Chignik Management Area Salmon Annual Management Report, 2016

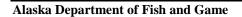
by

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Divisions of Sport Fish and Commercial Fisheries



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Weights and measures (metric)		General		Mathematics, statistics	
centimeter	cm	Alaska Administrative		all standard mathematical	
deciliter	dL	Code	AAC	signs, symbols and	
gram	g	all commonly accepted		abbreviations	
hectare	ha	abbreviations	e.g., Mr., Mrs.,	alternate hypothesis	H_A
kilogram	kg		AM, PM, etc.	base of natural logarithm	e
kilometer	km	all commonly accepted		catch per unit effort	CPUE
liter	L	professional titles	e.g., Dr., Ph.D.,	coefficient of variation	CV
meter	m		R.N., etc.	common test statistics	(F, t, χ^2 , etc.
milliliter	mL	at	@	confidence interval	CI
millimeter	mm	compass directions:		correlation coefficient	
		east	E	(multiple)	R
Weights and measures (English)		north	N	correlation coefficient	
cubic feet per second	ft ³ /s	south	S	(simple)	r
foot	ft	west	W	covariance	cov
gallon	gal	copyright	©	degree (angular)	0
inch	in	corporate suffixes:		degrees of freedom	df
mile	mi	Company	Co.	expected value	E
nautical mile	nmi	Corporation	Corp.	greater than	>
ounce	OZ	Incorporated	Inc.	greater than or equal to	\geq
pound	lb	Limited	Ltd.	harvest per unit effort	HPUE
quart	qt	District of Columbia	D.C.	less than	<
yard	yd	et alii (and others)	et al.	less than or equal to	≤
		et cetera (and so forth)	etc.	logarithm (natural)	ln
Time and temperature		exempli gratia		logarithm (base 10)	log
day	d	(for example)	e.g.	logarithm (specify base)	log _{2,} etc.
degrees Celsius	°C	Federal Information		minute (angular)	'
degrees Fahrenheit	°F	Code	FIC	not significant	NS
degrees kelvin	K	id est (that is)	i.e.	null hypothesis	H_{O}
hour	h	latitude or longitude	lat or long	percent	%
minute	min	monetary symbols		probability	P
second	S	(U.S.)	\$, ¢	probability of a type I error	
		months (tables and		(rejection of the null	
Physics and chemistry		figures): first three		hypothesis when true)	α
all atomic symbols		letters	Jan,,Dec	probability of a type II error	
alternating current	AC	registered trademark	®	(acceptance of the null	
ampere	A	trademark	TM	hypothesis when false)	β
calorie	cal	United States		second (angular)	"
direct current	DC	(adjective)	U.S.	standard deviation	SD
hertz	Hz	United States of		standard error	SE
horsepower	hp	America (noun)	USA	variance	
hydrogen ion activity	pН	U.S.C.	United States	population	Var
(negative log of)		***	Code	sample	var
parts per million	ppm	U.S. state	use two-letter		
parts per thousand	ppt,		abbreviations		
	‰		(e.g., AK, WA)		
volts	V				
watts	W				

FISHERY MANAGEMENT REPORT NO. 17-16

CHIGNIK MANAGEMENT AREA SALMON ANNUAL MANAGEMENT REPORT, 2016

by
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ABSTRACT

This report summarizes the 2016 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: Chinook O. tshawytscha, sockeye O. nerka, coho O. kisutch, pink O. gorbuscha, and chum O. keta salmon. In 2016, the Chignik River Chinook salmon escapement of 1,843 fish was within the escapement goal range of 1,300 to 2,700 fish. The 2016 Chignik River early-run sockeye salmon escapement of 418,290 fish was within the early-run escapement goal range of 350,000 to 450,000 fish. The late-run sockeye salmon escapement of 354,884 fish was also within the late-run escapement goal range of 275,000 to 400,000 fish. The CMA 2016 harvest of Chinook salmon was 20,719 fish. The total 2016 CMA sockeye salmon harvest of 1,394,091 fish (including the department's test fish harvest) was below the most recent 5-year average and similar to the recent 10- and 20-year averages. CMA coho salmon harvest of 94,397 fish was below the most recent 5-year average and similar to the 10- and 20-year averages. Estimated 2016 peak pink salmon escapement in the CMA was very poor and well below the recent 5-, 10-, and 20-even-year averages. The 2016 indexed peak pink salmon escapement estimate of 68,100 fish was well below the even-year sustainable escapement goal (SEG) range of 170,000 to 280,000 fish. The 2016 CMA harvest of 140,913 pink salmon was also well below all recent averages. Estimated peak chum salmon escapement was also below recent averages however, the indexed peak escapement of 69,900 chum salmon was within the SEG range of 45,000 to 110,000 fish. In 2016, 118,435 chum salmon were harvested which was below recent 5-, 10-, and 20-year average harvests. A total of 69 CMA permit holders made deliveries in 2016. The exvessel value for commercial salmon harvest in the CMA for 2016 totaled approximately \$8.64 million.

Key words: Chignik Management Area (CMA), Chignik River, *Oncorhynchus*, salmon, Alaska Board of Fisheries, 2016 commercial fisheries management, Chignik Salmon Management Plan, harvest, escapement

INTRODUCTION

The Alaska Department of Fish and Game (ADF&G) manages all 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 (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 tschawytscha*, sockeye *O. nerka*, coho *O. kisutch*, pink *O. gorbuscha*, and chum *O. keta* salmon. Sockeye salmon are the primary species targeted and the most important commercial and subsistence salmon species in the CMA. ADF&G manages all CMA commercial salmon resources by emergency order based on inseason evaluation of local stock abundance and escapement objectives. The majority of fishing effort is concentrated on salmon returning to the Chignik River watershed. Commercial salmon fishing is the economic mainstay for 5 villages: Chignik Bay, Chignik Lagoon, Chignik Lake, Perryville, and Ivanof Bay (Figure 1).

This report provides a summary of the 2016 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 November 1, 2016. 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 2016 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 early-run (Black Lake) and late-run (Chignik Lake) sockeye salmon (Table 1) as well as local stocks of Chinook, pink, coho, and chum 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

The Cape Igvak Salmon Management Plan (5 AAC 18.360) was officially adopted in 1978 and has since undergone several amendments to change allocation criteria in the plan (Jackson et al. 2015). The Cape Igvak Section is the westernmost section of Area K, located directly northeast of the CMA (Figure 1). Under the current plan criteria, 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)). 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 in the CMA, in the Cape Igvak Section, 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

The Southeastern District Mainland Salmon Management Plan (5 AAC 09.360) was formally adopted in 1980 and has undergone several amendments, mostly to allocation criteria (Keyse et al. 2016). The SEDM is composed of a group of sections at the eastern end of Area M, located directly southwest of the CMA (Figure 1). Under the current plan criteria, 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. If the harvestable surplus of sockeye salmon in the CMA is above or expected to be above certain thresholds, then 7.6% of the total estimated CMA sockeye salmon harvest is allocated to SEDM fishermen (5 AAC 09.360 (a–g)). After July 25, there are no allocative ties between the CMA and Area M.

2016 CHIGNIK SALMON MANAGEMENT

The first commercial salmon fishing period in 2016 began on June 4, and the last commercial fishing period ended on August 31 (Figure 3). A total of 69 CMA commercial salmon permit holders (excluding the ADF&G test fishery permit) participated in the 2016 commercial salmon season (Table 2).

Salmon were delivered to 4 locations in 2016: a floating processor operated by Trident Seafoods located in Chignik Bay, Trident Seafoods shore based processor in Sand Point, Ocean Beauty Seafoods in Alitak, 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 installation of the Chignik River weir was completed on May 22 at approximately 6:00 PM, with the first full day of escapement enumeration on May 23. Sockeye salmon escapement into the Chignik River in late May and early June was well above average and was tracking over the upper range of the escapement goal (Tables 1, 3, and 4). As a result of the early escapement, commercial fishing in the Chignik Bay and Central districts as well as the Inner Castle Cape Subsection of the Western District, opened for 48 hours on June 4. This initial fishing period was extended 24 hours and then closed for 48 hours to allow additional escapement into the Chignik River. Harvest levels were low during the initial early season fishing period; however, harvests increased significantly during the next commercial fishing period. Several closures ranging from 36 to 48 hours were necessary between fishing periods in June to allow for additional escapement into the Chignik River after drops in daily escapement and harvest during the fishing periods. A test fish was conducted in Chignik Lagoon on June 22 with the main intent of generating revenue to fund the weir and management operations. Results of the test fish also showed that there was no significant buildup of salmon; instead, fish were entering the lagoon and quickly moving to the river. This observed behavior was consistent throughout June and July.

Several fishing periods occurred in the Chignik Bay and Central districts throughout July. These fishing periods were interspersed by short closures ranging from 24 to 36 hours. Genetic samples were collected at the weir beginning June 27 to apportion the early and late runs during the peak overlap period, which typically occurs late-June through mid-July. The results of each genetic sampling period were usually available within 36 to 48 hours of the sampling date and provided crucial information for inseason management decisions. The initial set of 2016 genetic sample results revealed low proportions of late-run sockeye salmon indicating that the run may be late. The second and third sample results, however, showed a significant shift in the late run proportion (from 1.2% in the first sample to 37.4% in the third sample; Table 4). This shift in the proportion of late run fish reflected an average run transition timing from early-run sockeye salmon to late-run sockeye salmon. Information on the run transition from the genetic sampling results were used on a daily basis to make management decisions, and several extensions were made to current fishing periods to allow harvest on surplus early run fish while the late run tracked minimum escapement objectives. Short closures between fishing periods occurred when daily escapement and harvest dropped to allow additional escapement into the river.

After a 7-day closure, commercial salmon fishing reopened in the Chignik Bay and Central districts on August 2. The districts were open for the remainder of the month except for one short

closure from August 12 to August 14. Commercial salmon fishing was closed at the beginning of September to ensure that the 50,000 fish inriver run goal (IRRG) for sockeye salmon into the Chignik River from September 1–30 was achieved. There did not appear to be a harvestable surplus available in early September to allow a fishery and achieve the goal, and therefore the fishery remained closed.

The Chignik Lagoon closed waters markers alternated between Humes Point and Mensis Point during the 2016 salmon season (Figure 4). Closed waters at Humes Point were usually established at the beginning of a fishing period. Establishing closed waters markers at Humes Point concentrated fishing effort in the lower lagoon while allowing the department to assess the magnitude of salmon entering the lagoon. If the Humes Point markers were used at the beginning of a fishing period, the markers were typically moved to Mensis Point if that fishing period was extended. A summary of emergency orders outlining the commercial salmon fishery 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)), opened concurrently with the Chignik Bay and Central districts during June (Figures 2 and 3). In 2016, the Eastern District remained closed for most of July through August due to low pink salmon escapement into local streams. Inseason aerial surveys indicated that pink salmon escapement in 2016 was well below historical averages while chum salmon escapement was closer to recent averages. In total, the Eastern District was open to commercial salmon fishing for 24 days (Figure 3). Appendix A provides a summary of emergency orders outlining the commercial salmon fishery in the Eastern District.

Western and Perryville Districts Commercial Salmon Fishery

By regulation, the Inner Castle Cape Subsection of the Western District opened concurrently with the Chignik Bay and Central districts throughout the commercial fishing season (5 AAC 15.357 (b); Figures 2, 3, and 5). Also by regulation (5 AAC 15.357 (e)), the Western District, excluding the Inner Castle Cape Subsection, opened to commercial salmon fishing for two 48-hour periods with a mandatory minimum 48-hour closure between fishing periods through July 5. The first 48-hour fishing period began on June 16 and the second fishing period began on June 29. Both of these fishing periods were opened concurrently with the Chignik Bay and Central districts.

Excluding the Inner Castle Cape Subsection 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.

On July 9, the Western and Perryville districts opened to commercial salmon fishing for a period of 50 hours with an additional 50-hour extension based on adequate late-run escapement. The commercial fishing period closed on July 13 after daily harvest levels decreased and daily sockeye salmon escapement dropped significantly at the weir. In an attempt to evaluate early pink salmon runs and provide early harvest opportunity on pink salmon, several inner bays in the Central, Western and Perryville districts opened for 48 hours beginning midnight on July 14 (Appendix A). Several boats participated in the fishing period, but a combination of inclement

weather and low availability of pink salmon resulted in a minimal harvest. Two additional commercial fishing periods occurred in the Western and Perryville districts in July based on achievement of late-run Chignik River sockeye salmon escapement objectives. In late July, aerial surveys and harvest information indicated that local chum salmon escapement was adequate while local pink salmon were just beginning to arrive in the CMA. The districts closed on July 26, along with the Chignik Bay and Central districts, to allow additional late-run escapement into the Chignik River. The Western and Perryville districts, excluding the Inner Castle Cape subsection of the Western District, did not reopen for the remainder of July or during August due to poor pink salmon escapement into local streams.

In total, the Western District, excluding the Inner Castle Cape Subsection, was open to commercial salmon fishing for approximately 19 days, and the Perryville District was open for 15 days during 2016 (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 genetically distinct sockeye salmon runs (an early and late run) that enter the Chignik River watershed and temporally overlap during late June and 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 through 2013 the fishery was managed based on this date; beginning 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 2014, in-season management was based on results of genetic sampling of the sockeye salmon runs.

From 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 (11 sampling periods; Table 5). Genetic tissue (axillary process) was clipped from approximately 190 sockeye salmon each sampling event and, along with age, length, 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 from each fish. The goal was to provide quantifiable inseason estimates of the contribution of both Black (early run) and Chignik (late run) lakes sockeye salmon stocks to Chignik River escapement estimates (Russell and Foster 2014). During the 2013–2016 salmon seasons, sampling intensity was reduced, with effort focused during the critical overlap period (6 sampling periods; Table 5). In 2013 and 2014, funding was jointly provided by Chignik Regional Aquaculture Association (CRAA) and ADF&G. The 2015 and 2016 Chignik River sockeye salmon genetic sampling was again funded by the AKSSF.

The 2016 samples were analyzed and results were typically available within 36–48 hours after sampling. Stock proportions obtained from genetic sampling were used in season by ADF&G to attribute escapement simultaneously to the early- and late-run sockeye salmon escapement objectives instead of the July 4 date (Tables 4 and 5). Using the genetics proportions, Black and

Chignik lakes run timing was modeled using methods similar to SPA modeling (Witteveen and Botz 2004). The 2016 logistic model estimates show the timing of the late run to be similar to the recent average (2010–2015; Figure 6). Figure 6 highlights the variable nature of the late run timing 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 the appropriate stock composition estimate was applied to 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 2016 Escapement Information and 2016 Harvest Information sections of this document.

Escapement Goals

In 2015, 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 (Schaberg et al. 2015). The team recommended changing the areawide evenand odd-year pink salmon sustainable escapement goal (SEG), as well as the areawide chum salmon SEG. These new goals were targeted beginning in the 2016 season.

The new areawide pink salmon escapement goals were developed based on 8 index systems distributed throughout 4 of the 5 fishing districts of the CMA. These 8 systems have consistently been surveyed and have represented approximately 53% of the annual pink salmon indexed escapement over the last 35 years. The new chum salmon goal was developed based on 6 index systems distributed throughout 4 of the 5 fishing districts that have represented approximately 57% of the annual chum salmon indexed escapement over the last 35 years. During past seasons, ADF&G has surveyed 49 pink salmon index streams and 42 chum salmon index streams in order to monitor the CMA salmon runs and to calculate an escapement estimate based on peak aerial surveys. These streams will continue to be monitored by ADF&G in season to evaluate the health and spatial distribution of the CMA pink and chum salmon runs. The new areawide pink salmon SEG in even years is 170,000–280,000 fish and in odd years 260,000–450,000 fish. The new chum salmon SEG is 45,000–110,000 fish.

There were no changes recommended to any of the other established CMA salmon escapement goals, which remained as follows: the Chignik River Chinook salmon BEG range of 1,300–2,700 fish; the early-run sockeye salmon biological escapement goal (BEG) of 350,000–450,000 fish (Table 1); and the late-run sockeye salmon SEG of 275,000–400,000 fish. The late-run SEG includes an IRRG of 75,000 fish added to the lower bound of the goal range for late season subsistence needs. The IRRG was increased at the 2016 Board of Fisheries (BOF) meeting from 50,000 sockeye salmon (25,000 in August and 25,000 fish September 1–15) to 75,000 sockeye salmon (25,000 fish in August and 50,000 fish September 1–30; 5AAC 15.357(b)(3)(B)).

2016 Escapement Information

In 2016, 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 open 24 hours a day to allow for unrestricted fish passage. Underwater video equipment was used to count fish passing through the weir gates. At night, lights incorporated in the camera gates 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 2016 season was on May 23, and the last full count of the season was on September 12, after which the weir was removed (Tables 3 and 6). A post-weir sockeye and coho salmon estimate was produced using data collected with Dual-frequency Identification Sonar (DIDSON) from September 13 through September 23. Species apportionment was applied based on fish sampled in the lagoon by a crew using a variable mesh gillnet and reports of subsistence catch by local users. A model using weir count data in early September and DIDSON counts from September 13 to 23 was employed to produce a post-weir and DIDSON estimate from September 24 to 30.

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 early June. The run peaked by early July and was over by mid-August (Table 6; Figure 7). The 2016 Chignik River Chinook salmon escapement of 1,843 fish was below the recent 5-, 10-, and 20-year average escapements (Table 7). Chinook salmon escapement in 2016 was within the BEG range of 1,300–2,700 fish (Figure 8; Schaberg et al. 2015).

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 late June and the late run peaked in mid-July (Table 4; Figure 9). The 2016 estimated total Chignik River watershed sockeye salmon escapement was 773,174 fish, which was slightly below the 5-year average and slightly above the 10- and 20-year averages (Table 8). The early-run escapement was estimated at 418,290 sockeye salmon, which was within the early-run BEG range of 350,000–450,000 fish (Table 8; Figure 10). The late-run escapement was estimated at 354,884 sockeye salmon, within the late-run SEG range of 275,000–400,000 fish (Table 8; Figure 10). The late-run escapement includes weir counts through September 12 (when the weir was removed), DIDSON estimates from September 13–23, and a post DIDSON estimate for the remainder of September (3,464; Table 3).

The late-run Chignik River sockeye salmon IRRG requires 25,000 fish be escaped past the Chignik River weir in August in addition to minimum escapement needs for the month of approximately 50,000 fish (Table 1). This requires that a minimum of 75,000 sockeye salmon escape past the weir in August. The IRRG also requires that 50,000 sockeye salmon be escaped past the weir during September. In 2016, both components of the IRRG were met with approximately 104,000 sockeye salmon in August and approximately 52,000 sockeye salmon in September escaped past the weir (Table 3).

Total peak aerial survey counts of spawning sockeye salmon in Black Lake tributaries were well below all recent averages (Table 9). The low survey counts are partially due to the fact that the Alec River, a major sockeye salmon spawning tributary to Black Lake, was extremely turbid during the 2016 season and the department was unable to fly a successful survey of the river. In past years, the Alec River has made up as much as 90% of the peak sockeye salmon escapement for Black Lake streams surveyed. Total peak aerial survey counts of spawning sockeye salmon in the Chignik Lake and its tributaries were also below 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 (Witteveen et al. 2007).

Coho Salmon

Coho salmon enter CMA drainages in mid-August and generally continue through November. The 2016 Chignik River coho salmon escapement estimate through September 23 (including weir estimates until September 12 and DIDSON estimates September 13–23) was 30,291 fish (Table 6). Coho salmon escapement was monitored, via aerial survey, in low numbers (generally less than 2,000 fish) in several other CMA streams.

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

Pink Salmon

In 2016, pink salmon began entering the Chignik River in mid-July and peaked in early August with a total escapement of 486 fish (Table 6). The 2016 pink salmon escapement into the Chignik River was well below the 5-, 10-, and 20-year average escapements (Table 7).

Escapements into other CMA streams were monitored via aerial surveys. In season, streams that have been historically monitored for pink salmon were surveyed and compared to historical run timing and distribution. The 2016 overall combined peak escapement estimates for the CMA was approximately 139,476 pink salmon (Table 11). Pink salmon escapement was very poor in the CMA, as it was throughout much of the state of Alaska in 2016, and was well below historical averages. The current even-year SEG of 170,000–280,000 pink salmon is composed of 8 index streams in 4 of the 5 districts in the CMA. The calculated peak escapement based on aerial surveys of the 8 index streams in 2016 was 68,100 fish and did not achieve the lower bound of the escapement goal range (Table 12).

Chum Salmon

A limited number of chum salmon return to the Chignik River, mainly in late July and August (Table 6). The 2016 Chignik River chum salmon escapement was 114 fish, which was above the recent 5- and 10-year average escapements, and below the 20-year average escapements (Table 7).

Escapements into other CMA streams were monitored via aerial surveys. In season, streams that have been historically monitored for chum salmon were surveyed and compared to historical run timing and distribution. The 2016 overall combined peak escapement estimate for the CMA was 117,604 chum salmon, which was well below recent averages (Table 13). The current SEG of 45,000–110,000 is based on 6 index streams located in 4 of the 5 CMA districts. The peak aerial surveys from the index streams were summed and compared to the areawide aggregate SEG for

chum salmon (Schaberg et al. 2015). The 2016 CMA chum salmon escapement estimate of 69,900 fish based on the 6 index streams was within the SEG and below the 10-year average (Table 14).

2016 Harvest Information

Commercial salmon harvest information for 2016 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 are 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 2016 commercial salmon harvest and effort can be found in Table 2.

Chinook Salmon

A total of 20,719 Chinook salmon were harvested from the CMA in 2016, which was well above the 5-, 10-, and 20-year average Chinook salmon harvests (Table 15). A total of 35 fish were retained as home pack from the commercial fishery (Table 16). Most of the CMA Chinook salmon harvest occurred in the Central district (15,865 fish; Table 17). In 2016, Chinook salmon were primarily harvested from early June through mid-August (Table 18).

Sockeye Salmon

A total of 1,394,091 sockeye salmon were harvested in the CMA during 2016, which was below the 5-year average harvest and similar to the 10- and 20-year average sockeye salmon harvests (Tables 15 and 19). ADF&G's test fishery program harvested 8,073 of these salmon, and a total of 345 fish were reported as retained for home pack from the commercial fishery (Table 19). Most of the CMA sockeye salmon harvest in 2016 occurred in the Chignik Bay and Central districts (Table 20). Sockeye salmon were harvested from early June through August (Table 21).

In 2016, 94,790 sockeye salmon were harvested in the SEDM and 298,470 sockeye salmon in the Cape Igvak Section during the allocation period of June 1 through July 25 (Table 22). The Chignik-bound component of the SEDM harvest totaled 8.1 percent of the total Chignik-bound harvest (allocation 7.6 percent). The Chignik-bound portion of the Cape Igvak harvest was totaled 19.1 percent of the Chignik-bound harvest (allocation 15.0 percent).

The 2016 Chignik River early-run sockeye salmon harvest of 968,018 fish was below the 5-year average yet above the recent 10- and 20-year average harvests (Table 23; Figure 11). The laterun harvest of 819,333 sockeye salmon was above recent average harvests (Table 23; Figure 12). The total Chignik-bound commercial sockeye salmon harvest was 1,787,351 fish for a total run estimate (harvest plus escapement) of 2,560,525 sockeye salmon. The 2016 total harvest was similar to the 10- and 20-year average harvest and well below the recent 5-year average harvest (Figure 13).

In 2016, the Chignik early run was approximately 410,000 sockeye salmon below the forecast, whereas the late run was approximately 117,000 fish over the forecast (Table 24).

Coho Salmon

A total of 94,397 coho salmon were harvested in the CMA during 2016, which was similar to the 10- and 20-year average and above the 5-year average harvests (Tables 15 and 25). In 2016, all of the commercially-harvested coho salmon were sold to processors (Table 25). The majority of the 2016 coho salmon harvest occurred in the Central, Western, and Perryville districts from early July through August (Tables 26 and 27).

Pink Salmon

A total of 140,913 pink salmon were harvested during 2016, which was well below the even 5-, 10-, and 20-year average harvests (Tables 15 and 28). All commercially-harvested pink salmon were sold to processors by fishermen, which includes 18 salmon harvested during ADF&G's Chignik Lagoon test fishery (Table 28). The majority of the 2016 pink salmon harvest occurred in the Western and Central districts in July and August (Table 29 and 30).

Chum Salmon

A total of 118,435 chum salmon were harvested from the CMA during the 2016 season, which was below the 5-, 10-, and 20-year average harvests (Tables 15 and 31). All of the commercially harvested chum salmon were sold to processors by fishermen, including 17 salmon harvested during ADF&G's Chignik Lagoon test fishery (Table 31). Nearly half of the 2016 chum salmon harvest occurred in the Central District while the remaining harvest occurred mostly in the Eastern and Western districts (Table 32). Chum salmon harvest in the CMA occurred from early June through August (Table 33).

Economic Value

In 2016, 69 CMA permit holders (76% of CMA permits) made deliveries (Table 34). The exvessel value of the 2016 CMA salmon harvest was about \$8.6 million, or approximately \$125,200 per active permit holder, which was well below the 5-, 10-, and 20-year average exvessel values (Table 34; Figure 14). The vast majority (93%) of exvessel revenue was from the sale of sockeye salmon (approximately \$116,600 per active permit holder). The 2016 Chinook, coho, pink, and chum salmon harvest provided approximately \$2,600, \$2,300, \$1,400, and \$2,300, respectively, per active permit holder (Table 34).

CHIGNIK LAGOON TEST FISHERY

ADF&G conducts test fisheries in Chignik Lagoon for multiple purposes. The main purpose of the Chignik Lagoon test fisheries is to assess sockeye salmon abundance in Chignik Lagoon during closures. Test fisheries are also used to offset the costs of operations at the Chignik weir (Wilburn 2015).

