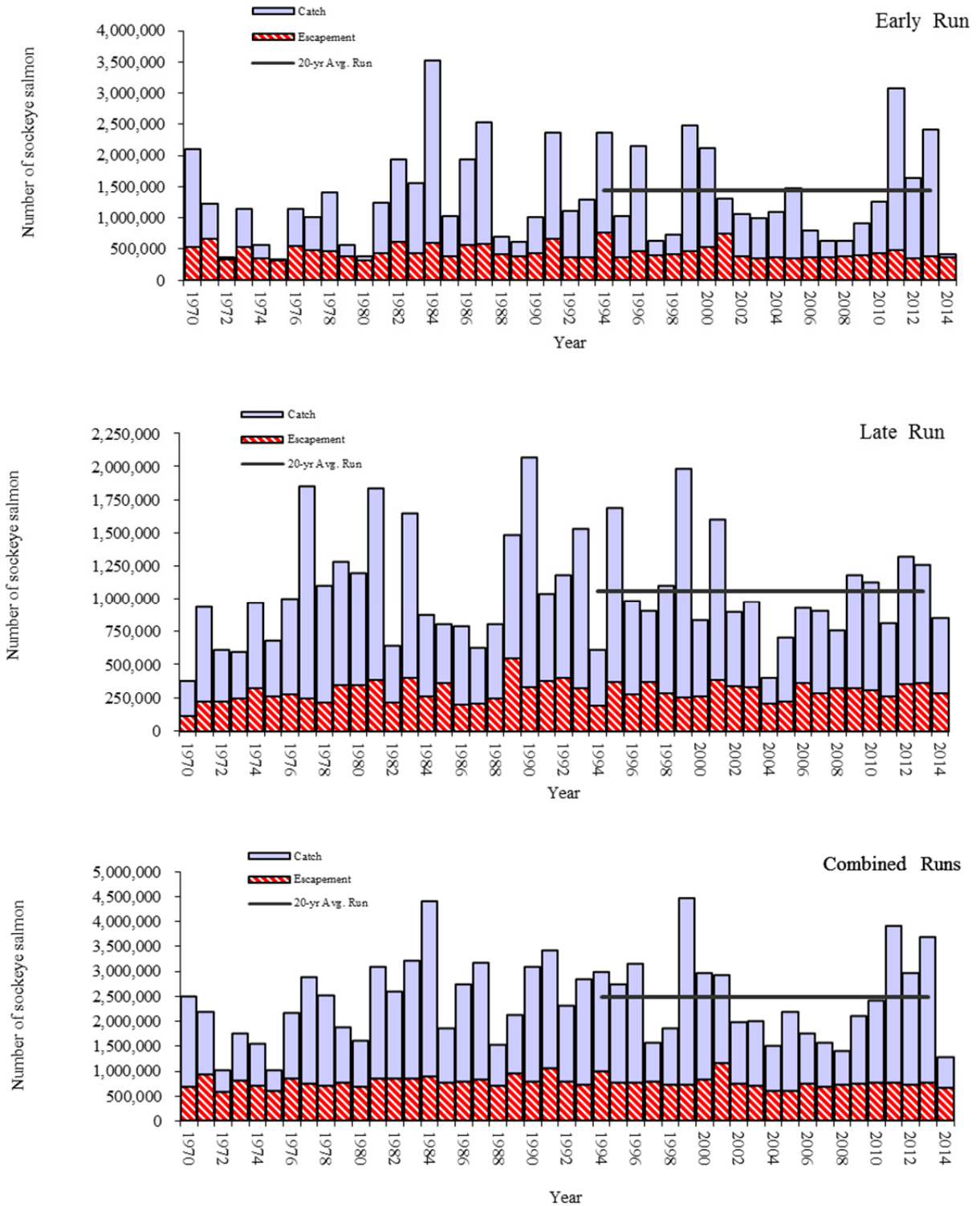


Figure 13.—Total sockeye salmon escapement and catch considered Chignik-bound including home pack, the department's test fishery harvest, and Cape Igvak and SEDM allocations, by year and run, 1970 through 2014.

