

# **Chignik Management Area Commercial Salmon Fishery Harvest Strategy, 2018**

by

**Dawn M. Wilburn**

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February 2018

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Alaska Department of Fish and Game

Divisions of Sport Fish and Commercial Fisheries



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

***FISHERY MANAGEMENT REPORT NO. 18-07***

**CHIGNIK MANAGEMENT AREA COMMERCIAL SALMON FISHERY  
HARVEST STRATEGY, 2018**

by

Dawn M. Wilburn

Alaska Department of Fish and Game, Division of Commercial Fisheries, Kodiak

Alaska Department of Fish and Game  
Division of Sport Fish, Research and Technical Services  
333 Raspberry Road, Anchorage, Alaska, 99518-1565

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*Dawn M. Wilburn,  
Alaska Department of Fish and Game, Division of Commercial Fisheries,  
351 Research Court, Kodiak, AK 99615, USA*

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# TABLE OF CONTENTS

	Page
LIST OF TABLES.....	ii
LIST OF FIGURES.....	ii
LIST OF APPENDICES .....	ii
ABSTRACT .....	1
INTRODUCTION.....	1
GEAR DESCRIPTION .....	1
CLOSED WATERS .....	2
REPORTING REQUIREMENTS .....	2
EMERGENCY ORDERS AND NEWS RELEASES .....	3
2018 SALMON FORECASTS.....	3
Sockeye Salmon .....	3
Total Run .....	3
Early Run (Black Lake) .....	3
Late Run (Chignik Lake) .....	4
Other Salmon Species.....	4
Chinook Salmon .....	4
Coho Salmon .....	4
Pink Salmon.....	4
Chum Salmon .....	4
2018 CHIGNIK SALMON MANAGEMENT .....	5
June.....	5
Transition Period .....	6
July .....	7
August and September .....	8
2018 SUBSISTENCE SALMON FISHERY .....	9
REFERENCES CITED .....	11
TABLES AND FIGURES.....	13
APPENDIX A. NEWS RELEASE INSTRUCTIONS .....	23
APPENDIX B. 2018 CHIGNIK SOCKEYE SALMON FORECAST.....	29
APPENDIX C. CHIGNIK SALMON SUBSISTENCE PERMIT .....	33

## LIST OF TABLES

<b>Table</b>	<b>Page</b>
1. Chignik River sockeye salmon interim escapement objectives, in numbers of fish, 2018.....	14
2. Chignik Management Area statistical areas prior to 2016 and current statistical areas.....	15

## LIST OF FIGURES

<b>Figure</b>	<b>Page</b>
1. Map of the Alaska Peninsula and the relative locations of the Chignik, Kodiak, and Alaska Peninsula Management Areas.....	17
2. Map of the Chignik Management Area commercial fishing district boundaries and statistical areas. ....	18
3. Map of the Inner (273-93) and Outer Castle Cape (273-95) subsections of the Western District.....	19
4. Map of upper Chignik Lagoon and the location of Pillar Rock, Mensis Point, Humes Point, Mallard Duck, and Schooner Bay marker locations and the location of the Chignik weir. ....	20
5. Map of “Jack’s Box” in the Chignik Bay and Central districts. ....	21
6. Map of the “Cape Ikti Line” in the Western and Perryville districts. ....	22

## LIST OF APPENDICES

<b>Appendix</b>	<b>Page</b>
A1. User instructions for the Division of Commercial Fisheries fishery announcements news release system.....	24
B1. 2018 Chignik sockeye salmon forecast. ....	30
C1. Chignik salmon subsistence permit. ....	34

## ABSTRACT

This document provides stakeholders with general information regarding how the Alaska Department of Fish and Game (ADF&G) will manage the 2018 Chignik Management Area (CMA) commercial salmon fishery. The 2018 total sockeye salmon *Oncorhynchus nerka* forecasted run for the Chignik River watershed is 1,749,000 fish. Approximately 834,000 sockeye salmon are expected to be harvested in the CMA. In June, the first commercial fishing period in the Chignik Bay, Central, and Eastern districts and the Inner Castle Cape Subsection of the Western District may occur after approximately 20,000 sockeye salmon have escaped or are expected to escape into the Chignik River. Two fishing periods of up to 48 hours in length, separated by at least 48 hours, may occur in the Western District concurrent with the Chignik Bay and Central districts during June and early July. All subsequent Western District fishing periods and the first commercial fishing period in the Perryville District may begin on July 6. Fishing periods in the outer portions of these districts will depend on the Chignik River sockeye salmon interim escapement objectives being met as well as the strength of the local pink and chum salmon runs. Beginning July 6 through August, inner bay fisheries may occur in the Western and Perryville districts to target pink and chum salmon. From the end of the transition period (approximately late-June through mid-July) until the end of the fishing season, ADF&G shall manage the CMA based on its evaluation of the local pink *O. gorbuscha*, chum *O. keta*, and coho *O. kisutch* salmon runs, as well as the Chignik watershed late-run sockeye salmon escapement.

Key words: Chignik, sockeye salmon, *Oncorhynchus nerka*, Chinook, *O. tshawytscha*, pink, *O. gorbuscha*, chum, *O. keta*, coho, *O. kisutch*, Chignik Management Area, CMA, 2017 management plan, subsistence fishing, commercial fishery, SEG, FMR

## INTRODUCTION

This document provides stakeholders with the basic framework of how the Alaska Department of Fish and Game (ADF&G) will manage the 2018 Chignik Management Area (CMA; Area L) commercial salmon fishery. 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, the CMA is divided into 5 fishing districts: Eastern, Central, Chignik Bay, Western, and Perryville. Each district is further divided into statistical reporting areas (Figure 2).

The 2018 CMA commercial salmon fishery will be managed by ADF&G in accordance with the guidelines established in the *Chignik Salmon Management Plan* (5 AAC 15.357). The goal of this management plan is to allow commercial fisheries on CMA salmon stocks and to achieve escapement goals for early-run (Black Lake) and late-run (Chignik Lake) sockeye salmon *Oncorhynchus nerka* as well as local stocks of pink *O. gorbuscha*, chum *O. keta*, coho *O. kisutch*, and Chinook salmon *O. tshawytscha*. Complete details of this plan are found in the *2016–2019 Alaska Peninsula, Atka-Amlia Islands, Aleutian Islands and Chignik Areas Commercial Salmon Fishing Regulations* booklet (ADF&G 2016) available from regional Alaska Department of Fish and Game offices, or online at:

<http://www.adfg.alaska.gov/index.cfm?adfg=fishregulations.commercial>.

## GEAR DESCRIPTION

Purse and hand purse seines are the only legal commercial salmon fishing gear within the CMA. Legal seine gear must be between 100 and 125 fathoms in length in the Chignik Bay District and between 100 and 225 fathoms in length in all other districts. No seine may be less than 3 fathoms, or more than 375 meshes in depth. Up to 25 meshes of chafing gear with a maximum mesh size of 7 inches may be used. Additionally, no lead may be more than 75 fathoms in length. In the Eastern, Central, Western, and Perryville districts, the aggregate length of seine and lead

cannot be more than 225 fathoms in length. Complete seine specifications are listed in 5 AAC 15.332.

## **CLOSED WATERS**

Specific closed water areas within the CMA are described in 5 AAC 15.350 and are determined using the global positioning system (GPS; 5 AAC 15.206). For general regulations on closed waters, please refer to 5 AAC 39.290. Where regulatory markers are posted, it is illegal to take salmon for commercial purposes on the streamward side of the markers (5 AAC 39.290 (b)).

## **REPORTING REQUIREMENTS**

Tender and processor reporting requirements are detailed in the CMA commercial fishing regulations (5 AAC 15.355). Processors are required to report the previous day's commercial harvest information to ADF&G staff by 10:00 AM daily, by e-mail, telephone, or radio (SSB or VHF). Earlier reporting is appreciated and helps to manage an orderly fishery. The preferred method of catch reporting is to e-mail an Excel spreadsheet (template provided by ADF&G) to the Chignik Area Management Biologist ([dawn.wilburn@alaska.gov](mailto:dawn.wilburn@alaska.gov)) and Chignik Assistant Area Management Biologist ([ross.renick@alaska.gov](mailto:ross.renick@alaska.gov)). Failure to report daily catch information in a timely manner is a violation of commercial fishing regulations (5 AAC 15.355). In order to process the harvest information and use it for management decisions, catch reports must include the estimated number and total pounds of salmon harvested by species from each statistical area. Timely and accurate catch information from all CMA fishing districts allows for informed and consistent management actions. Without timely and accurate information, a more conservative management approach may be adopted and less fishing time allowed. Information needs, reporting formats, and timetables may be obtained by contacting the Chignik management staff in Kodiak during the winter (907-486-1806) or at the Chignik weir (907-512-6731) from May through September.

It is the legal responsibility of the commercial fishermen, tenders, processors, and all buyers to ensure that all information on a fish ticket is complete and accurate. Prior to completing the ticket, permit holders, tender operators, and/or processors must make sure that the correct statistical area and harvest information has been entered and that all information on the fish ticket is complete, legible, and accurate. If multiple statistical areas were fished, fishermen must ensure that they have assigned and recorded the correct percentage of fish delivered from each of those statistical areas on the fish ticket. Fishermen may retain finfish from lawfully taken commercial catch for personal use (home pack), including for use as bait in a commercial fishery (5 AAC 39.010). However, commercially caught salmon retained for personal use must be recorded on the fish ticket and may not be sold or bartered. It is the fishermen's responsibility to secure a market for all catch before harvesting fish. The waste of salmon is prohibited by Alaska Statute (AS 16.05.831 and 5 AAC 93.310), and this rule will be strictly enforced.