ADF&G conducted 3 test fisheries in 2016, with a total harvest of 8,073 sockeye salmon (Table 19). The first test fishery occurred in Chignik Lagoon on June 22 and was primarily conducted to generate funds for management operations. A total of 5,218 sockeye salmon were harvested on June 22 (Table 21). Subsequent test fisheries to assess sockeye salmon abundance were conducted on July 8 and July 31.

SUBSISTENCE SALMON

The 2016 CMA subsistence harvest will not be available until after subsistence permits are returned and tabulated in the spring of 2017. Historical subsistence harvests can be found in Table 33.

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TABLES AND FIGURES

Table 1.-Chignik River sockeye salmon escapement objectives, 2016.

	Black	Lake	Chignik	Lake		Chignik	Lake
Date	Lower	Upper	Lower	Upper	Date	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	234,000 -	378,000
July 8	329,000 -	422,000	34,000 -	65,000	September 6	243,000 -	381,000
July 10	334,000 -	430,000	43,000 -	81,000	September 9	251,000 -	384,000
July 12	340,000 -	436,000	53,000 -	98,000	September 12	258,000 -	387,000
July 14	343,000 -	440,000	63,000 -	118,000	September 15	264,000 -	390,000
July 16	345,000 -	443,000	75,000 -	142,000	September 18	268,000 -	392,000
July 18	347,000 -	446,000	88,000 -	168,000	September 21	271,000 -	394,000
July 20	348,000 -	448,000	100,000 -	192,000	September 24	273,000 -	396,000
July 22	349,000 -	449,000	113,000 -	212,000	September 27	274,000 -	398,000
July 24	349,000 -	449,000	123,000 -	230,000	September 30	275,000 -	400,000
July 26	349,000 -	449,000	134,000 -	251,000	Esca	pement Goals	
July 28	349,000 -	449,000	143,000 -	269,000	Black Lake	350,000 -	450,000
July 30	350,000 -	450,000	151,000 -	284,000	Chignik Lake	275,000 -	400,000°

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 were considered late-run escapement. Beginning in 2014, inseason 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. New interim escapement objectives were also established for both runs.

The late-run escapement objective (June 20–September 30) includes the late-run sockeye salmon sustainable escapement goal (SEG; 200,000–400,000), plus an additional 75,000 sockeye salmon inriver run goal (25,000 in August and 50,000 in September) to meet late season subsistence needs. This results in an escapement of at least 75,000 sockeye salmon in August and a management target of 50,000 sockeye salmon in September.

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, 2016.

-	Eff	ort	Chino	ook	Sock	eye	Coh	10	Pin	k	Chu	m	Tot	al
Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
6/4	16	16	29	323	2,362	12,220	0	0	0	0	269	1,923	2,660	14,466
6/5	42	45	78	954	8,177	45,002	0	0	29	101	190	1,383	8,474	47,440
6/6	28	28	27	353	6,146	33,044	0	0	46	161	130	950	6,349	34,508
6/7	44	44	77	961	10,534	58,853	0	0	35	102	478	3,514	11,124	63,430
6/8							Fishery	Closed						
6/9							Fishery	Closed						
6/10	49	53	82	887	29,767	171,149	0	0	10	20	1,052	5,004	30,911	177,060
6/11	55	55	212	1,264	28,025	153,881	0	0	639	2,141	813	5,808	29,689	163,094
6/12	45	47	115	1,158	21,373	125,376	0	0	231	497	1,539	11,109	23,258	138,140
6/13	40	40	132	1,027	25,781	155,528	135	802	1,263	3,406	3,035	21,500	30,346	182,263
6/14	31	31	46	458	15,837	93,833	0	0	101	298	116	819	16,100	95,408
6/15	56	63	128	1,136	46,263	259,998	0	0	816	2,797	3,897	22,591	51,104	286,522
6/16	49	51	101	847	37,243	206,834	2	8	820	2,487	1,753	11,266	39,919	221,442
6/17	55	59	175	1,740	48,851	286,595	4	30	3,044	9,648	7,855	45,736	59,929	343,749
6/18	52	53	163	1,362	40,436	236,925	7	45	996	3,121	1,184	8,199	42,786	249,652
6/19	49	53	109	904	42,156	241,245	12	76	2,956	9,099	2,075	14,404	47,308	265,728
6/20	33	33	34	331	18,384	106,421	0	0	3,462	10,739	3,586	25,215	25,466	142,706
6/21							Fishery	Closed						
6/22							Fishery	Closed						
6/23							Fishery	Closed						
6/24	59	64	316	2,486	51,930	304,959	17	103	7,296	23,776	5,391	35,842	64,950	367,166
6/25	50	54	140	711	36,221	213,979	61	305	3,415	11,561	3,515	22,368	43,352	248,924
6/26	58	60	456	3,325	33,731	204,655	31	186	2,009	8,579	818	5,753	37,045	222,498
6/27							Fishery	Closed						
6/28	53	61	196	1,369	30,941	180,878	6	34	487	1,526	393	2,711	32,023	186,518
6/29	45	47	269	1,915	29,161	171,120	46	283	866	2,946	3,190	23,203	33,532	199,467
6/30	54	54	442	4,083	38,173	232,742	66	409	2,852	9,842	2,949	21,845	44,482	268,921
7/1								Closed						
7/2	45	49	295	2,699	24,601	144,276	205	1,196	994	3,223	2,378	16,018	28,473	167,412
7/3	48	48	79	916	28,181	167,112	29	176	463	1,382	557	3,792	29,309	173,378
7/4	49	49	127	1,246	28,728	171,758	214	1,312	431	1,404	1,193	8,995	30,693	184,715
7/5	55	55	134	1,347	22,976	136,914	91	526	638	2,111	900	6,479	24,739	147,377

Table 2.–Page 2 of 3.

	Ef	ffort	Chin	ook	Soci	кеуе	Co	ho	Pir	nk	Ch	um	То	tal
Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
7/6							Fishery	Closed						
7/7							Fishery	Closed						
7/8							Fishery	Closed						
7/9	59	63	897	5,307	60,088	346,868	2,839	19,235	2,026	6,760	2,259	16,502	68,109	394,672
7/10	50	51	109	1,199	33,127	205,292	4,472	37,381	3,104	9,475	2,042	14,776	42,854	268,123
7/11	51	52	1,207	7,139	37,359	214,362	2,496	14,997	1,884	6,298	2,144	15,405	45,090	258,201
7/12	53	53	472	3,597	53,034	310,824	3,214	19,530	2,274	7,750	3,361	24,374	62,355	366,075
7/13	30	30	53	572	10,177	62,735	245	1,400	801	2,849	661	4,869	11,937	72,425
$7/14^{a}$														
$7/15^{a}$														
7/16	40	41	309	2,272	37,075	206,887	1,471	8,800	2,618	9,892	3,358	22,277	44,831	250,128
7/17	48	55	659	3,930	61,413	381,222	4,247	26,035	4,565	16,664	3,565	23,938	74,449	451,789
7/18	54	55	993	6,753	39,873	245,496	3,278	21,026	3,317	10,899	1,951	14,090	49,412	298,264
7/19							Fishery	Closed						
7/20							•	Closed						
7/21							•	Closed						
7/22	58	73	3,501	21,727	47,690	282,335	6,370	42,637	8,510	36,421	4,531	29,945	70,602	413,065
7/23	43	43	1,179	6,976	21,440	130,121	3,284	21,943	3,597	16,588	1,090	7,520	30,590	183,148
7/24	48	50	412	3,788	30,569	186,909	6,021	41,230	6,942	26,268	2,424	17,566	46,368	275,761
7/25	48	49	861	7,134	29,563	181,368	8,017	58,780	9,141	38,799	6,540	50,922	54,122	337,003
7/26	47	49	596	4,566	46,297	300,326	5,370	37,308	7,432	28,875	4,050	27,457	63,745	398,532
7/27								Closed						
7/28								Closed						
7/29							•	Closed						
7/30							•	Closed						
7/31							•	Closed						
8/1								Closed						
8/2							-	Closed						
8/3	56	63	928	8,829	23,657	144,265	8,113	53,456	11,883	55,494	4,579	31,967	49,160	294,011
8/4	46	48	540	3,950	13,436	82,629	2,930	23,446	4,049	20,257	1,774	12,762	22,729	143,044
8/5	48	49	1,424	10,077	11,773	71,362	3,295	23,596	6,261	24,777	2,306	15,908	25,059	145,720
8/6	36	36	455	3,462	6,878	41,639	1,973	16,285	2,397	11,812	1,302	8,978	13,005	82,176

Table 2.–Page 3 of 3.

	Ef	fort	Chine	ook	Sock	eye	Col	10	Pin	ık	Chu	ım	T	otal
Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
8/7	44	50	481	4,167	11,395	66,464	5,951	44,221	7,058	29,927	3,743	26,900	28,628	171,679
8/8	40	40	444	3,794	8,683	52,324	2,360	16,797	3,331	15,046	2,458	17,149	17,276	105,110
8/9	36	36	196	1,675	9,361	58,040	3,191	21,551	2,981	16,515	2,282	15,328	18,011	113,109
8/10	37	37	236	2,027	10,225	64,603	2,679	18,179	3,654	17,719	2,620	16,237	19,414	118,765
8/11	34	36	66	1,538	9,095	56,496	2,493	18,385	2,964	14,405	2,021	13,406	16,639	104,230
8/12	34	34	69	633	7,181	43,580	1,218	9,269	1,327	7,546	1,345	8,481	11,140	69,509
8/13							Fisher	y Closed						
8/14	29	29	387	3,598	4,764	27,969	2,054	13,381	2,358	8,411	1,462	9,868	11,025	63,227
8/15	28	28	55	553	4,069	24,123	272	1,762	279	1,145	312	1,981	4,987	29,564
8/16	23	23	59	689	4,098	24,853	771	6,163	392	2,649	583	3,633	5,903	37,987
8/17	10	10	0	0	2,189	12,927	450	3,175	251	1,287	339	2,513	3,229	19,902
8/18	16	16	39	408	2,971	17,518	428	2,204	201	930	284	1,647	3,923	22,707
8/19	18	18	22	206	2,053	12,762	981	7,510	512	2,885	598	3,657	4,166	27,020
8/20	18	18	59	667	4,374	25,774	302	2,387	200	1,129	229	1,450	5,164	31,407
8/21-8/3	81 ^a													
Total	69	2,551	20,719	155,550	1,386,016	8,210,420	94,397	658,553	140,895	563,390	118,418	805,140	1,760,444	10,393,053

^a Information cannot be released due to confidentiality rules.

Table 3.-Estimated Chignik River sockeye salmon escapement, by day and management objective period, 2016.

	May-June			July	
Date	Daily	Total	Date	Daily	Total
5/23	338	338	7/1	9,626	9,626
5/24	618	956	7/2	15,389	25,015
5/25	636	1,592	7/3	5,044	30,059
5/26	756	2,348	7/4	4,356	34,415
5/27	624	2,972	7/5	3,310	37,725
5/28	1,308	4,280	7/6	11,703	49,428
5/29	2,472	6,752	7/7	23,680	73,108
5/30	1,800	8,552	7/8	25,830	98,938
5/31	1,270	9,822	7/9	17,629	116,567
6/1	2,178	12,000	7/10	6,192	122,759
6/2	9,258	21,258	7/11	5,802	128,561
6/3	8,762	30,020	7/12	4,970	133,531
6/4	4,394	34,414	7/13	1,770	135,301
6/5	7,646	42,060	7/14	13,895	149,196
6/6	2,235	44,295	7/15	21,061	170,257
6/7	1,804	46,099	7/16	18,088	188,345
6/8	6,340	52,439	7/17	4,978	193,323
6/9	18,925	71,364	7/18	3,786	197,109
6/10	14,244	85,608	7/19	10,935	208,044
6/11	4,608	90,216	7/20	17,968	226,012
6/12	2,278	92,494	7/21	23,769	249,781
6/13	2,873	95,367	7/22	11,887	261,668
6/14	3,128	98,495	7/23	5,483	267,151
6/15	24,240	122,735	7/24	3,807	270,958
6/16	7,476	130,211	7/25	3,638	274,596
6/17	5,673	135,884	7/26	1,078	275,674
6/18	2,010	137,894	7/27	3,621	279,295
6/19	5,111	143,005	7/28	5,774	285,069
6/20	4,806	147,811	7/29	6,431	291,500
6/21	22,480	170,291	7/30	6,957	298,457
6/22	29,935	200,226	7/31	10,978	309,435
6/23	29,003	229,229	July total:	- 7	309,435
6/24	27,206	256,435	,		,
6/25	8,936	265,371			
6/26	6,030	271,401			
6/27	6,947	278,348			
6/28	17,737	296,085			
6/29	6,149	302,234			
6/30	5,234	307,468			
May–June total:		307,468			

Table 3.–Page 2 of 2.

	August		Sept	September			
Date	Daily	Total	Date	Daily	Total		
8/1	16,921	16,921	9/1	2,607	2,607		
8/2	15,117	32,038	9/2	2,946	5,553		
8/3	7,930	39,968	9/3	3,643	9,196		
8/4	4,301	44,269	9/4	1,785	10,981		
8/5	2,424	46,693	9/5	3,099	14,080		
8/6	2,479	49,172	9/6	3,600	17,680		
8/7	2,184	51,356	9/7	2,989	20,669		
8/8	1,914	53,270	9/8	2,507	23,176		
8/9	1,419	54,689	9/9	780	23,956		
8/10	1,657	56,346	9/10	2,872	26,828		
8/11	1,969	58,315	9/11	3,001	29,829		
8/12	1,913	60,228	9/12	1,800	31,629		
8/13	1,917	62,145	9/13 ^a	2,361	33,990		
8/14	2,978	65,123	9/14	1,252	35,242		
8/15	3,026	68,149	9/15	1,602	36,844		
8/16	1,302	69,451	9/16	1,860	38,704		
8/17	3,250	72,701	9/17	2,419	41,123		
8/18	2,955	75,656	9/18	1,590	42,713		
8/19	1,540	77,196	9/19	2,194	44,907		
8/20	1,661	78,857	9/20	1,599	46,506		
8/21	2,032	80,889	9/21	672	47,178		
8/22	2,091	82,980	9/22	796	47,974		
8/23	1,814	84,794	9/23	947	48,921		
8/24	2,376	87,170	Post DIDSON estimate:	3,464	52,385		
8/25	2,137	89,307	September total:		52,385		
8/26	2,956	92,263	-				
8/27	3,491	95,754					
8/28	1,869	97,623	Early run total: ^b		418,290		
8/29	1,825	99,448	Late run total:b	_	354,884		
8/30	1,180	100,628	Season total:	·	773,174		
8/31	3,258	103,886					
August total:		103,886					

The weir was removed after the completion of the 9/12 count. DIDSON (Dual-frequency Identification Sonar) was used for enumeration estimates from 9/13–9/23.

b Historically, estimated 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 were considered late-run escapement. Beginning in 2014, inseason 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.

Table 4.—Genetic stock proportions of estimated Chignik River sockeye salmon escapement by day, 2016.

	Daily	Cumulative			
Date	escapement	escapement	Late run (%)	Early run	Late run
5/23	338	338	0.00	338	0
5/24	618	956	0.00	618	0
5/25	636	1,592	0.01	636	0
5/26	756	2,348	0.01	756	0
5/27	624	2,972	0.01	624	0
5/28	1,308	4,280	0.01	1,308	0
5/29	2,472	6,752	0.01	2,472	0
5/30	1,800	8,552	0.02	1,800	0
5/31	1,270	9,822	0.02	1,270	0
6/1	2,178	12,000	0.02	2,178	0
6/2	9,258	21,258	0.03	9,255	3
6/3	8,762	30,020	0.04	8,758	4
6/4	4,394	34,414	0.04	4,392	2
6/5	7,646	42,060	0.06	7,641	5
6/6	2,235	44,295	0.07	2,233	2
6/7	1,804	46,099	0.08	1,803	1
6/8	6,340	52,439	0.10	6,334	6
6/9	18,925	71,364	0.13	18,900	25
6/10	14,244	85,608	0.16	14,221	23
6/11	4,608	90,216	0.20	4,599	9
6/12	2,278	92,494	0.24	2,273	5
6/13	2,873	95,367	0.30	2,864	9
6/14	3,128	98,495	0.37	3,116	12
6/15	24,240	122,735	0.45	24,131	109
6/16	7,476	130,211	0.56	7,434	42
6/17	5,673	135,884	0.69	5,634	39
6/18	2,010	137,894	0.85	1,993	17
6/19	5,111	143,005	1.05	5,057	54
6/20	4,806	147,811	1.29	4,744	62
6/21	22,480	170,291	1.59	22,123	357
6/22	29,935	200,226	1.96	29,348	587
6/23	29,003	229,229	2.41	28,304	699
6/24	27,206	256,435	2.96	26,401	805
6/25	8,936	265,371	3.63	8,612	324

Table 4.–Page 2 of 4.

	Daily	Cumulative			
Date	escapement	escapement	Late run (%)	Early run	Late run
6/26	6,030	271,401	4.44	5,762	268
6/27	6,947	278,348	5.42	6,570	377
6/28	17,737	296,085	6.61	16,565	1,172
6/29	6,149	302,234	8.04	5,655	494
6/30	5,234	307,468	9.74	4,724	510
7/1	9,626	317,094	11.76	8,494	1,132
7/2	15,389	332,483	14.13	13,215	2,174
7/3	5,044	337,527	16.89	4,192	852
7/4	4,356	341,883	20.06	3,482	874
7/5	3,310	345,193	23.65	2,527	783
7/6	11,703	356,896	27.67	8,465	3,238
7/7	23,680	380,576	32.08	16,083	7,597
7/8	25,830	406,406	36.83	16,317	9,513
7/9	17,629	424,035	41.86	10,250	7,379
7/10	6,192	430,227	47.06	3,278	2,914
7/11	5,802	436,029	52.32	2,766	3,036
7/12	4,970	440,999	57.54	2,110	2,860
7/13	1,770	442,769	62.59	662	1,108
7/14	13,895	456,664	67.38	4,533	9,362
7/15	21,061	477,725	71.84	5,931	15,130
7/16	18,088	495,813	75.90	4,359	13,729
7/17	4,978	500,791	79.54	1,018	3,960
7/18	3,786	504,577	82.76	653	3,133
7/19	10,935	515,512	85.57	1,578	9,357
7/20	17,968	533,480	87.98	2,160	15,808
7/21	23,769	557,249	90.04	2,367	21,402
7/22	11,887	569,136	91.78	977	10,910
7/23	5,483	574,619	93.23	371	5,112
7/24	3,807	578,426	94.45	211	3,596
7/25	3,638	582,064	95.46	165	3,473
7/26	1,078	583,142	96.29	40	1,038
7/27	3,621	586,763	96.97	110	3,511
7/28	5,774	592,537	97.53	143	5,631
7/29	6,431	598,968	97.99	129	6,302
7/30	6,957	605,925	98.37	113	6,844
7/31	10,978	616,903	98.67	146	10,832
8/1	16,921	633,824	100.00	0	16,921
8/2	15,117	648,941	100.00	0	15,117

Table 4.–Page 3 of 4.

D.	Daily	Cumulative	T (0/)	Б. 1	T
Date	escapement	escapement	Late run (%)	Early run	Late run
8/3	7,930	656,871	100.00	0	7,930
8/4	4,301	661,172	100.00	0	4,301
8/5	2,424	663,596	100.00	0	2,424
8/6	2,479	666,075	100.00	0	2,479
8/7	2,184	668,259	100.00	0	2,184
8/8	1,914	670,173	100.00	0	1,914
8/9	1,419	671,592	100.00	0	1,419
8/10	1,657	673,249	100.00	0	1,657
8/11	1,969	675,218	100.00	0	1,969
8/12	1,913	677,131	100.00	0	1,913
8/13	1,917	679,048	100.00	0	1,917
8/14	2,978	682,026	100.00	0	2,978
8/15	3,026	685,052	100.00	0	3,026
8/16	1,302	686,354	100.00	0	1,302
8/17	3,250	689,604	100.00	0	3,250
8/18	2,955	692,559	100.00	0	2,955
8/19	1,540	694,099	100.00	0	1,540
8/20	1,661	695,760	100.00	0	1,661
8/21	2,032	697,792	100.00	0	2,032
8/22	2,091	699,883	100.00	0	2,091
8/23	1,814	701,697	100.00	0	1,814
8/24	2,376	704,073	100.00	0	2,376
8/25	2,137	706,210	100.00	0	2,137
8/26	2,956	709,166	100.00	0	2,956
8/27	3,491	712,657	100.00	0	3,491
8/28	1,869	714,526	100.00	0	1,869
8/29	1,825	716,351	100.00	0	1,825
8/30	1,180	717,531	100.00	0	1,180
8/31	3,258	720,789	100.00	0	3,258
9/1	2,607	723,396	100.00	0	2,607
9/2	2,946	726,342	100.00	0	2,946
9/3	3,643	729,985	100.00	0	3,643
9/4	1,785	731,770	100.00	0	1,785
9/5	3,099	734,869	100.00	0	3,099
9/6	3,600	738,469	100.00	0	3,600
9/7	2,989	741,458	100.00	0	2,989
9/8	2,507	743,965	100.00	0	2,507

Table 4.–Page 4 of 4.

	Daily	Cumulative			
Date	escapement	escapement	Late run (%)	Early run	Late run
9/9	780	744,745	100.00	0	780
9/10	2,872	747,617	100.00	0	2,872
9/11	3,001	750,618	100.00	0	3,001
9/12	1,800	752,418	100.00	0	1,800
9/13	2,361	754,779	100.00	0	2,361
9/14	1,252	756,031	100.00	0	1,252
9/15	1,602	757,633	100.00	0	1,602
9/16	1,860	759,493	100.00	0	1,860
9/17	2,419	761,912	100.00	0	2,419
9/18	1,590	763,502	100.00	0	1,590
9/19	2,194	765,697	100.00	0	2,194
9/20	1,599	767,296	100.00	0	1,599
9/21	672	767,968	100.00	0	672
9/22	796	768,764	100.00	0	796
9/23	947	769,710	100.00	0	947

Table 5.—Estimates of stock composition, with upper and lower 90% credibility intervals, and standard deviations for escapement through the Chignik River weir, by sample date, 2010–2016, using the program BAYES with a sequential prior.