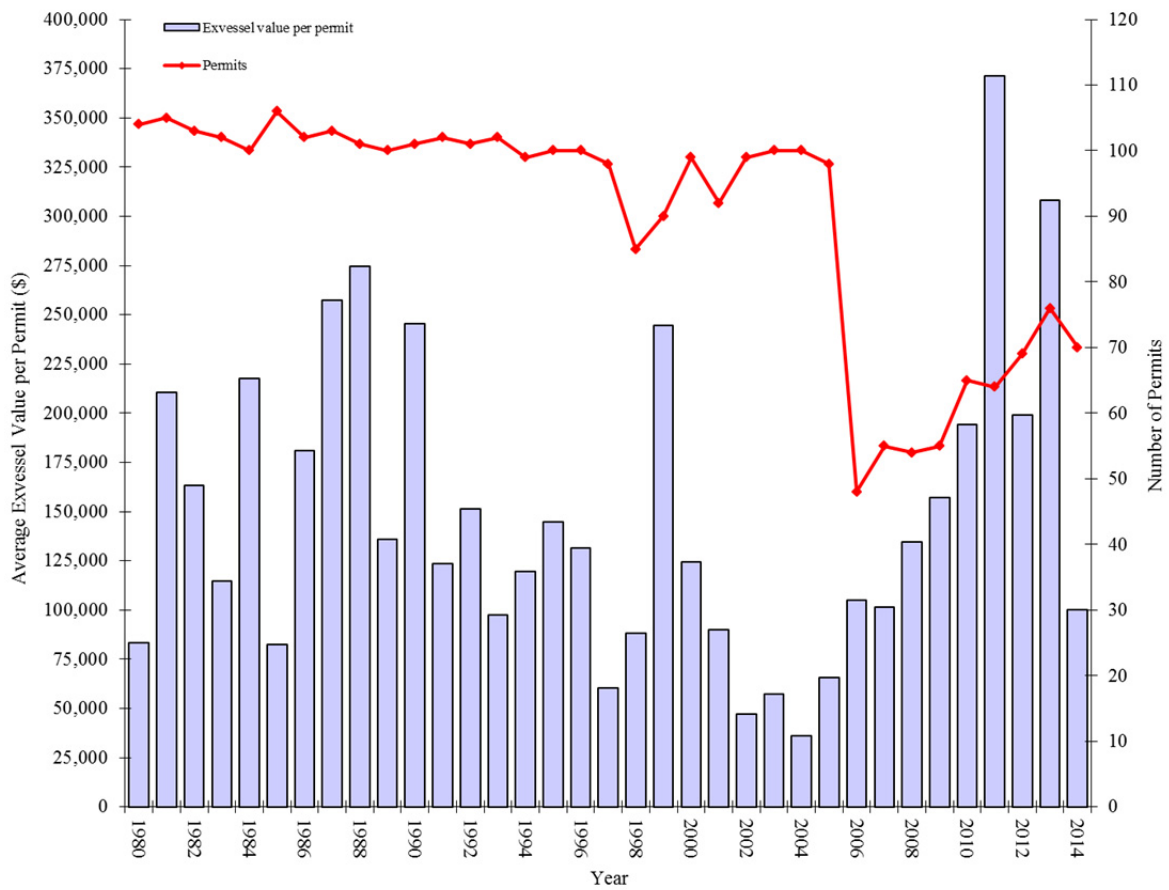


Figure 14.—Average exvessel value, in dollars, per permit and total permits fished by year 1980 through 2014.

APPENDIX A. SUMMARY OF 2014 EMERGENCY ORDERS

Appendix A1.–Summary of the 2014 Chignik Management Area Emergency Orders.