The CMA statistical areas were restructured in 2016. Due to the creation of new statistical areas and reassignment of numbers, it is imperative that the most recently updated statistical charts be used when filling out fish tickets (March 2016). These statistical charts will be available at the ADF&G offices in Chignik and Kodiak. Industry personnel can also obtain a chart by contacting the Chignik Area Management Biologist ([dawn.wilburn@alaska.gov](mailto:dawn.wilburn@alaska.gov)).



## EMERGENCY ORDERS AND NEWS RELEASES

Fishing periods will be established by emergency order (EO) based on both ADF&G's assessment of the strength and health of the salmon runs and the availability of a harvestable surplus of fish. News releases will be issued prior to fishery openings to notify the fishermen and processors. When possible, a 24-hour notice will be given before opening or closing commercial fishing periods. News releases will be broadcast over VHF channel 6. If you wish to receive news releases by e-mail or fax, please access the centralized ADF&G News Release System at <http://www.adfg.alaska.gov/index.cfm?adfg=cfnews.main> (accessed January 2018) and subscribe to the Chignik salmon seine fishery. Detailed instructions are located in Appendix A of this document. Catch, escapement, and other fishery information will be broadcast over VHF channel 6 at 9:15 AM and 6:15 PM daily. The Chignik Weir Report e-mail (catch, escapement, and other fishery data) will be sent out daily during the commercial salmon fishing season. Please contact ADF&G staff by e-mail ([dawn.wilburn@alaska.gov](mailto:dawn.wilburn@alaska.gov)) or by phone (907-512-6731 or 907-486-1830) to be placed on the e-mail distribution list.

Beginning approximately June 1, an automated information line (907-486-1839) will be activated to provide callers with recent escapement and harvest information as well as any current news releases.

## 2018 SALMON FORECASTS

### SOCKEYE SALMON

Preseason salmon forecasts provide fishermen and processors with the expected run strength of Chignik River watershed sockeye salmon for planning purposes. ADF&G also uses these forecasts to formulate a preseason management strategy; however, the fishery is primarily managed based on inseason indicators of actual run strength as they become available. The Chignik River sockeye and Chinook salmon run strength, as well as characteristics contributing to the quality of the run, are monitored daily through the weir and through commercial fisheries information. ADF&G will aim to achieve escapement within the range of the escapement goals; however, inseason adjustments may be made to management objectives if there is concern over quality of the run.

#### Total Run

The 2018 total sockeye salmon run for the Chignik River watershed is forecasted to be 1,749,000 fish (range 411,000 fish to 3,306,000 fish; Appendix B1; Brenner *In prep*). The total projected commercial harvest for 2018 is 1,011,000 sockeye salmon, of which 834,000 are expected to be harvested in CMA.

#### Early Run (Black Lake)

The total early-run forecast is approximately 848,000 sockeye salmon (range 0 fish to 1,914,000 fish; Appendix B1; Brenner *in prep*). The Chignik early-run harvest is projected to be approximately 448,000 fish. The early-run biological escapement goal (BEG) range is 350,000–450,000 sockeye salmon (Table 1; Schaberg et al. 2015). The early run typically peaks in late June and returns primarily to Black Lake and its tributaries.

## **Late Run (Chignik Lake)**

The total late-run forecast is approximately 901,000 sockeye salmon (range 411,000 fish to 1,392,000 fish; Appendix B1; Brenner *in prep*). The Chignik late-run harvest is projected to be approximately 563,000 fish. The late-run sustainable escapement goal (SEG) range is 200,000–400,000 sockeye salmon. To increase the opportunity for late-season subsistence harvest, an additional inriver run goal (IRRG) of 75,000 sockeye salmon (25,000 sockeye salmon in August and 50,000 in September) is added to the lower bound of the late-run goal, resulting in a total late-run escapement goal range of 275,000–400,000 sockeye salmon (Table 1; Schaberg et al. 2015).

## **OTHER SALMON SPECIES**

### **Chinook Salmon**

The 2018 CMA projected Chinook salmon commercial harvest is 7,000 fish, based on the most recent 10-year average harvest. Chinook salmon harvest in the CMA is mostly dependent upon the amount of commercial fishing time for sockeye salmon in July. There is no targeted Chinook salmon harvest in the CMA. The Chignik River Chinook salmon escapement goal is 1,300–2,700 fish (Schaberg et al. 2015).

### **Coho Salmon**

The 2018 CMA projected coho salmon commercial harvest is 111,000 fish and is also based on the most recent 10-year average. The coho salmon commercial harvest may vary depending on the commercial fishing effort directed on local pink salmon and chum salmon runs in the Eastern, Central, Western, and Perryville districts. Market conditions late in the season may also limit commercial salmon fishing effort when coho salmon are prevalent in Chignik Lagoon.

### **Pink Salmon**

The 2018 CMA projected pink salmon commercial harvest is 210,000 fish, based on the average even-year harvest from 2012–2016. Historically, the Western District has provided the largest proportion of the annual pink salmon commercial harvest.

In January of 2015, an escapement goal review team met to review the CMA salmon stocks with escapement goals. From that review, the team recommended changing the areawide even-year and odd-year pink salmon SEG ranges. The new CMA even-year escapement goal for pink salmon is an areawide SEG range of 260,000–450,000 fish (Schaberg et al. 2015). This SEG range was developed based on 8 index systems distributed throughout 4 of the 5 fishing districts in the CMA. These 8 systems have represented approximately 53% of the annual pink salmon indexed escapement over the last 35 years. Prior to 2016, ADF&G surveyed 49 index streams in order to monitor CMA pink salmon runs and to calculate an escapement estimate based on peak aerial surveys. While the 8 index systems will be monitored in order to provide an escapement index, the other 41 previously monitored streams will continue to be monitored to assess quality and spatial distribution of the runs.

### **Chum Salmon**

The 2017 CMA projected chum salmon commercial harvest is 253,000 fish, based on the most recent 10-year average harvest. Historically, the Central and Western districts have provided the largest proportion of the annual chum salmon commercial harvest.

In January of 2015, an escapement goal review team met to review CMA salmon stocks with escapement goals. From that review, the team recommended changing the lower bound SEG threshold of 57,400 chum salmon. The new CMA escapement goal for chum salmon is an areawide SEG range of 45,000–110,000 fish (Schaberg et al. 2015). This SEG range was developed based on 6 index systems distributed throughout 4 of the 5 fishing districts in the CMA. These 6 systems have represented approximately 57% of the annual chum salmon indexed escapement over the last 35 years. Prior to 2016, ADF&G surveyed 42 index streams in order to monitor the CMA chum salmon runs and to calculate an escapement estimate based on peak aerial surveys. While the 6 streams will be monitored in order to provide an escapement index, the other 36 previously monitored streams will continue to be monitored to assess quality and spatial distribution of the runs.

## **2018 CHIGNIK SALMON MANAGEMENT**

Beginning in the 2018 season, newly recommended interim escapement objectives have been established for the Chignik River early- and late-run sockeye salmon (Table 1). These interim escapement objectives were developed based on historical run timing and escapement information to help ensure achievement of the overall sockeye salmon escapement goals.

### **JUNE**

By regulation, beginning June 1, the first commercial salmon fishing period may occur when 20,000 sockeye salmon have escaped into the Chignik River, or if it is determined that a strong buildup of sockeye salmon exists in Chignik Lagoon and 20,000 sockeye salmon are expected to escape into the Chignik River (5 AAC 15.357 (b)(1)). The purpose of this regulation is to allow subsistence fishing opportunity prior to the commercial fishing season and to avoid a large buildup of salmon in the lagoon.

During June, commercial salmon fishing may occur in the Chignik Bay, Central, and Eastern districts, and the Inner Castle Cape Subsection of the Western District (Figure 2 and 3). Through approximately June 26, these areas open and close concurrently by regulation (5 AAC 15.357 (c)(1)) and are based upon achieving early-run interim escapement objectives (Table 1). In addition, the entire Western District may open for 2 fishing periods of up to 48 hours in length separated by a minimum closure of 48 hours. Both fishing periods in the Western District shall be opened concurrently with fishing periods in the Chignik Bay, Central, and Eastern districts (5 AAC 15.357 (e)).

Within Chignik Lagoon, ADF&G will primarily use the Humes Point and the Mensis Point markers to designate closed waters (Figure 4). Alternating between Humes Point and Mensis Point allows ADF&G to control escapement of sockeye salmon entering the Chignik River. The Pillar Rock and Chignik River weir markers may be used during periods of high escapement and/or limited harvest capacity by the fleet (Figure 4). If estimated cumulative sockeye salmon escapement is projected to exceed the upper bound of the early-run escapement goal, closed waters may be reduced in the Mallard Duck Bay and Schooner Bay areas of Chignik Lagoon during the month of June to provide additional opportunities to target sockeye salmon.

ADF&G test fishing may begin in early June to assess salmon buildup in Chignik Lagoon. Test fishing may occur on several days in early June depending on test fish vessel catch rates and escapement levels (Stumpf 2017). Subsequent commercial fishing periods during June will be based on the evaluation of interim escapement objectives (Table 1), commercial and subsistence

catches, and additional test fishing results. Additional test fisheries may also occur in the Chignik Lagoon or other areas of the CMA if necessary to generate revenue to fund management operations in the CMA. Details of these test fisheries will be released via the Fish and Game news release system.

## **TRANSITION PERIOD**

Prior to 2004, scale pattern analysis (SPA) was used to differentiate stock composition during the transition from the early- to late-run sockeye salmon, and the fishery was managed based on the results of this analysis (Witteveen and Botz 2004). Although the program was discontinued in 2004 due to funding constraints, ADF&G staff determined that July 4 was the best average approximation of a separation date between the early and late runs, based on historical SPA data. From 2005 through 2013 the fishery was managed so that through July 4, fishing periods were based on achieving the early-run interim escapement objectives. Beginning July 5, cumulative escapement was reset to zero and subsequent fishing periods were based on achieving the late-run interim escapement objectives.