$\begin{array}{c ccccccccccccccccccccccccccccccccccc$]	Black Lal	ke		C	Chignik Lake					
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Year	Date	Sample size	Proportion	Lower	Upper	SD	Proportion	Lower	Upper	SD			
6/27		6/14	190	0.959	0.894	1.000	0.036	0.041	0.000	0.106	0.036			
7/1 189 0.823 0.724 0.912 0.057 0.177 0.088 0.276 0.057 7/5 190 0.788 0.699 0.871 0.052 0.212 0.129 0.301 0.052 2010 7/8-7/9 190 0.784 0.687 0.870 0.056 0.216 0.13 0.313 0.056 7/11 190 0.519 0.409 0.625 0.066 0.481 0.375 0.591 0.066 7/14 188 0.227 0.154 0.306 0.046 0.773 0.694 0.846 0.046 7/18-7/19 188 0.293 0.214 0.377 0.05 0.707 0.623 0.786 0.05 7/23 186 0.108 0.052 0.173 0.037 0.892 0.827 0.948 0.037 6/10 188 0.998 0.988 1.000 0.005 0.002 0.000 0.000 0.000 0.000 0.000 0.0		6/21	189	0.995	0.966	1.000	0.014	0.005	0.000	0.034	0.014			
7/5 190 0.788 0.699 0.871 0.052 0.212 0.129 0.301 0.052 2010 7/8-7/9 190 0.784 0.687 0.870 0.056 0.216 0.13 0.313 0.056 7/11 190 0.519 0.409 0.625 0.066 0.481 0.375 0.591 0.066 7/14 188 0.227 0.154 0.306 0.046 0.773 0.623 0.786 0.054 7/23 186 0.108 0.052 0.173 0.037 0.892 0.827 0.948 0.037 7/30 190 0.013 0.000 0.062 0.022 0.987 0.938 1.000 0.002 0.000 0.002 0.000 0.002 0.000 0.002 0.000 0.002 0.000 0.000 0.002 0.000 0.000 0.002 0.000 0.000 0.002 0.000 0.000 0.002 0.000 0.000 0.002 0.000		6/27	189	0.924	0.794	1.000	0.075	0.076	0.000	0.206	0.075			
2010		7/1	189	0.823	0.724	0.912	0.057	0.177	0.088	0.276	0.057			
7/11 190 0.519 0.409 0.625 0.066 0.481 0.375 0.591 0.066 7/14 188 0.227 0.154 0.306 0.046 0.773 0.694 0.846 0.046 7/18-7/19 188 0.293 0.214 0.377 0.05 0.707 0.623 0.786 0.05 7/23 186 0.108 0.052 0.173 0.037 0.892 0.827 0.948 0.035 7/30 190 0.013 0.000 0.062 0.022 0.987 0.938 1.000 0.022 6/10 188 0.998 0.988 1.000 0.005 0.002 0.000 0.012 0.005 6/17 188 1.000 1.000 1.000 0.002 0.000 0.000 0.000 0.002 6/24 188 0.976 0.888 1.000 0.040 0.024 0.000 0.011 0.04 6/28 190 0.832 0.744 0.918 0.054 0.168 0.082 0.256 0.054 7/2 190 0.953 0.886 1.000 0.036 0.047 0.000 0.114 0.036 2011 7/5 190 0.785 0.696 0.866 0.052 0.215 0.134 0.304 0.052 7/9-7/10 187 0.719 0.625 0.807 0.055 0.281 0.193 0.375 0.055 7/12-7/13 190 0.297 0.214 0.384 0.052 0.703 0.616 0.786 0.052 7/21 186 0.123 0.062 0.192 0.039 0.877 0.808 0.938 0.039 7/28 189 0.036 0.000 0.088 0.029 0.964 0.912 1.000 0.029 6/11 188 0.976 0.994 1.000 0.034 0.024 0.000 0.096 0.034 6/18 190 0.964 0.882 1.000 0.036 0.047 0.000 0.0118 0.042 6/25 189 0.993 0.955 1.000 0.017 0.007 0.000 0.096 0.034 6/18 190 0.964 0.882 1.000 0.042 0.036 0.000 0.096 0.034 6/18 190 0.964 0.882 1.000 0.042 0.036 0.000 0.096 0.034 6/18 190 0.964 0.882 1.000 0.042 0.036 0.000 0.096 0.034 6/18 190 0.964 0.882 1.000 0.042 0.036 0.000 0.096 0.034 6/18 190 0.964 0.882 1.000 0.007 0.000 0.000 0.096 0.034 6/18 190 0.964 0.882 1.000 0.0017 0.000 0.000 0.096 0.034 6/18 190 0.964 0.882 1.000 0.0017 0.000 0.000 0.018 0.042 6/25 189 0.993 0.955 1.000 0.017 0.000 0.000 0.045 0.017 7/1 190 0.644 0.544 0.733 0.058 0.356 0.267 0.456 0.058 7/5 187 0.485 0.396 0.574 0.054 0.515 0.426 0.604 0.054 7/11 189 0.003 0.000 0.000 0.001 1.000 1.000 1.000 0.001 6/27 188 0.911 0.838 1.000 0.045 0.048 0.775 0.694 0.853 0.048 7/14 190 0.006 0.000 0.000 0.001 1.000 1.000 1.000 0.001 6/27 188 0.911 0.838 1.000 0.045 0.055 0.142 0.058 0.239 0.056 7/1 189 0.058 0.761 0.942 0.055 0.142 0.058 0.239 0.056 7/1 189 0.058 0.761 0.942 0.055 0.142 0.058 0.239 0.058 7/8-7/9 187 0.429 0.338 0.519 0.055 0.551 0.481 0.662 0.055		7/5	190	0.788	0.699	0.871	0.052	0.212	0.129	0.301	0.052			
7/14 188 0.227 0.154 0.306 0.046 0.773 0.694 0.846 0.046 7/18-7/19 188 0.293 0.214 0.377 0.05 0.707 0.623 0.786 0.05 7/23 186 0.108 0.052 0.173 0.037 0.892 0.827 0.948 0.037 7/30 190 0.013 0.000 0.062 0.022 0.987 0.938 1.000 0.022 6/10 188 0.998 0.988 1.000 0.005 0.002 0.000 0.012 0.005 6/17 188 1.000 1.000 1.000 0.002 0.000 0.000 0.000 0.002 6/24 188 0.976 0.888 1.000 0.040 0.024 0.000 0.112 0.04 6/28 190 0.832 0.744 0.918 0.054 0.168 0.082 0.256 0.054 7/2 190 0.953 0.886 1.000 0.036 0.047 0.000 0.114 0.036 2011 7/5 190 0.785 0.696 0.866 0.052 0.215 0.134 0.304 0.052 7/9-7/10 187 0.719 0.625 0.807 0.055 0.281 0.193 0.375 0.055 7/12-7/13 190 0.297 0.214 0.384 0.052 0.703 0.616 0.786 0.052 7/21 186 0.123 0.062 0.192 0.039 0.877 0.808 0.783 0.056 7/28 189 0.036 0.000 0.088 0.029 0.964 0.912 1.000 0.029 6/11 188 0.976 0.904 1.000 0.034 0.024 0.000 0.018 0.032 6/25 189 0.993 0.905 0.571 0.040 0.054 0.004 0.005 0.000 0.00	2010	7/8–7/9	190	0.784	0.687	0.870	0.056	0.216	0.13	0.313	0.056			
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			190	0.519	0.409	0.625	0.066	0.481	0.375	0.591	0.066			
7/23 186 0.108 0.052 0.173 0.037 0.892 0.827 0.948 0.037 7/30 190 0.013 0.000 0.662 0.022 0.987 0.938 1.000 0.022 6/10 188 0.998 0.988 1.000 0.005 0.002 0.000		7/14	188	0.227	0.154	0.306	0.046	0.773	0.694	0.846	0.046			
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		7/18–7/19	188	0.293	0.214	0.377	0.05	0.707	0.623	0.786	0.05			
6/10 188 0.998 0.988 1.000 0.005 0.002 0.000 0.012 0.005 6/17 188 1.000 1.000 1.000 0.002 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0112 0.04 6/24 188 0.976 0.888 1.000 0.040 0.024 0.000 0.112 0.04 6/28 190 0.832 0.744 0.918 0.054 0.168 0.082 0.256 0.054 7/2 190 0.953 0.886 1.000 0.036 0.047 0.000 0.114 0.036 7/9-7/10 187 0.719 0.625 0.866 0.052 0.215 0.134 0.352 7/14 190 0.297 0.214 0.384 0.052 0.773 0.616 0.786 0.052 <td></td> <td></td> <td>186</td> <td>0.108</td> <td></td> <td>0.173</td> <td>0.037</td> <td>0.892</td> <td>0.827</td> <td>0.948</td> <td>0.037</td>			186	0.108		0.173	0.037	0.892	0.827	0.948	0.037			
6/17 188 1.000 1.000 1.000 0.002 0.000 0.000 0.000 0.002 6/24 188 0.976 0.888 1.000 0.040 0.024 0.000 0.112 0.04 6/28 190 0.832 0.744 0.918 0.054 0.168 0.082 0.256 0.054 7/2 190 0.953 0.886 1.000 0.036 0.047 0.000 0.114 0.036 2011 7/5 190 0.785 0.696 0.866 0.052 0.215 0.134 0.344 0.052 7/9-7/10 187 0.719 0.625 0.807 0.055 0.281 0.193 0.375 0.055 7/12-7/13 190 0.297 0.214 0.384 0.052 0.703 0.616 0.786 0.055 7/21 186 0.123 0.062 0.192 0.039 0.877 0.808 0.938 0.039 7/28 189 </td <td></td> <td></td> <td></td> <td>0.013</td> <td></td> <td></td> <td></td> <td>0.987</td> <td></td> <td>1.000</td> <td>0.022</td>				0.013				0.987		1.000	0.022			
6/24 188 0.976 0.888 1.000 0.040 0.024 0.000 0.112 0.04 6/28 190 0.832 0.744 0.918 0.054 0.168 0.082 0.256 0.054 7/2 190 0.953 0.886 1.000 0.036 0.047 0.000 0.114 0.036 2011 7/5 190 0.785 0.696 0.866 0.052 0.215 0.134 0.304 0.052 7/9-7/10 187 0.719 0.625 0.807 0.055 0.281 0.193 0.375 0.055 7/12-7/13 190 0.297 0.214 0.384 0.052 0.703 0.616 0.786 0.052 7/14 190 0.308 0.217 0.402 0.056 0.692 0.598 0.783 0.059 7/21 186 0.123 0.062 0.192 0.039 0.877 0.808 0.938 0.039 7/28 189 </td <td></td> <td>6/10</td> <td>188</td> <td>0.998</td> <td>0.988</td> <td>1.000</td> <td>0.005</td> <td>0.002</td> <td>0.000</td> <td>0.012</td> <td>0.005</td>		6/10	188	0.998	0.988	1.000	0.005	0.002	0.000	0.012	0.005			
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		6/17	188	1.000	1.000	1.000	0.002	0.000		0.000	0.002			
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		6/24	188	0.976	0.888	1.000	0.040	0.024	0.000	0.112	0.04			
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		6/28	190	0.832	0.744	0.918	0.054	0.168	0.082	0.256	0.054			
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		7/2	190	0.953	0.886	1.000	0.036	0.047	0.000	0.114	0.036			
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2011	7/5	190	0.785	0.696	0.866	0.052	0.215	0.134	0.304	0.052			
7/14 190 0.308 0.217 0.402 0.056 0.692 0.598 0.783 0.056 7/21 186 0.123 0.062 0.192 0.039 0.877 0.808 0.938 0.039 7/28 189 0.036 0.000 0.088 0.029 0.964 0.912 1.000 0.029 6/11 188 0.976 0.904 1.000 0.034 0.024 0.000 0.096 0.034 6/18 190 0.964 0.882 1.000 0.042 0.036 0.000 0.018 0.042 6/25 189 0.993 0.955 1.000 0.017 0.007 0.000 0.045 0.017 7/1 190 0.644 0.544 0.733 0.058 0.356 0.267 0.456 0.058 7/5 187 0.485 0.396 0.574 0.054 0.515 0.426 0.604 0.054 2012 7/8-7/9ª 187		7/9-7/10	187	0.719	0.625	0.807	0.055	0.281	0.193	0.375	0.055			
7/21 186 0.123 0.062 0.192 0.039 0.877 0.808 0.938 0.039 7/28 189 0.036 0.000 0.088 0.029 0.964 0.912 1.000 0.029 6/11 188 0.976 0.904 1.000 0.034 0.024 0.000 0.096 0.034 6/18 190 0.964 0.882 1.000 0.042 0.036 0.000 0.118 0.042 6/25 189 0.993 0.955 1.000 0.017 0.007 0.000 0.045 0.017 7/1 190 0.644 0.544 0.733 0.058 0.356 0.267 0.456 0.058 7/5 187 0.485 0.396 0.574 0.054 0.515 0.426 0.604 0.054 2012 7/8-7/9ª 187 0.099 0.005 0.235 0.071 0.901 0.765 0.995 0.071 7/11 189		7/12-7/13	190	0.297	0.214	0.384	0.052	0.703	0.616	0.786	0.052			
7/28 189 0.036 0.000 0.088 0.029 0.964 0.912 1.000 0.029 6/11 188 0.976 0.904 1.000 0.034 0.024 0.000 0.096 0.034 6/18 190 0.964 0.882 1.000 0.042 0.036 0.000 0.118 0.042 6/25 189 0.993 0.955 1.000 0.017 0.007 0.000 0.045 0.017 7/1 190 0.644 0.544 0.733 0.058 0.356 0.267 0.456 0.058 7/5 187 0.485 0.396 0.574 0.054 0.515 0.426 0.604 0.054 2012 7/8-7/9a 187 0.099 0.005 0.235 0.071 0.901 0.765 0.995 0.071 7/11 189 0.225 0.147 0.306 0.048 0.775 0.694 0.853 0.048 7/17 189		7/14	190	0.308	0.217	0.402	0.056	0.692	0.598	0.783	0.056			
6/11 188 0.976 0.904 1.000 0.034 0.024 0.000 0.096 0.034 6/18 190 0.964 0.882 1.000 0.042 0.036 0.000 0.118 0.042 6/25 189 0.993 0.955 1.000 0.017 0.007 0.000 0.045 0.017 7/1 190 0.644 0.544 0.733 0.058 0.356 0.267 0.456 0.058 7/5 187 0.485 0.396 0.574 0.054 0.515 0.426 0.604 0.054 2012 7/8-7/9a 187 0.099 0.005 0.235 0.071 0.901 0.765 0.995 0.071 7/11 189 0.225 0.147 0.306 0.048 0.775 0.694 0.853 0.048 7/14 190 0.070 0.011 0.132 0.036 0.930 0.868 0.989 0.036 7/12 190		7/21	186	0.123	0.062	0.192	0.039	0.877	0.808	0.938	0.039			
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		7/28	189	0.036	0.000	0.088	0.029	0.964	0.912	1.000	0.029			
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		6/11	188	0.976	0.904	1.000	0.034	0.024	0.000	0.096	0.034			
7/1 190 0.644 0.544 0.733 0.058 0.356 0.267 0.456 0.058 7/5 187 0.485 0.396 0.574 0.054 0.515 0.426 0.604 0.054 2012 7/8-7/9a 187 0.099 0.005 0.235 0.071 0.901 0.765 0.995 0.071 7/11 189 0.225 0.147 0.306 0.048 0.775 0.694 0.853 0.048 7/14 190 0.070 0.011 0.132 0.036 0.930 0.868 0.989 0.036 7/17 189 0.003 0.000 0.020 0.009 0.997 0.980 1.000 0.009 7/21 190 0.006 0.000 0.049 0.018 0.994 0.951 1.000 0.018 7/28 170 0.000 0.000 0.001 1.000 1.000 1.000 1.000 1.000 0.024 7/1		6/18	190	0.964	0.882	1.000	0.042	0.036	0.000	0.118	0.042			
7/5 187 0.485 0.396 0.574 0.054 0.515 0.426 0.604 0.054 2012 7/8-7/9ª 187 0.099 0.005 0.235 0.071 0.901 0.765 0.995 0.071 7/11 189 0.225 0.147 0.306 0.048 0.775 0.694 0.853 0.048 7/14 190 0.070 0.011 0.132 0.036 0.930 0.868 0.989 0.036 7/17 189 0.003 0.000 0.020 0.009 0.997 0.980 1.000 0.009 7/21 190 0.006 0.000 0.049 0.018 0.994 0.951 1.000 0.018 7/28 170 0.000 0.000 0.001 1.000 1.000 1.000 1.000 0.001 6/27 188 0.911 0.838 1.000 0.045 0.089 0.000 0.058 0.239 0.055 2013 <td></td> <td>6/25</td> <td>189</td> <td>0.993</td> <td>0.955</td> <td>1.000</td> <td>0.017</td> <td>0.007</td> <td>0.000</td> <td>0.045</td> <td>0.017</td>		6/25	189	0.993	0.955	1.000	0.017	0.007	0.000	0.045	0.017			
2012 7/8-7/9a 187 0.099 0.005 0.235 0.071 0.901 0.765 0.995 0.071 7/11 189 0.225 0.147 0.306 0.048 0.775 0.694 0.853 0.048 7/14 190 0.070 0.011 0.132 0.036 0.930 0.868 0.989 0.036 7/17 189 0.003 0.000 0.020 0.009 0.997 0.980 1.000 0.009 7/21 190 0.006 0.000 0.049 0.018 0.994 0.951 1.000 0.018 7/28 170 0.000 0.000 0.001 1.000 1.000 1.000 0.001 6/27 188 0.911 0.838 1.000 0.045 0.089 0.000 0.162 0.024 7/1 189 0.858 0.761 0.942 0.055 0.142 0.058 0.239 0.058 2013 7/5 169		7/1	190	0.644	0.544	0.733	0.058	0.356	0.267	0.456	0.058			
7/11 189 0.225 0.147 0.306 0.048 0.775 0.694 0.853 0.048 7/14 190 0.070 0.011 0.132 0.036 0.930 0.868 0.989 0.036 7/17 189 0.003 0.000 0.020 0.009 0.997 0.980 1.000 0.009 7/21 190 0.006 0.000 0.049 0.018 0.994 0.951 1.000 0.018 7/28 170 0.000 0.000 0.001 1.000 1.000 1.000 0.001 6/27 188 0.911 0.838 1.000 0.045 0.089 0.000 0.162 0.024 7/1 189 0.858 0.761 0.942 0.055 0.142 0.058 0.239 0.058 2013 7/5 169 0.612 0.515 0.705 0.058 0.388 0.295 0.485 0.058 7/8-7/9 187 0.429		7/5	187	0.485	0.396	0.574	0.054	0.515	0.426	0.604	0.054			
7/14 190 0.070 0.011 0.132 0.036 0.930 0.868 0.989 0.036 7/17 189 0.003 0.000 0.020 0.009 0.997 0.980 1.000 0.009 7/21 190 0.006 0.000 0.049 0.018 0.994 0.951 1.000 0.018 7/28 170 0.000 0.000 0.001 1.000 1.000 1.000 0.001 6/27 188 0.911 0.838 1.000 0.045 0.089 0.000 0.162 0.024 7/1 189 0.858 0.761 0.942 0.055 0.142 0.058 0.239 0.058 2013 7/5 169 0.612 0.515 0.705 0.058 0.388 0.295 0.485 0.058 7/8-7/9 187 0.429 0.338 0.519 0.055 0.571 0.481 0.662 0.055	2012	$7/8 - 7/9^a$	187	0.099	0.005	0.235	0.071	0.901	0.765	0.995	0.071			
7/17 189 0.003 0.000 0.020 0.009 0.997 0.980 1.000 0.009 7/21 190 0.006 0.000 0.049 0.018 0.994 0.951 1.000 0.018 7/28 170 0.000 0.000 0.001 1.000 1.000 1.000 0.001 6/27 188 0.911 0.838 1.000 0.045 0.089 0.000 0.162 0.024 7/1 189 0.858 0.761 0.942 0.055 0.142 0.058 0.239 0.055 2013 7/5 169 0.612 0.515 0.705 0.058 0.388 0.295 0.485 0.058 7/8-7/9 187 0.429 0.338 0.519 0.055 0.571 0.481 0.662 0.055		7/11	189	0.225	0.147	0.306	0.048	0.775	0.694	0.853	0.048			
7/21 190 0.006 0.000 0.049 0.018 0.994 0.951 1.000 0.018 7/28 170 0.000 0.000 0.000 1.000 1.000 1.000 0.001 6/27 188 0.911 0.838 1.000 0.045 0.089 0.000 0.162 0.024 7/1 189 0.858 0.761 0.942 0.055 0.142 0.058 0.239 0.055 2013 7/5 169 0.612 0.515 0.705 0.058 0.388 0.295 0.485 0.058 7/8-7/9 187 0.429 0.338 0.519 0.055 0.571 0.481 0.662 0.055		7/14	190	0.070	0.011	0.132	0.036	0.930	0.868	0.989	0.036			
7/28 170 0.000 0.000 0.000 0.001 1.000 1.000 1.000 0.001 6/27 188 0.911 0.838 1.000 0.045 0.089 0.000 0.162 0.024 7/1 189 0.858 0.761 0.942 0.055 0.142 0.058 0.239 0.055 2013 7/5 169 0.612 0.515 0.705 0.058 0.388 0.295 0.485 0.058 7/8-7/9 187 0.429 0.338 0.519 0.055 0.571 0.481 0.662 0.055		7/17	189	0.003	0.000	0.020	0.009	0.997	0.980	1.000	0.009			
6/27 188 0.911 0.838 1.000 0.045 0.089 0.000 0.162 0.024 7/1 189 0.858 0.761 0.942 0.055 0.142 0.058 0.239 0.055 2013 7/5 169 0.612 0.515 0.705 0.058 0.388 0.295 0.485 0.058 7/8-7/9 187 0.429 0.338 0.519 0.055 0.571 0.481 0.662 0.055		7/21	190	0.006	0.000	0.049	0.018	0.994	0.951	1.000	0.018			
7/1 189 0.858 0.761 0.942 0.055 0.142 0.058 0.239 0.055 2013 7/5 169 0.612 0.515 0.705 0.058 0.388 0.295 0.485 0.058 7/8-7/9 187 0.429 0.338 0.519 0.055 0.571 0.481 0.662 0.055		7/28	170	0.000	0.000	0.000	0.001	1.000	1.000	1.000	0.001			
2013 7/5 169 0.612 0.515 0.705 0.058 0.388 0.295 0.485 0.058 7/8-7/9 187 0.429 0.338 0.519 0.055 0.571 0.481 0.662 0.055		6/27	188	0.911	0.838	1.000	0.045	0.089	0.000	0.162	0.024			
7/8–7/9 187 0.429 0.338 0.519 0.055 0.571 0.481 0.662 0.055		7/1	189	0.858	0.761	0.942	0.055	0.142	0.058	0.239	0.055			
	2013	7/5	169	0.612	0.515	0.705	0.058	0.388	0.295	0.485	0.058			
7/14 190 0.288 0.196 0.384 0.057 0.712 0.616 0.804 0.057		7/8–7/9	187	0.429	0.338	0.519	0.055	0.571	0.481	0.662	0.055			
		7/14	190	0.288	0.196	0.384	0.057	0.712	0.616	0.804	0.057			

Table 5.–Page 2 of 2.

			F	Black Lak	te		C	hignik La	ke	
Year	Date	Sample Size	Proportion	Lower	Upper	SD	Proportion	Lower	Upper	SD
	6/28	189	0.825	0.745	0.896	0.046	0.175	0.104	0.255	0.046
	7/2	189	0.785	0.690	0.874	0.056	0.215	0.126	0.310	0.056
2014	7/6	189	0.618	0.519	0.714	0.059	0.382	0.286	0.481	0.059
2014	7/10	188	0.357	0.258	0.460	0.062	0.643	0.540	0.742	0.062
	7/14	188	0.220	0.139	0.307	0.051	0.780	0.693	0.861	0.051
	7/18	189	0.143	0.064	0.227	0.050	0.857	0.773	0.936	0.05
	6/27	190	0.905	0.815	1.000	0.054	0.095	0.000	0.185	0.054
	7/1	188	0.932	0.856	0.996	0.042	0.068	0.004	0.144	0.042
2015	7/5	187	0.864	0.775	0.944	0.051	0.136	0.056	0.225	0.051
2013	7/12	190	0.894	0.790	0.995	0.061	0.106	0.005	0.210	0.061
	7/18	182	0.363	0.253	0.476	0.068	0.637	0.524	0.747	0.068
	7/25	187	0.383	0.284	0.485	0.061	0.617	0.515	0.716	0.061
	6/27	189	0.988	0.938	1.000	0.022	0.012	0.000	0.062	0.022
	7/2	156	0.799	0.694	0.895	0.061	0.201	0.105	0.306	0.061
2016	7/7	190	0.626	0.535	0.717	0.055	0.374	0.283	0.465	0.055
2016	7/12	180	0.422	0.338	0.506	0.051	0.578	0.494	0.662	0.051
	7/17	187	0.199	0.130	0.272	0.043	0.801	0.728	0.870	0.043
	7/26-7/27	190	0.135	0.076	0.202	0.038	0.865	0.798	0.924	0.038

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, 2016.

	Chinook		Coho]	Pink	(Chum	Dolly Varden	
Date	Daily Cu	mulative	Daily Cun	nulative	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative
5/23	0	0	0	0	0	0	0	0	30	30
5/24	0	0	0	0	0	0	0	0	36	66
5/25	0	0	0	0	0	0	0	0	48	114
5/26	0	0	0	0	0	0	0	0	78	192
5/27	0	0	0	0	0	0	0	0	24	216
5/28	0	0	0	0	0	0	0	0	60	276
5/29	0	0	0	0	0	0	0	0	78	354
5/30	0	0	0	0	0	0	0	0	18	372
5/31	0	0	0	0	0	0	0	0	18	390
6/1	0	0	0	0	0	0	0	0	138	528
6/2	0	0	0	0	0	0	0	0	270	798
6/3	0	0	0	0	0	0	0	0	246	1,044
6/4	0	0	0	0	0	0	0	0	72	1,116
6/5	0	0	0	0	0	0	0	0	117	1,233
6/6	0	0	0	0	0	0	0	0	204	1,437
6/7	0	0	0	0	0	0	0	0	216	1,653
6/8	0	0	0	0	0	0	0	0	222	1,875
6/9	0	0	0	0	0	0	0	0	618	2,493
6/10	0	0	0	0	0	0	0	0	360	2,853
6/11	6	6	0	0	0	0	0	0	342	3,195
6/12	0	6	0	0	0	0	0	0	66	3,261
6/13	0	6	0	0	0	0	0	0	576	3,837
6/14	0	6	0	0	0	0	0	0	533	4,370
6/15	0	6	0	0	0	0	0	0	1,406	5,776
6/16	6	12	0	0	0	0	0	0	558	6,334
6/17	0	12	0	0	0	0	0	0	876	7,210
6/18	6	18	0	0	0	0	0	0	678	7,888
6/19	0	18	0	0	0	0	0	0	806	8,694
6/20	0	18	0	0	0	0	0	0	978	9,672
6/21	12	30	0	0	0	0	0	0	864	10,536
6/22	36	66	0	0	0	0	0	0	987	11,523
6/23	24	90	0	0	0	0	0	0	515	12,038
6/24	18	108	0	0	0	0	0	0	324	12,362
6/25	36	144	0	0	0	0	0	0	282	12,644
6/26	42	186	0	0	0	0	0	0	390	13,034
6/27	12	198	0	0	0	0	0	0	432	13,466
6/28	30	228	0	0	0	0	0	0	894	14,360
6/29	48	276	0	0	0	0	0	0	456	14,816
6/30	30	306	0	0	0	0	0	0	234	15,050

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	Chinook		Coho		Pink		Chur	n	Dolly Varden	
Date	Date Daily Cumulative		Daily Cumulative		Daily Cur	nulative	Daily Cur	nulative	Daily Cumulati	
7/1	66	372	0	0	0	0	0	0	1,148	16,198
7/2	78	450	0	0	0	0	0	0	1,590	17,788
7/3	48	498	0	0	0	0	0	0	798	18,586
7/4	78	576	0	0	0	0	0	0	816	19,402
7/5	60	636	0	0	0	0	0	0	624	20,026
7/6	114	750	0	0	6	6	0	0	918	20,944
7/7	105	855	0	0	18	24	0	0	558	21,502
7/8	78	933	0	0	6	30	0	0	333	21,835
7/9	84	1,017	0	0	0	30	0	0	234	22,069
7/10	78	1,095	0	0	0	30	0	0	162	22,231
7/11	48	1,143	0	0	0	30	0	0	156	22,387
7/12	55	1,198	0	0	0	30	0	0	94	22,481
7/13	48	1,246	0	0	0	30	0	0	72	22,553
7/14	54	1,300	0	0	18	48	0	0	228	22,781
7/15	48	1,348	0	0	6	54	0	0	174	22,955
7/16	42	1,390	0	0	0	54	0	0	132	23,087
7/17	48	1,438	0	0	0	54	0	0	102	23,189
7/18	12	1,450	0	0	0	54	0	0	60	23,249
7/19	54	1,504	0	0	0	54	0	0	36	23,285
7/20	12	1,516	0	0	0	54	0	0	96	23,381
7/21	20	1,536	0	0	32	86	0	0	61	23,442
7/22	24	1,560	0	0	24	110	0	0	60	23,502
7/23	18	1,578	0	0	0	110	0	0	30	23,532
7/24	30	1,608	0	0	6	116	0	0	30	23,562
7/25	18	1,626	0	0	0	116	0	0	48	23,610
7/26	6	1,632	0	0	0	116	0	0	18	23,628
7/27	18	1,650	0	0	1	117	0	0	48	23,676
7/28	18	1,668	0	0	12	129	6	6	54	23,730
7/29	0	1,668	0	0	30	159	0	6	108	23,838
7/30	30	1,698	0	0	37	196	0	6	30	23,868
7/31	18	1,716	0	0	79	275	6	12	18	23,886
8/1	24	1,740	0	0	30	305	12	24	30	23,916
8/2	12	1,752	0	0	30	335	0	24	42	23,958
8/3	0	1,752	0	0	18	353	0	24	12	23,970
8/4	25	1,777	0	0	0	353	0	24	18	23,988
8/5	0	1,777	0	0	0	353	0	24	6	23,994
8/6	6	1,783	0	0	0	353	0	24	24	24,018
8/7	12	1,795	0	0	12	365	0	24	6	24,024
8/8	0	1,795	0	0	0	365	0	24	12	24,036
8/9	0	1,795	0	0	12	377	0	24	6	24,042
8/10	6	1,801	6	6	6	383	0	24	6	24,048
8/11	24	1,825	0	6	12	395	6	30	0	24,048
8/12	6	1,831	12	18	6	401	0	30	0	24,048