E.O. Number	Issued	Effective	Action taken
4-FS-L-01-14	6:15 PM 7/11/2014	5:00 PM 7/12/2014	Opens the Chignik Bay, Central, Eastern, Western, and Perryville districts for 79 hours from 5:00 PM Saturday, July 12 until 11:59 PM Tuesday, July 15. Closed Waters Effective 5:00 PM Saturday, July 12 salmon may only be taken northeast of Humes Point.
4-FS-L-02-14	12:00 PM 7/15/2014	11:59 PM 7/15/2014	Extends the current commercial salmon fishing period in the Chignik Bay, Central, Eastern, Western, and Perryville district for 72 hours from 11:59 PM Tuesday, July 15 to 11:59 PM Friday, July 18.
4-FS-L-03-14	6:15 PM 7/20/2014	1:00 PM 7/21/2014	Opens the Chignik Bay, Central, Eastern, Western, and Perryville districts for 83 hours from 1:00 PM Monday, July 21 until 11:59 PM Thursday, July 24.
4-FS-L-04-14	9:15 AM 7/21/2014	1:00 PM 7/21/2014	Closed Waters Effective 1:00 PM Monday, July 21 salmon may only be taken northeast of Mensis Point.
4-FS-L-05-14	6:15 PM 7/23/2014	11:59 PM 7/24/2014	Extends the current commercial salmon fishing period in the Chignik Bay, Central, Eastern, Western, and Perryville district for 72 hours from 11:59 PM Thursday, July 24 to 11:59 PM Sunday, July 27.
4-FS-L-06-14	3:00 PM 7/26/2014	11:59 PM 7/27/2014	Extends the current commercial salmon fishing period in the Chignik Bay, Central, Eastern, Western, and Perryville district for 48 hours from 11:59 PM Sunday, July 27 to 11:59 PM Tuesday, July 29.
4-FS-L-07-14	9:15 AM 7/29/2014	11:59 PM 7/29/2014	Extends the current commercial salmon fishing period in the Chignik Bay, Central, Eastern, Western, and Perryville district for 48 hours from 11:59 PM Tuesday, July 29 to 11:59 PM Thursday, July 31.
4-FS-L-08-14	3:00 PM 7/31/2014	11:59 PM 7/31/2014	Extends the current commercial salmon fishing period in the Chignik Bay, Central, Western, and Perryville district for 72 hours from 11:59 PM Thursday, July 31 to 11:59 PM Sunday, August 3. Closed Waters effective 10:00 PM Friday, August 1 salmon may only be taken northeast of Humes Point.
4-FS-L-09-14	10:00 AM 8/3/2014	11:59 PM 8/3/2014	Extends the current commercial salmon fishing period in the Chignik Bay, Central, Western, and Perryville district for 72 hours from 11:59 PM Sunday, August 3 to 11:59 PM Wednesday, August 6. Opens the Eastern district for 48 hours from 12:01 AM Tuesday, August 5 until 11:59 PM Wednesday, August 6.

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Appendix A1.–Page 2 of 2.

E.O. Number	Issued	Effective	Action taken
4-FS-L-10-14	11:00 AM 8/6/2014	11:59 PM 8/6/2014	Extends the current commercial salmon fishing period in the Chignik Bay, Central, Western, and Perryville districts, for 96 hours from 11:59 PM Wednesday, August 6 to 11:59 PM Saturday, August 10.
4-FS-L-11-14	12:00 PM 8/14/2014	11:59 PM 10/31/2014	Opens the Chignik Bay, Central, Western and Perryville districts from 8:00 AM Friday, August 15 until further notice.
4-FS-L-12-14	6:15 PM 8/18/2014	12:01 AM 8/20/2014	Opens the Eastern District for 48 hours from 12:01 AM Wednesday, August 20 until 11:59 PM Thursday, August 21.
4-FS-L-13-14	3:00 PM 8/20/2014	3:00 PM 8/21/2014	Closed Waters effective 3:00 PM Thursday, August 21 salmon may only be taken northeast of Mensis Point.
4-FS-L-14-14	9:15 AM 8/28/2014	10:00 PM 8/28/2014	Closes the Chignik Bay, Central, Western, and Perryville districts to commercial salmon fishing effective 10:00 PM Thursday, August 28.

**APPENDIX B. 2014 CHIGNIK SOCKEYE SALMON
POSTWEIR ESCAPEMENT ESTIMATE MEMORANDUM.**

MEMORANDUM

STATE OF ALASKA
DEPARTMENT OF FISH AND GAME
Division of Commercial Fisheries

TO: M. Birch Foster
Finfish Research Biologist
Commercial Fisheries Division
Region IV - Kodiak

DATE: 11/13/2014

FROM: Mary Loewen
Finfish Research Biologist
Commercial Fisheries Division
Region IV - Kodiak

PHONE: (907) 486-1805

SUBJECT: 2014 Chignik post-weir escapement estimate

The 2014 Chignik sockeye salmon post-weir escapement was estimated using data collected with DIDSON between September 4 and September 26. Species apportionment was applied based on fish caught in the lagoon by the DIDSON crew using a variable mesh gillnet, and one report of subsistence catch by a local user. A total of 18 days of fishing data between September 4 and 25 were used in species apportionment.