From 2010 through 2017, ADF&G collected genetic samples from sockeye salmon escapement at the Chignik River weir during the period of transition between the 2 sockeye salmon runs. Stock composition information was available in season in both 2012 and 2013, which assisted in managing the escapement estimates simultaneously for both sockeye salmon runs, although escapement was reset to zero on July 4. During the 2014–2017 seasons, inseason genetic sampling during the peak of the overlap period (June 24–July 20) was used to define the run transition and management decisions were based on this information instead of a set cut-off date between runs. Multiple years of early- and late-run stock proportions highlight the variable nature of the timing of entry into the Chignik River and demonstrate how a set separation date (e.g., July 4) can often underestimate or overestimate respective stock-specific escapement (Foster 2013).

During the transition period for the 2018 season, the Chignik Bay and Central districts, as well as the Inner Castle Cape Subsection will be managed based on achievement of the newly established interim escapement objectives for both runs (Table 1). The estimated daily early- and late-run escapement will be determined by applying an average stock proportion curve developed from inseason genetics data collected during the 2010–2017 seasons. Genetic sampling will once again occur during the traditional peak overlap period and results will be utilized for the following purposes; post season adjustments to the 2018 early and late run estimates, post season run reconstruction and further adjustments to the average stock proportion curve for future years.

In season, management will monitor variables of the runs such as age composition, sex composition, escapement, and harvest vs. effort, over the entire run. These variables may also be important indicators of run transition timing. The Chignik sockeye salmon runs are predominantly made up of freshwater age-1 fish in the early run and freshwater age-2 fish in the late run. The proportional shift in ages and the timing of that shift can give some indication to the transition timing. Monitoring run strength through escapement and harvest and comparing that to historical run timing can also provide valuable indications of run timing and strength. Typically, management will aim for the midpoint of the escapement objectives during a normal run with normal run transition timing. If these variables indicate that run transition timing may be abnormal, management action may be taken to aim for the lower or upper end of the objectives

to avoid over or under escaping either run. Management actions may include restricting or liberalizing fishing time and/or area.

Commercial fishing in the Eastern District may be restricted until the strength of the Chignik River watershed sockeye salmon late run can be determined. With the exception of the Inner Castle Cape Subsection of the Western District and the two 48-hour commercial fishing periods, the remainder of the Western District may not open until July 6. The entire Perryville District also may not open until July 6.

## **JULY**

During July, the Chignik Bay and Central districts (Figure 2) will be managed primarily based on Chignik River watershed sockeye salmon run strength. ADF&G may, however, adjust closed waters in Chignik Lagoon based on Chignik River watershed Chinook salmon escapement goals (1,300–2,700 fish; Schaberg et al. 2015). If Chinook salmon escapement during early July is weak and the escapement goal is unlikely to be met, waters upstream of the Humes Point markers may be closed to improve escapement by removing commercial fishing pressure from areas where Chinook salmon hold before entering the Chignik River (5 AAC 15.357(C)); Figure 4). If necessary, the commercial salmon fleet may be required to return Chinook salmon greater than 28 inches in length to the water quickly and with minimal handling in the Chignik Bay District.

The Eastern District (Figure 2) will be primarily managed for pink and chum salmon during July. The first commercial salmon fishing period after the transition period in the Eastern District can occur as early as July 9 and is likely to be at least 48 hours in duration. Extensions to this fishing period will depend on pink and chum salmon fishery harvest as compared to historical catch records, local pink and chum salmon escapements, and Chignik River watershed sockeye salmon escapement levels. The entire district will be opened to commercial salmon fishing only if Chignik River watershed sockeye salmon interim escapement objectives are expected to be met and a harvestable surplus of sockeye salmon is anticipated.

If the Chignik late-run sockeye salmon escapement is lower than expected, fishing periods in terminal areas in the Eastern District may be announced via EO to target pink and chum salmon. In these cases, the commercial salmon fishery in the Eastern District may close on short notice if substantial numbers of sockeye salmon are harvested. Closed waters may be expanded around individual streams if pink and chum salmon escapements are not sufficient in those areas, or closed waters may be reduced if escapement is sufficient and there is a large harvestable surplus of fish.

With the exception of the Inner Castle Cape Subsection (Figure 3), which opens concurrently with the Chignik Bay and Central districts, commercial fishing periods in the Western and Perryville districts (Figure 2) may be allowed beginning July 6 if Chignik River interim escapement objectives are expected to be met and surplus Chignik River sockeye salmon are available for harvest. Depending on expected Chignik River sockeye salmon run strength, those portions of the Chignik Bay and Central districts known as “Jack’s Box” may also be opened concurrently with the Western and Perryville districts (Figure 5). The first commercial salmon fishing period in these districts is likely to be 48 hours in duration. Extensions will depend on pink and chum salmon fishery harvest as compared to historical catch records, local pink and chum salmon escapements, and Chignik River watershed sockeye salmon escapement levels.

Before the 2016 season, several new inner bay statistical areas were created in the Eastern, Central, Western, and Perryville districts (Table 2; Figure 2). One purpose of these new statistical areas is to provide more detailed harvest and effort information from the selected bays. In an attempt to provide more early harvest opportunity on pink and chum salmon, ADF&G intends to conduct at least one 48-hour inner bay fishery as early as July 6, in the new statistical areas of the Western and Perryville districts as well as the Kujulik Bay Section of the Central District. If a sockeye salmon fishery is already occurring at this time (which would also mean that the bays are already open), the date of the inner bay fishery may be pushed back to as late as July 15. Areas may not open if the CMA is experiencing low water and dry river mouths. After July 15, other 48-hour fishing periods may occur; however, management will be primarily escapement based for pink and chum salmon, and may also consider the amount of fishing time already occurring in the districts.

If surplus Chignik River sockeye salmon are not expected to be available for harvest, the commercial fisheries in the Western and Perryville districts may occur north of the Cape Itki line beginning in mid-July to target local pink and chum salmon while avoiding Chignik River-bound sockeye salmon (Figure 6). If escapement is adequate in Ivanof Bay, the Inner Ivanof Bay statistical area will likely be open as well (Figure 2). In the case of substantial numbers of sockeye salmon being harvested while fishing north of the Cape Itki line, ADF&G will restrict fishing further into the remaining inner bay statistical areas if pink and chum salmon harvest and escapement appear adequate. Specific areas may be closed if pink and chum salmon escapements are not sufficient. If there is a large harvestable surplus of fish available and escapement is adequate, closed waters in these areas may also be reduced.

## **AUGUST AND SEPTEMBER**

In August and September, the Chignik Bay and Central districts, and the Inner Castle Cape Subsection of the Western District (Figure 2) will be managed based on Chignik River watershed sockeye salmon run strength. ADF&G plans to operate the Chignik River weir through September 15 for the 2018 commercial salmon season. In addition, 2 Dual Frequency Identification Sonars (DIDSON) will be operated concurrently from August 15 through September 15 in order to obtain a direct comparison of the weir and DIDSON enumeration methods. This will allow ADF&G to develop correction factors for the 2 methods specifically for the Chignik River. The purpose of this project is to develop a means for a more accurate assessment of the Chignik River late-season sockeye salmon run through the use of DIDSON after the weir has been removed. This project is funded by an Alaska Sustainable Salmon Fund (AKSSF) proposal through 2018.

Beginning September 15, commercial fishing periods in the Chignik Bay and Central districts are limited to a maximum of 48 hours per week and will be based on the evaluation of the sockeye salmon run strength and the Chignik Lake late-season sockeye salmon subsistence needs (5 AAC 15.357(b)(4)). Management options beginning September 15 include the following:

- allowing the maximum fishing time of 48 hours per week to be divided into 1, 2, 3, or 4 commercial fishing periods, depending upon estimated sockeye and/or coho salmon escapements (for example, the fishing time could be distributed over 4 days with 12-hour fishing periods per day within a floating 7-day period);

- a weekly fishing schedule of less than 48 hours, if the sockeye and/or coho salmon run strength is determined to be weak or the September IRRG is not being met; or
- a complete closure.

During August and September, the Eastern District (Figure 2) will be managed based on local pink, chum, and coho salmon abundance (5 AAC 15.357(c)(3)). Fishing times and areas will be based on ADF&G's inseason assessment of the local salmon stocks run strength. During the month of August, inner bay fisheries may occur concurrently with the Western and Perryville districts in areas with adequate pink and chum salmon abundance to warrant fisheries with the possibility of extended fishing time. However, district-wide openings will not be allowed unless Chignik River sockeye salmon interim escapement objectives (including the IRRG) are expected to be met and overall pink and chum salmon abundance is sufficient to meet Eastern District escapement objectives.

Until approximately August 20, fishing periods in the Western and Perryville districts (Figure 2) will be based on the evaluation of pink and chum salmon run strength, as well as the Chignik late run sockeye salmon strength (5 AAC 15.357(d)(2)). After August 20, fishing time in the Western and Perryville districts will be based on Chignik River sockeye salmon escapement and local pink, chum, and coho salmon abundance. Inner bay fisheries, or fishing north of the Cape Itki line, may occur during August in areas with adequate pink and chum salmon abundance to warrant fisheries with the possibility of extended fishing time. District-wide openings will not be allowed unless Chignik River sockeye salmon interim escapement objectives (including the IRRG) are expected to be met and overall pink and chum salmon abundance is sufficient to meet Western and Perryville districts escapement objectives.

## **2018 SUBSISTENCE SALMON FISHERY**

This section of the document briefly covers state subsistence regulations only. For more information on federal subsistence fishing regulations, contact the Federal Office of Subsistence Management.

All state subsistence salmon fishermen must obtain a Chignik Area subsistence salmon permit issued by the ADF&G for the 2018 season (5 AAC 01.015; Appendix C1). The permits will be available at the Chignik Weir Field Office and from several local vendors. Catch information obtained from subsistence permits is compiled annually and used to assess regional subsistence salmon fisheries. Subsistence fishing regulations are available online at: [http://www.adfg.alaska.gov/static-f/regulations/fishregulations/pdfs/commercial/2017\\_2018\\_subsistence\\_pu.pdf](http://www.adfg.alaska.gov/static-f/regulations/fishregulations/pdfs/commercial/2017_2018_subsistence_pu.pdf).