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	Chinook		Coho		Pink		Chu	m	Dolly Varden	
Date	Daily Cumulative		Daily Cumulative		Daily Cu	mulative	Daily Cu	mulative	Daily	Cumulative
8/13	6	1,837	6	24	0	401	0	30	6	24,054
8/14	0	1,837	0	24	0	401	0	30	6	24,060
8/15	6	1,843	12	36	6	407	0	30	18	24,078
8/16	0	1,843	6	42	0	407	0	30	6	24,084
8/17	0	1,843	0	42	6	413	0	30	30	24,114
8/18	0	1,843	36	78	6	419	0	30	30	24,144
8/19	0	1,843	6	84	12	431	0	30	0	24,144
8/20	0	1,843	60	144	7	438	6	36	36	24,180
8/21	0	1,843	36	180	0	438	0	36	18	24,198
8/22	0	1,843	73	253	12	450	6	42	18	24,216
8/23	0	1,843	114	367	0	450	0	42	66	24,282
8/24	0	1,843	144	511	6	456	0	42	30	24,312
8/25	0	1,843	164	675	0	456	6	48	78	24,390
8/26	0	1,843	222	897	0	456	0	48	36	24,426
8/27	0	1,843	446	1,343	0	456	0	48	30	24,456
8/28	0	1,843	444	1,787	0	456	0	48	24	24,480
8/29	0	1,843	248	2,035	0	456	12	60	12	24,492
8/30	0	1,843	319	2,354	0	456	6	66	6	24,498
8/31	0	1,843	504	2,858	0	456	6	72	18	24,516
9/1	0	1,843	391	3,249	0	456	0	72	19	24,535
9/2	0	1,843	702	3,951	0	456	0	72	12	24,547
9/3	0	1,843	891	4,842	0	456	0	72	30	24,577
9/4	0	1,843	672	5,514	0	456	12	84	12	24,589
9/5	0	1,843	1,095	6,609	12	468	6	90	6	24,595
9/6	0	1,843	1,073	7,682	18	486	6	96	0	24,595
9/7	0	1,843	1,352	9,034	0	486	0	96	6	24,601
9/8 9/9	0	1,843	978	10,012	0	486	6	102	18	24,619
	0	1,843	429	10,441	0	486	12	114	0	24,619
9/10	0	1,843	955	11,396	0	486	0	114	0	24,619
9/11 9/12	0	1,843 1,843	1,159 1,632	12,555 14,187	0	486 486	0	114	0	24,619
9/12	0	1,843	2,029	16,216	0	486 486	0 0	114 114	6 0	24,625 24,625
9/13	0	1,843	2,048	18,264	0	486	0	114	0	24,625
9/14	0	1,843	2,109	20,373	0	486	0	114	0	24,625
				22,337						
9/16	0	1,843	1,964		0	486	0	114	0	24,625
9/17	0	1,843	1,718	24,055	0	486	0	114	0	24,625
9/18	0	1,843	1,129	25,184	0	486	0	114	0	24,625
9/19 9/20	0	1,843	1,024	26,208	0	486 486	0	114	0	24,625
	0	1,843	1,394	27,602	0	486	0	114	0	24,625
9/21	0	1,843	1,064	28,666	0	486 486	0	114	0	24,625
9/22	0	1,843	881	29,547	0	486 486	0	114	0	24,625
9/23 Total	0	1,843 1,843	744	30,291 30,291	0	486 486	0	114 114	0	24,625 24,625

Note: A post-weir estimate for coho salmon from 9/13–9/23 was produced using DIDSON sonar.

Table 7.–Estimated Chignik River Chinook, coho, pink, and chum salmon, and Dolly Varden escapement, 1980–2016.

	Escapement ^a							
Year	Chinook ^b	Coho ^c	$Pink^d$	Chum ^d	Dolly Varden ^d			
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			
2015	2,054	60,209	4,269	54	16,346			
2016	1,843	30,291	486	114	24,625			
Averages								
1996–2015	3,436	18,668	8,172	135	18,805			
2006–2015	2,300	26,810	11,157	95	16,064			
2011–2015	2,076	38,781	6,764	80	22,128			

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- ^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 Coho escapements beginning in 2014 include a post-weir estimate from DIDSON based counts. Escapements prior to 2014 do not include a post-weir estimate.
- 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 pink and chum salmon or Dolly Varden.

Table 8.–Total Chignik River sockeye salmon escapement and escapement goals, based on post-season analysis, by run, 1980–2016.

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
2015	534,088	589,810	1,123,898
2016	418,290	354,884	773,174
Year	Early Run	Late Run	Total
SEG	350,000–450,000	275,000–400,000	625,000-850,000
Averages		,	
1996–2015	425,588	324,880	750,469
2006–2015	405,280	350,543	755,823
2011–2015	424,724	374,838	799,563

Table 9.–Estimated peak sockeye salmon escapement estimates for Black Lake tributaries, 1980–2016.

	Fan	Milk	Boulevard	Alec	Conglomerate	Broad	
Year	Creek	Creek	Creek	River	Creek	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
2015	23,100	ND	39,400	185,700	4,600	5,000	257,800
2016 ^a	34,000	ND	9,300	ND	5,000	5,000	54,400
Averages							
1996–2015	38,020	9,339	53,677	156,979	8,700	24,888	274,567
2006–2015	31,320	5,586	34,180	167,690	4,840	9,344	250,350
2011–2015	33,700	4,500	40,680	188,140	5,640	12,750	280,160

Note: No reliable escapement estimates (ND) were available for some years or streams within a year. All estimates were done via aerial surveys.

^a A reliable estimate for the Alec River was not achieved in 2016 because the majority of the river was muddy and turbid during the salmon season.

Table 10.–Estimated peak sockeye salmon escapement estimates for Chignik Lake and Black River tributaries, 1980–2016.

		Blac	ck River			Chign	ik Lake	
	Bearskin	West	Chiaktuak		Clark	Home	Hatchery	
Year	Creek	Fork	Creek	Total	River	Creek	Beach	Total
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
2015	2,600	24,800	16,150	43,550	14,120	1,260	47,000	62,380
2016	900	7,290	10,640	18,830	16,760	500	57,300	74,560
Averages								
1996–2015	3,056	13,353	15,540	30,256	25,319	5,546	52,733	77,394
2006–2015	2,455	10,065	19,455	32,176	31,942	4,046	64,667	94,188
2011–2015	1,390	10,010	18,170	29,973	37,364	2,372	75,400	115,136

Note: No reliable escapement estimates (ND) were available for some years or streams within a year. All estimates were done via aerial surveys.

Table 11.-Estimated peak pink salmon escapement in the Chignik Management Area, by district and year, 1980-2016.

			Distric	cts		
Year	Chignik Bay	Central	Eastern	Western	Perryville	Total
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	1,790	67,890	328,150	153,450	84,700	635,980
1985	ND	6,500	129,450	29,850	186,650	352,450
1986	ND	79,750	535,600	39,100	13,100	667,550
1987	ND	103,350	137,600	31,400	38,900	311,250
1988	1,640	139,800	578,620	194,000	160,700	1,074,760
1989	9,820	174,600	558,100	52,900	250,200	1,045,620
1990	1,850	72,100	496,800	33,300	63,400	667,450
1991	10,200	129,850	82,900	95,400	260,300	578,650
1992	11,600	117,900	907,325	35,435	92,225	1,164,485
1993	900	130,600	122,200	37,700	407,440	698,840
1994	23,000	136,000	620,000	92,300	127,300	998,600
1995	85,000	301,000	1,069,000	303,000	420,300	2,178,300
1996	15,000	118,000	572,700	144,000	238,800	1,088,500
1997	17,000	322,000	827,000	185,000	161,700	1,512,700
1998	7,050	115,200	762,700	101,500	177,000	1,163,450
1999	2,375	259,100	357,900	63,050	145,000	827,425
2000	4,800	85,050	557,950	41,600	48,420	737,820
2001	14,400	279,600	777,100	108,600	75,300	1,255,000
2002	10,500	109,100	603,650	73,600	32,120	828,970
2003	46,500	375,500	842,700	58,550	79,800	1,403,050
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
2011	32,348	223,500	504,000	86,650	139,750	986,248

Table 11.-Page 2 of 2.

	Districts								
Year	Chignik Bay	Central	Eastern	Western	Perryville	Total			
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			
2015	11,329	232,650	702,400	80,200	105,950	1,132,529			
2016	1,386	20,800	70,970	24,790	21,530	139,476			
Averages									
1996-2015	29,448	189,871	508,847	91,835	114,940	934,940			
2006-2015	28,403	140,348	376,098	70,896	94,823	717,518			
2011-2015	17,465	154,900	381,002	62,520	88,238	704,125			
Even-year aver	rages								
1996-2014	18,943	98,528	421,378	69,085	96,055	703,989			
2006-2014	24,956	60,185	222,976	47,162	54,982	421,257			
2010-2014	9,179	49,033	172,017	34,850	24,397	289,476			

Note: No reliable escapement estimates (ND) were available for some years or streams within a year. This table reflects the total peak escapement of 49 streams in the CMA that are monitored for in-season management, not just the 8 index streams used to compute the escapement index.

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

Table 12.–Estimated peak pink salmon combined escapement of index streams, and escapement objectives, 2006–2016.

Year	Total estimated peak escapement ^a
2006	163,800
2007	384,500
2008	260,800
2009	344,050
2010	98,400
2011	272,000
2012	111,000
2013	231,800
2014	87,240
2015	404,000
2016	68,100
Even-year SEG	170,000–280,000
Even-year average	
2006–2014	144,248

Calculated using peak aerial surveys from the 8 index streams established in Schaberg et al. 2015.

Table 13.–Estimated peak chum salmon escapement in the Chignik Management Area, by district and year, 1980–2016.

			District ^a			
$Year^b$	Chignik Bay	Central	Eastern	Western	Perryville	Total
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	23,750	138,900	9,200	35,500	218,159
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

Table 13.-Page 2 of 2.

			District ^a			
Year ^b	Chignik Bay	Central	Eastern	Western	Perryville	Total
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
2015	554	28,700	152,800	13,810	42,350	238,214
2016	514	12,500	62,890	9,400	32,300	117,604
Averages						
1996-2015	3,951	29,028	111,921	15,728	59,924	220,552
2006-2015	4,395	25,815	89,284	16,265	73,126	208,884
2011-2015	1,440	34,180	104,871	16,062	76,370	232,923

Note: This table reflects the total peak escapement of 49 streams in the CMA that are monitored for in-season management, not just the 6 index streams used to compute the escapement index.

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

Table 14.–Estimated peak chum salmon combined escapement of index streams, and escapement objectives, 2006–2016.

Year	Total estimated peak escapement ^a
2006	41,420
2007	132,200
2008	116,240
2009	108,300
2010	102,625
2011	119,000
2012	93,800
2013	109,900
2014	46,720
2015	123,400
2016	69,900
SEG	45,000–110,000
Average	
2006–2015	99,361

^a Calculated using peak aerial surveys from the 6 index streams established in Schaberg et al. 2015.

Table 15.—Total commercial salmon harvests (including home pack and the department's test fishery harvests) from the Chignik Management Area by species and year, 1980–2016.

	Permits making	_			Harv	vest		
Year	deliveries	Landings	Chinook	Sockeye	Coho	Pink	Chum	Total
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	98	1,681	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	3,153	2,962	2,405,151	32,312	871,871	154,965	3,467,261
2014	71	1,525	8,846	620,339	132,459	352,115	55,152	1,168,911
2015	72	2,276	9,204	1,552,495	82,054	1,978,211	101,017	3,722,981
2016	70	2,554	20,719	1,394,091	94,397	140,913	118,435	1,768,555
Averages								
1996–2015		2,648	4,016	1,403,584	90,939	521,568	146,664	2,491,231
2006–2015		2,357	4,998	1,387,753	90,054	1,093,647	193,901	2,770,353
2011–2015	71	2,497	6,257	1,775,022	71,387	849,014	150,350	2,852,029

Table 16.-Annual Chignik Management Area Chinook salmon harvest, 1980-2016.

	Test	fish	Commerc	ial catch	Home	pack	Tot	Total	
Year	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	3,136	55,638	271	6,157	3,408	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	
2015	15	160	9,105	71,722	84	1,045	9,204	72,927	
2016	0	0	20,684	155,088	35	474	20,719	155,562	
Averages									
1996–2015	4	66	3,908	48,956	104	1,761	4,016	50,783	
2006-2015	4	49	4,926	51,991	69	1,159	4,998	53,198	
2011-2015	5	47	6,172	60,842	79	1,329	6,256	62,218	

Note: No reliable escapement estimates (ND) were available for some years or streams within a year.

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

Table 17.—Chignik Management Area Chinook salmon harvest (including home pack and the department's test fishery catches), by district and year, 1980–2016.

		Ι	District			
Year	Chignik Bay	Central	Eastern	Western	Perryville	Total
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
2015	1,648	3,172	115	4,249	20	9,204
2016	693	15,865	413	2,446	1,302	20,719
Averages				·		· · · · · · · · · · · · · · · · · · ·
1996–2015	1,364	1,184	176	1,246	46	4,016
2006-2015	941	1,651	262	2,095	50	4,998
2011-2015	879	2,551	282	2,475	69	6,256

Table 18.–Chignik Management Area Chinook salmon harvest (including home pack and the department's test fishery catches), by district and day, 2016.

	Number of _		I	District			
Date	Permits	Chignik Bay	Central	Eastern	Western	Perryville	Total
6/4	16	9	16	a	Closed	Closed	25
6/5	42	66	12	a	Closed	Closed	78
6/6	28	16	a	a	Closed	Closed	16
6/7	44	31	46	0	Closed	Closed	77
6/8	0	Closed	Closed	Closed	Closed	Closed	0
6/9	0	Closed	Closed	Closed	Closed	Closed	0
6/10	49	39	43	0	Closed	Closed	82
6/11	55	32	180	0	Closed	Closed	212
6/12	45	24	77	14	Closed	Closed	115
6/13	40	25	90	17	Closed	Closed	132
6/14	31	38	8	0	Closed	Closed	46
6/15	56	13	80	a	Closed	Closed	93
6/16	49	12	29	60	a	Closed	101
6/17	55	26	73	76	a	Closed	175
6/18	52	6	157	0	Closed	Closed	163
6/19	49	4	69	36	Closed	Closed	109
6/20	33	10	22	a	Closed	Closed	32
6/21	0	Closed	Closed	Closed	Closed	Closed	0
$6/22^{b}$	1	0	Closed	Closed	Closed	Closed	0
6/23	0	Closed	Closed	Closed	Closed	Closed	0
6/24	59	20	245	51	Closed	Closed	316
6/25	50	5	79	56	Closed	Closed	140
6/26	58	18	396	a	Closed	Closed	414
6/27	0	Closed	Closed	Closed	Closed	Closed	0
6/28	53	19	177	0	Closed	Closed	196
6/29	45	1	87	0	181	Closed	269
6/30	54	24	249	a	150	Closed	423
7/1	0	Closed	Closed	Closed	Closed	Closed	0
7/2	45	18	277	0	Closed	Closed	295
7/3	48	16	62	a	Closed	Closed	78
7/4	49	9	118	0	Closed	Closed	127
7/5	55	11	123	0	Closed	Closed	134
7/6	0	Closed	Closed	Closed	Closed	Closed	0
7/7	0	Closed	Closed	Closed	Closed	Closed	0
7/8 ^b	1	0	Closed	Closed	Closed	Closed	0
7/9	59	17	513	Closed	162	205	897
7/10	50	4	22	Closed	44	39	109
7/11	51	9	1,083	Closed	96	a	1,188
7/12	53	16	301	Closed	102	53	472
7/13	30	10	52	Closed	0	0	53
7/14	a	Closed	3 <i>2</i>	Closed	a	a	0
7/15	a	Closed	a	Closed	a	a	0
7/16	40	0	271	Closed	28	10	309

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	Number of]	District			
Date	Permits	Chignik Bay	Central	Eastern	Western	Perryville	Total
7/17	48	6	258	Closed	394	1	659
7/18	54	1	693	Closed	257	42	993
7/19	0	Closed	Closed	Closed	Closed	Closed	0
7/20	0	Closed	Closed	Closed	Closed	Closed	0
7/21	0	Closed	Closed	Closed	Closed	Closed	0
7/22	58	5	2,612	Closed	281	603	3,501
7/23	43	6	1,098	Closed	5	70	1,179
7/24	48	34	144	Closed	95	139	412
7/25	48	15	303	Closed	446	97	861
7/26	47	7	480	Closed	85	24	596
7/27	0	Closed	Closed	Closed	Closed	Closed	0
7/28	0	Closed	Closed	Closed	Closed	Closed	0
7/29	0	Closed	Closed	Closed	Closed	Closed	0
7/30	0	Closed	Closed	Closed	Closed	Closed	0
7/31 ^b	1	1	Closed	Closed	Closed	Closed	1
8/1	0	Closed	Closed	Closed	Closed	Closed	0
8/2	0	Closed	Closed	Closed	Closed	Closed	0
8/3	56	4	889	Closed	35	Closed	928
8/4	46	2	538	Closed	Closed	Closed	540
8/5	48	24	1,400	Closed	Closed	Closed	1,424
8/6	36	4	419	Closed	32	Closed	455
8/7	44		466	Closed	a	Closed	466
8/8	40	18	426	Closed	a	Closed	444
8/9	36	7	170	Closed	a	Closed	177
8/10	37	11	223	Closed	a	Closed	234
8/11	34	2	50	Closed	a	Closed	52
8/12	34	2	64	Closed	a	Closed	66
8/13	0	Closed	Closed	Closed	Closed	Closed	0
8/14	29	0	387	Closed	Closed	Closed	387
8/15	28	0	55	Closed	Closed	Closed	55
8/16	23	2	57	Closed	Closed	Closed	59
8/17	10	1	a	Closed	Closed	Closed	1
8/18	16	0	a	Closed	Closed	Closed	0
8/19	18	1	58	Closed	Closed	Closed	59
8/20	18	0	8	Closed	Closed	Closed	8
8/21-8/31 ^a	_			_			
Season Total	70	693	15,865	413	2,446	1,302	20,719

^a Confidentiality requirements prevent the release of this information.

b ADF&G test fishery.

^c Season total includes information not provided by individual date due to confidentiality requirements.

Table 19.—Total harvest of sockeye salmon considered by regulation to be Chignik-bound in the Chignik, Cape Igvak, and Southeastern District Mainland commercial salmon fisheries, 1970–2016.

	Testf	ïsh	Commer	cial catch	Home	pack	Total CM	IA harvest	Cape	Igvak ^a	SE	DM ^b	Total Chignik-bound
Year	Number	Pounds	Number	Pounds	Number	Pounds ^c	Number	Pounds	Number	Pounds	Number	Pounds	Number Pounds
1970	ND	ND	1,325,734	9,210,127	ND	ND	1,325,734	9,210,127	ND	ND	ND	ND	1,325,734 9,210,127
1971	ND	ND	1,016,136	7,534,367	ND	ND	1,016,136	7,534,367	ND	ND	ND	ND	1,016,136 7,534,367
1972	ND	ND	378,218	2,863,742	ND	ND	378,218	2,863,742	ND	ND	ND	ND	378,218 2,863,742
1973	ND	ND	870,354	7,023,294	ND	ND	870,354	7,023,294	ND	ND	ND	ND	870,354 7,023,294
1974	ND	ND	662,905	4,756,653	ND	ND	662,905	4,756,653	ND	ND	ND	ND	662,905 4,756,653
1975	ND	ND	399,593	2,773,725	ND	ND	399,593	2,773,725	ND	ND	ND	ND	399,593 2,773,725
1976	ND	ND	1,163,728	8,562,989	ND	ND	1,163,728	8,562,989	ND	ND	ND	ND	1,163,728 8,562,989
1977	ND	ND	1,972,207	17,247,659	ND	ND	1,972,207	17,247,659	ND	ND	ND	ND	1,972,207 17,247,659
1978	ND	ND	1,576,283	12,451,982	ND	ND	1,576,283	12,451,982	225,078	1,583,809	ND	ND	1,801,361 14,035,791
1979	ND	ND	1,049,691	7,862,600	ND	ND	1,049,691	7,862,600	13,950	96,507	ND	ND	1,063,641 7,959,107
1980	ND	ND	859,966	5,795,098	ND	ND	859,966	5,795,098	32	147	63,724	442,601	923,722 6,237,846
1981	ND	ND	1,839,469	13,486,031	ND	ND	1,839,469	13,486,031	282,727	1,876,246	122,198	888,410	2,244,394 16,250,687
1982	ND	ND	1,521,686	11,340,439	ND	ND	1,521,686	11,340,439	166,756	1,162,053	62,789	463,729	1,751,231 12,966,221
1983	ND	ND	1,824,175	11,926,829	ND	ND	1,824,175	11,926,829	318,048	1,926,770	227,392	1,631,668	2,369,615 15,485,267
1984	ND	ND	2,660,619	18,536,287	ND	ND	2,660,619	18,536,287	449,372	2,820,646	423,292	3,053,430	3,533,283 24,410,363
1985	4,875	30,480	916,627	5,415,817	ND	ND	921,502	5,446,297	123,627	637,207	51,421	337,919	1,096,550 6,421,423
1986	ND	ND	1,645,834	11,254,860	ND	ND	1,645,834	11,254,860	188,017	1,153,092	118,006	841,446	1,951,857 13,249,398
1987	679	4,637	1,898,159	13,997,077	ND	ND	1,898,838	14,001,714	321,506	2,146,841	146,886	1,121,094	2,367,230 17,269,649
1988	3,425	24,287	792,416	5,690,165	ND	ND	795,841	5,714,452	10,520	63,641	19,320	140,708	825,681 5,918,801
1989	6,433	46,532	1,152,854	7,922,748	ND	ND	1,159,287	7,969,280	0	0	4,485	32,262	1,163,772 8,001,542
1990	5,522	33,915	2,088,128	13,775,854	ND	ND	2,093,650	13,809,769	107,706	665,309	117,065	783,670	2,318,421 15,258,748
1991	8,106	54,892	1,887,559	12,889,560	ND	ND	1,895,665	12,944,452	324,195	1,886,494	152,714	1,037,726	2,372,574 15,868,672
1992	12,423	80,326	1,265,026	8,292,576	ND	ND	1,277,449	8,372,902	150,434	896,108	93,845	608,765	1,521,728 9,877,775
1993	5,444	34,231	1,691,907	10,228,401	ND	ND	1,697,351	10,262,632	300,055	1,639,082	128,608	847,879	2,126,014 12,749,593
1994	9,139	54,433	1,609,834	10,091,402	ND	ND	1,618,973	10,145,835	250,230	1,423,150	142,350	934,493	2,011,553 12,503,478
1995	9,023	57,674	1,715,022	11,464,647	0	0	1,724,045	11,522,321	169,530	899,572	89,086	547,563	1,982,661 12,969,456
1996	4,317	36,511	1,954,036	14,866,234	40	304	1,958,393	14,903,049	308,327	1,954,430	127,201	884,305	2,393,921 17,741,784
1997	11,299	77,874	758,384	4,782,715	664	4,187	770,347	4,864,776	0	0	0	0	770,347 4,864,776
1998	12,374	66,040	1,041,798	6,372,010	267	1,633	1,054,439	6,439,683	8,813	39,133	66,893	408,902	1,130,145 6,887,718
1999	5,994	42,216	3,110,507	20,527,837	26	172	3,116,527	20,570,225	456,039	2,469,213	173,621	1,086,186	3,746,187 24,125,624
2000	11,604	88,790	1,763,621	13,577,434	0	0	1,775,225	13,666,224	271,344	1,703,875	103,419	737,462	2,149,988 16,107,561

Table 19.-Page 2 of 2.

	Testf	ïsh	Commerc	cial patch	Home	pack	Total CM	A parvest	Cape	Igvak ^a	SE	DM ^b	Total Chig	nik-Bound
Year	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	2,399,594	17,070,111	587	3,928	2,405,151	17,055,904	354,179	2,326,956	169,029	1,109,867	2,928,359	20,546,336
2014	3,454	20,637	616,879	4,120,133	6	40	620,339	4,140,810	0	0	0	0	620,339	4,140,810
2015	12,107	59,336	1,540,310	8,469,717	78	459	1,552,495	8,529,512	5,936	31,568	98,473	559,063	1,656,904	9,120,143
2016	8,073	45,419	1,385,673	8,208,491	345	1,939	1,394,091	8,255,849	298,470	1,674,233	94,790	559,190	1,787,351	10,489,272
Averages														
1996-2015	7,082	46,576	1,395,943	9,529,397	559	3,643	1,403,584	9,576,936	176,959	1,057,543	81,348	540,097	1,661,890	11,159,471
2006-2015	5,437	34,161	1,382,003	9,324,657	313	2,006	1,387,753	9,355,463	158,607	990,692	74,582	490,370	1,620,942	10,841,885
2011-2015	5,835	35,747	1,768,885	11,949,716	301	1,994	1,775,022	11,976,735	235,910	1,493,576	110,044	726,307	2,120,976	14,207,340

^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 20.—Total annual Chignik Management Area sockeye salmon harvest (including home pack and the department's test fishery catches), by district, 1980–2016.