September escapement was also estimated using traditional post-weir time series analysis of escapement data, which estimates the rate of decay in the run and forecasts escapements after weir removal assuming that the forecast escapement follows the same rate of decay as the run. (Figure 1). Escapement data from August 3 through September 4, the day the weir was removed, were used in that analysis.

The 2014 DIDSON counts resulted in an estimated escapement of 12,910 sockeye salmon from September 4 through September 15 (95% confidence interval 10,659 to 16,456 fish) and 10,257 sockeye salmon from September 16 through September 26 (the last day of DIDSON operations; 95% confidence interval 7,405 to 13,430 fish; Figure 2). A total of 23,167 sockeye salmon were enumerated between September 4 and 26 (95% confidence interval 18,064 to 29,757 fish), for a total estimated escapement of 26,188 sockeye salmon in the month of September (including 3 days of weir counts). Time series analysis resulted in an estimate of 6,158 (95% prediction interval 4,107 to 6,466) sockeye salmon between September 1 and 15, and 535 (95% prediction interval 357 to 562) sockeye salmon between September 16 and 30, for a total of 6,693 sockeye salmon (95% prediction interval 4,464 to 7,027 fish) in the month of September. The time series estimate of 6,693 sockeye salmon is 26% of the DIDSON estimate of 26,188 sockeye salmon during September 1 through 26.

This is the first year that DIDSON estimates have been used in place of the traditional time series estimate for escapement after the weir is removed. The large difference in estimates can likely be attributed to the rate of decay in escapement on the last day of weir counts. Because time series modelling predicts future values based on previous trends (the decay in escapement), the rate of decay is assumed to be the same throughout the forecast period. Several dates were tested for forecasting September escapement, in order to capture different rates of decay throughout the run. However, based on visual observation of fish passage upstream past the DIDSON units, as well as catches in the lagoon by crew and subsistence users, the DIDSON estimate is considered more accurate than the time series estimate for 2014 September escapement.

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Although all sockeye salmon enumerated in the post-weir estimate are considered as late-run (Chignik Lake stock) escapement, it is possible that some portion of the fish counted in September are actually from other stocks, such as the “late-late” run which is often referenced by local users. Without genetic identification of fish in late August and September to support this idea, all escapement in September is currently considered late-run (Chignik Lake stock). Future work to collect tissue samples for genetic identification in late August and September would allow for more fine-scale apportionment of escapement by stock-of-origin and potential refinement of escapement goal targeting.