An Alaska resident who obtains a state subsistence permit and who does not hold a commercial salmon fishing license (CFEC permit) may subsistence fish for salmon at any time. Commercial salmon license holders may subsistence fish for salmon during the commercial fishing season at any time except for 12 hours preceding and 12 hours following a commercial salmon fishing period (5 AAC 01.485).

Subsistence salmon fishing is permitted in the Chignik River. The Chignik River, beginning 100 yards below the weir, is open to subsistence salmon fishing year round. However, salmon may not be taken upstream from the weir to the outlet of Chignik Lake from July 1 to August 31 (5 AAC 01.475(1)). Subsistence fishing in this area is prohibited to protect spawning Chinook salmon. All fishing is prohibited 100 yards upstream and downstream of the weir while it is operational.

The Chignik Lake tributaries of Clark River and Home Creek, starting from their confluence with Chignik Lake upstream one mile, are open to subsistence salmon fishing (5 AAC 01.475(2)). The BOF amended the subsistence regulations to include these tributaries for the purposes of providing additional harvest opportunities for subsistence users.

Subsistence users are reminded that purse seine gear is not allowed for taking of subsistence salmon in Chignik Lake (5 AAC 01.470(a)). Additionally, any gillnet that is fixed, anchored, or otherwise held in place may not obstruct more than one-half of the width of any stream open to subsistence fishing. All subsistence salmon fishing gear must be marked with a buoy listing the first initial, last name, and address of the person operating the gear (5 AAC 01.010(h)). Subsistence users must carry their subsistence fishing permit with them while fishing. The adipose fin must be removed from all subsistence-caught salmon immediately after harvest.



## REFERENCES CITED

- ADF&G (Alaska Department of Fish and Game). 2016. 2016–2019 Alaska Peninsula, Atka-Amlia Islands, Aleutian Islands, and Chignik Areas Commercial Salmon Fishing Regulations. Alaska Department of Fish and Game, Division of Commercial Fisheries, Juneau.
- ADF&G (Alaska Department of Fish and Game). 2017. 2017–2018 Subsistence and Personal Use Statewide Fisheries Regulations. Available from <http://www.adfg.alaska.gov/index.cfm?adfg=fishregulations.commercial> (Accessed April 2016).
- Brenner, R. E., and A. R. Munro, editors. *In prep.* Run forecasts and harvest projections for 2018 Alaska salmon fisheries and review of the 2017 season. Alaska Department of Fish and Game, Anchorage.
- Foster, M. B. 2013. Chignik River sockeye salmon inseason genetic stock identification operational plan, 2013. [In] Salmon operational plans for the Chignik Area, 2013. Alaska Department of Fish and Game, Regional Information Report 4K13-05, Kodiak.
- Schaberg, K. L., D. A. Tracy, M. B. Foster, and M. Loewen. 2015. Review of salmon escapement goals in the Chignik Management Area, 2015. Alaska Department of Fish and Game, Fishery Manuscript Series No. 15-02, Anchorage.
- Stumpf, L. K. 2017. Chignik Lagoon sockeye salmon test fishery operational plan, 2017. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Operational Plan ROP.CF.4K.2017.01, Kodiak.
- Witteveen, M. J., and J. C. Botz. 2004. Chignik lakes scale pattern analysis, run assessment, and sockeye salmon catch sampling results, 2003. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report 4K04-30, Kodiak.



## **TABLES AND FIGURES**

Table 1.—Chignik River sockeye salmon interim escapement objectives, in numbers of fish, 2018.

Date	Black Lake		Chignik Lake	
	Lower	Upper	Lower	Upper
5-Jun	12,000	– 17,000		
10-Jun	45,000	– 55,000		
15-Jun	95,000	– 125,000		
20-Jun	150,000	– 230,000	1,000	– 2,000
25-Jun	215,000	– 320,000	3,000	– 5,000
30-Jun	272,000	– 355,500	6,000	– 11,200
5-Jul	300,000	– 385,500	10,000	– 23,000
10-Jul	330,000	– 405,000	22,000	– 42,000
15-Jul	336,000	– 420,000	41,000	– 82,000
20-Jul	348,000	– 436,000	68,000	– 136,000
25-Jul	350,000	– 448,000	98,000	– 196,000
30-Jul	350,000	– 450,000	127,000	– 255,000
4-Aug			155,000	– 280,000
9-Aug			172,000	– 308,500
14-Aug			190,000	– 320,000
19-Aug			206,000	– 331,000
24-Aug			218,000	– 340,000
29-Aug			223,000	– 348,000
31-Aug			225,000	– 350,000
September			275,000	– 400,000
Escapement Goals				
Black Lake	350,000	– 450,000		
Chignik Lake <sup>a</sup>	275,000	– 400,000		

<sup>a</sup> The late-run escapement objective 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.–Chignik Management Area statistical areas prior to 2016 and current statistical areas.

Area	Statistical area	
	Prior to 2016	2016
<u>Perryville District</u>		
Ivanof Bay Section		
Inner Ivanof Bay	N/A	275-41
Ivanof Bay	275-40	275-42
Humpback Bay Section		
Inner Humpback Bay	N/A	275-51
Humpback Bay	275-50	275-52
Perryville Section		
Perryville Area	275-60	275-60
<u>Western District</u>		
Mitrofanina Section		
Coal Cape Area	273-70	273-70
Ivan Bay	N/A	273-71
Fishrack Bay	N/A	273-73
Mitrofanina Island	273-74	273-74
Mitrofanina Bay	273-72	273-75
Dorner Bay Section		
Dorner Bay	N/A	273-81
Outer Kuiukta Bay	273-80	273-85
Windy Bay	273-82	273-82
Inner Kuiukta/Portage Bay	273-84	273-84
Castle Cape Section		
Castle Cape/Cape Iteki	273-90	273-90
Inner Castle Cape	273-93	273-93
Outer Castle Cape	273-95	273-95
<u>Chignik Bay District</u>		
Chignik Lagoon	271-10	271-10
<u>Central District</u>		
Outer Chignik Bay Section		
Chignik Bay	272-20	272-20
Hook Bay	272-30	272-30
Nakchamik Island	272-40	272-40

-continued-

Table 2.–Page 2 of 2.

Area	Statistical area	
	Prior to 2016	2016
<u>Central District (continued)</u>		
Kujulik Section		
Inner Kujulik Bay	N/A	272-51
Kujulik Bay	272-50	272-53
Kumlik Section		
Cape Kumlik	272-62	272-62
Sutwik Island	272-64	272-64
<u>Eastern District</u>		
Big River Section		
Aniakchak Bay	272-60	272-60
Inner Amber Bay	N/A	272-71
Amber Bay	272-70	272-74
Nakalilok/ Yantarni Bay Section		
Inner Yantarni Bay	N/A	272-73
Yantarni Bay	272-72	272-75
Inner Nakalilok Bay	N/A	272-82
Nakalilok Bay	272-80	272-81
Chiganagak Section		
Inner Chiganagak Bay	N/A	272-91
Chiganagak Bay	272-90	272-93
Agripina Section		
Port Wrangell	272-92	272-92
Inner Agripina Bay	N/A	272-95
Agripina to Kilokak	272-96	272-97