		D	istrict			
Year	Chignik Bay	Central	Eastern	Western	Perryville	Total
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	1,607,269	584,848	150,560	56,248	6,226	2,405,151
2014	208,056	100,375	86	302,614	9,208	620,339
2015	702,707	364,934	5,542	433,221	46,091	1,552,495
2016	741,932	328,749	38,629	204,058	80,723	1,394,091
Averages	•			•	·	<u> </u>
1996–2015	967,138	300,185	44,036	83,984	8,241	1,403,584
2006-2015	880,642	313,070	49,964	134,246	9,832	1,387,753
2011-2015	1,058,095	448,538	66,374	185,121	16,895	1,775,022

Table 21.—Chignik Management Area sockeye salmon harvest (including home pack and the department's test fishery catches), by district and day, 2016.

	Number of]	District			
Date	permits	Chignik Bay	Central	Eastern	Western	Perryville	Total
6/4	15	1,011	958	a	Closed	Closed	1,969
6/5	41	6,082	2,063	a	Closed	Closed	8,145
6/6	27	6,004	a	0	Closed	Closed	6,004
6/7	43	6,989	3,545	0	Closed	Closed	10,534
6/8	0	Closed	Closed	Closed	Closed	Closed	0
6/9	0	Closed	Closed	Closed	Closed	Closed	0
6/10	49	23,361	6,406	0	Closed	Closed	29,767
6/11	53	17,401	9,146	a	Closed	Closed	26,547
6/12	44	12,527	6,610	2,236	Closed	Closed	21,373
6/13	38	15,042	5,467	5,272	Closed	Closed	25,781
6/14	30	12,184	3,653	0	Closed	Closed	15,837
6/15	54	28,987	15,745	a	Closed	Closed	44,732
6/16	47	22,527	10,267	4,089	a	Closed	36,883
6/17	54	21,570	17,686	9,595	0	Closed	48,851
6/18	51	20,432	20,004	0	Closed	Closed	40,436
6/19	48	25,944	11,426	4,786	Closed	Closed	42,156
6/20	32	14,627	1,933	a	Closed	Closed	16,560
6/21	0	Closed	Closed	Closed	Closed	Closed	0
6/22 ^b	1	5,218	Closed	Closed	Closed	Closed	5,218
6/23	0	Closed	Closed	Closed	Closed	Closed	0
6/24	58	38,426	9,029	4,475	Closed	Closed	51,930
6/25	49	30,788	4,924	509	Closed	Closed	36,221
6/26	57	25,069	8,348	a	Closed	Closed	33,417
6/27	0	Closed	Closed	Closed	Closed	Closed	0
6/28	52	23,535	7,406	0	Closed	Closed	30,941
6/29	43	17,567	4,095	0	7,499	Closed	29,161
6/30	53	18,787	7,535	a	10,313	Closed	36,635
7/1	0	Closed	Closed	Closed	Closed	Closed	0
7/2	44	11,887	12,714	0	Closed	Closed	24,601
7/3	47	24,120	3,504	a	Closed	Closed	27,624
7/4	49	21,144	7,584	0	Closed	Closed	28,728
7/5	55	16,094	6,882	0	Closed	Closed	22,976
7/6	0	Closed	Closed	Closed	Closed	Closed	0
7/7	0	Closed	Closed	Closed	Closed	Closed	0
7/8 ^b	1	1,869	Closed	Closed	Closed	Closed	1,869
7/9	58	27,234	9,075	Closed	15,319	8,460	60,088
7/10	50	15,303	2,116	Closed	10,907	4,801	33,127
7/11	51	12,969	6,693	Closed	14,072	a	33,734
7/12	53	14,174	5,501	Closed	25,273	8,086	53,034
7/13	30	5,238	4,366	Closed	a	0	9,604
7/14	a	Closed	a	Closed	a	a	a
7/15	a	Closed	a	Closed	a	a	a
7/16	40	7,420	4,115	Closed	13,112	12,428	37,075

Table 21.–Page 2 of 2.

	Number of		Г	District			
Date	Permits	Chignik Bay	Central	Eastern	Western	Perryville	Total
7/17	48	15,224	7,150	Closed	36,431	2,608	61,413
7/18	54	11,587	5,367	Closed	20,557	2,362	39,873
7/19	0	Closed	Closed	Closed	Closed	Closed	0
7/20	0	Closed	Closed	Closed	Closed	Closed	0
7/21	0	Closed	Closed	Closed	Closed	Closed	0
7/22	58	16,747	10,095	Closed	10,329	10,519	47,690
7/23	43	13,939	1,189	Closed	321	5,991	21,440
7/24	48	13,222	4,210	Closed	3,499	9,638	30,569
7/25	48	9,926	5,951	Closed	9,367	4,319	29,563
7/26	47	5,431	8,282	Closed	24,698	7,886	46,297
7/27	0	Closed	Closed	Closed	Closed	Closed	0
7/28	0	Closed	Closed	Closed	Closed	Closed	0
7/29	0	Closed	Closed	Closed	Closed	Closed	0
7/30	0	Closed	Closed	Closed	Closed	Closed	0
7/31 ^b	1	988	Closed	Closed	Closed	Closed	988
8/1	0	Closed	Closed	Closed	Closed	Closed	0
8/2	0	Closed	Closed	Closed	Closed	Closed	0
8/3	56	9,291	14,015	Closed	351	Closed	23,657
8/4	46	8,356	4,881	Closed	199	Closed	13,436
8/5	48	4,953	6,820	Closed	Closed	Closed	11,773
8/6	36	3,963	2,497	Closed	418	Closed	6,878
8/7	44	3,852	7,414	Closed	a	Closed	11,266
8/8	40	3,448	5,212	Closed	a	Closed	8,660
8/9	36	4,755	4,494	Closed	a	Closed	9,249
8/10	37	3,544	6,624	Closed	a	Closed	10,168
8/11	34	3,974	5,052	Closed	a	Closed	9,026
8/12	34	3,193	3,918	Closed	a	Closed	7,111
8/13	0	Closed	Closed	Closed	Closed	Closed	0
8/14	29	1,854	2,910	Closed	Closed	Closed	4,764
8/15	28	3,790	279	Closed	Closed	Closed	4,069
8/16	23	3,035	1,063	Closed	Closed	Closed	4,098
8/17	10	1,653	a	Closed	Closed	Closed	1,653
8/18	16	2,712	a	Closed	Closed	Closed	2,712
8/19	18	1,144	909	Closed	Closed	Closed	2,053
8/20	18	4,118	256	Closed	Closed	Closed	4,374
8/21-8/31 ^a		_	_	_	_		_
Season Total ^c	70	741,932	328,749	38,629	204,058	80,723	1,394,091

^a Confidentiality requirements prevent the release of this information.

b ADF&G test fishery.

^c Season total includes information not provided by individual date due to confidentiality requirements.

Table 22.—Harvest of sockeye salmon considered by regulation to be Chignik-bound in the Chignik, Cape Igvak, and Southeastern District Mainland (SEDM) commercial salmon fisheries from June 1 through July 25, 1978–2016.

	Chigni	k ^a	Cape Ig	gvak ^a	SEDN	1 ^a	
Year	Catch	Percent	Catch ^b	Percent	Catch ^c	Percent	Total
1978	1,454,389	86.6	225,078	13.4	ND	ND	1,679,467
1979	794,504	98.3	13,950	1.7	ND	ND	808,454
1980	670,001	91.3	32	0.0	63,724	8.7	733,757
1981	1,606,300	79.9	282,727	14.1	122,198	6.1	2,011,225
1982	1,250,768	84.5	166,756	11.3	62,789	4.2	1,480,313
1983	1,450,832	72.7	318,048	15.9	227,392	11.4	1,996,272
1984	2,474,405	73.9	449,372	13.4	423,292	12.6	3,347,069
1985	690,698	79.8	123,627	14.3	51,421	5.9	865,746
1986	1,456,729	82.6	188,017	10.7	118,006	6.7	1,762,752
1987	1,659,236	78.0	321,506	15.1	146,886	6.9	2,127,628
1988	675,487	95.8	10,520	1.5	19,320	2.7	705,327
1989	496,044	99.1	0	0.0	4,485	0.9	500,529
1990	1,205,575	84.3	107,706	7.5	117,065	8.2	1,430,346
1991 ^d	1,962,583	80.5	324,195	13.3	152,714	6.3	2,439,492
1992	1,054,309	81.2	150,434	11.6	93,845	7.2	1,298,588
1993	1,495,098	77.7	300,055	15.6	128,608	6.7	1,923,761
1994 ^e	1,632,435	80.6	250,230	12.4	142,350	7.0	2,025,015
1995	1,024,785	79.8	169,530	13.2	89,086	6.9	1,283,401
1996	1,710,249	79.7	308,327	14.4	127,201	5.9	2,145,777
1997	443,892	100.0	0	0.0	0	0.0	443,892
1998 ^f	786,466	91.2	8,813	1.0	66,893	7.8	862,172
1999	2,326,811	78.7	456,039	15.4	173,621	5.9	2,956,471
2000	1,509,652	80.1	271,344	14.4	103,419	5.5	1,884,415
2001 ^g	1,134,991	79.4	215,214	15.1	79,037	5.5	1,429,242
2002	849,980	81.0	136,488	13.0	63,026	6.0	1,049,494
2003	855,179	81.7	121,887	11.6	70,044	6.7	1,047,110
2004	681,120	75.9	160,665	17.9	55,123	6.1	896,908
2005	1,098,718	70.8	274,328	17.7	177,906	11.5	1,550,952
2006	741,887	87.7	41,834	4.9	62,010	7.3	845,731
2007	601,213	92.0	52,527	8.0	0	0.0	653,740
2008	445,199	100.0	0	0.0	0	0.0	445,199
2009	871,890	83.3	126,968	12.1	48,322	5.5	1,047,180
2010	1,125,135	80.6	185,193	13.3	85,267	7.6	1,395,595

Table 22.-Page 2 of 2.

	Chignik	ζ ^a	Cape Ig	vak ^a	SEDM	[a	
Year	Catch	Percent	Catch ^b	Percent	Catch ^c	Percent	Total
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
2015	1,014,550	90.7	5,936	0.5	98,473	9.7	1,118,959
2016	1,167,326	74.8	298,470	19.1	94,790	8.1	1,560,586
Averagesh							
1996-2015	1,263,081	81.8	208,187	12.0	103,881	7.1	1,569,038
2006-2015	1,314,902	84.0	198,259	10.5	106,546	7.5	1,606,388
2011–2015	1,794,772	82.0	294,887	11.4	137,556	8.0	2,227,214

^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.

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 (excluding Chignik catch) do not include years in which the Cape Igvak and SEDM remained closed.

Table 23.–Chignik sockeye salmon escapement, total harvest considered Chignik-bound, and total run, 1970–2016.

		Early run			Late run			Total run ^{a,b,c}	
Year	Esc.	Harvest	Run	Esc.	Harvest	Run	Esc.	Harvest	Run
1970	536,257	1,566,065	2,102,322	119,952	262,244	382,196	656,209	1,828,309	2,484,518
1971	671,668	555,832	1,227,500	232,501	709,190	941,691	904,169	1,265,022	2,169,191
1972	326,320	43,220	369,540	231,270	386,615	617,885	557,590	429,835	987,425
1973	533,047	610,488	1,143,535	249,144	355,195	604,339	782,191	965,683	1,747,874
1974	351,701	204,722	556,423	326,245	648,283	974,528	677,946	853,005	1,530,951
1975	308,914	7,873	316,787	268,734	417,560	686,294	577,648	425,433	1,003,081
1976	551,254	599,341	1,150,595	279,509	727,043	1,006,552	830,763	1,326,384	2,157,147
1977	482,247	534,198	1,016,445	251,753	1,602,363	1,854,116	734,000	2,136,561	2,870,561
1978	458,660	940,188	1,398,848	223,887	885,173	1,109,060	682,547	1,825,361	2,507,908
1979	385,694	186,537	572,231	352,122	933,788	1,285,910	737,816	1,120,325	1,858,141
1980	311,332	73,742	385,074	352,729	849,980	1,202,709	664,061	923,722	1,587,783
1981	438,540	800,364	1,238,904	392,909	1,444,030	1,836,939	831,449	2,244,394	3,075,843
1982	616,117	1,324,396	1,940,513	221,601	426,835	648,436	837,718	1,751,231	2,588,949
1983	426,177	1,128,246	1,554,423	409,458	1,241,369	1,650,827	835,635	2,369,615	3,205,250
1984	597,712	2,919,984	3,517,696	267,862	613,299	881,161	865,574	3,533,283	4,398,857
1985	376,576	654,431	1,031,007	369,262	442,119	811,381	745,838	1,096,550	1,842,388
1986	566,088	1,364,295	1,930,383	207,231	587,562	794,793	773,319	1,951,857	2,725,176
1987	589,291	1,947,088	2,536,379	214,452	420,142	634,594	803,743	2,367,230	3,170,973
1988	420,577	271,377	691,954	255,180	554,304	809,484	675,757	825,681	1,501,438
1989	384,004	234,237	618,241	557,171	929,535	1,486,706	941,175	1,163,772	2,104,947
1990	434,543	582,520	1,017,063	335,867	1,735,901	2,071,768	770,410	2,318,421	3,088,831
1991	657,511	1,711,549	2,384,420	382,587	661,025	1,028,252	1,040,098	2,372,574	3,412,672
1992	360,681	744,417	1,105,098	405,922	777,311	1,183,233	766,603	1,521,728	2,288,331
1993	364,261	926,892	1,291,153	333,116	1,199,122	1,532,238	697,377	2,126,014	2,823,391
1994	769,462	1,595,176	2,364,638	197,447	416,377	613,824	966,909	2,011,553	2,978,462
1995	366,163	666,799	1,032,962	373,757	1,315,862	1,689,619	739,920	1,982,661	2,722,581
1996	464,461	1,688,264	2,152,725	284,676	705,657	990,333	749,137	2,393,921	3,143,058
1997	396,667	234,824	631,491	378,951	535,523	914,474	775,618	770,347	1,545,965
1998	410,659	313,158	723,817	290,469	816,987	1,107,456	701,128	1,130,145	1,831,273
1999	457,429	2,022,272	2,479,701	258,537	1,723,915	1,982,452	715,966	3,746,187	4,462,153
2000	536,141	1,574,391	2,110,532	269,084	575,597	844,681	805,225	2,149,988	2,955,213
2001	744,013	563,539	1,307,552	392,905	1,214,403	1,607,308	1,136,918	1,777,942	2,914,860
2002	380,701	684,728	1,065,428	343,616	565,339	908,955	724,317	1,250,067	1,974,383
2003	350,004	640,084	990,088	334,119	652,144	986,263	684,123	1,292,228	1,976,351
2004	363,800	727,975	1,091,775	214,459	192,465	406,924	578,259	920,440	1,498,700
2005	355,091	1,109,881	1,464,972	225,366	487,242	712,608	580,457	1,597,123	2,177,580
2006	366,497	436,028	802,525	368,996	570,525	939,521	735,493	1,006,553	1,742,046
2007	361,091	267,805	628,896	293,883	619,269	913,152	654,974	887,074	1,542,048
2008	377,579	253,490	631,069	328,479	433,780	762,259	706,058	687,270	1,393,328
2009	391,476	520,630	912,106	328,586	852,765	1,181,351	720,062	1,373,395	2,093,457
2010	432,535	833,713	1,266,248	311,291	816,532	1,127,823	743,826	1,650,245	2,394,071

Table 23.-Page 2 of 2.

		Early Run			Late Run		T	otal Run a,b,c	
Year	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
2015	534,088	627,827	1,161,915	589,810	1,029,077	1,618,887	1,123,898	1,656,904	2,780,802
2016	418,290	968,018	1,386,308	354,884	819,333	1,174,217	773,174	1,787,351	2,560,525
Averages									
1996-2015	425,588	922,855	1,348,443	324,880	738,682	1,063,562	750,469	1,661,536	2,412,005
2006-2015	405,280	889,797	1,295,077	350,543	730,436	1,080,979	755,823	1,620,233	2,376,056
2011-2015	424,724	1,317,262	1,741,986	374,838	802,297	1,177,136	799,563	2,119,559	2,919,122

^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 Beginning 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 24.—Chignik sockeye salmon forecasts and actual runs, by run and year, 1994–2016, in millions of fish.

_		Early rur	1		Late run			Total run		
Year	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	
2015	1.32	1.16	-0.16	1.22	1.62	0.40	2.54	2.78	0.24	
2016	1.80	1.39	-0.41	1.11	1.17	0.06	2.91	2.56	-0.35	
Averages										
2006–2015	1.25	1.28	0.03	0.89	1.10	0.21	2.14	2.38	0.24	
2011–2015	1.45	1.74	0.29	1.08	1.18	0.10	2.53	2.92	0.39	

Table 25.-Chignik Management Area coho salmon harvest, by year, 1980-2016.

1980	_	Test f	ish	Commerc	cial catch	Home	pack	То	tal
1980	Year	Number	Pounds	Number	Pounds	Number	Pounds ^a	Number	Pounds
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 ND ND 10,128 949,965 1985 0 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 ND ND 116,633 867,195 ND ND 116,633 867,195 ND ND 150,414 1,189,803 ND ND ND 150,414 1,189,803 ND ND ND 150,414 1,189,803 ND ND ND 150,414 1,189,803 ND ND ND 150,414 1,189,803 ND ND ND 150,414 1,189,803 ND ND ND 150,414 1,189,803 ND ND ND 150,414 1,189,803 ND ND ND 168,233 559,140 ND ND 168,233 559,140 ND ND 168,233 559,140 ND ND 168,233 559,140 ND ND 166,625 1,182,957 1999 0 0 0 130,131 933,745 ND ND 130,131 933,745 ND ND 130,131 933,745 ND ND ND 130,131 933,745 ND ND ND 130,131 933,745 ND ND ND 130,131 933,745 ND ND ND 130,433 2,362,691 1993 356 2,024 229,103 1,459,220 ND ND ND 229,459 1,461,244 1994 103 506 237,101 1,996,320 ND ND 229,459 1,461,244 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 0 90,908 756,509 0 0 0 90,908 756,509 0 0 0 90,908 756,509 0 0 0 123,222 943,536 0 0 123,222 943,536 0 0 123,222 943,536 0 0 123,222 943,536 0 0 123,222 943,536 0 0 123,222 943,536 0 0 123,222 943,536 0 0 123,222 943,536 0 0 123,222 943,536 0 0 123,222 943,536 0 0 123,222 943,536 0 0 123,222 943,536 0 0 123,222 943,536 0 0 123,222 943,536 0 0 123,222 943,536 0 0 123,222 943,536 0 0 123,222 943,536 0 0 123,222 123,366 13,386 857,995 0 0 133,448 1,012,153 754 113,448 1		ND	ND	119,573	771,392	ND	ND	119,573	771,392
1983	1981	ND	ND	78,805	602,603	ND	ND	78,805	602,603
1984 ND	1982	ND	ND	300,273	2,373,268	ND	ND	300,273	2,373,268
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 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 130,131 933,745 1990 0 0 130,131 933,745 ND ND ND 130,131 933,745 1991 42 253 165,583 1,182,704 ND ND ND 130,134 2,362,681 1991 42 253 165,583 1,182,704 ND ND ND 130,433 2,362,691 1993 356 2,024 229,103 1,459,220 ND ND 237,20	1983	ND	ND	61,927	488,203	ND	ND	61,927	488,203
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 ND 370,420 2,889,427 1989 0 0 68,233 559,140 ND ND MD 68,233 559,140 1990 0 0 130,131 933,745 ND ND ND 165,625 1,182,957 1991 42 253 165,583 1,182,704 ND ND ND 150,625 1,482,951 1993 356 2,024 229,103 1,459,220 ND ND 310,943 2,362,669 1994 103 506 237,101 1,996,320 ND ND 237,204 1,996,826 1995 0 0 193,226 1,485,947 20 154 1,9	1984	ND	ND	110,128	949,965	ND	ND	110,128	949,965
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 ND 362,33 559,140 1990 0 0 130,131 933,745 ND ND 130,131 933,745 1991 42 253 165,583 1,182,704 ND ND 130,131 933,745 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 223,259 1,461,244 1995 0 0 193,226 1,485,947 20 154 193,246 1,486,101	1985	0	0	191,162	1,709,637	ND	ND	191,162	1,709,637
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 ND 165,625 1,829,377 1991 42 253 165,583 1,182,704 ND ND 165,625 1,182,937 1992 1 8 310,942 2,362,663 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 DD 229,459 1,461,244 1994 103 506 237,101 1,996,320 ND ND DD 229,459 1,461,244 1995 0 0 193,226 1,485,947 20 154 193,246	1986	ND	ND	116,633	867,195	ND	ND	116,633	867,195
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 ND 310,943 2,362,681 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 0 123,222 943,536 0 0 123,222 943,536 20	1987	0	0	150,414	1,189,803	ND	ND	150,414	1,189,803
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 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 0 90,908 756,509 0 0 90,908 756,509 0 0 90,908 756,509 0 0 90,909 756,509 0 0 9	1988	0	0	370,420	2,889,427	ND	ND	370,420	2,889,427
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 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 0 0,90,98 756,509 0 0 90,908 756,509 1998 0 0 129,512 1,045,823 27 218 129,539 1,046,041 1999 0 0 8,410 617,320 200 0 123,222 943,536	1989	0	0	68,233	559,140	ND	ND	68,233	559,140
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 2001 0 123,222 943,536 0 0 123,222 943,536 2001 0	1990	0	0	130,131	933,745	ND	ND	130,131	933,745
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	1991	42	253	165,583	1,182,704	ND	ND	165,625	1,182,957
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 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 </td <td>1992</td> <td>1</td> <td>8</td> <td>310,942</td> <td>2,362,683</td> <td>ND</td> <td>ND</td> <td>310,943</td> <td>2,362,691</td>	1992	1	8	310,942	2,362,683	ND	ND	310,943	2,362,691
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	1993	356	2,024	229,103	1,459,220	ND	ND	229,459	1,461,244
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 <	1994	103	506	237,101	1,996,320	ND	ND	237,204	1,996,826
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 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 0 161,536 <td>1995</td> <td>0</td> <td>0</td> <td>280,605</td> <td>2,062,086</td> <td>913</td> <td>6,709</td> <td>281,518</td> <td>2,068,795</td>	1995	0	0	280,605	2,062,086	913	6,709	281,518	2,068,795
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 0 161	1996	0	0	193,226	1,485,947	20	154	193,246	1,486,101
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 </td <td>1997</td> <td>0</td> <td>0</td> <td>90,908</td> <td>756,509</td> <td>0</td> <td>0</td> <td>90,908</td> <td>756,509</td>	1997	0	0	90,908	756,509	0	0	90,908	756,509
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 0 159,198 </td <td>1998</td> <td>0</td> <td>0</td> <td>129,512</td> <td>1,045,823</td> <td>27</td> <td>218</td> <td>129,539</td> <td>1,046,041</td>	1998	0	0	129,512	1,045,823	27	218	129,539	1,046,041
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 76,776 519,	1999	0	0	89,410	617,320	200	1,381	89,610	618,701
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 <td>2000</td> <td>0</td> <td>0</td> <td>123,222</td> <td>943,536</td> <td>0</td> <td>0</td> <td>123,222</td> <td>943,536</td>	2000	0	0	123,222	943,536	0	0	123,222	943,536
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 2013 0 0 33,316	2001	0	0	131,441	1,012,153	7	54	131,448	1,012,207
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 32,284 <	2002	0	0	49,208	360,781	164	1,202	49,372	361,983
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 32,284 226,235 28 277 32,312 226,512 2014 0 0 13	2003	44	287		857,097	74	611		857,995
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 32,284 226,235 28 277 32,312 226,512 2014 0 0 132,459 1,091,310 0 0 132,459 1,091,310 2015 0 0	2004	0	0	37	283	0		37	283
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 32,284 226,235 28 277 32,312 226,512 2014 0 0 132,459 1,091,310 0 0 132,459 1,091,310 2015 0 0 82,049 523,519 5 31 82,054 523,550 2016 0 0 <t< td=""><td>2005</td><td>0</td><td>0</td><td>6,951</td><td>46,970</td><td>5</td><td>30</td><td>6,956</td><td>47,000</td></t<>	2005	0	0	6,951	46,970	5	30	6,956	47,000
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 32,284 226,235 28 277 32,312 226,512 2014 0 0 132,459 1,091,310 0 0 132,459 1,091,310 2015 0 0 82,049 523,519 5 31 82,054 523,550 2016 0 0 94,397 658,376 0 0 94,397 658,376 Averages 1996	2006	0	0	39,046	290,720		1,312	39,221	292,032
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 32,284 226,235 28 277 32,312 226,512 2014 0 0 132,459 1,091,310 0 0 132,459 1,091,310 2015 0 0 82,049 523,519 5 31 82,054 523,550 2016 0 0 94,397 658,376 0 0 94,397 658,376 Averages 1996-2015 2 14 90,898 685,384 39 292 90,939 685,690 2006-2015 0 <td>2007</td> <td>0</td> <td>0</td> <td></td> <td>543,761</td> <td>56</td> <td>416</td> <td></td> <td>544,177</td>	2007	0	0		543,761	56	416		544,177
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 32,284 226,235 28 277 32,312 226,512 2014 0 0 132,459 1,091,310 0 0 132,459 1,091,310 2015 0 0 82,049 523,519 5 31 82,054 523,550 2016 0 0 94,397 658,376 0 0 94,397 658,376 Averages 1996–2015 2 14 90,898 685,384 39 292 90,939 685,690 2006–2015 0 0 90,026 658,127 28 218 90,054 658,345	2008	0	0	161,536	1,290,277	0	0	,	1,290,277
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 32,284 226,235 28 277 32,312 226,512 2014 0 0 132,459 1,091,310 0 0 132,459 1,091,310 2015 0 0 82,049 523,519 5 31 82,054 523,550 2016 0 0 94,397 658,376 0 0 94,397 658,376 Averages 1996–2015 2 14 90,898 685,384 39 292 90,939 685,690 2006–2015 0 0 90,026 658,127 28 218 90,054 658,345	2009	0	0	110,373		0	0	110,373	732,346
2012 0 0 33,316 225,799 0 0 33,316 225,799 2013 0 0 32,284 226,235 28 277 32,312 226,512 2014 0 0 132,459 1,091,310 0 0 132,459 1,091,310 2015 0 0 82,049 523,519 5 31 82,054 523,550 2016 0 0 94,397 658,376 0 0 94,397 658,376 Averages 1996–2015 2 14 90,898 685,384 39 292 90,939 685,690 2006–2015 0 0 90,026 658,127 28 218 90,054 658,345	2010	0	0	159,198	1,137,878	0	0	159,198	1,137,878
2013 0 0 32,284 226,235 28 277 32,312 226,512 2014 0 0 132,459 1,091,310 0 0 132,459 1,091,310 2015 0 0 82,049 523,519 5 31 82,054 523,550 2016 0 0 94,397 658,376 0 0 94,397 658,376 Averages 1996-2015 2 14 90,898 685,384 39 292 90,939 685,690 2006-2015 0 0 90,026 658,127 28 218 90,054 658,345		0	0			16	147		519,569
2014 0 0 132,459 1,091,310 0 0 132,459 1,091,310 2015 0 0 82,049 523,519 5 31 82,054 523,550 2016 0 0 94,397 658,376 0 0 94,397 658,376 Averages 1996–2015 2 14 90,898 685,384 39 292 90,939 685,690 2006–2015 0 0 90,026 658,127 28 218 90,054 658,345	2012	0	0	33,316	225,799	0	0	33,316	225,799
2015 0 0 82,049 523,519 5 31 82,054 523,550 2016 0 0 94,397 658,376 0 0 94,397 658,376 Averages 1996–2015 2 14 90,898 685,384 39 292 90,939 685,690 2006–2015 0 0 90,026 658,127 28 218 90,054 658,345		0	0			28	277	32,312	226,512
2016 0 0 94,397 658,376 0 0 94,397 658,376 Averages 1996–2015 2 14 90,898 685,384 39 292 90,939 685,690 2006–2015 0 0 90,026 658,127 28 218 90,054 658,345		0	0	132,459		0			1,091,310
Averages 1996-2015 2 14 90,898 685,384 39 292 90,939 685,690 2006-2015 0 0 90,026 658,127 28 218 90,054 658,345	2015	0	0	82,049	523,519	5	31	82,054	523,550
1996-2015 2 14 90,898 685,384 39 292 90,939 685,690 2006-2015 0 90,026 658,127 28 218 90,054 658,345	2016	0	0	94,397	658,376	0	0	94,397	658,376
2006–2015 0 0 90,026 658,127 28 218 90,054 658,345	_								
		2							685,690
2011–2015 0 0 71,377 517,257 10 91 71,387 517,348					658,127	28		90,054	658,345
Note: No reliable estimates (ND) were available for some years						10	91	71,387	517,348

^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 26.–Chignik Management Area coho salmon harvest (including home pack and the department's test fishery catches), by district and year, 1980–2016.