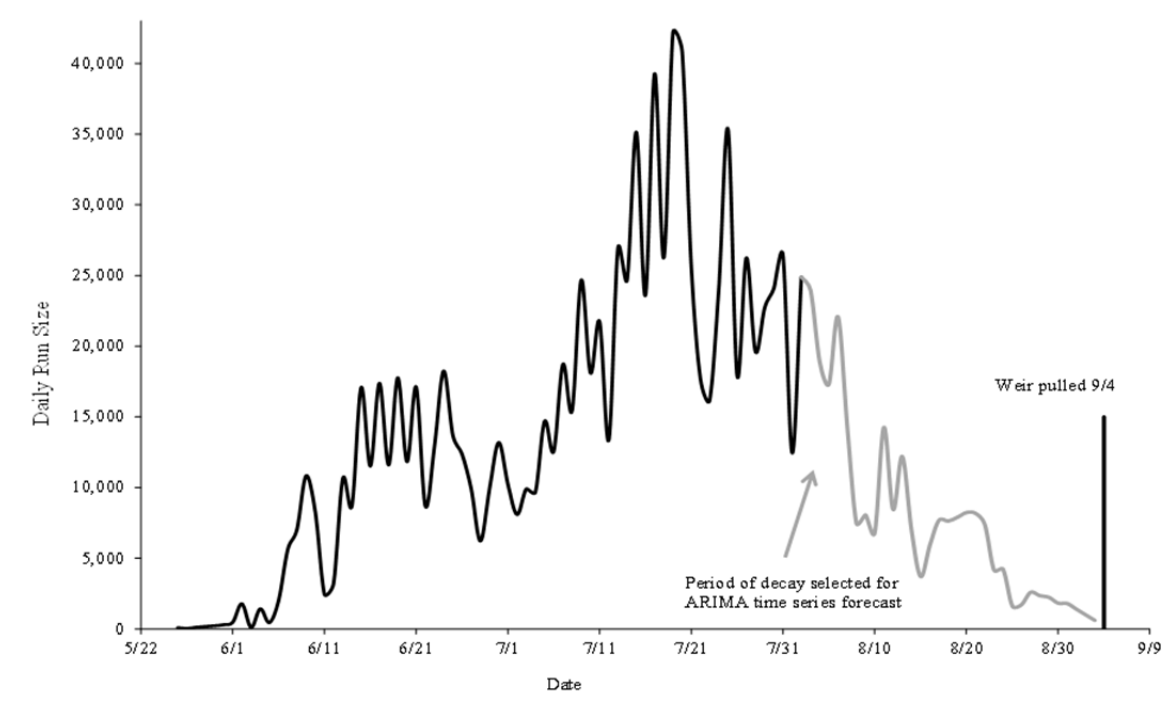


Figure 1.–2014 Estimated Chignik sockeye salmon run by day.

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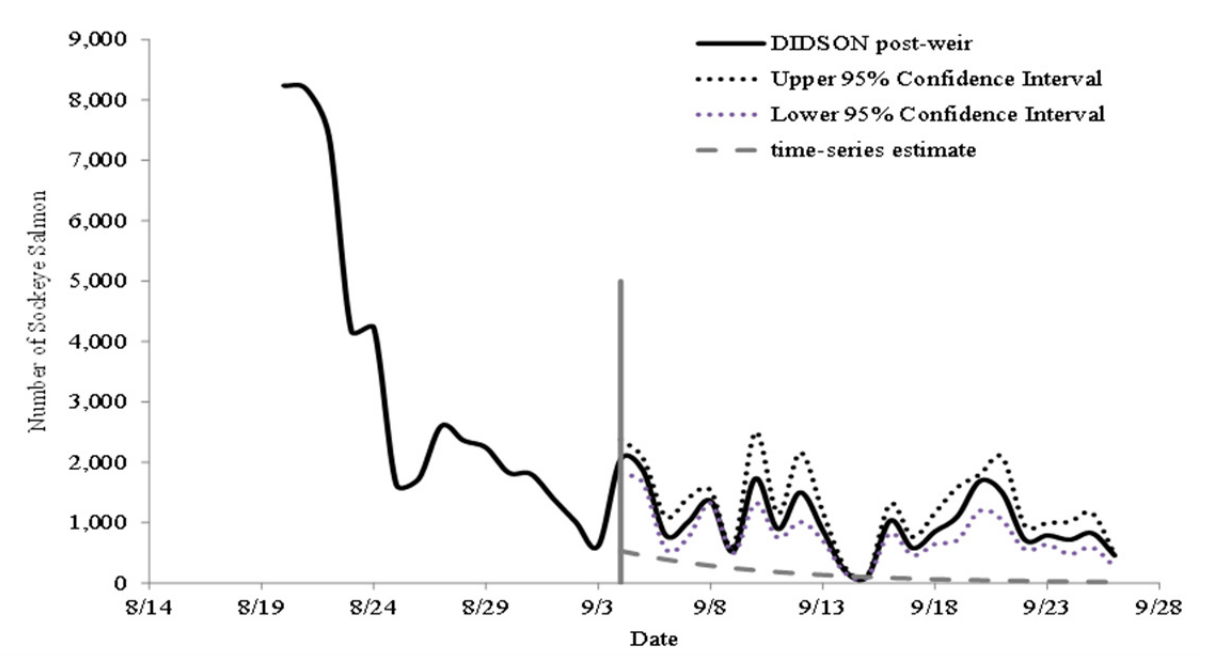


Figure 2.—2014 Post-weir sockeye salmon escapement estimate from DIDSON units with 95% Confidence Intervals, and time series estimate.

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