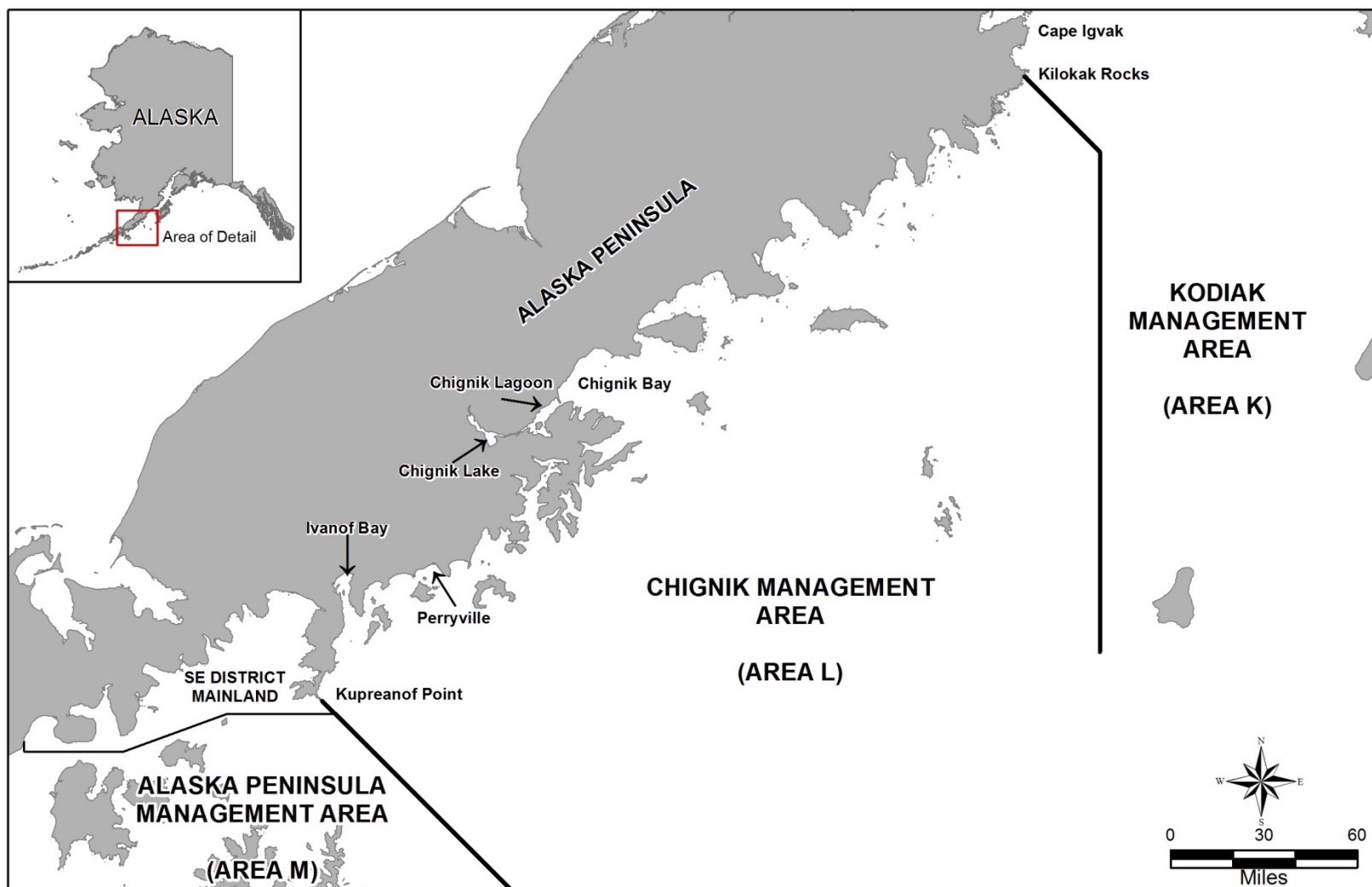


Figure 1.—Map of the Alaska Peninsula and the relative locations of the Chignik, Kodiak, and Alaska Peninsula Management areas.

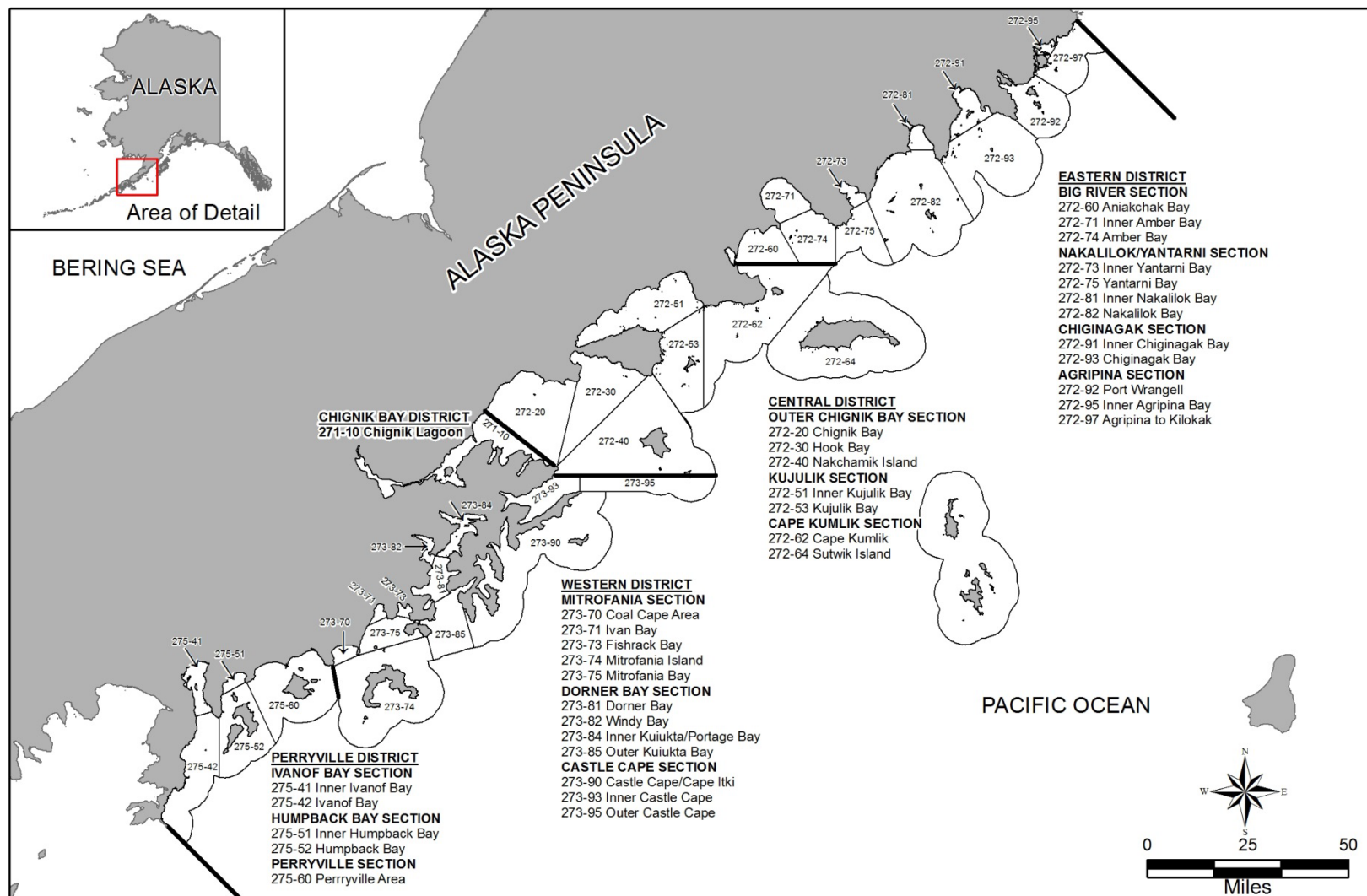


Figure 2.—Map of the Chignik Management Area commercial fishing district boundaries and statistical areas.



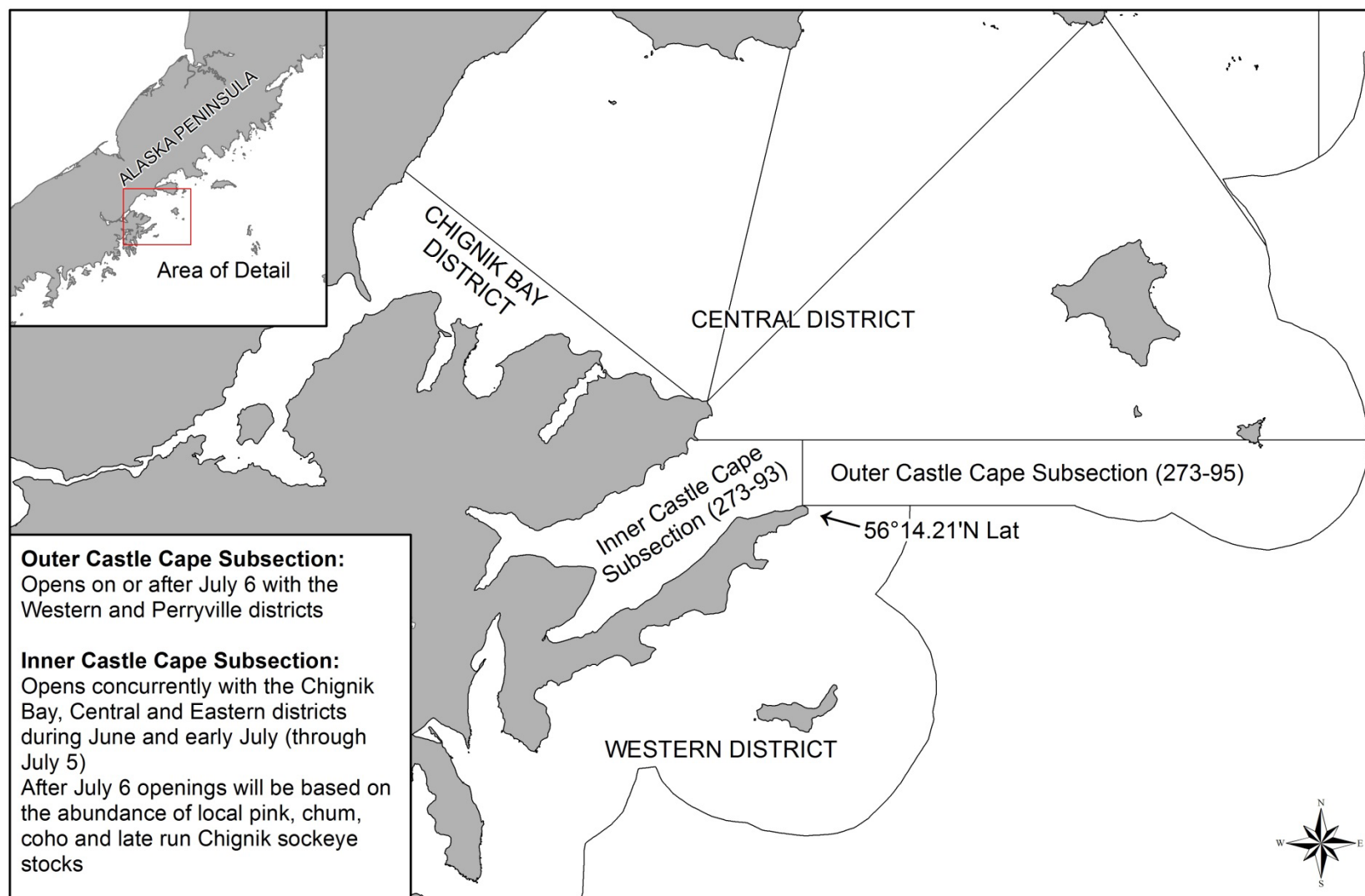


Figure 3.—Map of the Inner (273-93) and Outer Castle Cape (273-95) subsections of the Western District.