		Γ	District				
Year	Chignik Bay	Central	Eastern	Western	Perryville	Total	
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	8,238	521	16,770	2,637	32,312	
2014	6,550	17,584	653	98,345	9,327	132,459	
2015	712	27,257	454	48,950	4,681	82,054	
2016	4,604	41,515	55	26,940	21,283	94,397	
Averages	•			*	,		
1996–2015	15,245	17,737	1,026	52,089	4,842	90,939	
2006-2015	11,204	13,457	949	59,656	4,789	90,054	
2011–2015	3,951	14,132	404	47,321	5,579	71,387	

Table 27.—Chignik Management Area coho salmon harvest (including home pack and the department's test fishery catches), by district and day, 2016.

			District	Ι		Number of	
Tota	Perryville	Western	Eastern	Central	Chignik Bay	permits	Date
	Closed	Closed	a	0	0	15	6/4
	Closed	Closed	a	0	0	41	6/5
	Closed	Closed	0	a	0	27	6/6
	Closed	Closed	0	0	0	43	6/7
	Closed	Closed	Closed	Closed	Closed	0	6/8
	Closed	Closed	Closed	Closed	Closed	0	6/9
	Closed	Closed	0	0	0	49	6/10
	Closed	Closed	a	0	0	53	6/11
	Closed	Closed	0	0	0	44	6/12
13	Closed	Closed	0	135	0	38	6/13
	Closed	Closed	0	0	0	30	6/14
	Closed	Closed	a	0	0	54	6/15
	Closed	a	0	2	0	47	6/16
	Closed	0	0	4	0	54	6/17
	Closed	Closed	0	7	0	51	6/18
1	Closed	Closed	0	12	0	48	6/19
	Closed	Closed	a	0	0	32	6/20
	Closed	Closed	Closed	Closed	Closed	0	6/21
	Closed	Closed	Closed	Closed	Closed	1	6/22 ^b
	Closed	Closed	Closed	Closed	Closed	0	6/23
1	Closed	Closed	0	0	17	58	6/24
6	Closed	Closed	55	6	0	49	6/25
3	Closed	Closed	a	31	0	57	6/26
	Closed	Closed	Closed	Closed	Closed	0	6/27
	Closed	Closed	0	6	0	52	6/28
4	Closed	42	0	3	1	43	6/29
6	Closed	8	a	58	0	53	6/30
	Closed	Closed	Closed	Closed	Closed	0	7/1
	Closed	0	0	0	0	44	7/2
2	Closed	0	a	28	0	47	7/3
21	Closed	0	0	214	0	49	7/4
9	Closed	0	0	91	0	55	7/5
	Closed	Closed	Closed	Closed	Closed	0	7/6
	Closed	Closed	Closed	Closed	Closed	0	7/7
	Closed	Closed	Closed	Closed	0	1	7/8 ^b
2,83	1,910	213	Closed	712	4	58	7/9
4,47	4,108	223	Closed	136	5	50	7/10
1,16	a	456	Closed	646	66	51	7/11
3,21	1,610	876	Closed	407	321	53	7/12
22	0	a	Closed	221	1	30	7/13
22	a	a	Closed	a	Closed	a	7/14
	a	a	Closed	a	Closed	a	7/15
1,47	568	460	Closed	443	0	40	7/16

Table 27.–Page 2 of 2.

	Number of		Ι	District			
Date	permits	Chignik Bay	Central	Eastern	Western	Perryville	Total
7/17	48	418	644	Closed	3,152	33	4,247
7/18	54	1	524	Closed	2,661	92	3,278
7/19	0	Closed	Closed	Closed	Closed	Closed	0
7/20	0	Closed	Closed	Closed	Closed	Closed	0
7/21	0	Closed	Closed	Closed	Closed	Closed	0
7/22	58	1	1,846	Closed	2,114	2,409	6,370
7/23	43	8	378	Closed	624	2,274	3,284
7/24	48	27	428	Closed	1,996	3,570	6,021
7/25	48	7	1,354	Closed	5,638	1,018	8,017
7/26	47	51	1,582	Closed	1,374	2,363	5,370
7/27	0	Closed	Closed	Closed	Closed	Closed	0
7/28	0	Closed	Closed	Closed	Closed	Closed	0
7/29	0	Closed	Closed	Closed	Closed	Closed	0
7/30	0	Closed	Closed	Closed	Closed	Closed	0
7/31 ^b	1	0	Closed	Closed	Closed	Closed	0
8/1	0	Closed	Closed	Closed	Closed	Closed	0
8/2	0	Closed	Closed	Closed	Closed	Closed	0
8/3	56	137	5,417	Closed	2,559	Closed	8,113
8/4	46	2	2,132	Closed	796	Closed	2,930
8/5	48	696	2,599	Closed	Closed	Closed	3,295
8/6	36	42	778	Closed	1,153	Closed	1,973
8/7	44	6	5,479	Closed	a	Closed	5,485
8/8	40	306	1,815	Closed	a	Closed	2,121
8/9	36	5	2,187	Closed	a	Closed	2,192
8/10	37	3	2,209	Closed	a	Closed	2,212
8/11	34	8	2,285	Closed	a	Closed	2,293
8/12	34	3	1,014	Closed	a	Closed	1,017
8/13	0	Closed	Closed	Closed	Closed	Closed	0
8/14	29	9	2,045	Closed	Closed	Closed	2,054
8/15	28	93	179	Closed	Closed	Closed	272
8/16	23	107	664	Closed	Closed	Closed	771
8/17	10	10	a	Closed	Closed	Closed	10
8/18	16	45	a	Closed	Closed	Closed	45
8/19	18	70	911	Closed	Closed	Closed	981
8/20	18	44	258	Closed	Closed	Closed	302
8/21-8/31 ^a	_	_	_	_	_	_	_
Season Total ^c	70	4,604	41,515	55	26,940	21,283	94,397

^a Confidentiality requirements prevent the release of this information.

b ADF&G test fishery.

^c Season total includes information not provided by individual date due to confidentiality requirements.

Table 28.-Chignik Management Area pink salmon harvest, by year, 1980-2016.

Vear Number Pounds Number Pounds Number Pounds Number Pounds 1980 ND ND 1,093,184 3,635,145 ND ND 1,162,613 4,479,368 1982 ND ND 1,162,613 4,479,368 ND ND 4,479,368 1983 ND ND 321,178 1,200,888 ND ND 321,178 1,200,888 1984 ND ND 321,178 1,200,888 ND ND 442,021,6671 1985 0 0 160,128 643,731 ND ND 647,122 2,374,311 1986 ND ND 647,122 2,374,311 ND ND 647,122 2,374,311 1987 0 0 2,297,159 10,723,505 ND ND 2,997,159 10,723,505 1988 0 0 2,7712 94,269 ND ND 2,971,50 1,723,505 1988 0		Test f	ish	Commerc	cial catch	Home	pack	То	tal
1981	Year	Number	Pounds	Number	Pounds	Number	Pounds ^a	Number	Pounds
1982 ND	1980	ND	ND	1,093,184	3,635,145	ND	ND	1,093,184	3,635,145
1983 ND	1981	ND	ND	1,162,613	4,479,368	ND	ND	1,162,613	4,479,368
1984 ND	1982	ND	ND	873,384	2,916,671	ND	ND	873,384	2,916,671
1985	1983	ND	ND	321,178	1,200,888	ND	ND	321,178	1,200,888
1986	1984	ND	ND	444,804	1,651,249	ND	ND	444,804	1,651,249
1987	1985	0	0	160,128	643,731	ND	ND	160,128	643,731
1988	1986	ND	ND	647,125	2,374,311	ND	ND	647,125	2,374,311
1989	1987	0	0	246,775	899,560	ND	ND	246,775	899,560
1990	1988	0	0	2,997,159	10,723,505	ND	ND	2,997,159	10,723,505
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 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 0 769,885 2,586,026 0 0 769,88 2,586,026 1999 0 0 1,698,651 4,845,355 0 0 1,698,651 4,845,	1989	0	0	27,712	94,269	ND	ND	27,712	94,269
1992	1990	0	0	550,008	1,675,644	ND	ND	550,008	1,675,644
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 1,281,760 4,077,814 7 22 1,281,767 4,077,836 2002	1991	2,660	9,237	1,166,588	3,348,394	ND	ND	1,169,248	3,357,631
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 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<	1992	114	536	1,553,959	5,798,623	ND	ND	1,554,073	5,799,159
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 <td>1993</td> <td>1,826</td> <td>5,539</td> <td>1,646,551</td> <td>5,308,258</td> <td>ND</td> <td>ND</td> <td>1,648,377</td> <td>5,313,797</td>	1993	1,826	5,539	1,646,551	5,308,258	ND	ND	1,648,377	5,313,797
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	1994	14	55	431,049	1,494,604	ND	ND	431,063	1,494,659
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 66,066 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	1995	0	0	2,057,998	7,350,386	0	0	2,057,998	7,350,386
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 <td>1996</td> <td>0</td> <td>0</td> <td>183,806</td> <td>536,218</td> <td>5,262</td> <td>15,351</td> <td>189,068</td> <td>551,569</td>	1996	0	0	183,806	536,218	5,262	15,351	189,068	551,569
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 2,389,958 8,192,350 0 0 2,389,958 8,192,350 2008 0	1997	0	0	844,431	2,784,333	0	0	844,431	2,784,333
2000 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 2,389,958 8,192,350 2008 0 0 2,389,958 8,192,350 0 0 2,389,958 8,192,350 2010 0 1	1998	0	0	776,988	2,586,026	0	0	776,988	2,586,026
2001 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 2,389,958 8,192,350 2008 0 0 2,389,958 8,192,350 0 0 2,389,958 8,192,350 2010 0 0 1,408,339 4,502,661 0 0 1,408,339 4,502,661 0 0 1,408,339	1999	0	0	1,698,651	4,845,435	0	0	1,698,651	4,845,435
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 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	2000	0	0	428,064	1,183,004	0	0	428,064	1,183,004
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	2001	0	0	1,281,760	4,077,814	7	22	1,281,767	4,077,836
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	2002	66	276	65,984	206,385	0	0	66,050	206,661
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 6 871,868 2,610,880 0 0 871,871 2,610,886 2014 <	2003	570	2,167	501,661	1,951,928	407	1,584	502,638	1,955,679
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 6 871,868 2,610,880 0 0 871,871 2,610,886 2014 16 60 352,099 1,138,241 0 0 352,115 1,138,301 2016	2004	0	0	2,380	7,589	0	0	2,380	7,589
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 6 871,868 2,610,880 0 0 871,871 2,610,886 2014 16 60 352,099 1,138,241 0 0 352,115 1,138,301 2015 77 195 1,978,134 5,843,570 0 0 1,978,211 5,843,765 2016	2005	8	48	193,803	611,023	234	813	194,045	611,884
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 6 871,868 2,610,880 0 0 871,871 2,610,886 2014 16 60 352,099 1,138,241 0 0 352,115 1,138,301 2015 77 195 1,978,134 5,843,570 0 0 1,978,211 5,843,765 2016 18 69 140,895 563,390 0 0 140,913 563,459 Avera	2006	0	0	383,574	1,403,428	0	0	383,574	1,403,428
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 6 871,868 2,610,880 0 0 871,871 2,610,886 2014 16 60 352,099 1,138,241 0 0 352,115 1,138,301 2015 77 195 1,978,134 5,843,570 0 0 1,978,211 5,843,765 2016 18 69 140,895 563,390 0 0 140,913 563,459 Averages (even years) 1996-2014 8 34 521,031 1,736,936 529 1,544 521,568 <td>2007</td> <td>0</td> <td>0</td> <td>2,019,748</td> <td>7,388,012</td> <td>0</td> <td>0</td> <td>2,019,748</td> <td>7,388,012</td>	2007	0	0	2,019,748	7,388,012	0	0	2,019,748	7,388,012
2010 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 6 871,868 2,610,880 0 0 871,871 2,610,886 2014 16 60 352,099 1,138,241 0 0 352,115 1,138,301 2015 77 195 1,978,134 5,843,570 0 0 1,978,211 5,843,765 2016 18 69 140,895 563,390 0 0 140,913 563,459 Averages (even years) 1996–2014 8 34 521,031 1,736,936 529 1,544 521,568 1,738,514 2006–2014 3 12 750,618 2,570,028 6 18 750,627 2	2008	0	0		8,192,350	0	0	2,389,958	8,192,350
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 6 871,868 2,610,880 0 0 871,871 2,610,886 2014 16 60 352,099 1,138,241 0 0 352,115 1,138,301 2015 77 195 1,978,134 5,843,570 0 0 0 1,978,211 5,843,765 2016 18 69 140,895 563,390 0 0 140,913 563,459 Averages (even years) 1996–2014 8 34 521,031 1,736,936 529 1,544 521,568 1,738,514 2006–2014 3 12 750,618 2,570,028 6 18 750,627 2,570,058	2009	0	0	1,408,339	4,502,661	0	0	1,408,339	4,502,661
2012 0 0 137,684 452,160 22 65 137,706 452,225 2013 3 6 871,868 2,610,880 0 0 871,871 2,610,886 2014 16 60 352,099 1,138,241 0 0 352,115 1,138,301 2015 77 195 1,978,134 5,843,570 0 0 1,978,211 5,843,765 2016 18 69 140,895 563,390 0 0 140,913 563,459 Averages (even years) 1996–2014 8 34 521,031 1,736,936 529 1,544 521,568 1,738,514 2006–2014 3 12 750,618 2,570,028 6 18 750,627 2,570,058	2010	0	0	489,774	1,663,961	7	24	489,781	
2013 3 6 871,868 2,610,880 0 0 871,871 2,610,886 2014 16 60 352,099 1,138,241 0 0 352,115 1,138,301 2015 77 195 1,978,134 5,843,570 0 0 1,978,211 5,843,765 2016 18 69 140,895 563,390 0 0 140,913 563,459 Averages (even years) 1996–2014 8 34 521,031 1,736,936 529 1,544 521,568 1,738,514 2006–2014 3 12 750,618 2,570,028 6 18 750,627 2,570,058	2011	58	154	905,108	2,882,546	0	0	905,166	2,882,700
2014 16 60 352,099 1,138,241 0 0 352,115 1,138,301 2015 77 195 1,978,134 5,843,570 0 0 1,978,211 5,843,765 2016 18 69 140,895 563,390 0 0 140,913 563,459 Averages (even years) 1996–2014 8 34 521,031 1,736,936 529 1,544 521,568 1,738,514 2006–2014 3 12 750,618 2,570,028 6 18 750,627 2,570,058	2012	0	0	137,684	452,160	22	65	137,706	452,225
2015 77 195 1,978,134 5,843,570 0 0 1,978,211 5,843,765 2016 18 69 140,895 563,390 0 0 140,913 563,459 Averages (even years) 1996–2014 8 34 521,031 1,736,936 529 1,544 521,568 1,738,514 2006–2014 3 12 750,618 2,570,028 6 18 750,627 2,570,058	2013	3	6	871,868	2,610,880	0	0	871,871	2,610,886
2016 18 69 140,895 563,390 0 0 140,913 563,459 Averages (even years) 1996–2014 8 34 521,031 1,736,936 529 1,544 521,568 1,738,514 2006–2014 3 12 750,618 2,570,028 6 18 750,627 2,570,058	2014	16	60	352,099	1,138,241	0	0	352,115	1,138,301
Averages (even years) 1996–2014 8 34 521,031 1,736,936 529 1,544 521,568 1,738,514 2006–2014 3 12 750,618 2,570,028 6 18 750,627 2,570,058	2015	77	195	1,978,134	5,843,570	0	0	1,978,211	5,843,765
1996-2014 8 34 521,031 1,736,936 529 1,544 521,568 1,738,514 2006-2014 3 12 750,618 2,570,028 6 18 750,627 2,570,058	2016	18	69	140,895	563,390	0	0	140,913	563,459
2006–2014 3 12 750,618 2,570,028 6 18 750,627 2,570,058	Averages (ev	en years)							
	1996–2014	8	34	521,031	1,736,936	529	1,544	521,568	1,738,514
<u>2010–2014</u> 5 20 326,519 1,084,787 10 30 326,534 1,084,837	2006–2014	3	12	750,618	2,570,028	6	18	750,627	2,570,058
	2010–2014	5	20	326,519	1,084,787	10	30	326,534	1,084,837

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

Table 29.—Chignik Management Area pink salmon harvest (including home pack and the department's test fishery catches), by district and year, 1980–2016.

			District			
Year	Chignik Bay	Central	Eastern	Western	Perryville	Total
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	218,685	197,293	192,861	186,559	871,871
2014	11,663	98,984	2,964	226,008	12,496	352,115
2015	81,541	686,374	13,783	993,349	203,164	1,978,211
2016	3,110	85,346	10,142	25,000	17,315	140,913
Averages (even		,		-,	. ,	
1996–2014	41,586	132,949	63,159	233,082	50,793	521,568
2006–2014	69,461	157,209	109,432	348,739	65,786	750,627
2010–2014	17,481	112,341	17,058	173,082	6,572	326,534

Table 30.-Chignik Management Area pink salmon harvest (including home pack and the department's test fishery catches), by district and day, 2016.

	Number of		I	District			
Date	permits	Chignik Bay	Central	Eastern	Western	Perryville	Total
6/4	15	0	0	a	Closed	Closed	0
6/5	41	0	29	a	Closed	Closed	29
6/6	27	0	a	0	Closed	Closed	0
6/7	43	12	23	0	Closed	Closed	35
6/8	0	Closed	Closed	Closed	Closed	Closed	0
6/9	0	Closed	Closed	Closed	Closed	Closed	0
6/10	49	0	10	0	Closed	Closed	10
6/11	53	0	546	a	Closed	Closed	546
6/12	44	0	40	191	Closed	Closed	231
6/13	38	0	535	728	Closed	Closed	1,263
6/14	30	14	87	0	Closed	Closed	101
6/15	54	3	214	a	Closed	Closed	217
6/16	47	4	288	526	a	Closed	818
6/17	54	0	768	2,276	0	Closed	3,044
6/18	51	0	996	0	Closed	Closed	996
6/19	48	1	2,751	204	Closed	Closed	2,956
6/20	32	0	2,540	a	Closed	Closed	2,540
6/21	0	Closed	Closed	Closed	Closed	Closed	0
6/22 ^b	1	0	Closed	Closed	Closed	Closed	0
6/23	0	Closed	Closed	Closed	Closed	Closed	0
6/24	58	0	4,773	2,523	Closed	Closed	7,296
6/25	49	5	2,772	638	Closed	Closed	3,415
6/26	57	5	866	a	Closed	Closed	871
6/27	0	Closed	Closed	Closed	Closed	Closed	0
6/28	52	15	472	0	Closed	Closed	487
6/29	43	8	519	0	339	Closed	866
6/30	53	12	712	a	1,990	Closed	2,714
7/1	0	Closed	Closed	Closed	Closed	Closed	0
7/2	44	6	988	0	0	Closed	994
7/3	47	26	271	a	0	Closed	297
7/4	49	5	426	0	0	Closed	431
7/5	55	3	635	0	0	Closed	638
7/6	0	Closed	Closed	Closed	Closed	Closed	0
7/7	0	Closed	Closed	Closed	Closed	Closed	0
7/8 ^b	1	7	Closed	Closed	Closed	Closed	7
7/9	58	31	650	Closed	200	1,145	2,026
7/10	50	45	656	Closed	341	2,062	3,104
7/11	51	77	1,129	Closed	344	a	1,550
7/12	53	209	563	Closed	807	695	2,274
7/13	30	2	777	Closed	a	0	779
7/14	ā	Closed	a	Closed	a	a	0
7/15	a	Closed	a	Closed	a	a	0
7/16	40	5	782	Closed	1,155	676	2,618

Table 30.–Page 2 of 2.

7/17 7/18 7/19 7/20 7/21 7/22 7/23 7/24 7/25 7/26 7/27 7/28 7/29 7/30	9 permits 48 54 0 0 0 58 43 48 48 47 0 0	Chignik Bay 246 11 Closed Closed Closed 18 32 60 34 78	Central 1,685 1,367 Closed Closed Closed 3,762 342 2,368 2,200	Eastern Closed	2,434 1,660 Closed Closed Closed 1,678 1,623	Perryville 200 279 Closed Closed Closed 3,052 1,600	Tota 4,565 3,317 (((8,510 3,597
7/18 7/19 7/20 7/21 7/22 7/23 7/24 7/25 7/26 7/27 7/28 7/29 7/30	54 0 0 0 58 43 48 48 47 0	11 Closed Closed Closed 18 32 60 34 78	1,367 Closed Closed Closed 3,762 342 2,368	Closed Closed Closed Closed Closed Closed	1,660 Closed Closed Closed 1,678 1,623	279 Closed Closed Closed 3,052 1,600	3,31°
7/19 7/20 7/21 7/22 7/23 7/24 7/25 7/26 7/27 7/28 7/29	0 0 0 58 43 48 48 47 0	Closed Closed Closed 18 32 60 34 78	Closed Closed Closed 3,762 342 2,368	Closed Closed Closed Closed	Closed Closed Closed 1,678 1,623	Closed Closed Closed 3,052 1,600	8,51
7/20 7/21 7/22 7/23 7/24 7/25 7/26 7/27 7/28 7/29 7/30	0 0 58 43 48 48 47 0	Closed Closed 18 32 60 34 78	Closed Closed 3,762 342 2,368	Closed Closed Closed	Closed Closed 1,678 1,623	Closed Closed 3,052 1,600	8,510
7/21 7/22 7/23 7/24 7/25 7/26 7/27 7/28 7/29 7/30	0 58 43 48 48 47 0	Closed 18 32 60 34 78	Closed 3,762 342 2,368	Closed Closed Closed	Closed 1,678 1,623	Closed 3,052 1,600	8,51
7/22 7/23 7/24 7/25 7/26 7/27 7/28 7/29 7/30	58 43 48 48 47 0	18 32 60 34 78	3,762 342 2,368	Closed Closed	1,678 1,623	3,052 1,600	8,510
7/23 7/24 7/25 7/26 7/27 7/28 7/29 7/30	43 48 48 47 0	32 60 34 78	342 2,368	Closed	1,623	1,600	
7/24 7/25 7/26 7/27 7/28 7/29 7/30	48 48 47 0	60 34 78	2,368				3,59
7/25 7/26 7/27 7/28 7/29 7/30	48 47 0	34 78		Closed	1 221		
7/26 7/27 7/28 7/29 7/30	47 0	78	2,200		1,321	3,193	6,942
7/27 7/28 7/29 7/30	0			Closed	5,839	1,068	9,14
7/28 7/29 7/30		~	2,387	Closed	1,956	3,011	7,432
7/29 7/30	0	Closed	Closed	Closed	Closed	Closed	(
7/30		Closed	Closed	Closed	Closed	Closed	(
	0	Closed	Closed	Closed	Closed	Closed	(
	0	Closed	Closed	Closed	Closed	Closed	(
7/31 ^b	1	11	Closed	Closed	Closed	Closed	1.
8/1	0	Closed	Closed	Closed	Closed	Closed	(
8/2	0	Closed	Closed	Closed	Closed	Closed	(
8/3	56	290	10,610	Closed	2,559	Closed	13,459
8/4	46	97	3,554	Closed	796	Closed	4,44
8/5	48	493	5,768	Closed	Closed	Closed	6,26
8/6	36	46	1,877	Closed	474	Closed	2,397
8/7	44	75	6,697	Closed	a	Closed	6,772
8/8	40	218	3,070	Closed	a	Closed	3,288
8/9	36	67	2,529	Closed	a	Closed	2,596
8/10	37	66	3,451	Closed	a	Closed	3,517
8/11	34	67	2,822	Closed	a	Closed	2,889
8/12	34	56	1,180	Closed	a	Closed	1,236
8/13	0	Closed	Closed	Closed	Closed	Closed	(
8/14	29	30	2,328	Closed	Closed	Closed	2,358
8/15	28	113	166	Closed	Closed	Closed	279
8/16	23	67	325	Closed	Closed	Closed	392
8/17	10	28	a	Closed	Closed	Closed	28
8/18	16	60	a	Closed	Closed	Closed	60
8/19	18	83	429	Closed	Closed	Closed	512
8/20	18	59	141	Closed	Closed	Closed	200
8/21-8/31 ^a	_	<u> </u>	_			<u> </u>	
Season total ^c	70	3,110	85,346	10,142	25,000	17,315	140,913

^c Season total includes information not provided by individual date due to confidentiality requirements.

Table 31.-Chignik Management Area chum salmon harvest, by year, 1980-2016.

_	Test fi	ish	Commerc	cial catch	Home	pack	То	tal
Year	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	154,965	1,196,565	0	0	154,965	1,196,565
2014	3	24	55,149	458,475	0	0	55,152	458,499
2015	16	113	101,001	656,047	0	0	101,017	656,160
2016	17	139	118,418	805,140	0	0	118,435	805,279
Averages								_
1996–2015	11	99	145,567	1,120,500	1,087	8,483	146,664	1,129,081
2006-2015	3	23	193,874	1,488,639	24	180	193,901	1,488,842
2011–2015	6	46	150,296	1,140,336	48	356	150,350	1,140,737

^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 32.–Chignik Management Area chum salmon harvest (including home pack and the department's test fishery catches), by district and year, 1980–2016.

		D	ristrict			
Year	Chignik Bay	Central	Eastern	Western	Perryville	Total
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	57,356	45,268	38,237	4,902	154,965
2014	4,329	20,750	610	26,578	2,885	55,152
2015	5,683	39,373	2,768	48,080	5,113	101,017
2016	5,141	57,563	21,654	26,992	7,085	118,435
Averages						
1996–2015	8,712	56,363	23,641	51,715	6,234	146,664
2006–2015	9,534	68,001	36,555	74,964	4,847	193,901
2011-2015	6,763	64,436	24,372	48,877	5,902	150,350

Table 33.–Chignik Management Area chum salmon harvest (including home pack and the department's test fishery catches), by district and day, 2016.

	Number of		I				
Date	Permits	Chignik Bay	Central	Eastern	Western	Perryville	Total
6/4	15	0	269	a	Closed	Closed	284
6/5	41	1	181	a	Closed	Closed	223
6/6	27	22	a	0	Closed	Closed	49
6/7	43	30	448	0	Closed	Closed	521
6/8	0	Closed	Closed	Closed	Closed	Closed	0
6/9	0	Closed	Closed	Closed	Closed	Closed	0
6/10	49	2	1,050	0	Closed	Closed	1,101
6/11	53	1	657	a	Closed	Closed	711
6/12	44	40	436	1,063	Closed	Closed	1,583
6/13	38	0	1,845	1,190	Closed	Closed	3,073
6/14	30	9	107	0	Closed	Closed	146
6/15	54	4	425	a	Closed	Closed	483
6/16	47	2	154	1,578	a	Closed	1,781
6/17	54	10	594	7,251	0	Closed	7,909
6/18	51	2	1,182	0	Closed	Closed	1,235
6/19	48	14	1,908	153	Closed	Closed	2,123
6/20	32	2	858	a	Closed	Closed	892
6/21	0	Closed	Closed	Closed	Closed	Closed	0
6/22 ^b	1	0	Closed	Closed	Closed	Closed	1
6/23	0	Closed	Closed	Closed	Closed	Closed	0
6/24	58	8	2,921	2,462	Closed	Closed	5,449
6/25	49	14	2,124	1,377	Closed	Closed	3,564
6/26	57	8	680	a	Closed	Closed	745
6/27	0	Closed	Closed	Closed	Closed	Closed	0
6/28	52	45	348	0	Closed	Closed	445
6/29	43	16	424	0	2,750	Closed	3,233
6/30	53	175	531	a	2,172	Closed	2,931
7/1	0	Closed	Closed	Closed	Closed	Closed	0
7/2	44	32	2,346	0	0	Closed	2,422
7/3	47	93	442	a	0	Closed	582
7/4	49	57	1,136	0	0	Closed	1,242
7/5	55	16	884	0	0	Closed	955
7/6	0	Closed	Closed	Closed	Closed	Closed	0
7/7	0	Closed	Closed	Closed	Closed	Closed	0
7/8 ^b	1	7	Closed	Closed	Closed	Closed	8
7/9	58	135	755	Closed	733	636	2,317
7/10	50	194	208	Closed	1,154	486	2,092
7/11	51	126	706	Closed	1,146	a	2,029
7/12	53	179	494	Closed	2,184	504	3,414
7/13	30	32	555	Closed	a	0	617
7/14	a	Closed	a	Closed	a	a	0
7/15	a	Closed	a	Closed	a	a	0
7/16	40	53	560	Closed	2,070	675	3,398

Table 33.–Page 2 of 2.

	Number of		D	istrict				
Date	Permits	Chignik Bay	Central	Eastern	Western	Perryville	Total	
7/17	48	173	689	Closed	2,429	274	3,613	
7/18	54	76	527	Closed	1,181	167	2,005	
7/19	0	Closed	Closed	Closed	Closed	Closed	0	
7/20	0	Closed	Closed	Closed	Closed	Closed	0	
7/21	0	Closed	Closed	Closed	Closed	Closed	0	
7/22	58	103	2,196	Closed	990	1,242	4,589	
7/23	43	154	277	Closed	96	563	1,090	
7/24	48	122	1,000	Closed	275	1,027	2,424	
7/25	48	81	1,283	Closed	4,823	353	6,540	
7/26	47	85	2,134	Closed	839	992	4,050	
7/27	0	Closed	Closed	Closed	Closed	Closed	0	
7/28	0	Closed	Closed	Closed	Closed	Closed	0	
7/29	0	Closed	Closed	Closed	Closed	Closed	0	
7/30	0	Closed	Closed	Closed	Closed	Closed	0	
7/31 ^b	1	10	Closed	Closed	Closed	Closed	10	
8/1	0	Closed	Closed	Closed	Closed	Closed	0	
8/2	0	Closed	Closed	Closed	Closed	Closed	0	
8/3	56	222	3,779	Closed	2,559	Closed	6,560	
8/4	46	148	1,476	Closed	796	Closed	2,420	
8/5	48	238	2,068	Closed	Closed	Closed	2,306	
8/6	36	114	763	Closed	425	Closed	1,302	
8/7	44	122	3,429	Closed	a	Closed	3,551	
8/8	40	175	2,249	Closed	a	Closed	2,424	
8/9	36	60	1,865	Closed	a	Closed	1,925	
8/10	37	98	2,434	Closed	a	Closed	2,532	
8/11	34	185	1,706	Closed	a	Closed	1,891	
8/12	34	56	1,095	Closed	a	Closed	1,151	
8/13	0	Closed	Closed	Closed	Closed	Closed	0	
8/14	29	29	1,433	Closed	Closed	Closed	1,462	
8/15	28	182	130	Closed	Closed	Closed	312	
8/16	23	137	446	Closed	Closed	Closed	583	
8/17	10	54	a	Closed	Closed	Closed	54	
8/18	16	99	a	Closed	Closed	Closed	99	
8/19	18	108	490	Closed	Closed	Closed	598	
8/20	18	85	144	Closed	Closed	Closed	229	
8/21-8/31 ^a							=	
Season Total ^c	70	5,141	57,563	21,654	26,992	7,085	118,435	

a Confidentiality requirements prevent the release of this information.
b ADF&G test fishery.
c Season total include information not provided by individual date due to confidentiality requirements.

Table 34.—Value of the commercial salmon harvest, by species, and average value per active permit, in dollars, in the Chignik Management Area, 1970–2016.

	Chi	nook	Socke	eye	Coh	0	Pin	k	Chu	m		Number of	Value per
Year	Total ^a	Average ^b	Total ^a	Average ^b	Total ^a	Averageb	Total ^a	Average ^b	Total ^a	Averageb	Total value	permits ^c	permit
1970	6,129	77	2,190,272	27,378	18,397	230	635,673	7,946	376,025	4,700	3,226,496	80	40,331
1971	6,472	84	2,034,279	26,419	23,240	302	366,693	4,762	326,760	4,244	2,757,444	77	35,811
1972	2,028	25	825,498	10,319	35,699	446	48,401	605	87,759	1,097	999,385	80	12,492
1973	5,255	67	3,030,057	38,355	73,663	932	20,610	261	10,180	129	3,139,765	79	39,744
1974	2,941	31	3,618,781	38,498	31,933	340	64,069	682	51,125	544	3,768,849	94	40,094
1975	6,561	76	1,384,271	16,096	213,539	2,483	104,115	1,211	61,704	717	1,770,190	86	20,584
1976	13,800	179	4,751,000	61,701	138,000	1,792	568,300	7,381	183,600	2,384	5,654,700	77	73,438
1977	18,828	214	14,553,720	165,383	104,819	1,191	920,881	10,465	368,066	4,183	15,966,314	88	181,435
1978	56,700	597	15,653,500	164,774	116,400	1,225	1,131,500	11,911	404,500	4,258	17,362,600	95	182,764
1979	32,050	311	11,345,503	110,151	710,192	6,895	2,622,269	25,459	126,866	1,232	14,836,880	103	144,047
1980	67,657	651	5,532,290	53,195	520,655	5,006	1,477,060	14,203	1,061,963	10,211	8,659,625	104	83,266
1981	75,231	716	17,262,119	164,401	439,900	4,190	1,881,334	17,917	2,431,421	23,156	22,090,005	105	210,381
1982	75,276	731	13,038,510	126,587	1,782,027	17,301	578,184	5,613	1,356,597	13,171	16,830,594	103	163,404
1983	96,159	943	10,728,088	105,177	219,650	2,153	240,171	2,355	421,713	4,134	11,705,781	102	114,763
1984	114,502	1,145	20,402,076	204,021	759,972	7,600	330,916	3,309	146,024	1,460	21,753,490	100	217,535
1985	67,088	633	7,997,834	75,451	1,471,418	13,881	140,076	1,321	59,475	561	8,735,891	106	82,414
1986	84,800	831	16,882,290	165,513	667,740	6,546	356,147	3,492	456,546	4,476	18,447,523	102	180,858
1987	72,739	706	24,783,033	240,612	1,035,129	10,050	269,868	2,620	339,819	3,299	26,500,588	103	257,287
1988	286,740	2,839	14,350,354	142,083	4,153,424	41,123	6,771,266	67,042	2,189,293	21,676	27,751,077	101	274,763
1989	78,999	790	13,047,378	130,474	436,892	4,369	32,994	330	4,745	47	13,601,008	100	136,010
1990	185,256	1,834	22,509,923	222,871	700,309	6,934	502,693	4,977	878,510	8,698	24,776,691	101	245,314
1991	50,027	490	11,002,784	107,870	650,626	6,379	402,916	3,950	502,860	4,930	12,609,213	102	123,620
1992	193,326	1,914	12,552,025	124,277	1,323,107	13,100	811,882	8,038	414,005	4,099	15,294,345	101	151,429
1993	175,690	1,722	8,210,106	80,491	730,622	7,163	637,666	6,252	184,012	1,804	9,938,096	102	97,432
1994	38,096	385	10,046,245	101,477	1,094,415	11,055	226,504	2,288	430,888	4,352	11,836,148	99	119,557
1995	60,174	602	11,969,210	119,692	834,337	8,343	977,811	9,778	634,780	6,348	14,476,312	100	144,763
1996	25,041	250	12,640,560	126,406	447,228	4,472	24,827	248	32,279	323	13,169,935	100	131,699
1997	20,642	211	4,860,589	49,598	453,905	4,632	348,042	3,551	239,400	2,443	5,922,577	98	60,434
1998	31,934	376	6,631,192	78,014	397,413	4,675	310,323	3,651	137,647	1,619	7,508,509	85	88,335

Table 34.–Page 2 of 2.

													Value
	Chin	ook	Socke	ye	Co	ho	Pin	k	Chu	m		Number of	per
Year	Total ^a A	Average ^b	Total ^a	Average ^b	Total value	permits ^c	permit						
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
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	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
2015	72,439	1,020	6,606,379	93,048	99,469	1,401	934,971	13,169	164,012	2,310	7,877,270	71	110,947
2016 ^d	176,800	2,562	8,044,321	116,584	158,010	2,290	95,776	1,388	161,028	2,334	8,635,935	69	125,158
Averages													
1996-2015	38,026	536	9,134,669	120,111	254,978	3,551	479,895	7,337	315,707	4,752	10,223,275	79	136,286
2006-2015	54,118	840	9,846,622	151,439	286,282	4,740	761,433	12,530	536,061	8,488	11,484,516	63	178,036
2011–2015	56,414	812	13,775,913	197,860	199,327	2,903	655,252	9,412	457,698	6,718	15,144,605	70	217,704

^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.

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

Values represent the initial price paid, and do not include any postseason adjustments by any processor. The average 2016 exvessel prices per pound were as follows: Chinook – \$1.14, sockeye – \$0.98, coho – \$0.24, pink – \$0.17, chum – \$0.20.

Table 35.–Historical number of subsistence permits issued and returned and estimated subsistence salmon harvest, by species and year, 1980–2015.

_	Pe	rmits	Estimated Salmon Harvest							
Year	Issued	Returned	Chinook	Sockeye	Coho	Chum	Pink	Total		
1980	82	37	6	12,475	32	169	478	13,160		
1981	29	7	0	2,049	0	0	0	2,049		
1982	59	15	3	8,532	12	0	2	8,549		
1983	32	21	0	3,078	1,319	850	1,250	6,497		
1984	77	64	23	8,747	464	204	330	9,768		
1985	59	48	1	7,177	50	25	26	7,279		
1986	74	38	4	10,347	205	77	98	10,731		
1987	2	1	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 ^a	112	96	79	6,588	916	164	686	8,433		
2014	113	101	148	7,855	1,401	207	339	9,950		
2015 ^a	109	100	183	7,615	1,342	181	729	10,050		
Averages										
1995–2014	115	91	128	8,632	1,654	253	1,102	11,770		
2005-2014	109	86	129	7,919	1,472	216	787	10,523		
2010-2014	110	90	117	7,755	1,417	234	756	10,278		

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

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, probably resulting in an underestimate of subsistence harvests because 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, 2013, and 2015.

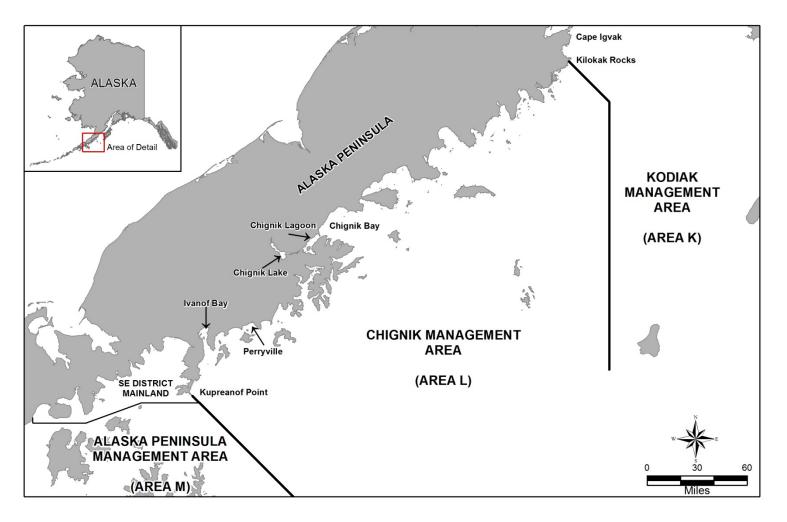


Figure 1.-Map of the Alaska Peninsula illustrating the relative locations of the Chignik, Kodiak, and Alaska Peninsula management areas.

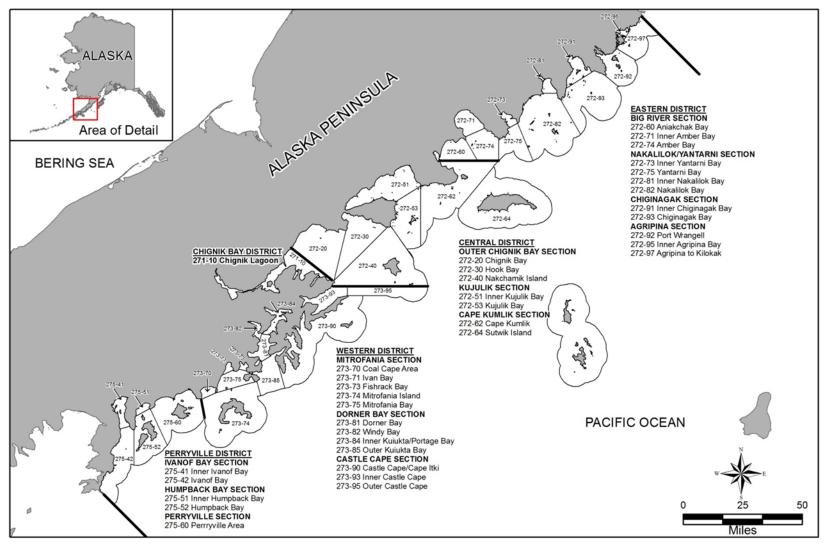


Figure 2.—Map of the Chignik Management Area illustrating district and section boundaries and statistical areas.

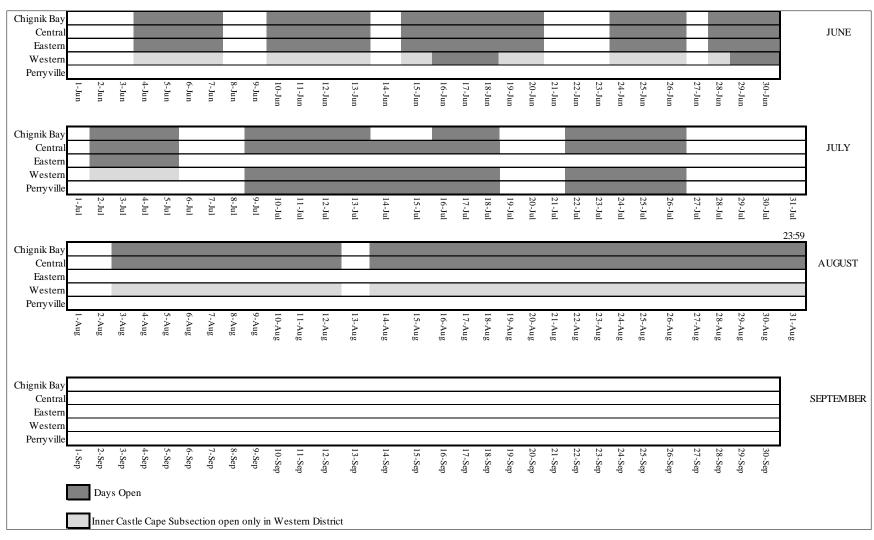


Figure 3.-Representation of days open to commercial salmon fishing, by district and month, 2016.

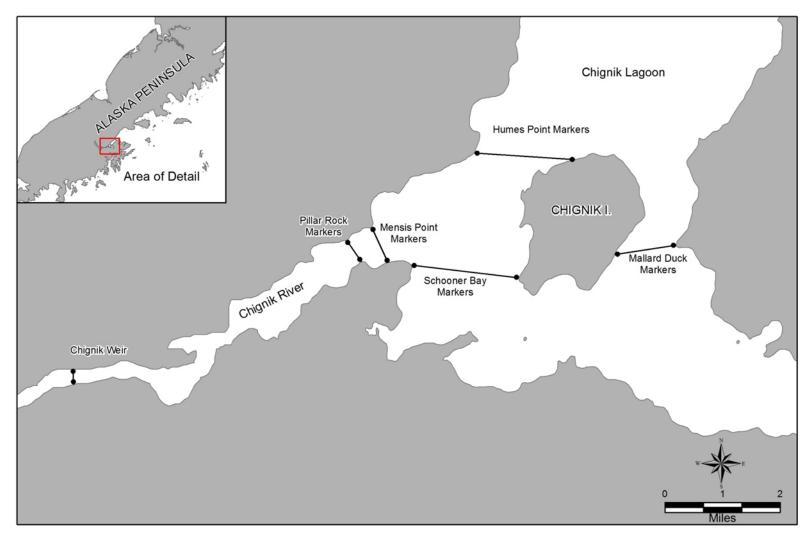


Figure 4.—Map of upper Chignik Lagoon showing the location of the Pillar Rock, Mensis Point, Humes Point, Mallard Duck, and Schooner Bay marker locations.

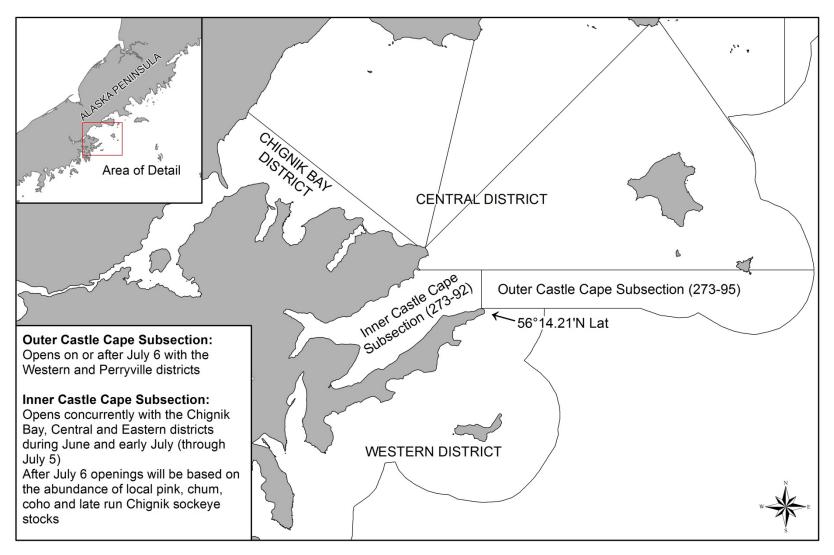


Figure 5.–Map depicting the Inner (273-93) and Outer (273-95) Castle Cape Sections of the Western District.

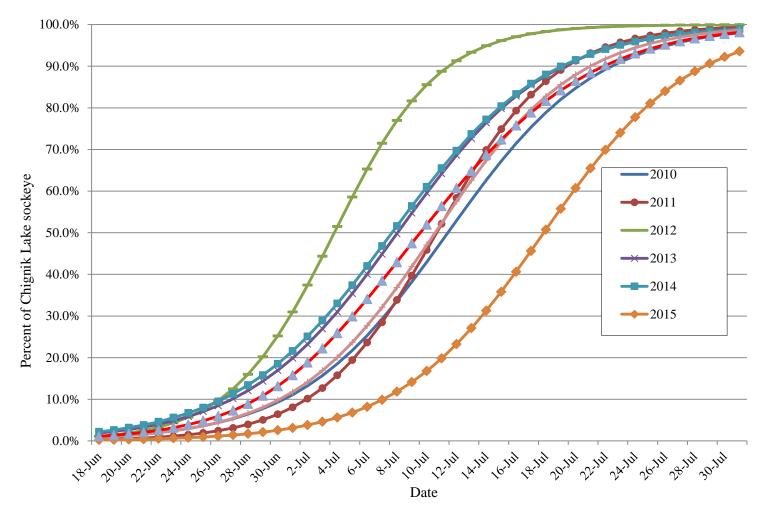


Figure 6.–Estimated proportional escapement of Chignik Lake (late run) sockeye salmon from inseason mixed-stock genetic analysis, 2010–2016.

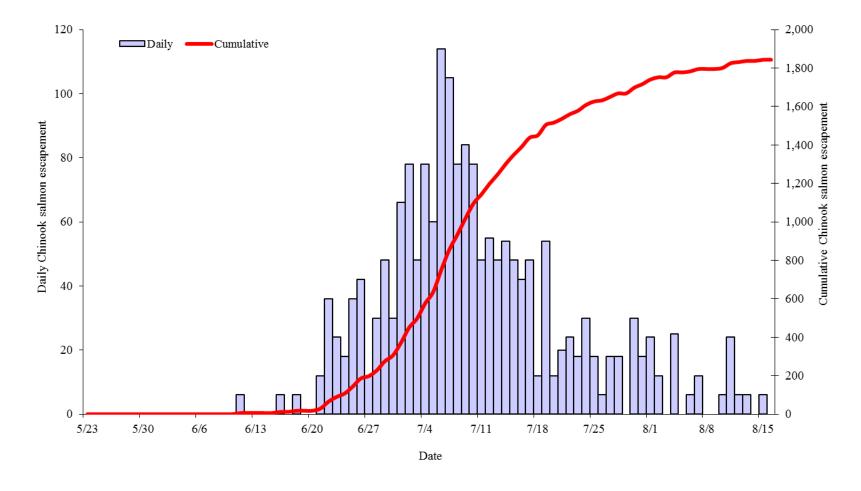


Figure 7.-Chignik River estimated daily and cumulative Chinook salmon escapement, 2016.