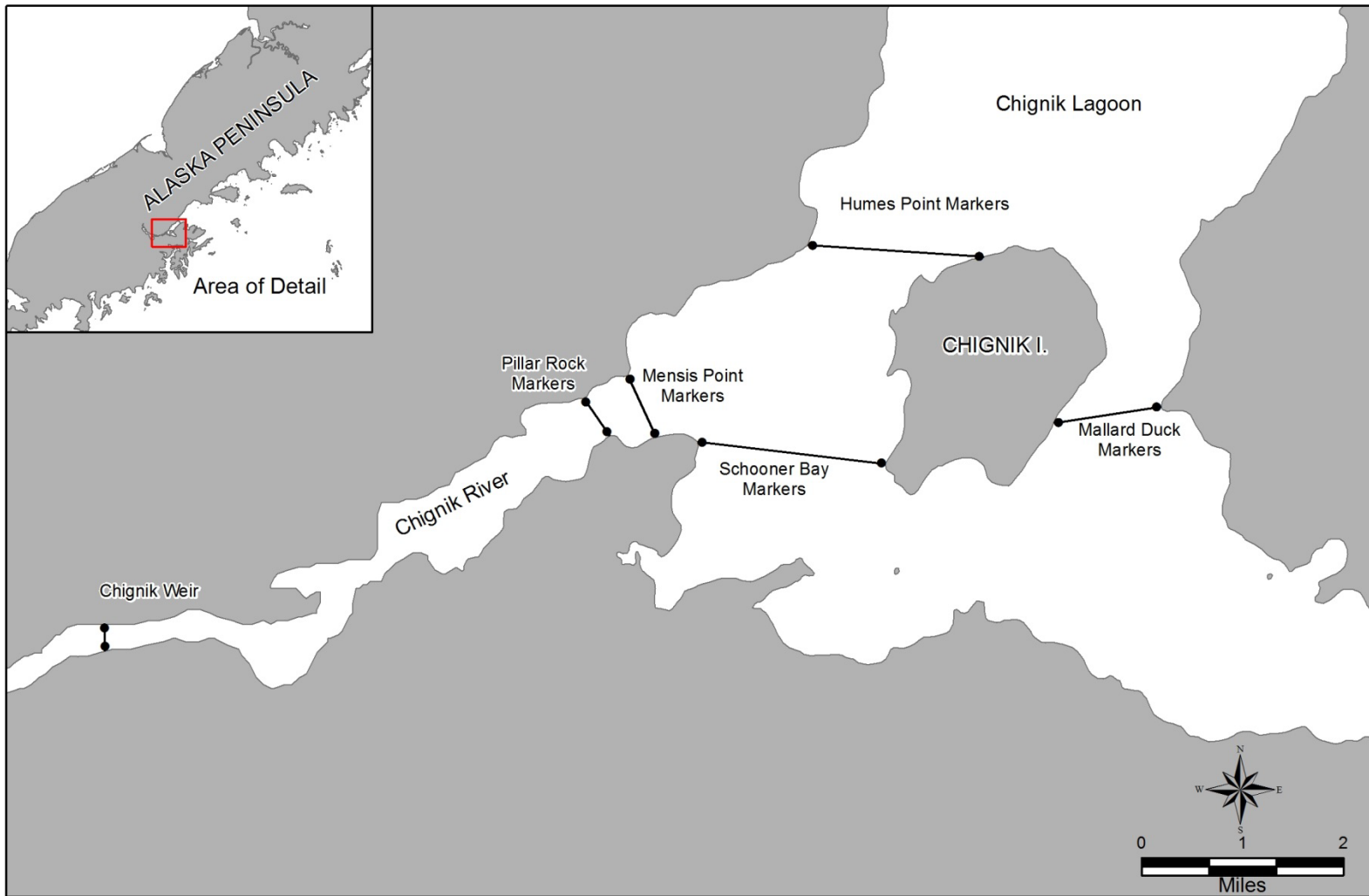


Figure 4.—Map of upper Chignik Lagoon and the location of Pillar Rock, Mensis Point, Humes Point, Mallard Duck, and Schooner Bay marker locations and the location of the Chignik weir.

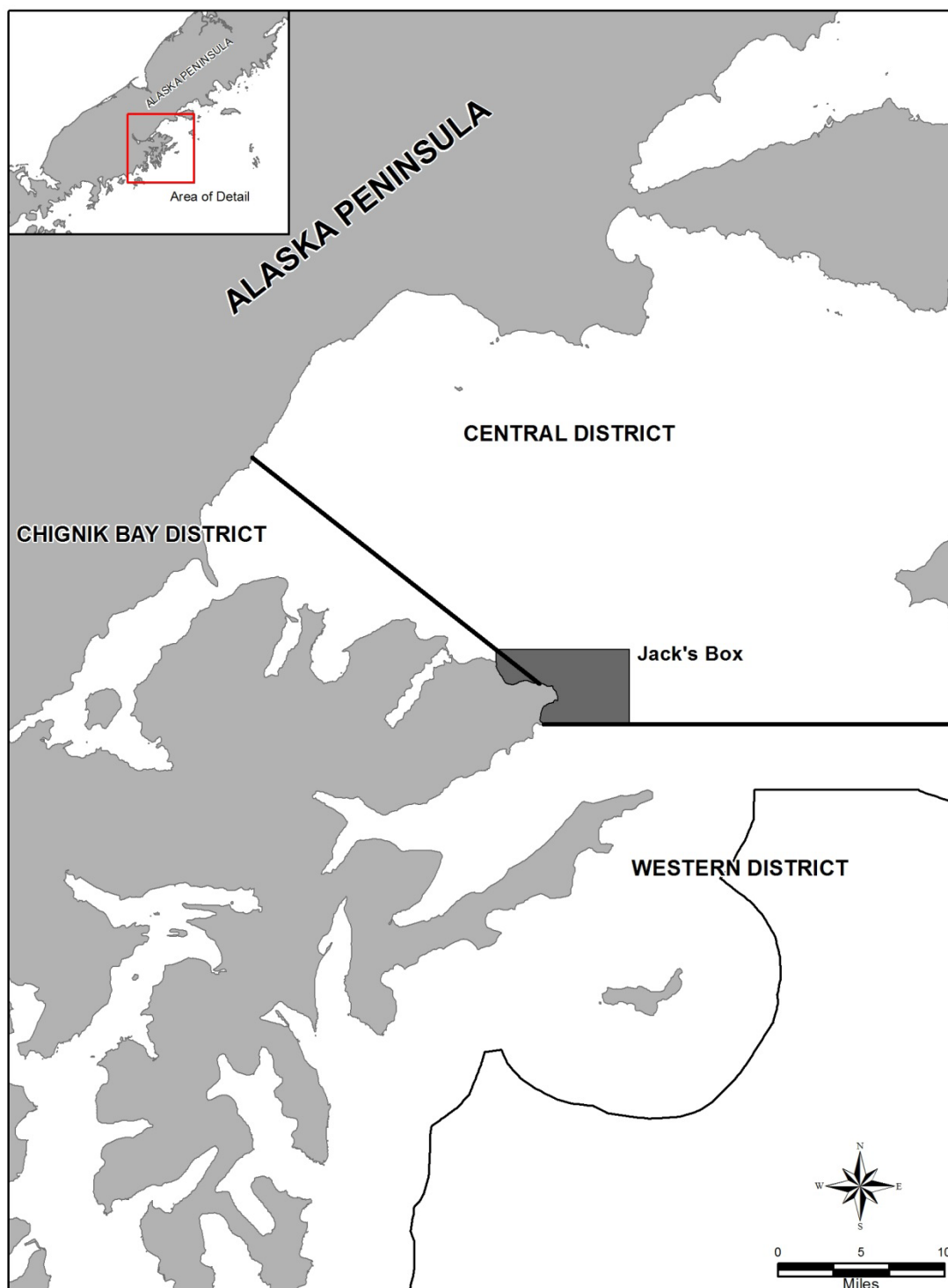


Figure 5.—Map of “Jack’s Box” in the Chignik Bay and Central districts.