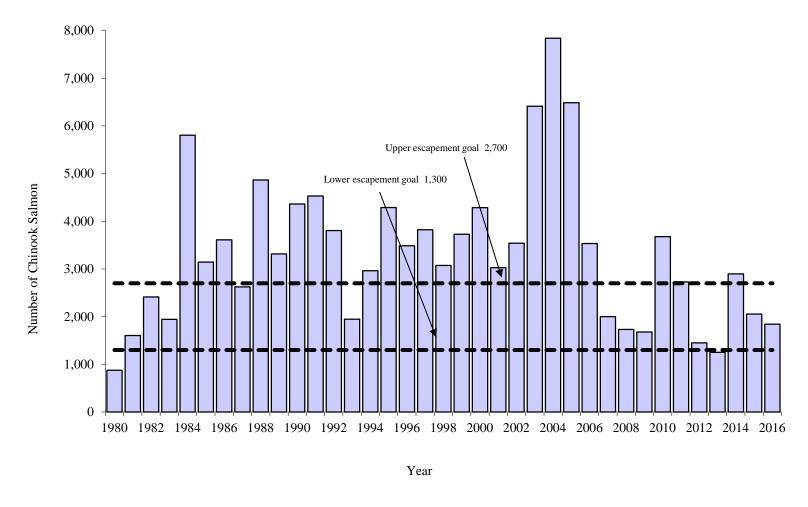


Figure 8.-Chignik River Chinook salmon escapement compared to the current escapement goal range, by year, 1980-2016.

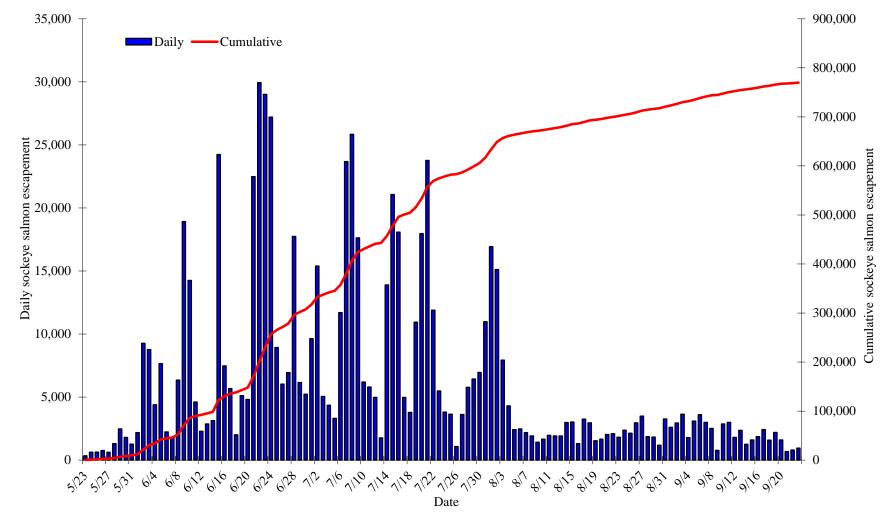


Figure 9.-Chignik River sockeye salmon daily and cumulative escapement including weir enumeration (5/23-9/12) and DIDSON daily estimates (9/13-9/23), 2016.

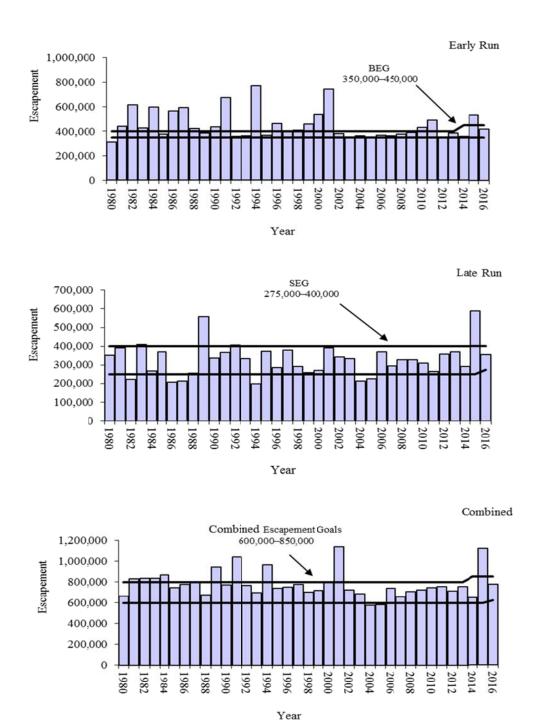


Figure 10.—Chignik River sockeye salmon early, late, and combined run escapements 1980–2016, compared to established escapement goals (including a late run inriver run goal of 75,000).

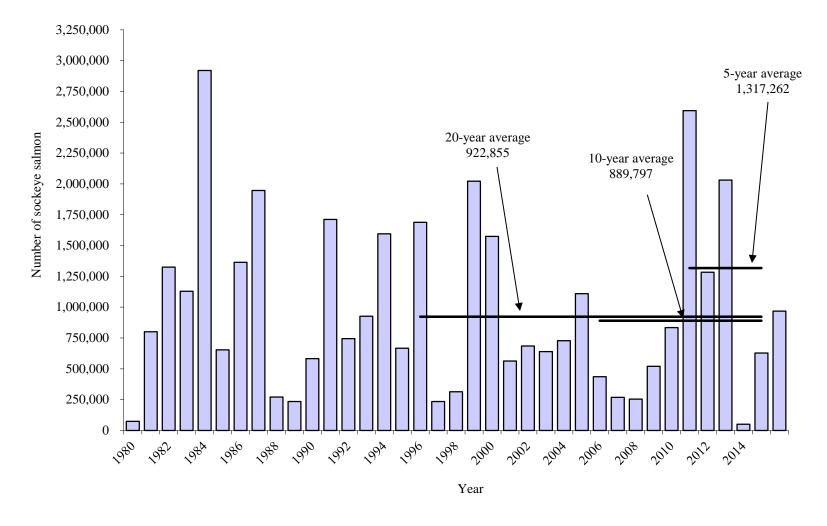


Figure 11.—Chignik-bound sockeye salmon early-run harvest, 1980–2016.

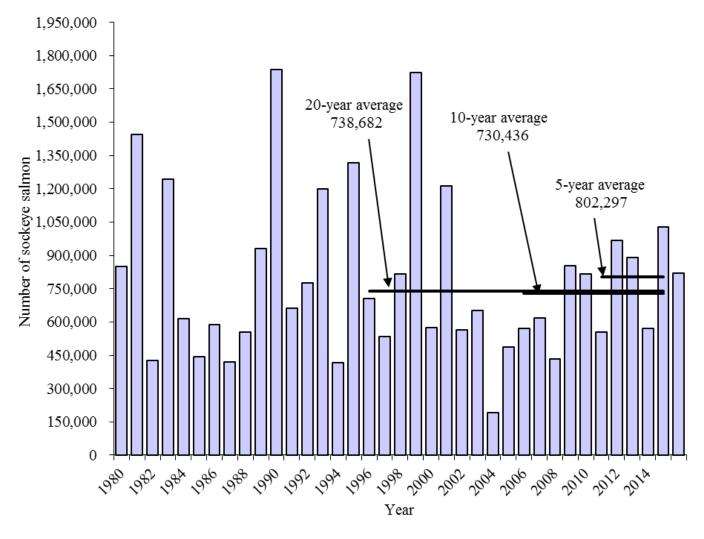


Figure 12.-Chignik-bound sockeye salmon late-run harvest, 1980-2016.

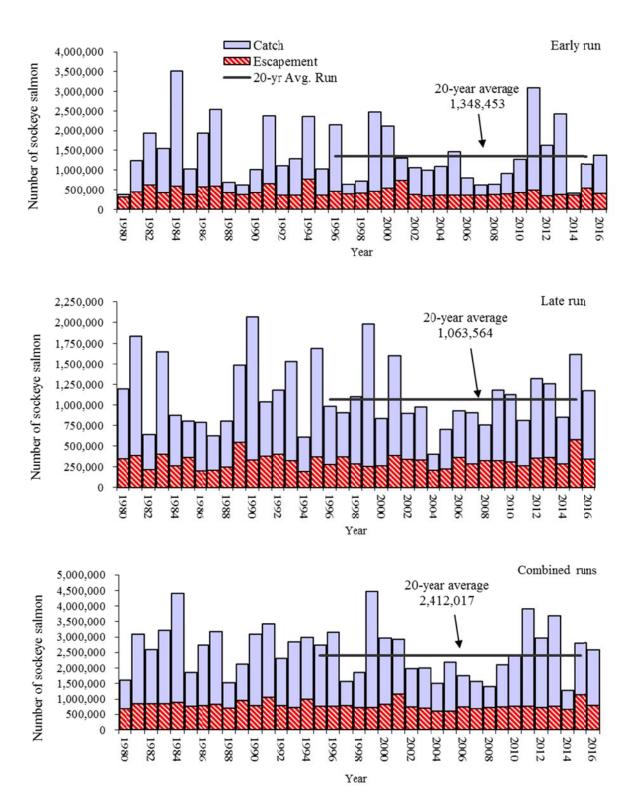


Figure 13.–Total sockeye salmon escapement and catch considered Chignik-bound including home pack, the department's test fishery harvest, and Cape Igvak and SEDM allocations, by year and run, 1980–2016.

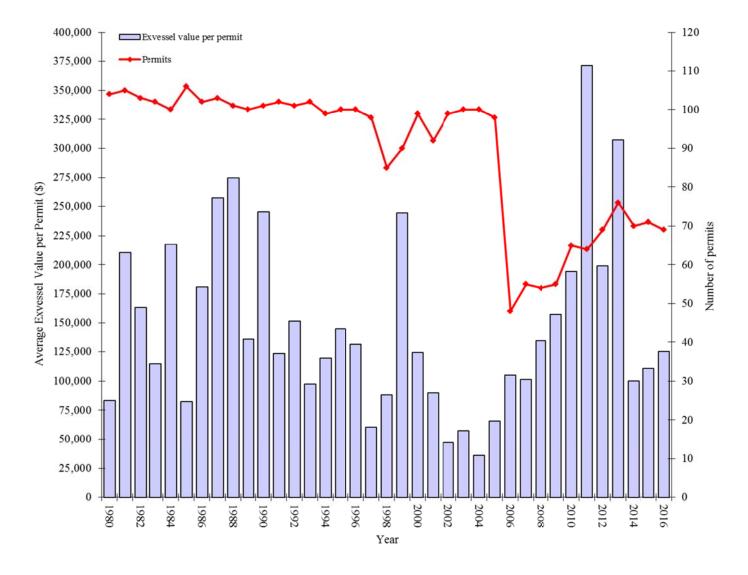


Figure 14.-Average exvessel value, in dollars, per permit and total permits fished by year 1980-2016.

APPEN	DIX A. SU	J MMARY	OF 2016 l	EMERGENC	Y ORDERS

Appendix A1.—Summary of the 2016 Chignik Management Area emergency orders.

		•	
E.O. Number	Issued	Effective	Action taken
4-FS-L-01-16	1:00 PM	4:00 PM	Opens the Chignik Bay, Central and Eastern districts as well as the
115 2 01 10	6/3/2016	6/4/2016	Inner Castle Cape Subsection of the Western District for 48 hours from
	0/3/2010	0/ 1/2010	4:00 PM Saturday, June 4 until 4:00 PM Monday, June 6.
4-FS-L-02-16	6:15 PM	6:15 AM	Extends the current commercial salmon fishing period in the Chignik
4-1/3-L-02-10			Bay, Central and Eastern districts as well as the Inner Castle Cape
	6/5/2016	6/6/2016	Subsection of the Western District for 24 hours from 4:00 PM
			Monday, June 6 until 4:00 PM Tuesday, June 7.
			Closed Waters effective 6:15 AM Monday, June 6 salmon may only
			be taken northeast of Mensis Point.
. =====================================		0.00.43.5	Opens the Chieville Day Control and Footen district or well on the
4-FS-L-03-16	6:30 PM	8:00 AM	Opens the Chignik Bay, Central, and Eastern district as well as the Inner Castle Cape Subsection of the Western District for 48 hours from
	6/9/2016	6/10/2016	8:00 AM Friday, June 10 until 8:00 AM Sunday, June 12.
4-FS-L-04-16	4:15 PM	8:00 AM	Extends the current commercial salmon fishing period in the Chignik
	6/11/2016	6/12/2016	Bay, Central and Eastern districts as well as the Inner Castle Cape
			Subsection of the Western district for 24 hours from 8:00 AM Sunday, June 12 until 8:00 AM Monday, June 13.
			Julie 12 until 8.00 Aivi Wonday, Julie 13.
4-FS-L-05-16	5:00 PM	8:00 AM	Extends the current commercial salmon fishing period in the Chignik
	6/12/2016	6/13/2016	Bay, Central, and Eastern districts, as well as the Inner castle Cape
	0,12,2010	0,13,2010	Subsection of the Western Districts for 24 hours from 8:00 AM
			Monday, June 13 until 8:00 AM Tuesday, June 14.
4-FS-L-06-16	12:00 PM	12:00 PM	Opens the Chignik Bay, Central and Eastern districts, as well as the
4 1 5 L 00 10	6/14/2016	6/15/2016	Inner Castle Cape Subsection of the Western District for 72 hours from
	0/14/2010	0/13/2010	12:00 PM Wednesday, June 15 until 12:00 PM Saturday, June 18. The
			Western District will open for 48 hours from 12:00 PM Thursday, June
			16 until 12:00 PM Saturday, June 18.
4-FS-L-07-16	Q-15 AM	12:00 DM	Extends the current commercial salmon fishing period in the Chignik
4-1.9-F-0\-10			Bay Central and Eastern districts, as well as the Inner Castle Cape
	6/17/2016	6/17/2016	Subsection of the Western District for 24 hours from 12:00 PM
			Saturday, June 18 until 12:00 PM Sunday, June 19.
			Closed waters effective 12:00 PM Friday, June 17 salmon may only
			be taken northeast of Mensis point.
4-FS-L-08-16	9:15 AM	12:00 PM	Extends the current commercial salmon fishing period in the Chignik
4-1 9-L-00-10			Bay, Central and Eastern districts, as well as the Inner Castle Cape
	6/18/2016	6/19/2016	Subsection of the Western District for 24 hours from 12:00 PM
			Sunday, June 19 until 12:00 PM Monday, June 20.
			continued

Appendix A1.–Page 2 of 3.

E.O. Number	Issued	Effective	Action taken
E.O. Humbel	133000	Litective	renon taren
4-FS-L-09-16	1:15 PM	5:00 AM	Opens the Chignik Bay, Central and Eastern districts, as well as the
	6/22/2016	6/24/2016	Inner Castle Cape Subsection of the Western District for 48 hours
			from 5:00 AM Friday, June 24 until 5:00 AM Sunday, June 26.
4-FS-L-10-16	9:15 AM	5:00 AM	Closed Waters effective 5:00 AM Friday, June 24 salmon may only
	6/23/2016	6/24/2016	be taken northeast of Mensis Point.
4-FS-L-11-16	9:15 AM	5:00 AM	Extends the current commercial salmon fishing period in the Chignik
	6/25/2016	6/26/2016	Bay, Central and Eastern districts, as well as the Inner Castle Cape
			Subsection of the Western District for 19 hours from 5:00 AM Sunday, June 26 until 11:59 PM Sunday, June 26.
			Sunday, June 20 unun 11.39 FW Sunday, June 20.
4 EG I 10 16	6.15 DV 5	10:00 AM	Opens the Chignik Bay, Central and Eastern districts, as well as the
4-FS-L-12-16	6:15 PM 6/26/2016	6/28/2016	Inner Castle Cape Subsection of the Western District for 62 hours
	0/20/2010	0/20/2010	from 10:00 AM Tuseday, June 28 until 11:59 PM Thursday, June 30.
			The Western District will open for 48 hours from 12:01 AM
			Wednesday, June 29 until 11:59 PM Thurday, June 30.
4-FS-L-13-16	9:15 AM	3:00 PM	Opens the Chignik Bay, Central and Eastern districts, as well as the
	7/1/2016	7/2/2016	Inner Castle Cape Subsection of the Western District for 50 hours from 3:00 PM Saturday, July 2 until 5:00 PM Monday, July 4.
			110111 5.00 1111 Saturday, Sury 2 and 15.00 1111 Monday, Sury 1.
4 EC I 14 16	9:15 AM	2.00 DM	Closed Waters effective 3:00 PM Saturday, July 2 salmon may only
4-FS-L-14-16		3:00 PM	be taken northeast of Mensis Point.
	7/2/2016	7/2/2016	
4-FS-L-15-16	6:15 PM	5:00 PM	Extends the current commercial salmon fishing period in the Chignik
115 2 15 10	7/3/2016	7/4/2016	Bay, Central and Eastern districts, as well as the Inner Castle Cape
			Subsection of the Western District for 25 hours from 5:00 PM
			Monday, July 4 until 6:00 PM Tuesday, July 5.
4-FS-L-16-16	5:15 PM	7:30 AM	Opens the Chignik Bay, Central, Western and Perryville districts for 50 hours from 7:30 AM Saturday, July 9 until 0:30 AM Monday, July 11
	7/8/2016	7/9/2016	hours from 7:30 AM Saturday, July 9 until 9:30 AM Monday, July 11.
4-FS-L-17-16	9:15 AM	9:30 AM	Extends the current commercial salmon fishing period in the Chignik
→-1 D-L-1/-10	7/10/2016	7/11/2016	Bay, Central, Western and Perryville districts for 25 hours from 9:30
	7/10/2010	//11/2010	AM Monday, July 11 until 10:30 AM Tuesday, July 12.
4 FG T 10 15	0.15.13.5	10.01.13.5	Extends the current commercial salmon fishing period in the Chignik
4-FS-L-18-16	9:15 AM	12:01 AM	Bay, Central, Western and Perryville districts for 25 hours from 10:30
	7/11/2016	7/12/2016	AM Tuesday, July 12 until 11:30 AM Wednesday, July 13.
			Closed Waters effective 12:01 AM Tuesday, July 12 salmon may
			only be taken northeast of Mensis Point.

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E.O. Number	Issued	Effective	Action taken
4-FS-L-19-16	6:15 PM 7/12/2016	12:01 AM 7/14/2016	Opens certain statistical areas within the CMA to target local pink and chum harvest for 48 hours from 12:01 AM Thursday, July 14 until 11:59 PM Friday, July 15. The areas are as follows with the statistical code; Kujulik Bay (272-51), Ivan Bay (273-71), Fish Rack Bay (273-73), Dorner Bay (273-84), Humpback Bay (275-51), and Ivanof Bay (275-41).
4-FS-L-20-16	12:15 PM 7/15/2016	3:00 PM 7/16/2016	Opens the Chignik Bay, Central, Western and Perryville districts from 3:00 PM Saturday, July 16 until 5:00 PM Monday, July 18.
4-FS-L-21-16	6:15 PM 7/20/2016	6:00 AM 7/22/2016	Opens the Chignik Bay, Central, Western and Perryville districts from 6:00 AM Friday, July 22 until 6:00 AM Sunday, July 24.
4-FS-L-22-16	9:15 AM 7/23/2016	6:00 AM 7/24/2016	Extends the current commercial salmon fishing period in the Chignik Bay, Central, Western and Perryville districts for 36 hours from 6:00 AM Sunday, July 24 until 11:59 PM Monday, July 25.
4-FS-L-23-16	9:15 AM 7/25/2016	11:59 PM 7/25/2016	Extends the current commercial salmon fishing period in the Chignik Bay, Central, Western and Perryville districts for 24 hours from 11:59 PM Monday, July 25 until 11:59 PM Tuesday, July 26.
4-FS-L-24-16	6:15 PM 8/1/2016	4:30 AM 8/3/2016	Opens the Chignik Bay and Central districts, as well as the Inner Castle Cape Subsection of the Western District for 50 hours from 4:30 AM Wednesday, August 3 until 6:30 AM Friday, August 5.
4-FS-L-25-16	9:15 AM 8/4/2016	5:30 PM 8/4/2016	Extends the current commercial salmon fishing period in the Chignik Bay and Central districts, as well as the Inner Castle Cape Subsection of the Western District for 50 hours from 6:30 AM Friday, August 5 until 8:30 AM Sunday, August 7. Closed Waters effective 5:30 PM Thursday, August 4 salmon may only be taken northeast of Mensis Point.
4-FS-L-26-16	9:15 AM 8/6/2016	8:30 AM 8/7/2016	Extends the current commercial salmon fishing period in the Chignik Bay and Central districts, as well as the Inner Castle Cape Subsection of the Western District for 61 hours from 8:30 AM Sunday, August 7 until 9:30 PM Tuesday, August 9.
4-FS-L-27-16	6:15 PM 8/8/2016	9:30 PM 8/9/2016	Extends the current commercial salmon fishing period in the Chignik Bay and Central districts, as well as the Inner Castle Cape Subsection of the Western District for 72 hours from 9:30 PM Tuesday, August 9 until 9:30 PM Friday, August 12.
4-FS-L-28-16	6:15 PM 8/12/2016	2:00 PM 8/14/2016	Opens the Chignik Bay and Central districts, as well as the Inner Castle Cape Subsection of the Western District at 2:00 PM Sunday, August 14 until further notice.
4-FS-L-29-16	9:15 AM 8/29/2016	11:59 PM 8/31/2016	Closes the current commercial salmon fishing period in the Chignik Bay and Central districts, as well as the Inner Castle Cape Subsection of the Western District at 11:59 PM Wednesday, August 31.

APPEND	OIX B. 201	6 CHIGN	IIK SOC	KEYE SA	LMON	POST-
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MEMORANDUM

State of Alaska

Department of Fish and Game Westward Region Office

TO: Kevin Schaberg DATE: November 28, 2016

Regional Finfish Research Coordinator Commercial Fisheries Division

Region IV- Kodiak

PHONE NO: 907-486-1848

FROM: Heather Finkle SUBJECT: 2016 Chignik post-weir estimate thru

Finfish Research Biologist September 30

Region IV- Kodiak

Commercial Fisheries Division

The overwhelming majority of Chignik River sockeye salmon escapement is estimated when passing through the Chignik weir, which is operational generally between the end of May through the beginning of September. However, fish continue to escape the system through the end of September and beyond after the weir has been removed.

Since the late 1990s, the Chignik late-run escapement goal has been adjusted numerous times to meet subsistence needs. In 1998, an objective of 25 thousand sockeye salmon for the period of September 1 -15 was added to the existing late run goal to allow local residents to achieve subsistence harvests. Again addressing concerns from local subsistence users, the 2004 Board of Fisheries added an additional 25 thousand sockeye salmon to the August management objective. In 2007, the late run's sustainable escapement goal (SEG) was increased from a range of 200-250 thousand fish to a range of 200-400 thousand fish through September 30, reassigning the prior August and September objectives and in-river run goal (IRRG) of 50 thousand fish supplemental to the SEG (Witteveen et al. 2007). Although there have been adjustments to the IRRG, the SEG for the late run has not changed following escapement goal reviews in 2010 (Nemeth et al. 2010), 2013 (Sagalkin et al. 2013), and 2015 (Schaberg et al. 2015).

Because the Chignik weir has generally been removed for the season at the beginning of September and the late-run SEG extends to September 30, a post-weir estimate has been derived to estimate the returns to Chignik following the closure of the weir. Typically, a time series analysis generalizing the decay of the run (Chatfield 1985) has been employed for the post-weir analysis to estimate fish passage through September 30.

Starting in 2011, a DIDSON sonar was deployed during weir operations as an initial assessment of the accuracy of DIDSON counts compared to weir counts. The intent of using the sonar was two-fold: the DIDSON would be available to collect accurate escapement count data in the event the weir fails and

following the removal of the weir when fish still enter the watershed. Since then, sonar counts have been collected following the removal of the weir. Post-weir sonar operation has varied in duration, ending as early as September 23 in 2015 and 2016 and running as late as September 28 in 2012 and 2013.

Because the late run goal extends through the end of September, this requires a post-weir estimate of sockeye salmon escapement for the period from the end of sonar counts through the end of September. For 2016, the weir was operated until September 12 and the DIDSON sonar was operated from September 13 to 23.

A time series model, which assumed the forecasted escapement follows the same rate of decay as the run, estimated a total of 3,464 late-run fish to have escaped upriver from September 24 to September 30 (Figure 1). The model employed weir count data from September 6 to 12 and DIDSON count data from September 13 to 23 to represent the decay of the run. No fishing occurred during the period of post-weir estimation. Inseason stock composition genetics analysis indicated that the run was greater than 99% late run by this time.

The addition of the post-weir estimate to the run reconstruction yields a total of 52,385 fish escaping the system from September 1 to 30, with 15,542 fish estimated to have escaped from September 16 to 30.

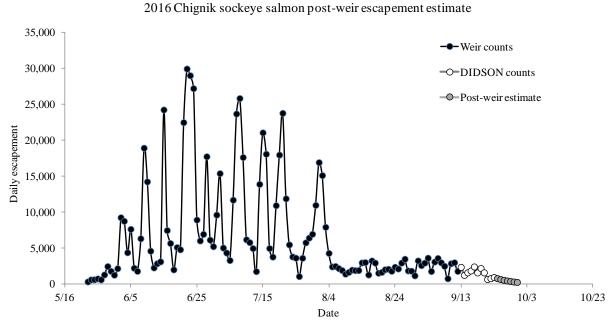


Figure 1. Estimated Chignik sockeye salmon run by day for 2016.

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CC: Wilburn, Stumpf, Wadle