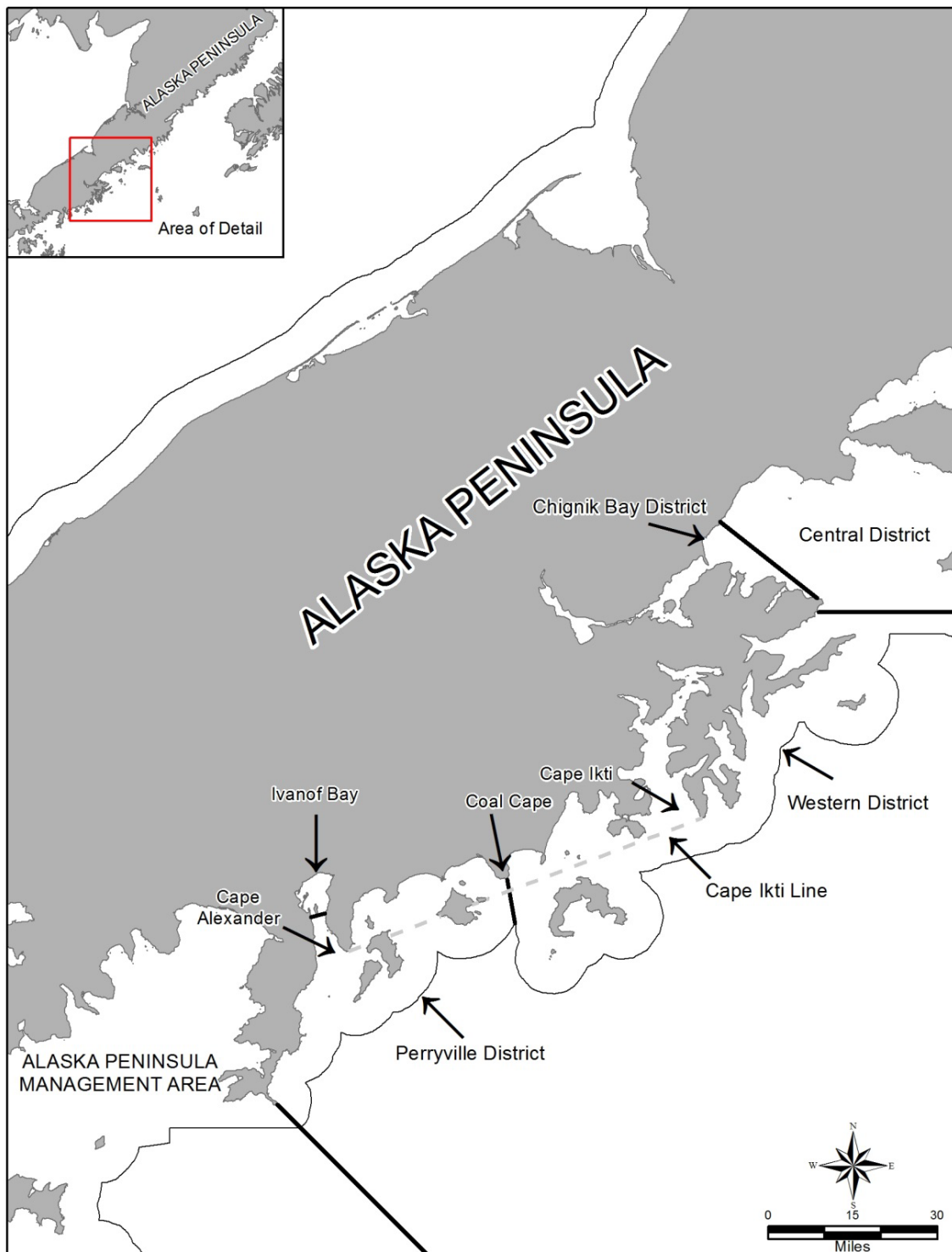


Figure 6.—Map of the “Cape Ikti Line” in the Western and Perryville districts.

## **APPENDIX A. NEWS RELEASE INSTRUCTIONS**

**USER INSTRUCTIONS FOR NEW DIVISION OF COMMERCIAL FISHERIES  
FISHERY ANNOUNCEMENTS NEWS RELEASE SYSTEM**

May 23, 2011



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On May 23, 2011, a new system for publishing news releases announcing commercial fishery openings, closings, fishing areas, times, etc. became available on the Alaska Department of Fish and Game website. This system also publishes non-regulatory fishery updates that convey information about specific fisheries and allows users to find announcements about subsistence fishing and those personal use fisheries managed by the Division of Commercial Fisheries.

The new system replaces several older systems used by the division to publish fishing announcements and fishery updates to the web and allows a single entry portal for state-wide searching and the creation of e-mail subscriptions.

As of May 31, 2011, all news releases are now issued through this single system. The public may now subscribe to electronic notification via e-mail for specific fisheries that may be of interest. All fishery news releases and announcements from that date forward will appear in the system as they are issued. If the public has subscribed to any news those news releases are delivered to the user's e-mail inbox as they are issued.

This system can be located on the Alaska Department of Fish and Game website, a visitor to the site should look for the “News and Events” icon which can be found by clicking on the “Home” or “Fishing” menus at the top of any webpage on the site. A “News and Events” icon is located on these pages and clicking on this icon takes the user to the “News and Events” page. By clicking “Regulation Announcements, News Releases, Emergency Orders” and then the “Commercial Fishing” icon, the user will bring up the application for finding news releases, emergency orders, and fishery updates. The user can also go directly to this application by copying the following link into their browser. It might be a good idea to bookmark this link for ease of returning to the site for subsequent visits.

<http://www.adfg.alaska.gov/index.cfm?adfg=cfnews.main>

The screenshot shows the Alaska Department of Fish and Game website. The header includes the state logo and navigation links like 'myalaska', 'My Government', 'Resident', 'Business in Alaska', 'Visiting Alaska', and 'State Employees'. The main navigation bar lists 'Home', 'Fishing', 'Hunting', 'Viewing', 'Education', 'Species', 'Lands & Waters', and 'Regulations'. Below this, a secondary bar lists 'About Us', 'Join Us', 'News & Events', 'Licenses & Permits', and 'e Library'. The 'News & Events' section is active, displaying a sidebar with links to 'News & Events Home', 'Regulation Announcements', 'News Releases & Emergency Orders', 'Media-Press Releases', 'Hot Topics & Issues', 'Boards of Fisheries & Game: Actions and Activities', and 'Features'. The main content area is titled 'Commercial Fishing Regulation Announcements, News Releases, and Updates'. It contains a 'Search News Releases' form with the following fields: 'Publication Date Range' (with 'to' and 'from' sub-fields), 'Effective Year' (a dropdown menu set to 'All'), 'Title: (or partial Title:)' (a text input field), 'Species Group' (a dropdown menu set to 'All'), 'Management Area' (a dropdown menu set to 'All'), 'District' (a dropdown menu), 'Gear Class' (a dropdown menu set to 'All'), and 'Activity' (a dropdown menu set to 'Commercial Fishing'). At the bottom of the form are 'Search' and 'Clear' buttons, and a 'Subscribe to News Releases' button.

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### USING THE NEW SYSTEM – Searching for News Releases:

The new Commercial Fishing Regulation Announcements, News Release, and Updates web page allows you to select the news releases of interest by using the search screen. Drop down menus are available for all selection categories, to assist in filtering the search of News Releases. Using the drop down menus, you can narrow your search and the results of that search.

It is possible to view a list of all releases issued by the commercial fisheries division in an entire year or, as is usually the case, search for a specific fishery, like the Bristol Bay salmon fishery or Kodiak black rockfish fishery. To select the entire set of releases, every drop down menu should have “all” selected, except for year, which should be set for the current year, 2011. Press the “Search” button and the results will be displayed within the “Search Results” box. The following screen shot shows the selection criteria and search results for all news releases and updates.

ADF&G Home » News & Events » News Releases » Cfishnews

### Commercial Fishing Regulation Announcements, News Releases, and Updates

Search News Releases

Publication Date Range:  to

Effective Year:

Title (or partial Title):

Species Group:

Management Area:

District:

Gear Class:

Activity:

#### Search Results

Title	Publication Date	Location	Fishery
Closure of Shelikof District & Salmon Announcement	05/16/2011 10:00 AM	Kodiak - Areawide	Pacific Cod - Kodiak - Areawide - Jiq, Tr
POINT GARDNER SEINE TE	05/16/2011 10:00 AM	Bristol Bay Toqjak	Salmon - Bristol Bay Toqjak Cillnet
South Alaska Peninsula (ar	05/16/2011 10:00 AM	SoutheastYakutat - Southe	Salmon - SoutheastYakutat - Southeas
UCI Commercial Herring & t	05/16/2011 9:00 AM	South Alaska Peninsula - Ar	Pacific Cod - South Alaska Peninsula -
Kodiak District Tanner Crab	05/16/2011 9:00 AM	Cook Inlet Upper Cook Inlet	Smolt Cook Inlet Upper Cook Inlet C
		Kodiak - Areawide	Pacific Cod - Kodiak - Areawide - Pot - C

To search for news releases specific to the Bristol Bay salmon fishery, the user selects 2011 as the year, salmon as the species, Bristol Bay as the management area, all for district, and activity as commercial fishing. Then push the “Search” button and the results are displayed in the “Search Results.” A screen print of this selection is provided below. It would also be possible to search for a specific district in Bristol Bay by also selecting one of the “District” options within a specific management area.

-continued-



To view a particular news release that is displayed in the Search Results section, the user will double click on that item in the list and it will open as a PDF document. The user will need to have Acrobat Reader installed on your computer to display and print the document.

ADF&G Home » News & Events » News Releases » CNews

## Commercial Fishing Regulation Announcements, News Releases, and Updates

### Search News Releases

Publication Date Range:  to

Effective Year:

Title (or partial Title):

Species Group:

Management Area:

District:

Gear Class:

Activity:

### Search Results

Title	Publication Date	Location	Fishery
Bristol Bay Eastside # 1	05/17/2011 9:30 AM	Bristol Bay - Egegik	Salmon - Bristol Bay - Egegik - Gillnet - C
BB TEST 8	05/17/2011 8:40 AM	Bristol Bay - Egegik	Salmon - Bristol Bay - Egegik - Gillnet - C
BB eastside	05/17/2011 7:35 AM	Bristol Bay - Egegik	Salmon - Bristol Bay - Egegik - Gillnet - C
BB east side test	05/17/2011 7:32 AM	Bristol Bay - Egegik	Salmon - Bristol Bay - Egegik - Gillnet - C
BB east side # 2	05/17/2011 7:24 AM	Bristol Bay - Egegik	Salmon - Bristol Bay - Egegik - Gillnet - C
BB eastside # Xx	05/17/2011 7:12 AM	Bristol Bay - Egegik	Salmon - Bristol Bay - Egegik - Gillnet - C

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### Subscribing to News Releases:

After making a news release selection, it is possible to subscribe and receive, via e-mail, future news releases for the specific fishery selected, by pushing the “Subscribe to News Releases” button at the right lower corner of the search screen. The subscription web page will display, as shown below.



The screenshot shows a web browser window with the URL [ADF&G Home > News & Events > News Releases > Cfinews](#). The page title is "Commercial Fishing Regulation Announcements, News Releases, and Updates". The main heading is "Subscribe to News Releases Via Email". A red asterisk indicates a required field. The form contains the following fields and options:

- Species Group:
- Gear Class:
- Activity:
- Management Area:  (marked with a red asterisk)
- District:
- Email Format:
- Email Address:  (marked with a red asterisk)
- Confirm Email Address:  (marked with a red asterisk)

At the bottom of the form are two buttons: "Subscribe" and "Clear". To the right of the form is a button labeled "Search for News Releases".

Simply type in an e-mail address in the box provided and then confirm this e-mail address in the box provided for confirming e-mail addresses, push the “Subscribe” button, and the subscription process is finished. News releases for the fisheries selected by the user will begin to appear in the user’s mailbox as they are published by ADF&G staff.

The user may return to the search screen by pushing the “Search for News Releases” button in the lower right hand corner of the subscription screen. When you subscribe to all News Releases for a specific category, as defined by the drop down menu, this subscription is limited to the selection you created. If you wish to subscribe to news releases for other fisheries you will need to repeat the process described above for each subscription desired.

A user may unsubscribe to any subscription by clicking on the link “Unsubscribe” that is included within each e-mail sent to a subscriber.

**APPENDIX B. 2018 CHIGNIK SOCKEYE  
SALMON FORECAST**

**Forecast Area: Chignik**  
**Species: Sockeye Salmon**

**Preliminary Forecast of the 2018 Run**

Total Production		Forecast Estimate (thousands)	Forecast Range (thousands)
Early Run (Black Lake)	Total Run Estimate	848	0–1,914
	Escapement Goal <sup>a</sup>	400	350–450
	Harvest Estimate <sup>b</sup>	448	
Late Run (Chignik Lake)	Total Run Estimate	901	411–1,392
	Escapement Goal <sup>a</sup>	338	275–400
	Harvest Estimate <sup>b</sup>	563	
Total Chignik System	Total Run Estimate	1,749	411–3,306
	Harvest Estimate <sup>b</sup>	1,011	
	Chignik Area	834	
	SEDM Area	57	
	Cape Igvak Section	120	

*Note:* Column numbers may not total or correspond exactly with numbers in text due to rounding.

<sup>a</sup> Harvest represents the midpoint of the escapement goal. An inriver run goal of 75,000 sockeye salmon is added to the lower bound of the late-run escapement goal.

<sup>b</sup> Includes anticipated harvests of Chignik-bound fish in Southeastern District Mainland and Cape Igvak fisheries.

**Forecast Methods**

Simple linear regression models using age-class relationships were used to forecast the 2018 early- and late- Chignik sockeye salmon runs. Each regression model was assessed with standard regression diagnostic procedures. Prediction intervals (80%) for the regression estimates were calculated using the variances of the regression models. Age class returns not estimated with statistical models utilized pooled medians with data from 1995 to the present; median prediction intervals were calculated from the 10th and 90th percentiles of the data.

For the early run, prior year ocean-age-2 returns predicted ocean-age-3 returns using data from the 2000 outmigration year to the present. Prior year early-run ocean-age-1 returns predicted ocean-age-2 returns (outmigration years 1998 to present). For the late run, prior year ocean-age-2 sockeye salmon returns predicted ocean-age-3 returns using data from the 2000 outmigration year to the present. Prior year ocean-age-1 early- and late-run returns were combined to predict late-run ocean-age-2 returns (outmigration years 1988 to present).

The early- and late-run regression and median estimates were summed to estimate the total Chignik River sockeye salmon run for 2018. The prediction interval range was calculated as the square root of the sum of the squared 80% prediction intervals for each age class forecasted. The combined early- and late-run 80% prediction interval was calculated by summing the lower and upper prediction bounds of the two runs.

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### **Forecast Discussion**

The 2018 Chignik sockeye salmon early run is forecasted to be 848,000 fish, which is 528,000 fish less than the 10-year average run of 1.38 million and almost 301,000 fish less than the 2017 early run of 1.15 million fish. The early run is predicted to be composed of approximately 75% ocean-age-3 and 25% ocean-age-2 fish. The late run is forecasted to be 901,000 fish, which is approximately 212,000 fish less than the 10-year average run of 1.11 million fish and 198,000 fish more than the 2017 late run of 703,000 fish. The 2018 late run is predicted to be composed of approximately 76% ocean-age-3, 23% ocean-age-2, and 1% ocean-age-1 and -4 fish. The 2018 total Chignik sockeye salmon run is expected to be 1.75 million fish, which is approximately 740,000 fish less than the 10-year average of 2.49 million and roughly 103,000 fish less than the 2017 total run of 1.85 million fish.

The projected 2018 early-run total harvest estimate of 448,000 fish is based on achievement of the mid-point of the early-run escapement goal range. The projected late-run harvest estimate of 563,000 fish is based on achieving the mid-point (338,000 fish) of the late-run goal, which includes the inriver run goal of 75,000 fish added to the lower bound (200,000 fish) of the escapement goal. Sockeye salmon harvest estimates for both runs include fish harvested in the Chignik Management Area, Chignik-bound fish harvested in the Cape Igvak Section of the Kodiak Management Area, and in the Southeastern District Mainland of the Alaska Peninsula Management Area.


The wide confidence intervals around the point estimate of the 2018 forecasts reflect the uncertainty inherent in the forecast models. The early run is typically more variable than the late run, resulting in wider confidence intervals for early run. Exploratory analysis using other sibling relationships and environmental variables corroborated this formal forecast. Similar methods have been used for forecasting the early and late runs since 2004. Due to the range of variation in the relationships used in these forecasts and their historical accuracy, our confidence in them is fair.

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Heather Finkle, Finfish Research Biologist, Westward Region



## **APPENDIX C. CHIGNIK SALMON SUBSISTENCE PERMIT**



**2018 CHIGNIK AREA SUBSISTENCE SALMON FISHING PERMIT**

Permit expires December 31, 2018

Name: \_\_\_\_\_ This permit is valid in the Chignik Management Area Only.

Address: \_\_\_\_\_

I hereby certify that I am an Alaska resident, and any fish taken will be used for subsistence purposes only.

Permittee signature \_\_\_\_\_ Date \_\_\_\_\_

Additional members of same household to be included on permit (Residents Only): \_\_\_\_\_

Email address: \_\_\_\_\_ Renew permit for next year: ☐

The catch report table below must be filled out (even if the permit was not used) and returned to a local Alaska Department of Fish and Game office prior to December 31, 2018. Failure to return the permit could result in future permits being denied (5 AAC 01.015 (C)).

**SUBSISTENCE SALMON HARVEST REPORT**

Number of salmon by species:

DATE	SPECIFIC LOCATION	KING	SOCKEYE	COHO	PINK	CHUM

- ALL PERSONS MUST HAVE A VALID SUBSISTENCE PERMIT IN POSSESSION WHILE TAKING OR ATTEMPTING TO TAKE SUBSISTENCE SALMON.
- COMPLETE THE SUBSISTENCE HARVEST REPORTS IMMEDIATELY UPON LANDING SALMON. UNSUCCESSFUL TRIPS SHOULD ALSO BE RECORDED.
- THE LIMIT IS 250 SALMON PER PERMIT. ADDITIONAL PERMITS MAY BE ISSUED IF ADDITIONAL SALMON ARE NEEDED FOR SUBSISTENCE.

**REFER TO THE CURRENT SUBSISTENCE REGULATION BOOK FOR COMPLETE REGULATIONS**

Return permit to: Chignik Salmon Management, ADF&G, 351 Research Court, Kodiak, AK 99615 by December 31, 2018.

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**SELECTED SUBSISTENCE REGULATIONS**

These listed regulations are not inclusive of all the regulations that apply to subsistence salmon fishing in the Chignik Area.

**5 AAC 01.015. SUBSISTENCE FISHING PERMITS AND REPORTS.** (b)(3) Permits must be retained in the possession of the permittee and be readily available for inspection while taking fish. A person who transports subsistence-taken fish shall have a subsistence fishing permit in their possession.

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

**5 AAC 01.470. LAWFUL GEAR AND GEAR SPECIFICATIONS.** (a) Salmon may be taken by seines and gillnets, or with gear specified by a subsistence fishing permit, except that salmon in Chignik Lake may not be taken with purse seines. A gillnet may not be set while staked, anchored, or otherwise fixed in a stream while it obstructs more than one-half of the width of the waterway.

**5 AAC 01.475. WATERS CLOSED TO SUBSISTENCE FISHING.** Salmon may not be taken (1) from July 1 through August 31, in the Chignik River from a point 300 feet upstream from the Chignik weir to Chignik Lake; (2) in Black Lake or any tributary to Black Lake or tributary to Chignik Lake except in the Clark River and Home Creek from their confluence with Chignik Lake upstream one mile.

**AAC 01.480. SUBSISTENCE FISHING PERMITS.**

- a. Salmon, trout and char may only be taken under the authority of a subsistence fishing permit.
- b. Not more than 250 salmon may be taken for subsistence purposes unless otherwise specified on the subsistence fishing permit.
- c. A record of subsistence-caught fish must be kept on this permit. The record must be completed immediately upon taking subsistence-caught fish and must be returned to the local representative of the department no later than December 31 of the year issued.

**5 AAC 01.485. RESTRICTIONS ON COMMERCIAL FISHERMAN.** (a) In the Chignik Area, a commercial salmon fishing license holder may not subsistence fish for salmon during the 12 hours before the first commercial salmon fishing period and the 12 hours following the closure of a commercial salmon fishing period. However, a commercial salmon fishing license holder may subsistence fish for salmon during a commercial salmon fishing period.

**SPECIAL PERMIT PROVISIONS**

1. The adipose fin must be removed from all subsistence-caught salmon immediately upon capture.
2. A commercial license holder may not fish for both subsistence and commercial salmon at the same time. Further, a commercial salmon vessel may not carry both the subsistence and commercially caught salmon at the same time.
3. A commercial fishing vessel may not simultaneously carry both commercial seine and subsistence gillnet gear.
4. Commercial fisherman may always remove salmon from their commercial catch for home pack. Record the number of salmon taken by species for home pack use on your fish ticket.
5. This permit can be withdrawn at any time.

**NOTICE TO FISHERMAN:**

Before you fish, be sure you know whose land you are on and check the regulations. State regulations apply on all state, private, and federal lands where authorized. Private landowners may restrict entry on their land. Federal lands may be closed to fishing except by certain rural residents. Persons standing on state or private lands should be sure their fishing activities are legal under state regulations. If you have questions regarding the federal subsistence fisheries, please contact the Federal Office of Subsistence Management at 1-800-478-1456.